

Women: Seeds of Change in Agriculture

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ABSTRACT

Women's contribution in any economy is inevitable. Their roles vary region to region, work to work, country to country and within region also. There is a need to harness the full potential of the women in overall development. Although it is also true that despite the near about equal shareholder in development works, women are still lagging behind in terms of accessibility to resources like credit, land acquisition, facilities, extension programmes etc. The reasons of this may be their illiteracy or lack of formal education, no social and economic security, social and cultural pressure etc. This paper emphasizes on the present situation of women in agriculture and suggests possible roadmaps to mainstream women in development process.

Key words: Women; Economy; Harness; Credit; Extension programmes;

Women are the unavoidable part of any development programmes whether it is for developed or developing country. Involvement of women in development varies from agriculture and allied sectors to industry and service sectors. But generally they are seen as secondary contributors in development and men are the major benefits holders of the programmes. Women play a central role in the agricultural economy, which means that their hours of work are long, leaving little time for learning how to use new technologies. Women cannot migrate as easily as men to towns and cities where training in new technologies is more available. Apart from agricultural production, women rather than men have the added responsibilities of caring for children and the elderly. In many communities cultural attitudes disallow women from visiting public access points, often because they are frequented by men or because women are not allowed out of their homes without being accompanied by men. (Jennifer Radloff, 2010) According to *Food and Agriculture Organization (2011)*, women farmers account for more than quarter of the world's population, comprise on an average 43 per cent of the agricultural work force in developing countries, ranging from 20 per cent in Latin America to 50 per cent in Eastern Asia and Sub Saharan

Africa. Yet women have less access than men to agricultural related assets, inputs and services. If they have easy, timely and reliable access to productive resources as men, women can increase yield by 20 per cent to 30 per cent, raising the overall agricultural output in developing countries by 2.5 per cent to 4 per cent. This gain in production can reduce the number of hungry people in the world by about 12 per cent to 17 per cent, besides increasing women's income. Still their potential is not harnessed properly. Thus it can be said that women's contribution in any economy is inevitable and there is a need to harness the full potential of the women in overall development. Although it is also true that despite the major or equal shareholder in development works, women are still lagging behind in terms of accessibility to resources like credit, land acquisition, facilities, extension programmes etc. Due to less income from farming, men are migrating to the urban area, shifting the burden of agriculture on women's shoulders thus the feminization of agriculture is taking place. A study released by United Nations Women India and Landesa, U.S. headquarter found that despite their time spent working in orchards, cotton fields and rice cultivation etc., women rarely inherit the land. Simply, if women do not have access to land they are also not

entitled to legal control over land, institutional credit or any other subsidized services like seeds and fertilizers etc. This also makes women's condition more miserable.

Below is data presented which shows the present situation of women in agriculture? Fig 1 shows the female share in economically active population in agriculture. It shows that from 1980 to 2010, the female share in agriculture in increased drastically in all countries. Fig. 2 spells the share of male and female agricultural holders in main developing countries. It can be reiterate from the fig 2 that women's share is although less in comparison to male but their contribution cannot be neglected and it also varies from country to country depending on their agricultural situations.



Fig.1. Female share of population economically active in agriculture

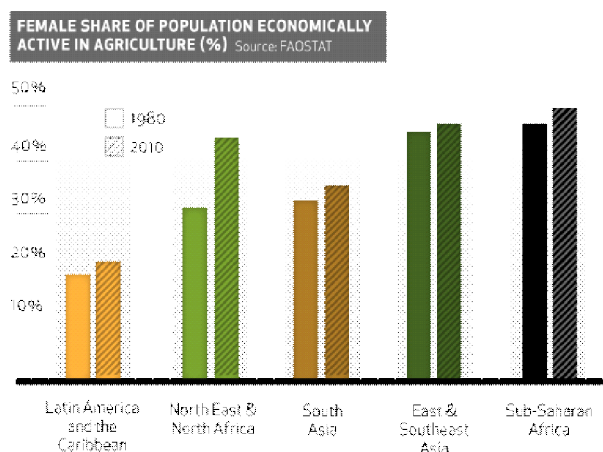


Fig.2. Share of male and female agricultural holders in main developing regions

Fig 3 highlights the one of the most important issue of agricultural services which needs immediate attention and action. It is surprising to know that women farmers receive only 5 per cent of all agricultural extension

services. This finding is coincide with the study done by Saquina Mucavele whose findings suggest that they comprise 43 per cent of the world's agricultural labor force, which rises to 70 per cent in some countries. Women comprise the largest per centage of the workforce in the agricultural sector, but do not have access and control over all land and productive resources. When we talk about the women extensionists, only 15 per cent of the world's extension agents are women, again it shows the less women extensionists, the less coverage to women farmers. Aid to women farmers also shows that only 10 per cent of total aid for agriculture, forestry and fishing goes to women, it also shows that despite their contribution, the aid to women farmers is very less.

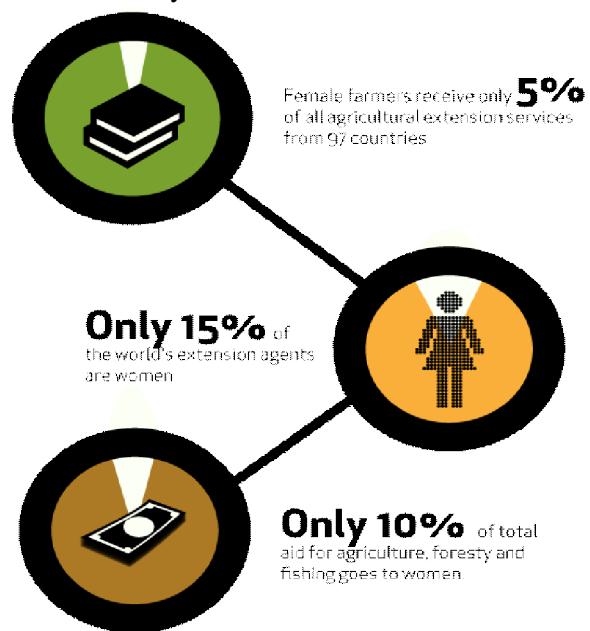


Fig.3. Female share in extension services

In India nearly 70 per cent of rural women are employed in agriculture and they are responsible for 60 to 80 per cent of food production. They play major role in animal husbandry, horticulture and poultry which are their main source of income and it is noticed that they always involved in labor and tolerance intensive works like transplantations and weeding operations. Among the rural women workforce, most of them are agriculture labor and some of cultivators. There are lot of variations in involvement of women in agriculture which is based on their culture, economic status, regions and crop selection. While the men are moving to cities for better occupations the women are taking care of cultivation

and sometimes they used to work as farm labor to support their family needs. The weaker section of the women used to market their products such as selling vegetables and other food crops in farmers market or door to door. Most of the women cultivators are involved in food crops rather than cash crops since cash crops need more marketing efforts which are traditionally taken care by men. The women in higher socio economic sections are not involved directly in cultivation or live stock and they used to help in labor administration, supporting activities and accounting. Still Indian society has some gender boundaries, but the rural women involve in multiple productive roles and it is necessary to give equal opportunity in agriculture. Most of the women farmers are marginal or small farmers, landless tenant farmers and farm labor, they don't have enough land to cultivate, less knowledge, limited access to innovative technologies, low capital and less credit facilities. (<http://farmersindia.blogspot.in/2011/04/women-in-indian-agriculture.html>)

Women's Contribution in Development: Theoretical Frameworks: Agriculture is the back bone of many developing countries. Women account for more than half of the work force by participating in different activities, either directly or indirectly. The gender division of labor varies from one society and culture to another, and within each culture external circumstances influence the level of activity (Nigist, 2004). However, except in few most developed countries, women's efforts are not yet realized by society. Women are, of course form an integral part of farming Household. They are involved in over half of the farm activities in many developing countries, bear most of responsibilities for household food security and contribute to household well being through their income generating activities (Etenesh, 2005). Recent data from the UN Food and Agricultural Organisation (FAO, 2010-11) shows that 43 per cent of the agricultural workforce in developing countries is made up of women. This ranges from approximately 20 per cent in Latin America to approximately 50 per cent in Asia and Africa. However, despite carrying out a significant amount of activities related to agriculture including crop production and livestock rearing as well as being engaged as wage labourers and in small scale income generating activities, rural women rarely have their voices heard, and their productive potential remains low (World Bank et al. 2008).

Women usually have limited accesses to resources and opportunities and their productivity remains low relative to their potential. Due to lack of awareness in our society women's role has not been recognized and we live in a society in which there is substantial level of gender inequality. The inequality in the provision of education reflects the deep rooted tradition and values within the ideological, political, economical and socio-cultural structure of societies (Kasente, cited in Takele, 2008). Women are affected by many issues relate to land and agriculture. Women's right to land is affected by land scarcity. Women are marginalized from accessing land whenever land is scarce (Hadera, 2002; Tesfaye, 2003). Rural women do not have equitable access to land and agricultural resources. They have low involvement in development activities and have low decision-making power. Their labor contribution to the agricultural sector is invisible because of the gender division of labor in communities. The income earned and profit gained from informal employment of women were not only to support the family in the feeding and other consumption but also contributes for poverty reduction. Women engaged in the informal employment contribute three-Fourth (75%) of the household consumption (UNDP, 2006). According to Linda (2005) men have more power to control on the income made by women and often decide to finance their own personal interest instead of the households. This is because; women have less power /right/ to make decision on the household income independently. Provisions of credit support and micro-finance facilities for rural women were one of the most important strategies for empowering rural women in the economic aspect. Credit and micro-finance support for rural women are not only for economic empowerment of rural women but also for poverty reduction and for enhancing of better living condition of poor rural women.

Another study done by Dommati Devender and Reddy Chittedi Krishna (2011) cited similar argument by saying that women produce between 60 to 80 per cent of the food in most developing countries and are responsible for half of the world's food production. On the contrary to this fact another group of researcher argues that despite their significant role agricultural production, a precise measure of women's contribution to food production is impossible to establish. In general women do not produce food separately from men and it

is impossible to disaggregate men and women contribution either in terms of labour supplied or in terms of output produced. It is enough to recognize that women are important to agriculture and agriculture is important to women (Cheryl Doss 2011). Various studies across worlds have recognized women's contribution in various economic activities. Agriculture is that enterprise where a large proportion of female agricultural workers is directly engaged and plays a very significant role. Recent studies highlight that women in India are the major of food in terms of value, volume and number of hours worked. According to the NSSO data, in 2004-05, in rural areas about 83 per cent women workers were engaged in agriculture, either as cultivators or as laborers, as compared to 63 per cent of male workers. Although a significant proportion of the rural workers are engaged in agriculture, but they are able to get work for only a few months of the year. This keeps them employed only in the "subsidiary status." (Goswami and Bordoloi, 2013). Nisha N (2008) in her study conducted on "Woman labour in agriculture- An economic analysis" finds that the woman labour got maximum employment in agriculture during Kharif season. The labourers got maximum number of days of employment in weeding followed by harvesting and post harvest operations. The woman labour had maximum unemployed days in summer as this is the off season for agriculture in the study area which compelled the woman labourers to seek employment opportunities like NREGS activities, construction work, tile making etc. The study also comes to the conclusion that woman unemployment in agriculture has caused a severe impact on the income of labourers, family expenditures and their saving and debt position. It also caused migration of labourers to other activities and places. Increase workforce participation rates do not always indicates increase in the level of welfare. So it must be accompanied by higher educational capabilities and asset and income. The same result was come out from another research work of Nisha Srivastava and Ravi Srivastava (2010). They also reveal that although most of the women workers are concentrated in agriculture but condition of works especially for women wage worker are quite dismal. Factors like job typing, low educational status etc compels women wage worker to take lower wage as compared to men. Tahir Munir Butt et al. (2010) in their paper "Role of Rural Woman

in Agricultural Development and their constraints", highlighted the fact that rural women along with men play an important role in the agricultural sector like crop production, livestock production as well as cottage industry. But they have incomplete access to resources, agricultural extension, education services and newest technical knowledge and information sources.

The *Commission for Africa (2005)* report notes that there is ample evidence to support the point that women make a greater contribution to economic life than men. They are perceived to be key agents through whom poverty and food security issues must be addressed, particularly in Africa through technological empowerment. Indeed, it has been argued that rural poverty is deeply rooted in the imbalance between what women have and what they do, but their potential to impact development is hampered by gender inequalities, which shape the economic roles played by both men and women (World Bank, FAO and IFAD, 2009). It has been noted that gender inequalities constrain women more than men in competitiveness and entrepreneurship, particularly in Africa (Bardasi et al, 2007). Thus, women have occupied most space in gender debates including those around research, development and policy arenas. Consequently, gender mainstreaming efforts have focused on women and gender imbalances in terms of resources, right and voice geared towards engendering development and fighting poverty (World Bank, 2001). Men and women differ in their access to, and control over inputs, productive resources and services, which limits the opportunities of men and women to participate productively in agricultural development (Bardasi et al., 2007). Rural communities have significant impacts linked to alignment of technological development along gender lines. These are, however, influenced by cultural factors with respect to decisions on ownership, allocation and disposal of resources and benefits accruing from them. The decisions on who purchases and uses particular modern technological innovations such as seeds, fertilisers and pesticides may already be predetermined, based on social and cultural dynamics of society (Kakooza et al, 2005). With regards to perception and adoption of modern technological innovations, there are certain gender dimensions based on different impacts on women and men as well as distinct cultural factors. It has been noted, for instance, that the new technological

innovations tend to benefit men more than women, lessening the workload of the former and increasing the activities linked to women, such as transplanting, weeding, harvesting and processing (*Quisumbing and Pandolfelli, 2008*). It has also been argued that modern biotechnology will also benefit men more than women (*Thomas, 2003; Expert report, 2004*). It has been reported that although both men and women jointly play key economic roles in the agriculture sector, women are more active and have embraced farming with poverty reduction objectives (*World Bank, 2005, 2007*). Rural women are the main producers of the world's staple crops, providing 90% of food consumed by the rural poor, playing significant roles in sowing, weeding, tending, harvesting and threshing (*World Bank, FAO and IFAD, 2009*). In *DFID (2007)*, it is argued that improving access to requisite resources (for e.g., seeds) for rural women to the same extent as men would increase agricultural production by 20%. These reports generally present women as the more aggressive gender in agricultural development and this may have enhanced the adoption of feminisation of poverty approach discussed previously. Understanding the dynamic processes of change related to gender and agriculture

is paramount in order to enhance faster and sustained agricultural growth. The gender patterns of these dynamics are important for growth and development of the agriculture sector, particularly in Africa where gender disparities tend to be greatest among the poor (*World Bank, 2001*). Men's and women's opportunities to respond to economic signals are not the same, in large part because of how gender ideologies structure their initial asset endowments. Rural women, despite their hard work and creative endeavors, typically face additional barriers from gender discrimination in use, control, and ownership of key agricultural assets—especially land, labor, cash and credit, and education. They often battle restrictive attitudes and institutions that impede their full economic participation in their communities. They shoulder more of the household responsibilities alongside their economic activities. And although the data remains ambiguous on the exact extent of the gender gap and although we know that the gap itself varies from country to country, we are nonetheless able to state with some certainty that women typically own less land than do men and that their agricultural plots tend to be smaller than men's (*Doss et al. 2013*). Reports from country after country

Table 1. All India annual average daily wage rate for various agricultural operations (Rs.)

Crop Year	Ploughing		Sowing		Weeding		Transplanting		Harvesting	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
2006-07	81.79	42.37	73.29	41.41	64.97	52.82	69.17	56.44	68.45	55.69
2007-08	91.38	49.96	79.28	57.18	70.07	58.27	73.79	61.93	75.24	62.31
2008-09	102.90	55.43	90.99	65.00	80.15	68.02	83.28	71.43	87.05	71.58
2009-10	120.85	70.43	104.52	79.47	92.78	78.94	98.29	86.71	102.82	84.95
2010-11	144.50	87.68	124.84	97.67	110.64	95.20	119.51	103.72	121.63	101.69
2011-12	190.91	NA	173.00	115.82	146.75	120.22	144.86	128.36	163.12	128.93

Source: Labour bureau; All India annual average is calculated for 20 major states; NA=Not Available

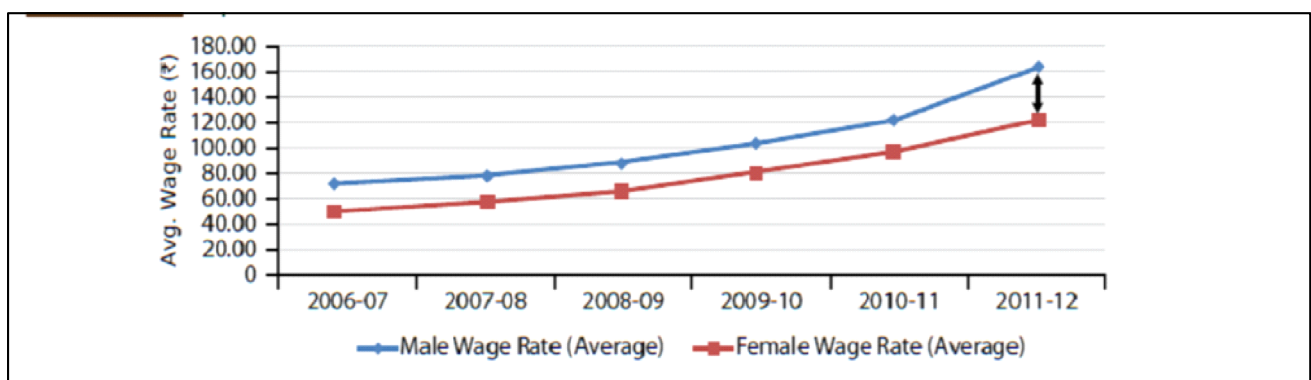


Fig. 4. Trends in average daily wage rate of male and female workers in agricultural operations

find that women use fewer inputs than do men, have fewer meetings with extension agents, find it more difficult to access credit, and as a result their productivity is lower (*Doss et al. 2011; Peterman et al. 2014; and Oseni et al. 2014*).

Some Realities : Below presented Table 1 and Figure 1 shows the clear picture of difference between male and female wage rates for various agricultural operations. It shows that in subsequent years from 2006-07 to 2011-12 there was an increase in wages rate for the male workers but increase in wage rates for female workers in various agricultural operations is not satisfactory and there is much difference between rates.

WAY FORWARD

The following text suggests the roadmaps for mainstreaming the women in development process. In order to empower and improve the women farmers' productivity, they need to have proper farm trainings and capacity building programs to compete various challenges in their rural livelihood. Women land ownership plays a major role in their credit worthiness, if they have right on the agriculture land they will have access to financial resources and savings. New legislations have to be taken place in farm land reforms like allocating the wasteland to women self help groups (SHG). Rural women have been acknowledged as the core food producers and processors, banks should recognize them as entrepreneurs, loans and Kissan credit cards have to be approved for them. Special support and market connectivity has to establish for rural women artisans to sell their agro based handicrafts. The farm labor wages should be the same without gender differences and the equal employment benefits have to be given in all rural schemes like NREG. Sufficient political representation must be required by rural women in local level councils, it directs them as an equal partners in political, economical and legal decision making. (<http://farmersindia.blogspot.in/2011/04/women-in-indian-agriculture.html>). It is often estimated that overall, the labor burden of rural women exceeds that of men, and includes a higher proportion of unpaid household responsibilities related to preparing food and collecting fuel and water. Studies indicate that ensuring women's control over production, income, and assets represents the surest path to enhancing the impact of agricultural development strategies (*Meinzen-Dick et*

al. 2011). Recognizing the need to integrate gender into agricultural interventions, development organizations have engaged in the process of mainstreaming gender into agricultural development programs and research (*World Bank 2009*). Using gender-sensitive indicators in experimental or quasi-experimental research methods of evaluation increased the understanding of how households make decisions. Policymakers are using such information to make necessary changes; for example, the national program for education, health, and nutrition in Mexico, and the microcredit program in Bangladesh have been modified to strengthen women's decision making (*Quisumbing and McClafferty 2006*). Research suggests that a more equitable allocation of resources that gives both men and women access to secure land and resource tenure, higher quality seeds, better tools, greater ease of transport, and improved market information can increase smallholder productivity and reduce poverty (*FAO 2011*). Agricultural interventions should seek to reduce or remove gender-based constraints to achieve greater productivity. Women farmers are less likely than men to use modern inputs such as improved seeds, fertilizers, pest control measures and mechanical tools. They also use less credit and often do not control the credit they obtain. Finally, women have less education and less access to extension services, which make it more difficult to gain access to and use some of the other resources, such as land, credit and fertilizer. These factors also prevent women from adopting new technologies as readily as men do. The constraints women face are often interrelated and need to be addressed holistically. (*FAO, 2010*). On the basis of research findings, the following roadmaps are suggested;

- link women SHGs/groups/cooperatives with the national training system
- skills based trainings focussing on creating sustainable employment opportunities
- promotion of non formal targeted education
- increase participation in development programmes and policies
- link women products from marketing avenues
- gender sensitization trainings for extension workers as well as farmers
- exposure visit of farmers (both male and female farmers) to exhibitions, fairs, field visits etc.

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