

Role of Rural Women Farmers in Economic Development in India

Tania Roy and Subhojit Chatterjee JIS University, Agarpara, West Bengal, India https://doi.org/10.5281/zenodo.7750401

Introduction

A well-developed society must include women because they play a central part in fostering progress, stability, and long-term growth of a country. Since 73.2% of rural women workers in India are farmers and they handle the majority of the significant farming tasks, rural women farmers are especially crucial to the economic development of the nation. Despite their contributions, these women are not legally the owners of the land they labor on, and they are also responsible for a variety of tasks like household work, child care, and managing land that belongs to male relatives.

Although there is a sizable female workforce employed and absorbed by the agricultural sector in developing nations like India, these women are frequently not regarded as workers or given the proper recognition. Men predominately make decisions in the business, and they also tend to be the main recipients of policies. Although technology has given males in agriculture more power, it has not succeeded in elevating the status of women workers as a vital component of the sector.

In India, where agriculture accounts for 55% of employment and 13.5% of the GDP, women make up a sizable part of the workforce. Women make up 48% of farmers who work for themselves and 33% of the agricultural labor force. Many rural women also manage complicated families and pursue multiple sources of income. In addition to producing agricultural products, caring for animals, processing and preparing food, and laboring for pay, they also gather fuel and water, trade, and engage in marketing. Despite not being considered "economically active employment" by national accounts, these activities are essential to the welfare of rural households.

Roy and Chatterjee

Women in agricultural production

As many as 84% of women in rural India rely on cultivation as their primary source of income. Women work in livestock, fisheries, and other closely connected sectors of food production in addition to making up 47% of agricultural laborers and 33% of cultivators. About 94% of women

working in crop cultivation are employed in the production of cereals, with lesser proportions employed in the production of vegetables, fruits, nuts, beverages, and spice crops. The percentage of women working in the produce of vegetables, cotton, oil seeds, and tea varies from 39.13% to 47%. These products are regarded as



unskilled even though they demand labor-intensive work. Agricultural auxiliary work is also done by women; in India, women make up 21% and 24% of all fish growers and fishermen, respectively.

Women in agricultural production

Women have played a significant part in managing livestock diversity for a very long time because they are responsible for providing for their families' needs while men look for wage work in the cities. By choosing animals that are simple to handle and need little care and input, women are actively and deliberately contributing to the management of animal genetic



resources. Approximately two-thirds of the world's 400 million impoverished livestock keepers are women. Women share the care of animals with men and kids, and they are typically more in charge of handling poultry and dairy animals as well as other animals that are housed and fed on a homestead. When women's mobility is limited, men are more involved in home construction, livestock herding, and product selling. Women have control over how eggs, milk, and poultry meat are used in the home and for selling. Development programs aimed at improving the lives of rural women have frequently

invested in poultry and small-scale dairy ventures. In some countries, women are also in charge of small-scale pig rearing. Due to workforce shortages, households headed by women typically own fewer animals, but they are just as successful in earning income from their pets as households headed by men. In societies where access to land is primarily reserved for males, owning livestock is particularly appealing to women.

Women as livestock keepers

Up to 30% of all employment, including primary and secondary activities, is held by women in the fisheries and aquaculture sector, where they play a major role. However, due to the physical demands of the job and societal expectations, women are less likely to participate in industrial offshore and long-distance capture fisheries. In coastal or inland waterways,



they are more frequently involved in subsistence and commercial fishing from small boats and canoes. In both artisanal and industrial fisheries, women make a significant economic contribution and work before, during, and after the catch. Women are known as "Fish Mamas" in some areas, such as West Africa, where they play a significant part in the entire fisheries chain, from fish production to fish sale. Women made up a sizable portion of the fishing and aquaculture workforce in nations like China and India. In general, women's involvement in aquaculture and fisheries is essential for assuring food security, lowering poverty, and advancing sustainable development.

Women in fisheries and aquaculture

Women Farmers in Modern Contract Farming: The emergence of modern supply chains is profoundly changing the way food and high-value agricultural products are produced and traded in developing countries, with important effects for rural women. While export-oriented value chains offer important employment opportunities for women female farmers are largely excluded from contracting with agro-industrial firms for the delivery of high-value produce. Women comprise less than 10 percent of the farmers involved in smallholder contract-farming schemes in the Kenyan fresh fruit and vegetable export sector (Dolan, 2001). Eaton and Shepherd (2001) find that in large contract-farming schemes involving many thousands of farmers in China, contracts were exclusively with men. In the French bean export sector in Senegal, only 1 out of the 59 contracted farmers is a woman.

Roy and Chatterjee

The exporting companies confirm that they strongly prefer contracting with men because women lack secure access to productive resources and so cannot guarantee delivery of a reliable flow of produce. For example, women lack statutory rights over land and have less authority over family labour compared to their husband and male siblings. High-value contract-farming has direct implications for the allocation of productive resources within the household. It has been argued that contract-farming with the modern agroindustry – and the exclusion of women from contracts – could give rise to intrahousehold conflicts over the allocation of land and labour resources between contract requirements and women's priorities with regard to food production (Sing, 2003). High-value contract-farming might result in decreased access to resources for female farmers concerned with substance food production, and ultimately lead to the deterioration of the food security situation of rural women and children (Bravo-Baumann, 2000). Convincing quantitative evidence on this issue is lacking. While men control the contracts as contracting party – the majority of the farm work done on contracted plots is performed by women as family labourers and necessarily reduces labour for food production. For example, Porter and Philips-Horward (1997) observe that in 70 percent of the cases of sugar contract-farming in South Africa the principal farmer working all year round on the sugar cane plots is a woman. Sing (2002) reports that women work longer hours than men in vegetable contractfarming schemes controlled by male farmers in the Indian Punjab. Eaton and Shepherd (2001) observe that in a large contract-farming scheme involving thousands of farmers in China women – while being completely excluded from signing contracts themselves - perform the bulk of the work related to contract farming. Dolan (2001) argues that specifically the growth of high-value horticulture supply chains has been detrimental for rural women in Kenya because land and labour resources that were traditionally used by women to cultivate vegetables for home consumption and sale in local markets have been appropriated by men for export vegetable production under contract. Others do not find conflicts over productive resources between high value contract production controlled by men and basic food production by women, or that this reallocation of resources – especially female labour – leads to adverse food security effects and deteriorated child nutrition. On the contrary, Minten, Randrianarison and Swinnen (2009), although not explicitly addressing gender issues, find that highvalue vegetable contract-farming in Madagascar leads to improved productivity for food (rice) production through technology spillovers, thereby improving the availability of food in the household and shortening the lean period or "hunger season". Analysis of the French bean export sector in Senegal also suggests that gender conflict over land and labour resources is quite limited. Beans are exported from Senegal only during the off-season (from November till April) and households only allocate part of their land and labour resources to contracted bean production and only during a confined period which does not coincide with the main "rainy" agricultural season when staple food crops and other subsistence crops are cultivated.

Participation and Role of Rural Women in Decision Making Related to Farm Activities: A Study in Burdwan District of West Bengal: The study for this paper was conducted in Katwa block-1 of Burdwan district in West Bengal. In this region women plays a very important role in both farming and decision making in term labour contribution. Usually, rice is cultivated by the farmers followed by potato, jute, vegetables and mustard. A total sample of 200 were picked up in which there were 100 men and 100 women from 4 villages which have higher concentration of women working in the agricultural sector. Respondents were classified based on caste in Forward caste, Other Backward Caste (OBC), Schedule Caste (SC), Schedule Tribes (ST), and Minority. Respondents with their unmarried children were considered as nuclear families and respondents with their married children living together was considered as joint families. The age of respondents was studied at three levels i.e., 20-35 yrs., 35-50 yrs., and >50 yrs. While the education level was distributed as illiterate, primary level and middle level or above. A stratified random sampling technique was used for this purpose. In order to quantify the extent of farmer's role in decision making in various areas, they were asked to mention their degree of involvement in decision making and responses were considered on five-point scales. The decision scores were worked out separately for production decisions.

Decision	Score
No Involvement (NI)	0
Opinion was sought (OS)	1
Opinion was considered (OC)	2
Joint Decision (JD)	3
Independent Decision (ID)	4

In this paper the sample have been analysed and calculated using some econometrics tests. The classification of sample households based on family type shows that among the women households, 67% belonged to nuclear families and 33% belonged to the joint families. On the other hand, among the man households, 77% belonged to the nuclear families & 23% from joint families. Similar pattern was also observed in NABARD model 3 where nuclear families appeared in largest proportion (72%). And because it is difficult to maintain a large family with meager income so a joint family would be an added burden. And it was also observed that there was no significant difference between women and men respondents in relation to their farming activities. 70% of the women

respondents belonged to the SC or ST (Hindu) and 28% from OBC (Hindu). So, we can say that most of the women respondents were from Hindu SC and ST. 64% of the men respondents belonged to the Hindu SC or ST and 25% belonged to the OBC (Hindu). So, we can also analyse that most of the respondents were from Hindu SC and ST. So, from the above given data we can say that most of the respondents involved in agricultural activities are from Hindu SC, ST or OBC. Also, we can observe from the data that almost no Muslim women participate in agricultural activities. And the poor Muslim men work as an agricultural wage labourer.

Table: Distribution of respondents according to their demographic characteristic

Characteristics	Category	Respondents			
	0,	Women	Men		
Age (Years)	Young (20 – 35 yrs.)	57 (57)	62 (62)		
	Middle (36 – 50 yrs.)	40 (40)	33 (33)		
	Old (above 50 yrs.)	3(3)	5 (5)		
	Mean (± S.E.)	$31.7 (\pm 0.9)$	$30.2 (\pm 0.9)$		
Family size	Nuclear family	67 (67)	77 (77)		
	Joint family	33 (33)	23 (23)		
Castes	Forward caste (Hindu)	1 (1)	4 (4)		
	Forward caste (Muslim)	0 (0)	2 (2)		
	OBC (Hindu)	28 (28)	25 (25)		
	OBC (Muslim)	1(1)	5 (5)		
	SC & ST (Hindu)	70 (70)	64 (64)		
Education	Illiterate	35 (35)	28 (28)		
	Functionally literate	30 (30)	15 (15)		
	Primary	20 (20)	24 (24)		
	Middle	10 (10)	19 (19)		
	High school	5 (5)	10 (10)		
	College	-	4 (4)		

We can also observe that 56% of the women and 72% of the men respondents were literate. And all of the literate respondents participated in farming activities. The women respondents were engaged in various occupations such as agriculture, agriculture labour, agriculture and agriculture labour, agriculture and others, and others. 38% of the responding women were agricultural labours and then 30% were in agriculture and others activities. Therefore, there were significant differences among the responding woman in relation to their occupation ($\chi 2 = 19.36$, df = 3, P < 0.0001); and it may indicate that women enter to labour force for want of money. It was also observed that 20% of

Roy and Chatterjee

the responding women had no rights in decision making in the area of farm production. Most of the times rural women had to take joint decisions. Only 13.18% of the time the respondent took the decision independently. Among the responding women, decision score was highest in crop and variety to be sown (2.6), followed by sale of farm products (2.3) and savings (2.1); and there were no significant variations among the decision-making areas (F=0.00; df = 10, 54; P > 1.000). So, we can analyse from this that women are mainly involved in small agricultural decisions as they only decided which crop needs to be sown, then followed by sale of farm product and at last saving whereas men made all the main decision like area of land preparation and sale of farm product and they also used to make the decision of buying farm machineries and fertilizers. So, we can analyse from here that the decision-making power was more in the hand of rural men instead of rural women. From this study we can see that in rural families, type and size of the family, caste, size of land holding, socio-economic status of the families, education level of rural women has significant influences on the involvement in decision making regarding agricultural activities.

 Table: Participation of rural respondents (percentage) in decision making process in relation

 to farm production

Decision making areas	Decis	Decision making by woman respondents				Decision making by man respondents						
	NI	os	OC	JD	ID	Score	NI	os	OC	JD	ID	Score
Plot selection	10	15	25	35	15	1.9	0	5	20	35	40	3.1
Crop & variety to be sown	5	10	25	40	20	2.6	5	10	25	40	20	2.6
Land preparation	20	15	35	15	15	1.9	0	5	15	25	55	3.3
Fertilizer application	30	10	15	35	10	1.9	0	5	15	35	45	3.2
Pesticide application	30	10	15	35	10	1.9	0	10	20	30	40	3.0
Labour hiring	15	15	20	35	15	2.2	5	10	15	25	45	3.0
Harvesting	20	15	25	30	10	2.0	0	10	15	45	30	3.0
Sale of farm produce	15	10	20	40	15	2.3	0	5	10	35	50	3.3
Purchase and sale of farm machinery	25	10	20	30	15	2.0	0	5	15	35	45	3.2
Purchase & sale of land	30	10	20	30	10	1.8	0	10	20	30	40	3.0
Saving	20	15	15	40	10	2.1	5	15	20	30	30	2.7
Mean	20.00	12.27	21.36	33.18	13.18	2.10	1.36	8.18	17.27	33.18	40.00	3.00
± S.E.	± 2.52	± 0.79	± 1.79	± 2.16	± 1.02	± 0.10	± 0.71	± 1.02	± 1.24	± 1.82	± 3.02	± 0.10

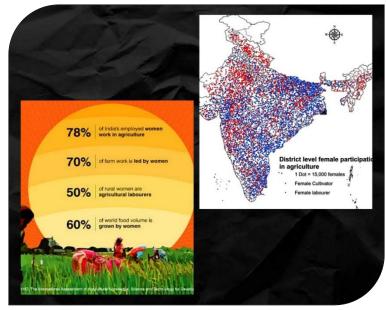
II: No Involvement, JD: Joint decision, OS: Opinion sought, ID: Independent decision, OC: Opinion considered

 Table: Relationship of personal, socio-economic characteristics of respondents with extent of participation in decision making

Sl. No.	Characteristics	Category	Woman respondents	Man respondents	Correlation coefficient (r)
1	1 Age Y		1.2	1.8	0.9947*
		Middle	2.1	3.2	
		Old	3.0	3.9	
2	Family size	Nuclear	2.7	3.8	1.000*
		Joint	1.5	2.2	
3	3 Education	Illiterate	1.2	1.9	0.9000*
		Functionally literate	1.8	2.5	
		Primary	2.1	3.1	
		Middle	2.4	3.1	
		High school	3	3.4	
		College		3.9	
4	Caste	Forward caste (Hindu)	3.5	4.2	0.9871*
		Forward caste (Muslim)	1.5	3.8	
		OBC (Hindu)	2.9	3.0	
		OBC (Muslim)	1.0	2.0	
		SC & ST (Hindu)	1.5	1.9	

*Significant

The purpose of this paper is to identify the participation of rural women in decision making in agricultural sector. In this paper w have analysed the participation based on the caste, the family size, the literacy of the women and the socio-economic status of the family. So, we can say that women in the rural society do a lot of hard work and are involved in agricultural activities but they are not involved in the major decision in an agricultural sector.



Women Participation in Agriculture

Conclusion

Rural women are major stakeholders in growth and development of agricultural sector for the New India. Acknowledging and mainstreaming of rural women via ensured access resources, to technology, education, health facilities,



ownership rights and skill development will improve agriculture productivity and help in building an empowered nation. But the role of women farmer in the rural society is to do farming as a household chore for which they don't even get remunerated. It dubbed by the society as responsibility towards her family. It is because of these social hurdle or taboos that a rural women farmers' work is not accounted as a work. It is not accounted because it is a household chore for her. If the Rural Women have the right in decision making and her part in agricultural activities is not included in household chore then the role of rural women farmer on the economic development of India would be way more visible.