

WOMEN IN AGRICULTURE : IMPERATIVE ISSUES

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Agriculture occupies the central position in Indian economy and continues to be the largest sector in terms of offering employment for both men and women. Agriculture in India accounts for 37% of India's GNP and according to the National Sample Survey Organisation data, employs 70% of the working population and about 84% of all economically active women (NSS, GOI, 1991). Hence women have a major role in agrarian sector. Farm women actively participate in many agriculture and animal husbandry related activities, besides their usual role of caring for children and home keeping. However, some argue that 84% is an underestimate. In reality, there are very few women in rural areas who are not 'farmers' in some way, whether they are working on the family farm or working as wage labourer. Agriculture has been increasingly becoming a female activity. A sectoral profile of female work force indicates that more than 80 per cent of female workers are engaged in agricultural agril. Sector in rural India. In urban areas, women workers are primarily employed in unorganised sectors like household industries, petty trades, building and construction industries etc. Broadly, women's work participation is higher in rural areas compared to urban areas. While women play a predominant role in the workforce of the country, their status remains one of subjugation and dependence. The report of the committee on the status of women in India (1974) states that, "any meaningful analysis of restriction imposed by social attitudes and norms, possession or lack of necessary equipment e.g. education and other employable skill, political awareness, etc. was only possible by studying women in different categories". The committee felt that they had to go beyond the categorization of society by castes, communities and classes and look at women in three different circumstances, viz.,

(a) Women below the subsistence line, whose problems and constraints are radically different

in nature from those, suffered by women in other sections of society.

(b) Women who move continuously between security and subsistence and often descend below the subsistence line with the disappearance of their means of earning a livelihood; and

(c) Women firmly above the security line.

Women in agriculture lead a precarious existence and could easily be categorised under group (b) above.

Women are a major contributor to the survival of the family, the poorer the family, the greater its dependence on women's income. More than 90 per cent of rural women in India are unskilled. This restricts them to low paid occupations. Women generally have no control over land and other production assets, which largely excludes them from access to institutional credit and renders them dependent on high cost informal sources of credit to secure capital for consumption and/or productive purposes. Women form the backbone of agriculture comprising the majority of agricultural labourers in India. Gender division are stark with all activities involving manual labour or monotonous work assigned to women while all operations involving machinery are generally performed by men. Agricultural wages for women are on an average 30-50 per cent less than those for men despite putting up equal hours and intensity of labour inputs.

Women's contribution in agriculture sector and consequently towards national economy is quite substantial but economy but it is still unacknowledged and invisible. A lot needs to be done to improve condition of women involved in agriculture in rural areas. Imperative issues for development are discussed in the paper.

Population and Agriculture Workers :

Table 1 shows details of percentage of agricultural workers in the total population from

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1951-2001. While percentage of rural population is slowly dwindling due to increased migration towards the cities, the percentage of labourers in agriculture has remained much the same at least from 1981 onwards. It may be said that more women are joining the labour force in these areas.

Table 1. Population and agricultural workers
(in millions)

Year	Total Population	Average Annual Exponential Growth Rate(%)	Rural Population	Cultivators	Agri-cultural Labourers	Other Workers	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1951	361.1	1.25	298.6 82.7%	69.9 49.9%	27.3 19.5%	42.8 30.6%	140 100%
1961	439.2	1.96	360.3 82%	99.65 2.8%	31.5 16.7%	57.6 30.5%	188.7 100%
1971	548.2	2.22	439.0 80.1%	78.2 43.4%	47.5 26.3%	54.7 30.3%	180.4 100%
1981 @	683.3	2.20	523.9 76.7%	M-46 F-30 92.5 37.8%	M-21 F-50 55.5 96.6(a) 22.7%	244.6 39.5%	1000%
1991 +	846.3	2.14	628.7 74.3%	M-43.71 F-33.09 110.7 35.2%	M-19.57 F-46.34 74.6 2.8%	128.8(a) 41%	314.1 100%
2001 P*	1027.0	1.93	714.7 72.2%	M-39.63 F-34.22	M-21.06 F-44.93		

@ Data in columns 5-8 excludes Assam

(a) Includes marginal workers.

+ Provisional Population in 2 and 4 columns includes projected figures for Jammu and Kashmir

M Male

F Female

(Source : Registrar General of India, Women in India, A Statistical Profile-1997)

A data base has been generated from 18,000 rural women who represent different agro-climatic zones of nine states covered under All India Coordinated Research Project in Home Science (ICAR). The sample included five occupational categories of large, medium, small and marginal farming and landless families. The database pertain to participation, decision making, and time use pattern related to agriculture, animal husbandry and homestead activities. The salient findings have highlighted that among farming families, women participated in crop production along with their male counterparts but women from landless category participate independently as they are either the wage earners or partners for procuring

grain in exchange for... profile in post harvest and animal husbandry activities emerged to be joint participation along with other female members for all categories of rural women. The independent participation profile was very strong for all the rural women for homestead activities.

The participation of women in different activities could be linked with their decision-making roles. While men dominated the scenario of decision making in farm related decisions the women emerged to be the primary decision-makers for home and family related decisions. For post harvest and animal husbandry related decisions, the women took joint decision with male members.

Time use pattern showed that agriculture related household chores keep the women occupied for 14-16 hours a day. In hill and tribal areas and other regions where men migrate to seek alternate avenues of employment, agriculture is almost completely in the hands of women. A woman's contribution is a very important component in the family resources because she has to play multiple roles-looking after the household, spending long hours-collecting fuel, fodder and drinking water, and in agriculture and related activities.

A significant number are engaged in livestock, forestry, fishing, orchards and allied activities as well as small and marginal farmers work as agricultural workers in their spare time or in times of difficulty to supplement their meagre incomes.

According to CSW1, women have all along been playing a distinctive role in agrarian as well as artisanal employment, where earning livelihood is a family endeavour, women have had a role in it.

Extent of participation :

Women are involved in almost all crop production activities. Their participation is influenced by several factors like age, family status, educational level etc. and it varies from one agro-climatic region to another. Some of the main crop production activities in which women have considerable involvement are :

- Putting seed in seed drill/behind the plough
- Unsheathing of maize cobs
- Transplanting of paddy
- Hand weeding
- Harvesting of paddy, wheat, maize etc.
- Cotton picking
- Potato digging
- Sugarcane stripping

- Storage of grain and seed
- Widdowing
- Storage of chemical weedicides, fertilizers and pesticides.

Following tables show the extent of participation of farm women in agriculture and dairy activities as documented by various researchers.

Table 2. Participation of farm women in agriculture (in %)

Sl. No.	Activities	Author & Study Area					
		Arunmozhi (1989) periyar Rice	Sheela James (1989) Periyar Rice	Shantha Govind (1984) Coimbatore Rice	Helen (1990) Chidambaranar Cotton (Rainfed)	Balaji (1990) N.A Arcot G.Nut	Subashnin (1990) niligiris Potato Cabbage
1.	Nursery preparation	24	26	30	NS	NS	NS
2.	Main field preparation	27	33	—	48	60	71
3.	Transplanting	68	63	69	—	—	85
4.	After cultivation	72	66	82	90	83	49
5.	Harvesting	65	92	87	82	97	76
6.	Postharvest operations	77	100	88	98	96	NS
7.	Seeds and sowing	—	70	98	95	95	NS
8.	Plant protection	NS	89	88	36	NS	39

NS : Not specified

Table 3. Participation of farm women in dairy activities (in %)

Sl. No.	Activities	Author & Study Area				
		Rexlin (1984) Gudimangalam	Sheela James (1989)	Helen (1990) Chidambaranar Periyar	Chinnadurai (1990) Coimbatore	Balaji (1990) N. Arcot
1.	Milking	98	99	82	88	85
2.	Feeding animals	98	100	100	96	97
3.	Maintenance of Cattleshed	97	100	100	94	89
4.	Fodder collection	98	100	—	94	—
5.	Purchase of animals	—	46	9	32	40
6.	Protection of animals	—	42	36	100	90
7.	Marketing	98	100	73	86	72
8.	Fixing rate	—	—	14	—	—
9.	Maintenance of records	—	—	14	79	—
10.	Processing of milk	—	—	100	—	—

Source : Women in Agriculture, Algaesan V. etal (1999), NCW – IFWA – NAARM.

Statistics and women workers :

Despite recent efforts to increase the visibility of women's productive work in census data, it is widely accepted that it remains grossly under reported. This is not just the statistical error, but signified deeply entrenched attitudes which even women are conditioned to carry. Mr. A.R. Nanda, the registrar general of India who worked closely with department of women and child development, UNIFEM and SNDT University, Bombay, to get a realistic estimate of the number of working women in the country felt that the percentage of working women would be considerably more than what statistics show. Despite probing questions by enumerators, it was found that there were several cultural factors which

admitting that they worked particularly in Haryana and Punjab. It was difficult for men and even women to accept that the work they were doing in fields and in their homes were economically productive. For instance, in a Haryana home the woman of the house and her daughter were milking and looking after 10 cows. They were obviously selling the milk for a monetary return but told the enumerators that the milk sufficed for the needs of the family. The husband, a transporter, was out of work but the women insisted that he was the real bread winner of the family. Similarly, the work done by women in fields is just not perceived as being economically remunerative work, especially if women work in their own fields.

are less remunerative or escape enumeration because it is unpaid work within the household economy or for subsistence. Women are often paid lower wages than men, for equal hours and intensity of labour inputs because it is perceived that they can not do the same hard work as men. Comments like that made by a senior bureaucrat,"a woman carries 20 kg of earth and a man carried 30 kg, so of course a woman should be paid less. If they do equal work, then they can have equal pay" are not unusual.

Social organization and female work participation

Female work participation differs from society to society and from group to group. In societies with Muslim influence, women are confined to

house only whereas in societies where such an influence is relatively weak or non-existent, such as Thailand, women play more active role outside the household. India occupies, some what middle position in this regard, where total absenteeism from work is prevalent among higher caste women on one hand and almost total work participation among those of lower castes and classes on the other (Myrdal, 1968). According to 1991 census, as much as 84 per cent of the SC female workers are engaged in agricultural pursuits. The maximum percentage of the SC female agricultural workers was in Bihar (93.84%) followed by Andhra Pradesh (92.43%) and Himachal Pradesh (91.45%) and minimum percentage was in Tripura (49.49%) followed by Punjab (55.32%) and Kerala (61.97).

Table 4. Comparative female work force in agriculture by social groups

(According to 1991 Census)

Social Group	% of population	Total main workers	Cultivators	Ag. Labourers	Both cultivators & Ag. Labourers
All group-Female	403.66 (100.00)	64.27 (100.00)	22.22 (100.00)	28.43 (100.00)	50.65 (100.00)
ST-females	33.40 (4.28)	10.01 (15.57)	4.71 (21.20)	4.43 (15.58)	9.15 (18.07)
SC-Females	66.29 (16.43)	13.29 (20.68)	2.33 (10.48)	8.84 (31.10)	11.16 (22.03)
Non-SC/ST-Females	303.67 (75.29)	40.97 (63.75)	15.18 (68.32)	16.16 (53.32)	30.34 (59.90)

Note: Figures within () indicate percentage of each social group to total main workers in respective industrial category.

A comparison of the data available in 1981 and 1991 censuses indicates a decrease in percentage of agricultural labourers among the SC female population and simultaneous increase in the percentage of cultivators during the decade 1981-1991.

Table 5. Variation in the SC female agricultural labourers cultivators during the decade 1981-1991.

Year	Agricultural labourers	Cultivators	Both agricultural labourers & cultivators
1991	66.52	17.53	84.05
1981	68.00	16.12	84.12

This does not necessarily mean that many of the SC female agricultural labourers might have had agricultural lands under the government programme during this period. In Indian macrocosm, the cultivators are economically better off category of workers and agricultural labourers have no match with them. This is not the situation in case of SC female work force. The SC cultivators

including there female cultivators are mostly marginal farmers and tenant cultivators and most of their time, they work as agricultural labourers in other's fields. The SCs constitute hardly 11.46% of the total cultivators in the country the SC females being even less i.e. 10.48% within their own social group (SCs), the women are significantly less in number than male cultivators, 10.36 million and cultivators 2.33 million (1991 census).

Thus, this data corresponds to the social organization of our Indian society. The whole purpose of agriculture structure, asserts Daniel Thorner (1956) has not been to increase the income by adopting more efficient methods but to rice in social prestige by abstaining from physical labour as far as possible.

Land ownership and women :

Women control a small fraction of all agricultural land and have in the past been systematically ignored by all institutions, households, community and government bodies in planning for natural resources. The exact amount is not known because the de jure and de facto situation is very complex.

While the constitution of India guarantees fundamental rights to all citizens for equal treatment under law (Article 14) and non discrimination on the grounds of sex (Article 15), in reality customary law which favours male heirs tends to ensure that men inherit much more land than women, and the land owned by women may be controlled by male relatives. All categories of land related legislation need to protect the gender rights to land, but these acts and rules do not contain provisions whereby the right of women to land can be asserted or safeguarded. Gender equality in legal rights to own property does not guarantee gender equality in actual ownership. According to Agarwal (1994), "Land defines social status and political power in the village, and it structures relationships both within and outside the household. Yet for most women, effective rights in land remain elusive, even as their marital and kin support erodes and female headed households multiply. In legal terms, women have struggled for and won fairly extensive rights to inherit and control land in much of South Asia, but in practice most stand disinherited. Few own land, even fewer can exercise effective control over it."

Imperatives :

Effective gender sensitisation programmes must shift from the current emphasis on numbers of women in groups or amounts saved, towards identifying and addressing work loads, access to resources etc. Some government and NGO programmes are promoting gender sensitive planning and decision making. Empowered and self confident women are likely to be able to architect their needs and plan their livelihood strategies, encompassing all their lives, not just the agrarian sector or activities. Women's participation is not just needed at the village level but also at the district, state and national level if lasting change is to occur.

The nature of participation must be the point of focus, whether it is real participation or just a token. A recent poverty profile study in Himachal Pradesh (PRAXIS, 2000) shows that while the upper castes are able to identify closely with the panchayats, this is not so with the scheduled castes, and among the scheduled caste groups. The women know the least about the process. The findings showed that women feel distant from official institutions in general, including the

panchayats. There is a need to create social space for them in such public fora and help them increase their confidence and capacity to participate effectively. Where effort is put into facilitating women-only fora for confidence building and overcoming cultural inhibition, and men are motivated to support creating such spaces for women, the women often begin to share decision making and even asset ownership (Box.) Benefits delivered through women are reflected in better health, education and overall standard of living of the family.

Empowering Women to Become Effective Players

The commitment of AKRSP (I) (Agra Khan Rural Support Programme, India), an NGO working in Gujarat, to bringing women into both the organisation and implementation of all its programmes, led to a very different outcome in one of their watershed projects. During a gender sensitisation exercise with the village women and men in one of the watershed villages, the amount of labour contributed by household women and men on private land development under the watershed project was calculated. The men themselves concluded that women were contributing roughly 50% of the labour and that 50% of the wages paid for the work should legitimately be paid to the women instead of the entire wage money being paid to the men simply because they were the owners. Empowered by such public acknowledgement of the normally invisible work, the women started depositing their share of the wage money in the common fund of their women's association. They used the money for undertaking collective activities in accordance with their own priorities.

The other important aspect which is often neglected is that of exact enumeration techniques which effectively and sensitively probe and document the contribution of women. Also there is need to convert their contribution into economic terms so that due recognition is given to these "invisible workers" and acknowledged.

Cultural and social organization must accord social dignity to manual work. Our traditional views on working on fields has further marginalised women workers. This has contributed to their oppression and low social status despite

contributing a major share to our national economy. There is need to bring about attitudinal changes. Usually women are given secondary position in our society and thus their contribution often neglected or given secondary position.

Many times need for introducing appropriate technologies, tools and equipment for farm women so as to reduce their drudgery, have been felt and discussed in various fora. Modifying available equipment to suit the ergonomic needs of women, testing them in different locations, producing them in bulk, is urgently required. Providing women with the skill and training them in the use of equipment is the most important need of the hour. The consequences of new technologies on women specific occupations and the constraints responsible for their transfer have to be separately studied in detail so that technological packages can be gender friendly, socially sound and can be coupled with appropriate packages of services and government policies.

Specific steps must be taken to provide women

with managerial and organisational skills so that they themselves can utilise new technologies such as those relating to bio-fertilizers, seed production, pest surveillance, bio-mass utilisation, crop livestock and fish integrated production systems.

CONCLUSION

Technological empowerment of women in agriculture, is not simply a research or extension issue. There are issues, which involve policies, which require support for taking these technologies to the field. Also social set up of our rural areas and attitudes of rural people towards women agricultural workers are also issues which can not be neglected. Control and access to resources and income earned by women is also an important issue. Effective implementation, legally as well as socially of land ownership rights of women is an imperative issue. Hence, one must look at the issues in a holistic manner and then devise strategies to develop the backbone of our agriculture i.e. the farm women.

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