

WAGE RATE DIFFERENCES IN MARATHWADA REGION

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ABSTRACT

Agriculture is the largest sector in many developing countries most of the developing countries have to depend much upon the development of agriculture for their economic development in order to meet the demand for food and agricultural raw-materials, to earn foreign exchange for overhead investment and expansion of Industries to meet the growing demand for employment and to raise cash income of rural people to stimulate industrial expansion, Even in the case of developed countries the historical Experience verneils the importance of agriculture in the process of economic development at the outset of industrial revolution. This study aims to analyze the situation of Marathwada region. Specially focus is given on wage rate differences. Because we know there is big part of population of India is depend on this sector. So with the help of secondary data this paper tries to analyze the situation of labour who depend on Indian agriculture sector.

Keywords: *Agriculture, Developing Countries, Wage Rate, Indian Agriculture Sector, Industrial Revolution.*

Introduction

Many growth theories using different approaches have revealed that agricultural development is instrumental to overall economic growth of various development models formulated for developing countries Lewis two-sector model for development has become popular for a predominantly agriculture oriented over populated and resource poor countries this modal was extended by rains and fellewis rains fei model has stressed the existence of an enormous economic surplus in potential form and this model is helpful in exploring the possibility of utilization of surplus for economic development. India's Agricultural Development has gone through quite a few changes over the last four and half decade. Every change has always induced the growth rated to a new height. However, the most crucial sector of agricultural labour has stayed largely, Neglected. The earlier two phases of agricultural development programmers and secondly the technological changes through Green Revolution have by passed the sector of agricultural labour. The target group oriented Programmes of early 70's have helped the sector to share some gains of development. But this can't be called a substantial change by any standards. Jose has clearly showed the stagnancy in real wages in the large part of country. Such stagnancy indicates no change in the standard of livings in the most of the agricultural labourers. In the Indian context the theories of wage determination do not seem to hold a perfect ground.

Objectives of the Study

- To highlight the cropping pattern of Marathwada
- To access the wage rate differences in Marathwada region in particular.

Research Methodology

This study aim to analyze the crop patterns of Marathwada Region. Secondary data has collected from difference sources. While collection of data and while analyzing the situation Marathwada region was particularly considered as geographical area. Whatsoever the discussion is made it may or may not be applicable to other states and regions.

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Development of Agriculture in Indian Context

The Indian government was aware of important role of agriculture in the economic development of country. So, the five year plans assigned high priority to agricultural development. Agriculture has been the major source of livelihood in India since the primordial age. The arrival of moguls followed by Births did not change the situation to the desired level. Agriculture remained totally primitive, deteriorative and turbulent. The deficiency of food grains has led to witness a number of horrible families. Since the post independence period, several measures have been taken to swing up agricultural sector. The first five year plan allotted 31 percent of its total investment to agriculture and allied activities. The agriculture sector has, however shown a mixed type of performance during the post-independence period. During the fifties and early sixties the growth in agricultural output was largely contributed by the expansion in land and area shown under different crops and not by any major technological change. As the agriculture sector in some of the developing countries has shown the signs of development today.

Situation got changed after 1966-67 with the onset of the process of agricultural development involving technological change with the introduction of high yielding varieties of seeds during mid sixties and increase in availability of chemical fertilizers and irrigation facilities. Indian agriculture no longer continued to be traditional one as it was during the fifties. The increased agricultural production enabled India to become self sufficient in food grains. During seventies and eighties, increase in production found in almost all the crops. Many efforts were taken in improving the agricultural situation in India. However, the growth in agricultural output was not smooth over all the years as well as over different states and regions in India. It is seen that technological change was specific to the crops such as wealthy cotton, paddy and groundnut. These crops all of which were grown under irrigated conditions in Haryana, western Uttar Pradesh Punjab, few pockets of Gujarat, Maharashtra, Tamilnadu and Andhra Pradesh.

Agricultural Development in Maharashtra

Efforts have been made in relation with improvement in production and productivity in Maharashtra and thereby involve in the national campaign of development of agriculture, which started during the post independence period. The development schemes viz. CADA, DPAP etc. have been launched in the state of Maharashtra in respect of many new schemes of agricultural development. Due to development of agriculture, higher levels of production of food and other farm products, higher income & better standard of living for farm families have been achieved. When agricultural sector grows faster, the impact of its development is felt in other sectors of the economy and its accelerates the overall economic development of region. Maharashtra could be considered to be one of the heterogeneous states in the Indian union as far as the varying agro-climatic conditions are concerned. The state comprises four regions i.e. Kokan, Western Maharashtra, Marathwada & Vidarbha regions which represent varying types of natural, physical, social & economical conditions, quite distinct from each other. The variability's in topography, soils and climatic factors bear significant impact on crop and land use patterns, use of production inputs and adoption of technological innovations of crop production among the regions. The inter regional comparison of the performance of agriculture has revealed that the technological advances in agriculture could not make much progress in their contribution to increase production and productivities of various crops in different regions Because of these variability's there existed significant imbalances and disparities in income levels of farm families in these regions.

Cropping Pattern in Maharashtra

Production of food grains is emphasized in agriculture of Maharashtra. Some crops like cotton, sugarcane, oilseeds, vegetables and fruits etc. are grown for the market and they are classified as commercial crops. There are two main crop growing seasons, Kharif and Rabi. The Kharif crops are sown with the onset of monsoon and harvested in September-October. The Rabi Crops are sown in October-November and harvested in February-March. There are some crops like Jowar and Cotton, Which are grown in both the seasons, Also sugar cane stands in the fields for 12 to 14 Months spread over both the seasons.

Over large area in Maharashtra are found rain fed crops. This is known as Jirayat or un irrigated land. Here the farmer is entirely dependent on the nature for crops production Most of the farmers have successfully adopted dry farming techniques where conservation of moisture is of vital importance Bagait in contrast, is an irrigated land where water intensive farming is practiced some crops like sugarcane are entirely dependent on irrigation. However, irrigation usually supplements rain to strengthen the main crops or sustain the subsidiary crops. The existing cropping pattern may not be necessarily the most efficient. There is always a scope for change in response to the improvement in technologies, economic factor and the nature of demand.

Advantages use of technology in Agriculture Sector:

Advantages of technology in agriculture include expediting crop production rate and crop quantity, which in turn reduces costs of production for farmers and food costs for consumers, and even makes crops more nutritious and livestock bigger and meatier. Technology in agriculture produces benefits for small-scale farms and national farming operations alike. These technologies include using environmentally sound and sustainable farming methods, such as no-till agriculture, and sophisticated equipment, including biotechnology.

Biotechnology serves as an evaluative and forecasting tool, helping farmers address issues like poor soil conditions, lower crop output and low nutritional value. Biotechnology lets humans manipulate certain aspects of crop and livestock production, in turn producing more cost-effective and higher quality products. Genetic modification is one large area of biotechnology. This technology involves scientists selecting ideal traits for plants and animals. They artificially influence the process of natural selection, even exchanging genes among unrelated species. Using genetic modification, farmers may reduce risk of disease and infection.

Agricultural Development & Wage differences in Maharashtra

Marathwada is under development in Maharashtra in its numerical strength, the population of the Marathwada is unique. Marathwada is one of the most agile but a backward region in an industrial state of Maharashtra. Historically it was annexed to erstwhile Nizam State. In the background of Hyderabad Action this region had built up the crescendo of civil muting against the feudal Nizams. The reasons behind the civil up-urge in Marathwada are well documented. In other words revolutionary spirits were quite high in the region. It comes out from the developed as history that the populace of this region suffered under the iniquitous treatment met by Nizam rulers.

Table1: Classification of Work Participation Rate, Percentage of Agricultural Workers and Percentage of Agricultural Labour

Particular	Census		Figures in Percentage	
	India	2011		
Work participation Rate	India	39.79		
	Maharashtra	43.98		
	Marathwada	45.20		
Percentage of Agricultural Workers to Total Workers	India	37.79		
	Maharashtra	45.61		
	Marathwada	66.64		
Percentage of Agricultural Labours to Total Workers	India	17.88		
	Maharashtra	22.39		
	Marathwada	30.90		

Source: Computed from the data obtained from Census 2011.

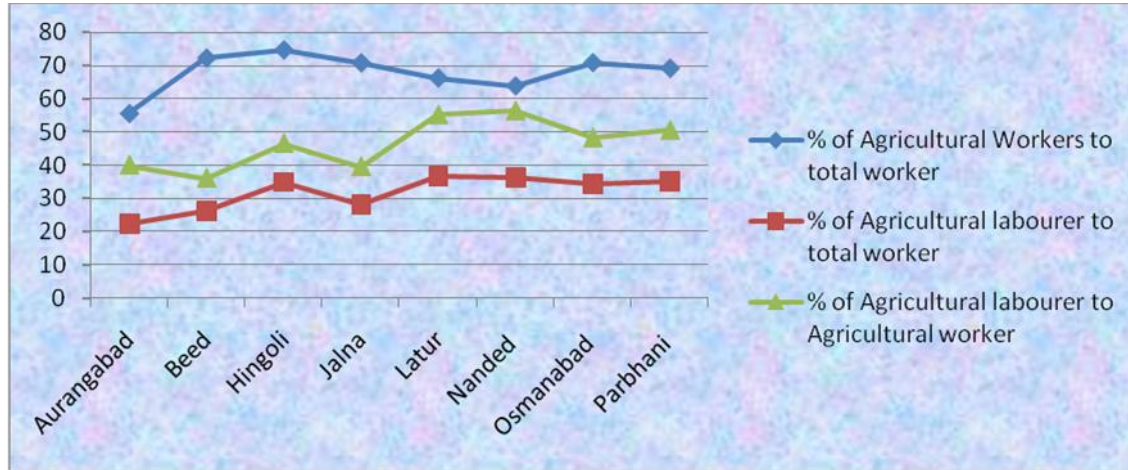
From above table we found that the composition of population and work force differs across the districts of Marathwada. Work participation rate of the region as a whole remained higher than the state as well as country. This is a clear indicator of the level of backwardness. As regards the work participation rate we have noted that the region being backward has high work participation rate (WPR) as compared to the state and country as a whole. The variations across censuses are because of the definitional changes. The percentage of agricultural worker to total workers in 2011 census in Marathwada region is having higher percentage as compared to the state and country. And also in 2011 census the position remained percentage of agricultural labour to agricultural worker the same.

Table 2: Proportion of Agricultural workers and Agricultural labourers to Total workers in Marathwada Region as per Census 2011

Sr. No.	Districts	% of Agricultural Workers to total worker	% of Agricultural labourer to total worker	% of Agricultural labourer to Agricultural worker
1	Aurangabad	55.70	22.32	40.08
2	Beed	72.39	26.11	36.06
3	Hingoli	74.80	34.87	46.61
4	Jalna	70.93	28.11	39.63
5	Latur	66.40	36.67	55.23
6	Nanded	64.01	36.11	56.41
7	Osmanabad	70.98	34.26	48.26
8	Parbhani	69.30	35.05	50.58

Source: Computed from the data obtained from Directorate of Agriculture, Department of Agriculture, Government of Maharashtra, Pune.

Chart 1: Proportion of Agricultural workers and Agricultural labourers to Total workers in Marathwada Region as per Census 2011



Source: Computed from the data obtained from Directorate of Agriculture, Department of Agriculture, Government of Maharashtra, Pune.

The percentage of agricultural workers to total workers as among the districts, Hingoli, Beed, Osmanabad and Jalna have higher work percentage as compared to Aurangabad, Nanded, Latur and Parbhani districts in census 2011. It is having lowest work percentage of Aurangabad district in the region.

The percentage of agricultural labourer to total workers as among the districts, Latur, Nanded, Parbhani and Hingoli have higher work percentage as compared to Aurangabad, Beed, Jalna and Osmanabad districts in census 2011. It is having lowest work percentage of Aurangabad district in the marathwada region.

As regards the percentage of agricultural Labourer to Agricultural workers as among the districts, Nanded, Latur, Parbhani and Osmanabad have higher work percentage as compared to Beed, Jalna, Aurangabad and Hingoli districts in census 2011. It is having lowest work percentage of Beed district.

Cropping Pattern of Marathwada Region

The proportion of area under different crops at a point of time is called cropping pattern. A change in cropping pattern implies a change in the proportion of area under different crops. Cropping pattern in any region depends upon physical characteristics of the soil, climates weather, rainfall etc. It also depends upon the nature and availability of irrigation facilities and institutional facilities as well. Economic motivation such as prices and income, Maximization, farm size, insurance against risk, availability of inputs and land tenure system also go into the determination of cropping pattern.

The conditions of soil and climate in Marathwada region are such that they contribute to a low value crops pattern and relatively low yield in most of the important crops. A major part of the region consists of plateau area where the rainfall is low and highly variable. The major crops grown in the Marathwada region are jowar, bajari, pulses, groundnut, soybean, cotton, sugarcane etc.

Below table 3.12 shows the district-wise cropping pattern of Marathwada region during the year 2008-09. In Aurangabad district mainly grown in jowar, bajari, maize and wheat contributed 17.3 per cent, 10.4 per cent, 10.9 per cent and 4.2 per cent, respectively. The cereals cropped area was near about 43 per cent and the pulses were 8.9 per cent. Total foodgrain share was 51.6 per cent to gross cropped area. Total oilseed cropped area was very little which is 2.7 per cent. Cotton is the main crop contributed near about 24 percent in the year 2008-09. The sugarcane is 1.7 per cent cropped area to gross cropped area.

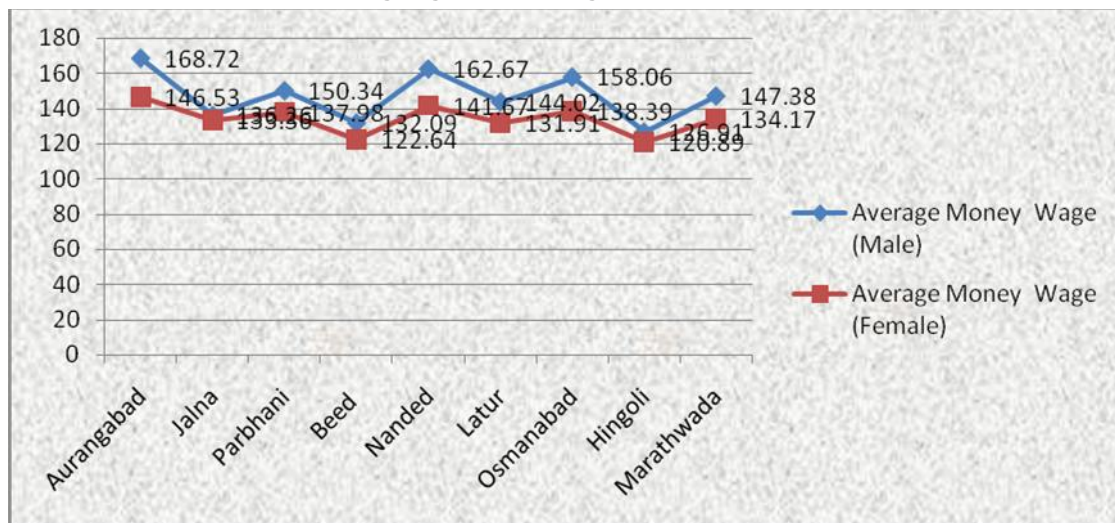
The share of cotton was highest which is 38.5 per cent followed by 21.9 per cent jowar. Total foodgrain cropped area is 47.7 per cent included in cereals (37 per cent) and pulses (10.7 per cent). Total oilseed cropped area is 8.0 per cent in that 5 per cent share alone soybean crop in Jalna district. Sugarcane cropped area is 2.7 per cent in that district in year 2008-09.

**Table 3: District wise Average agricultural wage rates in Marathwada [Male and Female]
(Figures in Rs. Per day)**

Sr. No.	Districts	Average Money Wage (Male)	Average Money Wage (Female)
1	Aurangabad	168.72	146.53
2	Jalna	136.26	133.36
3	Parbhani	150.34	137.98
4	Beed	132.09	122.64
5	Nanded	162.67	141.67
6	Latur	144.02	131.91
7	Osmanabad	158.06	138.39
8	Hingoli	126.91	120.89
9	Marathwada	147.38	134.17

Source: Filed Survey 2016-17

Chart 2: District wise Average agricultural wage rates in Marathwada [Male and Female]



Source: Filed Survey 2016-17

The above table reveals that the average money wages for male agricultural labourers in Marathwada is Rs. 147.38. The highest wage rate is in Aurangabad district (168.72) followed by Osmanabad (Rs. 162.67). In these districts and also in Osmanabad district average wages are higher than regional average. In Hingoli and Beed Distircts they are lower as compared to regional average.

The average money wage for female agricultural labourers in Marathwada is Rs. 134.17 per day during the period of 2016-17. The highest wage rates are in the Aurangabad district (146.53) followed by Nanded (141.67) and Osmanabad 138.39. In these districts average money wages for female agricultural workers are higher than regional average of Rs. 134.17, and in Hingoli district it is lowest (Rs. 120.89). In Other district it is almost equal to regional average rate.

Concluding Remark

The Indian government was aware of important role of agriculture in the economic development of country. So, the five year plans assigned high priority to agricultural development. Agriculture has been the major source of livelihood in India since the primordial age. The first five year plan allotted 31 percent of its total investment to agriculture and an allied activity and at present agriculture contributes is 21 percent in the national income. Though the share of agriculture is decreasing but not the population depends on it. The problem of 102.70 crore peoples hunger, the problem of employment India's social problems, development of India's 6 lakh villages and therefore development of country etc. problems can be solved through agriculture. The Government decided that the agricultural wages should be increased from time to time. The marginal productivity Theorists would always argue that, the wages are decided by the market forces and hence, competitor. The supply side of labour incorporates population growth as

well as labour absorption in the non-agricultural sector. The Major shortcoming is the assumption of constant technology and negligible institutional influence. Public policy is also a major determinant of the change in supply curve on the demand side. One can list various factors which at times pose a problem of identification. The minimum wage rates should be revised at an appropriate interval not exceeding five years.

Marathwada is a backward but agile region of Maharashtra state. Historically, the region has stayed under developed due to various reasons. Oppressed by feudal and lords and the agro-climatic conditions are the main causes of its status of development. Agriculture is the main stay of the population of the region. The area remained without any significant policy break-through for agriculture. Large areas are either under medium black with moderate depth coarse and shallow (below 9¹¹ 36¹¹ depth) soils. There are variations across the districts and certain districts have the dubious distinction of climatologically and economic constraints out of the Eight districts of Marathwada region. Aurangabad, Latur, Nanded and Parbhani are thickly populated as compared to Jalna, Hingoli, Beed and Osmanabad. The density of population in Marathwada is low as compared to Maharashtra state. High work participation rate as compared to the state as well as country is a main characteristic of the region. Agricultural workers form major portion of the working population. Population of agricultural worker as well as agricultural labour in the region is lower than the state and the country. But there are variations across the districts.

Given the population pressure in the sector the Growth of agriculture has not been quite, outstanding. The proportion of sown area in the region was over 70 per cent proportion of sown area is highest in Parbhani district. The region has left unused area of 13 per cent of its cultivable areas. Cropping pattern in the region is dominated by low value crops which also affects both employment (low) as well as wages (low), A part from this there is hardly any support from protective irrigation. Irrigation in the region indicated five issues: The first of proportion of irrigation in the region is quite low and barley sufficient even for protective irrigation. Second much of the water resources go to commercial crops. Third sources of irrigation largely depend on the agro climatic conditions. Fourth Irrigated patches are located very sparsely, benefiting only a few regions and fifth is Irrigation development in the region has no significant influence on the aggregate level of employment and wages.

On the background of this resource structure, the dismal performance of the region is not a surprising observation. The compound growth rate in production & productivity of food grain in the region is negative as compared to state as well as country. But the compound growth rate in production of pulses in the region is lightly high as compared to state. There are variations in the productivity of principal crops across the district of Marathwada. In the districts of Aurangabad, Jalna, Beed & Osmanabad the compound growth rate in productivity of all crops is negative the regional aggregate growth rates. The districts of Latur, Parbhani, Nanded & Hingoli is growth rate in productivity of some crops is positive growth rate respectively of jowar kharif, jowar rabi & total pulses, total food grains, jowar rabi as well as total pulses & total foodgrains, where the percentage of deep black soil is relatively high as compared to other districts in the region. Though significant area is under new varieties the impact does not seem to be very impressive. Hence, we may say that high yielding varieties have not made a significant debut in the region.

The depressing situation of agriculture has caused lower employment opportunities and also suppressed the increase in wage rates ultimately affecting the quality of life of the labourers of the region. As compared to the other states, the wage rates in Maharashtra are repressed, but more so in the region of Marathwada. Among the districts of Marathwada in Aurangabad, Nanded, Osmanabad & Parbhani districts average money wages for male agricultural labourers are higher than the regional average, whereas in Latur, Jalna, Beed and Hingoli districts they are lower than the regional average money wage. The highest money wage rate is in Aurangabad district. For female agricultural workers the highest average money wages are in Aurangabad district, and lowest in Hingoli district. In Nanded, Osmanabad and Parbhani districts they are nearby equal to the regional average money wage.

The development wage relationship is quite a perplexing problem in the context of an under developed agriculture. In this chapter we tried to analyze the relationship through four dimensions. Firstly, a theoretical model is presented analyzing the probable influences of the determining variables. This is followed by the empirical evidence over the districts and centers in the region of the state. The results of this analysis indicate a mixed picture even at the low wage relationship; however, certain clusters of districts and centers emerged with interesting combinations. Further the relationships were formally tested with the help of regression analysis. The results of this analysis are not very encouraging. Among

the reasons discussed for such behavior, the most dominant reason seems to be the low level of equilibrium, weak development of labour market and total absence to the labour organizations. In this context it is very important to develop a strong bargaining power in the hands of agricultural labourers, if the trends are expected to be upward moving.

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