

# Asian Resonance

## Inequalities in Gender Participation in Agriculture Sector: Some Reflections and Way Forward



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### Abstract

Agriculture with its allied activities is unquestionably the largest livelihood provider in India, particularly so in the vast rural areas. Agriculture which contributes nearly sixteen percent to Indian GDP is an important engine of growth and poverty reduction. This sector however is underperforming mainly because the role of women who form the backbone of this sector and are a vital part of the economy is poorly recognized and her hard work mostly unpaid. That women play a significant and crucial role in agricultural development and allied fields including the main crop production, livestock production, horticulture, post harvest operations, agro/social forestry, fisheries, etc. is a fact that has not only been taken for granted but also ignored since long. The nature and extent of women's involvement in agriculture, no doubt, varies greatly from region to region. Even within a region, their involvement varies widely among different ecological sub-zones, farming systems, castes, classes and stages in the family cycle. But regardless of these variations, there is hardly any activity in agricultural production, except ploughing in which women are not actively involved. In some of the farm activities like processing and storage, women predominate so strongly that men workers are numerically insignificant. Majority of the studies on women in agriculture conducted in India and other developing and under developed countries point to the conclusion that women contribute far more to agricultural production than has generally been acknowledged. Against this backdrop, an attempt has been made to understand the emerging gender inequalities in agriculture in terms of land distribution and disparities among the wage rates across different agricultural operations.

**Keywords:** Agriculture Gender, Wage Rate, Land Resour.

### Introduction

Agriculture with its allied activities is unquestionably the largest livelihood provider in India, particularly so in the vast rural areas. Agriculture which contributes nearly sixteen percent to Indian GDP is an important engine of growth and poverty reduction. This sector however is underperforming mainly because the role of women who form the backbone of this sector and are a vital part of the economy is poorly recognized and her hard work mostly unpaid. According to Swaminathan, the famous agricultural scientist, and some historians it is believed that it was woman who first domesticated crop plants and thereby initiated the art and science of farming. While men went out hunting in search of food, women started gathering seeds from the native flora and began cultivating those of interest from the point of view of food, feed, fodder, fibre, fuel and so on.

Since the onset of civilization men and women have been assigned clearly defined roles. Women undertook the responsibility of household and cultivation whereas men took over outdoor jobs which required greater physical strength such as hunting and protecting the clan. With the evolution of the civilization agriculture became the main occupation of the society. The dependence on agriculture increased and hunting gradually became extinct. This phenomenon has universal prevalence transcending across all the societies in the world. Women play a significant role at various stages of food production, processing and preparation but their contribution to agriculture in particular is poorly recognized. Even the planners and the policy makers perceive farmers as male. This in fact is the reason why agricultural inputs such as technology extension, training and services that enhance production capacity often

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tend to target the needs of male farmers. It is indeed ironic that women who carry out heavier work burden in food production have negligible access to land ownership and institutional credit. Even the wages paid to women workers for the same amount of labour put in, are generally less than their male counterparts. Thus the women are economically deprived and socially disadvantaged.

That women play a significant and crucial role in agricultural development and allied fields including the main crop production, livestock production, horticulture, post harvest operations, agro/social forestry, fisheries, etc. is a fact that has not only been taken for granted but also ignored since long. The nature and extent of women's involvement in agriculture, no doubt, varies greatly from region to region.

Even within a region, their involvement varies widely among different ecological sub-zones, farming systems, castes, classes and stages in the family cycle. But regardless of these variations, there is hardly any activity in agricultural production, except ploughing in which women are not actively involved. In some of the farm activities like processing and storage, women predominate so strongly that men workers are numerically insignificant. (Aggarwal, 2003) Majority of the studies on women in agriculture conducted in India and other developing and under developed countries point to the conclusion that women contribute far more to agricultural production than has generally been acknowledged.

Against this backdrop, an attempt has been made to understand the emerging gender inequalities in agriculture in terms of land distribution and disparities among the wage rates across different agricultural operations.

## Emerging Inequalities: Some Evidences

Before proceeding further, it is essential to understand the emerging inequalities in terms of land ownership and extent of participation in agricultural operations and the status of women participation in available labor force at the national level.

### Nature of Land Ownership

The present section deals with the land ownership across the different size of holdings. The evidences show that numbers of marginal and small farmers constituted the major proportion of the total number of farms i.e. around slightly more than three-fifths and less than one-fifths respectively. While they owned the area with only one percent point difference i.e. around 17 and 18 percent of the total area. The proportion of semi-medium and medium size was about 12 and 6 percent respectively. The large size of farmers was only about one percent while they owned about 14 percent of land. During the period of two decades, there were substantial changes in the distribution of different size of holdings. The proportion of marginal category of farmers increased considerably i.e. two-thirds. There was also a considerable change among different categories of farmers (Table 1). The proportion of two-third of the farmers owned slightly more than one-fifth of the total land. Thus, there was inverse relation among the proportion of number of holdings and area of land ownership. This shows that the distribution was skewed. A look at the average size of holdings, clearly points to the fact that over period of time, there were changes in the average size of holdings owned by the different categories.

There exist wide variations in the land ownership in village revenue records and in actual practice. Generally, land ownership is transferred in the name of sons and daughters after the death of an individual. The land is distributed in formal ways among

**Table 1**  
**Features of Land Ownership in India**

Size of Holdings	Marginal	Small	Semi-Medium	Medium	Large	All
<b>All Social Groups</b>						
<b>Distribution of land Holdings</b>						
1995-96	61.58	18.73	12.34	6.14	1.21	115580
2000-01	61.58	18.73	12.34	6.14	1.21	119931
2005-06	64.77	18.52	10.93	4.93	0.85	129222
2010-11	67.10	17.91	10.04	4.25	0.70	138349
<b>Distribution of Area Owned (Hectare)</b>						
1995-96	17.21	18.81	23.85	25.34	14.79	163355
2000-01	18.70	20.16	23.96	23.97	13.22	159436
2005-06	20.23	20.91	23.94	23.11	11.82	158323
2010-11	22.50	22.08	23.63	21.20	10.59	159592
<b>Average Size of Holding (Hectare )</b>						
1995-96	0.40	1.42	2.73	5.84	17.21	1.41
2000-01	0.40	1.42	2.72	5.81	17.13	1.33
2005-06	0.38	1.38	2.68	5.74	17.08	1.23
2010-11	0.39	1.42	2.71	5.76	17.38	1.15
<b>Female Group</b>						
<b>Distribution of land Holdings</b>						
1995-96	68.73	10.75	9.58	3.85	0.58	11012
2000-01	68.72	17.95	9.36	3.47	0.49	12990
2005-06	69.74	17.57	8.98	3.27	0.44	15115
2010-11	71.58	17.02	8.21	2.82	0.37	17682
<b>Distribution (percent) of Area Owned</b>						
1995-96	22.91	22.94	24.24	20.90	9.00	11716
2000-01	24.23	24.59	24.36	19.34	7.49	13373
2005-06	25.45	24.52	24.20	18.94	6.89	14768
2010-11	27.55	25.55	23.40	17.17	6.33	16510
<b>Average Size of Holding (Hectare )</b>						
1995-96	0.35	1.41	2.69	5.78	16.48	1.06
2000-01	0.36	1.41	2.68	5.73	15.66	1.03
2005-06	0.36	1.36	2.63	5.65	15.41	0.98
2010-11	0.36	1.40	2.66	5.68	15.83	0.93
<b>Share of Females in Land Ownership</b>						
1995-96	10.63	8.78	7.40	5.98	4.56	11012
2000-01	11.84	10.28	8.67	6.86	5.20	12990
2005-06	12.59	11.09	9.61	7.76	6.02	15115
2010-11	13.63	12.14	10.44	8.49	6.78	17682

**Source: Calculated on the basis of Data reported in Various Agricultural Census, <http://www.agcensus.nic.in>**

Individuals who are supposed to be next owners of the land. It is one of the major cause of gender differences in ground realities. Further, these need to be verified.

Women play a very significant role in agricultural production, but their role is not duly recognized. In majority of the developing nations like India women contribute up to about sixty percent of agricultural production. It is indeed ironical that in spite of the important participation of women in agriculture, their remuneration is less as compared to men and their access and control of capital resources such as land is almost negligible.

Indian rural economy is largely dependent on agricultural sector for its livelihood. Seventy percent of its population lives in the rural areas, out of which almost sixty percent is engaged in agriculture which is their main source of income. Indian women form the

backbone of agricultural workforce and play a vital role in the field of agriculture operation including, food production, horticulture, animal husbandry, sericulture, and etc.

Comprising the majority of agricultural labourers, women put in labour not only in terms of physical output but also in terms of quality and efficiency. Although the time devoted by both men and women in agricultural activities is almost equal, women put in extra hours of labour in their daily work routine consisting of cooking, cleaning, childcare and other domestic chores. These responsibilities are not shared by men folk.

In spite of working much harder and as efficiently as men, women are highly discriminated against in the matter of payment of wages and access to ownership of land. The picture that emerges from the analysis is indeed pathetic and clearly shows the

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extreme of gender inequality in terms of land ownership. It is clear from the table that as the size of holding increases from marginal to large, the percentage of female holdings decreases, both in terms of number as well as area. Only about 14 percent of women own land which accounts for about 13 percent of total area in case of marginal size of holdings. In the case of large size of holdings only 7 percent of women own land and the percentage of area owned is barely about 6. Where the size of holding is small and semi-medium, 12 percent and one-tenth of women have access to land forming similar proportions with slight margin of the total land area. In case of medium size of holdings about 8 percent of womenfolk own land which is same proportion of total area under cultivation (Table 2 and Fig.1).

Almost similar pattern can be observed in the distribution of land among female members in different categories of farmers and size of land owned and average size of land holdings. These factors show that females remained behind as compared to their male counterparts in this aspect too. From the analysis the interesting to note that there is three percent point improvement in the ownership pattern among the women in all categories of female farmers with slight variations. It shows that there is some social change taking place that may attributed to the factors namely, growing awareness among the communities and changes in public policies such as giving incentives for land transfer in favor of the female members of the family.

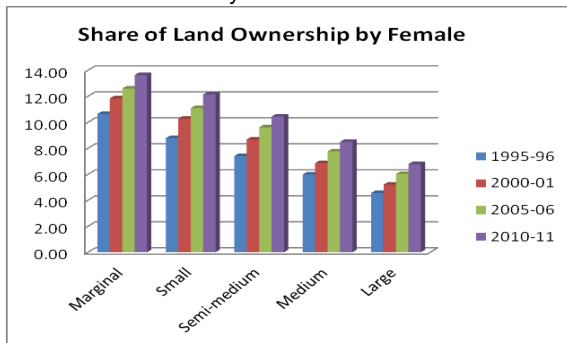


Fig. 1

The limited control of the fair gender over agricultural resources is a barrier to the balanced development of agriculture dependent Indian economy. The inequality in land holdings may be attributed to the fact that India's society being mainly patriarchal; the daughters were not given any share in father's property which was transferred only to the sons. However the negligible ownership of women in land holdings is probably the result of changed inheritance laws in India to ensure equal opportunity to inherit for male and female. Many studies have pointed out that women land ownership plays a major role in their credit worthiness. If they have ownership of agricultural land they will have access to financial resources and savings. If women had comparable access to resources like land, fertilizers and technology, the increase in food production could

reduce the world's hungry by twelve percent to seventeen percent. With greater success with their crops women could raise their incomes, and as primary caregivers in many developing societies elevate the nutrition of children in their care (Lucivero, 2012). Singh (2009) reported that the distribution of capital resources like land is unevenly distributed across genders. Women seldom enjoy property ownership rights directly in their names. Even when women have mutations of land in their names, they may not have actual control over that land. The limited access of women to land holding may be because of the prevailing social structure of the society. The ancestral property is generally transferred in the name of sons/ daughter but not in the name of daughter in laws. Importantly, there is certain proposal by the public agencies like Planning Commission of India to include the women in the property sharing.

The comparisons of data on land resources from 1995-96 2010-11 shows a slight improvement in favor of women. The implementation of policies may have made a difference. The present inheritance law which gives equality to both the genders in ancestral property has started to yield slightly positive results. Women's equal access to land and other property are guaranteed by law and have been upheld in several court cases. To encourage equal property registration states have introduced policies that lower property tax for women. The Hindu Succession Act of 2005 granted equal inheritance rights to ancestral and jointly owned property to women. The National Gender Resource Centre in Agriculture has been set up in the ministry of agriculture to promote women's access to land. However this law is weakly enforced. Another factor may be that parents who are ill-treated by their sons definitely have a soft corner for their daughters and may transfer some land to them for their daughter's safety in future against any adverse circumstances. Today, materialistic world relations are slowly deteriorating. This leads to women demanding their share from ancestral property even if they have to strain their relations with brothers who don't care for them after the demise of their parents. Education is yet another factor where the fair sex is becoming economically independent and aware of her rights.

## Women's Participation in Agricultural Operations

Women play a significant role in agriculture operations the world over. According to the Food and Agriculture Organization of the United Nations, "In the Indian Himalayas a pair of bulls works 1,064 hours, a man 1,212 hours and a woman 3,485 hours in a year on a one hectare farm, a figure that illustrates women's significant contribution to agricultural production." About 70 percent of the agricultural workers, 80 percent of food producers and 10 percent of those who are indulged in processing of the basic foodstuff are women. They also undertake 60 to 90 percent of rural marketing thus making up more than two third of the work force engaged in agricultural production. Rural women form the most important and productive workforce in the economy of India. Agriculture the single largest production, endeavor in India which contributes about sixteen percent of GDP,

is increasingly becoming a female activity. Agricultural sector employs four-fifths of all economically active women in the country. There are seventy five million women engaged in dairying as against fifteen million men and twenty million in animal husbandry as compared to one and a half million men. According to population census, 2011 estimates, proportion of 81 percent of women workers were from rural India. Similarly, the percentage of women who depend on agriculture for their livelihood is as high as 84 percent. Women make up about 33percent of cultivators and about 47 percent of agricultural laborers. These statistics do not account for work in livestock, fisheries and various other ancillary forms of food production in the country. In 2009, 94 percent of the female agricultural labor force in crop cultivation was in cereal production, while 1.4percent worked in vegetable production, and 3.72percent were engaged in fruits, nuts, beverages, and spice crops.

Women's participation rate in the agricultural sectors is about 47 percent in tea plantations, 46.84 percent in cotton cultivation, 45.43 percent growing oil seeds and 39.13 percent in vegetable production. While these crops require labor-intensive work, the work is considered quite unskilled. Women also heavily participate in ancillary agricultural activities. According to the FAO estimates Indian women represented a share of one-fifths and around one-fourth of all fishers and fish farmers, respectively.

In India, the typical work of the female agricultural laborer is limited to less skilled jobs such as sowing, transplanting, weeding and harvesting. According to United Nations Human Development Report only 32.8 percent of Indian women formally participate in the labour force, a rate that has remained steady since 2009 statistics.

### Gender and Labor Market

Gender roles are important social determinants of the availability of labor. It is widely recognized that disparities in access to and control

over labor can impede productivity. Social expectations underpin the gender division of agricultural and household tasks. In agriculture sector, women play a leading role in terms of labor contribution as compared to male counterparts (Singh, 2004). But, they occupy the unequal bargaining power that distorts intra-household allocation of labor and productive resources. In labour markets, the position of women is noticeable in terms of wage differentials, division of labour as well as non-suitability of agricultural implements operated by women. Experience shows that there exist wide variations in the agriculture wages paid to women and men for different agricultural activities.

Equal remuneration Act 25 of 1976 amended by Act 1987 provides for payment of remuneration at equal rates to men and women workers for the same work or work of similar nature. However in actual practice this law is not enforced in the agricultural sector. According to NSSO survey women receive less pay than men for similar jobs. The survey revealed that female employees received less remuneration than their male counterparts for doing similar jobs. The per day wage rate for casual labourer in rural areas was Rs. 102 on an average for male and only Rs. 69 on an average for women (Economic Times 2011)

The sad plight of the womenfolk lies in fact that although they carry out heavier work burden in agriculture but get lower returns for their work just because of gender inequality. The reason for this is the age old myth created by the patriarchs of the society that women are physically weaker and should be paid less as they can not carry out heavy work. According to a study in Punjab labor power of women is considered inferior because of employer's preconceived notion that the primary role of women is that of a home maker. Their work is less remunerative, low in status and lacks upward mobility. Many studies however report women to be technically as efficient as men.

**Table 2**  
**All-India Average Daily Wages Rates (in Rs) in Various Agricultural Occupations**  
**During November 2013-June 2014**

Agricultural Occupations	Male	Female	Children	Male-Female Gap
Ploughing/Tilling workers	259.03	185.39	@	73.64
Sowing (including Planting/ Transplanting/ Weeding) workers	219.51	179.66	110.68	39.85
Harvesting/ Winnowing/ Threshing workers	217.97	182.36	150.48	35.61
Picking workers (including Tea, Cotton, Tobacco and other commercial crops)	191.67	159.84	150.45	31.83
Horticultural workers (including nursery growers)	223.17	154.02	NA	69.15
Fishermen-inland	274.37	150	NA	124.37
Fishermen-coastal/ deep-sea	301.47	NA	NA	301.47
Loggers and wood cutters	304.72	154.84	@	149.88
Animal husbandry workers (including poultry workers, dairy workers and herdsman)	178.82	133.8	77.51	45.02
Packaging labourers, agriculture	227.97	166.23	@	61.74
General agricultural labourers (including watering/ irrigation workers etc.)	218.4	165.21	115.23	53.19
Plant protection workers (applying pesticides, treating seeds etc.)	284.0	166.7	NA	117.3

**Source: Wage Rates in India (2013-14), released in 2015, Labour Bureau (Shimla/ Chandigarh), Ministry of Labour & Employment**

Note: @ means number of quotations are less than five; NA means not reported

Within all agricultural occupations, the existence of gender disparity in daily wage rates is noticeable. The highest gender gap in daily wage rates between November 2013 and June 2014 was found for logging and wood cutting, and the lowest was found among picking workers employed for tea, cotton, tobacco and other commercial crops.

Another fact that describes the pathetic condition of women in rural areas is that men can easily migrate to another place in search of a better job opportunity and higher income. They can migrate anywhere from their birthplace. Women are at a disadvantage and cannot shift to another place as they have to look after the family and household. When men migrate to cities in search of better prospects women fill the vacuum in rural areas. Women are forced to accept work in agriculture in their own villages under deplorable conditions. The dependence of family farm on women's labour, especially during the peak periods of sowing and harvesting is inevitable. Farmers on the other hand also prefer women labourers as payment of lower wages to the female workforce tend to reduce the cost on the farm to some extent. Moreover the women workers are also preferred as they work sincerely without creating any fuss. Similarly the work of the women is preferred on the family farm because it is cheaper than hiring labor. Woman agricultural workers although constitute a higher proportion of labour force continue to receive lower wages than men. The ministry of labour puts the difference at sixty percent of men's wages, while the Indian journal showed that women received seventy five percent of men's earnings Kantor (2008) notes that for majority of women in northern India labour market participation is a survival strategy for the household and not a means of improving standard of living or raising a voice in the household.

### Concluding Remarks and Way Forward

From the forgoing survey of the available and relevant literature, certain insights emerge that need due attention of the policy makers, planners and implementers.

1. Various studies have concluded that the contribution of women in agriculture sector is well recognized since ages but they were deprived from the due benefits of agricultural development. They have limited access and control over resources, while they occupy the prime position in agricultural development. Lack of awareness among them resulted in low access to the resources and institutional support provided by the government and this fact needs to be given due attention of the policy makers and planners.
2. Limited access of women to land holding may be because of the prevailing social structure of the society. The ancestral property is generally transferred in the name of sons/ daughters but not in the name of daughters- in- law. It is worth mentioning that the public agencies like Planning Commission of India have proposed to include the women in the property inheritance.

3. Certain policy initiatives have yielded the desirable results in favor of women. These initiatives include incentive and facilities of concessions in the land transfers in favor of women and these have yielded the desirable outcomes to some extent. Such concessions resulted in enhancing social mind-set towards women's control over resources. But, there is still a lot to be done and that needs due attention of different stakeholders.
4. The study highlights that women labor market was inefficient. In all agricultural operations they were getting lower wage rate as compared to men. No doubt, there are certain operations that need more physical strength that men have and they generally get substantial higher wages. But, there are certain agricultural operations where women operate much more efficiently than men and still get lower wages. This phenomenon needs due attention of policy makers and planners.

### The Way Forward

There are some specific policy options that need to be considered as way forward for resolving the issues relating to gender inequalities in the time ahead.

1. There exists vast variations in the distribution of land resources among male and female that attribute to complex social factors. Certainly, the changing institutional reforms on the one hand and enhancing social awareness as certain incentives have yielded the desirable results. There is need to intensify such efforts.
2. There is a need to give due attention to minimize the gaps in wages among male and female in general and where women are operating efficiently in particular. It can be possible through policy enactment and social reforms.
3. Experience shows that agricultural development has resulted in enhancing the work load of women in farm and off farm activities. There is an urgent need to verify whether or not the development process in the agricultural sector has resulted in increasing the women's access to household income and making her life better than before or not.

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