



Empowerment of farm women – still a long path ahead

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ABSTRACT

Women are essential to economic development. A woman is the nucleus of the family, particularly, in rural India. Women share abundant responsibilities to perform wide spectrum of duties both at home and outside but their participation is considered as normal by the society. Women are the backbone of agricultural workforce but world wide their hard work has mostly been unpaid. She does the most tedious and back-breaking tasks in agriculture, animal husbandry and homes. These tasks not only demand considerable time and energy but also are sources of drudgery for rural women which are not yet precisely identified and quantified. The result is that women's needs for comfortable work participation remain neglected. Although gender empowerment has been a buzzword in development circles, the concept remains ambiguous. Emancipation of women is an essential pre-requisite for economic development and social progress of the nation. Women who are being considered as backbone of food security have to be imparted education and knowledge on innovative agricultural technologies for a holistic empowerment.

Women are essential to economic development, especially in rural and agricultural economies. A woman is the nucleus of the family, particularly, in rural India. She not only collects water, fuelwood, fodder and food but also plays a significant role in preserving the culture, grooming the children and shaping their destiny. Therefore, Founder of Bhartiya Agro Industries Foundation (BAIF), Late Dr. Manibhai Desai had emphasized that although women represent only 50 per cent of the total population, they contribute 75 per cent to the development of our society while men contribute only 25 per cent. Unfortunately, in spite of their laudable and vulnerable roles, which cannot be substituted by machine or men, women have been neglected since generations. This is happening inspite of a woman being recognized by our ancient saints and culture as not merely a mother but as a superior scholarly Institution. It is said in *Manu Samhita (Chapter II, Para 145)* a Guru who teaches Veda is 10 times superior to an ordinary teacher and the father is 100 times more than a teacher, but the mother is 1000 times more

superior than the father.

For the rural women, the day starts early in the morning with the responsibilities of fetching water, fodder, fuel and cooking food. She takes care of the children and members of the family, their health, orientation and education and attends to various income generation activities. She manages all the household matters, looks after the family assets and livestock, handles the purchases and finance, works for almost 14-16 hours and is the last to sleep at night. Still, when you ask her children what their mother does? Most of them instantly reply nothing. There is no recognition for her hard work, just because her work is not evaluated in terms of money. She often falls sick, but does not complain and this goes unnoticed by others in the family as they continue to work as usual for the sake of the family. She manages the family very efficiently with meagre means, but is still treated as illiterate. Women are ignored in matters, which are of concern to them as well. As a result, today women are the worst sufferers in the society due to

drudgery, ill health, illiteracy, deprivation and humiliation. Backwardness of women is a sign of poverty and women are the worst sufferers during the period of scarcity and calamity. No wonder, India hosts over one-third of the poor in the world, as lack of empowerment of women is a significant cause of poverty.

What is empowerment?

Empowerment strategies are varied and refer to those strategies which enable women to realize their full potentials. They consist of greater access to knowledge and resources, greater autonomy in decision making, greater ability to plan their lives, greater control over the circumstances that influence their lives and finally factors which would free them from the shackles of custom, beliefs and practices. Unless they themselves become conscious of the oppression meted out to them and show initiative to push forward it would not be possible to change their status much.

Women in agriculture and water management:

Women are the backbone of agricultural workforce but worldwide her hard work has mostly been unpaid. She does the most tedious and back-breaking tasks in agriculture, animal husbandry and homes. Traditionally women’s role in agriculture is staggering with nearly half of the population involved in agriculture and its related activities. Gujarat district proportion of female workers in agriculture (based on Census - 2001) is shown in Table 1. Most of the agricultural activities are women specific but tragically worldwide women mostly end up as hired agricultural laborers with substantial gender disparity in wages, earning far less than men in the same job. To add to her economic woes, inadequate education, less than satisfactory dissemination of technology, globalization, economic liberalization, commercialization, urbanization, political instability, natural disasters, mechanization of agriculture, decreased agriculture, migration of men to urban areas, and occupational health hazards such as prolonged hours of physical labour resulting in musculo-skeletal injuries, pesticide

Table 1 : Proportion of female workers, Census-2001

Sr. No.	District	Total workers (Male+Marginal)			Proportion of female workers (%)	Workers employed in agriculture			Proportion of female workers (%)
		Total	Male	Female		Total	Male	Female	
1.	Kachchh	605599	437198	168401	27.81	255323	160159	95164	37.27
2.	Banaskantha	1092201	664253	427948	39.18	725531	453077	272454	37.55
3.	Patan	533078	325825	207253	38.88	340527	198920	141607	41.58
4.	Mahesana	828519	512458	316061	38.15	396070	263814	132256	33.39
5.	Sabarkantha	940437	559204	381233	40.54	590539	372871	217668	36.86
6.	Gandhinagar	554336	370462	183874	33.17	222852	159011	63841	28.65
7.	Ahmedabad	2009365	1632223	377142	18.77	365216	227286	137930	37.77
8.	Surendranagar	647609	425491	222118	34.30	401569	226861	174708	43.51
9.	Rajkot	1244806	918524	326282	26.21	547518	309436	238082	43.48
10.	Jamnagar	734382	536624	197758	26.93	370187	220220	149967	40.51
11.	Porbandar	215134	153995	61139	28.42	109022	64515	44507	40.82
12.	Junagadh	1000842	683676	317166	31.69	638239	369221	269018	42.15
13.	Amreli	600819	386048	214771	35.75	381779	202597	179182	46.93
14.	Bhavnagar	944559	681124	263435	27.89	422790	228449	194341	45.97
15.	Anand	784711	535444	249267	31.77	442582	312454	130128	29.40
16.	Kheda	908180	579830	328350	36.15	533661	368326	165335	30.98
17.	Panchmahals	976726	557951	418775	42.88	758188	402500	355688	46.91
18.	Dahod	814590	425792	388798	47.73	673917	329915	344002	51.05
19.	Vadodara	1518845	1059861	458984	30.22	805846	473102	332744	41.29
20.	Narmada	259116	149063	110053	42.47	205589	111397	94192	45.82
21.	Bharuch	570693	403657	167036	29.27	314043	192617	121426	38.67
22.	Surat	2182509	1652118	530391	24.30	736014	395250	340764	46.30
23.	The Dang	92993	49206	43787	47.09	79860	39510	40350	50.53
24.	Navsari	545215	355556	189659	34.79	308991	165375	143616	46.48
25.	Valsad	650257	421703	228554	35.15	338486	169465	169021	49.93
	Gujarat	21255521	14477286	6778235	31.89	10964339	6416348	4547991	41.48

poisoning also make the life of rural women miserable. True, there are policies and programmes of Central and State Government to alleviate their problems, but they are proportionately insufficient and their execution is far from satisfaction. Much needs to be done in disseminating gender segregated data and gender bias in all aspects of agriculture, access to resources including land and natural resources, drudgery reduction, assuring nutritional security, diversification of activities of Self-help groups and *Stree Shakti* Groups with emphasis on productivity including post harvest technology, creation of marketing facilities, ownership to land and other allied resources, rural electrification, outreach from the media, collectives of women and inter-linking of SHGs, adult literacy, health awareness, gender sensitization of extension functionaries and financial institutions, awareness about pesticide hazard etc.

Women are a vital part of the Indian economy, constituting one – third of the national labour force and a major contributor to the survival of the family. The poorer the family, the greater is its dependence on women's income. Despite progress in several key indicators, a gender analysis of most social and economic data demonstrates that women in India continue to be relatively disadvantaged in matters of survival, health, nutrition, literacy, communication and productivity. Since independence, the Government of India's policy on women's development had undertaken various shifts of emphasis.

It is a well known fact that Indian women play a crucial role in the agriculture - cultivation. However, no field studies on the aspect of women's participation in cultivation seem to have been done or at least no such literature is available or is being used in water management, which has remained man dominated. Women's role in water management is quite prominent in 4 aspects, namely: (i) Involvement in water intake or receiving water supply, (ii) monitoring water conditions on fields, (iii) contacting water users and (iv) contacting water master / department. There is general tendency on the part of the males in rural areas to take agriculture as a part-time activity and in such situation, women by nature are more disciplined, honest and dedicated to their work as we find in sectors like banks, railway reservation counter, etc. There is a lot more to learn about the involvement of women in water management programmes. Maybe some institutional change may require to be made to strengthen the role of women in water management of irrigation systems.

Women's drudgery in agrarian society:

Drudgery is generally conceived as physical and mental strain, agony, monotony and hardship experienced by human beings. While all these result in decline in living and working conditions affecting men and women alike, the plight of the woman in this regard is alarming as they continue to be constrained by illiteracy, malnutrition and unemployment. The

long hours of work put in by women in fulfilling their multiple roles hardly leave any time for leisure and also have adverse affect on their health both mental and physical. During various operations women were exposed to multitude of biological, physical and mechanical hazards. The energy required in performing these tasks is more than the physical strength of women as women are in a below subsistence level of living.

Women while fulfilling their multiple roles namely, reproductive, productive and community work remain engaged long hours and perform monotonous and difficult activities which affect their mental and physical health. Moreover, different factors of drudgery embedded in pre and post-harvest activities, seasonal stress, and child bearing and rearing responsibility, household chores, health hazards create lots of heavy physical exhaustion and fatigue, mental stress, agony, boredom, and malnourishment. These are the reasons for women's low productivity and social complexity. This would require the introduction and adoption of labour saving and drudgery reducing technologies and methods to alleviate the sufferings of women in agriculture and domestic works which would enable the rural women to participate more energetically and enthusiastically.

In India, women have a major role in agrarian scenario. Randhawa and Chandra (1993) stated that they play a significant and crucial role in various agricultural and allied activities besides fulfilling their responsibilities as homemakers. *Sangwan et al.* (1990) reported that there is a distinct sphere of participation between males and females in farm and dairy sectors, the men were the planners and women implemented the activity. Their contribution is significant in the field of agriculture and allied activities as they are considered as backbone of food security. Contributions of farm women in agriculture cannot be ignored. The findings of Chaudhary and Singh (2003) support the above statement. They reported that women play considerable role in various agricultural activities such as pre-sowing, sowing and transplanting operations. Women's role was also reported in the preparation of compost and raising of vegetable nursery. Women's role was found to be maximum in hoeing and weeding practices on intercultural operations. Harvesting and post harvesting operations were reportedly more suited to the physical condition of women. Reaping of crops, storage of food grains, storage of seed and processing of grains are reported to be mostly done by women.

It is an acceptable fact that women possess talent which could be harnessed for the productive purpose. But it is most unfortunate that the role of women in agriculture has been neglected. A holistic development of women requires empowerment in all aspects involving them as managers, planners, scientists, and technical advisors. This is supported by Singh (2005) as "A large part of women's contribution in agriculture is often not recognized and is also unpaid".



It is the lifeline of Indian economy. The sustainability of agricultural growth has been the focused issue of the nation over the years. Transfer of technology generally aims at speedy diffusion of novel agricultural information from the place of invention (lab) to the place of adoption (land). For about five decades, the information and communication tool has been conventional and only Farm and Home Visit and Personal approach has been adopted by the extension personnel to disseminate the technical information to farmers. This method has been found time consuming and failed to disseminate the right technology to farmers at the right time who are spread across the country like India with diverse needs and interests.

Vehicles to reduce women's drudgery by means of strengthening skills:

Women participation in all activities is related to agriculture and household activities. Rural women continue to be poorly skilled, low paid and prone to exploitation. Women are left out of many formal training programme and excluded from coverage of extension services, thereby relegating them to secondary positions in agricultural work, in families, fields and the community. In many cases, landless women get left out of training programmes. There must be an increased focus on landless women, so as to include them in various technical and other training activities. There must be a reorientation of schemes targeted for the poor, towards more long term inputs and services.

Interventions that reduce the work of women both at home and in the wetland agriculture have been developed and promoted in many areas. These include paddy threshers, winnowers, harvesting tools, parboiling units, maize shellers. To save time in fetching water and collecting fuel wood and fodder, dig a well in the centre of the village, improving manual transport aids (handcarts), improving cooking stoves, increasing bio-mass production to meet fuel needs, and developing mechanisms for its sharing all helps in saving a lot of time or releasing a lot of time that can be devoted to other income generation activities. In addition, below-listed measures which are need-based may be taken towards the drudgery reduction:

- Creation of safe drinking water sources closer to their houses,
- Maternal and child health and family welfare,
- Strengthening of traditional health care practices,
- Training of midwives and upgrading the skills of local healers,
- Awareness on health, hygiene and sanitation,
- Training of local youth as health guides for first-aid,
- Establishment of community grain banks and promotion of nutrition gardens,
- Promotion of energy conservation devices: improved woodstoves, biogas, solar devices and energy

plantations,

- Establishment of Anganwadis and awareness of girl's education.

Also, the need-based training programmes, identified by and for women, should be organised at the doorstep of agrarian women. These may include:

- Technology transfer to women in all aspects of farming and farm management. Grassroots women farmers must be trained in various fields, including terrace farming technologies, animal husbandry, forestry, sustainable natural resource management, enterprise development, financial management, and leadership development.
- Training in pre and post harvest technologies, storage, preservation, packaging and processing and marketing.
- Skills of resource management including organic farming
- Short-term training programmes may be organised by Agricultural Universities that provide admission regardless of age, sex and educational qualifications.
- Improving women's access to agricultural technology through technical training and by designing women friendly agricultural technology.
- Awareness generation on legal rights and land ownership titles.
- Strengthening backward and forward integration of the agricultural sector with non-agricultural sectors in order to provide gainful employment to women workforce. Promoting agro-based industries owned and managed by women on cooperative basis can help achieve this.
- Training in nursery raising, horticulture crop cultivation, new techniques in coarse cereals production, seed support programme, storage techniques, manure preparation, bio diversity conservation, etc.

The suggestions for improving and redesigning training programmes for farm women are to adapt programmes to women's needs and skills allow sufficient time to enable women to acquire new skills and adjust schedules to fit women's existing workloads, provide training in agricultural and other productive activities, not just home and family welfare topics, emphasize activities for which there is an actual income generation potential, ensure the involvement and full participation of women from poorer and less educated backgrounds, use trainers who are not only technically competent and up – to – date, but who empathize with the needs and aspirations of rural women, provide practical field experience in the use of innovations and shift more resources to village – based training rather than residential training. NGOs have pioneered many of the initiatives subsequently incorporated in public sector extension services. NGOs continue to play a lead role in ensuring that women farmers and women on the farm receive training, information and improved technologies.

Paradigm shift in agricultural extension:

Agricultural extension is communication – the “marketing” of agricultural technologies to a targeted audience. Extension agents can more easily communicate with farm women if they use a suitable method and vehicle of communication to deliver to the intended farm women. Which method of communication to use depends on cultural differences, the communication technologies available, the farmer’s stage in the adoption process and local circumstances.

The role of agricultural extension is assuming greater importance in the context of globalization, privatization and liberalization and tremendous challenges of ensuring food and nutritional security to the Indian masses. A reorientation of existing strategies is essential to meet the new requirements of farming systems in the country and challenges in the areas of relevance, accountability and sustainability of agricultural extension. Observation made by Ponnusamy and Jancy Gupta (2004) supports with their findings that “The paradigm shift is required to meet the challenges of the 21st century and to bring food, nutritional and environmental security and for serving all sections of the rural community including farmers, farm women and farm youth”. India should move towards an ever-green revolution, states an eminent agricultural scientist, Prof. M.S. Swaminathan, and this shoulders more responsibilities on the extension functionaries and the technology delivery systems to meet the diverse needs of farmers. Some of the paradigm changes in the agricultural extension are as follows:

- Group approach for agricultural technology dissemination
- Involvement of community-based organizations for technology transfer
- Formation of self-help groups and extension through them
- Rural location-specific knowledge centres for providing instant information to farmers
- Need based problem-solving, skill based training for self-employment of rural youth
- Harnessing the use of electronic media and digital revolution

Extension communication must be supported by a research system that produces properly tested and fully appropriate new practices and varieties that extension agents can recommend to farm women and research must respond to the farm women’s needs, reported through the extension agent. Identifying cost effective ways to deliver extension and inputs to farm women is critical to sustaining extension services and financing recurrent costs. Groups also facilitate the adoption of new techniques. In a group setting, farm women can learn and practice new technical skills before embarking on their own activities. Group decisions to implement new practices carry more weight than individual decisions and otherwise

reluctant extension agents are encouraged to adopt new ideas. Often the cohesion in groups fosters peer learning as well as training from extension agents. Moreover, groups can be particularly effective in reinforcing knowledge among illiterate farm women, who can then rely on collective memory.

Potential IT tools for transfer of technology:

The focus of technology development in agriculture in the last half of 20th century was to increase the production efficiency of the farm. For this the Indian farmers including the farm women should be updated with latest knowledge to compete for global marketing. They must have the right information at the right time which is possible through new information technologies resulted in many non-agricultural fields. Sharma *et al.* (2005) indicated that the most commonly available IT tools for transfer of agricultural technology in Indian context are radio, television, video, telephone and mobile phone, printed media, Computer and Internet.

Multimedia is a modern electronic gadget with a combination of text, graphics, audio and video allowing the end user to control the delivered elements. Aeron (1998) indicated that, if you are stimulated with audio, you will gain about 20 per cent retention rate that of audio visual is up to 30 per cent and in an interactive multi media presentation, where you are really involved, the retention is as high as 60 per cent. Swanson *et al.* (1990) reported that person-to-person communication has traditionally been the most important form of information transfer. Information technology is making a significant contribution in the empowerment of women. The women SHGs and their members are using ICT approaches in both farm and off-farm activities. The government institutions are also engaged in the development and popularization of gender friendly tools and equipments. Interactive Multimedia Compact Discs (IMCD) is increasingly attracting the attention of farmers including farm women, extension functionaries and educationists as a way of much-needed speedy Transfer of Technology (ToT) in agriculture. It is fast becoming the most successful tool for Transfer of Technology and imparting education in agriculture. In fact, it is a motivational-cum-inspirational tool playing a significant role in sweeping changes in socio-economic development in the era of globalization.

Various initiatives are in vogue to enable farm women not only in Information and Communication Technology (ICT) but also in other certain key areas. The Common Minimum Programme provides that the government should ensure at least one third of all funds flowing into Panchayats should be earmarked for programmes for the development of women. The National Commission on Farmers set up by the government also has its terms of reference recommending measures for credit, knowledge, skill, technological and marketing empowerment of women, taking into consideration the increasing feminization of agriculture.



A National Gender Resource Centre in Agriculture (NGRCA) has been set up in the Ministry of Agriculture as a focal point for the convergence of all issues related to women in agriculture. In this connection, a unique step has been initiated by the Department of Agricultural Extension, Agricultural College and Research Institute, Tamilnadu Agricultural University which is operating a scheme entitled "Diffusion of farm technologies to farm women through userfriendly interactive multimedia compact disc". The scheme aims at empowering farm women as potential extension clients with the help of "User Friendly Interactive Multimedia Compact Discs". The scheme has envisaged selecting two villages under different eco-systems followed with identifying the felt technological needs of the farmers through Participatory Rural Appraisal (PRA) and Focused Group Discussions (FGDs). The identified and prioritized technological farm needs are being developed into user-friendly Interactive Multimedia Compact Disc (IMCDs).

In the process of diffusion, high retention rate is absolutely required. In this context, IMCD offers a retention rate as high as 60 per cent in imparting knowledge and learning skills. Since we are in the Information and Communication Technology (ICT) world, dependency on computer and allied modern electronic gadgets for executing our day to day activities is inevitable. All fields are being influenced by the interventions of ICT and agriculture is in no way an exception to it. Hence, Interactive Multimedia Compact Disc has been recently recognized as one of the Transfer of Technology (ToT) tool to educate and impart knowledge on innovative agricultural technologies to farm women who are now considered as prospective agricultural extension clientele. IMCD is highly pragmatic and observed to be a new recipe for empowering and enabling farm women in all spheres.

Self help groups – A powerful vehicle for technology dissemination:

Now-a-days group approach is employed to execute various rural development programmes. Usually women are mobilized into groups for undertaking mutually beneficiary social and economic activities. They are considered as powerful vehicles for development that function effectively through group dynamics. In fact, they also play an important role in technology dissemination. Malik *et al.* (2004) stated that "Strategies for sustainable agriculture development and natural resource management should stress the participation and empowerment of farm women. The members of women SHG are from the most deprived section of the society, and are mostly associated with agriculture and allied activities for their sustenance". "To give rural women visibility, they must be getting organized into Self-help-groups (SHGs). Group approach is a viable set up to empower women economically, socially and technologically for improved life", as reported

Singh and Mathur (2005). Role of SHGs is emerging as a promising tool in all aspects. The SHGs are created to enable the members to reap economic benefits of mutual help, solidarity and joint responsibility towards self and sustainable development".

Gender sensitive approach to women empowerment:

- Drudgery reduction to facilitate participation in economic development.
- Involvement in decision making process, identification of strategic gender needs and addressing them.
- Capacity building in technical skills, information sharing and leadership development.
- Formation of Self-help-groups for solidarity, awareness and motivation, addressing common problems and micro-financing.
- Economic development: enhance abilities to contribute to family income, access to credit and assets and reduce economic dependence.
- Staff orientation: to adopt suitable approaches to address the problems and encourage participatory development.
- Gender vigilance to ensure women's participation in all fronts and access to benefits in training, entrepreneurship and activities of Panchayati Raj Institutions (PRIs).
- Creation of awareness among men could enlist greater support for women participation in the various development programmes. In many regions, the men have taken a path contrary to tradition, to empower the women.

Capacity building:

Subsequently, building of capabilities to create awareness, improve their skills, develop leadership and link with technologies, trade, financial institutions and local governments can empower them to take active part in socio-economic development at par with others. Such steps have led the community towards a literate and progressive society, directly benefiting every family and helped to bring the rural women as key players, into mainstream development.

With various women empowerment activities and training, there has been a significant increase in the confidence of women. They have developed mutual trust, social security, skills and access to technology and credit through their self-help-groups and various people's organisations. The women groups have motivated the entire community to take up hygiene, sanitation, family planning and health care activities with the community. Several groups have established their grain banks to ensure food security for their members. There has been increased awareness about education for children, particularly, girls. Prevention of child marriage has been an important agenda of many self-help-groups which has been endorsed by the other sections of the community as well.

Conclusion:

Women's contribution to national development is crucial. The process of development, both economic and social, would be incomplete and lopsided, unless women are fully involved in it. Emancipation of women is an essential pre-requisite for economic development and social progress of the nation. If any programme has to be implemented successfully, so that certain modifications if any needed for the improvement of the programme can be taken into consideration. Women development programmes are facing problems of traditional and cultural norms, lack of marketing and storage facility, finance, inadequate supply of inputs, lack of viable schemes, and less importance to agricultural programmes. The success or failure of any programme can be shown by assessing the reactions of the people involved in that programme. The effectiveness of different development programmes depends on the women only, how vocal are they, how effective are they in taking decisions to their favours in male dominated Panchayats so that there is some reduction in the arduous task faced by poor women.

On assessing empowerment gains for women, empirical evidences have revealed that women have moved from beneficiaries to active partners in shaping empowerment. The empowerment process through educational interventions, Transfer of technologies, the feasibility trials and the out-reach programmes has contributed to significant gain in knowledge, adoption of women-friendly technologies for improving work efficiency, acceptance of technology for economic gain and improving various parameters of quality of life are the reflections of women's environment. Women who are being considered as backbone of food security have to be imparted education and knowledge on innovative agricultural technologies for a holistic empowerment. They should also be involved in expediting the technology transfer process. This is true with the words of Jawaharlal Nehru "When women move

forward, the family moves, the village moves and the nation moves". Hence, we may say that a lot has been done but so much more has to be done in this direction.

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