

THE EVALUATION OF GENDER WAGE DISCRIMINATION IN AGRICULTURAL SECTOR

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Abstract

Historically women have been credited with the origins of field agriculture. In rural India today, the majority of women continue to be engaged in agriculture and related activity. In fact as men move away from agriculture and diversify their occupation, women tend to be concentrated more in agriculture. There is thus an urgent need to focus on the concern of women in agriculture. For women agricultural labourers, who are growing in both absolute and relative numbers, show the concern regarding low level of wages, insecurity of employment and insecure workplace. The Indian census has been catching statistics based on economically productive work. The work done by women is mostly done for household is not always counted as economically productive work. Therefore, the work participation rate for women in India have been lower compared to men. Gender disparity in agriculture is evident with all activities concerning manual labour assigned to women while all actions involving machinery are mostly performed by men. Agricultural wages for women are on an average 30-50 % lesser than their male counterparts. This discrimination requires deeper analysis to throw some light in this emerge issue.

In the context of women agricultural labourers are facing huge gap and discrimination in many aspects such as wage, working hour, asset ownership, equal right and opportunities and other gender-related aspects. Though there is a wide space to develop them in terms of their equal rights and opportunities, the majority of them are left behind of the mainstream of society and they are also deprived both socially and economically in terms of education, health and living standard.

Key Words: Agriculture, Gender, Labour, Discrimination, equal, Development, Wage, Opportunity, employment, occupation, migration, Socio-Economic, farm, Participation, Gender Gap, Mainstreaming.

Objectives and Methodology

To evaluation of gender wage discrimination in agruculture in karnataka. This paper is based on the secondary sources of data. Which are collected from secondary data collected from different sources such as the Indiastata.com, Ministry of Agriculture, Government of India and Government of Karnataka, and Ministry of Labour and Employment, Govt. of India. The study has used Exponential Growth Model to measure the growth of agriculture labour wages and gender gap in agriculture wages between men and women in India and Karnataka.

Introduction

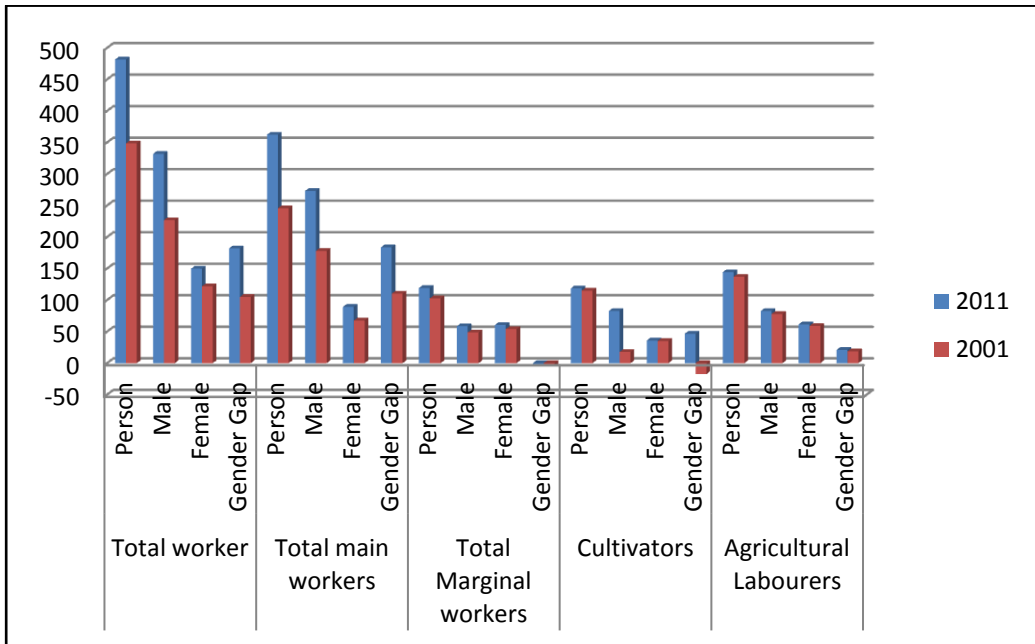
Women are the backbone of the developing economy. The role of women in the economy ensures the country's progress, stability, and long-term development. The primary sector primarily focuses on only one gender. Male is the major decision-makers and benefit seekers of the primary sector. The farming men practiced is commercially active, geared towards regional and international markets. The primary sector developed and emerged enormously by empowering men with technology. But these changes are failing to lift the women farmer as an integral part of the agriculture sector. The agriculture sector contributing 13.5% of the GDP of the Indian economy, and more than 55% of the rural population depend on the sector for employment. Women's role in Indian agriculture cannot be ignored; they include 48% of the female cultivators and 33% of agricultural Labour. Indian agriculture continues to absorb the female labour force but fail to recognize their role in agriculture. Rural women working in farming activities, take care of household activities, and their responsibilities. With household activities, women take care of livestock or poultry and other allied activities. Rural men migrate to urban areas for better opportunities. Women slowly and silently play many roles in the primary sector, from household activities to labourers and cultivators. Rural women's roles are changing very rapidly. Women have started to predominate every level of agriculture.

. Table :1 Distribution of Labour Force in India as per 2011 Census (Millions)

Particulars	Gender	2011	2001
Total worker	Person	481.70	348.60
	Male	331.90	226.80
	Female	149.90	121.80
	Gender Gap	182.00	105.00
Total main workers	Person	362.40	245.70
	Male	273.10	178.00
	Female	89.30	67.70
	Gender Gap	183.80	110.30
Total Marginal workers	Person	119.30	102.80
	Male	58.70	48.70
	Female	60.60	54.10
	Gender Gap	-1.90	-5.40
Cultivators	Person	118.70	115.00
	Male	82.70	17.80
	Female	36.00	35.10
	Gender Gap	46.70	-17.30
Agricultural Labourers	Person	144.30	137.00
	Male	82.70	77.90
	Female	61.60	59.10
	Gender Gap	21.10	18.80

Source: www.indiastat.com

Figure 1: Distribution of Labour Force in India as per 2011 Census (Millions)



Source: www.indiastat.com

Table 1 and figure 1 present the distribution of gender-wise labour force in India as per the 2001 and 2011 censuses. According to the above table, out of the total 481.7 million workers, around 331.9 million workers are male and the remaining 149.9 million workers are female. There is a significant increase in the number of total workers from the 2001 census to 2011. The gender gap between male and female in total workers is 182 million which is increased from 105 million in the 2001 census. Whereas, out of the total 362.4 million main workers, around 273.1 million workers are male and the remaining 89.3 million are female and the gender gap between these two is 183.8 million which only 110.3 million in the 2001 census was. Similarly, out of the total 119.3 million marginal workers, around 58.7 million workers are male and the remaining 60.6 million are female and the gap between these two is negative i.e. -1.9. Likewise, out of the total 118.7 million cultivators, around 82.7 million are male and the remaining 36.0 million are female and the gender difference between these two is 46.7 million which is increased drastically in the year 2011, it was negative during the 2001 census. Lastly, out of total of 144.3 million agricultural labourers, around 82.7 million labourers are male and the remaining 61.6 million labourers are female, the gender difference between these two is 21.1 million, it was 18.8 million in the year 2001.

In brief, the decadal growth of number of total workers, marginal workers, cultivators and the agricultural labourers is increased during the 2011 census and it was notable when compared to the 2001 data. But the dominance of the males continued except marginal workers.

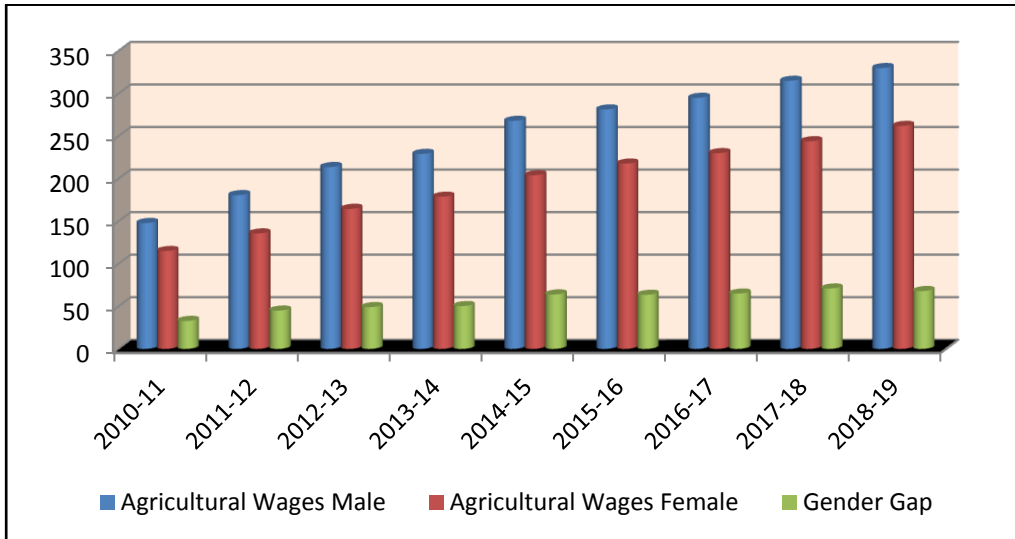
The gender difference is concern, there is a massive difference between male and female workers and this gap is increased in 2011 census when compared to the 2001 census of India.

Table 2: Annual Average of Agricultural Wages in India

Year	Agricultural Wages		Gender Gap
	Male	Female	
2010-11	147.91	115.02	32.89
2011-12	180.70	135.67	45.03
2012-13	213.71	164.57	49.14
2013-14	229.12	178.82	50.3
2014-15	268.00	204.00	64.00
2015-16	281.32	217.76	63.56
2016-17	295.00	230.00	65.00
2017-18	315.00	244.00	71.00
2018-19	330.00	262.00	68.00

Source : Directorate Of Economics And Statistics Department Of Agriculture, Cooperation & Farmers Welfare, Ministry Of Agriculture & Farmers Welfare

Figure 2: Annual Average of Agricultural Wages in India



Source: Directorate of Economics and Statistics Department of Agriculture, Cooperation & Farmers Welfare, Ministry Of Agriculture & Farmers Welfare

Annual average of agricultural wages in India is displayed in table 2 and figure 2. As per the above table, in the year 2010-11, the annual average of wages for men was 147.91 and 115.02 for women labourers. The gender gap between these two was 32.89 during the staid period. It has increased gradually to 330.00 for men and 262 for women labourers and the gender gap is around 68 in the year 2018-19. In sum, from the above analysis, it is revealed that there is a gradual increase in the growth of agricultural men and women wages in India and the gender gap is also increased during the reference period which is a main hurdle for gender development in the country. It is further noticed in the following econometric results also.

Table 2: Results of the Average Annual Growth of Agricultural Wages (Men and Women) and Gender Gap in India

Model Summary and Parameter Estimates							
Dependent Variable	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Wages of Male	.936	103.193	1	7	.000	151.177	.095
Wage of Female	.950	132.353	1	7	.000	115.071	.099
Gender Gap	.843	37.648	1	7	.000	36.122	.084

Source: computed

The results of the average annual growth of wages of male and female agricultural labourers and their gender gap are indicated in table 3.7. As shown in the table, the average annual growth of wage of male agricultural labourers is 9.5% which is statistically significant at 1% level with the R squared value of 0.936. The F value of the model is 103.193. It means that wages of male agricultural labourers have registered on an average 9.5% of the growth annually in the reference period. Whereas, the average annual growth of wages of female agricultural labourers is 9.9% which is statistically significant at 1% level with the R square value of 0.950. The F value of the model is 132.353. It means that wages of female agricultural labourers have recorded on an average 9.9% of the growth annually during the study period. Lastly, the average annual growth of the gender gap between male and female agriculture labourers' wages is 8.4% which is also statistically significant at 1% level with the R squared value of 0.843. The F value is 37.348. It means that the gender gap in wages between male and female labourers is significantly increased to an average of 8.4% annually.

Table 3: Agricultural in Wage Rates in India as per 2011 Census

Activity	Gender	Wage Rate (Rs)
Weeding	Male	98.96
	Female	81.10
Wage Gap		17.86
Transplanting	Male	105.46
	Female	88.18
Wage Gap		17.28
Harvesting	Male	106.87
	Female	88.69
Wage Gap		18.18
Threshing	Male	108.30
	Female	86.93
Wage Gap		21.37

Source: www.indiastat.com

With regard to the gender-wise agriculture wage rate for different activities as per census, 2011 is mentioned in table 3. According to the table, for weeding workman get 98.96 per day for the same work female labourers get 81.10. For transplanting workmen receive 105.46 per day for the same work female labourers get 88.18. Whereas for harvesting activities, male labourers receive 186.87, and female labourers get 88.69 for the same work. For crushing, male labourers get 188.30, and female labourers receive 86.93 for the same work. The data clearly shows huge wage gaps in all agriculture activities for the same work and same timings. In sum there is a gap in wages between male and female labourers in the agriculture sector, this gap is very high in threshing work when compared to the rest in India.

3.4 Women Agricultural Labourers in Karnataka

Agriculture labour has become the most important component in the agriculture sector. A little less than half of the total cost of production of field crop is of labour only. It is much more for labour-intensive crops such as sugarcane, cotton, vegetables etc. Agricultural labourers are socially and economically in the poorest section of society. Workers in the agricultural sector are classified into three main categories namely, cultivators, agricultural labourer and workers engaged in forestry, fishing and livestock etc. It is an established trend that as an economy matures; there is a movement of agricultural human resources from low productivity agriculture to higher productivity sectors. However, the trend has not been limited to just declining share of agriculture in total employment but also has led to a significant decline in an absolute number of people employed in the agricultural sector in India as well as in Karnataka. In the following section, the contribution made by the female farmers in various aspects relating to the agricultural operations in Karnataka is evaluated coherently.

Table 4: Number of Women Agricultural Workers in Karnataka

Sl. No.	Type of Worker	Location	Number of workers	In Percentage
1	Cultivators	a. Rural	1430089	97.30
		b. Urban	39715	2.70
		Total	1469804	100.00
2	Marginal workers	a. Rural	2132920	83.48
		b. Urban	422217	16.52
		Total	2555137	100.00
3	Agricultural labourers	a. Rural	2380106	94.79
		b. Urban	130717	5.21
		Total	2510823	100.00
4	Total main workers	a. Rural	5057884	71.77
		b. Urban	1989460	28.23
		Total	7047344	100.00

Source: Census of India (2011)

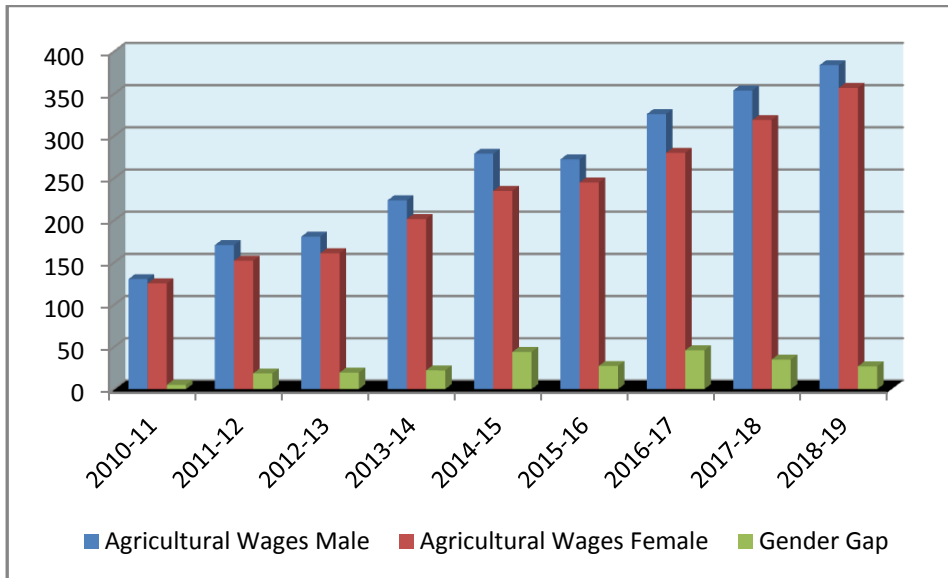
Table 3.9 presents the number of women agriculture workers in rural and urban Karnataka according to the Census 2011. As per the above table, there were 70,47,344 total female main workers in Karnataka in 2011, out of which 5057884 (71.77%) are rural female main workers, and 1989460 (28.23%) are urban female main workers. Whereas, out of 2510823 agricultural labourers, 5.21% of the workers situated in an urban area and 94.79% of the workers located in rural areas. Similarly, out of total 1469804 cultivators, majority of 97.3% of the cultivators are from rural areas, and 2.7% are from the urban area. Karnataka's total marginal workers are 2555137 in that 83.4548% of the rural and 16.52% from the urban area is marginal workers. It is very clear from the above analysis that, the highest percentage of female workers is located in rural Karnataka according to the 2011 census.

Table 5.: Average Agricultural Wages in Karnataka (in Rs)

Year	Agricultural Wages		Gender Gap
	Male	Female	
2010-11	130.35	125.34	05.01
2011-12	170.78	152.20	18.58
2012-13	180.71	161.12	19.59
2013-14	223.77	201.57	22.20
2014-15	279.00	235.00	44.00
2015-16	272.31	244.95	27.36
2016-17	326.00	280.00	46.00
2017-18	354.00	319.00	35.00
2018-19	384.00	357.00	27.00

Source : Directorate Of Economics And Statistics Department Of Agriculture, Cooperation & Farmers Welfare, Ministry Of Agriculture & Farmers Welfare

Figure 5: Annual Average of Agricultural Wages in Karnataka



Source : Directorate Of Economics And Statistics Department Of Agriculture, Cooperation & Farmers

Welfare, Ministry Of Agriculture & Farmers Welfare Table 5 and figure 5.1 clearly indicates the annual average of agricultural wages in Karnataka from the year 2010-11 to 2018-19. As stated in the above table and figure, the agriculture wage for male agricultural labourers was 130.35 and it has increased to 384.0 in the year 2018-19 in Karnataka. Whereas, in female agricultural labourers, the agricultural wage during 2010-11 was 125.34 which has increased gradually to 357 in the year 2018-19. Most importantly, the gender gap also has significant variations during the study period. It was 5.01 in the year 2010-11 which has increased to 27 in the year 2018-19.

Table 5.2: Results of the Average Annual Growth of Agricultural Wages (Men and Women) and Gender Gap in Karnataka

Model Summary and Parameter Estimates							
Dependent Variable	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Wages of Male	.963	181.685	1	7	.000	126.322	.131
Wage of Female	.987	531.483	1	7	.000	114.977	.128
Gender Gap	.527	7.784	1	7	.027	9.719	.176

Source: computed

The results of the average annual growth of wages of both male and female agricultural wages and the gender gap are reported in table 5.2. As per the given results, the average annual growth of wages of male agricultural labourers is 13.1 percent which is statistically significant at 1% level with the R squared value of 0.963. The F value is 181.685. It means that the average annual growth of wages of male labourers is increased on an average 13.1% annually. Whereas, the average annual growth of wages of female labourers is 12.8% which is also statistically significant at 1% level with the R Squared value of 0.987. The F value of the model is 531.483. It means that the wages of female agricultural labourers are increased on an average 12.8% annually. Lastly, the average annual growth of gender gap also 17.6% which is also statistically significant at 5% level with the R squared value of 7.784. It means that the gender gap is increased significantly on an average 17.6% annually in Karnataka.

It is revealed from the above analysis that, the average annual growth of wages of male agricultural labourers is high when compared to female and the gender gap is also increased drastically to 17.6% during the reference period which is precarious.

Conclusion: Woman status in India, as well as Karnataka, has analyzed in this paper with available data. It is observed that women are the backbone of the Indian economy and playing a pivotal role in Indian agriculture, but a role in the agriculture sector was invisible. "There is a huge gap in agriculture wages between men and women for different activities, and skill levels decide the wages of the labourers. For the above analyses, it is mentioned that women are an integral part of the agriculture sector, they are playing a very important role, but their role is invisible.

Due to unavailability of an institutional set up to recognize the invisible contribution made by the women segment leads to many constraints in bringing them back into the mainstream of society, therefore a systematic and scientific institutional effort is needed."

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