



## Engagement of Indian Labour in Agricultural sector

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### ABSTRACT

*The paper is an attempt to understand the agricultural labour force and their changing conditions of life. The introduction of new agricultural technologies has also led to change the dynamics of labour and agricultural relations as studies revealed. It is an assessment from the existing literature on wide range of sources on economy of labour force in India. The conditions of agricultural labour in India as data reveals, still it is in state of underdevelopment as wage rates are not on par with the increased consumer prices. As Indian farming system has been evolved based on the factual situations as it was struggling to maintain its sustenance, lack of sufficient support system not evident to utilize equipments, seeds and chemical manures properly, this led to formulate the policy initiating with the setting up of structural policy making on agriculture to address the challenges the sector facing. This policy move also led to reduce considerable imbalance in agricultural production within the country locating diverse agricultural regions from different Indian states. As it was evident that Indian agricultural sector became self-sufficient in food grains and overcoming severe food shortage challenges. The paper relied on various sources to conclude the labour forces' situation in changing agricultural conditions.*

### Keywords

Agricultural  
Technologies  
labour forces  
consumer



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## AGRICULTURAL CHANGING SCENARIO

At the beginning of India's independent economy, agricultural was in a discouraging state. Though the large section of Indian labour force was mainly dependent on this sector, agricultural sector has been struggling to keep on a point where it can sustain independently with the state support system. Indian land holdings have been shrinking into small and begun long back into scattered holdings. Even today, capital to initiate farm activities are a difficult task among large proportion of actual land tillers. Consequently, this led to relocate labour force in different non-farm organized sectors.

However, as it was mentioned in the India Labour and Employment Report (2014), "the process of diversification of employment away from agriculture has also accelerated. Although the large share has gone to services and construction, and only marginally to manufacturing, the process has led to an acceleration in labour productivity. The level of per worker productivity has increased three times during the period 1993-94 to 2011-12. The share of wages in the organized manufacturing sector, after declining steadily until 2007-08, started to recover to some extent in the last few years". The report clearly identified the reasons for diversification of labour force apart from other issues of labour economy. Thus, it needs to be thoroughly reviewed changes in farm labour force and its dynamics in the domain of larger agricultural sector in India. Hence, present a modest attempt to outline some important building blocks of changing frameworks of rural labour force through reviewing existing source in this domain.

## AGRICULTURAL SECTOR AND LABOUR FORCE

Beginning with early stages of independent India where Indian farming system was struggling to maintain its sustenance, sufficient support system evident to utilize equipments, seeds and chemical manures properly begun with the policy initiating with the setting up of the planning commission and the institution of five year plans in 1950 so as to initiate agricultural development in greater significance and to stabilize the country's economy (Mukherjee, S.K. 1992). This move also led to reduce considerable imbalance in agricultural production within the country locating diverse agricultural regions from different Indian states. As it was evident that Indian agricultural sector was not self-sufficient in food grains and facing severe food shortage though the fact that majority of working population in terms of cultivators and agricultural labourers were engaged in cultivation (Mukherjee, S.K. 1992).

Another important dynamics of development policy in India is that considerable priority was given to development of industrial sector at the beginning of five year plans though the agricultural performance was more vibrant during the First Five Year Plan (1951-1956). Agricultural development stagnated mainly shifting priority towards industrial development. Then, the government immediately changed its development directions and shifted its priority in the late fifties towards agricultural development (Tendulkar, S.D. 1981).

As it was pointed out by Tendulkar, S.D. (1981), the Second Five Year Plan (1956-61) was not only given importance to agriculture but also focused on transferring

labour force from agriculture to tertiary sectors. Along with these activities, the Third Five Year Plan (1961-66) was put its attention on introducing new strategy for agricultural development (Bhalla, G.S. and G. Singh 2001). New strategy in terms of introducing new seed fertiliser technology during the mid 1960's was a significant step forward that transformed the rural economic scenario in India.

In the early phase of the green revolution in terms of introducing the new High Yield-Variety (HYV) technology was relatively confined to North-Western parts of India -

Punjab, Haryana and Western Uttar Pradesh (UP). Thus, its initiation brought about some major changes in the nature and pattern of agricultural development in India. It was also resulted in increasing both in the area under cultivation and the overall production of these crops and this further resulted in acceleration in growth rates of output in these confined areas (Bhalla, G.S. and G. Singh 2001). Moreover, introduction of green revolution widened gap between north and south Indian states. Unearthing in-depth observations based on green revolution, Ledijensky, W. (1973) revealed that it had created disparity in income patterns of different farm sizes.

The study viewed that large farmers attained significant results as they had capacity to invest liberally in the new emerged agricultural inputs whereas small and marginal farm holders strained of it as a result the gap between the large and small farms holdings grew. Additionally, differences further widened in the incomes of these groups (Ledijensky, W. 1973). Consequently it was generally held that green revolution and its agricultural economy was found to be more beneficial to some sections of farm society and comparatively less to other farm sections - agricultural labourers and small farmers. Thus, it can be concluded from the studies reviewed above that under the strategy of green revolution extensively expanded agricultural actively intensively engaging new or modern technologies though some shortfalls emerged from other side of the story.

In contrast to the agricultural labourers, as Aggarwal, A.N. (1971) mentioned, the advent of green revolution made large farmers prosperous and they were able to get hold of investing in capital-intensive equipment in order to enhance their direct control over agriculture. The labourers, conversely, had been trailing out their traditional services as the trend has been decreased. Another important thing is that availability of land on crop sharing became a scarce option in changing dynamics of agricultural scenario. As a result of such changing political economy of farming, it had been reduced and alternative employment opportunities remained behind requirements. Consequently, Aggarwal, A.N. (1971) explains it as an emerging situation in which the two classes were becoming polarized and increasingly antagonistic to each other.

A study by Singh, H.K.M. (1979), highlighted technological factors in terms of use of tractors and other tools as these had positive effect on employment of agricultural labour. As there was inadequate supply of local labour, increased demand for labour in agricultural sector was observed. In view of that, wages had been increased. However, the segmented labour market in states like Uttar Pradesh, Bihar and Rajasthan, the force of labour was migrated to Punjab. Such huge migration of labour hit badly the issue wage rising. Such motive further weakened increased wage rates in the state. This is an interesting research which was produced in late

Regarding changing context of the agriculturist labour force, Mamoria, C.B. (1976) accounted that the rural economy of India had been worried in terms of the growth in the number of agricultural workers (cultivators and agricultural labourers) engaged in crop production. This led to the phenomenon of under-employment, underdevelopment and surplus population and was an obvious as their daily lives and livings of agricultural labourers were manifested in this context. In terms of characteristics of agricultural labour, Pandhi, K. (2007) illustrates agricultural labour as unorganized locating the structure of industrial labour force. Agricultural workers in general do not associate with organized unions and the force is not as active as other industrial labour force though other time based organized movements present. There is such attempt to institutionalize the force. Huge source of literature on agricultural workers maintains that the force is a force of unskilled and do hold bargaining power or less to some extent.

Rao, C.H.H. (1974) brought out both favourable as well as unfavourable conditions which brought out by the introduction of new technologies on agricultural employment. He revealed that the green revolution had not shown much impact on employment though increased tendency observable in both aspects in terms of capital investment on technology and HYV and fertilizers as well as employment. But, as Rao, C.H.H. (1974) mentioned, the introduction of million wells scheme and emergence of tubewells irrigation system seem to have contributed significantly to the employment of labour.

In the context of green revolution, some studies have focused on changing dynamics of labour wages. Within this domain, Bhalla, G.S. (1979) carried out a study on the real wage rates of the agricultural labourers. The study was confined to the state of Punjab and surveyed the results of decade from 1961 to 1972. He found that there was changing trend in real wages and observed completion between rising farm productivity and an increasing labour force.

From the state of Punjab, another study also came out to understand the correlation between green revolution and the condition of agricultural labourers. Singh, G. (1980) found that although the green revolution was extended in Punjab in the 60s, the condition of agricultural labourers in the district of Ludhiana had not progressed as a large section of labour force still living below the poverty line. Though contrast situation emerged in the study of Singh, G. (1980), NCAER study (1980), found that the new agriculture strategy in terms of introduction of machinery like tractor and other equipments etc., had created employment opportunities in non-agricultural sectors due to this as a backward linkages but actual labourers had not addressed in this study.

Oberoi, A.S. and H.K.M. Singh's (1983) study on the rural-urban migration in the context of green revolution in the district of Ludhiana of the Punjab state brought out that because of the process of migration, the state was gaining illiterate and low educated force and observed the out-migrants have a relatively higher level of education having socio-political implications for rural areas. In contrast to north Indian villages to south, the trend was also more or less similar to north India as it was pointed out by Jayashanker,

K. and K.V. Narayana (1983). The study in fact focused on the state of Andhra Pradesh locating the district of Warangal and tried to measure its impact on the wages and conditions of the agricultural labourers under modern agriculture. Jayashanker, K. and K.V. Narayana (1983) observed that the increased demand for labour owing to the adoption of new technology was evident and it showed that absorbing certain amount of unemployed rural labour with marginal increase in their wages. Further, it found that the change in the real wage rate was insignificant.

Another study by Bhalla, S. (1987) which attempted to examine both temporal and spatial changes in the absorption of labour in agriculture in different regions of India during post green revolution period (1971-72 to 1983-84). It was assumed that the rapid adoption of labour saving technology, labour use in agriculture in the coming decades was bound to decrease. But it was not evident in the census reports as increased tendency was observed in reports. Study by Kahlon, A.S. and

N.J. Kurien (1983) examined the impact of technological progress on labour absorption, productivity and returns to labour in agriculture in the context of green revolution. It analysed the data on wheat cultivation from 1970-71 to 1979-80 for major wheat-producing states such as Punjab, Haryana and Madhya Pradesh. The study found to be declining trend in the intensity of labour use almost in all the states. The decline was largely evident in the state of Punjab.

Parthasarthy, G. (1988) has analysed the real wage rates on the basis of daily wage rates locating two different agro-climatic conditions. It estimated the daily money wages in the year of 1984-85 to be broadly between Rs. 6 and Rs. 11 except in the states of Punjab, Haryana and Kerala where higher wage rates were evident. As against this trend, the minimum wage required to be maintaining a basic minimum standard of living was Rs. 22 per day at that point of time. With the advent of green revolution, wage rates started increasing. But, as prices of domestic consumption were also increased, considerably the real wage rates did not increase much as it was in the case of consumer goods. It has been generally observed that „increases in output did lead to increase in real wages in some states but such spurt in real wages has been of a short duration and there is hardly any state which managed to maintain sustained increase in wage over a period of three decades from the mid - 1960s onwards“ as pointed out by Parthasarthy, G. (1988). But contrast picture was observed by Unni, J. (1988) as its study showed that daily real wage earnings of adult males actually declined between 1964-65 and 1974-75 at the All India level and in most of the States except in Karnataka, Punjab and Uttar Pradesh.

Apart from general trends in the context of green revolution, specific technological interventions in the agriculture sector has also led to some structural changes in labour and its wages. Within this specific context, Sidhu, R.S. and S.S. Grewal (1990) concentrated on analyzing the demand for labour in tractor-operated farms and bullock operated farms in Punjab. Study brought out that contrary to the belief that tractor derails importance of labour force; the intensity of labourer use was found to be higher in terms of hours per hectare on tractor operated farms than on bullock operated farms. However, increase in farm size, use of weedicides and low wages were found to be negative influence on labour demand in the state agriculture.

A study on „employment growth and social protection of labour in India“ by Papola, T.S. (1994) found that the increase in „casualisation“ primarily directs the phenomenon of occupational shift of workforce from agricultural to non-agricultural activities in rural India. It revealed that whether the phenomenon of major shift from agricultural to non-agricultural activities need to be given special attention in understanding implication regarding the improvement and worsening of employment situation accompanying the overall process of „casualisation“ in rural areas. Study further noted that one is not compelled to move away from self-employment in agriculture, unless the income situation is likely to improve (Papola, T.S. 1994). It observed mainly that „casualisation“ that was taking place in rural India was a positive process induced by higher earnings outside agriculture as mentioned by Papola, T.S. (1994). However, employment pattern continue to be dominated by agriculture sector, on the other side the growth in non-agricultural sectors specifically, industrial sector has not been employment intensive (Papola, T.S. 1994). Comparatively, organised sector remained slow in creating new job opportunities when it compares with agriculture sector but wage rates were constant.

Johl, S.S. (1995), remarks that when there was an active demand in the market, the benefits of agricultural products in terms of higher prices were almost completely absorbed by the middlemen and derailed by them the benefits of actual producers and the new demand signals never conveyed to backwards. In connection with it, Jha, P. (1997) observed that the rural workforce structure had more or less remained unchanged for the first two and a half decades since independence, and subsequently, it started shifting to the non-agricultural occupations (Jha, P. 1997); it reached the highest level ever in 1989-90. During the 1990s, this trend has suffered a reversal contraction in the rural non-farm activity means shrinkage in whatever employment opportunities had opened up in this sector for members belonging to agricultural labour households, thus having a depressive effect on their income (Jha, P. 1997).

## CONCLUSION

The condition of deterioration in living of standard of agricultural labour households was evident and it was expected due to the falling agriculture share in the state (Rao, K.H. 1998). Thus, it mentioned that condition of deterioration in living of standard related to increased wage rates and improved standards of living conditions. It was mentioned by Rao, K.H. (1998) that casualisation was on rise among both female and male labourers, while male labourers are more prone. But, it was due to emergence of non-farm and other related activities in both agriculture and non-agriculture. In terms of determinants of occupational change, a study by Pal, S. and J. Kynch (2000) revealed that the major causes remained behind occupational change in rural areas were being male, from larger farming families or having higher schooling experience. It was also observed that states that there were altogether 147 non-farm activities in which the agricultural labour households were engaged. Rural Non Farm Activities (RNFAs) were emerging as an alternative in the state of Punjab. The green revolution was hugely successful only till 1970s after which agricultural growth in Punjab started decelerating. The cost of production per unit of agriculture increased, the profit

margin decreased and the real wages of rural agricultural workers became stagnant (Mahajan, R. K. 2002). The labour saving technologies and pattern like mechanization and shifting of cropping pattern (Especially towards horticulture at the margin in some areas) might have decreased the demand for labour as mentioned by Gosh, J. (2003).

Employment opportunities in agriculture sector are seasonal in nature. To meet the increasing requirements of the family, one has to seek better options of employment, specially, when rural poor is not well equipped financially (Sriram, M.S. and S. Parhi 2004). Saxena, M. (2004) briefly assessed that the share of labour force in agriculture to the total labour force has been showing the declining trend since 1970s. The problem of unemployment and poverty was arrested by RNFS. Pandhey, M.K. (2004) stated that non-agricultural self employment jobs have increased due to globalization. Mechanization complements modern varieties to realize the production potential, the spread of modern varieties induced labour saving technologies such as use of tractors, threshers and farm equipments and their easy availability due to the custom of hiring, facilitated even small farmers to adopt these technologies (Ramaswami, C. 2004).

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