

WOMEN PARTICIPATION IN SMALL SECTOR TEA CULTIVATION IN NORTH BENGAL AREAS IN INDIA

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ABSTRACT

Women's role as an active worker producer is rarely acknowledged though it is significant for the family's survival. In the present context male members of the farm families are willing to quit agricultural profession if they get scope. They migrate to urban areas in search of new job opportunities. So, women are increasingly becoming the prime agriculturist; although with little rights, authority, access to or control over resources. Tea plantation industry is a labour intensive one and women workers constitute the majority of workers of tea industry in India; but discussions on female workers and their role in decision-making processes are rarely addressed. The present study was undertaken as a part of the Ph.D. study (2011-14) to assess the actual participation of women in small tea sector in activity and decision making in respect of male workforce. A construct (Participation Index—Activity/Decision) was used to assess and compare the level of participation (Participation Index value=0 means no participation and 1 means 100% participation by the female). High Average Activity Index of female was observed in case of plucking (0.82) and weeding (0.42) whereas in case of fertilizer application, irrigation and spraying, low Activity Index was observed as 0.01, 0.01 and 0.00 respectively. In case of decision also female Average Decision Index was 0.26 and 0.13 respectively which is considered as low. In other areas, they had extremely minimum levels of participation. In both activity and decision making spheres, male members had significantly higher participation than women workforce.

KEYWORDS: Index, North Bengal, Participation, Small Tea Growers, Tea, Women

INTRODUCTION

Although women represent 50% of population and have contributed about 10% of income but they own less than 1% of world's property (Badiger and Huilgol, 2004). Although they share abundant responsibilities and perform a wide spectrum of duties in running family, maintaining the households, agriculture and allied activities (Katiyar *et al.*, 2008; Raju and Rani, 1991; Ahmed and Hussain 2004; Team and Doss, 2011; Arshad and Hussain, 2010) but the significance of decision-making is much more perceptible in rural agricultural families. The decisions to be taken in farming by farmwomen are influenced by the opinion of others with whom they interact (Chaudhary *et al.*, 1998). A women's

decision-making freedom is linked to whether she is engaged in gainful economic activity. Statistics have revealed that an employed mother's role is greater in making family decision in areas like investment and budgeting (Mishra and Goel, 2004).

Women's role has biologically and socially combined to create four distinct functions of mother, wife, homemaker and worker. The role of homemaker and worker is equally important as that of other three roles. But her role as an active worker producer is rarely acknowledged though it is significant for the family's survival (Reddy, 2003; Chayal *et al.*, 2013).

Women contribution in agricultural labour force in developed countries is 36.7 per cent while, it is about 43.6 per cent in developing countries (FAO, 2010). About 70 per cent of the agricultural workers, 80 per cent of food producers, and 10 per cent of those who process basic foodstuffs are women and they also undertake 60 to 90 per cent of the rural marketing (Choudhary and Singh, 2003; Sabo, 2006). Agriculture and farming activities involve joint participation of both male and female labour force and female labour participation hovered around 45 per cent in India (Census, 2011). There is hardly any activity in agricultural production, except ploughing in which women are not actively involved (Swaminathan, 1985); Now-a-days male members of the farm families are willing to quit the profession if they get scope. They migrate to urban areas in search of new job opportunities. So, women are increasingly becoming the prime agriculturist; although with little rights, authority, access to or control over resources (Acharya *et al.*, 2010). Tea plantation industry is a labour intensive one and majority of workers are women (Sarkar and Bhowmik, 1988). Although there is only a marginal increase of women workers from 2001, but women workers still constitute the majority of workers of tea industry in India; but discussions on female workers and their role in decision-making processes are rarely addressed (Kadavil, 2012).

Women are also stakeholders as customers, shareholders, suppliers, supply chain workers, and community members of the tea sector, whether from a social justice, stakeholder or business case perspective and tea sector should systematically address question of gender equality (Kadavil, 2012). In this backdrop the present study was undertaken as a part of the Ph.D. study (2011-14) to assess the actual participation of women in small tea sector in activity and decision making in respect of male workforce.

METHODOLOGY

Among the four tea producing districts of North Bengal, Jalpaiguri and Uttar Dinajpur comprises about 80% of small tea growers (Tea Board, 2011) and so these two districts were purposively selected. Among these two districts the specific areas where the tea concentration was high were selected again purposively in consultation with the personnels of CISTA (Confederation of Indian Small Tea Growers' Associations). Higher concentration of small tea growers is found in Jalpaiguri sub-division of Jalpaiguri district and Islampur sub-division of Uttar-Dinajpur district. So, these two sub-divisions were taken. Finally individual tea growers from different patches of these sub-divisions were selected. Care was taken to select the areas to make the sample representative.

Random sampling was employed to select the respondents. Hundred farmers from each district have been selected for interview. Grass root organizations like SHG have a positive effect on tea cultivation and in North Bengal the development of SHG is steady. The small tea growers are establishing their own SHG, although in a slow rate to get benefit from Tea board. So, SHG areas were also selected for the study. 100 respondents from each district from the study areas

were selected randomly of which 50% were the members of SHGs. So, altogether 200 small tea growers (100 SHG and 100 non-SHG growers) were chosen randomly. Data were collected through a structured pre-tested schedule.

For analysing and comparing levels of participation, Participation Index was developed following Pal et al., (2006) as follows:

$$\text{Participation Index} = \frac{\sum_{i=1}^n xi fi}{N \times n}$$

Where, xi =Score assigned for i th level of participation

fi =frequency of women participated in i th level

n =maximum score levels assigned (2 in the present study)

N =number of women considered for the study (50 in the present study)

Score in activity and decision arena were assigned through a scale composed of 'independent participation', 'joint participation' and 'no participation' with 2, 1 and 0 score levels respectively. Paired t-test and Wilcoxon on rank-sum test were employed to draw generalized inferences from the study.

RESULTS AND DISCUSSIONS

Results of the study are presented as activity and decision participation in the following tables with simultaneous discussion.

Table 1 depicted the distribution of women according to their level of participation both in activity and decision arena. We can find that maximum female workers (81.5%) of North-Bengal had low level of participation. It indicates that maximum female workers are engaged in low level of activities in small tea sector. 18.5% female are participated with moderate level of activities. No one was found with high level of activity participation. Uttar-Dinajpur district has more number of female workers (98%) who have low level of activity participation in comparison to Jalpaiguri district where 69% female workers have low level of activity participation. Only 2% of the female workers had moderate level of activity participation in Uttar-Dinajpur district, but in Jalpaiguri, it is as high as 31%. In case of group affiliation, low and moderate level of female activity participation was found in case of both SHGs and Non-SHG. None of the SHGs or Non-SHG was found with high level of activity participation. The mean values of participation index concludes that the women of North Bengal have low level of participation in various activities; although there is a difference between two district regarding activity participation ($t=4.99$; $p<0.001$).

From the table, we can also found that the extent of decision participation of women in small tea sector. It is found from the table that 100% female family members of North-Bengal target area possess low level of Participation in Decision making. The same picture is also revealed in case of both districts and both groups, SHGs and Non-SHG. As revealed from mean participation values that that female although were taking part in different activities in small tea sector but in case of decision making they had extremely minimum participation or low level of participation; and in case of both district and group affiliation their level of participation significantly differs from each other.

Table 1: Distribution of Women According to Extent of Participation in Small Tea Sector

Level of Participation	Whole North Bengal	District Wise		Group Affiliation	
		Jalpaiguri	Uttar Dinajpur	SHG	Non-SHG
Activity Arena					
Low (Index value up to 0.33)	163 (81.50)	69 (69.00)	98 (98.00)	78 (78.00)	87 (87.00)
Moderate (Index value 0.34 to 0.66)	37 (18.50)	31 (31.00)	2 (2.00)	22 (22.00)	13 (13.00)
High (Index value 0.67 and above)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Decision arena					
Low (Index value up to 0.33)	200 (100.00)	100 (100.00)	100 (100.00)	100 (100.00)	100 (100.00)
Moderate (Index value 0.34 to 0.66)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
High (Index value 0.67 and above)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Analysis on mean difference					
Mean Activity Participation Index	0.201	0.237	0.164	0.214	0.187
t-value (activity)	--	4.99 (p=0.00)		1.57 (p=0.12)	
Mean Decision Participation Index	0.082	0.096	0.068	0.093	0.071
t-value (decision)	--	5.23 (p=0.00)		2.18 (p=0.03)	
Paired t-value between activity and decision=13.16; p<0.001					

NB: Figures in the parentheses indicate percentage

A mean comparison between activity and decision participation also suggests that North Bengal women had significantly more activity participation than decision participation (paired t-value=13.16; p<0.001). This is not different from other sectors of decision making arena and gave a general trend of women participation in activity and decision making.

Table 2 represents a comparative picture of male and female participation in different activities of small tea cultivation. A clear picture about the activities of male and female members had been received from this table. 98.50% of works under each of fertilizer and irrigation were done by male lab our and 100% spraying work also were done by male members. In case of weeding activities, 44% works were done by male, 27.50% by female and rest 28.50% done by both. Plucking activities were mainly completed by female (72.50%) and 9.00% done by male and rest 18.50% plucking work was made by both.

Table 2: Comparative Picture of Male and Female Activity Participation in Different Activity Areas

Activity Arena	Male	Female	Both	Index Value	
				Male	Female
Fertiliser	197 (98.50)	0 (0.00)	3 (1.50)	0.99	0.01
Irrigation	197 (98.50)	0 (0.00)	3 (1.50)	0.99	0.01
Weeding	88 (44.00)	55 (27.50)	57 (28.50)	0.58	0.42
Spraying	200 (100.00)	0 (0.00)	0 (0.00)	1.00	0.00
Plucking	18 (9.00)	145 (72.50)	37 (18.50)	0.18	0.82
Wilcox on Rank-sum test (W)=18.00 (p<0.05)					

NB: Figures in the parentheses indicate percentage

Male Activity Index measured in case of fertilizer application, irrigation, spraying and weeding activities were

0.99, 0.99, 1.00, and 0.58 respectively where as low Activity Index measured as 0.18 in case of plucking activities. High Average Activity Index of female was observed in case of plucking (0.82) and weeding (0.42) where as in case of fertilizer application, irrigation and spraying, low Activity Index was observed as 0.01, 0.01 and 0.00 respectively. Wilcoxon rank-sum test value ($W=18.00$) which is significant at 5% level concludes that male participation in activity is significantly higher than female.

Table 3 represents the comparative picture of male and female participation in different decision making arena. This table reveals that maximum decisions ranging from 83.50% to 96.00% regarding area under tea cultivation, input to be purchased and its application time, irrigation application time and amount, spraying time and amount, sale of green leaves, quantity of lab ours to be hired and misc. managerial activities are taken by male member of family. Regarding plucking and weeding, 77.50% and 65.00% activities respectively done by male members where as 18.50% and 19.00% decisions are taken by both-male and female members. Female takes decision in 16.00% cases of weeding and 4.00% cases of plucking. Both take decision in area of cultivation (16.50%), input to be purchased (11.00%), input application time (12.50%), weeding (19.00%), plucking activities (18.50%) and quantity of lab our to be hired (16.00%) etc.

Table 3: Comparative Picture of Male and Female Decision Participation in Different Areas

Decision Arena	Male	Female	Both	Index Value	
				Male	Female
Area under tea cultivation	167 (83.5)	0 (0.00)	33 (16.5)	0.92	0.08
Input to be purchased	178 (89.0)	0 (0.00)	22 (11.0)	0.95	0.06
Input application time	175 (87.5)	0 (0.00)	25 (12.5)	0.94	0.06
Irrigation application time and amount	188 (94.0)	0 (0.00)	12 (6.0)	0.97	0.03
Spraying time and amount	192 (96.0)	0 (0.00)	8 (4.0)	0.98	0.02
Regarding weeding (chemical or manual)	130 (65.0)	32 (16.00)	38 (19.0)	0.75	0.26
Plucking time and amount	155 (77.5)	8 (4.00)	37 (18.5)	0.87	0.13
Where to sale green leaves	187 (93.5)	0 (0.00)	13 (6.5)	0.97	0.03
Qnty of labour to be hired	168 (84.0)	0 (0.00)	32 (16.0)	0.92	0.08
Misc. managerial activities	192 (96.0)	0 (0.00)	8 (4.0)	0.98	0.02
Wilcoxon Rank-sum test (W)=55.00 (p<0.001)					

NB: Figures in the parentheses indicate percentage

High male Average Decision Index ranging from 0.87 to 0.98 are observed in cases of area under tea cultivation, input purchase and its application, irrigation, spraying, plucking, sale of leaves, misc. managerial activities etc. In case of weeding male Activity Index is measured as 0.75, which is quite low. In case of weeding and plucking female Average Decision Index are 0.26 and 0.13 respectively. In other cases, Decision Index is negligible. Wilcoxon rank-sum test value ($W=55.00$) which is significant at 0.1% level concludes that male and female participation in decision is significantly different.

CONCLUSIONS

Women contribution in farm and family activities are although high but it is yet a matter of concern that their participation in decision making is very low in all fronts. It somewhat improves if women are directly associated with any productive work. To make our society more women responsive, policy makers and planners should have ready reference regarding status of women participation in activity and decision making from different spheres. From the present study it

can be concluded that in the small sector tea cultivation, women participate more in activities like weeding and plucking. But in no sphere of decision making in small tea sector, they made any countable impression. It is recommended that tea board and grass root organizations like Self-Help groups or Small Tea Growers' Associations may take initiative to attract women to come forward to take part in small tea sector to explore the economic benefit from such a remunerative sector.

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