

Women In Homestead Vegetable Farming

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Backdrop

The world faces the fundamental challenge of ensuring food security for millions of households living in poverty (Adekunle, 2013). The proportion of people living on less than 1.25 USD was 22% in 2010 (World Bank, 2010). Poverty and food insecurity are major issues in India, too, since out of a population of 1.21 billion people (Census 2011), 17.5% are malnourished (FAO, IFAD, WFP, 2012).

Despite radical measures based on scientific advancement, such as the introduction of high-yielding varieties and integrated farming systems, starvation is a reality that the world, especially developing countries like India, cannot ignore. It has become evident that developmental solutions aimed at alleviating poverty and ensuring food security must be built around sustainable exploitation of land and water, the two basic natural resources required for the sustenance of life. Also, any such intervention must focus on women because it is they who sustain rural households by pursuing multiple livelihood strategies.

Throughout the developing world, women are central to agriculture and constitute at least 43% of the agricultural work force (FAO, 2011). In India too they play a crucial role in agriculture and allied activities. However, they face severe handicaps due to the prevailing

social customs which deny them right over agricultural land. With severely limited alternative skills, lack of employment opportunities and the burden of managing large households, rural women are hard put to make ends meet. Given this scenario, self-employment in small-scale enterprises that harness local resources presents a constructive option for income generation (IFAD, 1998). One such enterprise is homestead farming or family farming. In recognition of its potential in reducing poverty and improving global food security, the United Nations has declared 2014 as the International Year of Family Farming.

This is the context in which a study was conducted in the South 24 Parganas district of West Bengal, India, where livelihoods depend on a combination of farming activities and wage labour. The study was a part of the project entitled “Increasing resilience in the agriculture and aquaculture systems in the coastal areas of the Ganges Delta,” funded by WorldFish, Dhaka. The data for the study was collected during 2012-13. The study was conducted with the objectives of analyzing the livelihoods of the people, the contributions made by women in homestead farming systems and the challenges faced by them, as well as the impact of the project.

Research Methodology

The study employed a survey method to obtain primary data. A questionnaire was administered to the beneficiaries of the project for the collection of primary data. The sample constituted 480 households selected through a random sampling method in Kakdwip, Namkhana and Sagarblocks in the coastal region of the district. Secondary data were obtained from various information sources such as local level government bodies, Gram Panchayat and web resources etc. Both primary data and secondary data were utilized for interpretation and analysis.

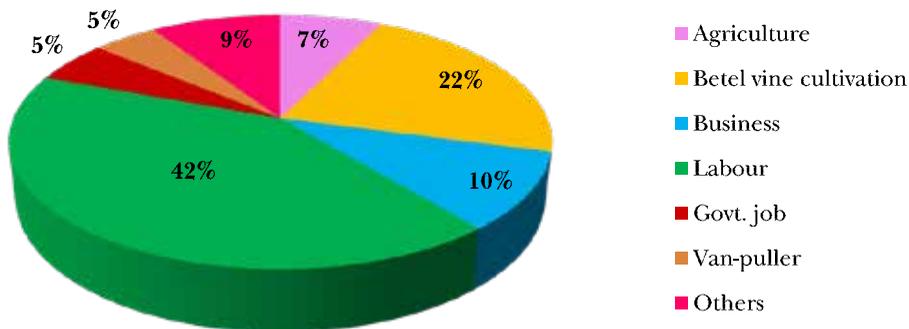
Predominant Livelihoods of Households

The inhabitants of the study area live in physically vulnerable circumstances. The area is prone

to cyclones and tidal surges which push saline water into agricultural fields, causing serious damage to livelihoods. Land holdings are generally small, with more than 91% of the households owning less than 1 ha of land (Bhattacharya et al., 2013). Hence, there is hardly any scope for adoption of technologically advanced practices. The distribution of occupation among the sample households is represented in Figure below, which shows that 42% of the households depend on wage labour for their sustenance. The other important source of income is the cultivation of betel vine, a cash crop suited to homestead farming. The average income of the largely agrarian population is Rs. 15,832/capita/year (AFC Ltd, <http://rkvy.nic.in/dap/wb/CDAP-South2024-Parganas>).

The social status of women is low because of the lower literacy levels. The rate of literacy among females is 68.90%, which is 13.20% less than that among males (Census,

Source of livelihoods in the study area



2011). The rate of crime against women is much higher than the state average with 1214 victims (Human Development Report, South 24 Parganas, West Bengal, 2009).

Homestead Vegetable Farming

is a major component of Homestead Farming System (HFS) which is an integration of aquaculture (fish and shell fish), horticulture (vegetables, fruits and cash crops) and animal husbandry (poultry, livestock). It has the potential not only to alleviate poverty, but also to empower women. It aims at income generation and ensuring food security by proper utilization of land that usually adjoins a dwelling house. It focuses on women since it is they who have traditionally managed such land to enhance the family's supply of food and generate supplementary income.

The entire HFS including the Homestead Vegetable Farming has been an integral part of rural livelihoods and is considered the community's most adaptable and accessible resource for reducing poverty and ensuring food security (Buchmann, 2009).

It aims at increasing the efficiency of this practice by introducing regenerative/integrated farming methods which can make the best use of land's potential and turn it into a productive source of food and economic security. The

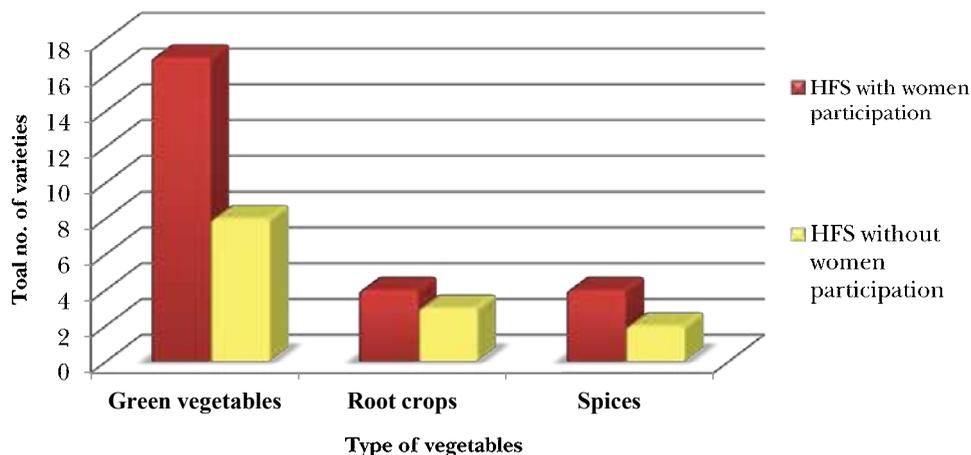
aim of this study was to examine women's participation in homestead vegetable farming and to find empirical evidence to show that such participation is essential for improving household food and nutrition security. The objective of homestead vegetable farming is to supplement the family diet to ensure the intake of essential nutrients, such as fibre, trace minerals and vitamins and to maintain the right balance between carbohydrates and proteins. Homestead farming also aims at helping women become self-sufficient by selling or exchanging their produce in village communities (Ahmad et al., 2007).

The study covered 620 women contributing 43% of the total homestead produce of the area. These women used homestead ponds for the irrigation of crops (Bhattacharya et al., 2012). The study found that an average of eight varieties of crops was cultivated in farms where women participated, as against five varieties in other farms.

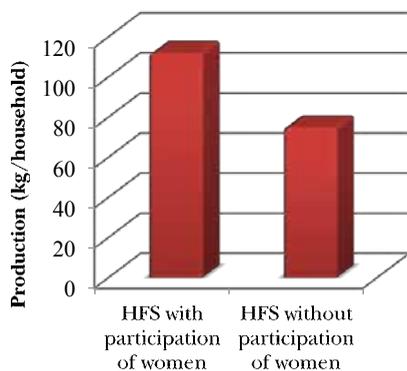
The farms where women participated produced a large variety of green vegetables along with root crops and spices. From this one may conclude that women's knowledge of crop varieties and the diverse use of agricultural products is important for improving food and nutritional security in rural households.

The study also showed that women's participation resulted in a 49% increase in vegetable production

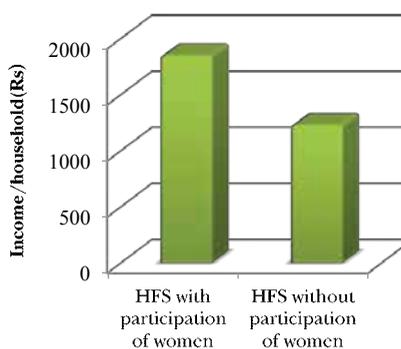
Comparison of HVF with and without women's participation



Production in vegetable farming



Income from vegetable farming



(Income from vegetable farming), which exceeded the FAO estimate of a 20% to 30% increase in yield. The participation of women also led to almost 50% higher income (Figure 5). The increase in production and income with women's participation

can help achieve the Millennium Development Goal 1 of reducing extreme poverty and hunger. Besides, when women participate in decision-making regarding homestead farming and gain control over the family income, they have

The Story of Mrs. Jaba Halder

Mrs. Jaba Halder (45), one of the project beneficiaries, is a typical housewife in a small village of South 24 Parganas. She was trapped in severe poverty before she was provided with support in the form of good quality vegetable seeds and fertilizers, as well as scientific advice for the management of her farm. During 2013-14 her contribution to the homestead vegetable farm has enhanced her household income by 40%. Her contribution from other related enterprises like homestead aquaculture, animal husbandry and betel vine farming has also enabled her husband to expand the homestead farm to grow crops for commercial purposes and ensure a sustainable income of Rs. 1.5 lakh (almost 2500 USD) a year. Jaba Halder's story proves that given adequate support, rural women can develop the skills and vision required to take up small-scale ventures and explode the common myth that businesses led by women do not grow beyond a certain scale.



a positive influence over the health and nutritional status of the family as well as the education of the future generation.

Apart from the economical view the women farmers have made themselves capable in.

Challenges Faced by Women Farmers

Women farmers in the study area face the usual problems of gender bias and lack of institutional support. The shortage of capital, lack of skills related to scientific farming methods, and the lack of quality inputs stand in the way of their making homestead farming a successful venture. In the cases in which women were given

the support required under the present project, a 49% increase in production was noted, as already mentioned. Thus, there is reason to believe that with adequate support, homestead farming can make a difference to the nutritional status and the general socio-economic status of rural households.

Scientific Assistance to Reach Women Farmers

A scientific intervention was initiated in six households living in extreme poverty in two different blocks Kakdwip and Namkhana situating in two salinity zones where Electric Conductivity ranges between

Challenges and Solutions





Woman planting onion saplings on homestead land

0-7.8 dS/m and 0-15.6 dS/m. The salinity of the soil had affected productivity to a great degree by inviting water-borne diseases which reduce production. The aim of this intervention was to provide such agricultural services to farmers that they normally did not have access to. The first task was to motivate the members, especially the women of these households to seek technical advice and trainings for their active participation. The beneficiaries were also provided with quality inputs, such as seeds and fertilizers. These inputs and the technical assistance caused the yield to increase to 2.3 times and the average income to increase by 1.7 times. Thus, proper scientific management and the active participation of women can enhance production.

Impact of the Programme in Promotion of Sustainable Livelihoods

There is a growing realization that agricultural development is a prerequisite for improving nutrition and reducing poverty. Since women play a crucial role in agricultural activities and in managing the household economy, it is imperative to involve them in any intervention aimed at agricultural development and ensuring food security. This study too pointed out that the women participated HVF provide an

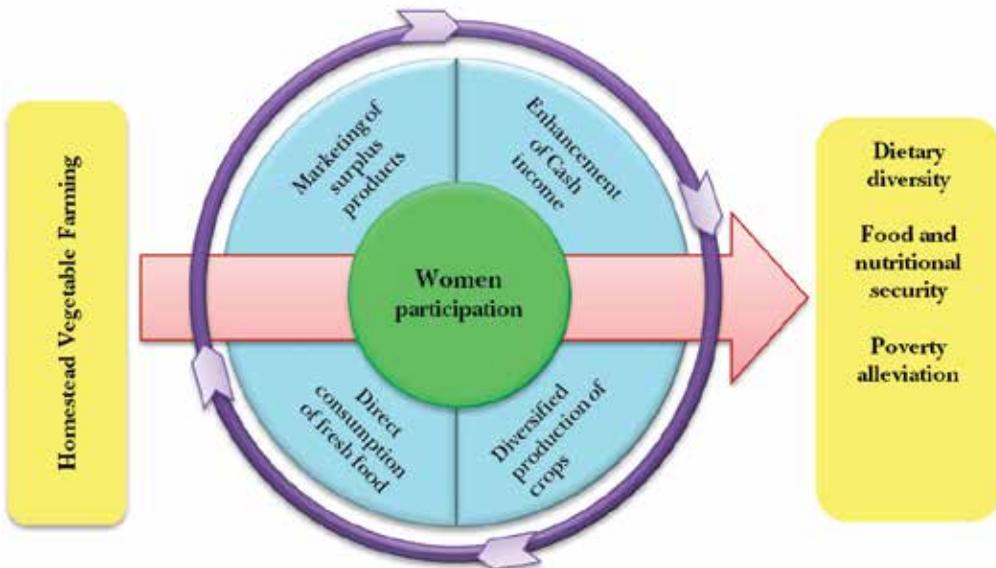
opportunity to consume 39% more vegetables than others. Besides, a greater diversity of vegetables was cultivated in these farms, ensuring food security and nutritional balance for the members of these household. The consequent increase in income also improved the economic status of these households

Figure 6 illustrates how women’s participation can create a link between homestead vegetable farming, dietary and nutritional status of the household and poverty alleviation.

Conclusion

This paper collates the empirical evidence on women’s participation in homestead vegetable farming, setting the stage for subsequent analysis of gender differences in farming activities and the potential gains from empowering women. It proves that given adequate support, women can contribute significantly towards increasing yields from homestead vegetable farming and perhaps towards improving the entire farming system. They can also contribute towards enhancing the household income and improving the nutritional status of rural families.

Benefits of women’s participation in homestead farming



This is heartening in the context of the International Year of Family Farming, which has been declared with a view to promoting development policies that support small farmers, especially women, to reduce rural poverty. Participants at the Asia-Pacific Conference on Family Farming held during 7th-10th August, 2014 under the aegis of the M S Swaminathan Research Foundation felt that women, as agents of rural development, can

contribute immensely to improving livelihoods in families, communities and countries (IFAD, 2014). Our study is a case in point.

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