



THE GROWTH OF FEMALE AGRICULTURAL LABOURERS IN INDIA: AN ANALYSIS

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KEYWORDS :

Agriculture plays a vital role in India's economy 54.6. percent of the total work force in the country is engaged in agricultural and allied sector activities¹. Agriculture in India defines familial tradition, social relations and gender roles. Female in the agricultural sector, whether through traditional means or industrial, for subsistence or as an agricultural labourer, represents a momentous demographic group. Agricultural sector employs 80 percent of all economically active women comprising 33 percent of the agricultures in the country. Agriculture, the single largest production endeavour in India is contributing substantially to the GDP². As per the provisional estimates of national income released by CSO on 29th May 2020, the share of agriculture and allied sectors in Gross Value Added (GVA) of the country at current prices is 17.8 percent for the year 2019-20. The share of agriculture and allied sectors in GVA of the country has declined from 18.2 percent in 2014-15 to 17.8 percent in 2019-20, an inevitable outcome of a development process in which the relative performance of non-agricultural sectors becomes mole dominant³. Within the agriculture sector, the share of crops has fallen from 11.2 percent in 2014-15 to 9.4 percent in 2018-19. The decline in the share of crops has been made up by an increase in the share of livestock and fisheries sectors⁴. Given the importance of the agricultural sector, the Government of India has taken several steps for its development in a sustained manner.

The Governments should not neglect the Indian farming community who are the toiling and struggling at farm level for the sustainable development of the agriculture. Even today India is predominantly an agrarian Country in which the farmer (cultivator) and the agricultural labourer are kingpins. The cultivator and the agricultural labourer are considered as farm families⁵. Increasing of percentage of female operational holders during different Agriculture Censuses indicates participation of more and more women in operation and management of agricultural holdings in the country. Women in India are making essential contributions to agriculture and rural economies⁶.

Classification of Workers

The economic growth and development of a nation depends on the quality of its workforce. Indian economy has been predominantly agricultural which contributes one third to the total workforce distribution also presents data regarding number of main and marginal workers. With the commencements of welfare schemes of the government, the percentage of marginal workers to total workers substantially increased from 9 in 1999 to 24.8 in 2001. The state-wise classification of workers is presented in table-1.

Table-1 State-wise Classification of Workers-2011

States	Total Population	Total Working Population	Total Main Workers	Total Marginal Workers	Total non-workers	Percentage working pop to total pop
Andhra Pradesh	845.81	394.21	330.37	63.85	451.58	46.61
Arunachal Pradesh	13.84	5.88	4.79	1.09	7.96	42.49
Assam	312.06	119.70	86.87	32.83	192.36	38.36
Bihar	1041.00	347.25	213.60	133.65	693.74	33.36
Chhattisgarh	255.45	121.80	82.42	39.39	133.65	41.68
Gujarat	604.40	241.68	203.65	44.02	356.72	40.98
Haryana	253.51	89.67	70.15	19.01	164.35	35.37
Himachal Pradesh	68.65	35.59	20.62	14.97	33.05	51.84
Jammu and Kashmir	125.41	43.23	26.44	16.79	82.19	34.47
Jharkhand	329.88	130.98	68.19	62.80	198.90	39.71
Karnataka	610.95	278.73	233.97	44.75	332.23	45.62
Kerala	334.06	116.99	93.30	22.89	217.87	35.02
Madhya Pradesh	726.27	315.74	227.02	88.72	410.53	43.47
Maharashtra	1123.74	494.28	437.63	56.65	629.46	43.99
Odisha	419.74	175.42	107.08	68.34	244.33	41.79
Punjab	277.43	98.97	84.51	14.46	178.46	35.67
Rajasthan	685.48	298.86	210.58	88.28	386.62	43.60
Tamil Nadu	721.47	328.85	279.42	49.43	392.63	45.58
Tripura	36.74	14.69	10.77	3.93	22.04	39.98
Uttaranchal	100.86	38.72	28.71	10.02	62.14	38.39
Uttar Pradesh	1998.12	658.15	446.35	211.79	1339.98	32.94
West Bengal	912.76	347.56	256.87	90.70	565.20	38.08
Total	12108.55	4818.89	3625.66	1193.23	7289.66	39.80

Source: GOI: Registrar General of India, Census Reports.

The table above shows the total working population total main and marginal workers and total non-workers in India during 2011. The total workers constitute 40 percent of the total population in India. The highest number of working population is found in U.P (13.66 percent) followed by Maharashtra (10.26 percent) combined A.P (8.19), Bihar (7.2 percent) and Tamil Nadu (6.83 percent). The total main workers accounted for 30 percent of the total population but more than 75 percent of the total working population.

Agricultural Workforce in India

The cultivators and agricultural labourers contribute the agricultural labours/ workforce in rural india⁷. According to

the second Agricultural Labour Enquiry published in 1960, agricultural labour families constituted nearly 25 percent of all rural families. According to this, more than 85 percent of the rural workers are casual, serving any farmer who is willing to engage them and only 15 percent of agricultural labourers are attached to specific landlords. More than half of the workers do not possess any land, and even the rest of them own only very little of land. Agricultural labourers predominantly belong to the scheduled castes, scheduled tribes and other backward classes. According to one estimate, between 75 and 80 percent of all agricultural labourers belong to the scheduled castes. The agricultural labour force has been continuously increasing in rural India as there is no spread of

industrial activities that results shifting of occupational pattern in rural India. According to the Nation Commission on Rural labour (1991), during 1987-88, out of 108.4 million rural households, 43 million household's belonged to rural labour households and among them, agricultural labour households were of the order of 33.3 million. In relative terms, rural labour households accounted for 39.7 per cent of total labour households and agricultural labour households were of the order of 30.7 percent. This implies that agricultural labour households constituted about 77 percent of all rural labour households in 1987-88⁸. The particulars relating to total population including rural population, total workers, and agricultural workers are presented in table-2

Table-2 Population and Agricultural Workers in India

(In millions)

Year	Total Population	Average Annual Exponential Growth Rate (%)	Rural Population	Total Workers	Agricultural workers		
					Cultivators	Agricultural Labourers	Total
1951	361.1	1.25	298.5 (82.7)	139.5 (38.63)	69.9 (71.9)	27.3 (28.1)	97.2 (69.7)
1961	439.2	1.96	360.1 (82.0)	188.4 (42.9)	99.5 (76.0)	31.5 (24.0)	131.5 (69.5)
1971	548.2	2.20	439.0 (80.1)	180.4 (32.9)	78.2 (62.2)	47.5 (37.8)	125.7 (69.7)
1981	683.3	2.22	525.5 (76.9)	244.6 (35.8)	92.5 (62.5)	55.5 (37.5)	148.0 (60.5)
1991	846.4	2.16	628.7 (74.5)	314.1 (37.1)	110.7 (59.7)	74.6 (40.3)	185.3 (59.0)
2001	1028.7	1.97	742.5 (72.2)	402.2 (39.1)	127.3 (54.4)	106.8 (45.6)	234.1 (58.2)
2011	1210.9	1.50	833.7 (68.9)	481.9 (39.1)	118.8 (45.1)	144.3 (54.9)	263.1 (54.6)

Source: GOI: Registrar General of India, Census Reports.

The table above shows that the total population has been continuously increased at an average annual exponential growth rate from 1.25 percent in 1951 to 2.16 percent in 1991 and it has declined to 1.50 percent in 2011 as the government had adopted small family norms and given incentives for family planning programmes in the country. On the other, the rural population has continuously increased at a rapid growth rate in physical terms from 1951 to 2011 in fact, there is more than two and half fold increase in the rural population but the percentage of rural population to the total population has steadily declining from 83 percent in 1951 to 69 percent in 2011, shows that the pressure on agricultural land has gradually decreasing in India. The total number of workers in the country has been increased by more than three and half times since 1951. However, the percentage of total workers to total population is more or less the same at 39 percent in 1951 and 2011. But there is a decline in the percentage and physical terms in 1971. The total agricultural workforce has steadily increased from 97 million in 1951 to 263 million in 2011 registering an increase of 1.71 percent. But the percentage of agricultural labour force to the total workers in India has gradually declined from 69 percent to 55 percent during the same period. The above analysis reveals that the rural people who developed on agricultural sector have migrated to the towns/cities for eking out their lively hood and reduced the burden on land to some extent.

The table further explains that the number of cultivators has increased by more than one and half times during the same period. The cultivators have accounted for 71.9 percent to the total agricultural labour force in 1951. The percentage of cultivators to the total agricultural labour force has reached to 76 in 1961, thereafter; it has gradually declined to 45 percent in 2011. The number of cultivators has disappeared from the cultivation and migrated and settled in the nearest towns/Cities. As a result as it, the number of small and marginal farmers who are also agricultural labour has increased by more than five-fold from 1951 to 2011. Their proportionate share in the total agricultural labour force has continuously increased from 28 percent in 1951 to 55 percent in 2011.

Sex-wise Classification of Workers :

The utilization of human resources for the socio-economic progress of a nation through occupational structure, labour force participation has of immense importance. The distribution of workers among different occupational categories along with regional disparities relating to the occupational structure shows the lopsided development of some parts of the nation. Occupational structure changes the whole economic activity of the people in the region. Occupational sex segregation is an important to explain the progress of the male and female work participation. State-wise and sex-wise classification of workers in India are presented in table:3

Table-3 State-wise sex-Wise Classification of Workers

States	Census 2001		Census 2011					
	Male Working population	Male main Workers	Female Working population	Female main Workers	Male Working population	Male main Workers	Female Working Population	Female Main Workers
Andhra Pradesh	268.52	244.16	143.21	103.32	241.86	214.60	152.37	115.77
Arunachal Pradesh	2.94	2.67	1.89	1.48	3.50	3.01	2.37	1.78
Assam	68.7	58.49	26.68	12.65	85.52	70.35	34.28	16.52
Bihar	204.83	175.11	74.92	35.42	252.22	172.71	95.03	40.89
Chhattisgarh	55.32	47.43	41.48	23.12	71.34	55.97	50.46	26.44

Gujarat	144.77	134.81	67.78	35.45	180.01	165.68	67.67	37.98
Haryana	57.16	49.33	26.62	13.08	68.07	58.61	21.10	11.55
Himachal Pradesh	16.87	13.33	13.06	6.31	20.43	14.39	15.16	6.24
Jammu and Kashmir	26.80	22.27	10.74	3.82	31.95	23.06	11.28	3.38
Jharkhand	66.60	51.34	34.49	13.13	84.25	52.34	46.73	15.84
Karnataka	152.35	138.97	82.99	54.68	182.70	163.50	96.02	70.47
Kerala	77.66	64.61	25.18	17.76	84.52	71.80	31.67	21.50
Madhya Pradesh	161.94	140.56	95.99	50.46	201.47	163.62	114.27	63.40
Maharashtra	268.52	244.16	143.21	103.32	326.17	299.89	168.11	137.74
Odisha	98.02	80.05	44.74	15.85	119.03	87.94	56.39	19.13
Punjab	69.60	64.26	21.67	14.10	80.74	72.65	18.23	11.86
Rajasthan	146.96	128.41	90.71	45.96	182.97	152.44	115.89	58.14
Tamil Nadu	181.00	163.03	97.78	74.54	214.35	189.61	114.50	89.81
Tripura	8.31	7.42	3.28	1.70	10.45	8.88	4.24	1.89
Uttaranchal	19.96	16.39	11.37	6.83	25.52	20.71	13.20	8.00
Uttar Pradesh	409.81	343.38	136.02	49.99	498.47	374.21	159.68	72.15
West Bengal	223.88	194.95	70.94	35.29	267.17	216.78	80.40	40.08
Total	2750.14	2401.48	297.38	728.57	3319.40	2732.10	1499.49	893.56

Source: GOI: Registrar General of India, Census Reports.

The table above shows that male and female working population and male main workers and female main workers during 2001 and 2011 Census periods. The male working population has increased from 2750 million in 2001 to 3319 million in 2011, registering an increase of more than 5 fold 20.70 percent while the female working population has increased by during the same period. The male main workers have also registered an increase of 13.77 percent while that of female main workers have also grown by 7.29 percent in 2011 when compared with the of 2001 census. Male main workers population has declined by 13.11 percent in A.P state only. The rest of the states have witnessed an increasing trend in the number of male working population. The highest increase in the total male working population is found in Rajasthan (24.50 percent) followed by Madhya Pradesh (24.10 percent), Bihar (23.14 percent) U.P (21.63 percent) and Tamil Nadu (18.43 percent).

Female working population has spectacularly increased from 2001 Census to 2011 is found in case of Rajasthan state (27.76 percent) followed by Bihar (26.84 percent), Odessa (26.06 percent) Uttar Pradesh (22.81 percent), Chhattisgarh (21.65 percent) and Madhya Pradesh (19.04 percent). There is a

considerable increase is witnessed in the state of Tamil Nadu (17.10 percent) followed by Maharashtra (17.39 percent), Karnataka (15.06 percent) and West Bengal (13.34 percent). The female working population has declined in case of Gujarat, Haryana and Punjab due the increasing industrial activities which favour and attract male working population. The number of female main workers has increased most all states except Haryana, Jammu and Kashmir, Jharkhand and Punjab states. The significantly in Uttar Pradesh (44.33 percent) followed by Maharashtra (33.31 percent) Karnataka (28.88 percent), Rajasthan (26.50 percent), Madhya Pradesh (25.64 percent), Kerala (20.83 percent) Odessa (20.69 percent), and Tamil Nadu (20.49 percent). In the rest of the states, the number of female main workers has witnessed a considerable increase in 2011 over 2001. In Punjab, the number of female main workers has declined due to mechanization of agriculture.

Occupational Differentiation by States

Occupational differentiation by States shows that the empirical differences in the occupational structure of the labour force in the different states. Values of the index of occupational differentiation by States and occupation in India between 2001 and 2011 are presented in table-4

Table-4 Values of the index of occupational differentiation by occupation in India 2001 and 2011.

States	Cultivators		Agro. Labour		HHI		Other Worker		Coeff.-Variation	
	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
Andhra Pradesh	1.089	1.126	0.696	0.734	0.638	0.675	1.430	1.335	34.53	28.32
Arunachal Pradesh	0.762	0.818	0.878	0.824	0.838	0.797	1.452	1.288	27.91	25.59
Assam	0.965	1.128	0.856	0.775	0.396	0.449	1.155	1.059	33.18	29.12
Bihar	1.152	1.197	0.810	0.901	0.704	0.613	1.464	1.174	29.19	28.01
Chhattisgarh	1.001	1.041	0.682	0.753	1.023	1.039	1.529	1.424	28.62	27.39
Delhi	0.547	0.892	0.523	0.805	0.754	0.953	1.019	1.004	28.00	25.33
Goa	0.582	0.723	0.482	0.636	0.761	0.860	1.135	1.048	33.64	25.21
Gujarat	0.982	1.140	0.614	0.601	0.768	0.745	1.283	1.248	27.49	25.70
Haryana	0.853	0.890	0.746	1.059	0.854	0.864	1.243	1.157	20.48	27.12
Himachal Pradesh	0.731	0.736	1.065	1.029	1.181	1.124	1.644	1.470	34.27	27.11
Jammu and Kashmir	0.813	0.721	1.155	1.046	0.636	0.473	1.257	1.221	26.01	27.82
Jharkhand	0.913	0.910	0.721	0.766	0.778	0.705	1.526	1.411	32.58	27.95
Karnataka	1.124	1.155	0.568	0.617	0.568	0.654	1.315	1.200	37.25	28.14
Kerala	1.235	1.249	0.785	0.818	0.516	0.725	1.066	1.022	30.43	27.69
Madhya Pradesh	0.991	1.069	0.699	0.757	0.745	0.786	1.499	1.349	32.27	27.47
Maharashtra	0.820	0.880	0.617	0.684	0.739	0.800	1.476	1.327	36.84	27.42
Manipur	1.013	1.036	0.768	0.655	0.351	0.351	1.262	1.181	39.63	28.37
Meghalaya	0.919	0.933	0.886	0.883	0.709	0.736	1.218	1.137	19.62	27.83
Mizoram	0.892	0.931	0.800	0.879	0.847	0.793	1.196	1.112	16.61	27.25
Nagaland	0.834	0.419	0.875	0.887	0.699	0.712	1.452	1.298	29.91	27.92
Odisha	1.259	1.374	0.657	0.672	0.555	0.753	1.348	1.250	36.86	30.37

Punjab	1.291	1.372	0.942	0.890	0.526	0.583	0.959	0.971	31.18	30.34
Rajasthan	0.835	0.877	0.614	0.650	1.010	0.867	1.499	1.369	33.83	30.24
Sikkim	0.805	0.813	0.767	0.730	1.102	0.950	1.300	1.206	22.24	29.89
Tamil Nadu	0.974	0.981	0.688	0.644	0.583	0.580	1.332	1.234	32.48	29.96
Tripura	0.972	1.161	0.722	0.767	0.447	0.455	1.252	1.101	35.14	30.07
Uttaranchal	0.612	1.168	1.220	1.119	0.934	0.656	1.598	1.413	33.28	30.04
Uttar Pradesh	1.083	1.167	0.674	0.838	0.728	0.656	1.340	1.102	28.40	29.79
West Bengal	1.192	1.374	0.823	0.901	0.376	0.400	1.184	1.103	37.31	30.10
INDIA	0.971	1.019	0.698	0.503	0.657	0.681	1.349	1.236	30.06	30.23

Source: Prasad V, Prathap m 2017. International journal of Economics and management Science 6: 434. Doi: 10.4172/2162-6359.1000434

The table above shows that the degree of occupational differentiation by States is identified by coefficient of variation. The highest the value of coefficient of variation the greater will be the occupational differentiation by the States. The coefficient of relative variations computed for the different States for the census years concerned reveals that there is no improvement in India for occupational differentiation throughout the period. The highest occupational differentiation by sex is found in case of Manipur in 2001 and in Odessa in 2011 whereas in 2011, the differentiation by sex above the national level in 2001. However, in 2011, the differentiation by sex is declining in all the states, only in Odessa, Punjab and Rajasthan values of the Indices are above the national level. Majority of the states have lower

occupational differentiation.

Occupational Differentiation by Sex

Occupational differentiation by sex known by the empirical differences in the occupational composition of male and female labour force. The value of index would be one, if males and females are distributed equally in all the occupational groups or there is no variation in the occupational distribution by sex. If the value of the index exceeds one; it explains that males are over represented in that particular occupation.

The state-wise distribution of working population by broad occupational groups and by gender and indices of concentration on India for the census periods 2001 and 2011 are shown in Table-5

Table-5 State-wise distribution of working population by broad Occupational Groups and Indices of Concentration, India 2001 and 2011 - Males

States	Cultivators		Agri Labour.		Household Industries		Other Workers		Percent of Population
	2001	2011	2001	2011	2001	2011	2001	2011	2001/2011
	Male	Male	Male	Male	Male	Male	Male	Male	Male
Andhra Pradesh	06.09	05.27	11.26	13.20	08.12	06.57	07.53	07.06	06.82
Arunachal Pradesh	00.16	00.18	00.02	00.03	00.04	00.04	00.03	00.11	00.11
Assam	02.85	03.75	01.45	01.83	01.53	02.10	02.65	02.62	02.55
Bihar	07.67	06.95	15.23	20.41	07.51	07.78	03.76	03.92	08.69
Chhattisgarh	02.89	02.93	02.15	03.81	01.32	01.16	01.37	01.44	02.06
Delhi	00.03	00.08	00.02	00.01	01.29	01.56	03.08	02.91	01.44
Goa	00.03	00.02	00.03	00.02	00.10	00.10	00.26	00.24	00.12
Gujarat	04.57	05.13	04.38	05.92	02.79	02.15	06.33	06.32	05.04
Haryana	02.17	02.16	01.25	01.69	01.51	01.91	02.44	02.42	02.17
Himachal Pradesh	00.98	01.10	00.10	00.17	00.39	00.38	00.62	00.64	00.56
Jammu and Kashmir	01.18	00.93	00.33	00.67	01.44	00.73	01.10	01.23	01.06
Jharkhand	02.82	02.77	02.59	03.80	02.72	02.31	02.05	02.28	02.71
Karnataka	05.66	05.75	04.57	05.33	04.64	04.48	05.97	06.25	04.98
Kerala	00.22	00.66	01.88	01.39	02.19	01.68	04.77	04.39	02.57
Madhya Pradesh	08.06	07.97	06.13	10.24	05.94	05.23	04.27	04.30	06.03
Maharashtra	07.82	09.18	08.59	11.00	06.48	07.06	11.88	11.21	09.36
Manipur	00.25	00.33	00.09	00.07	00.23	00.20	00.20	00.21	00.22
Meghalaya	00.42	00.34	00.16	00.17	00.11	00.10	00.17	0.20	00.24
Mizoram	00.15	00.16	00.02	00.04	00.04	00.04	00.09	00.09	00.08
Nagaland	00.32	00.31	00.03	00.05	00.11	00.10	00.04	00.16	00.17
Odisha	03.92	04.08	04.51	05.65	03.66	04.49	02.87	02.94	03.40
Punjab	02.06	02.12	01.93	02.01	02.04	02.55	03.17	03.09	02.35
Rajasthan	08.27	09.09	01.84	03.46	04.80	03.53	04.99	05.24	05.71
Sikkim	00.08	00.08	00.02	00.02	00.03	00.03	00.02	00.07	00.05
Tamil Nadu	03.82	03.30	07.44	07.86	07.41	06.04	08.04	08.47	05.80
Tripura	00.26	00.28	00.28	00.35	00.17	00.18	00.35	00.37	00.30
Uttaranchal	00.80	00.89	00.33	00.47	00.50	00.71	00.87	00.93	00.83
Uttar Pradesh	20.46	18.76	14.38	22.41	22.26	24.03	10.77	11.61	16.77
West Bengal	05.45	05.44	08.86	12.10	10.48	11.38	09.50	08.71	07.52
Index of Concentration	15.48	12.00	15.18	25.37	11.96	11.37	15.36	13.56	

Source: Prasad V, Prathap m 2017. International journal of Economics and management Science 6: 434. Doi: 10.4172/2162-6359.1000434

other remaining occupational groups have more or less the same level of concentration scores during 2001. In case of 2011 census, the highest concentration score is found in case of the agricultural labour category and the remaining categories like cultivators and other workers have a marginal variations in that respective concentration scores. With regard

to the state-wise distribution of males for the census periods of 2001 and 2011, the highest concentration scores have found in the occupational categories of agricultural labour, households industries and other workers during the two census period in Andhra Pradesh. But the cultivator category did not show the highest concentration in Andhra Pradesh. In fact, there is a heavy concentration score is found in case of agricultural labourers in Andhra Pradesh as it is an agrarian state having 6.82 percent of the total male population of the country. The agricultural labour accounted

for about 13 percent of the total agricultural labours of the country. Though the number of cultivators is comparatively lower in Maharashtra, Tamil Nadu and West Bengal States, the highest concentration score is found in case of other workers.

The State-wise distribution of working population by broad occupational groups of female and indices of concentration on India for census periods of 2001 and 2011 are presented in table-6

Table-6 State-wise Distribution of Working Population by Occupational Groups and Indices of Concentration, India 2001 and 2011 - Females.

States	Cultivators		Agriculture. Labourer		Household Industries		Other Workers		Percent of Population
	Female	Female	Female	Female	Female	Female	Female	Female	Female
	2001	2011	2001	2011	2001	2011	2001	2011	2001/2011
Andhra Pradesh	06.34	05.93	14.92	10.68	11.34	09.29	08.18	07.93	07.19
Arunachal Pradesh	00.34	00.42	00.02	00.02	00.03	00.05	00.13	00.15	00.11
Assam	02.62	02.67	00.87	00.87	02.57	03.34	03.36	03.35	02.59
Bihar	04.14	04.03	09.48	06.98	05.40	07.58	02.26	03.72	08.46
Chhattisgarh	04.40	04.39	03.70	03.32	01.01	00.87	01.42	01.47	02.17
Delhi	00.03	00.02	00.01	00.01	00.33	00.34	01.96	01.79	01.33
Goa	00.06	00.03	00.04	00.01	00.07	00.06	00.35	00.29	00.12
Gujarat	04.53	03.34	05.16	03.85	02.26	01.56	07.39	05.12	04.93
Haryana	02.77	01.92	01.14	00.35	01.01	00.89	03.09	01.96	02.02
Himachal Pradesh	02.67	03.21	00.08	00.09	00.23	00.25	00.46	00.61	00.58
Jammu and Kashmir	01.40	01.33	00.11	00.16	01.32	00.95	01.17	00.99	01.00
Jharkhand	03.54	04.23	02.76	02.53	02.36	02.68	01.47	01.89	02.73
Karnataka	04.92	05.08	07.29	04.68	06.75	05.54	07.55	07.84	05.13
Kerala	00.29	00.34	01.10	00.56	02.17	01.27	06.06	05.65	02.96
Madhya Pradesh	09.92	09.04	06.03	07.11	06.26	05.23	03.79	04.22	05.96
Maharashtra	12.25	13.83	11.91	08.11	06.36	06.25	10.03	10.49	09.21
Manipur	00.39	00.52	00.13	00.08	00.93	00.81	00.41	00.39	00.23
Meghalaya	00.51	00.60	00.16	00.11	00.14	00.13	00.35	00.39	00.25
Mizoram	00.30	00.28	00.03	00.02	00.04	00.05	00.23	00.17	00.09
Nagaland	00.66	00.77	00.03	00.04	00.15	00.16	00.19	00.24	00.16
Odisha	02.15	02.02	04.85	03.94	04.65	04.02	02.82	02.99	03.54
Punjab	00.72	00.50	00.78	00.42	01.89	01.59	04.79	02.64	02.23
Rajasthan	14.51	16.95	02.97	03.39	03.15	03.33	04.58	05.48	05.63
Sikkim	00.15	00.15	00.02	00.02	00.02	00.03	00.10	00.10	00.05
Tamil Nadu	04.42	04.21	08.82	05.76	10.36	09.04	09.73	10.05	06.14
Tripura	00.22	00.19	00.23	00.17	00.25	00.29	00.37	00.44	00.31
Uttaranchal	02.11	02.35	00.14	00.14	00.35	00.53	00.56	00.72	00.85
Uttar Pradesh	11.19	09.86	10.43	07.42	13.21	18.04	07.50	10.84	16.20
West Bengal	02.38	01.71	04.62	03.31	15.28	15.68	09.24	07.63	07.57
Index of Concentration	26.34	19.64	20.42	19.12	20.06	17.12	21.16	14.18	

Source: Prasad V, Prathap m 2017. International Journal of Economics and management Science 6: 434. Doi: 10.4172/2162-6359.1000434

The table above shows the concentration of workers particularly female workers in different categories of the economy. Among female workers the highest concentration of workers is found in case of agricultural labourers and the workers of the household industries at national level. The five states viz. Gujarat, Karnataka, Kerala, Maharashtra and Tamil Nadu have highest percentage share of other workers than the total share of their respective general population. The concentration index values of the occupations in India shows

that females are more concentrated than male workers this may due to their preferences to remain in their own places even accepting lower jobs. Generally the female do not the social mobility due to backwardness, poverty illiteracy and security.

Sex-wise Cultivators and Agricultural Labour during 2001-2011

The State-wise distribution of male cultivators and male agricultural labourers in 2001 census and 2011 census are presented in table-7

Table-7 Sex-Wise Number of Male Cultivators and Male Agricultural Labourers

States	Male Cultivators		Difference	Percentage Change	Male Agriculture Labour		Difference	Percentage Change
	2001	2011			2001	2011		
	2001	2011	2001	2011	2001	2011	2001	2011
Andhra Pradesh	39.07	43.57	4.50	11.52	25.10	81.30	56.20	223.90
Arunachal Pradesh	1.36	1.53	0.17	12.50	0.10	0.18	0.08	80.00
Assam	26.34	31.00	4.66	17.69	8.33	11.29	2.96	35.53
Bihar	64.57	57.45	-7.12	11.03	87.30	125.71	38.41	40.00
Chhattisgarh	24.66	24.24	-0.42	1.70	12.63	23.45	10.82	85.67

Gujarat	39.07	42.44	3.37	8.63	25.10	36.50	11.40	45.42
Haryana	18.55	17.89	-0.66	3.56	7.17	10.41	3.24	45.19
Himachal Pradesh	8.34	9.06	0.72	8.63	0.56	1.03	0.47	83.93
Jammu and Kashmir	10.05	7.65	-2.4	23.88	1.90	4.14	2.24	117.89
Jharkhand	24.05	22.91	-1.14	-4.74	14.85	23.42	8.57	57.71
Karnataka	48.33	47.54	-0.79	-16.35	26.21	32.83	6.62	25.26
Kerala	6.02	5.47	-0.61	-10.13	10.78	8.58	2.2	20.41
Madhya Pradesh	68.83	65.91	-2.92	-4.24	35.18	63.11	27.93	79.39
Maharashtra	66.81	75.92	9.11	13.64	49.24	67.74	18.50	37.57
Odisha	33.48	33.75	0.27	0.81	25.87	34.82	8.95	34.60
Punjab	17.63	17.53	-0.10	0.57	11.04	12.39	1.35	12.23
Rajasthan	70.63	75.18	4.55	6.44	10.55	21.33	10.78	102.18
Tamil Nadu	32.62	27.32	-5.30	-16.25	42.56	48.43	5.87	13.79
Tripura	2.21	2.29	0.08	3.62	1.62	2.14	0.52	32.10
Uttaranchal	6.84	7.35	0.51	7.46	1.90	2.87	0.97	51.05
Uttar Pradesh	174.80	155.12	-19.68	-11.26	82.46	138.03	55.57	67.39
West Bengal	46.55	45.00	-0.95	-2.04	50.80	74.53	23.73	46.71
Total	854.16	827.63			573.29	827.42	254.13	44.33

Source: GOI: Registrar General of India, Census Reports.

The table above clearly explains the number of male cultivators and male agricultural labourers and their decrease/ increase and the percentage change between 2001 and 2011 censuses in India. The highest number of male cultivators s found in Maharashtra followed by Assam, Rajasthan, Andhra Pradesh and Gujarat. The highest growth in terms of percentage is reported in case of Assam (18 percent) followed by Maharashtra (14 percent). A.P (12 percent) Gujarat (9 percent) and Uttarkhand (7percent). The rest of the States witnessed a declining trend between 2001 and 2011 Census. The highest number of male cultivators' is declined in U.P followed by Bihar and Tamil Nadu and Madhya Pradesh. In percentage terms, the highest number of male cultivators is declined in case of J&K (24 percent)

followed by Rajasthan (16 percent), Tamil Nadu (16 percent), UP (11 percent) and Bihar (11 percent). Out of 22 States, only nine States witnessed a growth in the number of male cultivators during the last decade ending 2011. With regard to the male agricultural labourers, there is a decline in the number of male agricultural labourers in Kerala (-20.41 percent) while the rest of the States have witnessed an increase in the number of male agricultural labourers. The highest number of male agricultural labourers is found in case of Andhra Pradesh followed by UP, Bihar, Madhya Pradesh and West Bengal. In percentage differences between 2001 and 2011 census, Andhra Pradesh stood in first place with 224 percent followed by Jammu&Kahmir 118 percent. The following table-8 presents the number of female cultivators and female agricultural labourers during 2001 and 2011.

Table-8 Sex-Wise Number of Female Cultivators and Female Agricultural Labourers

States	Female Cultivators		Difference	Percentage Change	Female Agriculture Labour		Difference	Percentage Change	
	2001	2011			2001	2011		2001	2011
Andhra Pradesh	18.96	21.34	2.38	12.55	26.52	88.37	61.85	233.22	
Arunachal Pradesh	1.41	1.50	0.09	6.38	0.09	0.18	0.09	100.00	
Assam	10.97	9.62	-1.35	12.31	4.31	7.16	2.85	66.13	
Bihar	17.36	14.51	-2.85	16.42	46.87	57.75	10.88	23.21	
Chhattisgarh	18.45	15.81	-2.64	-14.31	18.29	27.47	9.18	50.19	
Gujarat	18.96	12.03	-6.93	36.55	26.52	31.90	5.38	20.29	
Haryana	11.62	6.92	-4.70	-40.45	5.62	4.87	-0.75	-13.35	
Himachal Pradesh	11.21	11.56	0.35	3.12	0.39	0.72	0.33	84.62	
Jammu and Kashmir	5.87	4.80	-1.07	-18.23	0.56	1.33	0.77	137.50	
Jharkhand	14.84	15.24	0.40	2.69	13.66	20.94	7.28	53.29	
Karnataka	20.51	18.27	-2.24	10.92	36.06	38.73	2.67	7.40	
Kerala	1.22	1.23	1.11	90.98	5.42	4.65	-0.77	-14.21	
Madhya Pradesh	41.55	32.53	-9.02	21.71	38.82	58.82	20.00	51.52	
Maharashtra	51.33	49.77	-1.56	3.04	58.91	67.12	8.21	13.94	
Odisha	90.00	7.29	-1.31	-19.00	24.12	32.58	8.46	35.07	
Punjab	3.02	1.81	-1.21	40.17	3.86	3.49	-0.37	-9.59	
Rajasthan	60.77	61.00	0.23	0.38	14.68	28.01	13.33	90.80	
Tamil Nadu	18.54	15.16	-3.38	18.23	43.81	47.64	-3.83	8.74	
Tripura	0.92	0.67	-0.25	-27.17	1.13	1.40	0.27	23.89	
Uttaranchal	8.86	8.45	-0.41	-4.63	0.69	1.17	0.48	69.57	
Uttar Pradesh	46.88	35.46	-11.42	-24.36	51.55	61.36	9.81	19.03	
West Bengal	9.99	6.17	-3.82	-38.24	22.83	27.36	4.53	19.84	
Total	418.96	360.46	-58.50	-13.96	494.46	615.91	121.45	24.56	

Source: GOI: Registrar General of India, Census Reports

There is a drastic decline of more than 58 lakh female cultivators between 2001 and 2011 registering a decrease of 14 percent. Out of 22 states, only six States viz., A.P Assam,

Jharkhand, Kerala, Himachal Pradesh and Rajasthan witnessed and increase in the number of female cultivators. The rest of the state's witness an increase in the number of female cultivators. The highest number of cultivators who last the cultivation activity is found in Haryana (40 percent)

followed by Punjab (40 percent), West Bengal (38 percent) and Gujarat (37 percent). With regard to the increase/decrease of female agricultural labourers in India, generally agricultural labour in the country has continuously increased due to lack of any employment avenues except agricultural occupation in rural areas. But in case of female agricultural labourers, the increasing trend has become reverse in case of Haryana, Kerala and Punjab states where there is a decline in the number of female agricultural labour because of the adoption of mechanization in agriculture. More than 121 lakh female agricultural labourers have increased in 2011 over 2001, registering an increase of about 25 percent in the country. The highest number of female agricultural labourers is appeared in Andhra Pradesh with 62 lakh followed Madhya Pradesh with 20 lakh Rajasthan with 13 lakhs and Bihar with 11 lakh agricultural labour. The rest of the states have shown an increase in the number of agricultural labourers. In percentage farms, the highest increase in the number of female agricultural labourers is found in case of Andhra Pradesh (233 percent) followed by Jammu and Kashmir (138 percent), Arunachal Pradesh (100 percent) Rajasthan (91 percent), Himachal Pradesh (85 percent) Uttaranchal (70 percent) and Assam (66 percent). On the whole the number of female agricultural labourers have increased whereas the female cultivators have declined by 59 percent between 2001 and 2011 censuses.

Protection of Interest of Female workers

Formulation and coordination of policies and programmes for the female labour force within the frame work of national manpower and economic policies. There is a separate body to maintaining liaison with other Government agencies to secure effective implementation of the programmes in respect of women workers and it has to monitoring the implementation of the Equal Remuneration Act, 1976 and setting up of an Advisory Committee under the Equal Remuneration Act, 1976. 11.5 the ILO Convention No.100 of 1951 relating to Equal Remuneration for men and women was ratified by the Government of India in the year 1958. To give effect to the Constitutional provisions and also to ensure the enforcement of ILO Convention No.100, the Equal Remuneration Act was enacted on 1976. It should be implementing in good spirit to help the female agricultural labourers.

CONCLUSION:

Census 2011 report reveals about India's farmers and agricultural labourers. The variation in the number of main agricultural labourers ranges from 117 percent more in Rajasthan, 89 percent more in Himachal Pradesh and 73 percent more in Uttaranchal to 10 percent less in Kerala, 5 percent more in Bihar and 10 percent more in Punjab. The variation in the number of main cultivators ranges from 17 more in Assam, 2 percent more in Maharashtra and 2 percent more in Rajasthan to 40 percent less in Jammu and Kashmir, 24 percent less in Jharkhand and 20 percent less in Bihar. Throughout the states of India male workers are more than female workers, however, the distribution of population by sex shows that almost equal proportion of both the sexes in each state. The number of male cultivators have drastically declined that the female cultivators. The female agricultural labour has considerably increased between 2001 and 2011 census. They cannot migrate to towns and cities for employment. In fact, the female are existed more number in traditional occupations and still they are poor and backward level of development because they do not have social mobility due to lack of education and skills.

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