



Role of Women in Sustainable Agriculture and Rural Development

Kritika Kohli ✉

DSB Campus, Kumaun University, Nainital - Uttarakhand

✉ kohlikriti70@gmail.com

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Introduction

In India, women are the backbone of the agriculture and rural life. From sowing seeds to harvesting crops, taking care of animals, and managing households, their work is everywhere. Yet, their contribution often goes unrecognized. Today when we talk about sustainable agriculture and rural development, the role of women cannot be ignored. They are not only workers but also decision-makers, entrepreneurs, and protectors of our environment. This article explains how a woman contributes to sustainable agriculture and rural development, the challenges they face, recent updates from India and simple ideas to support them.

What women do in agriculture

- **Crop work:** Sowing, weeding, harvesting and post-harvest tasks.
- **Livestock and allied activities:** Caring of dairy animals, poultry and fish ponds.
- **Seed and kitchen gardens:** Preserving local seeds and growing nutritious food.
- **Natural resource care:** Water management, composting, and soil conservation.
- **Entrepreneurship and shgs:** Many women join self-help groups to make products (pickles, millet, foods, handicrafts) and sell them.
- **Climate change adaptation:** Women are quick to adopt climate-smart practices like crop diversification and integrated farming systems. They save and exchange climate-resilient seeds in their communities.
- These activities help sustainable farming because women often use local seeds, compost, and low-input techniques that protect soil and biodiversity.



Main challenges women face

- **Lack of land rights:** Many women work the fields but are not legal landowners, which reduce access to loans and government benefits.
- **Limited access to credit and tech:** Machines, quality seeds, drones, and credit often reach men first. This limits productivity improvements for women.
- **Training and information gaps:** Extension services and training sometimes do not reach women or are scheduled when they cannot attend.
- **Recognition and decision power:** Even when women do most farm work, household and community decisions may be made by men.

Table 1 Roles, Problems, and Solutions

Role/ Activity	Typical Problem	Practical Solution
Food crop production Seed saving and biodiversity	No land title/ low access to credit Little recognition, no markets for diverse crops	Give joint land titles, priority credit schemes for women Support community seed banks and local markets
SHGs and FPOS	Poor market links, weak digital skills	Training in marketing, digital tools, and access to buys networks
Livestock and nutrition	Limited veterinary services	Mobile vets and women-focused training camps



Climate-smart practices	Low access to technology	Provide subsidized tools and women-centric training programs
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Recent Success Stories And Empowerment Moves

- In Kerala, women in kudumbashree clusters expands floriculture from 15 hectares to nearly 1200 hectares, planting marigold especially for onam supported by market driven planning and resilience strategies.
- In Bihar, under Mukhyamantri Mahila rojgar yojna one women per family will get Rs 10000 to boost self employment, with higher funding possible based on business performance. Launch planned for September 2025.
- In Tamil Nadu, women led agriculture startups, including one converting bananas into cosmetics, are booming in the Cauvery delta with state support.
- In Odisha, indigenous women use “dream maps” to visualize ideal ecological land restoration, seeking development funds for climate resilient projects.
- In Uttar Pradesh, a new initiative plans solar energy deployment in every gram panchayat and aims to energize via decentralized renewable energy.
- Local training and tech-for-women programs are expanding. For example, district programs are now training SHG women in AI, e-commerce and digital marketing so they can sell products more widely.
- State supports like beekeeping and other schemes are being promoted to boost incomes. (example: Uttar Pradesh) launched beekeeping subsidies and training to increase pollination, farm income and self employment- and these schemes include women farmers.
- Global organization (FAO, WEF) stress agritech and inclusive policies. International reports recommend making agri-tech and mechanization accessible to women, because that raises productivity and sustainability.
- The Bibi Fatima Self-Help group in Karnataka won the UN equator initiative award 2025 for their work in sustainable agriculture: millet- based mixed cropping, seed conservation, millet processing using solar power, promoting bio diverse and climate resilient agricultural practices in 30 villages.



Key topic	Source type	Highlight
Regenerative farming in Jharkhand	News(Times of India)	Women revitalizing soil health and boosting eco-friendly agriculture
UN biodiversity recognition	News(Times of India)	SHG honored for sustainable farming and seed preservation
Solar initiatives for SHGs	News(Times of India)	Renewable energy driving women-led rural enterprises
Empowerment through FPOs	Business Line article	Collective formation expanding access to markets and financial inclusion

TOWARD A RESILIENT FUTURE--- What needs to be done

To make sure that women's role is strengthened and sustainable agriculture and rural development becomes resilient and equitable, here are some directions and policy/ action suggestions.

Secure land rights and access to natural resources

- Legal reforms to allow women own/ inherit land.

- Customary land norms should be aligned with gender equality.
- Ensure women have access to water rights, forests, grazing land.

Improve access to finance, input, technologies

- Tailored microcredit/ finance schemes for women farmers.
- Access to affordable high quality seeds, tools, organic inputs.
- Technologies that save labor (example water pumps, efficient stoves) to reduce time poverty.

Strengthen extension services and knowledge sharing

- Agricultural extension that is gender- sensitive: women extension agents, timing of training that fits women schedules, etc.
- Incorporate traditional knowledge (seed saving, local biodiversity) alongside modern innovations.
- Digital tools, mobile apps for weather, markets, pest control etc.

Market access + value addition

- Help women get fair prices (through cooperatives, producer companies).
- Support value addition (processing, packaging, storage) so more income is retained locally.
- Link rural women to markets (local, regional, global) and fair trade.



Key highlights

- Women make up a large share of agricultural labor globally (IFAD says- 36% of all agricultural workers) yet they often own very little of the land, have less access to inputs.



- Empowering women is not only fairness, it's smart policy: it improves food security, nutrition, resilience, incomes, and help achieve many of the sustainable development goals.
- Recent successes show that when women are given access to land, training, finance and leadership roles, the benefits multiply—environmental health, economic stability, social equity.

Conclusion:

In conclusion, women are absolutely essential for sustainable agriculture and rural development: they not only grow food, manage farms, care of animals, and protect natural resources, but also strengthen food security, reduce poverty, and improve family health. Recent reports show that farms managed by women tend to use more environmentally friendly methods and are quicker to adopt sustainable practices. Also, statistics reveals that about 40% or more of the agricultural workforce globally are rural women. Yet they often have less access to land, credit, training, and decision making power than men. On the climate front, female headed rural household are shown to lose significantly more income than male headed ones when disasters strike, which mean that in policy and rural development plans, gender- responsive climate adaptation is vital. New national level action plans, self- help groups, and awards are recognizing women's leadership in sustainable farming, seeded systems, biodiversity and nature based climate action—for example, community seed banks, organic farming, millet cultivation, and regenerative farming movements.

To sum up, achieving sustainable rural development means empowering women- giving them education, land rights, fair access to finance and technology, and making sure they are heard in decisions. When that happens, not only do families and communities thrive, but the planet is protected too.