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# ADOPTION OF SCIENTIFIC LIVESTOCK MANAGEMENT PRACTICES BY TRIBAL AND NON-TRIBAL FARM WOMEN

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**ABSTRACT**

A field study was conducted to collected to the first hand information on dairy animal management practices followed by the tribal and non tribal farm women in Chittorgarh district of southern Rajasthan. The results of the analysis revealed that technology adoption level of non-tribal farm women with respect to breeding, feeding, housing, milking and healthcare and hygiene practices of dairy animals is quite higher side than tribal farm women. The finding could be helpful to extension worker and policy makers to formulate more effective mechanism for transmitting the technological information to the end users, so that farm women can optimally utilise the technologies for improving the productivity of their livestock.

**Key word :** Tribal, Non-tribal, farm women, dairy husbandry, technology, MPS, adoption

India is one among the few nations in the world for its tribal population. In Rajasthan, tribal population is 12 per cent of the state population, more than 45 per cent reside in southern part of Rajasthan covering the “Aravali” ranges which run through the south west boarder of the state. Understanding the livestock management practices is necessary to identify the strength and weakness of the rearing system and to formulate suitable intervention polices (Gupta et. al. 2008). Rural women spend much of their time in unpaid activities. Whatever time they get from farm and women failed to get benefit of new technologies. With this point of view the present study was formulated to document information regarding the current status of adoption of scientific livestock management practices by farm women.

## MATERIALS AND METHODS

The present study was conducted in Nimbahera block of Chittorgarh district of southern Rajasthan. For the selection of villages a list of villages was prepared with the help of livestock personnel from the identified block. Five villages were selected on the basis of livestock population for present investigation. From the each selected village 10 tribal and 10 non-tribal farm families were selected with the help of random sampling technique procedure. Thus total size of sample constituted 50 tribal and 50 non-tribal respondents were selected. Data were collected by personal interview technique. The data were analyzed, tabulated and inferences were drawn in the light of the objective of study.

## RESULTS AND DISCUSSION

Table1 1 show that total 56 respondents in medium adoption categories 19 (38 %) and 37 (74%) respondents were non tribal and tribals, respectively were observed in the categories of medium level of adoption. Thirty (60%) non tribal farm women and only one tribal farm women were found to have high level of adoption. The table also depict that most of the respondents having low level of adoption were, 12 (24%) were tribal out of the total 13 respondents. It is interesting to note that majority of tribal respondents fell under medium adoption categories, while in case of non-tribal respondents majority were in high adoption

1 SMS (Extension Education), KVK, Sirohi
2 SMS (Animal Production), KVK, Sirohi
3 SMS (Agronomy), KVK, Chittorgarh

categories. It may be because of the fact that knowledge was higher among the non-tribal and also their level of education was on the higher side. The findings are in line with the finding of Sohi and Kherde (1980), Verranna (2000) and Pawar et. al. (2006).

**Table 1- Distribution of live stock keepers on the basis of their level of adoption**

| Adoption level | Categories of adoption | Tribal (n-50) | | Non-tribal (n-50) | | Total | |
|---|---|---|---|---|---|---|---|
| | | F | % | F | % | F | % |
| Below 11.82 | Low | 12 | 24 | 1 | 2 | 13 | 13 |
| Between 11.82 to 24.70 | Medium | 37 | 74 | 19 | 38 | 56 | 56 |
| Above 24.70 | High | 1 | 2 | 30 | 60 | 31 | 31 |

Individual practice wise extent of adoption gap was worked out and the results are presented in table 2.

**Table 2**
**Adoption gap of tribal and non-tribal farm women about improved practices of animal husbandry**

| | Improved practices | Tribal (n-50) | | | Non-tribal (n-50) | | |
|---|---|---|---|---|---|---|---|
| | | Adoption MPS | Adoption gap MPS | Ranks | Adoption MPS | Adoption gap MPS | Ranks |
| 1 | Breeding | 9.04 | 90.96 | I | 26.24 | 73.76 | II |
| 2 | Feeding | 18.42 | 81.58 | III | 33.33 | 66.67 | III |
| 3 | Housing | 12.67 | 87.33 | II | 22.12 | 77.88 | I |
| 4 | Milking | 23.86 | 76.14 | IV | 40.12 | 59.88 | IV |
| 5 | Health care and hygiene | 33.67 | 66.33 | V | 40.24 | 59.76 | V |

MPS – Mean percent Score

Table 2 reveals that the highest adoption gap was found in case of breeding followed by housing, feeding, milking and health care and hygiene among tribal farm women. They were ranked as Ist breeding, II housing, III feeding, IV milking and last health care and hygiene with adoption gap in percentage appearing to be 90.96, 87.33, 81.58, 76.14 and 66.33, respectively. On the other hand, in case of non-tribal farm women housing practices (77.88) were placed at the top as far as adoption gap was concerned. Breeding, feeding, milking and health care and hygiene practices were ranked II, III, IV and V, respectively. Their gap in MPS was of the tune of breeding (73.76), feeding (66.67), Milking (59.88) and health care and hygiene (59.76) practices, respectively. The table further indicates that even both the groups included in the study, possessed adoption level to a certain extent, however, it was alarming to record substantial magnitude of adoption gap in almost all the areas incorporated therein for study. The table also expressed that existing adoption gap was comparatively higher among the tribal farm women. This might perhaps be because the tribal farm women dwelled in scattered hamlets remained untouched or trodden. Beside, this also they were not being educated and persuaded by the extension agent in making use of advocated practices as compared to non-tribal farm women.

The findings were in line with the result of Awanti (1981) who found that overall adoption behavior of dairy farmers was satisfactory but still there existed a wide technological gap which needs to be bridged.

**Table 3**
**Difference in level of adoption between tribal and non-tribal farm women about improved practices of Animal Husbandry**

| Sl. No | Improved practices | Extent of adoption MPS | | Difference | Z value |
|---|---|---|---|---|---|
| | | Tribal | Non-tribal | | |
| 1 | Breeding | 9.04 | 26.24 | 17.20 | 7.25** |
| 2 | Feeding | 18.42 | 33.33 | 14.91 | 7.02 ** |
| 3 | Housing | 12.67 | 22.12 | 9.45 | 5.54 ** |
| 4 | Milking | 23.86 | 40.12 | 16.26 | 7.14 ** |
| 5 | Health care and hygiene | 33.67 | 40.24 | 6.57 | 5.68 ** |
| | Overall | 19.53 | 32.41 | 12.88 | 9.62 ** |

MPS - Mean percent Score
** Significant at 0.01 level of significance

Table 3 revealed that the difference in adoption of breeding, milking and feeding practices between tribal and non-tribal respondents were 17.20,16.26 and 14.91 MPS, respectively. The least adoption difference was found in case of health care and hygiene 6.57 MPS. Similarly 9.45 MPS adoption difference was observed in relation to housing.

Further to see the significant difference between tribal and non-tribal farm women, Z test was applied, it was interesting to note that in almost all the five areas of animal husbandry the Z- value were found to be significant difference with regards to adoption of improved practices of animal husbandry between tribal and non tribal farm women. The findings were in line with the result of Palit *at. al.* (2009)

## CONCLUSION

It can be concluded from the study that majority of tribal respondents had medium to low adoption level, while non-tribal respondents showed different picture as they possessed medium to high and low adoption in descending order, about improved practices of cattle and buffalo rearing. It was also concluded that tribal farm women had higher adoption gap in breeding, feeding, housing, milking and healthcare and hygiene practices of livestock rearing. Findings also indicated that there was significant difference in the adoption of improved livestock rearing practices between tribal and non-tribal farm women.

It was found that in both tribal and non-tribal respondents the actual contribution of dairying components of the farming system was much less than what the respondents of both the categories perceived. Extension training programmes are essential for tribal farm women in order to up grade their existing knowledge about animal husbandry so as to enable them to increase the out put per animal thereby, to improve their livelihood and enabling them to join the mainstream of national development.

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