CHAPTER-7
EMPLOYMENT GENERATION IN
INDUSTRIAL SECTOR

EMPLOYMENT SCENARIO DURING
PRE & POST REFORM

The Total Work Participation Rate (TWPR) in India during 1983 to 2012-13 has remained same, at 42 per cent (C.G.R. decreased from 2.37 per cent in pre-reform period to 2.09 per cent in post-reform period) though at rural level it declined marginally, while for their urban counterparts it increased to 2.5 per cent points for said period. The overall employment growth rate for rural as well as for urban workers has declined in post-reform period. In re-reform (1983 to 1993-94) period, rural TWPR remained almost same; urban TWPR increased by 0.7 percentage points. Whereas in post reform (1993-94 to 2012-13) period, rural TWPR declined marginally and urban TWPR increased by 4.8 percentage points. Total male and female WPRs in post-reform 184 periods have remained almost same whereas in pre-reform period increase in female WPR was much higher than that of males. In re-reform period in rural areas male WPR increased and female WPR decreased, where as in post reform periods both the rates have decreased in rural areas. At urban level WPRs for both the males and females have increased in both the periods but increase in male WPR is two times more than that of females. In pre-reform period the female employment growth rate was almost double to male employment growth rate. But it declined almost to half in post-reform period and for males it declined marginally. The growth rates of both the males and females declined in post-reform period. The most disappointing figure is
for 2.24 per cent to 1.65 per cent is discernible in case of rural male workers; for rural females the employment growth rate increased from 1.67 per cent to 1.83 per cent. On the other hand the growth rate of urban employment is not very encouraging. The increase from 3.36 per cent per annum to 3.42 per cent per annum for male workers is hardly an improvement for females and total persons, the growth rates declined in post-reform period.

On the whole, it is pretty much clear that the benefits of higher employment growth rates under the spell of economic reforms are negative for rural males and urban female workers, marginal for rural female workers and nearly nil for urban male workers. It is important to note that the rate of growth of urban employment continues to be much higher than that of rural employment, especially when the rural urban comparison is made for workers belonging to the same sex.

7.1(A) NATIONAL TRENDS IN SECTORAL EMPLOYMENT AND IN COMPOUND GROWTH RATES

Rural: The sectoral classification of total workers in general and women in particulars show that in India the proportion of rural total workers as well as rural female workers engaged in primary sector has steadily declined: for total persons it declined for 81.7 per cent in 1983 to 79.0 per cent in 1993-94 and further to 83.2 per cent in 2012-13; for female workers it declined from 87.8 per cent to 86.6 per cent and to 83.6 per cent for said period. In particulars, female's excessive dependence on agriculture as a source of livelihood has steadily been melting down and their employment base has clearly witnessed a modest degree of diversification. On the other hand the proportion of their rural employment
in secondary and tertiary sector has witnessed a steady increase. Tertiary sector which accounts for around 19 percent (201-13) in rural employment at all India level has shown a good increase in female workers in both the periods and increase in percentage has remained in percentage has remained higher in post reform period.

**Urban:** As far as urban India is concerned, maximum of the total workers are engaged in tertiary sector. The increased percentage point of total workers in tertiary sector has remained higher in pre-reform period. Secondary sector shows a declined in percentage in pre-reform period from 32.4 per cent (1983) to 30.9 (1993-94) per cent but in post period it again increased to 39.3 percent (2012-13), Decline in urban workforce in primary sector has remained higher in post-reform period. In pre-reform period they wee moving from agriculture towards tertiary sector. Urban females in primary sector show decline almost of same percentage points in both the periods. Secondary sector was absorbing less in 1993-94 as compare to 2012-13. Maximum of urban females are engaged in tertiary. But increase in the percentage points of working urban women in tertiary sector was higher in pre-reform period than the post reform period. Thus it is clear that the trends in primary, secondary and tertiary sector for both the periods are same for total workers and female workers.

The trends observed regarding sectoral employment growth rates in rural and urban areas are same at all India Level. The employment growth rate of rural and urban person in primary sector has reduced: secondary sector shows a pretty high increase and tertiary sector shows a slight decline in post reform period. As for as female employment is concerned the growth rates at rural level for primary sector has declined, for secondary and tertiary sector it has increased in post-reform period. For
their urban counterparts, primary and tertiary sector's female employment growth rates show decline but secondary sector show a good growth.

7.1(a) 1 Gender Gap in Employment

The male-female gender gap in work participation at all India level has decreased by 6.3 percentage points during 1983 to 1993-94 whereas during 1993-94 to 2012-13, it increased by 0.4 percentage points. At rural level it has decreased by 0.5 percentage points and at urban level. Increased by 1.8 percentage points in post-reform period 186.

State wise Analysis of Employment (Pre and Post Reform Period)

State-wise Regional Trends in Employment (and gender gap in work Participation) The state level employment scenario of selected states gives the following results.

Kerala is the most developed state of India according to HDI Report, 2010. Total workforce in Kerala is 38.6 percent of Kerala's total population. Over the period 1983 to 2012-13, in rural and urban areas of Kerala MWPR has increased but FWPR has decreased. Increase in MWPR at rural level in higher than that of urban and decrease in FWPR at rural level is also higher than that of urban level. It is very disappointing that a state having higher rate of female literacy in India, having such a low rate of female work participation. This thing clears that literacy rate does not show any strange positive correlation to female work participation. Another point which gives strength to this statement that over the period 1983 to 2012-2013 gender gap in total work participation in both the rural and urban areas of Kerala has increased.

In both the rural and urban areas, increase in MWPR was higher in pre-reform period. Rather in post reform period at urban level MWPR has
shown same decline. As far as FWP in concerned, in pre-reform period, rural FWPR shows a big decline and in post reform period it shows some increase, may be not pretty good but at urban level it has been continuously declining since 1983.

Punjab, is the second most developed state of HDI 2010. It is the agriculture dominated state with 40.9 percent on total workforce; 56.1 percent male and 22.8 percent FWP rate as on 2012-13, of this total work force 45.2 percent in rural and 36.5 percent is urban. In Punjab at rural level, the trend for male and female WPRS has remained same in pre-reform period that is both declined but decline in FWPR was almost three times higher than that of decline in MWPR. Contrary to this, in post reform period MWPR does not sow any change but FWPR shows a robust increase from 22.0 percent in 1993-94 to 42.2 percent in 2012-13. Thus total work participation at rural level, in Punjab show a decline in pre-reform period and in post reform period it has shown increase by same percentage points as of decline in pre-reform period.

As far as urban Punjab is concerned, in pre-reform period, MWPR increased by 1.6 percentage points but FWPR declined by 3.6 percentage points. In post reform period, WPRS of both the sexes have increased and increase in FWPR is double to increase in MWPR. The total urban WPR during 1983 to 1993-94 remained same due to increase in MWPR and decrease in FWPR. But in post-reform period it has shown increase of 2.9 percentage points.

During more than 3 decades (1983 to 2012-13) rural MWPR has decreased and rural FWPR has remained almost constant. Whereas at
urban level percentage of male and female workers have increased but increase in FWPR is very negligible.

**Karnataka:** Karnataka occupy seventh rank in HDI Report 2010. 46.3 percent of the total population constitutes the total workforce which is higher than that of Kerala and Punjab. As against Kerala and Punjab, Karnataka has shown a steady increase in male and female WPRs at rural level since 1993, at urban level MWPR has been continuously increasing since 1983 but FWPR shows stability in post-reform period. It has declined from 19.5 percent in 1983 to 18.1 percent in 1993-94. Total WPRs at both the rural and urban level have been continuously increasing since 1983. But increase at rural level is rear to double of urban.

From employment point of view. Karnataka is the strangest state. Among six selected states Karnataka shows highest male and female WPRs at both the rural and urban levels. Except urban FWP, which shows Marginal decline during pre-reform period, rest of the WPRs are increasing continuously. Not only this total workers percentage share in Karnataka is much higher than that of total workers percentage share in India. This is the only state where at rural level male has crossed 60 percent and female has crossed 45 percent of WPR. The long term (1983 to 2012-13) employment rates for males, females and total workers have increased in Karnataka except urban females. Where it has become constant in post-reform period. Another good point of this state is that the gender gap in work participation at rural level is minimum among six selected states i.e. 16.4 percentage points (2012-13) but it is disappointing at urban level, where it has reached to 47.5 percent in 2012-13. Overall scenario of employment in Karnataka is good except one thing that the FWPR (32 percent) is almost half of MWPR (60 percent) 188.
**West Bengal**: West Bengal is the north eastern state of India. Its rank in HDI Report 2010 is 8th. The total worker's share in west Bengal is 38.2 percent. Its MWPR is just next to Karnataka and a head to rest of the selected study states. This state does not show much variation in work participation rates during pre and post reform periods. All the WPRs have increased in both the period in both the areas except female WPRs at rural level which is very disappointing.

The percentage point’s increase in rural male WPR remained almost same in both the periods. Thus the total rural work participation during pre-reform period shows shall increase but due to decline in FWP in post reform period, the total rural work participation has remained almost fix at 37.9 percent during 1983 to 2012-13. Female employment scenario evening urban West Bengal is not very good in. It increased during 1983 to 2012-13 but remained less than rural FWPRs are the times especially in post-reform period where it has increased to 59.5 percent in 2004-05.

It can be concluded that West Bengalis not a female employment friendly state. The gender gap in work participation at both the rural and urban levels is very high. This is the only state where gender gap in work participation at rural level is near about of 40 percentage points and is increasing since 1983. The percentage is even more than that of Bihar which holds the 15th rank in HDI Report 2010.

**Assam**: Beside West Bengal. Assam is the other North-Eastern State of India which has been selected for research purpose. It is the second last and 14th from the top of HDI report 2010 for 15 selected states. According to HDI Report 2010 Assam is considered as second highest least developed state after Bihar. Its total work participation rate (36.4
percent) is very close to Kerala. As we go for employment scenario of the state. Over the period 1983 to 2012-13 total work participation rate in Assam has increased. Total MWPR is same as that of Rank 1 state that is Kerala. More workers constitute 55.1 percent of workforce in Assam whereas females are 15.9 percent. Data show that the increase in percentage points of workers during pre-reform period was higher that that of post reform period.

In Assam at rural level, the increase in Male and Female WPRs has remained higher in post reform period whereas at urban level this increase was higher during pre-reform period. The reason might be that in Assam employment programmes are more rural friendly. Urban male employment percentage is same as that of rural i.e. 55.1 percent, urban female employment in Assam is very less (10.9) though it increased slightly in post reform period. It is almost half of rural female employment. Total work participation at rural level (39.1 percent) is higher than that of urban (33.6 percent). This difference is due to higher female employment at rural level.

**Bihar**: Bihar is India's least development state. Only 29.4 percent of Bihar's population constitutes the workforce. In Bihar over the period of 1983 to 2012-13 the work participation rates, for total male and female have been gradually declining, though at rural level MWP increased slightly during 1983 to 1993-94. The declined in female work participation rate witnessed a sharp decline. After 1993-94 both the rates are gradually declining.

On the other side, urban MWPR declined in pre-reform period but increased with some percentage points in post-reform period. As for as
female employment rate is concerned it has been gradually declining since 1983 but more decline has recorded during pre-reform period.

**State-wise Regional Growth Rates:** From pre-reform to post-reform period as growth rates increased only for Punjab and Karnataka, the growth rates of total work participation and of rural total work participation have decreased for all the selected states except for Kerala and Punjab. In Urban area Punjab is the only state among selected six, where growth rate of state employment has increased in both rural and urban areas. The growth rates for males and females in rural areas have decreased in all the states except Punjab and Kerala (for rural females only) and in urban areas growth rates for male employment has been increased only in Punjab and West Bengal; for Urban females, growth rates have increased for Punjab and Karnataka only. At urban level states Kerala, Karnataka and Bihar do not show any significant change. Interestingly, one state Kerala, which is the most developed and the other, Bihar which is least developed do not show any increase in urban FWPR in post reform period. Punjab is the only state which shows good increase in urban FWPR in post-reform period.

**Auto Correlation Coefficient** of six selected states in 1983 with the three survey rounds (1993-94, 1999-00 and 2012-13) shows that the work participation rates for meaner not significantly correlated either at rural or at urban except for the round 2012-13. As ISO for as females are concerned the work participation rates are highly correlated for all the rounds. The structure of work participation rates for females is relatively more dispersed; CV ranged from 32 to 41 percent for rural women and for 5 to 8 percent for rural men. For the range of 32 to 38 percent of urban women, 5 to 9 percent for urban men. For combined (rural and urban)
female work participation, it lies between 31 to 36 percent for males 5 to 8 percent.

The structure of work participation rates of rural total (males and females) workers was relatively more dispensed between 13 to 17 percent as compared to urban total workers which lie between 9 to 11 percent.

CHANGE IN AREA - WISE SECTORAL EMPLOYMENT

The examination of the sector wise employment of the incremental workforce tells us about the relative sufferance or gain of workers when the labour markets under transition. In rural areas of pre-reform period, except the least developed states (Assam and Bihar), rest of the states show steady fall in primary sector employment. The fall in all the states is of 6 to 10 percentage points. In post-reform period primary sector rural WPR has declined in all the states. The proportion of rural workers in secondary sector has witnessed a steady increase in pre-reform period in top ranked and middle ranked states but lowest ranked state (Assam & Bihar) have shown a decline in WPR in this sector. In the post reform period again the top two states and bottom two states have shown increase in secondary sector rural TWPR though in least developed states magnitude of increase is very less as compare to top ranked states. But middle states have shown fall though not very significant. Tertiary sector recorded an increase in rural WPRS in all the states in pre-reform period. Maximum increase has been recorded in Punjab adn Kerala. In Post-reform period only one state i.e. Punjab which has shown fall in rural WPR.

CGR : Compound Growth Rate @
CHANGE IN CGRs OF SECTORAL EMPLOYMENT

The growth rate of rural workers in primary sector for all the selected states has remained less in post reform period than to pre-reform except in Punjab and West Bengal.

Highest increase in growth rates has been noticed in Punjab and lowest in west Bengal. As far as tertiary sector growth rates of rural employment are concerned, in pre-reform period Punjab witnessed the maximum and Bihar minimum. In rest of the state's growth rates were positive. In post-reform period, the state Punjab which was showing maximum growth rate (5.47 per cent) in pre-reform period surprisingly reduced to minimum (0.94 per cent). Except Kerala and Assam in other states growth rate of work participation has decreased in post 1993 years.

In urban areas, the share of employment in tertiary sector is significantly higher than that of other two sectors in all the states. Even the sum of WPR of primary and secondary both the sector is less than that of tertiary. It shows a steady increase in all the states since 1983 and increase in percentage during post-reform period is much higher than that of pre-reform period except the states Punjab and Assam where WPRs have declined negligibly in post-reform period. The percentage share of urban employment in primary sector has reduced to almost half in top and middle states but in bottom states it has either declined or remained stagnant during 1983 to 2012-13. The share of secondary sector in urban employment has decreased in middle and bottom ranked states during 1983 to 2012-13 Kerala and Punjab has shown some increase.

In Pre-reform period highest growth rate for rural workers among three sectors has recorded in tertiary sector except west Bengal where
maximum growth rates in pre-reform period was in primary sector. Highly disparate trends are discernible for urban employment growth for secondary sector like in Kerala growth rate declined from 4.44 percent during pre-reform period to 1.06 percent during post reform period. For same period growth rate in Punjab increased for 2.86 percent to 5.37 percent; in Karnataka from 2.36 percent to 3.49 percent but in West Bengal growth rate reduced from 2.75 percent to 1.90 percent. Second highest least developed state Assam has shown a robust increase in growth rate from 1.76 percent in pre-reform period to 6.48 percent in post reform period on the other side, the lowest ranked state Bihar entered into the negative territory in post-reform period.

Section III Female Employment Scenario in Pre and Post-reform Period : Sector-wise and Industry-wise Analysis of Female Employment and Compound Growth Rate

The pattern of female employment observed in percentage contribution in different sectors during the post-reform period is not much significantly different from that observed during the pre-reform period.

Rural : Excluding Assam rest of the states show either decline or negligible increase in rural FWPR in primary sector in post-reform period. It shows that globalization has not significantly affected the percentage of female workers in rural primary sector.

Out of 6 states, Kerala is the only state where over the study period, steady increase in rural female workers in secondary sector has observed. Punjab and Bihar show decline in pre-reform period and Karnataka and west Bengal show increase for same period. In post-reform period rural
FWPR in secondary sector increased in Punjab, Karnataka and Bihar and decreased in West Bengal and Assam.

**Urban**: At rural level a bulk of female workers in Kerala and Karnataka in post reform period shifted from primary to tertiary sector and in Punjab and West Bengal from primary to secondary sector. Least developed two states Assam and Bihar in Assam females have shifted from secondary to primary and tertiary and in Bihar from secondary and tertiary to primary sector.

The growth rate of rural female employment in primary sector in pre-reform period was negative for all the states except Karnataka and Assam. But in post reform period, Assam shown the maximum growth rate of 4.91 percent, followed by Punjab (4.62 percent), Karnataka (1.92 percent) and west Bengal (1.30 percent). As far as rural areas secondary sector is concerned there is a clear pattern in the growth of female employment. In the developed states (Kerala and Punjab) growth rate of rural female employment was negative in pre-reform period. But in post reform period it became positive, Punjab with 14.60 per cent growth rate, stands first. In middle two states, Karnataka and west Bengal, growth rates of female workers was much higher in pre-reform period whereas in post reform period these were less than 1 percent. In least developed states where Assam shows negative growth rates, Bihar shows pretty good growth i.e. 4.37 percent. The growth rate of rural female employment in tertiary sector of Kerala and Punjab in post reform period has remained between 6 to 7 percent. In Karnataka and West Bengal, FWPR in tertiary sector shows a big decline in post-reform year. In least developed states, Assam and Bihar, growth rate of female work participation have increased in post-reform year but the increase is not very high.
In pre-reform period, in urban areas female workers in Kerala were moving from primary to secondary and tertiary sectors and in Punjab from primary and secondary to tertiary sector. But in post-reform period in Kerala the observed trend is from primary to secondary and tertiary sector and in Punjab from primary and secondary to tertiary only and in Punjab from primary to secondary sector only. In middle ranked states the observed trend of shifting of urban female worker has remained same in both the periods i.e. in Karnataka the shift is from primary and secondary to tertiary sector and in west Bengal from primary to secondary sector only. In lower ranked states in pre-reform period. Urban female workers in Assam and Bihar shifted from primary to secondary and tertiary sector. But in post-reform period the trend changed in Assam from primary and secondary to tertiary and in Bihar from secondary and tertiary to primary sector.

The growth rate of urban female employment during pre-reform to post reform period in primary sector increased in least developed states and in secondary and tertiary sector it has increased in Punjab and Karnataka only.

A Nice-Industry analysis of female employment helps us to identify expanding and contracting industries in a six selected states in the pre and post reform period 194. It is found that agriculture is certainly a declining industry in most of the states. In pre-reform period, the state where the rural FWPR in agriculture increased was Punjab and Bihar. No increase is observed in any state of urban level. In post reform period it increased in Karnataka and Assam at rural level and Assam and Bihar at urban level. In Bihar, the increase rural FWPR in agriculture is 31 percentage point.
The states where the growth rate of agriculture employment improved during the post-reform compared with pre-reform period and West Bengal and Assam at rural level and Punjab and developed states at urban level (Assam and Bihar). The growth rate of rural female employment in mining & quarrying was relatively good in pre-reform period. In post-reform era growth rates either converted to negative or increased negligibly in the selected states.

It is possible since in many states mining and quarrying was relatively good in pre-reform period. In post-reform era growth rates either converted to negative or increased negatively in the selected states. It is possible that since in many states mining and quarrying occupied on insignificant share in female employment, thus even a small change could make phenomenal difference in growth rates. This is evident in the case of Karnataka and West Bengal, where the share of this particular sector accounts for roughly 0.5 percent. It can be said that in post-reform period urban females and less represented in manufacturing sector. Manufacturing which accounts for more than 8 percent in total rural female employment at all level India level has shown moderate improvement in its growth rates in developed states (Kerala and Punjab) in post reform period. Bihar also shows good growth rate in this industry in post reform period. The share of public utilities in rural female employment is quite significant i.e. between 0 to 0.2 percent for all the times. As far as growth rates are concerned, Kerala is the only state which shows a small increase in growth rates of female employment in this industry in post reform period construction which accounts 1 to 2 percent of rural female employment in India has not shown any considerable growth in post-reform period. Rather many states which were showing good growth in pre-reform years.
Only one state Assam Surprisingly appears to have recorded an exceptionally high growth rate from 4.36 percent in pre-reform period to 27.02 percent in post reform period. It is to be noted that this state is almost on the lower end of the states growth but it is puzzling to note their construction activity on the uprising phenomenally. As for as urban construction sector is concerned in pre-reform period, female employment in it increased in and the states except Assam. But in post reform period all the states show fall in the same. In Bihar it remains the same. In Bihar where in 1993, 6.1 percent of female workers were working in construction sector, reduced to 0.1 in 2012-13. Here it is clear that trend in construction sector is same in and the six selected states. Highest increase in pre-reform period was noticed in Bihar and highest fall in post-reform has also recorded in Bihar. Growth rate of female workers in this industry reduced to either very negligible or negative in post-reform period. The third most important industry for females is trade and commerce where around 2-5 percent of other rural females are working Percentage share for of rural female workers in trade & commerce has increased in call the states in post-reform period except in Assam. In post-reform period this industry shows good growth relative to pre-reform period. Highest recorded growth rate in pre-reform period was 12.46 percent in Assam followed by Kerala (375 percent), Punjab (3.04 percent) Karnataka (2.68 percent) and West Bengal (1.27 percent). Surprisingly in post-reform period, growth rate in Assam dropped to negative territory and highest growth rate show by Kerala (3.75 percent) followed by Punjab (3.04 percent) Karnataka (2.68 percent) and West Bengal (1.27 percent).

Female workers share in transport and communication industry in both the rural and urban areas has remained very less for all the times.
Usually the female share in this sector ranged from 0 to 0.6 percent in pre reform period and 0 to 1.4 percent in post-reform period except Assam. Where it increased to 5.8 percent in post reform period. In rural areas the female work participation in transport and communication sectors show increased growth rates. In urban areas in transport and communication, in pre-reform period the female employment turned in top and least developed states was almost same. It was declining but in the middle states, female work participation rates were increasing. In post-reform period it further started to increase except in Bihar where it further declined. As far as urban female employment growth rates regarding this sector are concerned, in pre-reform period they were negative in Kerala and Punjab but very high in Karnataka and west Bengal. In Assam and Bihar, growth rates were not very significant. In post reform period urban female employment growth rates are recorded as Punjab (M.O.S) Karnataka (8.68), Kerala (5.93) West Bengal (-7.70 percent) and Bihar (-25.51 percent) 196 other services are further classified into financial and community services. The growth rate of rural female workers in financial services in pre-reform period was much lesser than that of community services. In pre-reform period rural FWPR in community services increased in all the states except in least developed. But in post-reform period even in high ranked states rural female employment has declined in community services.

In urban areas situation is better. More females are working in this industry. In post reform period share of urban female workers in community services decreased. As for as growth rates are concerned in rural areas it increased for all the states except for Punjab and Karnataka but at urban level it has decreased call except Punjab Before 1993-94
females were not entering in this industry. In past 1993-94 years, the situation improved in West Bengal and Assam with 1.36 percent and 4.32 percent growth rates. In rural as well as in urban area females prefer to work in community services over to financial services. In both the periods though the share of urban female workers has remained very high in community services but except Punjab, growth rates in community services declined in all the selected states in post-reform period. The highest recorded growth rates of urban female employment in community services in post-reform period observed in Punjab i.e. 728 percent and lowest in Kerala (2.81) excluding Bihar where it is negative. As far as growth rate of urban female in financial services are concerned it is highest in Kerala (12.64 percent) Correlation Coefficient between female work participation rates of primary secondary and tertiary sectors of six selected states in 1983 with the three survey period i.e. 1993-94, 1999-00 and 2012-13 shows that at rural level the female work participation rates are highly correlated and significant at 1 percent level except for tertiary sector for the year 2012-13. But this was not true for the coruscation coefficient measured for urban females for urban areas it is significant either at 5 percent or 10 percent.

**Coefficient of Variation**

Indicates that the primary sector female work participation at rural level is more compressed than to urban level. For rural area it ranges between 9 to 20 percent; for urban areas 40 to 76 percent. For secondary and tertiary sector female work participation rates are more compressed at urban level than to rural. In rural areas it ranges from 50-83 percent for secondary and 45 to 68 percent for tertiary sector and in rural areas;
compared to 16-42 percent for secondary sector and 19 to 32 percent for secondary and tertiary sector respectively.

In India no major shift is observed in FWPR during pre-reform period in any industry. But during post-reform period, rural females shifted from agriculture to manufacturing construction and community services though the percentage increase is very less and at urban level they shifted from agriculture to manufacturing, trade and financial services.

In pre-reform period in rural areas, Kerala women were moving from agriculture to manufacturing, construction trade and community services; in Punjab, the percentage shift was from manufacturing to community services. In Karnataka and west Bengal the main percentage shift was from agriculture to manufacturing and community services. A small percentage increase noticed in construction. In Assam and Bihar, no major shift was observed. In Assam minor percentage of female workers shifted from community services to agriculture manufacturing and trade, in Bihar the percentage shift from all the industries was only towards agriculture.

In post reform period, in rural of Kerala female workers percentage was mainly shifting from agriculture to community services and same trade and hostelling; in Punjab, it was for community and agriculture services to manufacturing mainly and same percentage increase, noticed in construction and trade. It clears that in post-reform period in rural Kerala percentage of female workers increased in community services and in Punjab, it decreased .In Karnataka and West-Bengal no major shift observed in post-reform period. Though in Karnataka very negligible percentage of females shifted from manufacturing and community services
to agriculture and trade and in West Bengal from manufacturing and community and construction to community services and trade. In Assam, only in one Industry that is manufacturing from where the females were moving to agriculture and in Bihar the major percentage increase noticed was in manufacturing.

In pre-reform period, in urban Kerala females were leaving agriculture and transportation industries and were entering into manufacturing, construction trade and community services, whereas in Punjab the shift was mainly from agriculture and manufacturing to community services. A small increase in percentage 198 observed in trade also. In middle ranked states, urban females definitely were leaving agriculture in pre-reform period. In Karnataka, they were shifting from agriculture and manufacturing to financial and community services. Though the financial services percentage increase was very less. In West Bengal, the Shift was from agriculture and community Services to manufacturing and financial services In Assam almost same percentage of females were leaving agriculture and manufacturing. The major chunk of these females was entering into community services. Same were going to trade and mining quarrying this is the only state where in pre-reform period females were entering into mining & quarrying. In least developed state Bihar, major shift of females was from agriculture and trade to community services. Some increase was noticed in construction, financial services and in public utilities. This is the only state where in pre reform period a major increase of 5.7 percent female workers were observed in public utilities. As for as post-reform period is concerned, urban female workers, Kerala shows percentage shift from agriculture and manufacturing to trade, financially and community services with almost
same percentage increase in all. Punjab, a major percentage shift is from agriculture and trade to manufacturing and a small percentage increase in community service. In Karnataka and West Bengal, in post reform period only agriculture and construction industry show decline in FWPR in Karnataka, females moved to trade, community services and a small percentage increase in financial services; in West Bengal from agriculture to manufacturing and trade. The trend observed in least developed states is totally different from rest of the selected state. In Assam, a major percentage shift is from manufacturing and financial service to transportation and agricultural Industry. Some of females entered trade. In Bihar urban females moved from all the industries to agriculture only. In construction where around 6.1 percent of women workers were working recorded to zero.

In post-reform period, at urban level, mining & quarrying, public utilities and construction are noticed least occupied by females for employment. Among top and middle ranked states some females have started to enter in financial services in post-reform period. Urban females are also going in trade also. In least developed states females preferred agriculture over other industries in post reform period. At State level in rural areas in the age group of 15 years to 44 years FWPR has decreased in all the states except Punjab and Karnataka whereas in urban areas it has decreased only in Kerala and Bihar. In the age group of 45-59 FWPR has increased during 1993-94 to 2012-13 in all the selected states in both the rural and urban areas except for Bihar in rural areas.

The nature of female enforce has also reversed during 1993-94 to 2012-13 as compared to before 1993-94. As the casualisation of female workers has shown decline during this period. This part of the female
workforce is shifting to self employed in rural areas and to regular employed in urban areas.

Section-IV: Different Dimensions of Female Employment.
Age-Specific Female Work Participation

As per data it is seen that for rural and urban female workers during the year 2012-13, more than two-thirds of the usually employed females were in the age group 15 to 44. Further during this period, about one-fifths of the usually employed rural and urban females belonged to the age group 45-59 the oldest group (i.e. age group 60 and above) accounted for around 2 percent of the usually employed females in rural areas and 1 percent in urban areas. However, for the age group 15-23 in rural areas, a small decrease of about 1 percentage point for females is observed in the proportions between 1993-94 and 2012-13. But similar trend is not observed for the age group 15-29 in the urban areas. On the other hand, for the age-group 30-44, a small increase in the proportions between 1993-94 and 2012-13 is observed in the rural and urban areas-which are almost commensurate with the decrease noted against the age-group 15-29. In the most of the states (excluding Punjab and Assam) in the major age-group of 15-29 years FWPRs declined during 1993-94 to 2012-13. Highest increase in FWPRS has started from 30 years of age groups. In higher age-groups (45-59 years) FWPR has increased at both the levels in all the states except Bihar (at rural level) and relatively more increase took place in rural areas than to urban areas in post-reform period. At both the levels, in most of the selected states, FWPR in the age group of 55-59 years increased and in Punjab the increase is highest that is of 0.7 percentage points. 200 among the study states, Punjab is the only one where FWPR has increased in all
the age groups. Opposite to Punjab, in Bihar FWPR has declined in all the age group except 35-39 years.

In 2012-2013 in the age group of 5-9 years, no female child worker has been noticed in rural areas among only of the selected states where as at urban level, in West Bengal female child worker ratio increased from 0.1 percent in 1993-94 to 0.2 percent in 2012-13 in Kerala, Punjab, Karnataka, Assam and Bihar Zero child female workers ratio has been noticed during 1993-94 to 2012-13. The whole analysis explices that it is not true that the increase in percentage of FWP has taken place only in SS category. In top and middle ranked states except Punjab, more increase has taken place in PS category female workers, whereas in least developed states it observed in SS category.

**Mode of Employment:**

Self-employment is predominant form of employment for females, accounting for more than half of the female workforce. The extent of casualisation of female workers in both rural and urban areas declined during 1993-94 to 2012-13. In rural India, female workers shifted mainly to be self employed and in urban India towards regular employment.

**Index of Casualisation:**

Index of casualisation of selected states shows the decline in the incidence of casualisation of female workers in almost all the states at both the levels except West Bengal and Bihar at urban level. At urban level the incidence of casualization is much lesser to rural areas.
**MAJOR FINDING OF THE STUDY:**

**National Trends in Employment:**

The total work participation rate in India in 1983, 1993-94 and in 2012-13 has remained same at 42 percent. For rural workers it decreased by 0.5 percentage points and for urban workers it increased by 1.8 percentage points during post-reform period. Total male and female work participation rates during post reform period have remained almost stable whereas during pre-reform period increase in total FWPR was much higher than that of males. Male-female work participation gap at level decreased by 6.3 percentage points during pre-reform period whereas in post-reform period it increased by 0.1 percentage points. At rural level it has decreased by 0.5 percentage points and at urban level increased by 1.7 percentage points during post reform period.

**Growth Rates of Employment at National Level:**

The annual compound growth rate of total employment decreased from 2.37 percent during pre-reform period to 2.09 percent during post-reform period. During pre-reform period, annual Compound growth rate for female employment was almost double to that of males. But in post-reform period it almost declined to half and became almost equal to that of males. The total employment growth rate for males and females declined in post reform period.

Rate of growth of urban employment continue to be much higher than that of rural employment, especially when rural-urban comparison is made for workers belonging to same sex.
Employment Scenario in selected six states:

One of the main motives of this research was to find out whether the status (HDI rank) of the state and its employment scenario and correlated or not mean high developed state having high employment rate or not, vice versa.

But the research shows that there is no such relationship exists between employment and status of the state. The states which are placed high in HDI 2010 do not show any considerable differentiation in employment from middle ranked and least developed states.

Total Employment Scenario:

Among six selected states, in five, rural male work participation rate (MWPR) was increasing in pre-reform period (except Punjab) and in post-reform period, again five (except Bihar) state show increase.

Rural FWPR in top ranked two states was declining in pre-reform period which started to increase in post reform period. In rest of the four states trend regarding rural FWPR has remained same in both the periods.

In post-reform period rural total WPR increased in all states except Bihar do not show any significant change in FWPR at urban level in post reform period.

Rural male work participation rates in all the six selected states have ranged between 54 percent to 57 percent, with two exceptions.

One is Karnataka where it is 62.2 percent and second is Bihar where it is 47.7 percent. The corresponding rates for urban counterparts lie between 54 percent to 60 percent, excluding urban Bihar with 45.2 percent.
For female the work participation rates vary with large variation with the range of 13 percent to 46 percent at rural level and 11 percent to 20 percent with one exception of Bihar having 6.5 percent female work participation rate at urban level.

Interpretation of Ps and Ss data shows that the female work participation rate of subsidiary status at all India level as well as in all the states and in both the regions (rural and urban) is much higher to that of males. Further the difference of SS work participation rate between males and females is higher at rural level. Male work participation rate in top ranked two states is increased and in middle and lowest ranked two states, it decreased in both the areas in post reform period.

**Compound Growth Rate:**

From pre-reform to post-reform period the growth rate of total work participation decreased for all the selected states except the top ranked states.

**Auto Correlation Coefficient** between the work participation rates of six selected states in 1983 with the three survey rounds (1993-94, 1999-00 and 2012-13) show that the work participation rates for men are not highly correlated neither at rural level nor at urban except for the round 2012-13. As far as females are concerned, the work participation rates are highly correlated for all the rounds.

**Coefficient of variation** further reveals that the structure of work participation rates for men across states with quite compressed. It ranged between 5 to 8 percent in case of rural males and between 5 to 9 percent among urban males. Irrespective of rural and urban areas CV for combined work participation of males ranged between 5 to 8 percent. The structure of
work participation rates for women was relatively more dispersed; C.V. ranged from 32 to 41 percent among rural women and from 32 to 38 percent among urban women for combined (rural and urban) it lies between 31 to 36 percent. The structure of work participation rate of rural total (males and females) workers was relatively more dispersed between 13 to 17 percent as compound to urban total workers which lie between 9 to 11 percent.

**Sector-wise total employment in selected states:**

In post-reform period primary sector rural WPR has declined in all the states. Tertiary sector recorded an increase in rural WPRs in all the selected states in pre as well as post-reform period. Decline in urban work force in primary sector has remained higher in post reform period. Maximum of the urban workforce is engaged in tertiary sector. Increased percentage points of urban total workers in tertiary sector have remained much higher in post reform period accept the State Assam.

**Sector wise growth rate of Employment in selected States:**

The growth rate of rural workers in primary sector for most of the States has remained less in post reform period in comparison to pre-reform. In secondary sector, higher compound growth rates for workers have been noticed in post reform period except for middle states, Karnataka and West Bengal.

In post-reform period employment growth rates of rural and urban persons in primary sector have declined; secondary sector shows a pretty high increase and tertiary sector shows slight decline.

For Females; at rural level, primary sector growth rates have decreased and secondary and tertiary sectors show increase; at urban level
primary and tertiary sector female employment growth rates show decline and secondary sector show good growth.

In urban areas, the share of total employment in tertiary sector is significant higher than that of other two sectors in all the states. Even the sum of WPR of primary and secondary both the sector is less than that of tertiary. It shows a steady increase in all the states since 1983 but increase in percentage during post-reform period is much higher than that of pre-reform period.

**Coefficient of Variation** of the occupational structure of WPRs of persons reveals that at rural level it ranges between 9 to 19 percent, 43 to 52 percent and 30 to 40 percent respectively for primary, secondary and tertiary sector whereas in urban areas it ranges from 38 to 60 percent, 22 to 27 percent and 10 to 17 percent for primary, secondary and tertiary sector respectively. Thus it is clear that rural areas primary sector coefficient of variation is relatively less dispersed but for secondary and tertiary sectors it is relatively less dispersed to that of urban areas.

In rural areas of six selected states most having less growth rate of employment in primary and tertiary sector in post reform period.

Secondary sector shows good growth.

**Female employment, industry-wise in India and selected states:**

Female representation in mining and quarrying, public utilities, construction and transport industries is very less as compared to community services and manufacturing.

Agriculture is certainly a declining industry in most of the states. In pre-reform period, relative to many other industries, a large chunk of urban females were working in construction. But in post-reform period in all the
selected states percentage share of females workers in constructions declined. In Bihar where in 1993, 6.1 percent of females were working in construction reduced to zero in 2012-13.

In post-reform period percentage, share of rural female work participation in trade and commerce has increased in all the states except Assam.

In India no major shift observed in FWPR during pre-reform period in any industry. But during post-reform, females shifted from agriculture to manufacturing, construction and community services though the percentage increase is very less.

The deep analysis of selected states shows that females representation in mining and quarrying, public utilities, construction and transport industries is very less compared to community services and manufacturing. In rural areas in pre-reform period in top ranked and middle ranked states, females were moving mainly to community services and in least developed states only in agriculture. At rural level in the periods, mining & quarrying, public utilities, construction and trade are least demanded though in urban areas in pre-reform period in lowest ranked states some female employment observed in mining & quarrying and public utilities. In financial services, in top ranked states, females are relatively less interested to middle ranked and bottom ranked states.

**Auto Correlation Co-efficient** between females work participation rates of primary to primary, secondary to secondary and tertiary to tertiary, sectors of six selected states in 1983 with the three survey periods i.e. 1993-94, 1999-00 and 2012-13 shows that at rural level the female work participation rates are highly correlated and significant at percent level
except for tertiary sector for the year 2012-13. But this was not true for the correlation coefficient measured for urban females for urban areas it is significant either at 5 percent or 10 percent.

**Coefficient of Variation** indicates that the primary sector female work participation at rural level is more compressed than to urban level. For rural areas it ranges between 9-20 percent; for urban areas 40-76 percent. For secondary and tertiary sector female work participation rates are more compressed at urban level than to rural. In rural areas it ranges from 50-83 percent for secondary and 45-68 percent for tertiary sector as compared to 16-42 percent and 19-32 percent for urban secondary and tertiary sectors respectively.

More than 2/3rd of the usually employed females were in the age group of 15-44 years in 2012-13 FWPR in the age-group of 15-44 years has declined and 45-59 years has increased in most of the selected states.

Though in rural India females WPR in post-reform period remained same but it is a matter of concern that in PS category it reduced to half i.e. from 23.4 percent in 1993-94 to 12.1 percent in 2012-13 and SS category, it increased to more than double i.e. from 9.4 percent in 1993-94 to 20.5 percent in 2012-13.

During 1993-94 to 2012-13, casualisation of female workers has declined at both the levels. At rural levels, more females are going to self-employment and at urban level towards regular employment.

The correlation and regression analysis of socio-economic determinants of female work participation rate shows that female work participation and literacy rate and highly correlated.
7.2) Reforms in Labour Law:

The finding of the present study rural that in spite of several programmes and policies employment generating especially female oriented employment programmes and schemes, work participation rate in general and especially for females is still very less gender bias is very high in employment. Participation in economic activity in the form of employment is very important for the development of individual in person and for the nation as a whole. It is hereby suggested as follows :-

**Role of the Government and Legislation:**

Government should formulate a comprehensive employment strategy aiming at sectoral and regional diversification.

Identify appropriate female labour intensive technologies.

Encourage faster growth in the primary sector.

- The growth strategy must also focus on creating employment opportunities in the non-form and household industry sectors which are highly labour intensive and require less skilled female workers.
- Globalization often gives importance to skill-requiring high level of education, often out of the reach of the unorganized sector workers especially out of reach of females. There is a large chunk of the educated unemployed female without any technical skill, who needs to be provided training for productive employment. The government must devise a policy aimed at absorbing such segments of the female labour force through appropriate training.
- Government should concentrate to counter and diverse the process to marginalization of female labour through self-employment and regular employment.
• The thrust should be on to manage rural out-migration with a suitable region specific employment policy to create more sustainable job opportunities.

• Promote non-farm income generating activities to generate more productive employment opportunities in the non-farm sector.

• There is a big need to make women more aware about SHGs for the government should organize.

• Special cells at rural level to generate awareness and provide essential information and help to women.

• Increase the fund proportion in budget to provide more micro-credits. for that government should first find out the actual needy females of that credits.

• before starting the self employed work government should first provide a small training regarding that work to enhance the ratio of success of that work.

• Try to appoint female staff in such organization to feel free the women to come to such cells/organizations to get information.

• The ongoing efforts of the government in setting up female self help group like "Stree Shakti" have to be intensified.

• There is a strong need for proper implementation of employment generating programmes/schemes/plans and labour laws. It should also be confirmed that the help should reach to the actual needy person.

7.3) Human Resources Development:

In the present Scenario of market economy and policies of liberalization, the need for high quality of Human Resources to meet the
technology and skill requirement in order to give complete advantage to Indian Industries. This is basically required for globalization and make product of world class quality at cheaper and acceptable to the consumer. This could be achieved only when work force employed by the Industry is well trained.

The majority of the job seekers, 59 million un number, registered in the Employment Exchanges are required to be diverted to self employment either as our own account worker or as employer or as helper in industries. To make them successful in their ventures they are to be equipped with necessary skill suitable to the labour market demand particularly in the industrial sector. Skill development, therefore, has to be considered in the larger perspective and should not be aimed at meeting the requirement of organized sector only.

**Arrangement of Institution Like :**

- **The Apprenticeship Training:**

  This is a centre state activity as a part of total quality management. Initially the Apprenticeship Act envisaged training of trade apprentices the training of graduates and diploma holders in engineering and technology as graduates and technician apprentices was brought within the preview of the Act through an amendment in 1973.

  The Apprentices Act make it obligatory on the part of employers, both in public and private sector industries to engage trade apprentices according to the ratio of apprentices to workers in designated trades prescribed under the rules.
Workers Training:

The Workers Training aimed at providing institutional training is mainly implemented by the state government through a network of Industrial Training Institutes (ITIs) policies, Training standards, trade testing and certification of training imparted by such institutions are guided by the Central Government through DGE E/T.

NEED OF CHANGING TRAINING / SKILL DEVELOPMENT PROGRAM:

The skill development is taking place through formal channel. The quality of such skilled manpower is not known. The Job oriented training imparted by various organizations for uplift of the weaker sections of society, may not be consideral as skill development in the context of the modernization of the Industry, globalization and economic liberalization.

All ITIs are not engaged in imparting training in all the 40 engineering trades and 20 non-engineering trades. Only those trades for which affiliation has been granted for an ITI are considered for training. The total seating capacity of these ITIs was about 4.7 Lakh as on 31.07.96.

Considering that 80% of the seats (20% not utilized on account of drop outs non filling up of the seats etc.) are utilized, we can expect the training of at the outside 3.76 Lakh candidate every year.

The apprenticeship training envisages shop floor training of about 2.25 Lakh in the industrial establishments located in various states/UTs. As against this, seats utilizes were about 1.5 Lakh i.e. about 60% Therefore, utilization of the training facilities under this Act is inadequate.

About 70% of the persons selected for the apprenticeship training are ITI trained personnel, and only 30% are freshers chosen from the
market. At present about 4.5% of the labour for which is being added every year in our country can expect institutional vocational training.

The industrial training imparted through the ITI at present develop only semi-skilled manpower that are hardly able to settle themselves on their own. The ITI run by government or private industrial suffers from irregular infrastructural upgradation to keep pace with technological changes due to various reasons, like resource constraint. Such isolated training without the active involvement of the Industry can in no way, equip them with sufficient skill. Planning for industrialized, skill development should therefore, aim at meeting primarily the objective of self employment and accordingly the quantum and skill level decided so that they can appear in the labour market that is they should be able to complete with the product coming of the organized industry, or at least perform better or equal to the persons developing skill through an informal manners.

To sum up, economic reforms have not succeeded in facilitating the process of greater and productive employment generation-Instead, the entire process of jobless growth. Besides this, the so-called competitive atmosphere is also responsible vulnerability in the condition of - For increasing labour force- All this has resulted in lower employment prospect and insecurity of job of the labour force in post reform period.

Visualizing the increased vulnerability of labour in the new atmosphere, however, government has adopted various policy measures for instances. Voluntary Retirement Scheme (VRS), National Renewal Fund (NRF) etc. the fund provided under there scheme are inadequate as it covers barely 3-4 percent of the total affected labour force. Similarly, the
new privatized and globalize mosphere is demanding for highly skilled and well trained man-power but the training and skill development programmes which are operationalised by government and private institutes are not appropriately and adequately fulfilling the growth need of skilled manpower in the industry.
Reference:

5. N.P. Harihanan, Indian Economy
7. N.P. Harihanan, Lights & Shades of Indian Economy
8. Note : GCI : Global Competitive Index