

Leveling the Field: Enabling Systems for Women Farmers' Empowerment

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Executive Summary

This policy brief delves into the urgent necessity of setting up enabling systems that empower women farmers in agricultural economies worldwide. Despite being the backbone of global food production, women farmers often face systemic barriers that limit their access to resources, markets, and decision-making opportunities. This analysis highlights the myriad complex obstacles faced by women farmers and offers a comprehensive framework for policymakers to create impactful solutions.

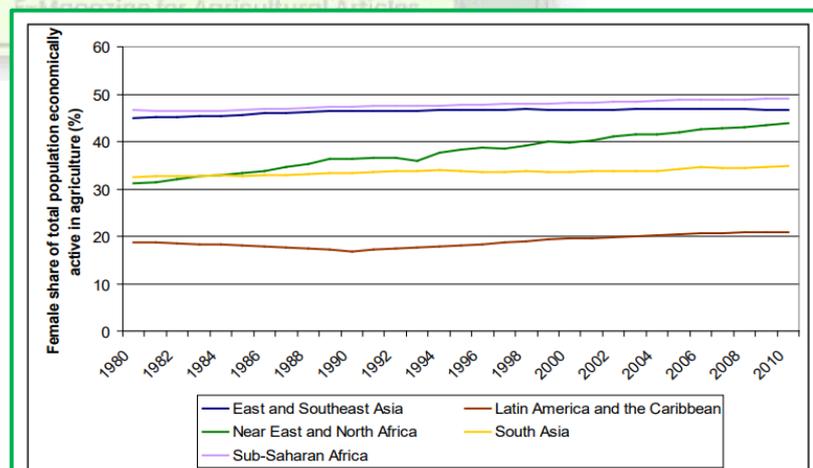
Introduction

Women have historically played a crucial role in agriculture, contributing significantly to food production and rural development globally. However, women farmers, particularly those from small and marginal holder families, face a dual burden of vulnerability in the rural economy and gender inequality. Gender-specific obstacles within family farming systems result in unequal rights and opportunities for women and girls. They often lack adequate resources, representation, and acknowledgment in agricultural activities. This gender gap leaves men with more control over resources like land, credit, and training opportunities, limiting women's decision-making power and their ability to invest in their farms. This, in turn, leads to lower productivity and incomes.

Empowering women in agriculture is paramount for achieving sustainable food security and agriculture. Recognizing the pivotal role of women, this policy brief focuses on identifying key challenges and strategies to address gender-based constraints, unlocking the untapped potential of women farmers. This, in turn, can lead to improved livelihoods, more resilient food systems, and inclusive and thriving communities.

Challenges Faced by Women Farmers

I. Women's participation in agriculture: With women comprising 42% of India's agricultural workforce, their role is vital for rural development and food security, encompassing various farm and non-farm activities (The Energy and Resource Institute, 2022). In

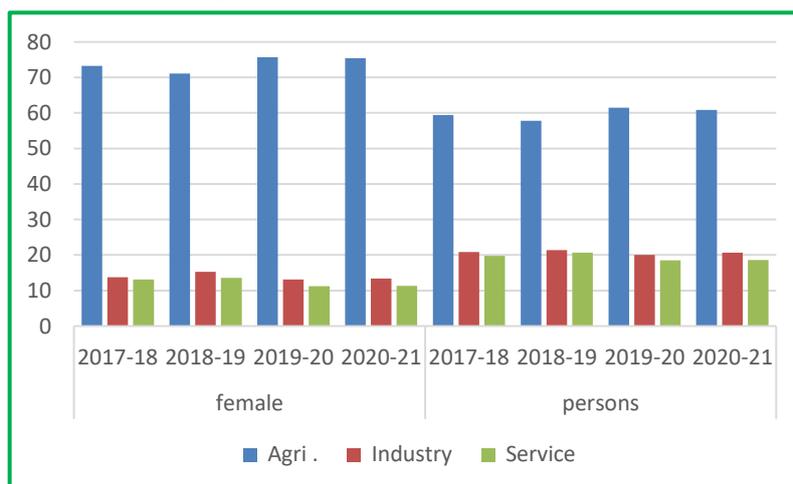


Female share of the agricultural labour force (SOFA Team and Cheryl Doss, 2011)

rural areas, around 84% of women depend on agriculture for their livelihoods, with approximately 33% as cultivators and 47% as agricultural laborers (Rao, 2006). Despite their significant contributions, women face challenges in land ownership, with less than 2% owning farmland (The Energy and Resource Institute, 2022). With women comprising 42% of India's agricultural workforce, their role is vital for rural development and food security, encompassing various farm and non-farm activities. (SOFA Team and Cheryl Doss, 2011).

The workforce distribution across agriculture, industry, and service sectors is shown in the graph below. Historically, there has been a shift from agriculture to industry and services due to higher productivity in the latter two sectors. Previous surveys confirmed this trend, including the NSSO survey after 2004-05.

However, the PLFS data reveals a surprising reversal in 2019-20, with an increase in agricultural employment and a decrease in industry and services. In terms of gender, a large number of women were employed in rural agriculture, while a smaller percentage worked in the service and industry sectors. In 2021, the industry sector employed 13.4% of female workers, while the service sector employed 11.3% of female workers (Periodic



Percentage of female employed in different sectors (PLFS Data)

Labour Force Survey (PLFS), 2017-2022).

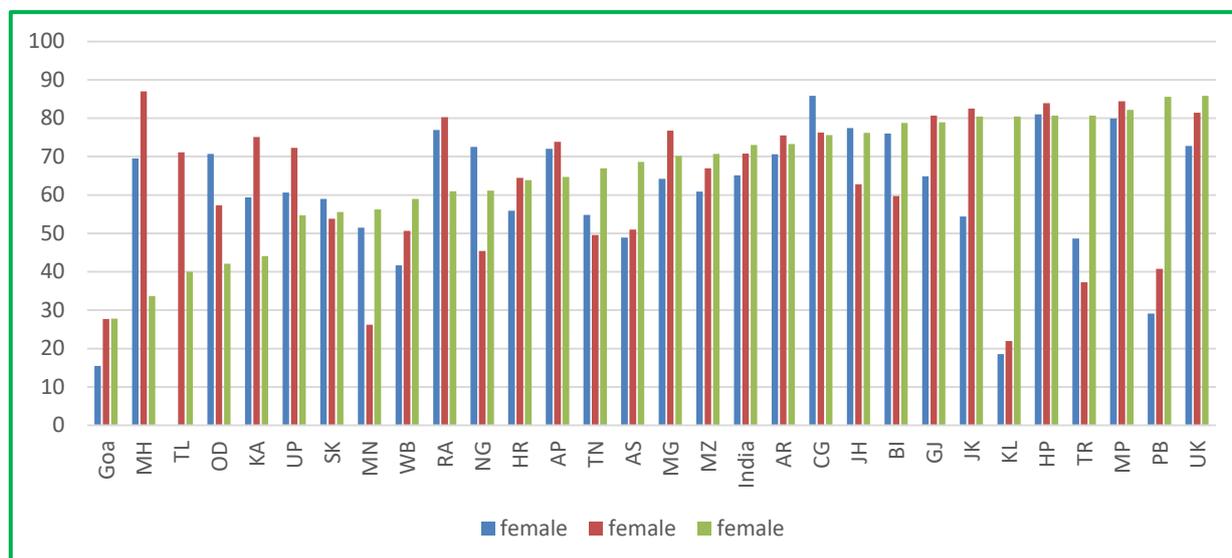
Gender-wise percentage of ownership of various agri-related enterprise: This data highlights a gender gap in agriculture. Female ownership is only 21%, lower than male ownership, despite a higher percentage of women working in agriculture. Women are prominent in livestock activities (23% of female owners) but less so in other non-crop agricultural activities (around 9%). While women's contribution to small-scale livestock production is recognized, their involvement in intensive production and large commercial enterprises' market chains is less understood. This reveals a notable gender disparity in ownership and employment distribution in the agricultural sector.

Gender wise percentage of ownership of various agri-related enterprise

Activities	Male	Female	%Female owner	Male owners	Female Owners	% employees under female owner
Agri.activities other than crop production & plantation	5572 44	5231 0	9 %	113147 2	102828	8 %
Livestock	8607 401	2546 345	23 %	152015 17	3679536	19 %
Forestry	4422 21	1244 75	22 %	920902	209192	18 %
Fishing	4432 34	3863 7	8 %	767052	61794	7 %
Sub Total	1005 0100	2761 767	21 %	180209 43	4053350	18 %

Source: (FICCI, 2019-20)

The graph below shows varying levels of female participation across states during 2021. The lowest rates were in Goa, Maharashtra, and Telangana, around 27%, 33%, and 40%, respectively. Meanwhile, Uttarakhand, Punjab, and Maharashtra had the highest participation rates, approximately 85.8%, 85.6%, and 82%, respectively. Several states have seen significant increases in female participation over the years, indicating positive trends in



State wise women participation in Agriculture sector

gender inclusion. These shifts highlight changing dynamics of female participation in various states. For instance, in Madhya Pradesh, 82.2% of women engage in farming, even though their work is often unpaid and unrecognized (Ghosh, 2014).

Source: 2011-12 data- (Pattnaik, 2017); 2017-18 and 2021-22 data- (Periodic Labour Force Survey (PLFS), 2017-2022)

- I. **Access to land:** Women farmer have limited access to land, which is a critical resource for farming. As per the MP state government's estimates, only about 10% of women own land.

Percentage of household land and average area owned by gender in landowning rural households, 2014

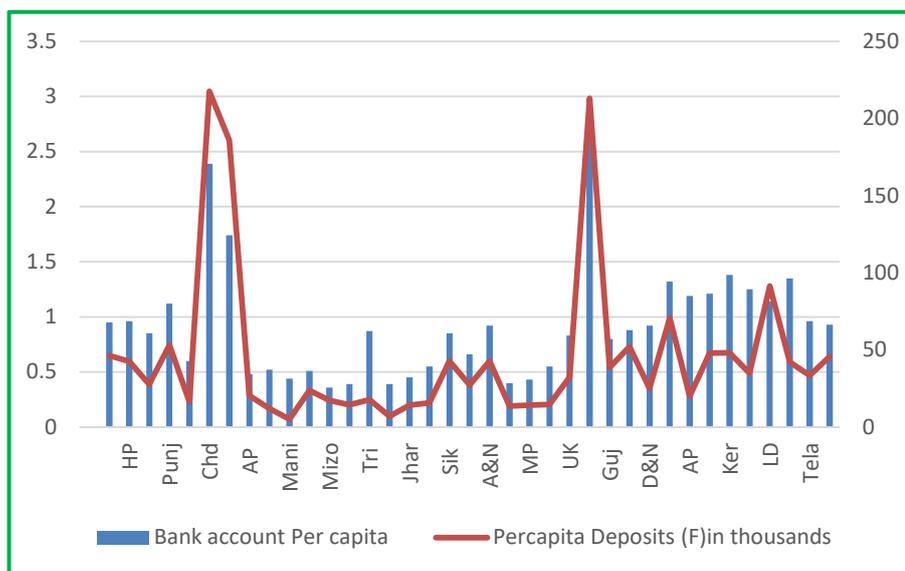
Region/State	Total area (hectares)	Percentage land owned		Average area owned (hectares)	
		Females	Males	Females	Males
South	632.63	17.6	82.4	1.28	1.8
Andhra Pradesh	115.3	12.4	87.6	0.71	1.55
Telangana	190.62	21.5	78.5	0.93	1.62
Karnataka	326.71	17.1	82.8	2.43	2.03
West & Central	966.82	8.7	91.3	1.78	2.04
Maharashtra	549.67	9	91	1.64	2.1
Gujarat	208.58	4.1	95.9	0.78	1.48
Madhya Pradesh	208.57	12.5	87.5	4.34	3.04
East	462.94	7	93	0.66	1.12
Bihar	160.42	9.8	90.2	0.63	1.18
Jharkhand	123.9	7.8	92.2	0.61	0.9
Odisha	178.62	3.8	96.2	0.85	1.28
All regions	2062.39	11	89	1.24	1.66

(Agarwal, 2021)

The above table displays the gender breakdown of land ownership in rural households in 2014. In the South area, males held 82.4% of the land with an average plot size of 1.8 hectares compared to females who owned 17.6% of the property with a 1.28-hectare average. Women in Madhya Pradesh, controlled 12.5% of the land with an average plot size of 4.34 hectares, while men held 87.5% of the land, with a median plot size of 3.04 hectares. Overall, males held 89% of the land throughout all regions, while females owned 11% of the total amount, with an average size of 1.24 hectares. These statistics underscore the existing gender disparities in rural land ownership, emphasizing the need for addressing gender inequality in land distribution and ownership.

- II. **Access to credit and inputs:** Women in farming encounter challenges accessing credit, seeds, fertilizers, and modern agricultural knowledge. Data on per capita bank accounts and deposits in

Indian states reveals disparities. Chandigarh leads with 2.39 bank accounts and 217.55 thousand rupees per capita deposits, while Mizoram has the lowest accounts (0.36) and Manipur the lowest deposits



Per capita bank acc. and deposits

(5.23 thousand rupees). Economic development, financial literacy, and infrastructure contribute to these variations. source: (Kaur, 2017)

Gender inequality persists in farming with unequal pay and working conditions. Women are paid less and their contributions undervalued, hindering gender equality. They also face unfavorable conditions and limited resources. Addressing this issue requires systemic changes and gender-sensitive labor policies for equal pay. Strengthening women's bargaining power through groups and cooperatives can help improve wages and working conditions collectively.

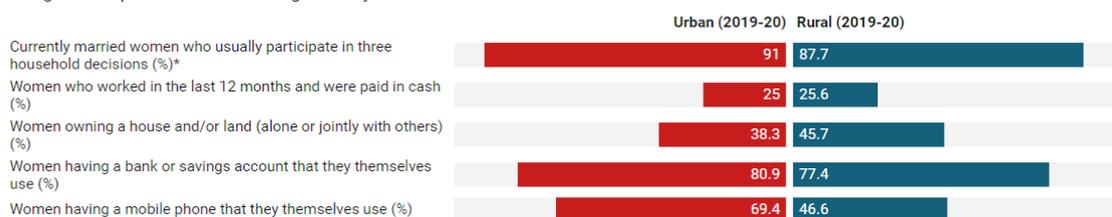
- III. **The rural-urban gap in women empowerment-** The gender gap in women's empowerment between rural and urban areas in India reveals significant disparities in opportunities and outcomes. Rural women face challenges like limited access to education, healthcare, finance, and employment opportunities. In contrast, urban areas offer better infrastructure, education, healthcare, and employment prospects, contributing to urban women's empowerment. To bridge this gap, we must improve rural infrastructure, promote education and skills development, enhance healthcare services, ensure financial access, and implement gender-sensitive policies.

Empowering rural women through entrepreneurship, land rights, and local governance participation can reduce disparities and promote gender equality in India. Securing women's rights in farming is crucial to unlocking their full potential, and eliminating gender barriers to resources, opportunities, and agency.

In agriculture, gender-specific obstacles like limited land access, financing, markets, training, suitable working conditions, and equal treatment disproportionately affect female farmers. The main hurdle is inadequate land rights, with few women owning land in developing countries. Gender bias in the economic system restricts women's access to credit for investing in productivity-enhancing tools and techniques.

Rural urban gap in women's empowerment, India (2019-21)

All figures are provided for women age 15-49 years



*Decisions about health care for herself, making major household purchases, and visits to her family or relatives.

Source: NFHS-5 (2019-20) • Created with Datawrapper

Eliminating these barriers would empower women and benefit global food production. Increased income would enable women to invest in healthcare, nutrition, and education, yielding long-term positive outcomes for farming communities and beyond. Addressing gender disparities in agriculture requires policies and interventions promoting gender equality to unlock women's potential and enhance their contributions to agriculture.

Existing schemes

The Government has been committed to make agriculture more inclusive for women through women exclusive schemes and schemes with components specifically meant for females. There are multiple schemes in the 'Farm Women Handbook' that are women-centric and take into account various needs of female farmers. Some of the key central schemes for women farmers in India are given.

- i. **Mahila Kisan Sashaktikaran Pariyojana-** The government is committed to empowering women in agriculture through "Mahila Kisan Sashaktikaran Pariyojana" (MKSP), part of DAY-NRLM since 2011, focusing on capacity building in sustainable farming. It operates through State Rural Livelihoods Mission (SRLM) (Press Information Bureau, 2021).
- ii. **Integrated Scheme for Agricultural Marketing (ISAM) and Sub-mission on Agricultural Mechanization (SMAM)**
- iii. **National Rural Livelihood Mission (NRLM), Pradhan Mantri Fasal Bima Yojana**

Policy Component	Specific provision (only for women)	Training Programme	As Beneficiary
Support for Women Food Security Groups (FSGs)	Established and supported under ATMA Cafeteria as a mandatory activity at INR 0.10 Lakh/group per year at domestic/household level to promote off farm activities	Training Programmes on Gender friendly Equipment for Women farmers are to be conducted by Farm Machinery Training & Testing Institutes	At least 30% of the fund allocation was to be made to women
Representation of Women Farmers in decision making bodies	Mandatory representation of women farmers in State, District, Block Farmer Advisory Committees, ATMA Governing & ATMA Management Committee at District Level	5.4 National Food Security Mission (NFSM)	
As Beneficiary	At least 30% of total scheme beneficiaries are women and minimum 30% of resources meant for programmes are to be allocated to women farmers extension and women extension functionaries	As Beneficiary	At least 30% of the fund allocation was to be made to women
Storage Infrastructure	33.33% Subsidy (on capital cost) for women as compared to 25% for men. Even the maximum subsidy ceiling is higher than that for men.	Promotion of Farmer Producer Organisations (FPOs) and marketing support for value chain integration (to un-registered farmer groups, SHGs of Women & others etc. for local marketing of pulses and millets)	INR 2 lakh per group of 15 farmers (for one time support only)

Scheme for agricultural marketing (ISAM) and Sub-mission on Agricultural Mechanization (SMAM)

- iv. **(PMFBY), Rashtriya Krishi Vikas Yojana (RKVY) and Soil Health Card Schemes** aim to reduce rural poverty, improve rural livelihoods, and empower women farmers through sustainable agriculture and livelihood opportunities. (Press Information Bureau, 2021).

While some states like Odisha and Andhra Pradesh have their own income-boosting policies, the "feminization of agriculture" varies across Indian states, posing challenges for centrally sponsored schemes. Agriculture activities and practices have a lot of regional variations and varied aspirations which can be handled efficiently by the State Governments. **Madhya Pradesh** has made remarkable strides in agriculture and women's empowerment, with women farmers playing a pivotal role. Therefore, it's crucial to evaluate the status of women farmers in Madhya Pradesh's agricultural progress. **The MP government has implemented several schemes to support women farmers in the state. Here are a few examples:**

1. **Mukhya Mantri Kisan Kalyani Yojana:** This scheme aims to support farmers in the state, including women farmers. It provides financial assistance for various activities such as seed distribution, soil health management, irrigation, and other farming-related activities.
2. **Mahila Kisan Sashaktikaran Yojana:** This scheme specifically targets women farmers and aims to empower them by providing them with training, guidance, and support to help them improve their agricultural practices and increase their income.
3. **Mukhya Mantri Mahila Kisan Swarozgar Yojana:** This scheme provides financial assistance and support to women farmers who wish to start their own agro-based businesses.
4. **Pradhan Mantri Fasal Bima Yojana:** This scheme provides insurance cover to farmers, including women farmers, against crop loss due to natural calamities or other factors.

Recommendation

Rural women form the most productive work force in the economy of majority of the developing nations including India. Following are the recommendations to encourage the women farmer empowerment.

1. **Creating a proper database:** Current methods of measuring women's involvement in agriculture neglect those in secondary roles, like water and fodder collection or working on family lands. Accurate assessment requires recognizing diverse contributions and specific needs, enabling policymakers to create more effective support strategies.
2. **Improving Female Landholding Patterns:** Despite their significant contributions to agricultural output, women currently own only 12.8% of the land (Raman, 2019). To tackle this inequality, revise ownership criteria to promote more women owning land. Require land titles to be in a non-male individual's name or have at least 50% shared non-male ownership, with exceptions for unpartnered male owners. The challenge is achieving broad coverage while preventing loopholes, which can be addressed using the Digital India Land Records Modernization Programme (DILRMP) centralized database as a reliable reference
3. **Enabling "Scientific & Climate Resilient" Smart Women Farmers:** Women farmers lack access to technology and mechanization, hindering productivity. Manual labor is their primary option, but they can benefit from labor-saving tools to improve livelihoods. Access to such technologies is vital for smallholder farmers to adapt to climate change. Empowering women can be done through participatory design and user-led innovation, enabling them to create tools tailored to their practices and agricultural needs.
4. **Addressing the inherent challenges in Women Farmers' access to Farming schemes:**
 1. De-linking the schemes entitlement with land ownership to eliminate the barriers, women farmers face in accessing the farming related entitlements. Eligibility criteria that are required to access the government schemes limiting to land ownership and possession of land title in the name of claimants needs to be amended.

- a. Recognize women as independent beneficiary of schemes and enable them to access schemes regardless of their land ownership.
- b. Use of gender inclusive communications in departments: Revisiting schemes and changing the men-farmer centric language transforming that into gender progressive language in the scheme guidelines, documents, formats and IEC materials.
- c. Maintain gender desegregated data across all data sets related to farming and water resource management and digitize such data to ensure transparency.

5. Bridging Resource Gaps and Overcoming Market Barriers-

- a. Empower women in decision-making and resource management institutions.
- b. Ensure gender-responsive budgeting for schemes like MGNREGS and agriculture programs.
- c. Provide technical training to women on crop productivity, resource management, and irrigation.
- d. Invest in capacity building and incubation centers for female entrepreneurs in farming and promote digital literacy among rural women.
- e. Identify and address barriers for women farmers to enable their equal participation in Krishi-Mandi.

6. Women-friendly agriculture machines- There's a growing need for women-friendly agricultural machines to bridge the gender gap. Traditional machinery, designed for men, can be heavy, challenging, and risky for women. These machines can enhance conditions, reduce labor, and empower women by being lightweight, easy to use, and accommodating different tasks. They positively impact women's lives by reducing physical stress, giving them more time for income-generating activities. Women-friendly agricultural machines are crucial for gender equality and sustainable agriculture.

This article emphasizes the importance of a holistic approach to empower women in agriculture. It highlights the roles of governments, private sectors, and civil society organizations in providing resources and opportunities for women farmers to achieve food security and gender equality. The policy recommendations aim to improve women farmers' livelihoods and their involvement in decision-making. Empowering women in farming is crucial for sustainable agricultural development and rural transformation, calling for urgent policy implementation in India.

Case Study: "Promoting Gender Equality and Nutrition in Millet Farming in Mali"

Location: Mali, West Africa

Background: In Mali, millet is a staple crop, and women play a vital role in its cultivation and processing. However, gender disparities and cultural norms often hinder women's access to resources and decision-making power.

Intervention: An organization called "Empowering Women Farmers for Nutrition and Food Security" implemented a project in Mali to promote gender equality and improve family nutrition in millet farming communities. The intervention aimed to empower women in millet farming through capacity building and leadership development. Training sessions and workshops enhanced their knowledge and skills in millet cultivation, post-harvest processing, and nutrition-sensitive farming. Women were encouraged to participate in decision-making processes and given a voice in resource allocation. Access to resources was addressed through secure land rights and improved access to agricultural inputs and technologies. Nutrition education programs emphasized diverse diets and the nutritional value of millets.

Result- Women farmers who participated in the project reported increased millet yields, attributed to improved farming practices, access to inputs, and enhanced knowledge. Women's economic empowerment led to increased income and decision-making power within households, resulting in greater investment in family nutrition and well-being. The project contributed to enhanced family nutrition by promoting the consumption of diverse

and nutritious diets, including millet-based meals, and improving women's knowledge of nutrition and food preparation.

References

1. Agarwal, B. A. (2021). How Many and Which Women Own Land in India? Inter-gender and Intra-gender Gaps. *The Journal of Development Studies*, 57(11), 1807-1829. doi: <https://doi.org/10.1080/00220388.2021.1887478>© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>)
2. FICCI. (2019-20). *FLO Report on Women Participation in Indian Agriculture*. FLO. Retrieved from <https://www.ficciflo.com/wp-content/uploads/2020/07/FLO-Agri-Report-2020-2.pdf>
3. Ghosh, M. M. (2014). Analysis of Women Participation in Indian Agriculture. *International Journal of Gender and Women's Studies*, 2(2), 271-281. Retrieved from https://ijgws.com/journals/ijgws/Vol_2_No_2_June_2014/16.pdf
4. Kaur, J. (2017). Financial Inclusion and Females: State Level Analysis. *World Wide Journal of Multidisciplinary Research and Development*, 3(11), 215-218. Retrieved from http://wwjmr.com/upload/financial-inclusion-and-females-state-level-analysis-in-india_1511780915.pdf
5. Pattnaik, I. a. (2017). *Tracking Women in Agriculture through (working paper: 242)*. Gujrat Institute of Development and research.
6. Periodic Labour Force Survey (PLFS). (2017-2022). *Annual Report*. NATIONAL SAMPLE SURVEY OFFICE, MOSPI, GOI.
7. Periodic Labour Force Survey. (2017-2022). *Annual Report*. NSO, MOSPI, GOI.
8. Press Information Bureau. (2021). *Scheme for Women Farmers*. MOA&FW, GOI. Retrieved from <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1705506>
9. Raman, S. (2019). *73.2% Of Rural Women Workers Are Farmers, But Own 12.8% Land Holdings*. India spend. Retrieved from https://www.indiaspend.com/73-2-of-rural-women-workers-are-farmers-but-own-12-8-land-holdings/#google_vignette
10. Rao, E. K. (2006). "Role of Women in Agriculture: A Micro Level Study,". *Journal of Global Economy, Research Centre for Social Sciences*, 2(2), 107-118. Retrieved from <https://ideas.repec.org/a/jge/journal/224.html>
11. SOFA Team and Cheryl Doss. (2011). *The Role of Women in Agriculture*. FAO. Retrieved from <https://www.fao.org/3/am307e/am307e00.pdf>
12. The Energy and Resource Institute. (2022). *India's Women Farmers: The Unimagined Mass*. TERI. Retrieved from <https://www.teriin.org/article/indias-women-farmers-unimagined-mass>