Status and awareness of farm women about drudgery reducing technologies in Rajgarh district, Madhya Pradesh

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ABSTRACT

The present study was an attempt to find out the present status and awareness of 120 farm women about drudgery reduction technologies in Rajgarh district, Madhya Pradesh. Findings revealed that majority of the farm women were of middle age and illiterate. Trend of nuclear type of families existed which were of medium size. Most of the farm women belonged to OBC category having annual family income of less than Rs 1,00,000 as majority were marginal farmers with small size of herds. Very few of them (10.00%) were having completely Pucca houses. They had low level of mass media exposure and low contact with extension personnel as well as extension institutions. Maximum participation of farm women was found in animal dung collection and its disposal (90.50%) followed by picking of vegetables (88.50%), storage (85.00%), manual harvesting (82.00%), weeding (80.00%) and drying and cleaning of grains (80.00%). Among all the activities, manual harvesting was considered as drudgery-prone operation/ difficult to perform activity by 66 per cent respondents followed by weeding (63.00%), threshing (60.00%), picking of vegetables (44.00%) and thinning (43.00%). Majority (82.50%) of farm women had low level of awareness about drudgery reducing tools and implements. The variables like educational qualification, annual income, mass media exposure level, contact with extension personnel/agents were positively and had high significant correlation with their awareness index regarding drudgery reduction tools whereas the variables like age and family size were observed negatively correlated.

Keywords: Farm women; awareness; socio-economic status; drudgery reduction tools

INTRODUCTION

Women are the backbone of agricultural workforce as they perform more than 79 per cent of farm activities. A huge proportion of rural women is of farmers or farm workers involved in several activities in agricultural and allied fields like the crop production, irrigation, manuring, post-harvest operations, agro/social forestry, livestock activities, fisheries etc (Sudharani and Raju 1991, Verma and Sinha 1991, Oberoi and Singh 2001, Rani 2007, Mukherjee 2014). The share of women labour force in agriculture is expected to be 55 per cent by 2025 AD (Singh 2012). The extent of women's involvement and type of activities performed by them in agriculture and allied fields vary greatly from state to state even within a state. Long hours of work with age-old traditional, unsafe and hazardous tools lead to significant physical, mental exhaustion and health-related problems (Nag and Nag 2004). The farm women perform agricultural tasks with the age-old traditional tools since gender-friendly appropriate tools are either not available or insufficient in number. The contributory factors to this problem are unawareness and limited knowledge of farm women, their educational, social and economic status and lack of exposure to surroundings. It is thus imperative to know the present status of farm women and their need to get exposed to women-friendly new technologies which would help them to improve their quality of life (Anon 2006).

If appropriate drudgery reduction technologies are made available to the farm women at home and farm, it would definitely contribute in reducing their drudgery, increasing their working capability and increasing farm production resulting in improved quality

of life. Thus the present study was planned with the objective to study the present socio-economic status, participation and perception of farm women involved in agricultural and livestock activities and to analyze their awareness level about drudgery reduction tools and its correlation with their socio-economic variables.

METHODOLOGY

The study was conducted on rural women of four villages of Rajgarh district of Madhya Pradesh. A total of 120 rural women were selected for the study using simple random sampling. Data were collected through a well-structured questionnaire, focused group discussion and personal interview method. The present study investigated awareness and knowledge of rural women towards improved farm tools and implements and the relationship of socio-economic status of women with their awareness index regarding drudgery.

RESULTS and DISCUSSION

Personal, social and economic profile of farm women

Data presented in Table 1 reveal that majority (47.50%) of the farm women belonged to middle age group of 30-50 years whereas 37.50 per cent were young (18-30 years). Majority (70.00%) of farm women was illiterate, 21.67 per cent were having primary education and only 8.33 per cent had secondary education. Forty per cent of farm women were having joint families whereas 60.00 per cent had nuclear family system. Little less than half (45.00%) of respondents had medium size families whereas only 25.00 per cent were having small families of up to five members. Maximum (67.50%) of them belonged to OBC category followed by SC/ST (25.00%) and general caste (7.50%) category. Little less than half (48.33%) of farm women had relatively low level of annual family income (Rs <1,00,000) and 44.17 per cent had medium annual family income (Rs 1,00,000 to 3,00,000). Only some (7.50%) farm women had relatively high level of annual family income (Rs >3,00,000). Majority (56.67%) of the farm women family had marginal size of landholdings. Only few (9.16%) were medium farmers. Majority (70.83%) of the farm women had small size of herds (<5). Majority (62.50%) of the farm women had the semi-Pucca type of houses.

Majority of the farm women were of middle age group. Most of them were illiterate. No farm woman was educated above secondary level. Trend of nuclear type and medium size family was prevalent. Most of the farm women belonged to OBC caste category having annual family income of less than Rs 1,00,000 as majority were marginal farmers with small size of herds. Very few of them (10.00%) were having completely Pucca houses.

Communication variables of farm women

It is evident from the Table 2 that majority (65.00%) of the farm women had low level of mass media exposure. Only some (5.83%) farm women had high level of mass media exposure. Similarly half (50.00%) of the respondents had low level of contact with extension personnel whereas 34.67 per cent farm women had medium level of contact. Only some farm women (15.33%) had high level of contact with extension personnel. Majority (75.83%) of the respondents had low level of contact with extension institutions; only few (4.17%) had high level of contact. The data give a strong indication about low level of mass media exposure and low contact with extension personnel as well as extension institutions in case of majority of farm women.

Participation and perception of farm women in agricultural and livestock activities

Data in Table 3 (Fig 1) show the participation of farm women in agricultural and livestock activities. The maximum participation of farm women was found in animal dung collection and its disposal (90.50%). Majority of the women were involved in picking of vegetables (88.50%), storage (85.00%), manual harvesting (82.00%), weeding (80.00%) and drying and cleaning of grains (80.00%). Similar findings have been reported by Singh et al (2004). The other activities in which farm women were involved were winnowing, thinning, transplanting, nursery raising and threshing. The findings of the present investigations are in agreement with the observations made by Srivastva and Singh (2012) and Mrunalini and Snehalatha (2010).

Data in Table 3 (Fig 1) reveal the perception of farm women about different agricultural and livestock activities performed by them. Among all the activities, manual harvesting was considered as drudgery prone operation/difficult to perform activity by 66.00 per cent respondents followed by weeding (63.00%), threshing (60.00%), picking of vegetables (44.00%) and thinning (43.00%). Farming activities which were perceived as moderately drudgery prone

Table 1. Distribution of respondents according to the personal, social and economic profile (n= 120)

Variable	Respondents	
	Number	Percentage
Age (years)		
Young (18–30)	45	37.50
Middle (30–50)	57	47.50
Old (>50)	18	15.00
Education		
Illiterate	84	70.00
Primary (up to 5th standard)	26	21.67
Secondary (up to 10th standard)	10	8.33
Type of family		
Joint	48	40.00
Nuclear	72	60.00
Size of family (number of members)		
Small (up to 5)	30	25.00
Medium (6 to 9)	54	45.00
Large (>9)	36	30.00
Caste		
General	09	7.50
OBC	81	67.50
SC/ST	30	25.00
Annual family income (Rs)		
Low (<1,00,000)	58	48.33
Medium (1,00,000 –3,00,000)	53	44.17
High (>3,00,000)	9	7.50
Landholding (ha)		
Marginal (<1.00)	68	56.67
Small (1.00–2)	41	34.17
Medium (>2.00)	11	9.16
Herd size (number)		
Small (<5)	85	70.83
Medium(5–10)	26	21.67
Large (>10)	09	7.50
Type of house		
Kuchcha	33	27.50
Semi-Pucca	75	62.50
Pucca	12	10.00

Table 2. Distribution of respondents according to their communication profile (n= 120)

Variable	Respondents	
	Frequency	Percentage
Mass media exposure level		
Low (<08)	78	65.00
Medium (08–13)	35	29.17
High (>13)	7	5.83
Contact with extension personnel/agents		
Low (<05)	60	50.00
Medium (05–10)	38	34.67
High (>10)	18	15.33
Contact level with extension institutes		
Low (<05)	91	75.83
Medium (05–10)	24	20.00
High (>10)	5	4.17

Table 3. Distribution of farm women according to their participation and perception in agricultural and livestock activities (n= 120)

Activity	Respondents			
	Participation (%)	Perception (%)		
		Sedentary activity	Moderate activity	Heavy activity
Weeding	80.00	11.00	26.00	63.00
Thinning	72.00	22.00	35.00	43.00
Picking of vegetables	88.50	18.00	38.00	44.00
Manual harvesting	82.00	08.00	26.00	66.00
Raising nursery	49.50	58.00	27.00	15.00
Transplanting	55.50	17.00	41.00	42.00
Threshing	25.00	12.00	28.00	60.00
Winnowing	70.00	34.00	41.00	25.00
Drying and cleaning of grains	80.00	28.00	39.00	33.00
Grading of grains	76.00	25.00	47.00	28.00
Storage	85.00	36.00	47.00	17.00
Animal dung collection and disposal	90.50	07.00	56.00	37.00

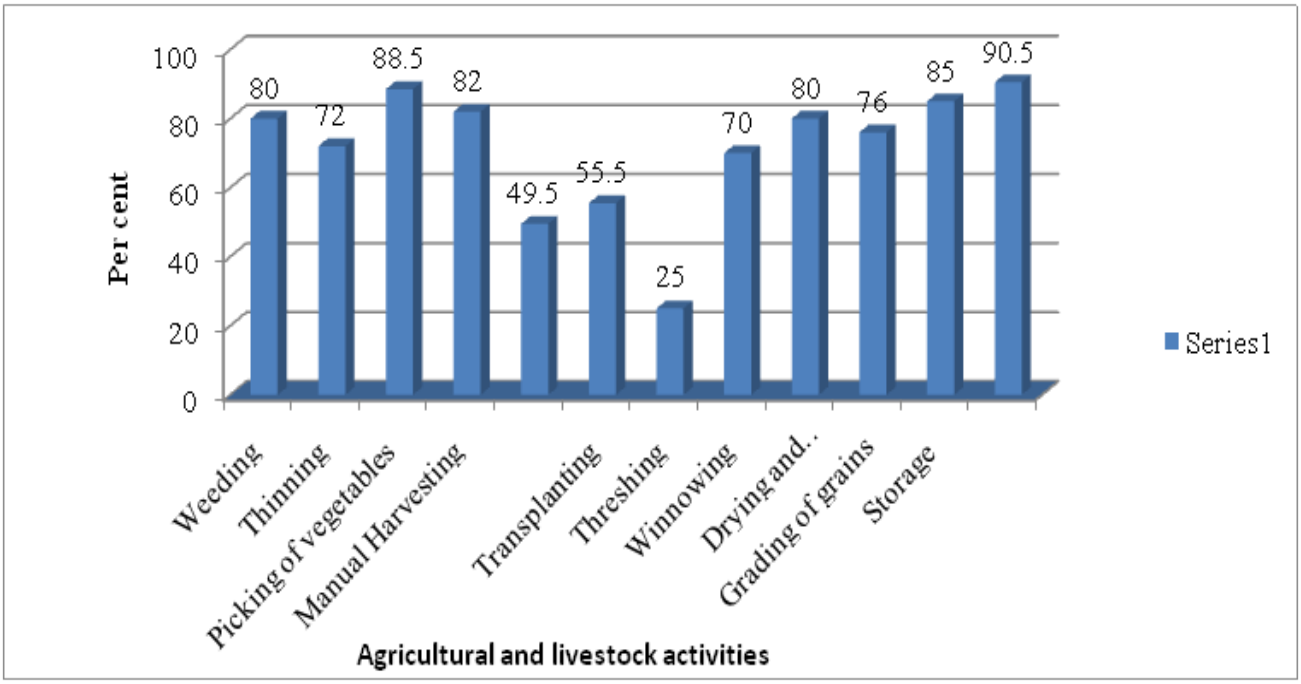

Fig 1. Distribution of farm women according to their participation in agricultural and livestock activities (n= 120)

by majority of farm women were transplanting (41.00%), picking of vegetables (38.00%) and thinning (35.00%) whereas only 8.00 and 11.00 per cent respondents perceived that manual harvesting and weeding were the least drudgery prone activity/ sedentary activity respectively. Kumar et al (2011) reported drudgery of farm women when they work by bending for long hours in the scorching sun. Drudgery in farm activities was also reported by Verma and Sinha (1991). Thus most of the agricultural and livestock activities were perceived as difficult to perform by majority of the farm women. This can be due to inadequate posture, long duration of exhaustive and repetitive work and lack of sufficient rest. Similar findings are reported by Mrunalini and Snehalatha (2010) which state that women perceived harvesting, weeding inter-cultivation and threshing as the most drudgery prone tasks as per priority. Gandhi et al (2014) reported that threshing and winnowing were most stressful activities.

Table 4. Distribution of respondents according to awareness level regarding drudgery reducing tools and implements (n= 120)

Level	Respondents	
	Frequency	Percentage
Low (<50)	99	82.50
Medium (50–65)	15	12.50
High (>65)	06	5.00

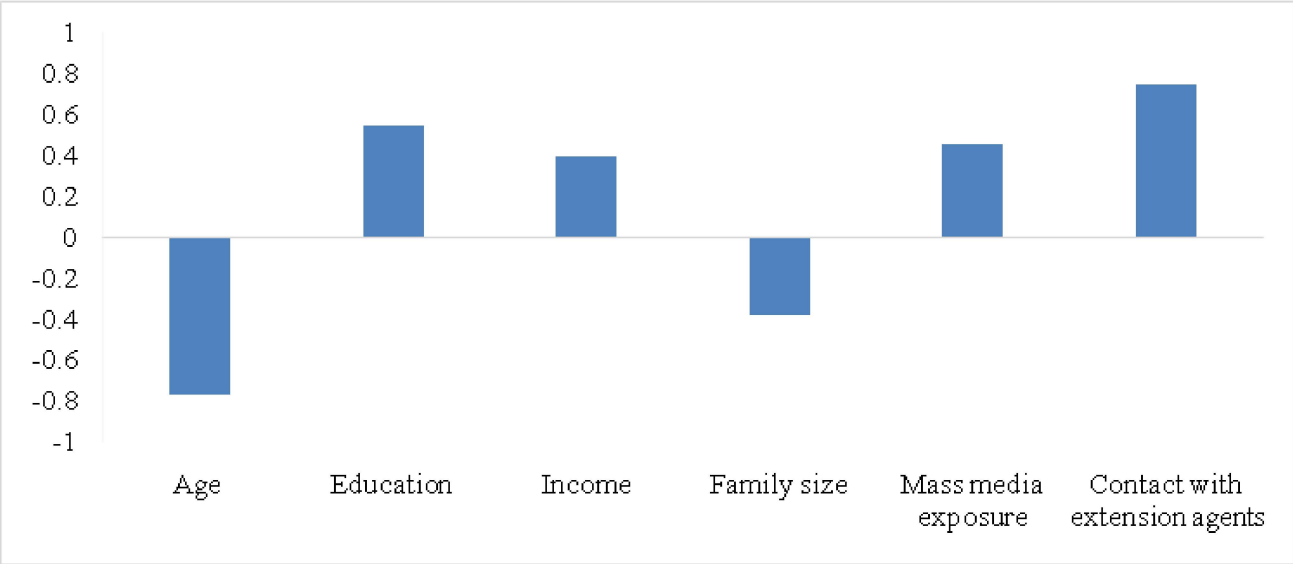

Fig 2. Correlation coefficient between different variables with women's awareness index regarding drudgery reduction tools (n= 120)

Awareness level of farm women about drudgery reducing tools and implements

The data presented in Table 4 depict that a majority (82.50%) of farm women had low level of awareness about drudgery reducing tools and implements followed by medium level (12.50%). Very few (5.00%) farm women were having good awareness about drudgery reducing tools and implements. It shows that drudgery reducing tools and implements were not popular among the farm women of the selected area owing to low level of their awareness. The stress of agricultural activities can be reduced by using appropriate drudgery reducing tools and implements (Mrunalini and Snehalatha 2010, Sudharani and Raju 1991, Rani 2007, Patel et al 2015).

Use of inappropriate tools by farm women was reported by Aggarwal et al (2013) resulting in acute and sub-acute cumulative trauma of wrist and forearm. Singh et al (2014) reported higher working efficiency while harvesting with serrated sickle.

Relationship between physical, socio-economic and communication status of farm women and their awareness index

The data presented in Fig 2 reveal the relationship between the socio-economic status and awareness index of the women friendly technologies in agriculture. There was negative correlation between age of farm women and their awareness index. Knowledge level of younger women was more as compared to the elderly women. Higher the age, lower was the awareness index.

There was a positive relationship between the education level of farm women and their awareness level. Knowledge level of women regarding the various drudgery reduction tools was found to be positively associated with family income and negatively associated with the size of the family. A positive correlation of mass media exposure level of women and their awareness index regarding drudgery reduction tools was found. Contact with extension personnel/

agents and awareness index of farm women regarding drudgery reduction tools was found highly positively correlated with each other in the present study.

CONCLUSION

Drudgery of farm women is a major issue although they do not express it and suffer silently. Low level of awareness of drudgery reducing tools and implements was found among majority of the farm women. Communication is an issue of concern. The variables like educational qualification, annual income, mass media exposure level and contact with extension personnel/agents were positively related and had high significant correlation with awareness index regarding drudgery reduction tools of the farm women whereas the variables like age and family size were negatively correlated. Women-friendly drudgery reducing tools and implements need to be popularized primarily related to most drudgery prone faming activities like harvesting, weeding, threshing and picking of vegetables. Farm women must be motivated to adopt drudgery reducing tools and implements. It is thus necessary to organize trainings and demonstrations to create more awareness among farm women regarding drudgery reduction tools. This will prevent different kinds of occupational health hazards, increase their efficiency and thereby save energy and time of farm women.

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