



WELCOME

Riza Mathew
PALB 9163
Sr.Msc (Agril. Extension)
UAS-Bengaluru



Feminization of Agriculture: Prospectus and Challenges

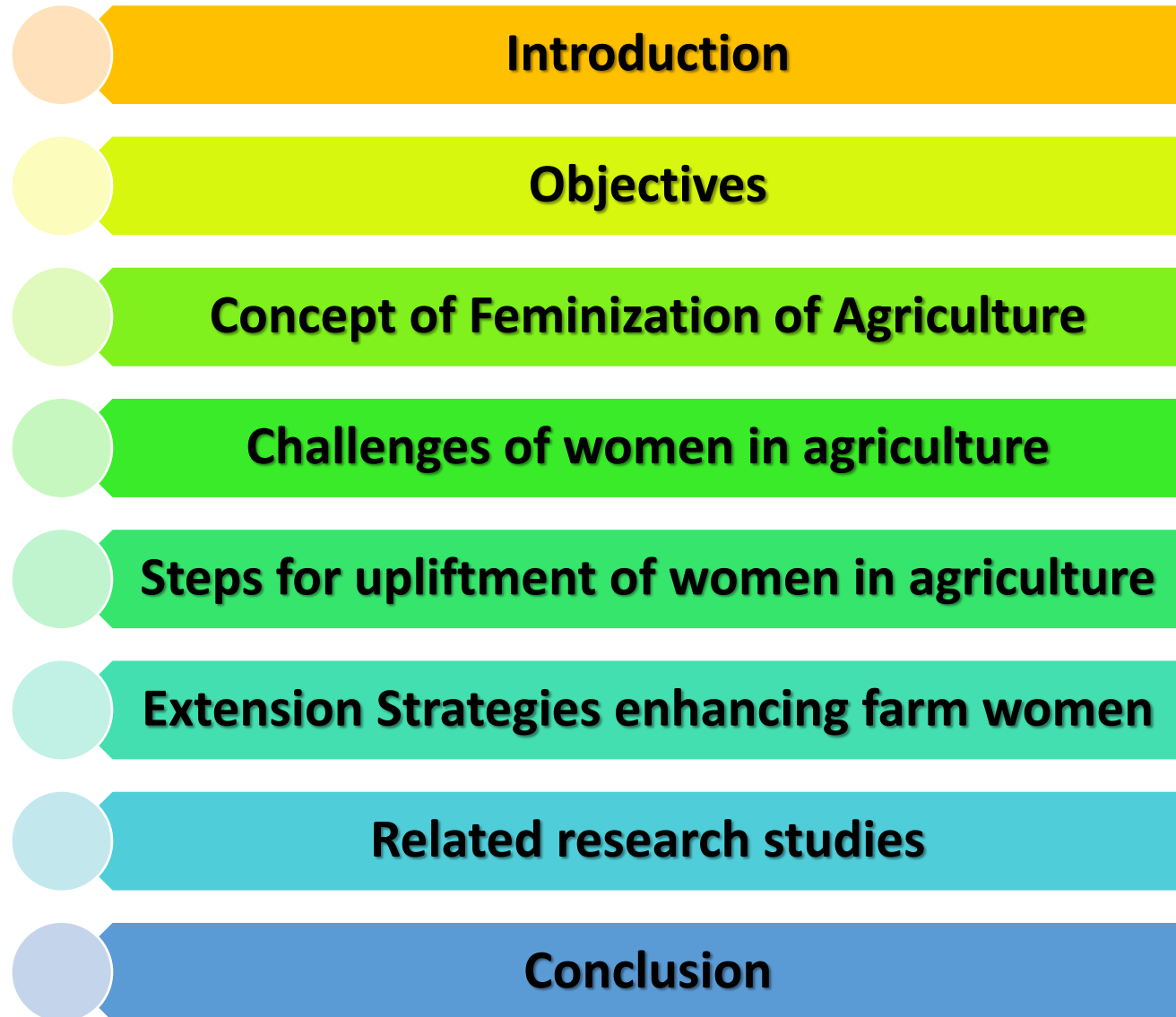




“Some historians believe that it was woman who first domesticated crop plants and thereby initiated the art and science of farming. While men went out hunting in search of food, women started gathering seeds from the native flora and began cultivating those of interest from the point of view of food, feed, fodder, fiber and fuel”

- **Swaminathan**

Flow of presentation



Introduction

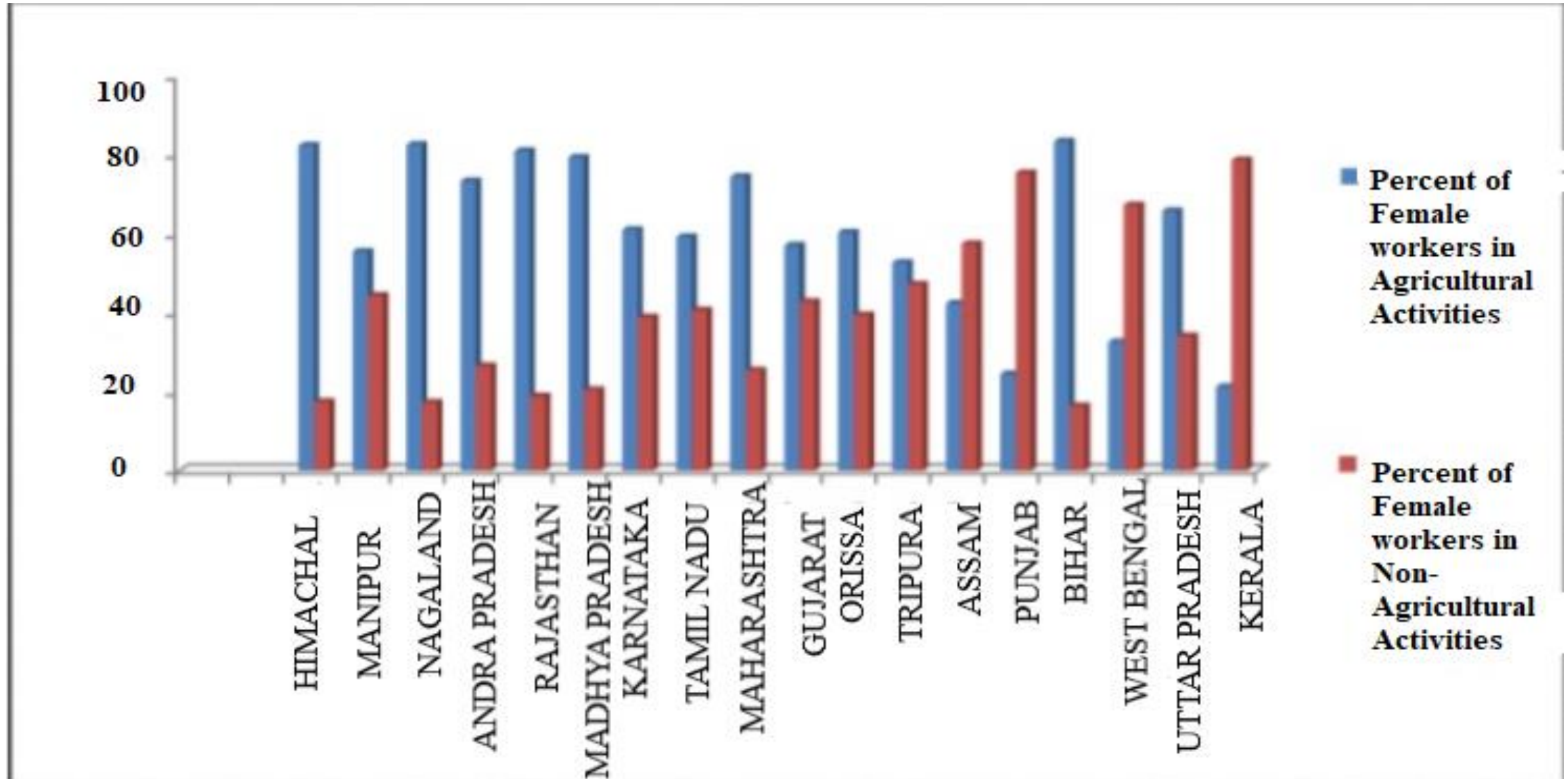
Main workers in agriculture, 1991 & 2001

(in millions)

	Cultivators			Agricultural laboures			Plantation, livestock, fishing, hunting and allied activities			All agricultural workers			% female workers
1991	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female	
Total	110.7	88.5	22.2	74.6	46.2	28.4	6.0	4.7	1.3	191.3	139.4	52.0	27.2
Rural	107.6	85.8	21.8	70.3	43.2	27.2	4.9	3.7	1.2	182.8	132.7	50.1	27.4
urban	3.1	2.7	0.4	4.3	3.0	1.3	1.1	1.0	0.1	8.5	6.7	1.8	21.6
2001													
Total	103.6	78.3	25.4	63.5	41.1	22.4	10.3	6.7	3.6	177.4	126.0	51.4	29.0
Rural	101.3	76.4	24.9	60.5	39.1	21.4	8.7	5.4	3.3	170.6	121.0	49.6	29.1
urban	2.3	1.8	0.5	3.0	2.0	1.0	1.6	1.3	0.3	6.8	5.1	1.8	25.8

Census 2001, 1991

State-wise Women Participation in Agricultural & Non – Agricultural Activities



Objectives



To understand the concept of feminization of
Agriculture



To study the challenges , steps taken for the
upliftment of women in agriculture and way
forward



To review the related research studies

Concept of Feminization of Agriculture

“ A measurable increase of women’s participation in the agricultural sector”

- This is either an increase in the percentage of women in the agricultural workforce within overall female workforce
or
- It is also sometimes seen as women taking over those gendered agricultural tasks which were once done only by men

Women in Indian Agriculture:

The Agriculture Census (2010-11) shows that out of an estimated 118.7 million cultivators, 30.3% were female and out of 144.3 million agricultural labourers, 42.6% were females.

CENSUS OF
AGRICULTURE
YOUR VOICE. YOUR FUTURE. YOUR OPPORTUNITY.

Out of total female main workers, 55% were agricultural labourers and 24% cultivators.

Agricultural census 2010-11

Categories of farm women

Pearson (1979)

**Independent
producers**

**Agricultural
partners**

**Agricultural
helpers**

Farm homemakers

Oct 15 is observed respectively as

1. International day of Rural women by the United nations
2. National women farmer's Day (Rastriya Mahila Kisan Diwas) in India



Causes of Feminization of Indian Agriculture :

➤ Poverty



➤ Agrarian Distress and Shift of men to casual workmen



➤ Migration to Urban Areas



➤ Mobility



➤ Mechanization of agriculture



Impact of Feminization of Agriculture



Hunger reduction



Household security and nutrition

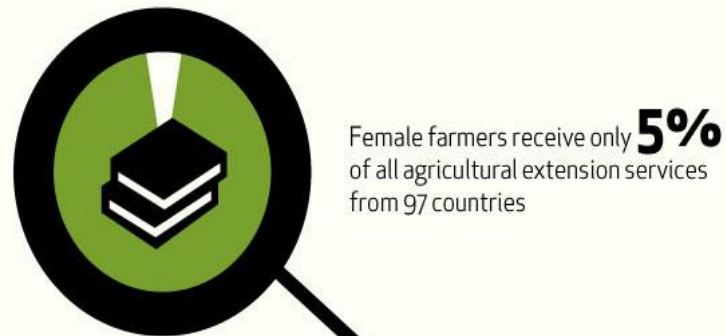


Employment opportunities



Increment in income

Gender gap in agriculture



Only **15%** of the world's extension agents are women



For the full story, visit farmingfirst.org/women

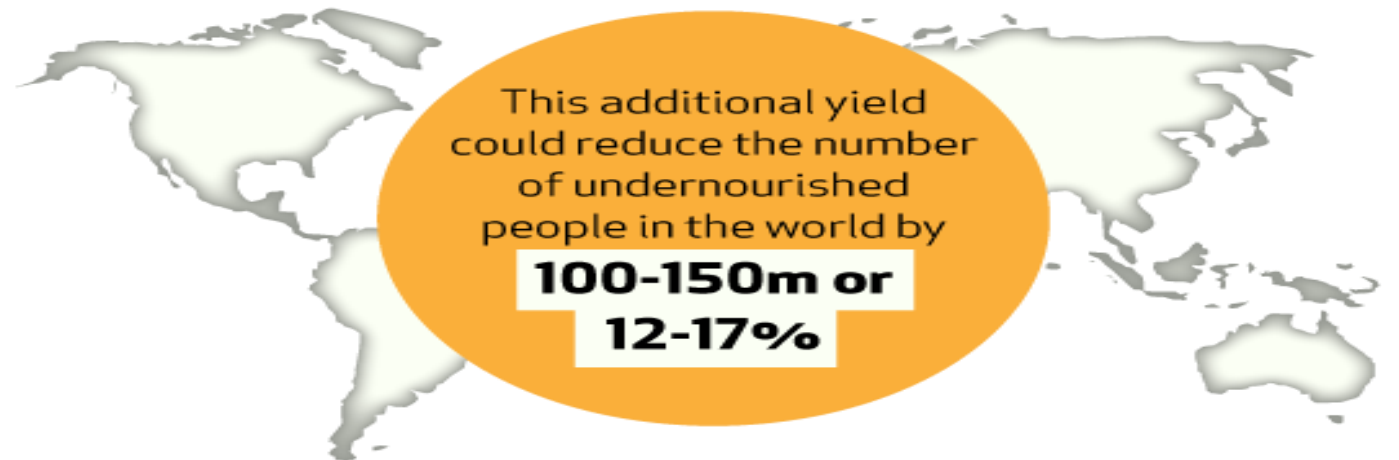


The yield gap between men and women farmers averages around **20-30%** mostly due to differences in resource use



Given equal access to resources as men, women would achieve the same yield levels, boosting total agricultural output in developing countries by

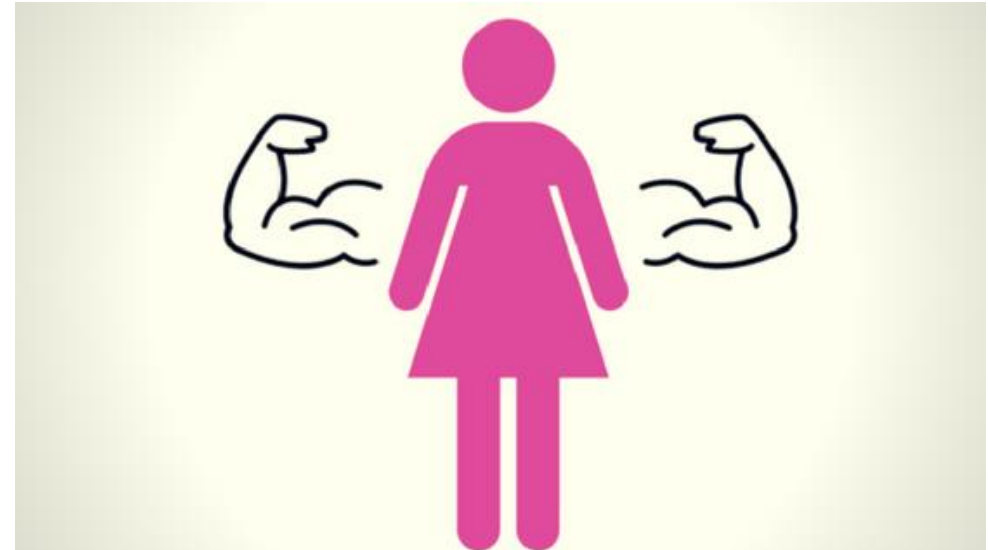
2.5-4%



CHALLENGES

- Access to land
- Access to credit
- Access to agricultural inputs
- Access to technology
- Access to education, training and extension services
- Managing different roles
- Wage
- Marketing
- Feminization of poverty
- Violence
- Health and Occupational Hazards

Steps taken for the upliftment of women in agriculture:





भा.कृ.अनु.प. - केन्द्रीय कृषिरत महिला संस्थान, भुवनेश्वर

ICAR- CIWA

ICAR- Central Institute for Women in Agriculture

Bhubaneswar, India

ISO 9001- 2008 Certified



Projects initiated for women in agriculture



**Evaluation of
interactive learning
module**



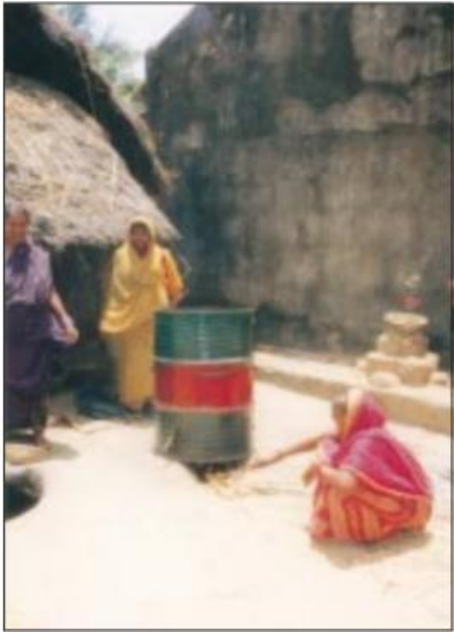
Reducing drudgery



**Involving women in
aquaculture**



**Management of
coastal agro-eco
system**



**Paddy parboiling unit
for drudgery reduction**



Groundnut decorticator



Dibblers



**Nursery
rearing of
rohu and
catla**



Vegetables in nutritional gardens

NATP Project studies on.....

- **Fisher Women in Coastal Ecosystem**
- **To empower and train women**
- **The study covered 28 villages comprising more than 6,000 fishery families in Andhra Pradesh, Karnataka, Kerala and Tamil Nadu.**





- Cost of equipment is Rs.5,600
- To store leftover fish, cut the fish, display for fish

Fresh fish vending and fresh fish container



- Cost of equipment is Rs.3,950
- No technical know-how is needed

Low cost ice cream freezer

Cafeteria for women in agriculture

Policy Framework for Agricultural extension (PFAE)

- **Cafeteria** for offering states to guide the development of new programmes for women in agriculture.

New programmes that are proposed should

- Expand their definition of agriculture beyond crop production and should be based on site specific needs assessment.
- Help women groups to successfully adopt new techniques, crops and enterprises to increase their incomes and employment opportunities
- planned with adequate resources for mobilizing women



Special provisions that empower women:

**Women Food
Groups (FSGs)**



**Self Help
Groups**



**Collective
farming**



Women Food Groups (FSGs)



Mahalaxmi Saras Exhibition in Mumbai showcased nutritious food items by women of Pathardi

Revolution in Fish Farming through Women Self Help Group- Odisha Shows the Way :

Extension material such as “training manual on Fish farming in GP tanks by WSHGs”, leaflet on better management practices (BMPs) for fish farming in GP tanks have been produced and are under distribution to nearly 50,000 members of WSHGs across the state.



“Fish Farming in Gram Panchayat Tanks by Women SHGs” -2018

Collective maize farming in tribal Odisha:

The farmers bought hybrid maize seed and fertilizer using their collected savings “corpus fund” from the Large Sized Multipurpose Cooperative Society (LAMP) of the government of Odisha

Results- production has almost doubled compared to the previous year.

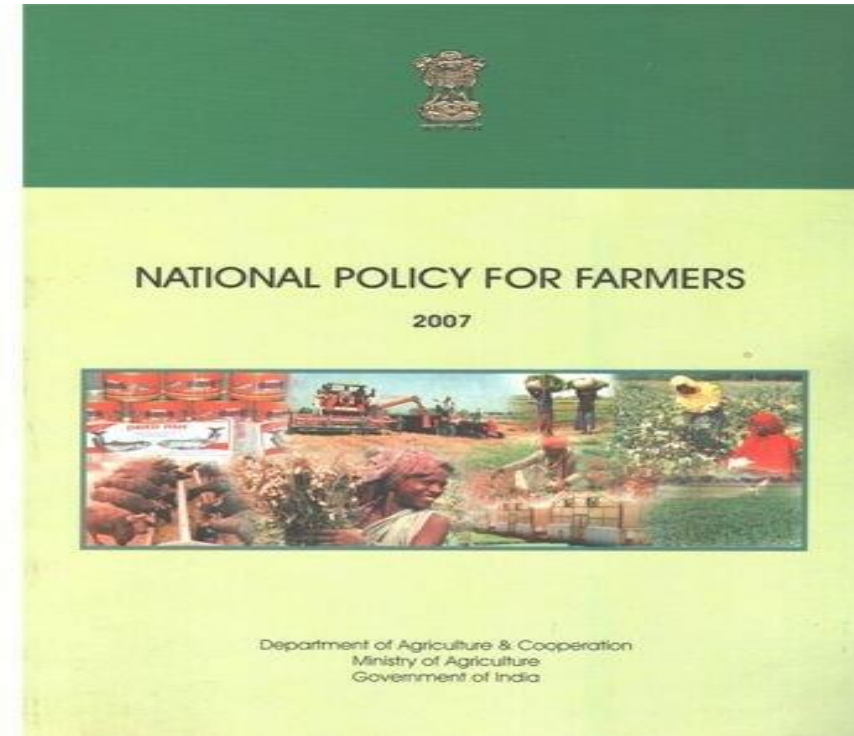


Women farmers in the tribal villages of Odisha, eastern India, are increasing their yields through the use of hybrid seed varieties, new technologies and better agriculture practices with training and support from the CSISA project and the Odisha agricultural department.

Government efforts:



National Gender Resource Centre in Agriculture (NGRCA) was setup in the DAC & FW in 2005-06 with the view of creating a women sensitization module encompassing 'Pro Woman initiatives'



Foregrounding, recognizing and mainstreaming of women's role in agriculture as encapsulated within "The National Policy on Farmers" 2007



- **30% of budget allocation for women beneficiaries in all ongoing schemes**
- **Preference to Women Farmer in various policies such as organic farming, self employment scheme, Pradhan Mantri Kaushal Vikas Yojana**

Mahila Kisan Sashaktikaran Pariyojana (MKSP)

A sub component of the Deendayal Antodaya Yojana-NRLM (DAY-NRLM) seeks to improve the present status of women in Agriculture, and to enhance the opportunities available to empower her.

36.06 Lakh Mahila Kisans have been benefitted through **84 project** in **24 state** and union territories in the country.

Deendayal Antyodaya Yojana – NRLM*

Sustainable Rural Livelihoods through Community Participation

-  Implemented in 4884 blocks across 600 districts in 29 States & 5 UTs
-  5 crore women mobilised into 45 lakh SHGs (as on May 18)
-  Over 1.8 lakh community members trained & deployed to provide support to community institutions
-  Provide Interest Subvention to women SHGs to avail bank loan up to ₹ 3 lakh
-  22000 CLRP** providing 24 hours door step extension services

*Community Livelihoods Resource Persons
**National Rural Livelihoods Mission



MAHILA KISAN SASHAKTIKARAN PARIYOJANA

Empowering Women in Agriculture



6222 Custom Hiring Centres to facilitate hiring of farm equipment at nominal rate



More than 33 lakh women farmers supported (as Mar 18)



More than 8 lakh women farmers mobilized into 86000 Producer Groups and 125 Producer Companies

Special provisions for women farmers in national schemes

- **National Mission on Agricultural Extension & Technology (NMAET) – Sub-Mission on Agricultural Extension (SAME)**

Agriculture Technology Management Agency (ATMA)	Support for Women Food Security Groups (FSGs)- Rs.0.10 lakh per group/year to achieve food security at the domestic/house hold level through setting up of kitchen garden, promoting off farm activities such as piggery, goat-rearing, bee-keeping etc.
Agri-Clinics & Agri-Business Centers (ACABC)	•44% Back-ended composite subsidy towards cost of project to women as compared to 36% to men
Mass Media Support to Agricultural Extension	•One day specially allocated to cover areas of core competence women farmers in programmes of All India Radio & Doordarshan

Mission for Integrated Development of Horticulture (MIDH)

Assistance for horticulture mechanization also available grower associations/ farmer groups/ Self Help Groups/Women farmer groups having at least 10 members, who are engaged in cultivation of horticultural crops.

National Mission on Oilseeds & Oil Palm (NMOOP)

Promoting Women Groups-Provision available under the Mission for involvement of Co-operative Societies, Self Help/Women Groups/FIGs/FPOs etc.

Integrated Scheme for Agricultural Marketing (ISAM)

- 33.33% Rate of Subsidy (on capital cost) for women as compared to 25% for men
- Maximum Subsidy Ceiling is Rs. 500.00 lakhs for women as compared to Rs.400.00 lakhs for men

National Food Security Mission (NFSM)

At least 30% allocation of the funds is for women farmers
Provide training based on cropping system to farmers including weaker section of women

National Mission for Sustainable Agriculture (NMSA)

At least 50% of the allocation is to be utilized
for small, marginal farmers of which at least 30% are women
beneficiaries/farmers

Sub-Mission on Agricultural Mechanization (SMAM)

Training Programmes on Gender friendly Equipment for Women farmers
are to be conducted by Farm Machinery Training & Testing Institutes..

WOMEN ENTREPRENUSHIP

**"AS WOMEN,
WE MUST STAND UP
FOR OURSELVES.
WE MUST STAND UP
FOR EACH OTHER.
WE MUST STAND UP
FOR JUSTICE FOR ALL."**

-MICHELLE OBAMA



"Somebody once said, educate a woman & u will educate a family. I am saying empower a woman to become an entrepreneur, & you will create an entire family of entrepreneurs. Women entrepreneurship is the need of the nation right now, it is the surest quickest way to make INDIA a super power.



Women-led farming initiatives



Gitanjali Raman, Co-Founder, Farmizen

Farmizen is currently present in Bengaluru, Hyderabad, and Surat, with about **1,500 subscribers and 24 farms across the three cities, and around 40 acres of land** under cultivation.

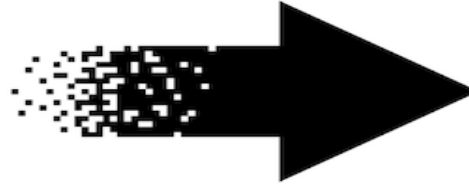
They want to expand to **100,000 families and generate over Rs 300 crore** in recurring revenue in two years



***Gurdev Kaur Deol, Founder,
GSHGFPO***

With hundreds of women employed, **GSHGFPO** cultivates a variety of vegetables, makes sauces and juices from the produce, and also does bee-keeping, with over **450 boxes** for the same. Purchases organic pulses and spices from other farmers which it packages and sells.

Way Forward



- Credit without collateral under the micro-finance initiative of NABARD
- **Jharkhand Govt** initiative of registering land in name of women for **rupee 1**
- Women-centric strategies and dedicated fund for women farmer in govt schemes
- Document best practices of addressing gender and equity issues in the Agriculture and allied programmes.
- Involve women organizations in empowerment processes
- Reward the Gender Sensitive Taluk/District etc.



Extension Strategies enhancing farm women

- Training and skills imparted to women
 - i) training in latest advances in agriculture
 - ii) training in leadership to motivate to play role of change agent
- Employment of women in aspects of agricultural extension services
- Organize women into functional groups
- Gender sensitive extension approaches
- Development of new extension training materials





District level Progressive women farmer

Arathi-Thumkur district

- 21.2 acres
- Paddy,ragi,small millets, watermelon ,pomegranate,papaya,sapota,mango,cucumber,
- Daily 40 liter of milk
- 8-10 lakh income yearly

Ashwathamma-Benguluru rural

- 9.5 acres
- IFS
- Polyhouse in one acre
- 10 honey bee boxes
- Rainwater harvesting system,Rearing goat,sheep,poultry

SUCCESSFUL FARM WOMEN IN AGRICULTURE





Rajkumari Devi

Kisan Chachi’, which translates to ‘Farmer Aunty’.

- Tips on kitchen farming
- Mobilises women to form self-help groups

Used the low-lying fields to grow paddy and wheat and used the rest of the space to grow bananas, mangoes, and papayas.

Preserving over a hundred traditional paddy varieties, along with the endangered breeds of black cumin, sesame, turmeric, maha Kanta, phula and ghortia.

Best Farmer Award by the Odisha Government in 2004



Kamala Pujhari

Review studies



1.Rural Women Participation in Farming Activities of Shivamogga District of Karnataka State

S. SOWJANYA, B. K. MANJUNATH , C. K. SUDHA AND L. V. SRIKANTH CHOUDARY

- The study was designed to explore the extent of women's participation in various agricultural activities in **Shivamogga district**
- A total of **160 rural women** were selected through proportionate random sampling and interviewed with a well-designed, pre-tested interview schedule

Participation of farm women in farm activities (n=160)

Sl.No	Farm Activities	Frequency	Percentage
1	Ploughing of field	5	3.12
2	Cleaning of field	130	81.25
3	Levelling of field	10	6.25
4	Raising nursery for seedling	80	50.00
5	Sowing	56	35.00
6	Transplanting	70	43.75
7	Manure Application	62	38.75
8	Fertilizer Application	3	1.87
9	Weeding	151	94.37
10	Thinning	95	59.37
11	Gap Filling	130	81.25
12	Plant Protection Measures	5	3.12
13	Cutting	160	100
14	Picking	160	100
15	Shifting Production to threshing floor	145	90.62
16	Threshing	120	75.00
17	Winnowing	150	93.75
18	Drying of Grains	160	100
19	Cleaning of Grains	160	100
20	Grading	150	93.75
21	Storage	160	100
22	Marketing	10	6.25
23	Processing	160	100

Recommendation of the study

- Female extension wing should be established at district level to train and provide services to rural women
- Women training centers should be established at district level whose responsibility to conduct training for rural women on different agricultural activities

2.Participation of Farm Women in Decision-Making Process on Agricultural Operations in Yadgir District of Karnataka

S.B. Goudappa , S. Surekha and B.S. Reddy

- The study was carried out in Shahapur taluk of Yadgri district in Karnataka
- A purposive sample of 120 farm women were selected from four villages i.e., 30 farm women from each village by following random sampling procedures.

Performance of farm women on selected agricultural operations (n = 120)

Agricultural operations	Performance of agricultural operations by					
	Women alone		Men alone		Jointly by Women & Men	
	No.	%	No.	%	No.	%
<i>Pre-Harvest Operations</i>						
Land preparation						
Ploughing & harrowing	-	-	120	100.00	-	-
Stubble collection	108	90	-	-	12	10
Preparations of seed bed	18	15	70	58.33	32	26.66
<i>Sowing</i>						
Sowing with seed bowl	82	68.33	38	31.67	120	100.00
Dibbling of seeds	96	80.00	03	05.50	21	17.50
Transplanting of seedling	68	56.66	52	43.33	-	-
Application of fertilizer	16	13.33	82	68.33	28	23.33
Irrigation	68	56.66	52	43.33	-	-
Application of pesticides	48	40.00	38	31.66	34	28.34
Hand weeding	120	100.00	-	-	-	-
Scaring for birds and others animals	56	46.66	31	25.83	33	27.50
$X^2_r = 74.6^*$						
<i>Post-Harvest Operations</i>						
Harvesting	89	74.16	31	25.83	-	-
Processing of grains	110	91.66	-	-	10	08.33
Threshing of activities	84	70.00	26	21.66	10	08.33
Grading of quality seeds	107	89.17	-	-	13	10.83
Storage of food grains	81	67.50	16	13.33	23	19.16
Keeping accounts	56	46.66	64	53.33	-	-
$X^2_r = 72.9^*$						

Participation of farm women in Decision making process related to selected agricultural operations (n = 120)

Agricultural operations	Stages of Decision Making process					
	Awareness and initiating solutions for problems		Finding out alternative suggestions by considering		Finalization of Decisions on farm merits & demerits activities	
Land preparation	81	67.50	19	15.83	10	08.33
Sowing	77	64.16	30	25.00	13	10.83
Irrigation	89	74.16	26	21.66	05	04.16
Application of fertilizers	81	67.50	23	19.16	16	13.33
Application of pesticides	64	53.34	34	28.33	22	18.33
Hand weeding	96	80.00	16	13.33	08	06.66
Transplanting of seedlings	55	45.83	51	42.50	14	06.66
Harvesting	91	75.83	20	16.68	09	07.50
Grading	46	38.34	64	53.33	10	08.33
Storage of food grains	42	35.33	57	47.50	21	06.66
Selling and buying the land and equipment	86	71.67	28	23.33	06	05.00
Keeping account	36	38.33	59	49.16	53	44.60

Extent of involvement of farm women in the decision-making process of the selected agricultural operations (n = 120)

Agricultural operations	Extent of Rural Women Involvement in Decision Making Process					
	Low		Medium		High	
	No.	%	No.	%	No.	%
Land preparation	10	08.33	19	15.83	91	75.83
Sowing	13	10.83	30	25.00	77	64.16
Irrigation	05	04.16	26	21.66	89	74.16
Application of fertilizers	16	13.33	23	19.16	81	67.50
Application of pesticides	22	18.33	23	19.16	81	67.50
Hand weeding	08	18.33	46	38.33	66	55.00
Transplanting of seedlings	14	06.66	51	42.50	55	45.83
Harvesting	21	11.66	51	42.50	49	40.83
Grading	08	17.50	64	53.33	36	38.33
Storage of food grains	21	06.66	57	47.50	42	35.33
Selling and buying the land and equipment	14	17.50	60	50.00	36	38.33
Keeping account	08	11.66	59	49.16	53	44.60

Recommendation of the study

- Develop self-confidence, sense of equity and elevate status in the decision making process need to organize capacity building process for farm women in agro based enterprises and handicrafts



CONCLUSION



THANK YOU