

# Feminization of Indian Agriculture: Status of Women Farmers

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Feminised Agriculture in India )*

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# The Context

- Feminization of agriculture in India is not a new phenomenon (*it was recognized earlier by Duvvury, 1989 and Chowdhry, 1993*),
- However it has gained immense importance in the present context, with a decline in income growth and stagnation of employment in the sector.
- According to World Bank data, the agriculture value added to the GDP has declined in India from 18.6 percent in 2006-11 to 17.8 percent by 2011-2014. U
- Under the Government of India's 11<sup>th</sup> plan, *the National Commission of Farmers (NCF, 2005) report: II*, shows that with increasing out-migration of male members, more and more women are participating in agriculture.
- The male out-migration is mainly in the nature of a distress migration (NCF, 2005 and Kanchi, 2010).
- While men are moving out of agriculture, women have to continue to take care of the land, either as managers or as helpers.

# Objectives and Research Questions

## **Part I: Analysis of Census data: All Indian and States wise**

- Critically analyze feminization of agriculture and tries to examine the pattern, trend and type of feminization.
- It further tries to re-define 'what is feminization'.
- To understand how feminization of agriculture as an issue could be interpreted in the present agrarian condition.

## **Part II: Analysing the Role of Women in Agriculture: Household Survey in Gujarat and West Bengal**

- Examine women's absolute or relative contribution of labour?
- Analyse the ownership or access rights to agricultural assets?
- Analyse the autonomy and authority?

# Trend of Women in Workforce: Census Data

Table. Gender-wise workforce participation rate

	WPR (%)			% Total Workers Female
	Male	Female	Total	
1981	52.4	19.8	35.6	25.9
1991	51.5	22.3	37.1	28.6
2001	51.8	25.6	39.2	31.6
2011	<b>53.3</b>	<b>25.7</b>	<b>39.8</b>	<b>31.2</b>

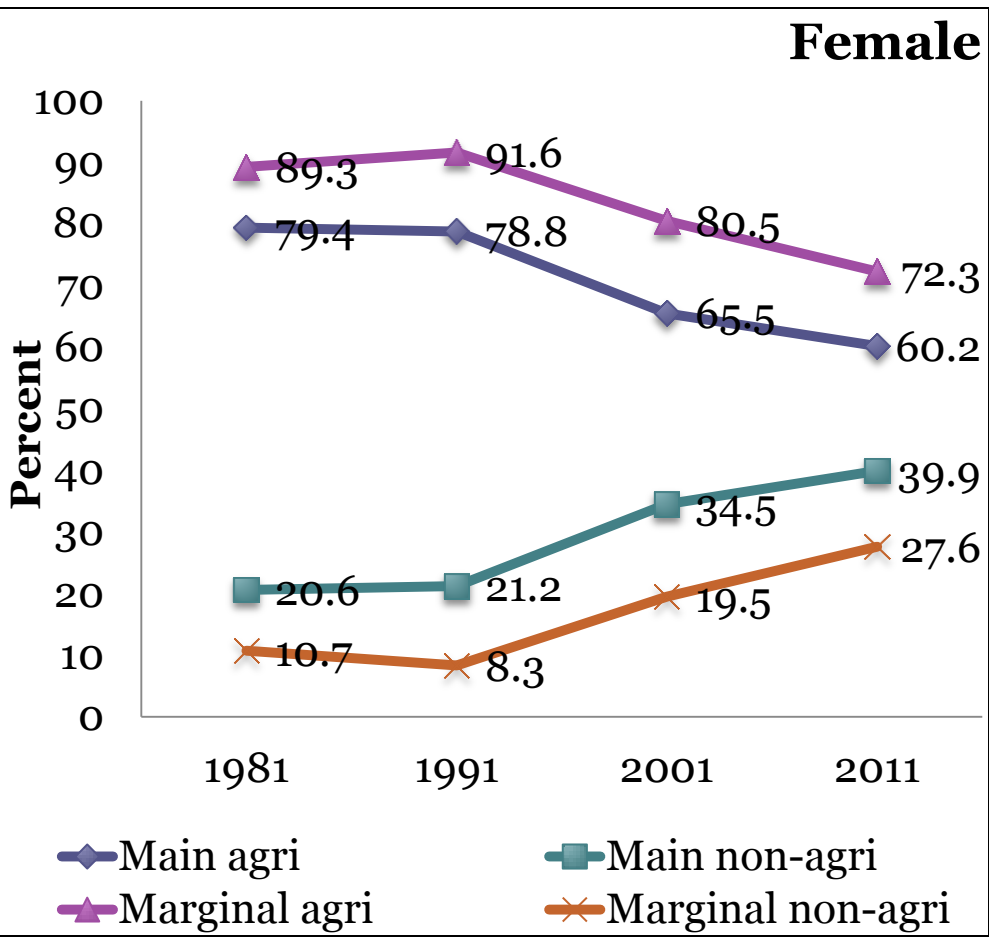
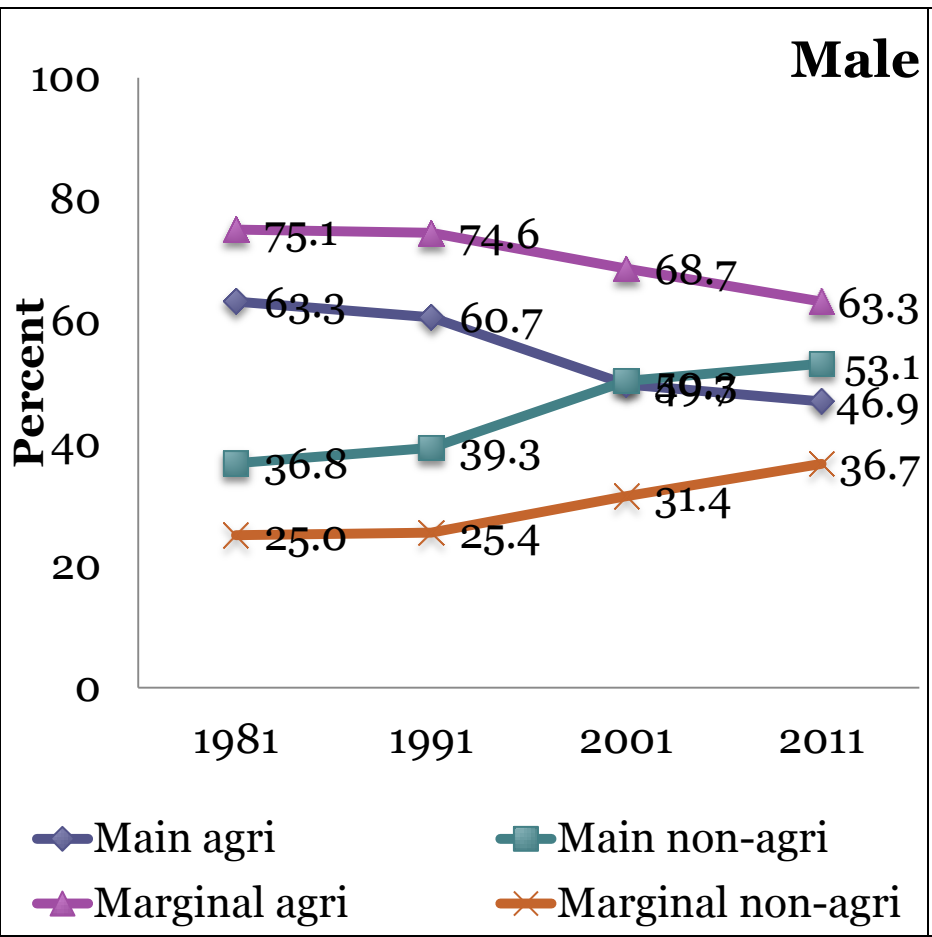
Table: Main workers participation ratio

Census year	Male (as a % of Total Male workers)	Female (as a % of Total female workers)
2001	87.3	57.3
2011	82.3	59.6

## Work participation in Agricultural and Non-Agricultural Sectors

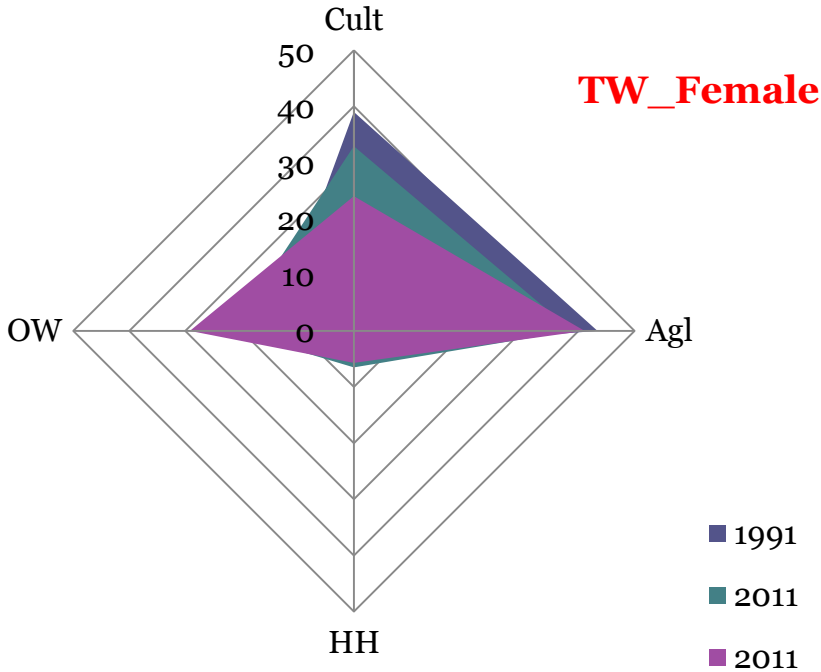
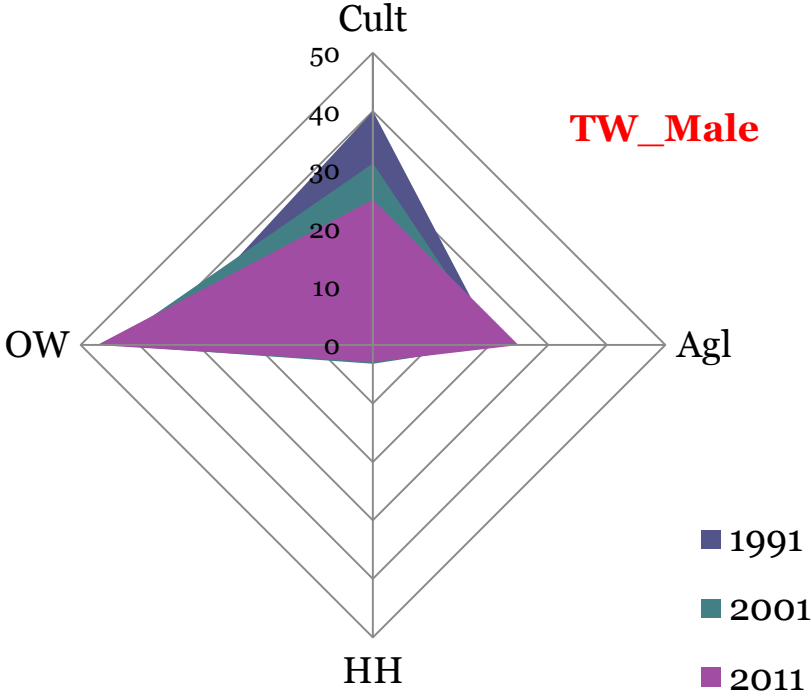
Census year	Agricultural workers (%)	Agriculture		Non-Agriculture	
		Male (%)	Female (%)	Male (%)	Female (%)
1981		62.0	66.2	38.0	33.8
1991	67.2	60.9	82.4	39.1	17.6
2001	58.4	51.9	71.8	48.1	28.2
2011	54.5	<b>49.8</b>	<b>65.1</b>	50.1	34.9

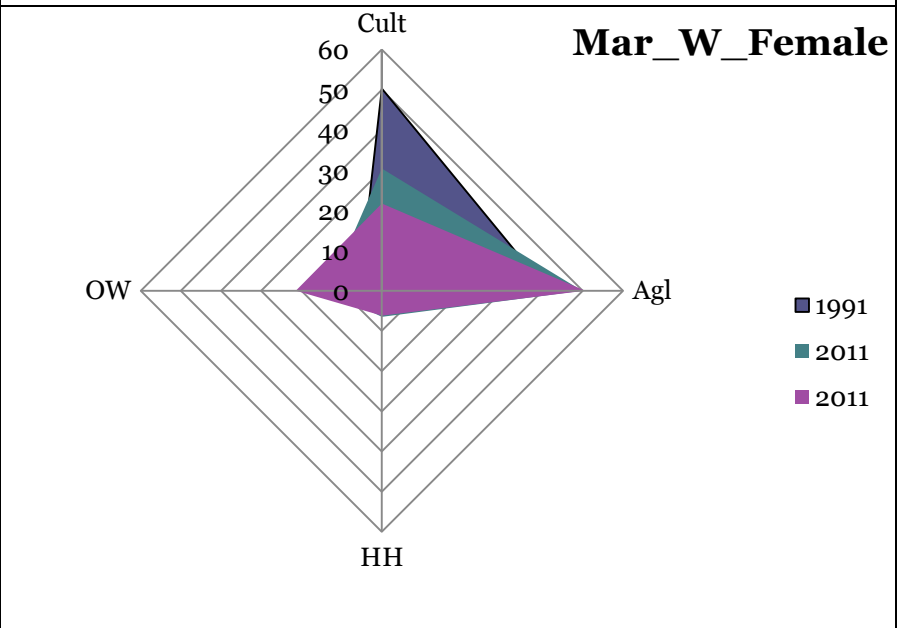
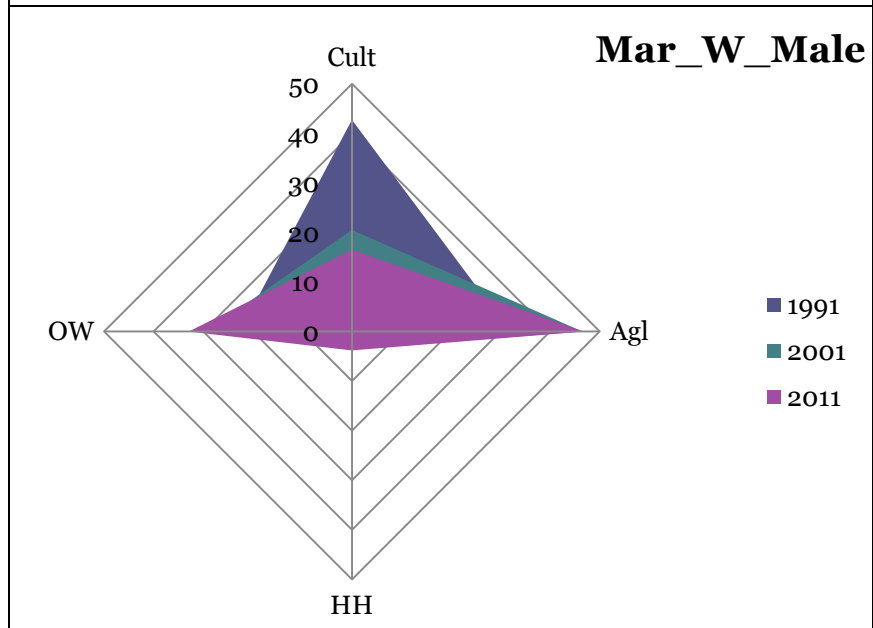
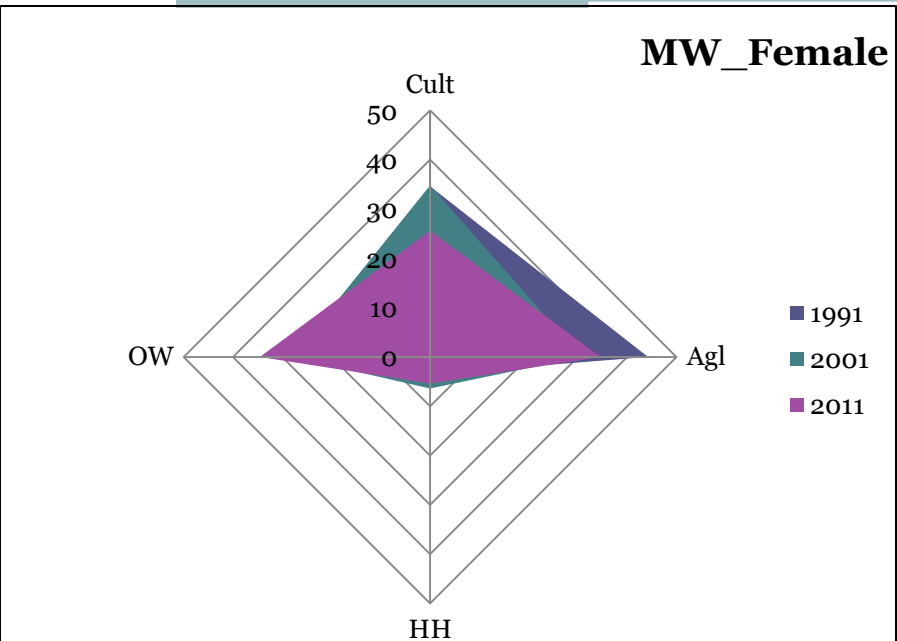
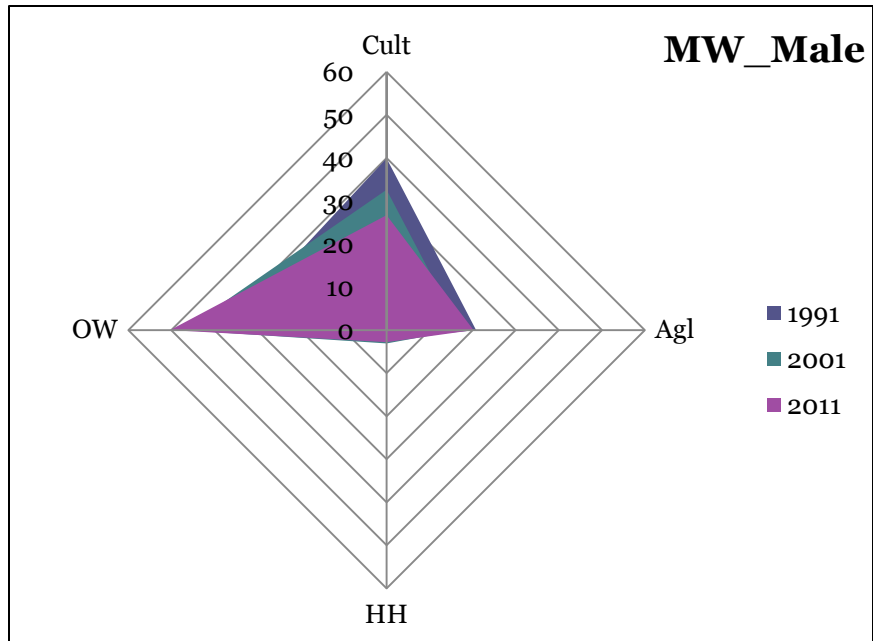
# Male and female participation in agriculture and non-agricultural activities



Unlike male workers, the share of female main workers in agriculture was significantly higher than in the non-agricultural sector

# Occupation-wise workforce participation







## Correlation between Female Workers in agriculture and other Factors

Characteristic	$\rho$
TFW/TW	0.70
Per capita land	0.62
Growth rate of Agri-GDP	0.37
Per capita Income Agri& allied	-0.69
HDI	-0.68
Per capita income	-0.61
Women land holding (share)	-0.29
Growth rate of GSDP (at constant price)	-0.13

Note: Spearman's rank correlation coefficient



# The project on farmers of Future: Gujarat and West Bengal

*Preliminary Results and Survey Design*

# Defining the Context

- **Women farmers?**
- *Time spend and number of activities that they perform in farm.*
- **Feminization of Agriculture ?**
- Deere (2005) defined feminization of agriculture as
  - Increase in rural women's, or rural and urban women's, participation rates in the agricultural sector,
  - Increase in the share of the agricultural labour force that is female,
  - Higher female share can in turn be the result of a higher female activity rate and/or a decrease in men's participation rate in agriculture
  - Result of the under enumeration of women as unpaid family labour in the past
  - Greater visibility as agricultural wage workers or own-account farmers in the current period.
- **Feminization of Labour vs. Feminization of Empowerment in Agriculture**

India

Gujarat

West Bengal

Districts

Costal Tribal region Dairy and dry

Costal Tribal region Dairy and dry

Block 1

Irrigated-commercial crop

Block 5

Irrigated-commercial crop

Block 8

Block 2

Block 4

Block 6

Block 3

Block 7

V 1

V 2

V 9

V 10

V 15

V 16

V 3

V 4

V 7

V 8

V 11

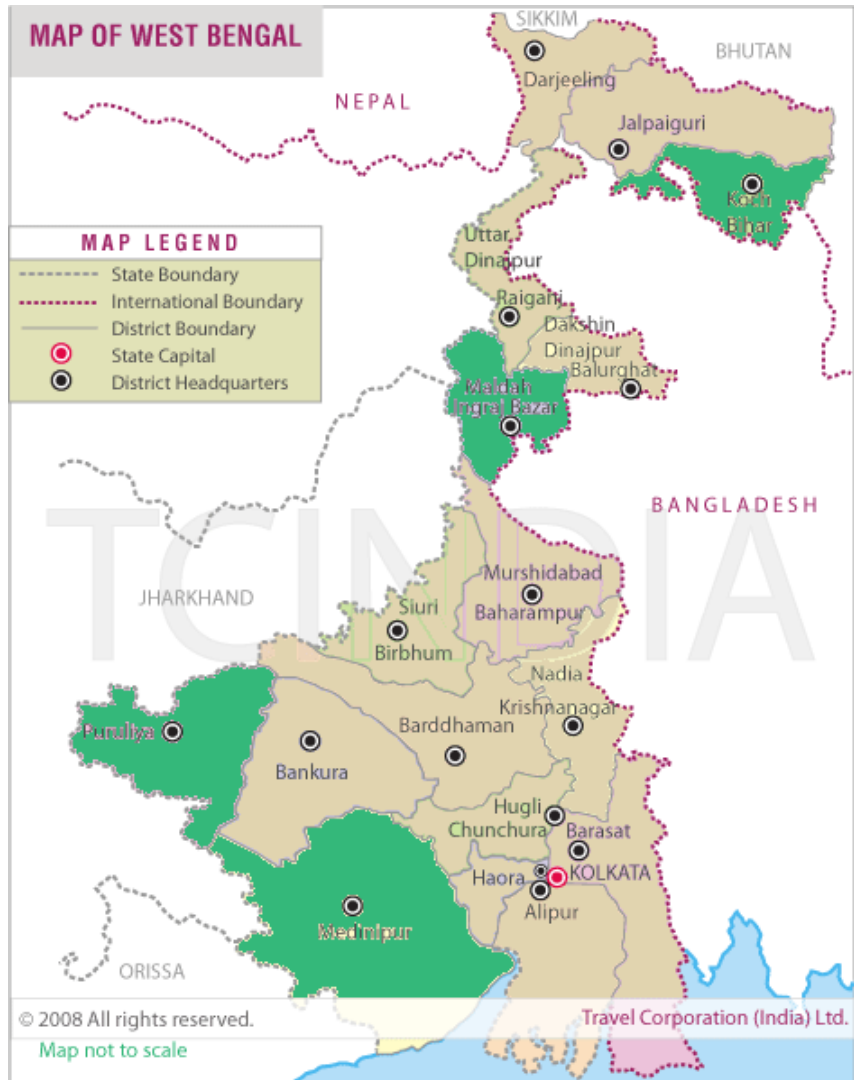
V 12

V 5

V 6

V 13

V 14



## Women Land Ownership in Two States: The Surveyed Households

	Gujarat		West Bengal	
	Name of Districts			
Irrigated- Rice wheat area – Costal	Valsad	1.9	West Medinapur	3.5
Commercial crop and Diary	Patan	3.8	Malda	4.3
Irrigated – commercial area	Rajkot	3.8	Kuch Bihar	4.5
Tribal region	Panchmahal	0.0	Purulia	1.5
	Gujarat	1.9	WB	3.6

Information drawn from 6005 households across 8 districts and 16 villages. Village census conducted before choosing the sample (50 from each village). The above table shows information drawn from 6005 households.

# Important Role of Women in various type of Agricultural Activities : Gujarat

	Patan	Valsad	Rajkot	P.Mahal	Total
Ploughing	4.3	0.4	0.8		1.2
Leveling	7.9	5.5	18.3	4.7	8.7
Sowing seed	25.6	<b>84.7</b>	40.6	32.9	44.3
Applying manure or fertilizer	24.4	<b>71.2</b>	55.8	67.0	<b>56.3</b>
Pesticide application	15.4	19.4	15.5	0.5	11.2
Watering	15.0	35.0	23.2	51.8	33.8
Weeding	<b>65.9</b>	<b>86.9</b>	<b>73.6</b>	<b>99.1</b>	<b>83.6</b>
Harvesting	<b>67.4</b>	<b>89.4</b>	<b>77.3</b>	<b>99.0</b>	<b>85.2</b>
Storage	23.8	48.1	16.7	<b>81.4</b>	47.0
Marketing	10.7				2.3

# Important Role of Women in various type of Agricultural Activities : West Bengal

	West Medinapur	Kuch Bihar	Purulia	Malda	WB
Ploughing	-	-	-	-	-
Leveling	71.0	78.6	71.7	69.5	<b>73.0</b>
Sowing seed	87.4	84.0	87.3	79.3	<b>84.3</b>
Applying manure or fertilizer	36.5	58.6	41.2	51.9	47.8
Pesticide application	12.4	12.1	5.4	12.8	11.0
Watering	55.0	68.1	55.4	59.0	59.9
Weeding	80.8	85.2	83.1	78.7	<b>82.0</b>
Harvesting	75.3	72.5	83.7	71.8	<b>75.2</b>
Storage	54.5	30.0	50.3	31.5	40.6
Marketing	0.0	0.5	6.2	1.0	1.6
other	1.7	1.1	4.4	2.8	2.3
other 2	26.6	14.8	22.3	18.2	20.1



# Gendered Activities in Farm, Livestock and Home

DIST	Index of Activities Performed by the Women in both States			
	Farm related	Livestock	Traditional Household	Non-Traditional household
Patan	2.0	3.2	<b>4.5</b>	2.1
Valsad	2.3	3.3	4.4	<b>2.4</b>
Rajkot	2.2	3.2	4.4	1.6
Panchmahal	2.3	<b>3.5</b>	<b>4.5</b>	2.0
<b>Gujarat</b>	<b>2.2</b>	<b>3.3</b>	<b>4.5</b>	<b>2.0</b>
Medinipore	<b>2.5</b>	<b>2.9</b>	<b>4.4</b>	1.8
Cooch Bihar	2.3	2.7	<b>4.4</b>	1.5
Puruliya	<b>2.5</b>	2.7	4.3	<b>2.1</b>
Malda	2.4	2.6	4.3	2.0
<b>West Bengal</b>	<b>2.4</b>	<b>2.7</b>	<b>4.3</b>	<b>1.9</b>

Traditional Household: Cooking, Collecting fuel for cooking, Fetching drinking water, Taking care of children , Taking care of elderly, Taking care of livestock.

Non-Traditional household: Fishing, Going to market for food purchase, Going to market for selling fish/livestock, Managing household budget

# Decision-making at Home & in the Farm

	Farm related decision making	Big purchase decision making	Human development decision making	Household small decision making
Patan	1.8	1.7	3.0	3.4
Valsad	2.1	1.8	3.0	<b>3.6</b>
Rajkot	1.8	1.5	2.8	3.1
Panch Mahal	<b>2.5</b>	<b>2.0</b>	3.0	3.5
<b>Gujarat</b>	<b>2.1</b>	<b>1.8</b>	<b>3.0</b>	<b>3.4</b>
West Medinapur	2.2	2.4	<b>3.1</b>	<b>3.6</b>
Kuch Bihar	1.8	2.0	2.8	3.2
Purulia	<b>2.4</b>	<b>2.8</b>	2.9	<b>3.6</b>
Malda	2.2	2.4	3.0	3.2
<b>WB</b>	<b>2.2</b>	<b>2.4</b>	<b>3.0</b>	<b>3.4</b>

**Farm related decision making:** What crop to grow, Purchase or sale of animal, Buying of farm inputs, Amount of farm produce to be sold (foodgrains).

**Big purchase decision making:** Purchase or rent of new home, Large household purchases

**Human development decision making:** Children's Education, Health care

**Household small decision making:** Daily household purchases, Visits to family or relatives, what food is to be cooked, Buying vegetable, Other

# Caste wise Women Labour and Decision Making

	Activity/Labour				Decision Making			
	Farm related	Livestock	Traditional Household	Non-Traditional household	Farm related	Big purchase	Daily purchase and social	Education and health
	<b>Gujarat</b>							
<b>General</b>	2.0	3.2	4.3	1.8	1.7	1.7	3.3	2.5
<b>ST</b>	2.2	3.5	4.4	2.4	1.9	1.9	3.5	2.8
<b>SC</b>	2.0	2.9	4.4	1.8	2.0	2.0	3.4	2.7
<b>OBC</b>	2.3	3.4	4.4	1.9	2.0	1.7	3.4	2.8
	<b>West Bengal</b>							
<b>Gen</b>	2.5	2.8	4.5	1.9	2.3	2.5	3.7	3.1
<b>ST</b>	2.5	2.7	4.4	2.2	2.2	2.4	3.3	3
<b>SC</b>	2.3	2.7	4.3	1.7	2	2.3	3.2	2.9
<b>OBC</b>	2.5	2.8	4.2	1.9	2.2	2.5	3.4	2.9

## Increase in the duration of female labour Involvement:

	GUJARAT		WEST BENGAL
Patan	73.3	West Medinapur	65.0
Valsad	60.4	Malda	84.5
Rajkot	35.0	Kuch Bihar	41.0
Panch Mahal	44.0	Purulia	81.2
<b>Total</b>	<b>53.2</b>	<b>Total</b>	<b>67.5</b>

Has there been any change (10-15 Years) in the pattern of the labour involvement

	Increased	Decreased	No Change	
Patan	22.8	51.5	25.7	100
Valsad	27.7	20.8	51.5	100
Rajkot	20.0	30.0	50.0	100
Panch Mahal	11.0	45.0	44.0	100
<b>Gujarat</b>	<b>20.4</b>	<b>36.8</b>	<b>43.0</b>	<b>100</b>
West Medinapur	69.0	11.0	20.0	100
Kuch Bihar	83.5	5.2	11.3	100
Purulia	49.0	11.0	40.0	100
Malda	87.1	4.0	8.9	100
<b>WB</b>	<b>72.0</b>	<b>7.8</b>	<b>20.0</b>	<b>100</b>

## Snap sort of Migration among the Sample Households

	Gujarat		West Bengal	
HH evidence of migration	52		42.1	
Total migrant population	14.2		10.5	
Permanent migrants	20.4		23.4	
Temporary migrants	34.7		<b>63.4</b>	
Seasonal migrants	<b>44.8</b>		12.8	
	Male	Female	Male	Female
Total migration	79.8	20.2	<b>92.4</b>	7.8
temporary migration	76.3	23.6	<b>93.3</b>	6.7
seasonal migration	88.8	11.2	<b>90.3</b>	9.6

# Awareness of Women farmers

# Awareness of Women Farmers

	subsidy from the government	Organic farming	Genetically Modified crops?	Soil testing	Soil health-card	Awareness about climate change
Patan	11.9	20.8	5.9	3.0	1.0	4.0
Valsad	19.8	5.0		3.0	2.0	10.9
Rajkot	1.0	24.0	69.0	3.0		18.0
Panch Mahal	1.0	49.0	1.0			23.0
<b>Gujarat</b>	<b>8.5</b>	<b>24.6</b>	<b>18.9</b>	<b>2.2</b>	<b>0.7</b>	<b>13.9</b>
Medinapur	34.0	7.0		5.0		13.0
Kuch Bihar	20.6	7.2		4.1		12.4
Purulia	13.0	9.0		3.0	1.0	28.0
Malda	17.8	4.0	2.0	5.0	1.0	12.9
<b>WB</b>	<b>21.5</b>	<b>6.8</b>	<b>0.5</b>	<b>4.3</b>	<b>0.5</b>	<b>16.5</b>

# Access to Agricultural Research and Extension

	Gujarat			West Bengal		
	Never	Once a year	A few times a year	Never	Once a year	A few times a year
visite to KVK	99.5	0.5	-	97.8	1.5	0.8
visit KrishiSibir	99.5	0.5	-	97.3	2.5	0.3
visit KrishiMela	98.0	1.7	0.2	98.3	1.5	0.3
visit Model farms	99.5	0.5	-	98.0	1.8	0.3
attended any meeting with the agricultural scientists	100	-	-	99.0	1.0	-
Meeting with extension officers	99.0	0.7	0.2	97.3	2.5	0.3
consultation programs with NGOs	99.5	0.5	-	98.7	0.8	0.5





# Women in Agriculture and Food security

## Do you feel the work load has increased on you?

	Increase		Increase
Patan	26.7	Medinapur	78.0
Valsad	19.8	Kuch Bihar	70.1
Rajkot	18.0	Purulia	87.0
Panch Mahal	35.0	Malda	83.0
Gujarat	24.9	WB	79.6

## If yes: does that affect your food habit?

	Due to whole days work burden don't get time to eat properly	Irregular timing of meal	No change
Patan	82.0	20.0	
Valsad	65.0	10.2	24.8
Rajkot	50.0	22.0	28.0
Panch Mahal	71.4	25.7	3.9
<b>total</b>	<b>68.0</b>	<b>19.0</b>	<b>15.0</b>
Medinapur	51.3	42.3	6.4
Kuch Bihar	41.8	37.3	20.9
Purulia	50.0	41.9	8.1
Malda	48.2	40.0	11.8
<b>total</b>	<b>48.1</b>	<b>40.5</b>	<b>11.4</b>

# Conceptualizing Feminization of Agriculture

- The type of feminization of agriculture that the Census data presents implies a concentration of women either in agricultural labour or 'other-work', and could be related to what the NCW (2008) described as 'feminization of poverty'.
- Their involvement as cultivators might not be financially empowering, as the sector is already experiencing severe decline and is no longer considered as a profitable occupation.
- This type of feminization of agriculture implies that women are now taking care of economic activities that have been left by men. Such involvement occurs under duress, and could be termed as '**feminization out of compulsion**' or '**feminization of agrarian distress**'.
- This type of feminization in India is distress-driven, as no effective government action exists to help women in agriculture.

# Overall Development by keeping Women in the Centre

- Basic social and economic protection is missing for a large portion of the rural population, because of which women as the cheapest and weakest labour in households and communities are falling back on agriculture whereas men are moving out of farms altogether.
- To transform the situation, it is essential to put the **focus on women in the overall development plans and policies of agriculture.**
- Feminization of Indian agriculture has been taking shape in the context of a complex interplay of shrinking land holdings; degraded soils and water resources; declining accessibility to traditional seeds and other inputs; distorted market incentives for crop choice and technology; growing labour shortages; and mechanization.
- It has also been occurring within a **deepening crisis of gender relations.**
- Efforts to enhance women's agency without addressing these broader rural crises will achieve only limited outcomes.

# Land Right should not be Forgotten

- Without titles to land, it is a challenging situation not only for the women farmers but also for the policy-makers who are at a loss to devise appropriate credit mechanisms for rural women.

- Largely overlooked in the literature on feminisation of agriculture are the systemic constraints on women's agency as producers in India, arising from being confined to traditional roles defined by endemic patriarchy.
- The agrarian crisis is manifested through a complex interplay of shrinking land holdings; degraded soils and water resources; declining accessibility to traditional seeds and other inputs; distorted market incentives for crop choice and technology; growing labour shortages; and mechanisation (Mishra and Reddy 2011). Feminisation of Indian agriculture has taken shape within this larger reality. Therefore, approaching the feminisation of agriculture necessitates looking at the broader context of women's agency in agrarian crisis.
- The efforts to enhance women's agency without addressing the rural crisis will achieve only a limited objective. The agenda for overcoming barriers of commercialisation and land rights among women thus has to be located in this larger setting of overall neglect, non-sustainability and disparity in growth opportunities offered by the existing neo-liberal policy framework.
- Enhancing women's agency as producers requires strategies directed to changing the broad context of agricultural growth, lest women remain caught in instrumental roles consolidating the present approach towards urban-biased economic growth—an outcome that will serve to deepen the agrarian crisis and food insecurity.

# THANK YOU

