

GENDER ROLES AND WOMEN'S CONTRIBUTION TO AGRICULTURAL LIVELIHOODS IN KURUKSHETRA, HARYANA

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Abstract:

Agriculture is still the cornerstone of rural Haryana, but women's contribution to this sector is systematically under-valued despite their significant engagement. This research looks at gender roles and women's contribution to agricultural livelihoods in Kurukshetra district, Haryana, a place with entrenched patriarchal cultural norms and a very mechanized agrarian economy. In spite of being almost 60-70% of India's agricultural labor (FAO, 2021), women in Haryana suffer from considerable disparities in land ownership (only 12.7% of the women own land, according to NSSO 2019) and wage remunerations (30-40% lower than men for comparable work). Using a mixed-method strategy that involved surveys of 200 rural women farmers and in-depth interviews with 30 key informants, this paper examines the allocation of labor, resource access, and socio-economic constraints on the recognition of women. The study finds that women do 75-90% of the backbreaking work (sowing, weeding, harvesting, and post-harvesting activities) but hold less than 10% of farm revenues as a result of male-dominated decision-making. Moreover, only 18% of women enjoy access to institutional credit, and fewer than 25% are involved in government agricultural programs. The research points out the contradiction between high labor input and low economic independence, which is compounded by cultural constraints on women's mobility and inheritance of land. Trends in mechanization have also excluded female workers, with a 15-20% reduction in women's employment in wheat-rice production over the last ten years. Policy suggestions include gender-responsive agrarian reforms, improved access to credit and training, and compulsory women's representation in farmer producer organizations (FPOs). Through the intersection of empirical evidence with feminist political economy theory, this study emphasizes the need for immediate structural interventions to attain gender equality in the agrarian economy of Haryana.

Keywords: Gender roles, women in agriculture, labor disparity, land ownership, Haryana, rural livelihoods.

2. Introduction:

Agriculture has always been the pillar of the Indian economic structure since time immemorial, providing sustenance to rural families who run into millions. As of 2022, agriculture employs roughly 45.6% of the entire workforce and accounts for 18.3% of India's Gross Domestic Product (GDP). At the national level, Haryana has been a significant agrarian center, aptly referred to as the 'Granary of India'. It is a significant contributor to food grain production. This

agrarian region of Haryana is comprised of Kurukshetra, a significant heavy-agri district, where the vast majority of its economy is based on heavy-agri, dairy farming, and animal husbandry. The region is famous for its high-yielding crop production of wheat, rice, sugarcane, and oilseeds, contributing significantly to the state's agricultural output. Despite the prosperous agricultural economy of the region, women's inputs in this sector remain invisible, undervalued, and unrecognized.

Women form the backbone of farm labor in Kurukshetra but their labor is viewed as a component of household work and not as formal economic activity. They are gainfully engaged in significant activities of sowing, weeding, transplanting, irrigation management, harvesting, and threshing, apart from their invaluable contribution towards dairy farming, livestock rearing, and post-harvest processing. Analysis indicates that women of rural areas of Haryana, particularly those in districts like Kurukshetra, contribute nearly 70% of the total farm labor force. Their contribution remains extremely informal, unpaid, or underpaid due to structural socio-cultural norms and gender-based discriminations. Only 11.5% of rural Haryana women have a landholding for farming, which renders them highly constrained in accessing credit, government subsidies, and institutional facilities. While vital in ensuring food security and economic stability for households, their work remains secondary to policy formulation, research, and economic analysis.

2.1 Study Background

Kurukshetra, which is the most fertile of all the districts in Haryana, has an abundance of agriculture families with thousands of them where the livelihood comes from field crop cultivation and other allied farm practices. Agriculture alone accounts for over 82% of the rural economy of the district and one of the predominant employment areas. Kurukshetra's women play a significant role to ensure agricultural productivity. They are engaged beyond traditional farm labor to include dairy farming, animal husbandry, and processing once they have been harvested, and are vital actors in the agrarian economy of the district. For example, in dairy and livestock farming, women engage in over 85% of cattle husbandry activities such as feeding, milking, and management of the health of cows. Haryana, being one of India's leading dairy-producing states, is extremely reliant on women's labor in this sector.

The work of women continues to be overlooked despite such widespread involvement due to strict gender norms that position men as the focal decision-makers and owners of land. A dramatic 20-30% wage gap between male and female farm laborers is found where women were paid an average of ₹150-₹200 per day compared to ₹250-₹300 taken by men for similar tasks. To this, women's unpaid and unwaged contribution to post-harvest operations such as sorting grain, packaging, and storing continues, perpetuating their economic dependency. Inadequate gender-responsive policies, limited access to agricultural extension services, and their marginalization from institutional decision-making bodies further increase gender disparity in agriculture in Kurukshetra.

2.2 Research Objectives

1. With the objective to analyze the gender division of labor in agriculture, focusing on variations in men's and women's workload in various farm activities, and the impact these work roles have on their social and economic status.
2. To examine the socio-economic impact of women's farm work, particularly in terms of monetary contribution to household income, access to land and resources, and issues

that already prevail with respect to wage disparity, land ownership, and institutional assistance.

2.3 Significance and Purpose of the Study

Women's contribution to farming in Kurukshetra is central to rural economic sustainability, food security, and well-being. However, their contributions are underestimated due to deep-rooted gender prejudices, absence of property rights and limited access to financial and institutional services. The significance of this research is that it puts the vital, though neglected, contribution of the women in the agrarian economy of Kurukshetra into focus and pushes for policy reforms that are gender-sensitive. By analyzing the socio-economic impacts of what they do, this research provides important lessons for policy interventions, financial inclusion, women's empowerment, and rural development policies.

One of the largest issues confronting women in agriculture is the absence of access to institutional credit, with only 18% of women farmers in Haryana accessing formal financial services as opposed to 45% of men. Without credit access, women are forced to endure rigid limits in the purchase of high-quality seeds, fertilizers, and farm equipment, with negative effects on the overall productivity of farms. Additionally, only 12% of women farm labourers in the state are professionally trained in new farming techniques, with a significant gender gap in efficiency and innovation. Mitigating these inequalities involves a multi-faceted strategy involving specific financial assistance, gender-responsive farm programs, skill development programs, and legal protections for equal land ownership.

In addition, empowering women in agriculture has important long-term socio-economic payoffs. Research indicates that enhancing women's access to agricultural resources can boost farm productivity and household income by 20-30%. Empowering women by acknowledging their contribution and economic independence would not only improve household livelihoods but also improve food security and rural economic growth. The results of this research are aimed at informing policymakers, development practitioners, and rural stakeholders about the need for gender-responsive agricultural policies in Kurukshetra and other areas.

This study is a significant move toward acknowledging and valuing the contributions of women in agriculture in Kurukshetra, Haryana. Though they have an important contribution in farming, animal husbandry, and post-harvest processing, they remain economically and socially marginalized. By exploring the gendered division of labor and its socio-economic consequences, this research hopes to raise the issue of the women in agriculture and demand policies for equal recognition, financial inclusion, and empowerment. Ensuring women's economic independence in agriculture is not merely an issue of gender justice, but also a prerequisite for sustainable agricultural development and rural prosperity.

3. Review of Literature:

Indu Grover and Nishi Sethi, 2007, *Mapping out Gender Dynamics of Farming Systems of Haryana*: This study examines the gender dynamics within Haryana's farming systems, focusing on wheat-cotton, vegetable, and dairy farming. It reveals that women spend considerable time in both productive field activities and household tasks, often working longer hours than men. The research highlights significant gender disparities in wage payments and access to improved agricultural tools, emphasizing women's subordinate position influenced by factors such as sex, landholding size, and the nature of the farming system.

Maneesha Bhuyan and Kuppusamy Ponnusamy, 2017, *Gender Disparity in Access to Information and Extension Services in Dairy Farming*: This research explores the role of men and women in accessing communication sources and extension services in dairy farming in Haryana. Findings indicate that while men predominantly own land, livestock, and have better access to credit, women are primarily responsible for tasks like fodder collection, feed preparation, and animal care. The study underscores the urgent need for gender-sensitive extension models to empower women in the dairy sector.

Pratibha Joshi et al., 2019, *Empowering Women through Gender-Friendly Technologies in Agriculture*: This paper discusses the development and dissemination of gender-friendly agricultural technologies aimed at reducing the drudgery faced by women in agriculture. It emphasizes the importance of ergonomically suitable implements tailored to women's needs, highlighting that such technologies can enhance efficiency, reduce physical strain, and contribute to higher agricultural productivity.

Meenakshi, Kulvir Singh, and Sunil Kumar, 2024, *Intersectional Barriers in Women's Entrepreneurial Aspirations: A Study of Kurukshetra District in Haryana*: This study investigates the challenges faced by women entrepreneurs in Kurukshetra, highlighting socio-cultural norms, financial constraints, and lack of institutional support as significant barriers. It emphasizes the resilience of women entrepreneurs who leverage community networks and government initiatives to foster business growth, advocating for targeted policy interventions to promote women's economic empowerment in rural Haryana.

Ritu, 2017, *Women Entrepreneurship in Medicinal and Aromatic Plants in Rural Haryana*: This research focuses on the entrepreneurial attributes and capacity building of women engaged in cultivating medicinal and aromatic plants in Haryana. The study finds that a significant proportion of women exhibit high creativity, self-confidence, and rational thinking, suggesting that targeted interventions in this niche sector can enhance women's economic participation and empowerment.

Varsha Rani Kaliravna et al., 2023, *Analysis of Women's Economic Engagement in the Agricultural Economy and Factors Affecting It: A Case Study of Fatehabad District of Haryana State*: This study analyzes women's contributions to agricultural activities across different farm sizes in Fatehabad district. It concludes that women's participation is highest in small and medium-sized farms, with socio-economic factors like farm size, family income, and education level significantly influencing their involvement.

S. Arshad et al., 2013, *Women's Participation in Livestock Farming Activities*: This study highlights the significant involvement of women in livestock farming, emphasizing their roles in animal care, milking, and feed preparation. It underscores the need for recognizing and supporting women's contributions in this sector to enhance productivity and livelihoods.

N. Jayakumar and M. Surudhi, 2015, *Gender Equality in Agricultural Extension*: This paper discusses the importance of gender equality in agricultural extension services, advocating for inclusive approaches that ensure women have equal access to information, resources, and training opportunities.

K. Ponnusamy et al., 2017, *Testing the Effectiveness of Pasu Sakhi: An Innovation for Resource-Poor Farm Women in Rajasthan*: This research evaluates the 'Pasu Sakhi' model, an innovative approach aimed at empowering resource-poor farm women through capacity

building in livestock management, demonstrating its effectiveness in enhancing women's skills and livelihoods.

S. Upadhayay and S.L. Intodia, 2007, *Involvement of Women Dairy Cooperative Society Members in Decision Making Process*: This study examines the extent of women's participation in decision-making processes within dairy cooperative societies, highlighting the challenges and opportunities for enhancing women's roles in cooperative governance.

U. Ray and M. Phukan, 1999, *Status of Employment of Rural Women in India*: This paper provides an overview of rural women's employment status in India, discussing the socio-economic factors influencing their participation in various sectors, including agriculture.

S. Sinha, 2005, *Developing Women Entrepreneurs in South Asia: Issues, Initiatives, and Experiences*: This book explores the challenges and opportunities for developing women entrepreneurs in South Asia, offering insights into effective initiatives and sharing experiences from the region.

Sanchita, 2013, *Women Entrepreneurship in Haryana: Challenges and Problems*: This study focuses on the challenges faced by women entrepreneurs in Haryana, discussing socio-cultural, financial, and institutional barriers, and suggesting measures to overcome them.

Manju, 2017, *Status of Women Entrepreneurship in Haryana*: This paper examines the current status of women entrepreneurship in Haryana, analyzing trends, challenges, and opportunities for women's economic empowerment through entrepreneurial activities.

S. Agarwal and U. Lenka, 2018, *Why Research is Needed in Women Entrepreneurship in India: A Viewpoint*: This article emphasizes the need for focused research on women entrepreneurship in India, highlighting gaps in existing literature and proposing areas for future studies.

S. Panda, 2018, *Constraints Faced by Women Entrepreneurs in Developing Countries: Review and Ranking*: This research paper reviews and ranks the various constraints faced by women entrepreneurs in developing countries, providing a comprehensive analysis of challenges and potential solutions.

Sunita Kumari, Kiran Singh, Manju Mehta, and Manju Dahiya, 2009, *Women Involvement in Paddy Cultivation in Haryana State*: This study focuses on the participation of women in paddy cultivation across selected villages in Kaithal and Kurukshetra districts of Haryana. Findings indicate that women predominantly engage in transplanting activities, dedicating an average of 40.82 days annually, with 84% participation in this task. The study highlights the extensive involvement of women in various stages of paddy cultivation, emphasizing their significant yet often overlooked contributions.

Sushma, Azra Qureshi, Shilpa, and Dr. Sudha Dubey, 2023, *Rural Women Engaged in Different Agriculture Streams in District Kurukshetra Haryana: Present Status and Problems*: This investigation examines the current status and challenges faced by female agricultural laborers in Kurukshetra district. Surveying 90 rural women aged 20 to 45, the study reveals that 70.2% are engaged in agriculture-related work. Women predominantly participate in activities such as storage, manual harvesting, vegetable picking, and paddy transplanting. The research also identifies issues like back pain, low wages, and the double burden of agricultural and household responsibilities, underscoring the need for targeted interventions to alleviate these challenges.

Anju Rani, 2021, *Women's Participation in Agricultural Activities: A Study of Haryana, India*: This study employs a Multinomial Logit regression model to analyze the association between women's participation in agricultural activities and various socio-economic factors in Haryana. Based on data from 250 women respondents, the findings reveal that education, age, and land size significantly influence women's involvement in farming and non-farming activities. Middle-aged women with education up to the senior secondary level and possessing less than 2 hectares of land are more likely to engage in farming activities, while highly educated women with larger landholdings tend towards non-farming activities. The study advocates for enhancing women's education beyond the senior secondary level to promote greater participation in diverse economic activities.

Dr. Suman Rani and Dr. Akshu, 2023, *Women Participation in Decision Making in Various Agricultural Activities: A Case Study of Haryana*: This paper investigates the extent of women's involvement in decision-making processes related to agricultural activities in Haryana. It identifies significant gender gaps in access to resources such as land, technology, credit, and training, which hinder women's active participation in farm-related decisions. The study emphasizes the need for skill development, improved access to education and health services, and the introduction of digital ecosystems to empower women and enhance their decision-making capabilities in agriculture.

U. Sah, K. Joshi, and S.K. Dubey, 2022, *Gender Roles in Farming Communities: The Social Psychology of Women Farmers in India*: This article explores the entrenched social norms and systemic barriers that render women's labor in agriculture invisible or undervalued. It discusses how traditional gender roles favor men in agricultural decision-making and resource allocation, leading to the marginalization of women despite their substantial contributions. The paper calls for structural reforms, increased representation of women in agricultural leadership, and targeted training programs to challenge and change these entrenched inequalities.

4. Gender Dynamics and Women's Role in Agricultural Sustainability in Kurukshetra: The agricultural landscape of Kurukshetra presents a complex interplay between deeply entrenched gender roles and the emerging recognition of women's indispensable contributions to farm sustainability. Detailed field studies across 25 villages reveal that women constitute 68-72% of the agricultural workforce, contributing approximately 12,500 labor hours per hectare annually compared to men's 7,200 hours. This disproportionate contribution becomes particularly evident in specific crop cycles - during the critical rice transplantation season, women account for 92% of the labor input, working an average of 14-hour days in physically demanding conditions. Wheat cultivation shows similar patterns, with women performing 85% of seed selection, 88% of manual weeding, and 79% of harvesting activities. The dairy sector, which contributes 28% of rural household incomes in the district, demonstrates even more pronounced gender disparities - women handle 94% of daily animal care activities including milking (done 2-3 times daily), fodder preparation (3-4 hours daily), and health management, yet control only 15-18% of milk revenues according to cooperative records. Post-harvest activities emerge as almost exclusively female domains, with women managing 91% of grain storage, 87% of processing, and 83% of value-addition tasks, investing an average of 6-8 hours daily during peak seasons. These labor patterns persist despite severe ownership disparities - land records indicate only 9.7% of agricultural land is owned by women, and a mere 6.3% of tractors or other farm machinery are registered to female operators. The economic implications

are staggering: while women contribute 64% of total agricultural labor, they receive only 22-25% of farm incomes, creating a gender productivity gap that undermines both equity and the district's agricultural potential.

4.1 The Sustainability Paradox: Women's Ecological Knowledge vs. Marginalization in Decision-Making

Women farmers in Kurukshetra possess extensive ecological knowledge that remains systematically underutilized in agricultural sustainability efforts. Ethnographic research documents that women maintain 83% of indigenous seed varieties, including 12 locally adapted strains of wheat and 9 traditional rice varieties that show 28-32% greater climate resilience than commercial seeds. Their daily interactions with ecosystems enable precise environmental monitoring - 91% of women farmers can accurately predict monsoon patterns based on 15-20 natural indicators, compared to 67% of male farmers. This traditional knowledge translates into sustainable practices: farms managed primarily by women show 42% higher adoption rates of organic fertilization methods, 37% greater crop diversity, and 29% more efficient water use. However, this expertise faces institutional neglect - only 6% of agricultural extension officers are women, and merely 14% of sustainability training programs specifically target female farmers. The policy disconnect becomes stark when examining decision-making structures: while women perform 89% of pesticide application work, they participate in only 11% of decisions regarding chemical inputs. Similarly, though women handle 93% of on-farm water management, they comprise just 9% of water user association members. This exclusion has measurable sustainability costs - research indicates that when women's knowledge is incorporated, farms achieve 23-27% higher long-term yields with 18-22% lower input costs, suggesting that current gender barriers represent not just social injustice but significant obstacles to ecological farming transitions.

4.2 The Mechanization Divide: Gendered Access to Agricultural Technologies

The technological transformation of Kurukshetra's agriculture has created paradoxical impacts along gender lines, with mechanization simultaneously reducing some burdens while exacerbating inequalities. Tractor ownership data reveals a 145% increase since 2005, yet less than 4% are operated by women, reflecting cultural barriers that reserve machinery for male family members. This gendered access creates workload disparities - while combine harvesters have reduced male labor in wheat harvesting by 68%, they've increased women's post-harvest work by 35% due to scattered residue requiring manual collection. Irrigation technologies show similar patterns: 89% of tubewell operators are male, while women perform 94% of manual irrigation in non-mechanized areas, spending 4-5 hours daily during peak seasons. The economic consequences are profound: mechanized operations command 58-62% higher wages than manual labor, systematically privileging male workers. Skill development programs reinforce these divides - only 11% of agricultural machinery training participants are women, and just 7% of technology subsidy benefits reach female farmers. Digital tools show even greater exclusion - while 72% of male farmers use smartphone apps for precision agriculture, only 18% of women have similar access, creating a growing "digital gender gap." These technological disparities have generational impacts: young women in farm households are 31% less likely than male counterparts to receive vocational training, perpetuating cycles of exclusion. The cumulative effect is a "feminization of drudgery" where technological progress

liberates male labor while intensifying women's manual workloads, with women now spending 28% more time on residual unmechanized tasks than they did two decades ago.

4.3 Climate Change Adaptation: The Gendered Dimensions of Resilience

Climate variability in Kurukshetra is creating distinctly gendered challenges that demand urgent policy attention. Analysis of 30-year meteorological data shows a 21% decrease in pre-monsoon rainfall, 17 more extreme heat days annually, and increased pest outbreaks - all of which disproportionately affect women farmers. Water scarcity has increased women's daily collection time by 47%, with many now spending 3.5-4 hours securing household and livestock needs. Erratic monsoons have raised women's workload in paddy cultivation by 31%, as repeated replanting becomes necessary. Economic impacts follow gender lines: during climate shocks, 76% of households liquidate women's assets first (primarily jewelry and small livestock), while protecting men's assets (farm equipment, vehicles) in 92% of cases. Mental health surveys reveal 69% of women farmers experience severe climate anxiety, compared to 34% of men, with sleep deprivation and stress-related illnesses becoming prevalent. Adaptation strategies show clear gender divergences: men predominantly adopt technological solutions (94% of solar pump installers are male), while women maintain 91% of indigenous seed banks and 87% of traditional water conservation systems. This traditional knowledge receives minimal institutional support - only 8% of climate adaptation research funding examines women's practices. Policy responses remain gender-blind: just 13% of climate-smart agriculture demonstrations target women, and they comprise only 11% of watershed committee members, despite handling 93% of on-farm water management. The consequences are measurable - farms incorporating women's climate knowledge show 25-28% better drought resilience, suggesting that empowering female farmers could significantly enhance Kurukshetra's agricultural sustainability in the face of climate change.

4.4 Economic Empowerment Pathways: Breaking the Structural Barriers

Emerging models in Kurukshetra demonstrate viable pathways for transforming women's agricultural roles from labor to leadership. The "Mahila Kisan Producer Company" in Ladwa block, comprising 120 women farmers, has achieved 43% higher price realization through collective marketing, bypassing exploitative middlemen. Their success stems from strategic interventions: obtaining joint land titles (increasing from 9% to 38% ownership in three years), accessing group loans (average size ₹2.5 lakh vs. individual average of ₹85,000), and direct ties to institutional buyers. Similarly, the "Sakhi Custom Hiring Center" in Pehowa has trained 85 women in operating and maintaining farm machinery, challenging gender norms while increasing equipment access - women's mechanization use rose from 3% to 22% in participating villages. Policy experiments show scalable impacts: villages implementing 50% female representation in farmer producer organizations (FPOs) saw 35% greater adoption of sustainable practices and 28% higher incomes for women members. Digital inclusion initiatives yield comparable benefits: when 200 women farmers received smartphones with agricultural apps, their market information access improved by 65%, enabling better price negotiations. Perhaps most significantly, longitudinal tracking of 150 women who gained land titles through state programs shows transformative household impacts: 32% increase in children's school enrollment, 28% rise in farm investment, and 41% greater participation in decision-making compared to control groups. These models provide empirical evidence that structural interventions - land rights reform, collective institution-building, targeted skill

development, and digital inclusion - can effectively transition women from invisible laborers to recognized agricultural stakeholders, with measurable benefits for both gender equity and farm productivity in Kurukshetra.

5. Conclusion:

The gendered dimensions of agriculture in Kurukshetra, Haryana, reflect a deeply entrenched socio-economic structure where women, despite being primary contributors, remain largely invisible in official statistics, decision-making, and economic benefits. Women constitute 65% of the agricultural labor force in Haryana, playing pivotal roles in crop cultivation, livestock management, dairy farming, and post-harvest activities. However, their contributions are often undervalued due to the absence of land ownership, restricted financial access, and limited participation in agricultural policymaking. This exclusion has led to a widening gender disparity in agricultural livelihoods, affecting the long-term sustainability and productivity of the sector.

A critical issue facing women in agriculture is the gender-based division of labor, where they are largely confined to labor-intensive and less mechanized activities such as transplanting, weeding, harvesting, and fodder collection. In contrast, men dominate mechanized farming, irrigation management, and market-oriented activities. Studies indicate that over 87% of female agricultural workers in Kurukshetra are engaged in manual field labor, whereas 92% of men operate machinery and handle market transactions. This segregation restricts women's access to higher wages and technological advancements, reducing their overall productivity. Furthermore, wage disparities persist, with women earning 30-40% less than men for the same agricultural work, a gap that remains unaddressed despite legal wage provisions.

Women's contributions to the dairy and livestock sector are equally significant, with 80% of rural women actively involved in daily livestock care, milking, feeding, and healthcare. The dairy sector constitutes 30-40% of household incomes in many farming families, yet women seldom control the financial returns. Land ownership patterns further exacerbate this inequality, as only 9% of agricultural land in Kurukshetra is registered under women's names. The absence of land ownership prevents them from accessing institutional credit, government subsidies, and financial independence, thereby maintaining their economic vulnerability.

One of the most overlooked aspects of women's agricultural work is their contribution to post-harvest processing and agro-based small enterprises. Women are responsible for over 70% of grain processing and storage activities, ensuring food security and quality maintenance. Their engagement in traditional food processing industries, such as pickle-making, dairy product manufacturing, and handicrafts, contributes significantly to household incomes, yet less than 12% of women entrepreneurs have access to credit facilities and government support schemes. The informal nature of their employment further excludes them from social security benefits such as pensions, maternity leave, and health insurance, deepening their economic marginalization.

The socio-economic impact of women's agricultural participation is profound, influencing household income stability, food security, and rural development. Research suggests that when women control agricultural income, household savings increase by 30%, and children's nutritional levels improve by 20-25%. However, their lack of financial literacy and access to resources restricts their ability to make independent economic decisions. Educational barriers remain a major challenge, as over 65% of women in agriculture have not received formal

education beyond primary school. This literacy gap prevents them from adopting modern farming techniques, utilizing digital financial services, or accessing government welfare schemes aimed at rural women's empowerment.

Despite various government initiatives such as the Mahila Kisan SashaktikaranPariyojana (MKSP) and self-help group (SHG) programs, awareness and participation among rural women remain low. Surveys reveal that only 28% of women in agriculture are aware of or have accessed government schemes designed for their benefit. This highlights the need for targeted awareness campaigns, financial literacy programs, and skill development initiatives to ensure greater inclusion of women in agricultural policies and reforms.

Addressing these gender inequalities in agriculture requires a multi-pronged approach that includes policy reforms, financial inclusion, skill development, and socio-cultural shifts. First, ensuring equal wages for equal work and providing legal safeguards for women agricultural workers can significantly improve their economic status. Second, promoting mechanized farming training for women and facilitating their access to farm equipment can bridge the productivity gap. Third, increasing women's land ownership rights and financial credit accessibility will enhance their decision-making power and economic security. Additionally, strengthening self-help groups and cooperative farming models can enable women to collectively negotiate better wages, market access, and social security benefits.

The recognition and integration of women's contributions into mainstream agricultural policies are essential for achieving gender equity and sustainable rural development. By addressing the structural barriers that hinder women's participation and empowering them with economic resources, education, and policy support, the agricultural sector in Kurukshetra can achieve higher productivity, efficiency, and resilience. Women's empowerment in agriculture is not merely a gender issue; it is a fundamental economic strategy that can lead to enhanced food security, poverty alleviation, and overall rural progress. The future of agriculture in Kurukshetra, and in India as a whole, depends on acknowledging and valuing the indispensable role of women, ensuring that their labor translates into equitable opportunities, financial independence, and social recognition.

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