

INVOLVEMENT OF FARM WOMEN IN AGRICULTURE AND ANIMAL HUSBANDRY ACTIVITIES

N.M.Chauhan¹ and N.B. Chauhan²

ABSTRACT

The highest participation of farmwomen was found in pre-sowing to sowing operations followed by stubble collection and manuring while in case inter-culturing weeding followed by gap filling, application of fertilizer, bird scaring, irrigation and bunding. In harvesting to post harvesting stage, the highest participation found in nipping / picking and threshing followed by harvesting, winnowing, bagging and storage. Majority of the decisions regarding farm management was dominated and taken by their husbands. The relationship between independent variables like age, education, herd size, land holding, family size and number of children of the respondents and their participation in crop husbandry was observed positively significant.

INTRODUCTION

Agriculture is the backbone of Indian. The farm technology is changing at faster rate and farmer has to adopt this in order to become a competitive one. Growing agriculture has been an interminable saga of women's life in tribal areas. Involvement of women in livestock production is also a long standing tradition, where domestic animals have been an integral part of the family farming system. Empowerment of the Farm women is a current need of the time in agrarian country like, India. The census data of 2001 reflects the fact that out of the total 496 million of rural female population 23.90 % are workers and about 87.00 % female workers are found in Agriculture. Keeping in view the present investigation on Involvement of the Tribal Farm Women in crop and animal husbandry in Navsari District of South Gujarat was undertaken with following specific objectives.

METHODOLOGY

Navsari district of the Gujarat state is one of the tribal dominated districts of the state. Out of 131 villages six villages viz Adda, Aat, Chhapra, Hansapore, Matwad and Mogar were randomly selected for the study. Twenty tribal farm women were selected randomly from each of the selected villages. Thus, the total sample size was confined to 120 farm women. Data was collected by personal interview during the month of March 2005. Ex-Post-Facto research design was employed. The mean score and coefficient of correlation was computed to find out the relationship between each of the independent variables and the dependent variable.

RESULTS AND DISCUSSION

1 Involvement of the tribal farm women in Crop husbandry

- 1.1 Participation of tribal farmwomen in pre-sowing and sowing operation

1. Programme Coordinator, KVK, Mangalbharti, Vadodara, Gujarat,

2. Professor and Head, Dept. of Ext. Edu. BACA,AAU Anand**

Table 1: The role of tribal farmwomen in pre-sowing and sowing operation

n = 120

Sr. No.	Pre-sowing and sowing operation	Mean value	Rank
1	Sowing / transplanting	2.63	I
2	Stubble collection	2.51	II
3	Clode crushing	2.40	III
4	Manuring	2.02	IV
5	Seedbed preparation / nursery	1.32	V

The perusal of the data in Table 1 revealed that the highest participation of tribal farm women were observed in sowing / transplanting followed by stubble collection, clode crushing, manuring and seedbed preparation / nursery, respectively.

1.2 Involvement of the tribal farmwomen in intercultural operation

Frequency of participation by farmwomen in various intercultural operations was measured with the help of 4 point rating scale. Most frequently, frequently, least frequent and no participation with scale value of 4, 3, 2 and 1, respectively.

Table 2 : Distribution of tribal farm women according to involvement in inter-culturing operation

n= 120

Sr. No.	Inter-culturing operation	Mean value	Rank
1	Weeding	3.16	I
2	Gap filling	2.22	II
3	Application of fertilizer	2.14	III
4	Bird scaring	1.69	IV
5	Irrigation	1.24	V
6	Bunding	1.09	VI
7	Hoeing with hand	1.07	VII

The data presented in Table 2 revealed that the highest participation of the tribal farmwomen were observed in weeding, followed by gap filling, application of fertilizer, bird scaring, irrigation, bunding and hoeing with hand, respectively.

1.3 Involvement of tribal farmwomen in harvesting and post-harvesting operation

Data collected from the respondents regarding frequency of participation in harvesting and post harvesting operations were given in Table 3.

Table.3 : Classification of tribal farmwomen according to their participation in harvesting and post-harvesting operations

n = 120

Sr. No.	Harvesting and post-harvesting operations	Mean value	Rank
1	Nipping / picking and threshing	3.22	I
2	Harvesting	2.93	II
3	Winnowing	2.34	III
4	Storage	2.12	IV
5	Making threshing yard	1.93	V
6	Bagging / packing	1.54	VI
7	Marketing of agricultural produce	1.29	VII

Perusal of the data presented in Table 3 indicated that the highest participation of the tribal farmwomen were observed in nipping / picking and threshing followed by harvesting, winnowing, storage, making threshing yard, bagging / packing and marketing of agricultural produce, respectively. The roles of tribal farmwomen in all the operations were observed up to the importance level.

2 Involvement of the tribal farm women in livestock management

The data presented in Table-4 regarding the involvement of tribal farm women in livestock management which indicates that the highest mean score of involvement of tribal farm women was obtained in case of cutting and bringing a fodder.

Table. 4: Involvement of tribal farmwomen in Livestock management

n=120

Sr. No.	Livestock management operations	Mean value	Rank
1	Cutting and bringing a fodder	3.62	I
2	Compost making	3.61	II
3	Watering and feeding to animals	3.40	III
4	Milking	3.22	IV
5	Cleaning cattle shed	3.01	V
6	Selling of milk and its products	2.23	VI
7	Bathing animals	2.04	VII
8	Preparation of milk products	1.64	VIII
9	Grazing	1.63	IX
10	Taking animal for bull service	1.57	X
11	Taking the animal for veterinary service	1.48	XI

Moreover they were involved in compost making, followed by watering and feeding to animal, milking, cleaning of cattle shed, selling of milk and

milk products, bathing of animals, preparation of milk products, grazing of animals ,taking animals for bull and veterinary services.

3 Relationship between independent variable of the respondents and their participation in crop husbandry

Table 5 : Relationship between independent and their involvement in crop husbandry n = 120

Sr. No.	Independent variables	Correlation coefficient ('r' value)	
1	Age	0.8430	**
2	Education	0.7409	**
3	Occupation	- 0.5553	*
4	Herd size	0.7854	**
5	Land holding	0.7774	**
6	Family size	0.8074	**
7	Type of family	0.6284	**
8	Number of children	0.4918	*
9	Age of marriage	- 0.8709	*

* Significant at 5 %, ** highly significant at 1 %.

Data presented in Table 5 indicated that age, education, herd size, land holding, family size and type of family were found highly significant with their involvement in crop husbandry. Further, number of children was significant but

the occupation and age of marriage were found negatively significant. It means age of marriage and occupation were the key factors of involvement of tribal farm women in Navsari district of South Gujarat.

4 Relationship between independent variable of the respondents and their participation in animal husbandry

Data presented in table 6 reflects that age, education, occupation, herd size, land holding family size number of children and age of marriage were found negatively significant with

their involvement in animal husbandry practices while only type of family found significant.. It means increasing the age, higher education, other source of income, number of herd, land holding family members and age of marriage may decrease their involvement in animal husbandry activities.

Table. 6: Relationship between independent and their participation in animal husbandry n=120

Sr. No.	Independent variables	'r' value
1	Age	-0.8888*
2	Education	-0.8411*
3	Occupation	-0.3014*
4	Herd size	-0.9464*
5	Land holding	-0.8881*
6	Family size	-0.9322*
7	Type of family	0.8646*
8	Number of children	-0.8036*
9	Age of marriage	-0.8709*

*Significant at 5%

5 Tribal farmwomen's involvement in the process of decision making about the crop husbandry

Data collected from the respondents regarding their involvement in the process of decision-making about crop husbandry are given in Table 7.

Table 7: Involvement tribal farmwomen in decision making process for crop husbandry n= 120

Farm management aspects	Only self		Husband		Joint decision		Not related	
	F	%	F	%	F	%	F	%
Deciding area to be sown under different crops	05	4.17	75	62.50	40	33.33	--	
Introduction of a new crop variety	04	3.33	99	82.50	17	14.17	--	
Selection of seed	03	2.50	78	65.00	39	32.50	--	
When to irrigate fields	01	0.83	105	87.50	06	5.00	08	6.67
Quantity and type of fertilizers used on the farm	--	--	102	85.00	12	10.00	06	5.00
Using plant protection measures	01	0.83	92	76.67	05	4.17	22	18.33
Hiring farm labours	--		25	20.83	80	66.67	15	12.50
Buying farm machinery / equipment	02	1.67	96	80.00	22	18.33	--	--
Installing oil engine and electric motor	--	--	80	66.67	40	33.33	--	--
Buying and selling of land	--	--	34	28.33	86	71.67	--	--
Borrowing money for farm operations	--	--	84	70.00	36	30.00	--	--
Selling of surplus farm produce	03	2.50	47	39.17	70	58.33	--	--

It is evident from the data that in majority of the decisions regarding farm management were dominated by their husbands such as when to irrigate the fields (87.50 per cent), quantity and type of fertilizers to be used in the farm (85.10 per cent), introduction of new crop variety (82.50 per cent), buying farm machinery / equipment (80.00 per cent), using plant protection measures (76.67

per cent), borrowing money for farm operation (70.00 per cent), respectively.

6 Involvement of farmwomen in decision making process for Animal husbandry

Data collected from the respondents regarding their involvement in decision making for animal husbandry are presented in table-8.

Table. 8 : Involvement tribal farmwomen's in decision making process for animal husbandry n=120

Animal Husbandry	Only self		Husband		Joint Decision		Not Related	
	F	%	F	%	F	%	F	%
Selection of animal breed	07	5.83	29	24.17	72	60.00	12	10.00
Selection of fodder and feed	98	81.67	04	3.33	06	5.00	12	10.00
Sale and purchase of animals	13	10.83	15	12.50	78	65.00	14	11.60
Sale of milk and its products	63	52.50	08	6.67	18	15.00	31	25.8
Keeping size of herd	42	35.00	15	12.50	48	40.00	15	12.5

The results indicated that the selection of fodder and feed was dominantly decided by tribal farmwomen (81.67 per cent) followed by sale of milk and milk products (52.50 per cent). The decision regarding sale and purchase of animal (65.00 per cent), selection of animal breed (60.00 per cent) and keeping size of herd (40.44 per cent) were taken jointly by family members.

CONCLUSIONS

- 1 The highest involvement of tribal farmwomen was seen in sowing/transplanting, weeding and nipping/picking.
- 2 The majority of the decisions regarding farm management were not performed by tribal farmwomen.
- 3 The positive and significant relationship were found between their role of tribal farmwomen in crop husbandry and their age, education,

herd size, land holding, family size and number of children. Whereas, the negative relationship was observed among occupation, type of family, age at marriage and their role in crop husbandry.

- 4 The frequency of involvement of tribal farmwomen was seen the highest in cutting and bringing a fodder
- 5 The relationship between independent variables of the respondents and their involvement in animal husbandry were found negative with all the independent variables except type of family.
- 6 Selection of fodder and feed was dominantly decided by farmwomen.

Character is the real foundation of all worthwhile success.

- Jhon Hays Hommond.