International Journal of Agriculture Sciences
ISSN: 0975-3710&E-ISSN: 0975-9107, Volume 8, Issue 55, 2016, pp.-3011-3013.
Available online at http://www.bioinfopublication.org/jouarchive.php?opt=&jouid=BPJ0000217

Research Article

TRIBAL WOMEN PARTICIPATION FOR WATERSHED MANAGEMENT PRACTICES IN INTEGRATED WATERSHED MANAGEMENT PROGRAMME

SHARMA PRASHANT[1], SHARMA PRABHAKAR[2], PATEL M.M.[3], DAIPURIA O.P.[4], SHARMA ROHAN[5*] AND CHAUHAN SANDEEP[6]

[1,2,3,4,5]Department of Extension Education, Rajmata Vijayaraje Scindia Krishi Vishwa Vidhayalya, Gwalior, Madhya Pradesh
[6]Department of Agriculture Extension, Krishi Vigyan Kendra, Sehore, Madhya Pradesh
*Corresponding Author: Email-rohansumitra@gmail.com

Received: October 25, 2016; Revised: November 02, 2016; Accepted: November 03, 2016; Published: November 12, 2016

Abstract- The term "Scheduled Tribes" refers to specific indigenous peoples whose status is acknowledged to by the Constitution of India. The term Adivasi also applies to indigenous peoples of this area. Tribal women play an important and significant role in watershed management programme. The study revealed that the total respondents of complete participation category, 43.75 per cent were having complete participation in contour bunding and majority of respondents showed a trend of partial involvement in underground water resource development (56.25%). Out of 11 independent variables education, extension contact, size of land holding, material possession, occupation, annual income, social participation and knowledge of watershed practices were significant with extent of participation in watershed practices while age, family size and farm power were non-significant association.

Keywords- Tribal women, Profile, Participation, Watershed practices

Citation: Sharma Prashant, et al., (2016) Tribal Women Participation for Watershed Management Practices in Integrated Watershed Management Programme. International Journal of Agriculture Sciences, ISSN: 0975-3710 & E-ISSN: 0975-9107, Volume 8, Issue 55, pp.-3011-3013.

Academic Editor / Reviewer: Pradeep Mishra, Nilay Kumar Saxena

Introduction

The tribes of Madhya Pradesh are the scheduled tribes as per the prerequisite of the Constitution of India. The tribes of Madhya Pradesh have ranked in the top in terms of the tribal population. The tribes of Madhya Pradesh population constitute over 20% of the state population & are mainly concentrated in southern part of the state. The main tribal groups in Madhya Pradesh are Gond, Bhil, Baiga, Korku, Bhariya, Halba, Kaul, Mariya, and Sahariya. Bhils have the highest population in Jhabua district followed by Dhar, Barwani and Khargone districts. Gonds have major concentrations in Dindori district, Chhindwara, Mandla, Betul, Seoni and Shahdol districts. Other four major groups Kol, Korku, Sahariya and Baiga have registered the highest population in Rewa, Khandwa, Vidisha, Shivpuri and Shahdol districts respectively. Such tribal people have a heredity, lifestyle, cultural traditions, social structure, economic structure, beliefs, language and religious characteristics. Saharia are the members who belong to traditional society. Most of the Saharia are depended on ecology, which plays an important role in forming their economic structure. People's participation is an important factor of different level of watershed management programme, which determine the success of programme. Tribal women actively participate in different activities i.e. conservation of forest, soil-water conservation, agricultural production practices and other practices like animal husbandry, bee keeping, cottage industry etc. But tribal women's participation in smart agriculture for sustainable development and watershed management practices has been inadequately understood. Hence, an investigation was conducted with the following specific objectives: (i) to know the profile of the tribal women. (ii) To find out the extent of participation of tribal women in Integrated watershed management programme. (iii) To determine the relationship between profile of tribal women with extent of participation.

Material and Methods

The present study was conducted purposively in IWMP-3, project of Nateran, Block Vidisha District (M.P.). There are eight watershed areas in IWMP-3, project and all watershed areas were selected. The watershed area wise lists of tribal women's were prepared. From this, twenty tribal women's were selected randomly from each selected macro watershed area to make a sample size of 160 respondents. Data collected was qualitative as well as quantitative. The quantitative data was interpreted in terms of percentage and qualitative data was tabulated on the basis of approved categorization method. The percentage, mean, standard deviation and chi square test was worked out in the study for analysis of data.

Results and Discussion

Table-1 *Frequency distribution of respondents according to profile of tribal women (n=160)*

S.No.	Category	Frequency	%	Mean
1	**Age**			
	Young	19	11.87	0.31
	Middle	85	53.13	1.37
	Old	56	35.00	0.90
2	**Education level**			
	Illiterate	09	05.63	0.20
	Can only read (functionally literate)	11	06.87	0.24
	Primary school	19	11.87	0.42
	Middle school	44	27.50	0.96
	High School	56	35.00	1.23
	Above high school	21	13.13	0.46
3	**Extension contact**			
	Low	35	21.87	0.47

	Medium	*92*	*57.50*	*1.24*
	High	*33*	*20.63*	*0.44*
4	***Family size***			
	Small(up to 4 members)	*19*	*11.87*	*0.31*
	Medium(5-8 members)	*82*	*51.25*	*1.35*
	Large(>8 members)	*59*	*36.88*	*0.97*
5	***Size of land holding***			
	Marginal (<1 ha)	*81*	*50.63*	*1.13*
	Small (1-2 ha)	*29*	*18.12*	*0.40*
	Medium (2.1-5 ha)	*29*	*18.12*	*0.40*
	Large (>5 ha)	*21*	*13.13*	*0.29*
6	***Material possession***			
	Low	*29*	*18.12*	*0.41*
	Medium	*71*	*44.38*	*1.00*
	High	*60*	*37.50*	*0.85*
7	***Occupation***			
	Agriculture	*57*	*35.62*	*1.01*
	Agriculture + Business	*65*	*40.63*	*1.15*
	Agriculture + Business + Service / Other	*38*	*23.75*	*0.68*
8	***Annual income***			
	Low (Below Rs. 50000)	*43*	*26.87*	*0.49*
	Medium (Rs. 50000-100000)	*99*	*61.88*	*1.13*
	High (Above Rs. 100000)	*18*	*11.25*	*0.20*
9	***Farm Power***			
	Low	*50*	*31.25*	*0.54*
	Medium	*94*	*58.75*	*1.02*
	High	*16*	*10.00*	*0.17*
10	***Social participation***			
	Low	*49*	*30.63*	*0.55*
	Medium	*89*	*55.62*	*1.01*
	High	*22*	*13.75*	*0.25*
11	***knowledge of watershed practices***			
	Low	*44*	*27.50*	*0.71*
	Medium	*97*	*60.63*	*1.56*
	High	*19*	*11.87*	*0.30*

The Table reveals that majority of the respondents (53.13%) belonged to middle age category. Most percentage of respondents (35%) were educated at high school level, majority of the respondents (57.5%) had medium extension contact, majority of the respondents (51.25%) had medium size of family, majority of the respondents (50.63%) were medium size of land holding, most of the respondents (44.38%) belonged to medium material possession, most of the respondents (40.63%) belonged to agriculture and business occupation, more than half of the respondents (61.88%) belonged to medium annual income, more than half of the respondents (58.75%) had medium farm power, majority of the respondents (55.62%) belonged to medium social participation and more than half of the respondents (60.63%) were found that medium knowledge of watershed practices.

Table-2 *Distribution of tribal women's according to their extent of participation in watershed management practices*

S. No.	Recommended watershed practices	Complete participation		Partial participation		No participation	
		frequency	%	frequency	%	frequency	%
Practices for soil and water conservation and food purpose							
1	Contour bunding	70	43.75	56	35.00	34	21.25
2	Strip cropping	34	21.25	72	45.00	54	45.00
3	Mixed cropping	36	22.50	56	35.00	68	42.50
4	Crop rotation	34	21.25	59	36.88	67	41.87
5	Contour cultivation	34	21.25	67	41.87	59	36.88
6	Surface water resources	36	22.50	84	52.50	40	25.00
7	Underground water resources development	36	22.50	90	56.25	34	21.25
8	Control of soil erosion	51	31.88	67	41.87	42	26.25
9	Pasture land development	54	33.75	61	38.12	45	28.13
10	Barren land development	52	32.50	74	46.25	34	21.25
11	Use of wind break	35	21.88	54	33.75	71	44.37
12	Recommended fertilizer	34	21.25	39	24.37	87	54.38
Practices for cultivation of fodder, fuel and vegetable crops							
13	Suitable crops for fodder	35	21.87	54	33.75	71	44.38
14	Suitable plants for fuel	40	25.00	47	29.38	73	45.62
15	Vegetable farming	70	43.75	54	33.75	36	22.50
Other Practices							
16	Small scale industry	73	45.62	43	26.88	44	27.50
17	Self help group	83	51.87	43	26.88	34	21.25
18	Saving scheme	81	50.62	45	28.13	34	21.25
19	Poultry farming, goat rearing	73	45.62	57	35.63	30	18.75
20	Literacy programme	35	21.87	55	34.38	70	43.75
21	Training programme	49	30.62	68	42.50	43	26.88

The Table shows that of the total respondents of complete participation category, 43.75 per cent were having complete participation in contour bunding followed by pasture land development (33.75%). Majority of respondents showed a trend of partial involvement in underground water resource development (56.25%) followed by surface water resource conservation (52.5%) activities. Partial and no participation had reflected in activities more direct benefits not to get immediately. Complete participation was shown by 43.75 per cent respondents' particularly vegetable farming. This might be due to direct benefit to and within shorter period towards fulfilling their felts needs. Nearly half of the respondents were shown complete involvement in self-help group and saving scheme. In training programme organized under watershed development programme and activities propounded particularly poultry, goat rearing; the extent of participation was partial.

Table-3 *Relationship between Socio-economic characteristics and extent of participation*

S.No.	Characteristics	χ^2	D.F.	Value of "C"
1	Age	0.170^{NS}	2	0.041
2	Education	17.832**	4	0.358
3	Extension contact	15.357**	2	0.339
4	Family size	0.106^{NS}	2	0.032
5	Size of land holding	10.429*	4	0.292
6	Material possession	6.190*	2	0.234
7	Occupation	13.643**	4	0.325
8	Annual income	14.528**	4	0.332
9	Farm Power	0.043^{NS}	4	0.020
10	Social participation	8.963*	2	0.274
11	knowledge of watershed practices	11.873*	4	0.308

^{NS} non-significant, * significant at 5% probability level, ** significant at 1% probability level

The Table indicates that level of education, extension contact, size of land holding, material possession, occupation, annual income, social participation and knowledge of watershed practices of tribal women had significant association with their extent of participation in watershed practices. Hence, the null hypotheses about independence of each socio-economic characteristic like education, extension contact, and size of land holding, material possession, occupation, annual income, social participation and knowledge of watershed practices with extent of participation of tribal women in watershed practices are rejected. Significant association of education, extension contact, size of land holding, material possession, occupation, annual income, social participation and knowledge of watershed practices of tribal women with their extent of participation in watershed practices indicated that the extent of participation of tribal women in watershed practices significantly varied due to their above-mentioned socio-economic characteristics of tribal women. However, the socio economic characteristics like age, family size and farm power of tribal women did not have any association with their extent of participation in watershed practices. Therefore, the null hypotheses about independence of each age, family size and farm power with extent of participation of tribal women in watershed practices are accepted that means the extent of participation did not vary due to age, family size and farm power of tribal women.

Conclusion

The findings leads to conclude that majority of the respondents were belong to middle age, most percentage of respondents were educated at high school level, majority of the respondents were found to medium extension contact, majority of the respondents were medium size of family, majority of the respondents were medium size of land holding, most of the respondents belonged to medium material possession, most of the respondents belonged to agriculture and business occupation, more than half of the respondents belonged to medium annual income, more than half of the respondents were medium farm power, majority of the respondents belonged to medium social participation and more than half of the respondents were found that medium knowledge of watershed practices. Their participation is affected by education, extension contact, and size of land holding, material possession, occupation, annual income, social participation and knowledge of watershed practices. The above findings were supported by Bagadi, G.L. (2012), Jirli *et.al* (2010), Manjula N. and Belli R.B. (1994), Naberia *et.al* (2006), Rathore, R. S *et.al* (2011) in their studies [1-5].

Acknowledgement:

The authors are thankful to Dr. A.K. Singh, Vice Chancellor of RVSKVV, and Gwalior for providing necessary facilitators to conduct the study successfully. The authors are also thankful to Mr. Neeraj Jain and Mr. Ajay Rathore (PIA Team), IWMP-3, Nateran Bock, Vidisha (M.P.) for giving the valuable suggestion in improving the manuscript. We acknowledge the pioneers whose work has been cited and to all those who motivated to bring out these findings.

Authors Contribution:

An attempt has been made by all authors to cover all those relevant aspects, which are very oftenly required for consultation by agricultural extensionists. The deliberate attempt was made by Dr. Prashant Sharma (Contractual Teacher, Dept. of Extn Edu, COA, RVSKVV, Gwalior, M.P.), Dr. Prabhakar Sharma (Scientist, Dept. of Extn Edu, COA, RVSKVV, Gwalior, M.P.), Dr. M. M. Patel (Prof. & Head, Dept. of Extn Edu, COA, RVSKVV, Gwalior, M.P.), Dr O. P. Daipuria (Professor, Dept. of Extn Edu, COA, RVSKVV, Gwalior, M.P.), Mr. Rohan Sharma (Ph.D Scholar, Dept. of Extn Edu, COA, RVSKVV, Gwalior, M.P.), Mr. Sandeep Chauhan (Scientist, Dept. of Agriculture Extension, krishi Vigyan Kendra, Sehore, M.P.), to collect and include all needed data to get the findings about tribal women participation in IWMP, for the benefit of the readers.

Abbreviations:

MP-Madhya Pradesh
IWMP-Integrated Watershed Management Programme
PIA-Programme Implementation Agency
RVSKVV-Rajmata Vijyaraje Scindia Krishi Vishwa Vidyalaya
Extn Edu-Extension Education
J- Journal

Conflict of Interest: None declared

References

[1] Bagadi G.L. (2012) *International J. Of Extn Edu.,* .8, 19-23.
[2] Jirli Basavaprabhu and Kumar Pushpendra (2010) *Journal of Community Mobilization and Sustainable Development,* 5(1), 13-17.
[3] Manjula N. and Belli R.B. (1994) *Maharashtra Journal of Extension Education*, XIII pp. 227.
[4] Naberia Seema and Khare Nalin (2006) *Indian Research Journal of Extension Education,* 6(3), 1-3.
[5] Rathore R.S., Kalla P.N. and Jani P.P. (2011) *Rajasthan J. Extn Edu,* 19, 55-58.