



## A Study on Awareness and Participation of Farm Women in Improved Cattle Management Practices in Sehore District of Madhya Pradesh

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### ABSTRACT

*The present study was conducted in Sehore district of Madhya Pradesh during 2013-14 at Department of Agricultural Extension, R.A.K. College of Agriculture Sehore (M.P.). The main objective of the study was to determine extent of awareness and participation of dairy farm women in improved cattle management practices and to find out relationship between independent attributes of dairy farm women with their extent of awareness and participation of improved cattle management practices. The study revealed that majority of the dairy farmwomen have full awareness followed by partial awareness and majority of farmwomen have partial participation followed by fully participation and no participation in improved cattle management practices respectively. On the other hand, the study revealed that the relationship of dependent variables i.e. awareness and participation of farm women with independent variable was found positive and significant relation with the improved cattle management practices.*

***Key words:*** Improved cattle management practices, Dairy farm women awareness, Participation, Relationship.

### INTRODUCTION

Agriculture is the basis of subsistence for rural Indian, since long away. Over 70 per cent of population in India depends on agriculture and subsidiary occupations for their livelihood. Many studies clearly pointed out that the village development depends upon agriculture development which includes the development of live stock too along with crops production.

The National Commission on Agriculture has identified dairying as an instrument of socio economic change for maximum farmers. It is a fact that the dairy farming has not only been an integral part of our economy but is also equally engrossed in our culture. The major product of livestock farming is milk and the other dairy products. These products have a special place in the National economy.

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Firstly, the dependency of people who make their living out of this dairy farming i.e. selling milk and other dairy products (vendors) are concerned with this enterprise. The secondly, major chunk of population of our country who find milk and its allied products as the major source of nourishment i.e. the consumers. Dairy development with improved cattle management practices in rural India also important for betterment of farmers as crop production suffers from the vagaries of nature such as prolonged drought and/or heavy rainfall. Fluctuations in total production cause violent changes in market prices of agricultural commodities. On the discussion of above facts, it is true that in view of recent advancement in the agricultural technologies including cattle management and more and more involvement of women in agriculture, the role performance of women functionaries is not just to educate the women regarding other activities but they have to pay equal attention towards dissimilation of agro based technologies including cattle management for the socio economic upliftment of rural families particularly in tribal area. For this, it is imperative that the women functionaries should have awareness regarding agriculture and allied areas. Ample of studies are available showed the drawbacks of cattle management due to unawareness and less participation of women engaged in this enterprise due to low knowledge and resource endowed.

With this point in view, the present study on awareness and participation of farm women in improved cattle management practices was formulated, at Sehore district of Madhya Pradesh. The main objective of present research was to determine the extent of awareness and participation of tribal farm women in improved cattle management practices, and to find out relationship between attributes of farm women with their awareness and participation in improved cattle management practices.

## MATERIAL AND METHODS

### Sampling, design and collection of data

The present study was carried out in Sehore block of Sehore district, Madhya Pradesh

being nearer to mega cities Indore and Bhopal and there are being many dairy units running in the area. The respondent farmers for the study were selected random through multi-stage sampling technique. In first stage, a list of villages having well established dairy farms was prepared along with the number of dairy farms in each village out of these only 5 villages with maximum milch animal population were identified and selected for present study. In the second stage of sampling, a list of farmers having dairy herd was prepared along with the size of herd. Among this, list of 22 farm women was selected on the basis of random sampling method. Hence, the total respondents were 110 for this study.

### Instrument and method of data collection:

The data was collected with the help of interview schedule which was prepared on the basis of objectives of the study. For the convenience of data collection, the interview schedule was prepared in Hindi. Before the actual collection of the data the interview schedule was subjected to pre-testing. The data was collected for the year 2011-12.

### Analysis of data:

Collected data was quantitative as well as qualitative in nature. The quantitative data was tabulated in term of degree of achievement like low medium and high were necessary, the quantitative data was converted in to qualitative form, and all data was properly coded and entered in a master chart for the purpose of classification and tabulation. The appropriate statistical tools like percentage, mean, average and Chi-square test was applied for drawing the inference of the study.

### A. Independent variables:

1. Age
2. Education
3. Size of land holding
4. Social participation
5. Economic motivation
6. Socio-economic status
7. Attitude toward improved dairy practices
8. Extension participation
9. Innovativeness
10. Management orientation
11. Exposure to training
12. Number of cattle

**B. Dependent variables:**

1. Awareness of tribal farm women in improved cattle management practices.

2. Participation of tribal farm women in improved cattle management practices

**RESULTS AND DISCUSSION****B.i. Extent of awareness****Table 1: Distribution of farm women according to their extent of awareness in cattle management practices**

S.No.	Management practices	No. of tribal farm women (N=110) (Extent of awareness)			
		Unaware	Partial	Fully	Mean score
(a.)	Awareness of feeding practices:				
1.	Awareness of feeding elements as recommendation.	27 (24.55)	47 (42.73)	36 (32.73)	2.08
2.	Awareness of providing feed requirements for milk production purpose.	28 (25.45)	43 (39.09)	39 (35.45)	2.10
3.	Awareness of providing essential minerals requirement for animals	27 (24.55)	37 (33.64)	46 (41.82)	2.17
4.	Awareness of providing balance feed as per requirements.	22 (20.00)	37 (33.64)	51 (46.36)	2.26
5.	Awareness of using animal food mixture of concentrates	27 (24.55)	38 (34.55)	45 (40.91)	2.16
6.	Awareness of feeding of concentrates and roughage mixture.	23 (20.91)	43 (39.09)	44 (40.00)	2.19
7.	Awareness of feed mixture i.e. 2/3 dry roughage and 1/4 green fodder (roughage) requirements.	26 (23.64)	40 (36.36)	44 (40.00)	2.16
	Average mean score	26 (23.64)	41 (37.27)	43 (39.09)	2.15
(b.)	Awareness of breeding practices:				
1.	Awareness of using improved animal breeding programme as recommended.	34 (30.91)	40 (36.36)	36 (32.73)	2.02
2.	Awareness of using improved breeds bull in breeding programme.	32 (29.09)	41 (37.27)	37 (33.64)	2.05
3.	Awareness of using artificial insemination.	37 (33.64)	38 (34.55)	35 (31.82)	1.98
4.	Awareness about time of next insemination after parturition of animals	36 (32.73)	39 (35.45)	35 (31.82)	1.99
5.	Awareness about period to which avoid the animal from bull after insemination.	32 (29.09)	41 (37.27)	37 (33.64)	2.05
6.	Awareness about hybrid cow gives more milk as compare to country cow.	35 (31.82)	41 (37.27)	34 (30.91)	1.99
7.	Awareness about pregnancy time period of cow/buffalo.	29 (26.36)	47 (42.73)	34 (30.91)	2.05
	Average mean score	34 (30.91)	41 (37.27)	35 (31.82)	2.01
(c.)	Awareness of disease control practices:				
1.	Awareness about various diseases of animals	27 (24.55)	42 (38.18)	41 (37.27)	2.13
2.	Awareness of vaccination programme to control the diseases.	29 (26.36)	37 (33.64)	44 (40.00)	2.14
3.	Awareness of using important medicine in animal treatment.	29 (26.36)	38 (34.55)	43 (39.09)	2.13
4.	Awareness about dose and procedure use in medicine.	26 (23.64)	39 (35.45)	45 (40.91)	2.17
5.	Awareness of diagnosis process by doctor of animal in disease.	28 (25.45)	36 (32.73)	46 (41.82)	2.16
6.	Awareness of using proper management to control the disease.	26 (23.64)	41 (37.27)	43 (39.09)	2.15
	Average mean score	27 (24.55)	39 (35.45)	44 (40.00)	2.15
(d.)	Awareness of general management :				
1.	Awareness about proper farm house for animal.	37 (33.64)	37 (33.64)	36 (32.73)	1.99
2.	Awareness about proper record of animal.	31 (28.18)	42 (38.18)	37 (33.64)	2.05
3.	Awareness of proper arrangement for the cleaning the animal and it's farm house.	32 (29.09)	39 (35.45)	39 (35.45)	2.06
4.	Awareness of proper arrangement for drinking water.	31 (28.18)	36 (32.73)	43 (39.09)	2.11
5.	Awareness of the proper method of milking.	29 (26.36)	40 (36.36)	41 (37.27)	2.11
6.	Awareness about the age of animal for selling and purchasing.	28 (25.45)	39 (35.45)	43 (39.09)	2.14
	Average mean score	31 (28.18)	39 (35.45)	40 (36.36)	2.08
	Overall extent of awareness in cattle management practices	29 (26.36)	40 (36.36)	41 (37.27)	2.11

The study showed that among the overall dairy farmwomen, the higher number of farm women, had full adoption regarding feed practices under improved livestock management practices i.e. (37.27%) followed by partial (36.36%) and low (26.36%) level of adoption respectively.

The above study shows that overall awareness of breeding practices under improved cattle management practices, the high per cent of farm women found to partial aware 37.27 per cent followed by fully aware 31.82 per cent and unaware 30.91 per cent respectively.

The above study shows that the overall awareness regarding disease control under improved cattle management practices, the high per cent of tribal farm women found to fully aware 40.00 per cent followed by partial aware 35.45 per cent and unaware 24.55 per cent respectively.

The above study shows that the overall awareness of general management practices under improved cattle management practices, the high per cent of tribal farm women found to fully aware 36.36 per cent followed by partial aware 35.45 per cent and unaware 28.18 per cent respectively.

**Table 2: Distribution of farm women according to their overall extent of awareness in improved cattle management practices**

Attributes	Categories	No. of tribal farm women	Percentage	Mean Score
Awareness	(a) Unaware	29	26.36	0.26
	(b) Partial aware	40	36.36	0.73
	(c) Fully aware	41	37.27	1.12
	<b>Total</b>	<b>110</b>	<b>100.00</b>	<b>2.11</b>

The data presented in above table reveals that the high per cent of farm women 37.27 per cent were found to have fully awareness followed by partial awareness 36.36 per cent and unawareness 26.36 per cent regarding improved cattle management practices respectively. The category wise mean score of regarding improved cattle management

practices was found for unawareness 0.26 followed by partial awareness 0.73 and for fully awareness 1.12 respectively. The overall mean score of awareness regarding improved cattle management practices was found to 2.11.

#### B.ii. Extent of participation

**Table 3: Distribution of farm women according to their extent of participation in cattle management practices**

S.No.	Management practices	No. of tribal farm women (N=110) (Extent of participation)			
		No	Partial	Fully	Mean score
(a).	<b>Participation in feeding practices:</b>				
1.	Participation in feeding practices as recommendations.	23 (20.91)	47 (42.73)	40 (36.36)	2.15
2.	Participation in providing feed requirements for milk production purpose.	25 (22.73)	43 (39.09)	42 (38.18)	2.15
3.	Participation in providing essential minerals requirement for animals	24 (21.82)	37 (33.64)	49 (44.55)	2.23
4.	Participation in providing balance feed as per requirements.	29 (26.36)	37 (33.64)	44 (40.00)	2.14
5.	Participation in using animal food mixture of concentrates	32 (29.09)	38 (34.55)	40 (36.36)	2.07
6.	Participation in feeding of concentrates and roughage mixture.	33 (30.00)	43 (39.09)	34 (30.91)	2.01
7.	Participation in feed mixture i.e. 2/3 dry roughage and 1/4 green fodder (roughage) requirements.	31 (28.18)	40 (36.36)	39 (35.45)	2.07

Average mean score		29 (26.36)	40 (36.36)	41 (37.27)	2.11
(b).	Participation in breeding practices:				
1.	Participation in using improved animal breeding practices as recommended.	32 (29.09)	40 (36.36)	38 (34.55)	2.05
2.	Participation in using improved breeds bull in breeding programme.	34 (30.91)	41 (37.27)	35 (31.82)	2.01
3	Participation in artificial insemination.	31 (28.18)	39 (35.45)	40 (36.36)	2.08
4.	Participation in next insemination of animals	36 (32.73)	39 (35.45)	35 (31.82)	1.99
5.	Participation to avoid the animal from bull after insemination.	29 (26.36)	41 (37.27)	40 (36.36)	2.10
Average mean score		32 (29.09)	40 (36.36)	38 (34.55)	2.05
(c).	Participation in disease control practices:				
1.	Participation in vaccination programme to control the diseases.	28 (25.45)	45 (40.91)	37 (33.64)	2.08
2.	Participation in using important medicine for animal treatment.	34 (30.91)	36 (32.73)	40 (36.36)	2.05
3.	Participation in procedure used for giving medicine.	31 (28.18)	39 (35.45)	40 (36.36)	2.08
4.	Participation in diagnosis process by doctor of animal in disease.	31 (28.18)	41 (37.27)	38 (34.55)	2.06
5.	Participation in using proper management to control the disease.	28 (25.45)	45 (40.91)	37 (33.64)	2.08
Average mean score		31 (28.18)	41 (37.27)	38 (34.55)	2.06
(d).	Participation in general management :				
1.	Participation in proper farm house for animal.	35 (31.82)	38 (34.55)	37 (33.64)	2.02
2.	Participation in maintaining proper record of animal.	35 (31.82)	39 (35.45)	36 (32.73)	2.01
3.	Participation in proper arrangement for the cleaning the animal and it's farm house.	35 (31.82)	41 (37.27)	34 (30.91)	1.99
4.	Participation in proper arrangement for drinking water.	33 (30.00)	39 (35.45)	38 (34.55)	2.05
5.	Participation in the proper method of milking.	32 (29.09)	38 (34.55)	40 (36.36)	2.07
Average mean score		34 (30.91)	39 (35.45)	37 (33.64)	2.03
Overall extent of participation in cattle management practices		31 (28.18)	40 (36.36)	39 (35.45)	2.07

The above study shows that overall the high per cent of tribal farm women found to fully participation 37.27 per cent followed by partial participation 36.36 per cent and no participation 26.36 per cent in feeding practices under improved cattle management practices respectively.

The study also revealed that overall participation in breeding practices under improved cattle management practices, the high per cent of tribal farm women found to partial participation 36.36 per cent followed by fully participation 34.55 per cent and no participation 29.09 per cent respectively.

study shows that the overall participation in disease control under improved cattle management practices, the high per cent of tribal farm women found to partial participation 37.27 per cent followed by fully participation 34.55 per cent and no participation 28.18 per cent respectively.

The above study shows that the overall participation in general management practices under improved cattle management practices, the high per cent of tribal farm women found to partial participation 35.45 per cent followed by fully participation 33.64 per cent and no participation 30.91 per cent respectively.

**Table 4: Distribution of farm women according to their overall extent of participation in improved cattle management practices**

Attributes	Categories	No. of tribal farm women	Percentage	Mean Score
Participation	(a) No	31	28.18	0.28
	(b) Partial	40	36.36	0.73
	(c) Fully	39	35.45	1.06
	<b>Total</b>	<b>110</b>	<b>100.00</b>	<b>2.07</b>

The data presented in above table reveals that the high per cent of tribal farm women 36.36 per cent were found to have partial participation followed by fully participation 35.45 per cent and no participation 28.18 per cent in improved cattle management practices respectively. The category wise mean score of improved cattle management practices was

found for no participation 0.28 followed by partial participation 0.73 and for fully participation 1.06 respectively. The overall mean score of participation in improved cattle management practices was found to 2.07. Similar finding are also reported by Toppo Ambrase *et.al.*<sup>7</sup>, Yadav *et.al.*<sup>8</sup>, Chouhan and Chouhan<sup>2</sup> and Prajapati *et.al.*<sup>5</sup>.

**Table 5: Chi-square test between independent variables with the awareness of farm women towards improved cattle management practices**

S.No.	Independents Variables	X <sup>2</sup>
1	Age	10.1*
2	Education	12.7*
3	Size of Land holding	13.8*)
4	Social Participation	11.6*)
5	Socio economic status	10.5*).
6	Attitude toward improved dairy practices	10.7*).
7	Extension Participation	9.9*)
8	Economic motivation	11.7*).
9	Innovativeness	11.6*).
10	Management orientation	8.2 N.S.
11	Exposure to training	12.6*).
12	Size of dairy herd	9.0 N.S.).

\* Significant level at 5 per cent level of significance with 4 d.f.

The results of chi square (X<sup>2</sup>) analysis in above table revealed that characteristics namely

Age (10.1\*), Education (12.7\*), Size of Land holding (13.8\*) Social Participation (11.6\*) Socio economic status (10.5\*). Attitude toward improved dairy practices (10.7\*). Extension Participation (9.9\*) Economic motivation (11.7\*). Innovativeness (11.6\*). And Exposure to

training (12.6\*).were found to positive and significant on the extent of awareness of farm women. On the other hand, chi square (X<sup>2</sup>) of remaining characteristics namely Management orientation (8.2 N.S. Size of dairy herd (9.0 N.S.)). were positive but non significant associated with the extent of awareness of farm women These findings derive support from the finding of Kadian and Kumar<sup>4</sup>.

**Table 6: Chi-square test between independent variables with the participation awareness of farm women towards improved cattle management practices**

S.No.	Independents Variables	X <sup>2</sup>
1	Age	10.4*
2	Education	13.3*
3	Size of Land holding	11.9*
4	Social Participation	8.0 N.S
5	Socio economic status	13.9*
6	Attitude toward improved dairy practices	10.8*
7	Extension Participation	10.0*
8	Economic motivation	10.3
9	Innovativeness	8.0 N.S..
10	Management orientation	13.6*
11	Exposure to training	12.2*
12	Size of dairy herd	8.9 N.S..

\* Significant level at 5 per cent level of significance with 4 d.f.

The results of chi square ( $X^2$ ) analysis in above table revealed that characteristics namely Age (10.4\*), Education (13.3\*), Size of Land holding (11.9\*) Socio economic status (13.9\*). Attitude toward improved dairy practices (10.8\*). Extension Participation (10.0\*). Management orientation (13.6)\* Exposure to training (12.2)\* and Economic motivation (10.3) were found to be positive and significant on the extent of participation. On the other hand, chi square ( $X^2$ ) of remaining characteristics namely Social Participation (8.0 N.S.), innovativeness (8.0 N.S.), and Size of dairy herd (8.9 N.S.) were positive but non-significant associated with the participation of farm women. These findings derive support from the finding of Singh *et al.*<sup>6</sup>, and Chouhan and Chouhan<sup>2</sup>.

### CONCLUSION

The study concludes that majority of the farm women have full awareness (37.27%) followed by partial awareness (36.36) per cent and unawareness (26.36) per cent regarding improved cattle management practices respectively and majority of farmwomen have partial participation (36.36) followed by fully participation (35.45) per cent and no participation (28.18) per cent in improved cattle management practices respectively. The study also concludes that socio-economic attributes of farmwomen have a positive and significant relationship with the awareness and participation of farmwomen regarding improved cattle management practices respectively.

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