

GENDER BASED DISCRIMINATION IN RURAL LABOUR MARKET: A STUDY OF TWO SOUTH INDIAN VILLAGES

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Abstract: Women in rural India are involved in myriad activities, ranging from crop production to the management of household resources. It is also important to keep in mind the fact that women also spend a substantial part of their time in the management of live stock, poultry etc. According to 2001 census report about 72 percent of the entire female working force was engaged in agricultural operations in India. Thus it amply justifies that the women contributes more to the Indian agriculture than male, even though, since long time they were not given equal wages as compared to the men. It is often argued that since women do less labourious work than men they received lower wages than men. But the wage discrimination of women exists even for similar type of work performed by men and women.

Labour wage differences between men and women are not a new issue for debate but it is surprising at even after several efforts made by the government to remove this evil from the agrarian society, it still prevails extensively. The wage discrimination on the basis of gender in Indian agriculture is live issue for the discussion. Moreover, it is very important in the context of vehement changes in Indian economic and social structure. The women literacy levels and their organizational unity have been significantly climbing up one hand, and the state and central governments have been enacting the laws for their welfare and development on the other hand. But the inequality is persisting remarkably in the agricultural sector. Thus an assessment is needed to checkout weather these laws are being provided economic justice to the

women in our Indian agricultural sector, particularly at village level. With this background in this paper an attempt has been made (i) to examine the prevailing labour market organizational structure at micro level (ii) to study the rural wage market structure and wage rates for different operations and (iii) to explore the importance of women in agriculture and their discrimination in rural wage market.

Keywords: Discrimination, Employment, Labour Market, Gender, Wages

INTRODUCTION

Women in rural India are involved in myriad activities, ranging from crop production to the management of household resources. It is also important to keep in mind the fact that women also spend a substantial part of their time in the management of live stock, poultry etc (Bhagirath Dash, 2000, Agarwal, 1988, Sisodia, 1985). According to 2001 census report about 72 percent of the entire female working force was engaged in agricultural operations in India. Thus it amply justifies that the women contributes more to the Indian agriculture than male, even though, since long time they were not given equal wages as compared to the men. It is often argued that since women do less labourious work than men they received lower wages than men. But the wage discrimination of women exists even for similar type of work performed by men and women.

Haque(1998), made a study using secondary data in 15 major states found that the wage discrimination of

women exist even for similar type of work performed by men and women. Another study of Jyothi Kachroo(2006) used the primary data and found that the women labourers are more productive than male workers in all the agricultural operations. Rashmi Singh and Sangeeta rai(2003) in their study reported that gender divisions are stark with all activities involving manual labour or monotonous work assigned to women while men generally perform all operations involving machinery. Agricultural wages for women are an average 30-50 percent less than those for men despite putting up equal hours and intensity of labour inputs.

Parthasarathy's(1996) study used secondary data and observed the wage rates of agriculture labourers in major 14 states of India. It found that in 1964-65 female real wages formed only 64 percent of male wages. There has been a rise in the share in 1974-75, 1977-78, 1983 and 1987-88 as compared to 1964-65. But the variation between male and female wages still existed. The major reason for discrimination of females is traditional bias against female workers. This study also found that in the irrigated area male wages are also better as compared to wages in the unirrigated areas. In another study Jeemol Unni (1997) found that the male-female wage differentials had declined steadily to fall to 1.3 in 1987-88 from 1.7 in 1965. After 1996, however the differential stagnated in most states, and even rose in few others. Study of Singh *et al*(2003) on the basis of primary data found that wage disparity were higher among men and women in agriculture where men enjoyed with higher wages than women while incase of non-farm activity, male-female labour wages differentials were meager. Most of the studies conducted in Indian agriculture either using secondary or primary data are concluded that the women labourers were discriminated in the labour market on the basis of gender.

Labour wage differences between men and women are not a new issue for debate but it is surprising at even after several efforts made by the government to remove this evil from the agrarian society, it still prevails extensively. Theoretical arguments available in the literature display inadequacies in their explicatory potentials to understand wage discrimination process in the Indian context. Nevertheless, often some of these are extended to justify or explain gender wage differentials. Women's labour productivities or efficiency levels being lower than that of men undertaking similar work, or that the physical/biological nutritional requirements for women being considered lower than that of men, serve as a justification for relatively lower wage rates being assigned to women as compared to men. But some of the studies found that

the common notion that female labour is less efficient input than her male counterpart is not correct and their productivities level also equal to their counterpart. Moreover they participate in the operations keenly and work effectively than male labourers (Jyothi Kachroo, 2006, Krishnaraj, Maithreyi and Amita singh,2004). It is further pointed out that the gap in wage earnings persists in the specific operations where women tend to have a greater presence like transplantation, weeding, etc. Women's jobs, because they are women's jobs, are paid less regardless of other consideration like productivities. Even though the female productivities levels are equal to their counterpart male labourers, but they are being paid lower wages on the basis of gender biasedness(Singh Rashmi and Sangeeta rai, 2003).

The wage discrimination on the basis of gender in Indian agriculture is live issue for the discussion. Moreover, it is very important in the context of vehement changes in Indian economic and social structure. The women literacy levels and their organizational unity have been significantly climbing up on one hand, and the state and central governments have been enacting the laws for their welfare and development on the other hand. But the inequality is persisting remarkably in the agricultural sector. Thus an assessment is needed to checkout weather these laws are being provided economic justice to the women in our Indian agricultural sector, particularly at village level. With this background in this paper an attempt has been made (i) to examine the prevailing labour market organizational structure at micro level (ii) to study the rural wage market structure and wage rates for different operations and (iii) to explore the importance of women in agriculture and their discrimination in rural wage market.

STUDY AREA

Jayavaram and R.C.Puram villages from Prakasam district of Andhra Pradesh purposively selected for this study. These two villages are quite opposite by nature of labour market, cropping pattern and natural resources. Jayavaram (Tangutur mandal), is an un-irrigated village and totally depends upon rainfall for the agriculture and the main crop is tobacco. This village is only 2.5 kms away from the mandal headquarter, Tangutur, where the number of tobacco companies and industries are located. In addition to agriculture the labourers are getting employment in these tobacco industries as off seasonal work. Moreover, in this village the labour market is well organized and women labour participation in decision making is active.

Ramachandra Puram (Jarugumalli mandal) is an irrigated village and located 16 kms away from

Tangutur town and 15 kms away from Kondepi town. Paddy and tobacco are the important crops and importantly agriculture is the only source for the labour livelihood. After the agriculture season most of the village labourers used to migrate to the near towns, seeking employment for their subsistence. It is important to note that the village labour market is scattered and unorganized and women labour role is passive in the decision making.

In both the villages, crops are cultivated during two seasons such as khariff and rabi. It is observed that the rabi season is economically significant for farmers as well as for the labourers, as it generates higher levels of income. The tobacco and paddy are the major rabi crops in R.C.Puram and tobacco, bengalgram and eucalyptus are the important rabi crops in Jayavaram. More over in both the villages, majority of land is being cultivated under the commercial crops.

METHODOLOGY AND SAMPLE DESIGN

The present study is mainly based on the primary data on employment, wages and organizational structure of labour market, collected from the villages through interviewing the heads of the selected households and used a separate questionnaire for each household. In addition to this, the focus group discussion (FGDs) was conducted with the village community in order to acquire more accurate qualitative information and data. The household survey was conducted during May 2006 to March 2007 and 2009 (March to June) in the selected villages. The labour employment and wages tables were prepared on the basis of interview schedules and taken averages. Besides this, local team leaders of agricultural labourers are also consulted to get more accurate and qualitative data. While preparing labour mandays in each crop, own family labour employment days have also been taken into account.

Jayavaram village is inhabited by 318 households and Ramachandra Puram is inhabited by 272. In both the villages, the total number of households are 590 and the number of sample households selected are 217 i.e. 36 percent from each category of households from each village. Totally 117 households from Jayavaram and 100 households from Ramachandra Puram are selected on the basis of Random Sampling and total sample households are classified into four categories such as landless labourers, small farmers, medium-farmers and **large farmers**¹. In Jayavaram, out of 117 sample households, landless labour households are 44, small farmers' households are 50, medium farmers' households are 13 and large farmers' households are 10. In the village of Ramachandra Puram, out of 100 sample households, landless households are 42, small farmers' households are 38, medium farmers' households are 11 and large

farmers' households are 9. The head of the household is interviewed to get the necessary data. The interviews were held both at the farmer's houses and also in the fields. The primary data is supplemented by the data collected from these secondary sources.

STRUCTURE OF LABOUR MARKET, EMPLOYMENT AND WAGES IN R.C.PURAM

Organizational structure of village labour market

The village labour market is unorganized and scattered. It is found from the household survey and focus group discussions (FGDs), that there is no *muta* or agricultural team that existed in this village either from the socially backward community agricultural labourers or from non-dalit community agricultural labourers. During the agricultural season, the farmer usually informs a labourer, who has good rapport with him, about the labour requirement of that day. That one worker gathers the labourers as per the farmer's requirement on that day. Moreover the wages are fixed after the completion of each operation. The wage fixation totally depends upon the farmers' choice. The choice of wage increase or retain the same as of the previous year, again, totally depends on the large farmer's decision. Here it is worth noting that the labourers are not given any chance to participate in the wage fixation process. The increase in labour wages totally depends on the farmer's grace but not on the demand of labour. Forced by their socio and economic conditions, the labourers usually accept even if the wages fixed by the farmer are same as that of the previous year. It is noted that agriculture is the only source of livelihood of landless labourers for their subsistence in this village.

The landless labourers, who are mostly from Dalit community, use to borrow money from farmers for unexpected expenses like marriages, illness and children's education etc. It is this debt of landless labourers with farmers which suppressed their voice against the low wages. One of the senior agricultural **labourers**² said, "We usually borrow money from the landlords for our unexpected expenses and needs, so if we ask for any increase in wages, they may ask for immediate repayment of the debt, thus we are unable to raise any voice about the wage fixation process and wage rates. Last year we asked for the hike of our daily wages and they rejected it. Moreover we never even dare to question the landlords, for if we questioned them, they may not call us for work and we will lose our livelihood". It is also observed that, among the sample households, highest illiteracy is recorded in landless labourers. This proves the fact that they are educationally backward. Interestingly, among all Dalit households in the village, only one person is found to be graduated.

Table 1: Labour Mandays in Tobacco and Paddy Crop Cultivation (acre)

Operation	Tobacco			Paddy		
	Male	Female	Total	Male	Female	Total
To spread Manure	2 (100.0)*	---	2(2.04)** (100.0)*	1 (100.0)*	---	1(1.61)** (100.0)*
Ploughing	6 (100.0)*	---	6(6.12)** (100.0)*	7 (100.0)*	---	7(11.29)** (100.0)*
To spread Fertilizers	2 (100.0)*	---	2(2.04)** (100.0)*	2 (100.0)*	---	2(3.23)** (100.0)*
Transplantation& gap filling	6 (46.15)*	7 (53.85)*	13(13.27)** (100.0)*	1 (9.09)*	10 (90.91)*	11(17.74)** (100.0)*
Plant protection& weedout	---	6 (100.0)*	6(6.12)** (100.0)*	---	8 (100.0)*	8(12.90)** (100.0)*
Pumping pesticides	6 (100.0)*	---	6(6.12)** (100.0)*	5 (100.0)*	---	5(8.06)** (100.0)*
Depestation with hand	---	5 (100.0)*	5(5.10)** (100.0)*	---	---	---
Plucking	---	---	---	3 (100.0)*	---	3(4.84)** (100.0)*
Harvesting/Reaping	7 (25.0)*	21 (75.0)*	28(28.57)** (100.0)*	1 (10.0)*	9 (90.0)*	10(16.13)** (100.0)*
Curing	15 (100.0)*	---	15(15.31)** (100.0)*	---	---	---
Heaping	---	---	---	3 (60.0)*	2 (40.0)*	5(8.06)** (100.0)*
Grading	2 (13.33)*	13 (86.67)*	15(15.31)** (100.0)*	---	---	---
Threshing	---	---	---	6 (60.0)*	4 (40.0)*	10(16.13)** (100.0)*
Total	46 (46.94)*	52 (53.06)*	98(100.0)** (100.0)*	29 (46.77)*	33 (53.23)*	62(100.0)** (100.0)*

Source: Household Survey. **Note:** *Figures in the parenthesis indicates the percentage share in the respective operation mandays ** indicates the percentage share of respective operation in total mandays. 1man day= 8 working hours.

The schooling is dropped at a very early age due to their adverse economic conditions. The poor socio and economic conditions of these landless labourers is taken as the advantage by the landlords leaving a dumb role for the labourers in the wage fixation process. With this background let us see the wage structure and employment condition prevailed in this village.

Employment

Tobacco and paddy are the important crops in this village and occupied major proportion of the area during the rabi season. Table 1 & 2 postulates the labour **mandays**³ in tobacco and paddy which are occupied major proportion in the village cropping

pattern. The operations included in tobacco crop cultivation are varying than that of paddy crop cultivation. It could be depicted from the table 5.34 that, all operations taken together per acre tobacco cultivation provides a total of 98 man days, of which 52 for female labourers and 46 mandays for male labourers. It indicates that the female workers are dominating the tobacco crop cultivation. The reasons for domination of female workers in the process of tobacco cultivation are varied. Firstly the lower wage for female workers than their counter part male labourers. Secondly the female labourers are specialized in some operations relating to the process of tobacco crop cultivation.

The data further reveals that the operations like plant protection, weeding, depestization with hand and grading totally dominated by female workers, whereas the operations like applying of manure, fertilizers and pesticides, and curing is totally subjugated by male workers. Transplantation process provides more or less equal employment mandays to male and female labourers, because female workers are specialized in the plantation process and men workers use to bring water from the nearest ponds. Hence it requires equal proportion of labour. Among the all operations harvesting operation provides more employment days (28 mandays), followed by *Kachha* grading (15 mandays), curing (15 mandays) transplantation (13 mandays), pumping pesticides (6 mandays). It is also found that out of the total number of employment mandays in tobacco cultivation, women workers employed 53.07 percent of days and the remaining 46.93 percent of man days employed by their counterpart male workers respectively.

The data presented in the table 2 portrays that one acre of paddy cultivation provides a total of 62 man days, of which 33 mandays for female workers and 29 man days for male workers. Like tobacco crop, paddy crop cultivation is also dominated by the female workers. Paddy crop cultivation included the operations like applying of manure, fertilizers and pesticides, ploughing, transplantation, weeding, plucking, reaping, heaping and threshing. Among these operations transplantation, weedout and reaping have been dominated by the female workers, while the remaining operations have been dominated by male workers. Out of all the operations transplantation provides more employment mandays (11) and registered 17.46 percent in total mandays. For applying manure, fertilizer, ploughing, plucking and applying pesticides only male workers are employed and taking these five operations together, provides 18 mandays of employment and registered 29.03 percent of share in total mandays.

Women are specialized in weeding, reaping and transplantation operation. But in the transplantation operation a male worker assists the female worker, who supplies the plants. Heaping operation provides total of 5 mandays, of which, 2 for female and 3 for male workers. The threshing operation provides total of 10 mandays, out of 6 for male workers and 4 for female workers. As tobacco harvesting operation, the paddy reaping process is fully dominated by female workers and out of 10 mandays, 9 for female and one for male labourers. Moreover out of total 62 employment mandays, 53.23 percent of mandays are employed by female workers and 46.77 percent of mandays are employed by male workers. This evidently shows the female workers supremacy in paddy field cultivation.

Wage rates in Different Crops

The table 3 exhibits that per day wage per workers for different operations of tobacco and paddy crop cultivation. In any operations of different cultivation, the female labourers are being paid fewer wages than the male workers. The overall variation is quite high in the case of tobacco cultivation. On an average in tobacco field a male worker is paid Rs.86.63/- per a day, whereas women worker is paid only Rs.62.02/- per day. Moreover in the tobacco crop cultivation on an average, a female worker paid only 71.59 percent of a male worker wage. It shows the high inequality between the labourers on the basis of gender. In case of paddy cultivation, on an average a male worker is paid Rs.82.76/- per a day, while a women worker paid Rs.56.67/- per a day. In the paddy crop cultivation on an average a female worker is paid only 68.48 percent of a male worker wage. Wage variation between male and female is slightly lower in tobacco cultivation than in paddy cultivation. The highest amount of wage per day is being paid to the male workers for ploughing (Rs.100/-), harvesting (Rs.100/-) and pumping pesticides (Rs.100/-) of tobacco cultivation. And the lowest amount wage of Rs.30/- per day is being paid to the female workers for grading of tobacco crop. Meanwhile in Paddy cultivation the highest amount of wage per day is being paid to the male workers for ploughing (Rs.110/-), and pumping pesticides (Rs.100/-) and the lowest amount wage of Rs.40/- per day is being paid to the female workers for weeding.

Wage Discrimination

Wage discrimination between male and female labourers also prevailed in the selected village on the basis of gender. The table 3 exhibits clearly a large wage gap persisted between male and female workers in tobacco and paddy crops. The wages of labourers vary from operation to operation in both the crops. There are only few agricultural operations like transplantation, harvesting and grading in tobacco cultivation and transplantation, reaping, heaping and threshing in paddy cultivation, are performed by both men and women workers.

In tobacco fields male workers gets wage Rs.55/- and female workers gets Rs.50/- at plantation and gap filling operations whereas it is Rs.60/- and Rs.50/- in paddy fields. Pumping of pesticides is totally operated by male workers and a male worker gets Rs.100/- for this operation in paddy as well as in tobacco crop cultivation.

The male and female workers are being paid equal wages for harvesting operation in tobacco crop cultivation. It is to be noted that among all the operations harvesting process is hard work. For this each labour spends nearly **14 hours**.

Table 2: Labour Wages in Tobacco and Paddy Crop Cultivation in Different Operations (Rs/Day)

Operation	Tobacco				Paddy			
	Male	Female	Average	F/M ratios (%)	Male	Female	Average	F/M ratios (%)
Applying Manure	50.00	---	50.00	---	50.00	---	50.00	---
Ploughing	100.00	---	100.00	---	110.00	---	110.00	---
Applying Fertilizers	50.00	---	50.00	---	50.00	---	50.00	---
Transplantation	55.00	50.00	52.31	90.90	60.00	50.00	50.91	83.33
Gap filling	55.00	50.00	52.31	90.90	---	---	---	---
Plant protection & Weeding	---	35.00	35.00	---	---	40.00	40.00	---
Applying pesticides	100.00	---	100.00	---	100.00	---	100.00	---
Plucking	---	---	---	---	70.00	---	70.00	---
Depestation with hand	---	35.00	35.00	---	---	---	---	---
Harvesting	100.00	100.00	100.00	100.00	---	---	---	---
Reaping	---	---	---	---	80.00	80.00	80.00	100.00
Heaping	---	---	---	---	70.00	55.00	64.00	78.57
Threshing	---	---	---	---	70.00	55.00	64.00	78.57
Curing	95.00	---	95.00	---	---	---	---	---
Grading	65.00	30.00	34.67	46.15	---	---	---	---
Average	86.63	62.02	73.57	71.59	82.76	56.67	68.87	68.47

Source: Household Survey. Average wage for each operation = (No. of male man days * Per day male wage + No. of female Man days * Per day female wage)/total male and female man days.

Moreover in this operation, the role of male worker is nominal and female worker use to do hard work, the male labour assists them in loading of raw tobacco leaves in tractor as well as in *barn*. Even though, the female workers puts lot of effort in this operation, paid equal wages to their counter part male labour, where male role is nominal. Same tendency also registered in case of reaping operation in paddy fields. But there is slight variation between male and female workers in case of heaping and threshing operations in paddy fields. In tobacco cultivation *kacha* grading is providing more employment to the female labourers, but the wage gap between male (Rs.65/-) and female (Rs.30/-) is quite high comparatively with other operations. The analysis on wage rates between male and female workers clearly indicates that the women workers are being paid lower wages than their counter part male workers and they are vehemently discriminated in the wage market. The studies conducted in Indian agriculture either using secondary or primary data on wage discrimination are corroborating the above analysis (Jyothi Kachroo, 2006, Bhagirath Dash, 2000, Singh *et al*, 2003).

STRUCTURE OF LABOUR MARKET, EMPLOYMENT AND WAGES IN JAYAVARAM

Organizational structure of labour market

It is found from the household survey and focus group discussion (FGDs) that the Jayavaram village labour market is well organized compared to the other selected village (R.C.Puram). Usually, a group of 20-25 agricultural labourers form a team called gang or *muta*. At present, in this village five *mutas* exist all together, out of which four are from dalit community and the remaining one is from non-dalit community. Moreover, these groups are formed on the basis of castes & communities and within the same castes & communities, further formation is based on surnames and sometimes on relationships. Each labour group has a team leader, who is generally called as '*Mutamestri*'. The team leader is usually elected on the basis of qualities like honesty, assiduity, education and most importantly the rapport with the landlords. It is interesting to note that even though the team leaders are endogenous, they unite whenever there is a problem related to the wage rates and employment. But in other social issues they are strictly scattered. *Mutamestri* controls the entire group and it is he who sends the labourers to work as per the requirement of the farmer. The decision of employment totally depends on *mutamestri*. Thus we see that there is no direct dealing between the workers and the farmers regarding the employment and it is the *mutamestri* who mediates between the employee and the employer. This *muta* or labour group continues upto the completion of transplantation and gap filling operation and

afterwards it dissolves because beyond this point, most of the operations are dominated by the female labour. In this scenario, a female team leader is elected for further operation. Again at the time of harvesting the same team gets reorganized, subsequently a male is elected as a team leader to pursue the entire harvesting process.

The wage rates for different operations involving in the cultivation of tobacco, bengalgram and plants are fixed before the plantation operation. Before the cultivation starts, the village farmers organise a meeting with all the team leaders in the village (including female *mutamestris*) and fix the wages of all different operations involved in the cultivation of all crops in the village. Before this meeting, each team leader discusses with the labourers in the group and decides the minimum and maximum wages of each operation in comparison to the previous year wages. After this discussion a decision is taken, and all village team leaders organize another meeting in order to discuss the decision taken in their own group meetings. Finally, they unanimously decide reasonable prices for each operation and one of the senior *mutamestris* is elected to discuss with the farmers. As a last step, as stated earlier, the farmers and *mutamestris* discuss about the wages and both come to a conclusion on the final fixation of the wages for all operations in that particular year. As per the information given by the *mutamestris*, the wages proposed by them may or may not be accepted in the meeting of farmers. However, since long time they are getting reasonable/acceptable wages for each operation. Once the daily wages for different operations are fixed, every farmer and labourers have to obey those wage rates and go by it. It is an interesting and appreciable fact to note that in the wage fixation process, female labourers play an active role by participating in the meetings with farmers. Quite importantly the increase in the labour wages to a large extent depends on the bargaining expertise of the *mutamestri*.

The full final payment is made after the successful completion of each operation. Meanwhile the farmers have to give some advance payment, which will be then deducted in the final payment. All monetary issues are carried out by the mediation of *mutamestris*, and as we observed earlier, there is no direct dealing between the employee and farmer regarding this. Thus, the village labour market is organized and *mutamestris* play a very crucial role along with the farmers in the fixation of labour wages.

Labour Employment

As mentioned previously rabi season is important in this village in the context of farmers and labourers economy. Tobacco, bengalgram and plant crops are

occupied major proportion of area in the village cropping pattern. Thus the employment and per day wage tables are prepared for these important crops only. Employment mandays of tobacco crop have been presented in the table 4. All the major operations starting from land preparation to *kachha grading*⁵ are taken into account while estimating the mandays of tobacco crop. The employment mandays are varying from operation to operation. It could be seen from the data presented in the table 4 that one acre tobacco cultivation provides a total 99 mandays of employment. Out of the total employment mandays, women labourers are employed in 51 mandays and their counterpart male labourers are employed in 48 mandays. It indicates that the intensity of female absorption is more than the male labourers. Moreover, out of total employment mandays female labourers account for 51.51 percent of share, whereas the male labourers registers for 48.49 percent of share. Among the total operations involved in tobacco cultivation, operations like applying fertilizers, manure and pesticides, curing is totally dominated by the male labourers, whereas the operations like plant protection, weeding, depestization with hand is dominated by female labourers. Very few operations like transplantation, harvesting, grading is being done by the male and female labourers.

The data further reveals that, the labour absorption is high in harvesting operation, which accounts for 28 mandays (20 for female and 8 for male) and registers 28.3 percent of share in total employment mandays. The grading process also provides more employment mandays after harvesting. In the harvesting process male labourers use to help the female labourers in the loading of raw tobacco in tractor as well as in 'Barn'. The transplantation and gap filling operation also provides 13 mandays, out of which, 6 for male labourers and 7 for female labourers. Applying fertilizers, pesticides and manure, taking together provides 9 mandays (9.09 percent), which are totally engaged by male labourers. The ploughing process provides 6 mandays which included bullock and machine labour, these operations also absorbed by only the male labourers. It is found that among the all operations involved in tobacco cultivation curing operation is prominent one. The colour and texture of the tobacco leaf mostly depend upon the efficiency of curing labour. This important operation provides 16 employment mandays, which is totally dominated by the male labourers. However on an average the tobacco crop cultivation is dominated by the female labourers.

The table 5 demonstrates that the per acre labour employment mandays in bengalgram crop cultivation in the selected village. The operations involved in bengalgram cultivation are applying pesticides,

manure and fertilizers, ploughing, sowing seeds, weeding, reaping and threshing. Among these operations weeding and reaping is fully dominated by the female labourers, whereas the operations like applying fertilizers, pesticides and manure, sowing seeds and ploughing are dominated by male labourers. Male and female labourers are engaged in only threshing operation. It could be depicted from the data presented in the table that one acre bengalgram cultivation provides only 45 employment manday, of which 21 are for male labourers and 24 are for female labourers respectively. Like tobacco, this crop is also dominated by the female labourers and occupied the share of 53.32 percent in total mandays. Among the all operations which are involved in bengalgram by female labourers, weedout provides more mandays (11) and accounts for 24.43 percent of share in total mandays per acre. The reaping is the second highest mandays providing operation, which is also dominated by female labourers, registered 20 percent of share in total mandays. The threshing and ploughing operations provide equal employment days (5) and individually accounts for 11.10 percent of share in total mandays. The threshing operation is mostly done by machine equipment and the male and female labourers assist this mechanical process. Taking male dominated operations like applying pesticides, fertilizer and manure, ploughing and sowing seeds together accounts for 12 employment mandays and register a 26.67 percent of share in total mandays.

Per acre labour employment mandays of plants, i.e., subabale and eucalyptus, cultivation has been presented in the table 6. The major operations involved in the plant crop cultivation are applying fertilizers and manure, ploughing, transplantation and gap filling, weedout and harvesting. The data presented in the table further depicts that on average, plants cultivation provides 42 employment mandays, of which 23 mandays are for male labourers and 19 mandays are for female labourers. Like tobacco and bengalgram the labour composition for each operation is varies. Contrary to tobacco and bengalgram labour composition in the plant cultivation is dominated by the male labourers. Out of total mandays, male labour mandays occupies 54.76 percent of share and female labour mandays account for 45.24 percent of share. Among the total operations prevailed in the plant activation only weeding operation is dominated by the female labourers, which provides 9 mandays (21.43 percent). On the other hand operations like applying fertilizers and manure ploughing is dominated by male labourers, which account for 9 mandays (21.43 percent). The operations like transplantation, gap filling and harvesting is being involved by male and as well as female labourers. Transplantation and gap

filling operation provide 11 mandays (26.20 percent) out of which 5 mandays are for male and 6 mandays are for female labourers. Further the harvesting process provides 15 mandays (35.71 percent) of which 10 mandays are for male labourers and 5 mandays are for female labourers. Among the all operations, where male labourers are involved, harvesting operation has occupied the major proportion (43.47 percent) in total male mandays and in total female mandays weeding operation has occupied the major proportion (47.37 percent) respectively.

The analysis on tobacco, bengalgram crop labour employment mandays from the gender point of view, shows us that some operations are dominated by female labourers and some operations are dominated by male labourers, but on an average in both the crops female employment mandays are more than the male labourers. However the plants cultivation shows a quite contrary situation to it. The overall operation of plants cultivation shows that the dominance of male workers and they occupied more mandays than their counterpart female labourers.

Labour wages for different operations:

Per day average wages of different crops of different operations prevailing in the village have been presented in the table 7. Except in few operations like harvesting in tobacco, in any other operation of different cultivations, the female labour is paid lower wages than the male labourers. The overall hiatus between male and female labour is quite high in bengalgram cultivation. On an average in bengalgram a male labour is being paid Rs.86.90/- per a day, whereas a women labour is being paid only Rs.52.50/- and is paid only 60.41 percent of a male labour wage. It indicates that there exists a high wage inequality between the labourers on the basis of gender.

The same unequal tendency between male and female also prevailed in the remaining two crops such as tobacco and plants, but the variation is much lesser than the variation in bengalgram. In tobacco cultivation, on an average a male worker is paid Rs.96.25/- per day, whereas a female worker is paid Rs.68.33/- per a day and the female labour is being paid 70.99 percent of male wages. Among the three corps the highest amount of wage per day is being paid to the male workers for harvesting (Rs.100/-) and ploughing (Rs.110/-) of tobacco cultivation. And the lowest wage of Rs.35/- per a day is being paid to the female labour for grading in the tobacco crop cultivation.

Table 3: Labour Mandays in Tobacco, Bengalgram and Plant Crop Cultivation in Jayavaram(acre)

Operation	Tobacco			Bengalgram			Plants		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
To spread Manure	1 (100.0)*	---	1(1.01)** (100.0)*	2 (100.0)*	---	2(4.44)** (100.0)*	1 (100.0)*	---	1(2.38)** (100.0)*
Ploughing	6 (100.0)*	---	6(6.06)** (100.0)*	5 (100.0)*	---	5(11.11)* (100.0)*	6 (100.0)*	---	6(14.28)* (100.0)*
To spread Fertilizers	2 (100.0)*	---	2(2.02)** (100.0)*	3 (100.0)*	---	3(6.67)** (100.0)*	1 (100.0)*	---	1(2.38)** (100.0)*
Transplantation & gap filling	6 (46.15)*	7 (53.85)*	13(13.13)** (100.0)*	---	---	---	5 (45.45)*	6 (54.54)*	11(26.19)** (100.0)*
Sowing seeds	---	---	---	3 (100.0)*	---	3(6.67)** (100.0)*	---	---	---
Plant protection & weedout	---	5 (100.0)*	5(5.05)** (100.0)*	---	11 (100.0)*	11(24.44)** (100.0)*	---	8 (100.0)*	8(19.05)* (100.0)*
Pumping pesticides	7 (100.0)*	---	7(7.07)** (100.0)*	3 (100.0)*	---	3(6.67)** (100.0)*	---	---	---
Depestation with hand	---	7 (100.0)*	7(7.07)** (100.0)*	---	---	---	---	---	---
Harvesting	8 (28.57)*	20 (71.43)*	28(28.28)** (100.0)*	---	9 (100.0)*	9(20.0)** (100.0)*	10 (66.67)*	5 (33.33)*	15(35.71)** (100.0)*
Curing	16 (100.0)*	---	16(16.16)** (100.0)*	---	---	---	---	---	---
Grading	2 (14.29)*	12 (85.71)*	14(14.14)** (100.0)*	---	---	---	---	---	---
Threshing	---	---	---	5 (60.00)*	4 (40.00)*	9(20.0)** (100.0)*	---	---	---
Total	48 (48.48)*	52 (52.52)*	99(100.0)** (100.0)*	21 (46.67)*	24 (53.33)*	45(100.0)** (100.0)*	23 (54.76)*	19 (45.24)*	42(100.0)** (100.0)*

Source: Household Survey, **Note:** *Figures in the parenthesis indicate the percentage share in the respective operation mandays ** indicates the percentage share of respective operation in total mandays. 1 man day= 8 working hours.

Table 4: Labour Wages in Tobacco, Bengalgram and Plant Fields in Jayavarm (Rs/Day)

Operations/Crop	Tobacco				Bengalgram				Plants			
	Male	Female	Average	F/M ratio	Male	Female	Average	F/M ratio	Male	Female	Average	F/M ratio
To spread Manure	70.00	---	70.00	---	70.00	---	70.00	---	70.00	---	70.00	---
Ploughing	110.00	---	110.00	---	110.00	---	110.00	---	110.00	---	110.00	---
To spread Fertilizers	70.00	---	70.00	---	70.00	---	70.00	---	70.00	---	70.00	---
Transplantation/ sowing seeds	60.00	55.00	57.31	91.67	75.00	---	75.00	---	60.00	55.00	57.27	91.66
Gap filling	60.00	55.00	57.31	91.67	---	---	---	---	60.00	55.00	57.27	91.66
Plant Protection /weedout	---	40.00	40.00	---	---	40.00	40.00	---	---	40.00	40.00	---
Pumping pesticides	110.00	---	110.00	---	100.00	---	100.00	---	---	---	---	---
Depestation with hand	---	40.00	40.00	---	---	---	---	---	---	---	---	---
Harvesting	110.00	110.00	110.00	100.00	---	60.00	60.00	---	100.00	90.00	96.67	90.00
Threshing	---	---	---	---	80.00	70.00	75.56	87.50	---	---	---	---
Curing	100.00	---	100.00	---	---	---	---	---	---	---	---	---
Grading	70.00	35.00	40.00	50.00	---	---	---	---	---	---	---	---
Average	96.25	56.25	81.87	58.44	86.90	52.50	68.56	60.41	90.42	57.00	75.23	63.04

Source: Household Survey, Average wage for each operation = (No. of male man days * Per day wage male wage+ No. of female Man days * Per day wage female wage)/Total male and female man days.

A COMPARISON OF VILLAGE WAGES WITH STATE WAGES

It is interesting to note that the prevailing average wages in both the villages are higher than the state level as well as Prakasam district level, but lower than minimum wages. It could be seen from the table 5 that in 2005-06 per day a male labour was being paid Rs.59.35/- and a female labour was paid Rs.42.25/- at state level, whereas it was Rs.61.25/- and Rs.51.13/- in Prakasam district respectively.

The table further depicts that during 1990-91 to 2005-06 the Prakasam district male, female and average wages significantly higher than the state wages and the district women workers are being paid higher wages than the state women workers. But the average real wages of Prakasam district have declined significantly from Rs.18.32/- in 1990-91 to Rs.15.19/- in 2005-06, whereas the male and female real wages also declined from Rs.19.29/- and Rs.16.55/- to Rs.17.38/- and Rs.13.82/- and registered negative growth rates (Table 7) during the same period respectively.

Table 5: Average Agricultural Labour Wages in AP and Prakasam District (Wages in Rs)

Year	Andhra Pradesh				Prakasam District			
	Male	Female	Average	F/M	Male	Female	Average	F/M
1990-91	17.53	12.50	15.02	71.29	25.00	22.50	23.75	90.00
1991-92	19.65	14.16	16.91	72.09	25.00	25.00	25.00	100.00
1992-93	23.13	16.94	20.03	73.25	29.58	25.00	27.29	84.52
1993-94	25.06	17.83	21.45	71.18	29.58	22.92	26.25	77.48
1994-95	24.36	19.79	22.07	81.26	35.42	31.25	33.34	88.23
1995-96	31.02	22.13	26.57	71.35	37.92	31.85	34.89	83.99
1996-97	34.40	25.16	29.78	73.15	39.35	33.25	36.30	84.50
1997-98	37.91	28.50	33.21	75.17	41.25	37.65	39.45	91.27
1998-99	40.56	29.63	35.09	73.04	43.45	39.32	41.39	90.49
1999-00	44.33	32.77	38.55	73.92	44.65	39.85	42.25	89.25
2000-01	47.49	34.70	41.10	73.07	45.98	40.25	43.12	87.54
2001-02	48.77	35.91	42.34	73.63	49.30	40.56	44.93	82.27
2002-03	49.16	36.05	42.61	73.33	49.72	42.78	46.25	86.04
2003-04	52.41	38.16	45.29	72.81	54.44	46.25	50.35	84.96
2004-05	55.75	40.16	47.96	72.04	54.86	48.82	51.84	88.99
2005-06	59.35	42.20	50.78	71.10	61.25	51.13	56.19	83.48

Source: Various reports of Agricultural Wages in India, Ministry of Agriculture, Govt. of India and Prices, Wages & Index Numbers (this report has been publishing since 1999-00, earlier unpublished data was collected from the official registers), Directorate of Economics and Statistics, Government of Andhra Pradesh.

Table 6: Real Wages of Agricultural Labour in Andhra Pradesh and Prakasam District

Year	AP			Prakasam		
	Male	Female	Average	Male	Female	Average
1990-91	13.53	9.64	11.58	19.29	17.36	18.32
1991-92	12.60	9.08	10.84	16.03	16.03	16.03
1992-93	11.07	8.11	9.59	14.16	11.97	13.06
1993-94	12.43	8.85	10.64	14.67	11.37	13.02
1994-95	11.44	9.29	10.36	16.63	14.67	15.65
1995-96	12.86	9.18	11.02	15.72	13.21	14.46
1996-97	13.33	9.75	11.54	15.25	12.89	14.07
1997-98	13.84	10.40	12.12	15.05	13.74	14.40
1998-99	12.92	9.43	11.18	13.84	12.52	13.18
1999-00	13.68	10.11	11.90	13.78	12.30	13.04
2000-01	14.70	10.74	12.72	14.24	12.46	13.35
2001-02	15.05	11.08	13.07	15.22	12.52	13.87
2002-03	14.37	10.54	12.46	14.54	12.51	13.52
2003-04	14.93	10.87	12.90	15.51	13.18	14.34
2004-05	15.49	11.16	13.32	15.24	13.56	14.40
2005-06	16.04	11.41	13.72	16.55	13.82	15.19

Source: Table: 5. **Note:** Real wages calculated by deflating money wages with CPIAL. Base 1986-87=100.

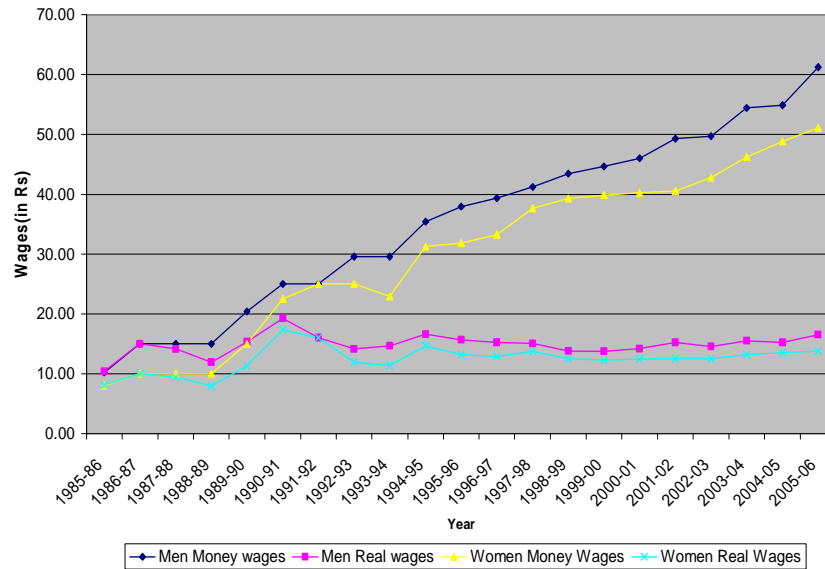


Figure 1: Comparison of Money and Real Wages of Agricultural Men and Women in Prakasam District

Table 7: Compound Growth rates of Real Wages in Andhra Pradesh and Prakasam District

Year	Andhra Pradesh		Prakasam District	
	Male	Female	Male	Female
1990-91 to 1995-96	-0.84	-0.82	-3.35	-4.46
1995-96 to 2000-01	2.26	2.66	-1.64	-0.96
2000-01 to 2005-06	1.46	1.00	2.55	1.74
1990-91 to 2005-06	1.07	1.05	-0.95	-1.42

Source: Table: 6. **Note:** Compound Growth Rates Calculated using the formula: $P_t = P_0 (1+r)^n$.

Table 8: Minimum Wages of Different Agricultural Operations in Andhra Pradesh as on 2004-05

Name of the operation	Basic wages (Round to nearest rupee)		
	Zone-I	Zone-II	Zone-III
Ploughing	84.0	74.0	64.0
Threshing	93.0	79.0	64.0
Scrowing	80.0	73.0	64.0
Transplanting	80.0	73.0	64.0
Harvesting	80.0	73.0	64.0
Weeding	80.0	73.0	64.0
Any other light operation not involving skill or hazard	68.0	64.0	64.0
Grass cutting workers	68.0	64.0	64.0
Digging	90.0	68.0	64.0
Stacking	90.0	68.0	64.0
Pruning	90.0	68.0	64.0
Supervisor	112.0	90.0	68.0
Head Mali	112.0	79.0	68.0
Mali	90.0	68.0	64.0
Watchman	112.0	79.0	68.0
Sprayer of pesticides	135.0	107.0	88.0
Tobacco plucker	112.0	112.0	101.0
Tobacco curing operation	130.0	90.0	90.0
Cotton plucking operation	112.0	112.0	101.0
Sugarcane plantation dressing	112.0	112.0	101.0
Other plantation operations in fields not classified elsewhere	112.0	112.0	101.0
Loading and unloading operations	112.0	79.0	70.0

Source: G.O.Ms.No.33, G.O.Rt.No.35, dated 17-07-2004, Commissioner of Labour, Labour, Employment, Training & Factories (Lab.II), Hyderabad, government of Andhra Pradesh, www.aponline.gov.in.

Zone-I: Mandals: Naguluppalapadu, Addanki, Korisipadu, Jamkavarampangalu, Ballikuruva, Sathamagalur, Martur, Yaddanapudi, Chirala, Vetapalem, Chinaganjan, Parchuru, Inhallu, Kramachedu,

Zone- II: Mandals: Ongole, **Tangutur**, Kothapatnam, chimalkurthi, maddipadu, Santhanthalapadu, Kondurur, Guluru, Vivivetivaripalem, Ponnalur, Kondapi, Jruigumilli, Ulavalapadu, Singarayakonda, Lingasamudram,

Zone-III: Mandals: Knigiri, Hanumanthunipadu, Pamul, Velingandle, Chandrasekharapuram, Pedacherlapalli, Pidili, Konakamitta, Marripadu, Darsi, Tallur, Mundlamuv, Donakonda, Kirichadu, Tarlapadu, Markapur, Dornala, Pedaraveedu, Yerragondapalem, Tripuranthakam, Pullalacheruvu, Giddalur, Racherla, Komarolu, Bestawaripet, Kumbam, Ardaveedu.

Important Note: The selected villages are located in the highlighted mandals in Zone- II respectively.

Contrary to district experience the state level agricultural labour average wages have declined slightly from Rs.11.58/- in 1990-91 to Rs.11.18/- in 1998-99, but afterwards it increased and reached a level of Rs.16.04/- in 2005-06. More or less same tendency prevailed in case of male and female real wages. Male real wages declined from Rs.13.53/- in 1990-91 to Rs.13.33/- in 1996-97, afterwards it increased (except 1998-99) slightly and reached Rs.16.04/- in 2005-06, whereas women real wages declined from Rs.9.64/- in 1990-91 to Rs.9.18/- in 1995-96 and afterwards it increased (except 1998-99) to Rs.11.41/- in 2005-06 respectively. It could be observed from the table 6 that during 1990-91 to 2005-06 the real wages of male and female at state level registered positive growth rates, whereas at Prakasam district level it registered negative growth rates (male: -0.95 and female: -1.41). Moreover it explains that economic liberalization since 1990-91, has brought a declining trend in real wages at state level. It is not only in AP, most of the states have experienced the declining tendency of real wages after the economic reforms⁶.

It clearly indicates that even the money wages of Prakasam district are higher than state wages. The real wages declined significantly in the study period. It is found that the average money wages of state, Prakasam district as well as selected villages also lower than minimum wages of Andhra Pradesh state (minimum wages range from Rs.64.00/- to Rs.112/- in AP as on 31.03.2004, on the basis of zones). However, as Parthasarathy (1997) observed, minimum wages have generally been fixed below the market wage rates at pauper levels, although these are sometimes higher than the market wage rate selected operations and wages paid in backward regions and wages paid for women and children. He also points out that if the minimum wages are implemented they have the potential to raise the level of average daily wages. The minimum wage of different operations has been presented in table 8, and these wages have been fixed for 5 hours in a day for ploughing and 6 hours for other operations, whereas we calculated 8 working hours as a day as Directorate of Economics and Statistics, Government of Andhra Pradesh. It is observed from the household survey data that in all the crops cultivation in both the villages on an average labourers are being paid lower wages than minimum wages, but the tobacco field wages are nearer to the minimum wages (some operations). For instance as per the minimum wage act, for weeding operation Rs.73/-(6 hours, per hour Rs.12.16/-) is the minimum wage, but in the both villages actual paying wage is lower than this (in R.C.Puram Rs.4.37 in tobacco crop, Rs.5/- in paddy crop and in Jayavarm Rs.5/- per hour), whereas for ploughing minimum wage is Rs.74/-(6 hours, per hour Rs.12.33/-), but in

both the villages for this operation wage is higher (in R.C.Puram per hour Rs.12.50/- and Rs.13.75/- per hour in Jayavaram). However, average labour wages of Prakasam district and selected villages are significantly higher than the state average wages.

CONCLUSIONS

The overview of the study reveals that women labour is vital for the agricultural operations and their proportion is more than their counter part male in all the crops cultivated in the selected villages. And further the women labour shown supremacy in village agriculture sector. The analysis on wage rates between male and female workers clearly indicates that the women workers are being paid lower wages than their counter part male workers and they are vehemently discriminated in the wage market. The studies conducted in Indian agriculture either using primary or secondary data on wage discrimination are corroborating the above results.

The analysis further reveals that among the crops grown in the selected villages tobacco labourers are being paid higher wages than other two crops. However the wage discrimination between male and female is even prevailed in tobacco for the same work and working hours. Moreover the wage variation between male and female is quite high in bengalgram fields and female labourers are being paid higher wages in tobacco fields. On an average a female labour is getting 70.99 percent wage of male in tobacco, 60.41 percent in bengalgram and 63.04 percent in paddy crop cultivation. Comparatively the Jayavarm village labourers are being paid higher wages than R.C.Puram, due to the strong labour unions. In the light of findings it is suggested that the government should strengthen the existed legislations and implement it effectively to give the equal wage to men and women for same work and same working hours and enforce the minimum wages act effectively.

Notes: (a) (i) Landless labourers—those who do not possess any land for cultivation and whose livelihood totally depends upon their labour. (ii) Small farmers—all those who possess 0.01 acres to 5.0 acres of land. (iii) Medium farmers—those who possess 5.0 acres to 10.0 acres of land. (iv) Large farmers—this category has the highest possession of land with 10 acres and above. The upper limit of class interval has not been included while lower limit is included. (b) In addition to general survey, the village labour leaders Mr.Kondaiah(65 years) and Mr.Eswar rao(35 years) are extensively interviewed to elicit this information regarding employee and employer relationship and other general information on labour market. (c) Like Directorate of Economics and Statistics, Government of Andhra Pradesh, the researcher also taken 8 working hours per a day. (d) The harvesting

operation is one of the hardest operations involved in tobacco cultivation. For this operation the labourers use to go early morning and works upto late nights. The reason for going early morning is while picking up the leaves from tobacco plant it needs moisture, other wise it would be broken. (e) This is the farm level ending operation of tobacco cultivation. There are two types of grading operations in tobacco cultivation process: (i) farm grading (kachha grading) and (ii) Ag-mark grading. Before selling their final product in the tobacco boards, farmers use to go for kachha grading to separate same colour leaves after curing. But the traders who buy the product in tobacco boards through auction system usually go for Ag-mark grading on the basis of their export order. (f) Haque, T., “ Regional Trends, Patterns and Determinants of Agricultural Wages in India” Indian Journal of Labour Economics, Vol.41, No.4, 1998, P.845-860, in this article he compared the minimum wages(as of 1993-94) with actual paid wages, it found that Andhra Pradesh, Gujrat, Haryana, Himachal Pradesh, kerala, Punjab, Rajasthan, Taminnadu, and Uttara Pradesh wages are higher than minimum wages, whereas Assam, Bihar, Karnataka, Madya Pradesh, Maharastra, Orissa, and WestBengal wages are lower than minimum wages.

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