



MARGINAL FEMALE LABOUR IN AGRICULTURE

Dr. Chandra Purkayastha

HOD, Department of Economics, K.J.Somaiya College of Arts & Commerce.

Abstract

Feminization of agriculture refers to the increased participation of women in the agricultural labour market. To improve incomes the agricultural labour moves towards the productive manufacturing or tertiary sectors. The marginal labour in the agricultural sector thus finds a place in it. The demand for such workers is met by women in the rural areas. Their involvement in activities, which are more than their traditional role, represents an opportunity to integrate them in the labour markets. There is a need to appreciate this opportunity. A study of the supply of women labour to the agricultural sector is necessary. The huge dimensions of supply and the need to facilitate such transformation to the formal economy will provide a direction to which policy must respond. An effective and sensitive response can make a major contribution to the national economy. It holds the promise of a significant social change.

Key Words: *Feminization, Agriculture, Labour.*

Introduction

It has been a general pattern in the past that, as countries climb up the development ladder, the relative weight of the agricultural sector is reduced, whether it is measured as its contribution to the total GDP or as the proportion of the workforce that it employs (Lobao and Meyer 2001).

In developing countries in particular, this agrarian transition influences the status and working conditions of women.

Feminization of Agricultural Labour

According to Swaminathan, the famous agricultural scientist, some historians believe 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 and fuel.

Feminization of agriculture refers to the increased participation of women in the agricultural labour market. The two major factors for increased feminization of agriculture in India can be attributed to the 'demand pull' and 'poverty push'. Looking for ways/means to overcome poverty is a major reason for increased participation of women in the workforce. Other than directly forcing women in rural areas to join the agricultural workforce to supplement the income of the family with their wages, poverty also indirectly leads to feminization. Poverty forces men to migrate to urban areas in search of work, leaving the womenfolk to tend to the swatches of land left behind by them.

The Changing Size of Land Holdings.

The number of 'operational holdings' in India rose over a ten year period from 119.9 million to 137.7 million (up 14.8%). Whereas in three categories of the size of holdings (large, medium and semi-medium) the number of operational holdings dropped, in the categories of small and marginal the number rose (by 8.8% and 22.4% respectively). The rise in total operational holdings of 17.8 million is due mainly to the increase in the number of marginal holdings, that is, below one hectare, and these account for more than 95% of the all holdings added to the total in this ten-year period.

At a national level, the addition of such a large number of small holdings has not expanded the total acreage under cultivation. Rather, all cultivated land - in all size categories - has very slightly shrunk (by 0.16%) to 159.1 million hectares. However, the total masks both one large deficit and one large addition - a 17.5% decrease in the total operating area of large holdings (10-20 hectares, and above 20 hectares), and an 18.7% increase in the total operating area of marginal holdings (below one hectare). The total area operated as marginal holdings has risen from 29.8 million hectares in 2000-01 to 35.4 million hectares in 2010-11.

[All India Report on Number and Area of Operational Holdings (provisional), Department of Agriculture and Cooperation, Ministry of Agriculture. (2012)]. The rise in small/marginal holdings has led to uneconomic farm sizes. The farms are unable to support an expanding family leading to migration of the males from the farms.

This has brought about the change in land use that accompanies the disturbing changes in the number and composition of cultivators. There are now 95.8 million cultivators for whom farming is their main occupation, reported P Sainath, which is less than 8 per cent of the population, down from 103 million in 2001 and 110 million in 1991. (Census 2011).



The increase in population, subdivision and fragmentation of land holdings due to increasing numbers of members in the family encourages conversion of semi-medium and medium group of farmers into group of small and marginal farmers, which resulting in un-economic land holdings. In future Indian agriculture will be dominated by marginal and small holdings, on which application of new agricultural technologies would become more difficult (Rao, 1989).

The Indian agriculture is characterized by millions of marginal and small farmers, who are facing difficulties to operate the high risk activity of farming. The risk are related to weather uncertainties, uneven access to technologies and natural resources, unreliable input supplies, stressed infrastructure in power and irrigation and uncertain marketing arrangements, reduced bargaining power in input and output marketing of Indian farmers.

Labour Market Imperfections

Although most of the economists believe prevailing wage rate as the price of labour, indeed the wage rate may not be the actual price of the labour because of number of reasons: market is not perfectly functional or market is too shallow, when it exists at all. General economic theory states that the market wage rate determined through the interaction of the forces of demand for and supply of labour is the best measure of the value of labour. This is true only when labour market is perfect. In conditions where labour market are imperfect even if it exists, estimating the value of labour becomes tricky. The wage rate under non-labour market or shallow labour market condition is called shadow wage rate in labour market literature and is widely used in social accounting such as cost benefit analysis. The shadow wage rate should reflect the opportunity cost of labour. The opportunity cost of labour is close to its marginal productivity under given resource circumstances.

Labour market imperfections are one of the leading causes of economic backwardness. This is because human labour is the most important input to mobilize other inputs in the production process. The value of human labour becomes implicit in value of the products reflected in their market prices. Under/over pricing of labour creates problems in efficiency as well equity in the production and distribution of goods and services.

As the male members have migrated they leave behind a large number of small farms not economical to cultivate. The marginal farms provide an opportunity to females to undertake activity with some economic payoffs. Since the farm does not generate marketable returns such activity provide gains which are useful to the farmers directly.

Viability

Chandra,(2001) reported that small farms are not viable unless they are supported with some supplementary income. There are several study conducted on issue related to viability of marginal and small farmers at micro-level. Pasha, 1991 examined the role of animal husbandry and common property resources for sustainability and viability of small and marginal farmers in drought-prone region and found that ruminant livestock and common property resources played important role for viability and sustainability of marginal and small farmers.

The study further observes that 65 per cent of farmers are marginal and their land holdings below one hectare of land. The highest share of marginal farmers was recorded in the state of Kerala, followed by Bihar and West Bengal. The small and marginal farmers contribute over 80 per cent share of total farmers and they cannot sustain livelihood only on their own farms. The marginal farmers supply their surplus labour to large farmers and secondary and tertiary sector. It is observed that states with higher share of marginal and small farmers and higher share of rainfed area are positively correlated with share of rural population below poverty

The Agricultural Labour Situation in India

The rapid rise in industry and services and urbanization, involving both a change in migratory patterns and is a result of four types of labourers in the rural areas.

- a. Landless labourers who are personally independent but who work exclusively for others.
- b. Petty farmers with tiny bits of land who devote most of their time working for others.
- c. Farmers who have economic holding but who have one or more of their sons and dependants workings for others prosperous farmers.
- d. Land less labours who are attached to the landlords

However, opportunities are also widely open to marginal and small farmers in terms of increasing scope of human labour intensive enterprises such as fruits and vegetables, dairy, fishery, goat and sheep rearing etc. due to increasing consumption resulting demand of these high value commodities (HVCs) in recent years. Within the agricultural sector, high-value segment is expected to contribute more to the wellbeing of the smallholders, as its require more labour and generate higher returns



than cereals (Joshi *et al.*, 2006). Crop diversification possibly will be an important mechanism for employment generation, income growth, poverty alleviation, food and nutritional security, risk aversion and sustainability of the system from judicious use of scarce natural resources (Kar, *et. al.*, 2003). Marginal farmers with less than 0.01 ha. of land have allocated highest share of land (68.81 per cent) to dairy activity, followed by crop cultivation (14.25 per cent), farming of goat and sheep (9.98 per cent) and farming of other animals (1.94 per cent). As a consequence they have received maximum income from dairy (77.60 per cent) followed by crop cultivation (10.04 per cent), farming of goat and sheep (5.33 per cent) and farming of other animals (5.01 per cent) in Kharif season in Punjab.

The above data lays the groundwork for the participation of women in agricultural labor. That women play a significant and crucial role in agricultural development and allied fields including in the main crop production, livestock production, horticulture, post harvest operations, agro/ social forestry, fisheries, etc. is a fact long taken for granted but also long ignored. 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.

Another major cause of feminization in agriculture is the increasing demand for labour in the rural areas, especially in the agriculture sector. While the men in the family have moved to new and different employment opportunities in the manufacturing sector and elsewhere, there is a dearth of labour to fill the gap in supply of labour for agriculture. It has become increasingly acceptable for women to work, and agriculture has traditionally been an appropriate sector for rural women to involve themselves in. This results in what has been referred to in recent years as the "feminization" of agriculture. Broadly understood, we mean by this the increased importance of women's role in agriculture, whether as measured by the ratio between women and men in this sector or whether it is reflected in the high proportion of women whose main employment is in agriculture. Though a global phenomenon, the feminization of agriculture shows important regional variations.

Though women play a great role as food producers, they face obstacles such that they are often relegated to a form of agricultural production that is characterized by its low productivity and that is geared towards own consumption. The high rate of migration of men from Bihar over the past few decades has resulted in women coming to the front and taking charge of family as well as farm, revealed the report. Quoting a survey conducted by the Institute for Human Development, New Delhi, the report says that 70% of all women engaged in cultivation are from households witnessing migration. "Migration leads to additional vulnerabilities of women left behind but it was found that these women were playing new roles like going to 'mandis' to sell farm produce.

But regardless of these variations, there is hardly any activity in agricultural production, except ploughing in which women are not actively involved.

The range of activities that women are engaged in can be broken up in the following categories.

- Agriculture: Sowing, transplanting, weeding, irrigation, fertilizer application, plant protection, harvesting, winnowing, storing etc.
- Domestic: Cooking, child rearing, water collection, fuel wood gathering, household maintenance etc.
- Allied activities: Cattle management, fodder collection, milking etc.

According to latest UNDP report, As men migrate in search of better-paid work, women in rural India are taking over agricultural work in the villages. They face meager wages, long hours, hazardous work and sexual harassment. Figures from the census show that, amongst rural women, the percentage of marginal workers (defined as working for less than 183 days per year) has increased significantly from 8.1 per cent in 1991 to 14.2 percent in 2002. During the same period, there 'was a sharp fall in the percentage of main workers (more than 183 days a year), especially male workers, coming from rural areas. The figures thus show a casualization and feminization of the workforce in rural areas, with the number of marginal women workers becoming larger and more significant, while male main workers in rural areas have declined. Women's role in agricultural operations, animal husbandry and other economically productive activities is very significant. They contribute about 60-70 percent of the labour required for these activities thus playing a pivotal role in sustaining economy.

Dairy Production: Women accounted for 93% of total employment in dairy production. Depending upon the economic status, women perform the tasks of collecting fodder, collecting and processing dung. Women undertake dung composting and carrying to the fields. Women also prepare cooking fuel by mixing dung with twigs and crop residues. Though women play a significant role in livestock management and production, women's control over livestock and its products is negligible.



In India, Animal Husbandry is a vocation for millions of small farmers and land less people. A large percentage of them raise animals on crop residues and common property resources. When in some developed countries, less than 3% of the adult population is engaged in agriculture and animal husbandry, 70 percent of Indian population is dependent on agriculture and animal husbandry. Women provide 60 percent of the livestock farming labour and more than 90 percent of work related to the care of animals is rendered by women folk of the family.

In Bihar, over half the workforce in agriculture is female, supporting the thesis of feminization of agriculture. Additionally, women contribute 79.5% of the workforce engaged in animal husbandry in the state. When it comes to animal husbandry, women do all sorts of jobs right from cleaning and feeding the cattle to milking them and selling the milk in market.

The agrifood systems today hardly allow female independent producers to thrive, instead relegating them to a form of agricultural production that is often characterized by its low productivity and that is geared towards own consumption or meeting the needs of the family. Such homestead-based production can represent an important contribution to food security.

In some of the farm activities like processing and storage, women predominate so strongly that men workers are numerically insignificant. (Aggarwal 2003) Studies on women in agriculture conducted in India and other developing and under developed countries all point to the conclusion that women contribute far more to agricultural production than has generally been acknowledged. Recognition of their crucial role in agriculture should not obscure the fact that farm women continue to be concerned with their primary functions as wives, mothers and homemaker.

The studies under *Identification and improvement of farming systems suited to farmwomen in Eastern India* project revealed that there is intense involvement of farmwomen in vegetable cultivation necessitating to take follow up supportive activities and interventions in the area of vermin composting, natural plant pesticides, biological control and IPM. Women of family contributed highest hours per season (61.66) in harvesting and post harvesting operations and participated lowest in land preparation.

The Effects of Feminization.

With changing structure of the society, female labour force participation has increased significantly. For instance, female participation in labour force has increased from 74 to 79 percent during 2003 to 2010 (1). Similarly, due to introduction of improved farming inputs and technology such as genetically modified seeds and chemical fertilizers (CBS, 2010), the productivity of labour force has also changed. Thus, there is a need for updated shadow wage rate estimation consistent with recent technology and labour force participation rates at frequent intervals.

Effect

One recent study on the Indian state of Karnataka highlighted the central role that land ownership plays in facilitating the mobility of women -- their capacity to travel alone --, and their capacity to make autonomous choices, as a result of the improved bargaining power within the household that results from owning land (Swaminathan et al. 2012). Land ownership is also important to enhancing women's participation in rural institutions that could enhance their decision-making power and leverage more collective rights and resources: ownership of land makes women more economically secure, enhancing their self-confidence and self-esteem and their role in decision-making, and allowing them to garner more social, familial and community support (ICRW 2006: 100).

Women who own property are also less exposed to violence, since they can flee marital violence (Agarwal and Panda 2007; Friedemann-Sánchez 2006; ICRW 2006: 12).

The violence associated with displacement, devaluation and dis-empowerment takes the form of intensive violence, increasing incidences of rape, the epidemic of female foeticide, and growth in trafficking of women. Women also bear the ultimate burden of farm suicides, since they are left to look after their households without assets but with the burden of indebtedness.

Deceleration in employment in primary sector The reasons for deceleration in employment in primary sector might be due to implementation of MGNREGS as safety net. Hence, rural wages have increased in real terms resulting in females, children and elderly people having withdrawn themselves from labour market due to income effect. The other factors such as easy access to credit, education, better job opportunities in secondary and tertiary sector and reducing in distress and increasing use of labour-saving technological change are also responsible for withdrawal from employment in primary sector.



Conclusion

India's economy would have great boost if its women participated in paid work in the market economy on a similar basis to men, erasing the current gaps in labour-force participation rates, hours worked, and representation within each sector. Women in India only represent 24 percent of the labour force that is engaged in any form of work in the market economy, compared with an average of 40 percent globally. (McKinsey Global Institute, September 2015).

The below-potential contribution of women to India's GDP today—measured by their share of paid work in the market economy—contrasts with their higher share of unpaid care work such as cooking, cleaning, and taking care of children and older members of the family. Globally, women spend roughly three times the amount of time spent by men on unpaid work. In India, the situation is extreme—women perform 9.8 times the amount of unpaid care work that men. It has been estimated that most of unpaid work is routine household chores exacerbated by poor access to basic services such as sanitation, clean water, and clean sources of cooking fuel. Much of this unpaid work may be done willingly and provide great satisfaction to women and welfare for their families. However, it does not translate into wage-earning opportunities for women or promote their financial independence.

More women in India tend to work in low-productivity jobs than men. Seventy-five percent of female employment in rural areas is in agriculture compared with 59 percent for men. (NSSO data 2014.) Analyzing NSSO's wage data by occupation for India appears to support the trend of female being paid less. Irrespective of the professional level, women on average get paid 30 percent less than their male counterparts. The labor force participation rate is 35.8% for women whilst it is 81.3% for men in the rural areas. SOURCE: National Sample Survey Organisation, 68th round of employment and unemployment, 2011-12; Some unpaid care work could be substituted by better infrastructure and services such as access to safe water and clean fuels in homes, better transport, the marketisation of unpaid work through the creation of reliable and affordable paid services for child care, caring for the elderly, and performing domestic chores, and, finally, more equitable sharing of unpaid work between members of the family.

Improving infrastructure that eases the performance on domestic work can include availability of water for household use and sanitation, speeding efforts under India's Swachh Bharat mission. The government could also create policies that encourage service providers to deliver affordable child care and services for caring for the elderly.

Enabling women to be equal partners in society and in India's workforce would help in making India inclusive. The economy will benefit as a result of women's participation. Thus by encouraging gender equality in society, those large economic benefits will be obtained.

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