

WOMEN IN AGRICULTURE – A WAY TO ACHIEVE FOOD SECURITY IN INDIA

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Abstract

Agriculture is the backbone of the Indian economy. Women play a vital role in building this economy. Over the years, there is a gradual realization of the key role of women in agricultural development and their vital contribution in the field of agriculture, food security, horticulture, processing, nutrition, sericulture, fisheries, and other allied sectors. Rural women form the most important productive work force in the economy of majority of the developing nations including India. Rural women often manage complex households and pursue multiple livelihood strategies. Their activities typically include producing agricultural crops, tending animals, processing and preparing food, working for wages in agricultural or other rural enterprises, collecting fuel and water, engaging in trade and marketing, caring for family members and maintaining their homes. Many of these activities are not defined as "economically active employment" in national accounts but they are essential to the wellbeing of rural households. Women play a significant role in agriculture throughout the world. About 70% of the agricultural workers, 80% of food producers, and 10% of those who process basic foodstuffs are women and they also undertake 60 to 90% of the rural marketing; thus making up more than two-third of the workforce in agricultural production (FAO, 1985). Despite the fact that women produce much of the food in the developing world, they also remain more malnourished than most men are. Although women do the majority of work in agriculture at the global level, elder men, for the most part, still own the land, control women's labor, and make agricultural decisions in patriarchal social systems. [Carolyn Sachs]

Key words: Agriculture, households, malnourished, social system, livelihood strategies.

Introduction

In India, in over all farm production, women's average contribution is estimated at 55% to 66%. In the Indian Himalayas a pair of bullocks works 1064 hours, a man 1212 hours and a woman 3485 hours in a year on a one hectare farm, a figure that illustrates women's significant contribution to agricultural production. (Shiva FAO, 1991). Women provide one half of the labour in rice cultivation in India (Unnevehr and Stanford, 1986). In the plantation sector women are the crucial labourers (Shivaram, 1988). Depending on the region and crops, women's contributions vary but they provide pivotal labour from planting to harvesting and post-harvest operations... In rural India, agriculture and allied industrial sectors employ as much as 89.5% of the total female labour. [FAO]

According to the FAO, while the proportion of the labor force working in agriculture declined over the 1990s, the proportion of women working in agriculture increased, particularly in developing countries. In some regions such as Africa and Asia, almost half of the labor force is women. In 2007, women made up about 41 percent of total employment in agriculture globally. In developing countries, most women's work is devoted to agriculture. Women are involved in every stage of food production. Despite women's extensive and varied participation in agriculture, they continue to have less access than do

men to modern agricultural inputs. As a result, their farm work is labor intensive and yields meager economic returns.

Women play a key role in **food production** and form a large proportion of the agricultural work force globally. To help rural women escape poverty, in 2012 UN Women joined with the World Food Programme, Food and Agriculture Organization, the International Fund for Agriculture Development to launch a joint programme to empower poor rural women through economic integration and food security initiatives. The initiative aims to empower rural women to claim their rights to land, leadership, opportunities and choices, and to participate in shaping laws, policies and programmes.

Swaminathan, the famous agricultural scientist describes that it was woman who first domesticated crop plants and thereby initiated the art and science of farming. While men went out hunting in search of food, women started gathering seeds from the native flora and began cultivating those of interest from the point of view of food, feed, fodder, fibre and fuel. Women have played and continue to play a key role in the conservation of basic life support systems such as land, water, flora and fauna. They have protected the health of the soil through organic recycling and promoted crop security through the maintenance of varietal diversity and genetic resistance.

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Gender issues are receiving increasing attention in the context of higher and inclusive agricultural development. The challenge we are facing is twofold: identifying context specific gender issues in agriculture and addressing them on priority through appropriate socio-economic, technological, and knowledge and policy-based interventions. During the past few years, a great awakening has taken place at the global level on gender issues, their consequences and the need for an urgent action. The Global Conference on 'Women in Agriculture', held in March 2012, organized by the ICAR in collaboration with other stakeholders clearly reflected the concerns of global community on the issue. The Global Conference with national and international participants, discussed several issues of immediate and long term importance under broad thematic areas of empowerment, drudgery, food and nutrition, market linkage, access to assets and resources, climate change, research, education, extension and policy, and identified critical areas of intervention for empowerment of women and addressing gender issues.

Rural women and girls have many roles and many responsibilities. They are farmers, care-givers, wage labourers and micro-entrepreneurs and they often spend many hours fetching water and collecting firewood. The empowerment of women is fundamental to reduce poverty, hunger and malnutrition. Gender equality and women's empowerment are important factors for the social and economic development of a nation. The promotion of gender equality and empowering of women is one of the eight Millennium Development Goals (MDG) to which India is a signatory. In India, the role of women, gender issues and the need for creating opportunities for women were recognized long ago by the planners and policy makers, as a result of which successive plans witnessed a number of programmes and mechanisms to address problems of women. The gender subject was implanted within the National Agricultural Research System (NARS) as an area of research in latter part of Eighth Five-Year Plan with the establishment of Directorate of Research on Women in Agriculture, at Bhubaneshwar.

Agricultural extension efforts should help women improve food production while allowing them to shift more of their labor to export production. Similarly, changes in legal, financial, and educational systems must be undertaken in order to enhance women's social and economic contributions to rural development in the long term. There is a need to examine carefully the implications of land tenure laws and regulations for women. And educational policies and funding must be changed to reflect the very high social and economic returns to women's primary education and literacy. Till date research interventions in National Agricultural Research System (NARS) largely

focused on management and augmentation of agricultural production through new knowledge and technologies. As things are unfolding, women would be playing even greater role in Indian agriculture. With increase in rural-urban migration leading to shift in male workers out of agriculture, development of the sector would largely depend on the attitude, interest, knowledge base and capacity of women to manage the changes in agriculture.

According to the World Bank, rural women comprise 43 percent of the agricultural labour force that produces, processes and prepares much of the food available in the world. In recognition of the contribution of these women, the UN celebrates the International Day for Rural Women on October 15. This day recognizes the role of rural women, including indigenous women, in enhancing agricultural and rural development, improving food security and eradicating poverty. With temperatures rising, weather patterns changing and climate-related disasters becoming more frequent, food security has become a major challenge across the world, and especially in India. As key players in the country's agriculture sector and those in charge of ensuring adequate nutrition for families, rural women are at the centre of this challenge. A FAO (Food and Agriculture Organization) report says that if women were given equal access to resources as men, agricultural yield could increase 2.5-4% in developing countries, enough to feed at least 100 million more undernourished people! Empowering and investing in rural women is also pre-requisite to fulfilling the vision of the Sustainable Development Goals that aims to end poverty and hunger, protect the environment, improve health parameters and empower all women. This fact is reflected in the inspiring stories of women across the globe who have fought legal, social and cultural obstacles to bring about significant social and economical reforms in their communities.

Success Stories

Highest oil palm yield recorded by woman farmer

Oil palm is the highest oil yielding cultivated crop in the world, yielding around five tonnes of oil per hectare. Realising the importance of oil palm in marching towards achieving vegetable oil security in the country, Government of India is implementing the Oil Palm Development Programme in the potential States. Taking up the challenge of cultivation of a new crop in Mysore District, **Mrs. Suma Kumar M.S.**, W/o Late Kumar M.S., Marse Village, Mandakahalli (P.O.), Varuna (Hobli), Mysore District, Karnataka State could harvest a record yield of 53.20 tonnes / hectare (mean of 3 years). Indian Institute of Oil Palm Research honoured her with the "Best Farmer Award" during the Kisan Mela Celebrations.

This is the highest ever yield recorded in India so far and the innovative practices adopted by the farmer could be adopted by other oil palm growers in different regions for maximizing productivity in oil palm.

1. Mixed Farming and Animal Husbandry for Sustainable Livelihood

Rita Kamila- A self-sufficient farmer who has achieved a sustainable source of livelihood in one of the world's top climate change hotspots, the Sunderbans, Rita Kamila has worked almost single-handedly on her land to achieve the right mix of farming and animal husbandry. Known locally as a model farmer, Rita has successfully transitioned her farm to organic over the past few years and now grows several varieties of food crops. Using the ecologically sound practices of integrated farming, she has incorporated livestock and fish culture into her farm. She has also installed a bio-digester plant that generates bio gas from farm waste such as livestock manure and fish waste. The biogas is used as cooking fuel and the residue is judiciously recycled to provide nutrients to crops. Rita's thriving farm has ensured that her family has plenty to eat round the year and she gained the respect of her fellow farmers, who stop by her farm for peer-to-peer exchanges.

2. Use of Drudgery Reducing Farming Tools

Atram Padma Bai the elected Sarpanch of eight villages with more than 2,000 farmers, was a tribal Girijan farmer who only cultivated cotton, oil seeds and pulses on her three acre land. In 2013, she used a Rs. 30,000 loan from the Fair trade Premiums Committee to launch a Hiring Centre for agricultural tools. With the support of a Fair trade India certified producer organisation, she invested in drudgery reducing farming tools such as pick-axes, sickle, spades, hoes and wheelbarrows. Her idea was to lend these tools to poor farmers in neighbouring villages who could not afford them, at a marginal rate, through her hiring centre. Using the premiums, Padma Bai also set up a drudgery reduction unit, and constructed two concrete roads and a fair weather dry mud road. The hard working sarpanch has also managed to get government funds to make ponds for rainwater harvesting and install a water pump that will make clean water available in the village school.

3. Sustainable Rain-Fed Farming Techniques

Women farmers of the Medak District of Telangana are teaching sustainable rain-fed farming techniques to peasants in the neighbouring Vidarbha region of Maharashtra. Representing the poorest of the poor in their village communities, these women farmers

were once landless laborers, but today, thanks to the Deccan Development Society (DDS) village level women's sanghams (voluntary farmer associations), these women have not only tackled their farming problems effectively but are also generating an additional income through innovative and eco-friendly ways. Using traditional preservation techniques, women preserve organic seeds that they barter with farmers in the region. **Chandramma**, who heads the Seed Bank at Pastapur, explains that they pick and keep the healthy grain in a mud container, layered with neem leaves, ash and dry grass. They then seal the whole box with mud, dry it and keep it at a secure space. On their month-long seed bartering journey to 30 villages in the region, Chandramma and her fellow women farmers teaches other villagers how to follow organic farming methods and grow climate-resistant crops like traditional varieties of millets. Many of them have become filmmakers (they haven't been to school!) who have produced documentaries on organic farming, seed sovereignty, bio-fertilisers and good farming practices that have been screened worldwide. They have also launched the Sangham community radio, the first-of-its-kind in India, which is another great initiative that educates farmers in a staggering 200 villages in the region.

Conclusion

Women are key agents for development. They play a catalytic role towards achievement of transformational economic, environmental and social changes required for sustainable development. But limited access to credit, health care and education are among the many challenges they face. These are further aggravated by the global food and economic crises and climate change. Empowering them is essential, not only for the well-being of individuals, families and rural communities, but also for overall economic productivity, given women's large presence in the agricultural workforce worldwide. UN Women supports the leadership and participation of rural women in shaping laws, policies and programmes on all issues that affect their lives, including improved food and nutrition security, and better rural livelihoods. Training equips them with skills to pursue new livelihoods and adapt technology to their needs.

There is no doubt about the power that women have in shaping and guiding sustainable development in rural areas. Today, many Indian women farmers are taking the lead in helping to find innovative and lasting solutions for many of the challenges which exist today. All of these women share one thing in common – a passionate and unwavering belief that through their innovative business approaches, they can change things for the better. Rural communities thrive on the commitment and dedication

and hence, it's important to recognize the contributions of these unsung heroines. We should value these awesome rural women who are playing important roles in the community.

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