CHAPTER VII
SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS

7. Introduction

The ultimate objective of planned development is to ensure human well-being through sustained improvement in the quality of life of the people. The development of human resources contributes to sustained growth and productive employment. A healthy, educated and skilled workforce can contribute more significantly and effectively to social and economic development. During the era of structural changes in early 1990’s, the new economic reforms were supposed to enhance the potentials of investment opportunities and a substantial increase of employment opportunities in the Indian labour market.

The present study primarily based on NSSO data suggests that during the last 25 years several structural changes in employment have occurred and the share of non-agricultural sector in the total labour force has increased though the total employment level has remained same.

This study has attempted to look at the effects of economic reforms in the garb of globalization on total employment in general and female employment in particular in the selected six states, Kerala, Punjab, Karnataka, West Bengal, Assam and Bihar. The study has the following objectives:

7.1 Objectives:

I. to explore the comparative changes in work participation in general and female work participation in particular in India and six selected states during pre- and post-reform period;
II. to analyse the sectoral changes in total work participation;
III. to identify the structural changes in female work participation in diverse sectors of the economy
IV. to explore the inter-state and inter regional (rural and urban) differentials of female work participation in India and the listed six states.
V. to decipher the determinants of change in female employment.
VI. to study the extent and change in female employment as per mode of
VII. to examine the extent of casualisation of female employment in post-reform period.

7.2 **Hypothesis:**

I. There is little employment generation during post-reform period as compared to the pre-reform period.

II. Variations in rural workforce are more as compared to their urban counterparts in post-reform period.

III. Female casualisation has increased in post-reform period.

IV. Globalisation and development has led to occupational shift in work participation rates of both the males and females from primary sector to secondary and tertiary sectors. This is more true for the developed states as compared to least developed states.

V. Development and employment are said to be positively correlated.

7.3 **Data Sources and Methodology:**

The study is primarily based on secondary data from various sources.

I. **Data Sources**

The present study is based on secondary data. The data have been collected from various official and semi-official published reports and works of individual scholars. The main Sources of secondary data used are; Reports of NSSO (Employment and unemployment) of various Rounds, Census Reports of India of 1981, 1991 and 2001, Human Development Report 2001, Statistical Abstracts of India and of various States, Economic Survey (various issues), Reports of Directorate of Economics and Statistics of various states of different years. Articles from various Journals like Economic and Political Weekly, The Indian Journal of Labour Economics, Man and Development, etc. have been used.

An attempt has been made to analyse work participation variations across India and selected states grouped on the basis of HDI Report 2001. Out of 28 states of India, six states have been selected. The criterion for the above stated selection is Human Development Report of India 2001. Two states, Kerala and Punjab have been selected from the top ranked developed states, two middle ranked states (Karnataka and West Bengal) and two least developed states (Assam and Bihar) have been selected.
II. **Survey Period**

As per our requirement, data of four rounds 38th, 50th and 55th and 61st rounds have been taken. The study undertakes the period from 1983 to 2004-05, divided into two equal decades. The period 1983 to 1993-94 surrogates pre-reform period while the period 1993-94 to 2004-05 is expected to capture the changes brought about by economic reforms thus termed as post-reform period.

The study is based on Usual (Principal and Subsidiary) Status data. We computed afresh the absolute number of workers for 1983, 1993-94, 1999-2000 and 2004-05 and growth rates and associated changes are based on these very estimates. For the record, using decade-wise compound growth rates, separately for rural and urban population, the rural and urban population was interpolated as on July 1, 1983, January 1, 1994, January 1, 2000 and January 1, 2005 to align it with NSSO estimates for 1983, 1993-94, 1999-00 and 2004-05.

7.4 **Summary**

7.4.1. **Section I: National Trends in Employment:**

7.4.2. **Section II State-wise Analysis of Employment (Pre- and Post-Reform Period):**

7.4.3. **Section III Female Employment Scenario in Pre-and Post-Reform Period.**

7.4.4. **Section IV Different Dimensions of Female Employment**

7.41. **Section-I: National Trends in Employment:**

7.41. (a) **National Trends in employment (Male/Female/ Total):**

The total work participation rate (TWPR) in India during 1983 to 2004-05 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 by 2.5 percentage points for said period. The overall employment growth rate for rural as well as for urban workers has declined in post-reform period. In pre-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 2004-05) period, rural TWPR declined marginally and urban TWPR increased by 1.8 percentage points. Total male and female WPRs in post-reform
period have remained almost same whereas in pre-reform period increase in female WPR was much higher than that of males. In pre-reform period in rural areas male WPR increased and female WPR decreased, whereas in post-reform period 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 from 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 male 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.

### 7.4.1.(b) National Trends in Sectoral Employment and in Compound Growth Rates

**Rural:** The sectoral classification of total workers in general and women in particular shows 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 from 81.7 per cent in 1983 to 79.0 per cent in 1993-94 and further to 73.2 per cent in 2004-05; 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 particular, 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 sectors has witnessed a steady increase. Tertiary sector which accounts for around 14 percent (2004-05) 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 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 points of total workers in tertiary sector has remained higher in pre-reform period. Secondary sector shows a decline in percentage in pre-reform-period from 32.4 per cent (1983) to 30.9 (1993-94) per cent but in post-reform-period it again increased to 33.3 per cent (2004-05). Decline in urban workforce in primary sector has remained higher in post-reform-period. In pre-reform period they were 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 2004-05. Maximum of the urban females are engaged in tertiary sector. But increase in the percentage points of working urban women in tertiary sector was higher in pre-reform period than to post-reform period. Thus it is clear that the trends in primary, secondary and tertiary sectors for both the periods are same for total workers and for 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 persons in primary sector has reduced; secondary sector shows a pretty high increase and tertiary sector shows a slight decline in post-reform period. As far as female employment is concerned the growth rates at rural level for primary sector has declined; for secondary and tertiary sectors 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 shows a good growth.

**7.4.1. (c) 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 2004-05, it increased by 0.1 percentage points. At rural level it has decreased by 0.5 percentage points and at urban level increased by 1.8 percentage points in post-reform period.
7.4.2. Section - II : State-wise Analysis of Employment (Pre and Post-Reform Period):

7.4.2. (a) 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, 2001. Total workforce in Kerala is 38.6 per cent of Kerala’s total population. Over the period 1983 to 2004-05, in rural and urban areas of Kerala MWPR has increased but FWPR has decreased. Increase in MWPR at rural level is 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 highest 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 strong positive correlation to female work participation. Another point which gives strength to this statement that over the period 1983 to 2004-05 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 some decline. As far as FWP is 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 2001. It is agriculture dominated state with 40.9 per cent of total workforce; 56.1 per cent male and 22.8 per cent FWP rate as on 2004-05, of this total work force 45.2 per cent is rural and 36.5 per cent 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 show any change but FWPR shows a robust increase from 22.0 per cent in 1993-94 to 32.2 per cent in 2004-05. Thus total work participation at rural level in Punjab shows 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 almost 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 two decades (1983 to 2004-05) 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 2001. 46.3 per cent 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 1983; at urban level MWPR has been continuously increasing since 1983 but FWPR shows stability in post-reform period. It has declined from 19.5 per cent in 1983 to 18.1 per cent in 1993-94 and remained same in 2004-05. Total WPRs at both the rural and urban levels have been continuously increasing since 1983. But increase at rural level is near to double of urban.

From employment point of view, Karnataka is the strongest 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 per cent and female has crossed 45 per cent of WPR.

The long term (1983 to 2004-05) 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 (2004-05) but it is disappointing at urban level, where it has reached to 39.5 per cent in 2004-05. Overall scenario of employment in Karnataka is good except one thing that the FWPR (32 per cent) is almost half of MWPR (60.0 per cent).
West Bengal: West Bengal is the north eastern state of India. Its rank in HDI Report 2001 is 8th. The total worker’s share in West Bengal is 38.2 per cent. Its MWPR is just next to Karnataka and ahead 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 periods in both the areas except female WPR at rural level which is very disappointing.

The percentage points increase in rural male WPR remained almost same in both the periods. Thus the total rural work participation during pre-reform period shows small increase but due to decline in FWP in post-reform period, the total rural work participation has remained almost fix at 37.9 per cent during 1983 to 2004-05.

Female employment scenario even in urban West Bengal is not very good in. It increased during 1983 to 2004-05 but remained less than rural FWPRs all the times though rural FWPR is declined. Urban MWP has remained good all the times especially in post-reform period where it has increased to 59.5 per cent in 2004-05.

It can be concluded that West Bengal is 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. This percentage is even more than that of Bihar which holds the 15 rank in HDI Report 2001.

Assam: Besides 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 2001 for 15 selected states. According to HDI Report 2001, Assam is considered as second highest least developed state after Bihar. Its total work participation rate (36.4 per cent) is very close to Kerala. As one go for employment scenario of the state, over the period 1983 to 2004-05 total work participation rate in Assam has increased. Total MWPR is same as that of Rank 1 state that is Kerala. Male workers constitute 55.1 per cent of workforce in Assam whereas females are 15.9 per cent. Data show that the increase in percentage points of workers during pre-reform period was higher than 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 per cent; 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 per cent) is higher than that of urban (33.6 per cent). This difference is due to higher female employment at rural level.

**Bihar:** Bihar is India's least developed state. Only 29.4 per cent of Bihar’s population constitutes the workforce. In Bihar over the period of 1983 to 2004-05 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 far as female employment rate is concerned it has been gradually declining since 1983 but more decline has recorded during pre-reform period.

7.4.2. (b) State-wise Regional Growth Rates:

From pre-reform to post-reform period 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 areas growth rates increased only for Punjab and Karnataka. Punjab is the only state among selected six, where growth rate of total employment has increased in both the 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 rate for male employment has 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 the 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 2004-05) shows that the work participation rates for men are not significantly correlated either at rural or at urban except for the round 2004-05. As
far 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; C.V ranged from 32 to 41 per cent for rural women and for 5 to 8 per cent for rural men. It range from 32 to 38 per cent for urban women; 5 to 9 per cent for urban men. For combined (rural and urban) female work participation, it lies between 31 to 36 per cent; for males 5 to 8 per cent.

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

7.4.2 (c) Changes in Area-wise Sectoral Employment:

The examination of the sector wise employment of the incremental workforce tells us about the relative sufferance or gains of workers when the labour market is under transition.

In rural areas in 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 states (Assam and Bihar) have shown a decline in WPR in this sector. In 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 and Kerala. In post-reform period only one state i.e. Punjab which has shown fall in rural WPR.

7.4.2 (d) Changes 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. But in secondary sector, higher compound growth rates for rural workers have
been noticed in post-reform period except for middle states, Karnataka 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 rates of work participation have 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 sectors 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 2004-05. The share of secondary sector in urban employment has decreased in middle and bottom ranked states during 1983 to 2004-05. 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 in 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 sectors. Like in Kerala growth rate declined from 4.44 per cent during pre-reform period to 1.06 per cent during post-reform period. For same period growth rate in Punjab increased from 2.86 per cent to 5.37 per cent; in Karnataka from 2.36 per cent to 3.49 per cent but in West Bengal growth rate reduced from 2.75 per cent to 1.90 per cent. Second highest least developed state Assam has shown a robust increase in growth rate from 1.76 per cent in pre-reform period to 6.48 per cent in post-reform period. On the other side, the lowest ranked state Bihar entered into the negative territory in post-reform period.

**Auto Correlation Coefficient** among the work participation rates of primary, secondary and tertiary sectors of six selected states in 1983 with the three survey periods i.e. 1993-94, 1999-00 and 2004-05 show that at rural level the WPRs are highly
correlated for all the three sectors. The correlation coefficients are positive and significant at 1 per cent level. This is true for correlation coefficient obtained for urban persons also, except for primary sector for the years 1999-00 and 2004-05 which is significant at 5 per cent level instead of 1.0 per cent.

**Coefficient of Variation (C.V)** of the occupational structure of WPRs of persons reveals that at rural level it ranges between 9-19 per cent, 43-52 per cent and 30-40 per cent respectively for primary, secondary and tertiary sectors. Whereas in urban areas it ranges from 38-60 per cent, 22-27 per cent and 10-17 per cent for primary, secondary and tertiary sectors 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 more dispersed.

**7.4.3. Section III Female Employment Scenario in Pre-and Post-reform period:**

**7.4.3. (a) Sector-wise and Industry-wise Analysis of Female Employment and Compound Growth Rates**

The pattern of female employment observed in percentage contribution in different sectors during the post-reform period is not very 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 urban 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 & Bihar; in Assam females have shifted from secondary to primary and tertiary and in Bihar from secondary and tertiary to primary sector.

The growth rates of **RURAL** female employment in **primary sector** in pre-
reform period were negative for all the states except Karnataka and Assam. But in post-
reform period, Assam shows the maximum growth rate of 4.91 per cent, followed by
Punjab (4.62 per cent), Karnataka (1.92 per cent) and West Bengal (1.30 per cent).

As far rural area’s 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 per cent. In least
developed states, where Assam shows negative growth rate, Bihar shows pretty good
growth i.e. 4.37 per cent.

The growth rates of rural female employment in tertiary sector of Kerala and
Punjab in post-reform period has remained between 6 to 7 per cent. In Karnataka and
West Bengal, FWPR in tertiary sector show a big decline in post-reform years. In least
developed states, Assam and Bihar, growth rates of female work participation have
increased in post-reform years 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
and secondary to tertiary sector only and in Punjab from primary to secondary sector
only. In middle ranked states the observed trend of shifting of urban female workers 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
lowest ranked states in pre-reform period urban female workers in Assam and in Bihar
from primary to secondary and tertiary sectors. 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
sectors it has increased in Punjab and Karnataka only.

A Nine-industry analysis of female-employment helps us to identify expanding
and contracting industries in six selected states in the pre and post-reform periods.
It is found that agriculture is certainly a declining industry in most of the states. In pre-reform period, the states where the rural FWPR in agriculture increased were Punjab and Bihar. No increase is observed in any state at 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 in rural FWPR in agriculture is of 31 percentage points. The states where the growth rate of agriculture employment improved during the post-reform compared with pre-reform period are West-Bengal and Assam at rural level and Punjab and least 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 that since in many states, mining and quarrying occupies an 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 per cent.

It can be said that in post-reform period urban females are less represented in manufacturing sector. Manufacturing which accounts for more than 8 per cent in total rural female employment at all 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 insignificant i.e. between 0 to 0.2 per cent 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 per cent 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, entered into either negative territory or reduced to very less in post-reform years. Only one state Assam, surprisingly, appears to have recorded an exceptionally high growth rate from 4.36 per cent in pre-reform period to 27.02 per cent 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 upswing phenomenally. As far as urban construction sector is concerned,
in pre-reform period, female employment in it increased in all the states except Assam. But in post-reform period all the states show fall in the same. In Bihar where in 1993, 6.1 per cent of female workers were working in construction sector, reduced to 0.1 in 2004-05. Here it is clear that trend in construction sector is same in all 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 per cent of the rural females are working. Percentage share of rural female workers in trade and commerce has increased in all 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 per cent in Assam followed by Kerala (3.75 per cent), Punjab (3.04 per cent), Karnataka (2.68 per cent) and West Bengal (1.27 per cent). Surprisingly in post-reform period, growth rate in Assam, dropped to negative territory and highest growth rate shown by Kerala (3.75 per cent) followed by Punjab (3.04 per cent), Karnataka (2.68 per cent) and West Bengal (1.27 per cent).

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 females share in this sector ranged from 0 to 0.6 per cent in pre-reform period and 0 to 1.4 per cent in post-reform period except Assam where it increased to 5.8 per cent 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 trend 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 (14.05), Karnataka (8.68), Kerala (5.93), West Bengal (-7.70 per cent) and Bihar (-25.51 per cent).
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 far 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 for all except Punjab. Before 1993-94 females were not entering in this industry. In post 1993-94 years, the situation improved in West Bengal and Assam with 1.36 per cent and 4.32 per cent growth rates. In rural as well as in urban areas 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 rate of urban female employment in community services in post-reform period observed in Punjab i.e. 7.23 per cent and lowest in Kerala (2.81) excluding Bihar where it is negative. As far as growth rates of urban female in financial services are concerned it is highest in Kerala (12.64 per cent).

**Correlation coefficient** between female work participation rates of primary, secondary and tertiary sectors of six selected states in 1983 with the three survey periods i.e. 1993-94, 1999-00 and 2004-05 shows that at rural level the female work participation rates are highly correlated and significant at 1per cent level except for tertiary sector for the year 2004-05. But this was not true for the correlation coefficient measured for urban females. For urban areas it is significant either at 5 per cent or 10per cent.

**Coefficient of variation (C.V)** 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 to 20 per cent; for urban areas 40 to 76 per cent. For secondary and tertiary sectors female work participation rates are more compressed at urban level than to rural. In rural areas it ranges from 50-83 per cent for secondary and 45 to 68 per cent for tertiary sector and in rural areas; as compared to 16-42 per cent for secondary sector and 19 to 32 per cent for secondary and tertiary sectors 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, Keralite 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 areas of Kerala, female workers percentage was mainly shifting from agriculture to community services and some in trade and hotelling; in Punjab, it was from agriculture and community services to manufacturing mainly and some 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 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
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 in 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. Some 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 per cent female workers was observed in public utilities.

As far as post-reform period is concerned, urban female workers, Kerala shows percentage shift from agriculture and manufacturing to trade, financial and community services with almost same percentage increase in all. In Punjab, a major percentage shift is from agriculture and trade to manufacturing and a small percentage increase in community services. 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 states. In Assam, major percentage shift is from manufacturing and financial services to transportation and agriculture industry. Some of the females entered trade. In Bihar, urban females moved from all the industries to agriculture only. In construction where around 6.1 per cent of women workers were working reduced 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 15-44 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 2004-05 in all the selected states in both the rural and urban areas except for Bihar in rural areas.

The nature of female workforce has also reversed during 1993-94 to 2004-05 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.

7.4.4. Section-IV : Different Dimensions of female Employment:

7.4.4.(a) Age-Specific Female Work Participation:

As per data it is seen that for rural and urban female workers during the year 2004-05, 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 per cent of the usually employed females in rural areas and 1 per cent in urban areas.

However, for the age-group 15-29, in the rural areas, a small decrease of about 1 percentage point for females is observed in the proportions between 1993-94 and 2004-05. 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 2004-05 is observed in the rural and urban areas–which are almost commensurate with the decrease noted against the age-group 15-29.

In most of the states (excluding Punjab and Assam) in the major age-group of 15-29 years FWPR declined during 1993-94 to 2004-05. 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 state, FWPR in the age-group of 55-59 years increased and in Punjab the increase is highest that is of 0.7 percentage points.
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-groups except 35-39 years.

In 2004-05 in the age-group of 5-9 years, no female child worker has been noticed in rural areas among any of the selected states; whereas at urban level, in West Bengal, female child worker ratio increased from 0.1 per cent in 1993-94 to 0.2 per cent in 2004-05; in Kerala, Punjab, Karnataka, Assam and in Bihar, zero child female worker ratio has been noticed during 1993-94 to 2004-05.

The whole analysis explicates 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.

7.4.4. (c) Mode of Employment:

Self-employment is relatively predominant form of employment for females, accounting for more than half of the female workforce. The extent of casualisation of female workers in both the rural and urban areas declined during 1993-94 to 2004-05. In rural India, female workers shifted mainly to be self employed and in urban India towards regular employment.

7.4.4. (d) 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 casualisation is much lesser to rural areas.

7.5 Major Findings of the Study:

a) National Trends in Employment:

- The total work participation rate in India in 1983, 1993-94 and in 2004-05 has remained same at 42 per cent. 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 India 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.

b) Growth Rates of Employment at National Level:

- The annual compound growth rate of total employment decreased from 2.37 per cent during pre-reform period to 2.09 per cent 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 rates 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 the same sex.

2. 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 are correlated or not. Mean high developed state having high employment rate or not, vice versa.

But the research show that there is no such relationship exists between employment and status of the state. The states which are placed high in HDI 2001, does not show any considerable differentiation in employment from middle ranked and least developed states.

a) 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) states 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 the states except Bihar.
- Most developed state Kerala and least developed 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 per cent to 57 per cent, with two exceptions. One is Karnataka where it is 62.2 per cent and second is Bihar where it is 47.7 per cent. The corresponding rates for urban counterparts lie between 54 per cent to 60 per cent, excluding urban Bihar with 45.2 per cent. **For female the work participation rates** vary with large variation with the range of 13 per cent to 46 per cent at rural level and 11 per cent to 20 per cent with one exception of Bihar having 6.5 per cent 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 subsidiary status 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.

**b) Compound Growth Rate**

- From pre-reform to post-reform period the growth rates 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 2004-05) shows that the work participation rates for men are not highly correlated neither at rural level nor at urban except for the round 2004-05. As far as females are concerned, the work participation rates are highly correlated for all the rounds.

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

c) 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 in post-reform period.
- Decline in urban workforce 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.

d) Sector Wise Growth Rates 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 rural 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 a 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 significantly higher than that of other two sectors in all the states. Even the sum of WPR of primary and secondary both the sectors 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
- Auto Correlation coefficient among the 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 2004-05 show that at rural level the WPRs are highly correlated for all the three sectors. The correlation coefficients are positive and significant at 1 per cent. This is true for correlation coefficient obtained for urban persons also, except for primary sector for the years 1999-00 and 2004-05 which is significant at 5 per cent level instead of 1 per cent.

Coefficient of variation of the occupational structure of WPRs of persons reveals that at rural level it ranges between 9 to 19 per cent, 43 to 52 per cent and 30 to 40 per cent respectively for primary, secondary and tertiary sectors. Whereas in urban areas it ranges from 38 to 60 per cent, 22 to 27 per cent and 10 to 17 per cent for primary, secondary and tertiary sectors 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 more dispersed to that of urban areas.

In rural areas of six selected states, most having less growth rates of employment in primary and tertiary sectors in post-reform period. Secondary sector shows good growth.

3. Female Employment, Industry-Wise in India and Selected States:

- Females representation in mining & 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 female workers in construction declined. In Bihar where in 1993, 6.1 per cent of females were working in construction, reduced to zero in 2004-05.
- 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 period, 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 & 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 coefficient* between female 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 2004-05 shows that at rural level the female work participation rates are highly correlated and significant at 1per cent level except for tertiary sector for the year 2004-05. But this was not true for the correlation coefficient measured for urban females. For urban areas it is significant either at 5 per cent or 10per cent.

- *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 per cent; for urban areas 40-76 per cent. For secondary and tertiary sectors female work participation rates are more compressed at urban level than to rural. In rural areas it ranges from 50-83 per cent for secondary and 45 to 68 per cent for tertiary sector as compared to 16-42 per cent and 19-32 per cent 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 2004-05.

- 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 female 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 per cent in 1993-94 to 12.1 per cent in 2004-05 and in SS category, it increased to more than double i.e. from 9.4 per cent in 1993-94 to 20.5 per cent in 2004-05.

- During 1993-94 to 2004-05, casualisation of female workers has declined at both the levels. At rural level, 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 are highly correlated.

7.6 **Recommendations and Suggestions:**

The findings of the present study reveal 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:-

I. **Role of 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-farm and household industry sectors which are highly labour intensive and require less skilled female workers.
- Globalisation often gives importance to skills-requiring high levels of education, often out of the reach of the unorganized sector workers especially out of the reach of females. There is a large chunk of the educated unemployed female without any technical skill, who need 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 reverse the process of 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 in rural areas.
- Promote non-farm income generating activities to generate more productive employment opportunities in the non-farm sector.
- The special employment programmes can make a more additive contribution to female employment generation if the emphasis is shifted to the creation of high quality infrastructure. This infrastructure will enhance agricultural productivity and thereby increase employment in agriculture on a more sustainable basis.

But agriculture will not be able to absorb the educated youth. Enhanced self-employment opportunities in both the rural and urban areas can solve the problem of unemployment of educated youth upto some extent.

- There is a big need to make women more aware about SHGs. For that government should organize:
  - Special cells at rural level to generate awareness and provide essential information and help to women.
  - Increase the fund proportion in budgets 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 organizations 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 groups 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.

II. Reforms Regarding Education System:

Still a large proportion of females especially in the rural areas, are getting non professional education. This may be due to

- lack of awareness,
- expensive professional education,
- parents and societal negative attitude for females regarding professional education,
- lack of such colleges/institutions/universities to women’s reach, etc.

Government should invest liberally, rather than withdrawing in government educational institutions, providing technical/professional training; more specifically, training to females.

Not only in universities but even at college and school levels, there should be employment exchanges, which provides information regarding availability of jobs.

The focus should be to strengthen policies to empower women to emerge from the poverty syndrome and to increase access to better economic resources by encouraging them to participate in skill-based productive economic activities.

Social security still eludes most workers in the informal sector. The problem is more acute for women workers. The lack of capital assets, low and irregular income, sickness and other contingencies, poor working and living conditions and lack of outside linkages and opportunities for skill upgradation- all these interlinked factors drag these women into deprivation, trapping them in the vicious circle of poverty.

The success of labour welfare can be achieved through the combined effort of the government, the judiciary, the people, media, NGOs and last but not the least, the labourers themselves, who should be aware of their rights, and of course, their duties also.

In the end it is suggested that rather than killing the public sector, its efficiency and performance should be improved. Because quality of employment in
formal/organised work is for better than the quality of work/employment informal/unorganised sector. So educational infrastructure should be strengthened. Hence role of government is very crucial to improve quality education which leads to human capital formation, to be used in labour market. Private sector needs to be regulated to generate quality employment opportunities especially for the females.