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| RESEARCH ARTICLE

Women Peasants in India: Farmers or 'Farmers' Wives'?

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ABSTRACT

Even though there is an increasing trend towards the 'feminisation of agriculture', especially among the small and resource-poor farm households due to the increasing long-term migration of men, women's work on the family farm is invisibilised to a very large extent in most parts of the country. One of the reasons for the absence of gender issues in the literature on agriculture is that women are not even regarded as farmers due to the absence of property rights for them. This paper is based on fieldwork conducted in villages of Punjab, Rajasthan and Telangana. It brings to light lesser-known facts about women's ownership of land and their changing status in rural India. Based on data collected through primary research from 100 households in each of the three states, this paper concentrates on the less researched aspects of women in agriculture in India. The study focuses on women's role as farmers, their control over land, their participation in agricultural activities on family farms, and decision-making, including decisions relating to the family. The analysis of data shows that there are regional differences in these aspects, which are mainly due to the differences in cultural factors relating to women's status in society.

KEYWORDS

Women in agriculture in India, Property rights for women, Women Farmers, Patriarchy, Farming households

| ARTICLE INFORMATION

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1. Introduction

It has been argued that women were the first farmers among the 'hunting gathering societies' in history (Childe 1942 cited in Agarwal 1988). However, in India today, the term 'woman farmer' is almost an oxymoron since women engaged in agricultural work are considered either 'agricultural labourers' or 'farmers' wives' (when working on the family farm). Women's work on the family farm (quite like her domestic work and animal husbandry work) is invisibilised to a very large extent in most parts of the country, though there are regional differences. This is despite the fact that there is an increasing trend towards the 'feminisation of agriculture', especially among the small and resource-poor farm households due to increasing long-term migration of men to cities in search of more lucrative jobs, leaving the non-viable holdings to be cultivated by women, (Vepa 2005).

The present study concentrates on aspects of women in agriculture that are less researched, such as women's role as farmers, their control over land, and participation in agricultural activities on family farms and in decision-making, including those relating to the family. It brings out the regional differences in these aspects as mediated through cultural factors.

The paper is organised into six sections. Section 2, following this Introduction, is based on a literature review of the 'Women's status in farming communities' in different parts of the country. It elaborates upon the question of 'women's right to own (and inherit) land' and the regional differences along with causes for these differences as found in the existing literature. The next section describes the Methodology. Section 4 discusses the issue of lack of statistics on the 'gender' aspect of land ownership and attempts to fill this gap with the help of information from the primary survey and field observations in the three states. Section 5 focuses on women's contribution to various agricultural activities as noted through the primary survey in the three states as well

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as recorded by the available studies in different parts of India. Section 6 presents the findings from the primary surveys on 'women's role in decision making' concerning (i) agricultural activities and (ii) household decisions, respectively. It also includes the findings about the 'perceived' reasons for women's absence in certain decisions.

2. Literature Review

One of the areas that the existing research studies on 'women in agriculture' have focused on is - women agricultural labourers. These include – Baruah (2016, 2020), Chowdhury (2011), Kannan and Raveendran (2012), Mazumdar and Neetha (2011), Rangarajan et al (2011).

Some of these studies studied the impact of new agricultural technology on the employment and income of male and female agricultural workers. Using data on Female Labour Force Participation Rates (FLFPR), Baruah (2016, 2020) argues that the process of rural transformation of the economy in India (both in areas that witnessed high agricultural growth as well as those that experienced slower agricultural growth) has increased the labour market vulnerabilities among women. She cites the low earnings of women agricultural labourers, irregularity of their employment and concentration of women workers in low productive sectors in support of her argument. Unlike their male counterparts, women are unable to move out of agriculture to more diversified occupations (Srivastava and Srivastava 2010). The women who suffer from vulnerabilities of caste and class are unable to reap the benefits of economic growth and remain in the labour market as informal paid labour, especially in agriculture (see Abraham, 2013).

However, there is little research on the large number of women who work as unpaid workers in the self-employed category. These unpaid workers are largely wives or daughters of farmers on land that is owned either by their husbands or parents or parents-in-law (Baruah 2016).

One of the reasons for the absence of gender issues in the literature on agriculture is that women are not even regarded as farmers. Women's work has been invisible, but the absence of property rights makes them even more irrelevant in the agriculture related policies.

"According to Oxfam (2013), around 80 per cent of farm work is undertaken by women in India. However, they own only 13 per cent of the land" (The Hindu, 2013).

This issue has received increasing attention in the literature on "women and agriculture" since the late 80s, thanks mainly to the seminal works of Bina Agarwal (1994a & 1994b). The ownership of land by women is a question of critical importance when ascertaining their economic and social status. Agarwal (1994b: 1455) argues, "The gender gap in the ownership and control of property is the single most critical contributor to the gender gap in economic well-being, social status, and empowerment." While women actually perform most of the agricultural work, they are not considered farmers as they do not have legal rights on these holdings. "This lack of recognition affects women's control over how income is spent, and their authority to participate in decisions regarding the sale of land or transfer of control or ownership of land to other family members" (Arun, 1999, p. 22)

Even though women have the legal right to inherit land (e.g. under the Hindu Succession Act), they don't own and exercise control over land. It has been argued that since arable land is the most important property in rural South Asia, a meaningful improvement in the economic and social status of women largely depends upon their independent land rights. Better employment opportunities for women can complement but not substitute for land. (Agarwal 1986, 1988, 1994a & 1994b). Section 4 discusses this issue in detail.

3. Methodology

As part of a study on the impact of agrarian distress on women, I collected data on various aspects of women's involvement in agriculture, including landholding. The fieldwork spanned four villages each in the three states of the country: Punjab, Rajasthan and Telangana. The three states are geographically quite dispersed and cover the northern, western and southern regions of the country, respectively. In each of the three states, two backward districts (having low productivity, high incidence of poverty and debt related suicides) were identified, and two villages were similarly selected from each of these six districts, keeping in mind the objectives of that study.

The two districts selected in Punjab were Bathinda and Sangrur. In Sangrur district, Andana village and Bhutal Kallan village were selected. In the Bathinda district, villages Ganga and Dhapali were selected for collecting primary data.

In Rajasthan, the two districts of Ajmer and Nagaur were selected for the primary survey. Villages Mehru Kalan and Dhoondhri in Ajmer and villages Odeet and Ratau in Nagaur were selected for the study.

Nalgonda and Mahbubnagar were the two districts identified for the survey in Telangana. In Nalgonda, villages Guntipalli and Khanapur and in Mahbubnagar district, villages Jangamaiahpally and Lingampally were identified.

Twenty-five households (preferably having small and marginal farms and/or those belonging to SC, ST and OBC communities) from each village were contacted for the collection of required information, keeping in mind the objectives of that study. The field investigation was carried out with the help of a detailed questionnaire through personal interviews, which were supplemented with meetings and discussions with groups of village men and women as well as panchayat members and village elders. Thus, the total sample size that was planned was 300 households (100 from each of the three states).

4. Land Ownership by Women in Rural India

This section first discusses the issue of the non-availability of official data on women's ownership of land in India. Next, it presents a summary of the literature about the socio-cultural and historical factors affecting women's ownership and control over land. It then provides information based on the data collected through the Primary Survey conducted in three states – Punjab, Rajasthan and Telangana which shows regional variation in the overall trend on women's ownership of land. The section concludes with some interesting insights on the question of land ownership brought out during the discussion with groups of farmers in the three states.

4.1 Complete Absence of Data on Women's Ownership of Land

Despite its importance, data on women's ownership of land (and other assets) is a big gap. Both – the NSSO's decennial Land and Livestock Holding surveys collect data on the area of land owned and operated, and The All-India Debt and Investment surveys, which provide estimates of the net value of land owned, use 'Household' as the primary unit and even the World Agricultural Census which uses data consolidated from the land revenue surveys of States, takes operational holdings as the primary unit. Therefore, disaggregated data for male and female title holders is not available. Also, official records may not show the accurate position because, many times, transfers in the land title are not reported by land owners.

Agarwal, Anthwal & Mahesh (2021) lament that "Until recently, there has been a virtual absence of all-India state-wise data to measure gender differences in land ownership. More recently, two national level surveys, the Indian Human Development Survey (IHDS-II for 2010–11) and the National Family Health Survey (NFHS-4 for 2015–16), included questions on this count and provided state-level estimates" (p. 1809). However, later in the essay, they mention that NFHS-4 is unreliable and IHDS-II is seen by them as restricted in scope.

"Recent statistics released by the University of Maryland and the National Council of Applied Economic Research (NCAER, 2018) state that women constitute over 42 per cent of the agricultural labour force in India but own less than two per cent of farmland" (Pachauri, 2019). "According to the India Human Development Survey (IHDS, 2018), 83 per cent of agricultural land in the country is inherited by male members of the family and less than two per cent by their female counterparts" (Pachauri, 2019).

Our survey recorded the extent of and differences in land ownership by women among the three states. Fieldwork discussions brought out some new and interesting facts. These are explained in the next subsection.

4.2 Factors Affecting Women's Ownership and Control over Land

Based on a large number of ethnographic studies and macro-surveys in India, Agarwal (1994a) identified certain factors that seem to influence the degree of control women exercise over land. The important findings are summarized below:

(i) Post-marital residence, especially village exogamy/endogamy practices and the distance of women's post-marital residence from their natal home. Agarwal (1994a: 318) found that daughters are likely to face more hostility from their natal families in claiming their shares in land as well as face practical difficulties in retaining and self-managing their land in regions where village exogamy and especially long-distance marriages are the norm.

She finds that there is a marked regional variation in marriage rules among the Indian Hindus. While "In northwest India, marriages among Hindus are almost always outside the natal village, village endogamy being forbidden among virtually all caste groups and especially the upper castes... In northeast and south India, by contrast, there is a marked preference for in-village marriage, and village endogamy is never forbidden. ... In the western, central and eastern states, the picture is a mixed one ..." (pp. 328-330)

(ii) Close-kin and cross-cousin marriages. There is less opposition to daughters inheriting land or being given use rights or gifts in land in communities where daughters are allowed to marry close-kin, including cross-cousins, than in communities that prohibit all forms of close-kin marriages (Agarwal, 1994a). Similarly, widows face less opposition to their inheriting land in regions where levirate is practiced. (Chowdhry, 2009)

In northwest India, both village endogamy and close-kin marriages are forbidden among Hindus, and there are restrictions on married women visiting their natal homes. The social situation of Hindu women in northwest India "is one of great vulnerability, and the support and intervention of kin in case of mistreatment cannot be depended upon. ...In south India, by contrast, marriage does not leave a woman so vulnerable" (Agarwal, 1994a, pp. 343-344) since there is more locational and social (close-kin marriages practiced) closeness in south Indian marriage alliances.

(iii) Purdah practices and other forms of control over female sexuality (reflected in the extent of widow remarriages, social acceptability of divorce by women and their remarriages, pre-marital sex and (female) adultery, etc.). "In regions where the physical seclusion of women is practised, women are likely to be particularly constrained in both claiming and controlling land" Agarwal (1994a, 319). Seclusion practices and Purdah norms govern the extent of women's physical mobility, which affects women's labour force participation rates and their literacy levels.

Purdah norms and restrictions on women's mobility and control over female sexuality are found to be highest in northwestern India and least in south and northeast India. It is practiced in east, west, and central India to a lesser extent than in northwest India. (Agarwal, 1994a, Map 8.3 p. 348)

- (iv) Rural Female Labour Force Participation Rates (RFLFPR) affect the visibility of women's contribution to the income of the household, which provides social acceptance of her needs. RFLFPR seem to influence the social perceptions about women's productive contribution to the economy and, therefore, gives legitimacy to their rights. It also depicts the degree of women's contact with their physical environment and everyday experience of farming.
- (v) Rural Female Literacy Rates (RFLR) not only influence women's ability to claim and control land in different ways but also "their intra-household bargaining power and autonomy in decision-making, including in fertility decisions." (Ibid., 319)
- (vi) Total Fertility Rate (TFR) is the average number of live births that women have during their reproductive lives and indicates the time a woman would spend in pregnancy, lactation and infant care. Although rural women who work on the farm continue to do so during pregnancy and lactation, their capacity to work on the farm and the amount of time available for it is adversely affected by frequent childbearing. (Ibid., 360-361)

Agarwal (1994a) finds that as a result of the varying influence of these factors, the two regions of India that are "more conducive to women being able to exercise their rights in land are northeast and South India." (p. 368). Literacy rates vary from low to high, and TFR are low-to-medium. The region within India that Agarwal identifies where women are likely to encounter the most resistance to their claims (on land) is northwest India (especially the Punjab, Haryana, Uttar Pradesh, and Rajasthan belt). Here, "village endogamy is typically forbidden, marriages are often at some distance from the natal village (especially among the uppercaste landowning communities), close-kin marriages are usually taboo, purdah is practiced, control over female sexuality is strict, and women's labour force participation rates are low. Also, population densities and total fertility rates (especially in Uttar Pradesh and Rajasthan) are high, female literacy is low, inequalities in the ownership of private land are considerable, and non-privatized land in the form of village commons and forests is limited and rapidly disappearing. ... Central, western and eastern India come inbetween these two ends of the spectrum." (pp. 368-369)

4.3 Land Ownership by Women Among Sample HHs in The Three States

The survey results (Table 1) show that there are huge differences among the three states concerning ownership of land by women. In Punjab, only 1 of the 100 HHs surveyed in the state reported that land is owned by a woman. In Rajasthan, too, there is a very small percentage of HHs (11%) where land is owned by women. However, in Telengana, it is heartening to note that 35.2% of women among the sample HHs (consisting mainly of marginal and small farmers belonging to SC, ST and OBC communities) own land in their own names, and another 20.4% own it jointly with the male members of the household, only about 44.4% land is owned only by males.

Table 1 Gender-based land ownership distribution in the three states (Percentage)

	Punjab	Rajasthan	Telangana
Male	99.0	89.0	44.4
Female	1.0	11.0	35.2
Joint Ownership	-	-	20.4
All	100.0	100.0	100.0

Source: Primary Survey

Village-level data shows some variations. In Rajasthan, ownership of land by women is found to be the highest in Ratau (20%) and Mehru Kalan (16%) and is lowest in Dhoondhari (4%) while it is (12%) in Odeet. In Telangana, Lingampally has an equal overall share in land ownership between males and females among the sample households, and in Jangamaiahpally, the proportion of females owning land is marginally higher than that of males. Guntipalli village has a skewed distribution between male and female land ownership such that 60 percent of households have solely male ownership, whereas the percentage for females is 40 percent and has no joint ownership. However, given the small sample size, we have not attempted an analysis of data at the village level and focus here only on the state-level differences.

4.4 Insights from Field Discussions

Though the response to the questionnaires revealed that in Dhapali, Andana and Bhutal villages, land was not owned by a woman in any of the sample HHs, and only one respondent in Ganga village reported ownership of land by a woman in the household, an interesting fact was revealed during group discussions with village elders and panchayat members in village Dhapali and village Bhutal. This researcher was informed that around 20% of land in Dhapali village and 30% in Bhutal is in the name of women due to the government scheme of 2% lower registration fees for land registered in the name of women. However, ownership is only on paper, and all decisions are made by the men of the households. They consider it below their dignity to even acknowledge this fact, and that is the reason why the surveyor was told that the land is owned by the male member even though women are the owners legally.

As mentioned in subsection 4.1, there are major gaps in gender statistics. The situation mentioned in the preceding paragraph shows that official records (however accurate they may be) will not be able to provide an accurate account of land actually 'controlled' by women since, as noted by Agarwal (1994), there is a persistent gap not only between women's legal rights and their actual ownership of land but also between ownership and actual control due to complex range of social, ideological, and administrative factors. However, there is evidence that the increasing migration of males to urban areas has resulted in a rising share of farms being managed by women. Mahajan (2019) writes that "In India, the role of women as farm managers has been veiled behind the image of men as primary decision makers on farms. Data shows that approximately 8% of farm households had women farm managers in India in 2004, and this number increased to 11% in 2011". We, therefore, look at women's contribution to agricultural activities and their say in decision-making in respect of family farms in the following sections.

5. Women's Participation in Agricultural Activities

To understand the role of women in agriculture, it is important to take note of women's participation in various agricultural activities and decisions. This section puts together information on women's participation in various agricultural activities among the sample HHs surveyed in the three states and supplements it with information on women's participation collated from other studies undertaken in different regions. The findings suggest that, on the whole, women contribute significantly to agricultural activities on farms as well as take care of the cattle, besides being the primary caretaker of the household.

5.1 Punjab

The primary survey in Punjab finds a significant presence of women in agricultural operations among the sample HHs (see Table 2). They contribute significantly (more than men in some cases) in most activities like the preparation of crops, sowing, cultivating, and taking care of crops. During group interactions, too, women (particularly in Rajasthan and Telangana) showed keen interest in discussions relating to agricultural activities.

Table 2: Participation of Women in Agriculture in Punjab

S. No	Tasks	Ganga \	Ganga Vill. Dhapali vill.		Andana vill.		Bhutal vill.		
		М	F	М	F	М	F	М	F
1	Preparation of crop	28%	72%	24%	76%	60%	40%	50%	50%
2	Sowing of crop	28%	72%	24%	76%	60%	40%	60%	40%
3	Selection of crop	48%	52%	28%	72%	40%	60%	76%	24%
4	Seeds	48%	52%	24%	76%	50%	50%	64%	36%
5	Selection of Fertilisers	72%	28%	48%	52%	80%	20%	82%	18%
6	Irrigation	32%	68%	32%	68%	64%	36%	66%	34%
7	Harvesting	24%	76%	24%	76%	50%	50%	72%	28%
8	Storage	32%	68%	20%	80%	66%	34%	70%	30%
9	Marketing	48%	52%	60%	40%	80%	20%	84%	16%
10	Labor hiring	32%	68%	60%	40%	76%	24%	80%	20%

Source: Field survey observation

"Punjab provides the ideal case of an agrarian economy that has transitioned from a traditional to a modernised one" (Baruha 2020: 29). Despite high-income growth, the female labour force participation rate (FLFPR) has remained low in rural areas (Baruha 2016). In the case of Punjab, women's participation in agriculture is not only low but has been declining due to various reasons such as:

- Decline in labour requirement due to increased mechanization
- Replacement of women family labour by hired labour due to increase in income and socio-cultural norms among landowning higher caste HHs
- Change in crops (replacement of cotton by rice)

Padhi (2009) mentions the low status of women in Punjab and the fact that despite participating in every household activity and helping with livestock and crops, daughters are viewed as burdens as there is no salvation unless one mobilises the requisite amount of money for a dowry to get them married. The devaluation of women in the state is apparent, with Punjab leading the figures in declining sex ratios. The sex ratio in Punjab, as per the 2001 Census data, is 876 females per 1,000 males, while the national average is 933.

The important findings from the survey of Punjab villages are therefore discussed in detail below:

i) Less participation of women in certain activities. The use of seeds, fertilizers and pesticides has increased with the adoption of new technology (green revolution) in Punjab, where even marginal farmers use improved varieties of seeds and apply adequate (or excess) quantities of fertilizers and pesticides. However, when we surveyed the participation of women in various agricultural activities, it was observed that women's participation was low in these particular activities. In Bhutal, 84 percent of marketing and 82 percent of fertilizers selection is done by men alone. Two important Reasons reported are a lack of awareness and less access to markets. It has, however, been pointed out by scholars (Agarwal 1988) that in a patriarchal society, important tasks, including ploughing the field and marketing the crop, are performed exclusively by men so that they retain their control. Labour hiring is another activity which is dominated by men, except in the case of Ganga village.

ii) Excellent participation of women in productivity-enhancing and total production. Despite the low participation of women in the usage of fertilizers and pesticides, they are contributing significantly to other activities like the preparation of crops, sowing, cultivating and taking care of crops. Field surveys revealed that women contribute more than men in some cases, as shown in the villages of Ganga and Dhapali. Women showed keen interest in agricultural activities, and very positive results in total production were observed. Besides taking care of the household, women also contribute to farms in a big way. Though women are physically weaker than men, they are performing not only equally but better than men.

During the group discussion, women were informed about the reduced opportunities for work due to the following reasons: (1) Increasing mechanization of agricultural operations such as harvesting; (2) Women (and men too) from land owning castes are allowed to work only on their own farms and not for wages on others' farms. These days, many landowners lease out their land as

cultivation is no longer profitable, so women (and men) from these HHs are without work. (3) Women workers were preferred in cotton picking, but cotton farming has been reduced drastically due to the infestation of pests and diseases of cotton crops.

iii) Less participation of women in decision-making. Though women contributed to production by performing various agricultural operations, they did not have much say in decisions regarding the purchase of seeds, fertilisers, etc., or hiring and marketing decisions. Interestingly, in response to questions regarding who decides the purchase of seed, fertilisers, etc., many farmers included the cooperative societies and or the companies supplying these along with the name of the male member of the households. Some farmers included the name of the money lender or banks as those influencing some of these decisions.

iv) Differences among the two districts in Punjab. The above data reveal that women's participation in almost all activities is lesser in the two villages of Sangrur than in the two villages in Bathinda. The reasons for this need further exploration.

Fieldwork also revealed that in Punjab, there is a taboo among higher castes on women working on others' farms for wages. Padhi (2009) notes that "the imperative of safeguarding the honour of the community of Jat Sikhs acts as the biggest debilitating factor" against women's wage work even when the family is in debt. However, women generally contribute to agricultural activities on family-owned farms. One or two Jat Sikh women expressed their desire to work for wages but said that they would be ostracised from the village if they did it.

5.2 Rajasthan

Agriculture in Rajasthan is more subsistence in nature, and the HHs there presented a contrast with the relatively more prosperous HHs in Punjab villages, especially since the sample consisted of marginalized HHs in backward villages.

In Rajasthan, the survey revealed that the women are either fully or partly engaged in various agricultural operations (see Table 3). They are mostly engaged in agricultural operations such as harvesting, field preparation, irrigation, storage, and sowing. They are found to be relatively less engaged in agricultural operations such as fertilizer/pesticide usage, sale of output and hiring of labour – there have been some cases where women undertook these operations as well.

Table 3: Participation of Women in Agriculture in Rajasthan

	Ajmer					Nagaur			
		Mehru Kalan		Dhoondhari		Ratau			
	Fully	Partly	Fully	Partly	Fully	Partly	Fully	Partly	
Preparation of Field	44		16	32	12	40	8	32	
Sowing Method	20		4	4	4	24	4		
Selection of Crop	16		4		4	20	8	4	
Seed Variety Choice	8		4		4	20	8	4	
Fertilizer/Pesticide Usage									
	4		8	8	8	12	8	4	
Irrigation	24		20	16	24		8		
Harvesting	56		24	32	40	20	64	4	
Storage	16		8	24	20	16	28	24	
Sale of Output	8		4	4		4		4	
Hiring of Labour	4		4		8		8		

Source: Based on Primary Survey

It may be observed that in Mehru Kalan village, a relatively large proportion of women are fully involved in various agricultural operations such as harvesting (56%) and preparation of fields (44%). Here, no woman is found to be partly involved. Similarly, in Odeet village, 64 percent of the women are fully involved in harvesting, followed by 28 percent in storage. Here, 32 percent of the women are partly involved in the preparation of the field. Similarly, in Ratau village, 40 percent of the women are partly involved in the preparation of the field. Here, 40 percent of the women are fully involved in harvesting.

6. Women's Participation in Agricultural and HH Decision Making

The study has also inquired about the significance of women in decision-making. Queries about the significance of women in decision-making regarding various agricultural operations were made. The results for Rajasthan and Telangana are presented in Tables 4 and 5, respectively.

6.1 Rajasthan

It may be observed from Table 4 that a large number of farm households gave significance to women's opinion in decision making in almost all the agricultural operations except hiring of labour where the share of women in decision making is found to be relatively low.

Table 4: Role/participation of women in Agricultural decision making in Rajasthan

rubic 4. Noic, pui	ticipation of women in				
	Mehru Kalan	Dhoondhari	Ratau	Odeet	All
Preparation of Field					
	48	76	68	72	66
Sowing Method					
	32	64	72	60	57
Selection of Crop					
	48	60	64	76	62
Seed Variety Choice					
	32	52	64	64	53
Fertilizer/Pesticide Usage					
	24	50	60	48	44
Irrigation					
	44	76	16	28	41
Harvesting					
	68	88	72	72	75
Storage					
	40	80	76	76	68
Sale of Output					
	24	56	32	20	33
Hiring of Labour					
	16	12	0	0	7

Source: Based on Primary Survey

6.2 Telangana

In Telengana, women are farmers in their own right (as shown by the land ownership pattern). They undertake agricultural activities on their own and family owned farms and participate in all activities. However, even in Telangana, women are not solely responsible for major agricultural activities/decisions such as harvesting, storage, selection of fertilizers, etc.

Table 5: Role/participation of Women in Agricultural Decision making in Telangana

Activity	Lingam	pally		Jangam	Jangamaiahpally k		Khanapur-Dindi			Guntipalli-Chandampet		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Preference of Crop	22.22	0	77.78	22.22	0	77.78	11.11	11.11	77.77	18.75	0	81.25
Sowing of crop	11.11	0	88.89	0	22.22	77.78	0	22.22	77	6.25	0	93.75
Selection of crop	0	11.11	88.89	0	22.22	77.78	22.22	11.11	66.66	6.25	12.5	81.25
Selection of Seeds	11.11	11.11	77.78	33.33	0	66.67	33.33	0	66.66	6.25	0	93.75
Selection of fertilizer	11.11	0	88.89	33.33	0	66.67	33.33	11.11	55.55	6.25	0	93.75
Irrigation activities	11.11	0	88.89	0	33.33	66.67	0	0	100	6.25	0	93.75
Harvesting	11.11	0	88.89	33.33	0	66.67	0	11.11	88.88	6.25	0	93.75
Storage Activities	11.11	0	88.89	22.22	0	77.77	22.22	11.11	66.66	6.25	0	93.75
Marketing Activities	11.11	0	88.89	22.22	0	77.77	37.5	0	62.5	6.25	0	93.75
Labour Hiring Activities	33.33	0	66.67	71.43	0	28.57				53.33	0	46.67

Source: Based on Primary Survey

In Guntipalli village, it is observed that in all agricultural activities, from sowing to marketing, both male and female members are jointly involved in about 90 percent of our sample households. In other villages, the majority of decision-making (ranging mostly between 66% and 88%) is done by males and females jointly. In Jangamaiahpally and Khanapur-Dindi, some of the activities, such as the selection of seeds and fertilizers, are undertaken by men alone in 33 percent of households; in the rest, 66 percent of these are undertaken jointly by men and women in the household. However, decisions regarding hiring labour and preference of crops are relatively more male-dominated (71% in Jangamaiahpally and 53% in Guntipalli).

6.3 Fieldwork Findings

During group discussions with women in Guntipally and Khanapur, it was pointed out that women in the households are pressing for a change of the crop from cotton to vegetable cultivation, but this is being resisted by some of the male members. However, some female headed households have already started vegetable cultivation in their farms and backyards and are reaping benefits. They not only stopped purchasing vegetables from outside but are also supplying them to the market. Women have also been supporting crop rotation and asking for changes in the crop pattern from cotton to vegetable cultivation. Women are also supporting the adoption of Non-chemical Pesticide Management (NCPM), which is being made popular by the government on a massive scale. Many of them said that they are now using non-chemical pesticides and bio-chemical-based vermin compost.

6.4 Women's Perception About Decision-Constraining Factors

Recognising the significance of women's decision-making in various aspects, the study has also made an inquiry regarding various decision-constraining factors from women. The emerging results are reported in Tables 6 and 7 for Rajasthan and Punjab, respectively.

Table 6: Percentage of Women in Rajasthan Reporting the Influence of Various Decision-Constraining Factors

	Ajmer		Nagaur		
	Mehru Kalan	Dhoondhari	Ratau	Odeet	All
Illiteracy	80	84	84	76	81
Poor access to farming information	96	64	88	68	79
Belief that women are less informed than men	76	60	68	64	67
Low self-confidence in making decisions	40	48	64	64	54

Source: Based on Primary Survey

It may be observed from Table 6 that a majority of the women in Rajasthan considered illiteracy as the major decision constraining factor. Similarly, the majority considered their poor access to farming information as another constraining factor. However, a relatively smaller proportion reported their low self-confidence in making decisions.

Table 7: Percentage of Women in Punjab Reporting the Influence of Various Decision-Constraining Factors

	Bathinda	Bathinda		Sangrur		
	Ganga	Dhapali	Andana	Bhutal	All	
Illiteracy	80	76	44	52	63	
Poor access to farming information	76	76	44	52	62	
Belief that women are less informed than men	80	52	28	24	46	
Low self-confidence in making decisions	36	40	20	24	30	

Source: Based on Primary Survey

In discussions with groups of women in Punjab, it was observed that they were not forthcoming with answers in the presence of men. The social milieu in Punjabi culture requires women to be docile and quiet in front of men. Women are generally discouraged from expressing themselves verbally in the presence of elders and male members since childhood. After marriage, they are expected to be subservient to their husband and his family. In such a social structure, it is quite expected that they do not have a say in important decisions concerning farming operations. Things are, however, changing, and we observed that women are more forthcoming now than earlier and have a larger say in decision-making on issues concerning the family, as explained in Section 7.

6.5 Woman Sarpanch and Participation of Women in Panchayat Meetings in Telangana

As explained above, unlike Punjab and Rajasthan, women in Telangana not only own land in their own name and jointly with the male members of the HHs, but they also actively participate in agricultural activities and decisions. An interesting finding emerged regarding their political participation during the FGDs with groups of men and women in the four villages. Of the four villages, two villages had a woman sarpanch; it was reported that the male-female ratio during the Panchayat meetings was 50:50. However, in the other two villages, it was 70:30 and 60:40. It was further reported that in the two villages headed by a woman sarpanch, a fair opportunity is given to the women participants and that their opinions and problems are considered by other members and the issues raised by women are being put to discussion and debate. In the other two villages, not only is the attendance of women less, but it was also reported that not much significance is given to the opinions and problems of women, and they are mere listeners.

7. Role of Women in Household Decisions

Respect for women's advice/opinion on household matters is a precursor to their advice on agricultural matters being taken seriously. Also, previous research shows that HHs where women have an equal say in family matters tend to spend more on the wellbeing of children and education, etc., as compared to those where men alone make such decisions. Recognizing that the empowerment of women begins with their role in decision-making in household matters, the study also inquired into women's role in various HH matters such as 1) education of children, especially girls; 2) health issues; and 3) decisions relating to family size/reproduction. The emerging results are reported in Tables 8 and 9 for Rajasthan and Punjab, respectively.

Table 8: percentage share of sample households in Rajasthan where women's advice is considered in HH decisions

	Ajmer		Nagaur			
	Mehru Kalan	Dhoondhari	Ratau	Odeet	All	
Education of children, especially gir	rls 60	76	88	56	70	
Health issues	88	76	100	96	90	
Reproductive health issues	52	28	76	76	58	

Source: Based on Primary Survey

It may be observed that in Ratau village, 100% of the households consider women's advice on health issues, followed by education of girl children (88%) and reproductive health issues (76%). Similarly, the incidence of women's advice in the villages of Odeet, Dhoondhari and Mehru Kalan is quite high. However, it is noteworthy that women's advice is relatively less considered in the case of reproductive health issues in the villages of Mehru Kalan and Dhoondhari.

Table 9: percentage share of sample households in Punjab where women's advice is considered in HH decisions

	Bathinda		Sangrur	All	
	Ganga	Dhapali	Andana	Bhutal	All
Education of children, especially girls	80	76	40	80	69.5
Health issues	40	60	32	80	53
Reproductive health issues	40	60	32	72	51

Source: Based on Primary Survey

The survey results for Punjab show that, on average, more than 50% of women agree that their opinion is considered in several household decisions, especially regarding education, health, and family planning. The diagram shows that about 80% of women agree that their opinion is considered in decisions about the education of their children in three villages, namely Ganga, Dhapali, and Bhutal. In the village of Andana, this figure was 40%. This may be due to the proximity of this village to the State of Haryana, where the education of the girl child is very low. On the issue of health, village Bhutal has the highest number of women who agree that their opinion is considered on health-related issues, followed by 60% in Dhapali, 40% in Ganga, and 32% in Andana. Thirdly, with regard to family planning, 72% of women in Bhutal agreed that their opinion is considered; this was followed by village Dhapali with 60%, village Ganga with 40% and village Andana with 32%.

Padhi (2009) wrote that the internalised taboo (against wage work among Jat Sikhs) prevents them from seeing a future other than marriage for their daughters, thus ensuring the drudgery of housework and other similar responsibilities for the next generation of women, too. Field visits, however, showed that things are changing even in Punjab villages, as in the village Dhapali, where we learnt that there are girls with postgraduate and professional (B. Ed.) qualifications who are encouraged to explore options for studying and working abroad in view of the limited opportunities in the local areas.

This section is a comparative or descriptive analysis of the study based on the study results, previous literature, etc. The results should be offered in a logical sequence, giving the most important findings first and addressing the stated objectives. The author should deal only with new or important aspects of the results obtained. The relevance of the findings in the context of existing literature or contemporary practice should be addressed.

8. Conclusion

The study aimed at exploring those aspects of women in agriculture that are less researched, such as women's role as farmers, ownership and control of land by women, women's participation in agricultural activities on family farms and in decision making, including those relating to the family.

Since data on women's ownership of land (and other assets) is a big gap, the study collected information on women's ownership and control of land among the sample HHs in the three states. It finds that there are large differences in these aspects as mediated through cultural factors. While the female ownership of land is merely 1 percent in patriarchal Punjab, it is somewhat more in Rajasthan (11.2%) and in the southern state of Telengana (where gender discrimination is much less), not only 35.2 percent of the land is owned by women, but another 20.4 percent is jointly owned by men and women.

Fieldwork brought out interesting facts that were revealed during group discussions with village residents, such as the fact that more than 20 percent of the land is registered in the name of women due to lower registration fees though the surveyors were told that this figure is less than 1 percent because the ownership is only on paper and all decisions are taken by the men of the households.

The study finds that women perform a large number of agricultural activities in all three states, but the activities involving important decisions such as hiring labour, buying inputs and selling the produce are dominated by men, particularly in the case of patriarchal Punjab but also in the other two states. However, decisions relating to family matters such as the education of children, health and reproduction are more democratic and even in patriarchal Punjab, women have a major say in these matters.

However, being exploratory in nature, this study had a small sample size (100 HHs in each of the three states). Future research undertaken in more states and with a larger sample can add to the knowledge on this important but less-researched area, which can be helpful in policy-making.

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