



LEVELS, TRENDS AND STRUCTURE OF WORKFORCE IN INDIA:

A CENSUS ANALYSIS (1981-2001)

R.B.Bhagat, K.C.Das, Daliya Sebastian and Soumya Mohanty

Introduction

Indian economy has been predominantly agricultural. A major shift in the economic policy has taken place in 1991 with liberalization and globalization of Indian economy. As a result, it has witnessed a series of reforms encompassing all major sectors of the economy, and has marked a steady break from the past policy regimes of control, regulation and licenses. This has boosted the economic growth as the economy grew on an average at the rate of nearly 6 per cent in 1990s. This was expected to bring about a major shift in the trend and pattern of work participation rates in rural and urban areas. What are the reflections of this high economic growth rate on the trend, structure and pattern of workforce participation rates in the Indian economy in the last two decades? The economists have generally relied on National Sample Survey (NSS) data for this purpose, and the wealth of information from various censuses are not taken seriously in analyzing the trends in labourforce.

The objectives

The following are the main objectives of the study

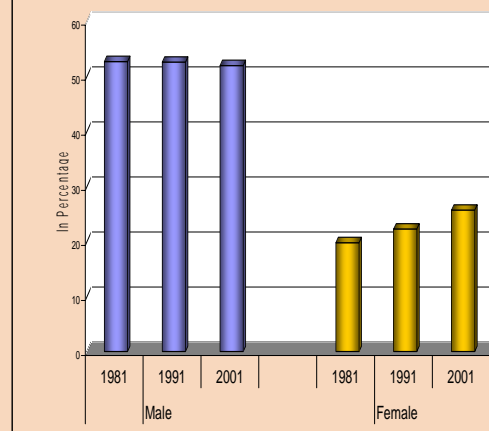
1. To study the trends and patterns of work participation at the national, state, and district levels during 1981 to 2001.
2. To study the trend in the composition of workforce by age, sex and educational levels during 1981 to 2001.

Every year, IIPS undertakes many research studies on a number of themes related to population and health at the state and national levels using its own resources. The 'Research Brief Series' is a new initiative by the Institute to provide an opportunity to the faculty, Ph.D. students and visiting fellows to quickly disseminate the important findings of their research studies before they are published as a research report or in a scientific journal. The authors of the Research Brief look forward to receive feedback from readers that could be helpful in revising the larger study report.

Editor,
Research Brief Series

Dr. R.B.Bhagat is Professor and Dr. K.C.Das is Reader at the Dept. of Migration & Urban Studies of IIPS; Ms. Daliya Sebastian and Ms. Soumya Mohanty are Research Scholars at IIPS.

Fig. 1: Crude Work Participation Rate (Total workers) by Sex, India, 1981-2001



3. To ascertain the changes in the share of non-agricultural sector by rural and urban status at the national, state and district levels from 1981 to 2001.

Major Trends and Patterns

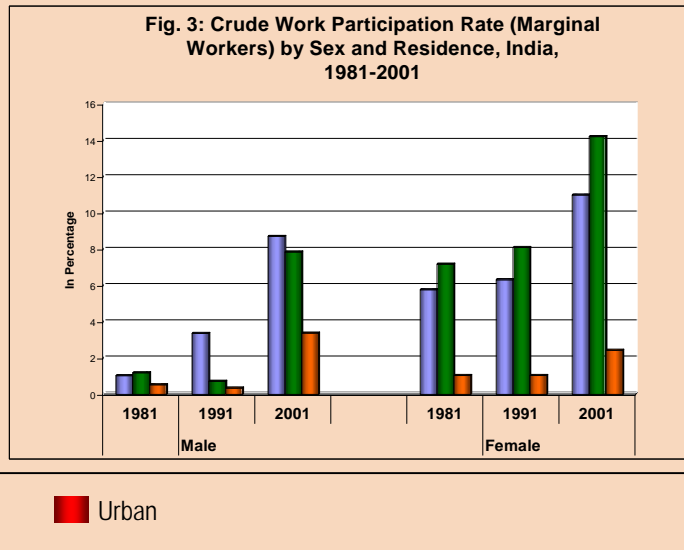
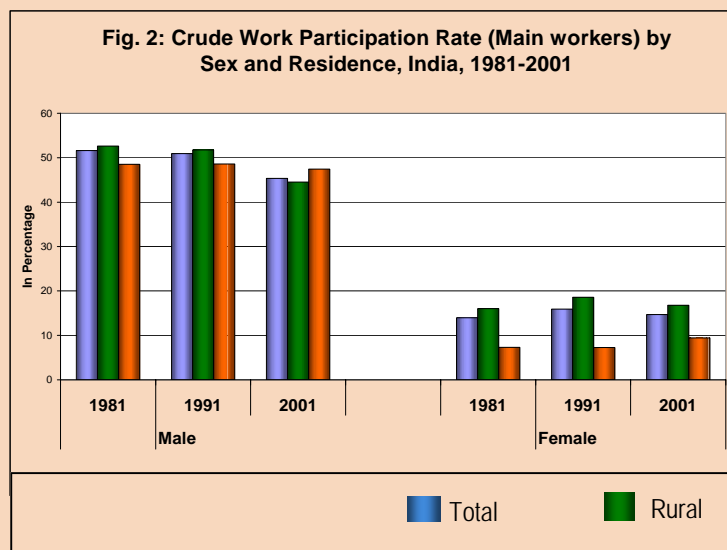
The work participation rate among males remained almost static, whereas among females it has shown a significant increase during 1981-2001. This is found for almost all states. As a result, the disparity in work participation rates between males and females has been reducing over the last two decades. This is true for both rural and urban areas. The northern states of Punjab, Haryana, Delhi and Uttar Pradesh show very low percentage of work participation among females. Punjab recorded the lowest participation rate over the decades from 1981 to 2001. On the other hand, the hilly

states of Himachal Pradesh, Uttaranchal and northern-eastern states show very high female work participation rates. In southern India, Kerala does not record a high work participation rate in spite of very high literacy. On the other hand, comparatively a high work participation rate is seen in Andhra Pradesh. The work participation increases with high altitude, tribal inhabitations and high rainfall areas devoted to rice cultivation.

It is important to know the changes in work participation rates by main and marginal work status separately. Main workers are those who have worked more than 183 days in a year preceding the census operation. Those who have worked less than 183 days are termed as marginal workers. The extent of marginal workforce shows the incidence of part time or short duration jobs in an economy. It has been observed that at the national level, a declining trend is observed in work participation rates of male main workers

programmes in the rural areas. However, the decline in participation rates of male main workers and the concomitant jump in the marginal workforce in urban areas also reflect the changing job market situation during the 1990s. Now the short duration jobs, more significantly in urban areas, is gaining prominence consistent with the policy of globalization and liberalisation of Indian economy.

According to 2001 census, nearly 7.5 percent of India's population (77 million) falls in the age 60 years and above. So, it would be worthwhile to look into the age composition of workforce as well. It is found that the proportion of both male and female elderly workers (age group 60 and above) has increased faster, particularly in the last decade 1991-2001. It is worrying to note that poor states like Bihar and Uttar Pradesh show very high work participation among elderly in 2001 (up to 12 per cent of the workforce). On the other hand, it is encouraging to note that the proportion of workers in age group 5-14 years has declined



(Fig.1). The female main workers also experienced a decline during 1991-2001, but only in rural areas (Fig. 2). On the other hand, in some states like Haryana and Punjab female workforce in main category has increased 2 to 6 times during 1991 to 2001.

Unlike main workers, marginal workforce among males and females has shown a very high increase during 1991-2001 in both rural and urban areas (Fig. 3). The increase may be partly attributed to the efforts made by the census authorities to enumerate women workforce in the country which went mostly unreported in earlier censuses, and partly due to the availability of short duration jobs under various government

programmes during 1981-2001 (Fig. 4). But females show higher incidence of child labour than males. The census 2001 further shows that southern states have the lowest incidence of child labour with Kerala showing the least. On the other hand, north-eastern states of Meghalaya, Mizoram and Nagaland show high level of participation of children in the workforce (5 percent or more). The states like Madhya Pradesh, Rajasthan, and Bihar also have higher incidence of child labour than the national level. It is important to note that there is a preponderance of marginal workers among the child workers. On the other hand among marginal workers, the proportion of male child labour outstrips females in most states and union territories.

It has been found that the percentage of workers engaged in non-agricultural sector has increased considerably over the decades at the national and state levels. In 1981 nearly one third of the male workforce was engaged in non-agricultural activities; however, in 2001 around half of the male workers were non-agricultural workers. Northeastern states like Assam, Meghalaya and Mizoram have lower share of non-agricultural workers compared to the national level. On the other hand, states like Punjab and Kerala have gained about twenty percent increase in non-agricultural workforce during 1981 to 2001. In Kerala, where half of the workforce was engaged in non-agricultural activities in 1981, this figure went upto three-fourth by 2001. Similarly in Punjab, where the share of the non-agricultural workforce was two-fifth in 1981, it went up to three-fifth by 2001. In states like Gujarat, Haryana, Maharashtra, Karnataka and West Bengal, the increase was around 10 percent from 1981 to 2001.

In case of marginal workers, there is an increasing trend observed in the percentage of non-agricultural workers during 1981-2001. In 1981, around 9 percent of the marginal workers were engaged in non-agricultural sector in rural areas at the all India level. However, it increased to around 20 percent in 2001. The percentage of marginal non-agricultural workers in urban areas was around 27 percent in 1981, which increased to 47 percent in 1991 and further to 80 percent in 2001 at the national level.

The educational levels of workforce have been found increasing from 1981 to 2001 at the national as well as at state levels. The percentage of literate male workers has increased from 49.6 percent in 1981 to 70.5 percent in 2001. It is interesting to observe that among those literate male workers, the proportion of matric and above has increased from 5 per cent in 1981 to nearly 26 percent in 2001. In the case of female workers, the literacy rate increased from 14 percent in 1981 to nearly 36 percent in 2001. On the other hand, those literates who were matric and above was 2 percent in 1981, which increased to nearly 9 percent in 2001 among female workers. Thus, the pace of change in educational levels of male and female workforce has been more or less same during 1981 to 2001. And this is true for most of the states and union territories. The states of Kerala and Mizoram have very high (more than 80 %) percentage of

literate workforce among males and females. The main workers were more literate than the marginal workers in 2001, which marked a reversal of the pattern observed during 1981 to 1991. In the rural areas the proportion of literate male marginal workers was two times greater than the proportion of literate female marginal workers. The share of both male and female marginal workers with matric and above has increased more than two times from 1991 to 2001.

At the district level, there has been a high inter-district variations observed for both males and females. But the inter-district variations in female work participation rates have reduced in most of the states due to sharp rise in female workers.

Salient Findings

- Male work participation rates (main and marginal) remained almost static around 52 per cent during 1981 to 2001, whereas female work participation showed an increasing trend from 20 per cent in 1981 to 26 percent in 2001. The increase in female workforce is the result of spectacular increase in marginal workforce in both rural and urban areas, and also a rise in main workers in urban areas. On the other hand, main workers among males have declined very steeply in rural areas, and have not changed in urban areas.
- A very high growth rate of marginal workers among females during 1981-2001 shows an improvement of census enumeration of womens' employment. On the other hand, the increase in marginal workers among males indicates the changing employment of short duration as a result of greater casualisation of male workforce in both rural and urban areas. This is also accompanied by a rapid decline in regular jobs for males in the rural areas in 1990s.
- Disparities between male and female work participation rates are narrowing down in rural and urban areas. This has been possible due to increasing work participation rates among females.
- The share of workers in non-agricultural sector has increased remarkably from nearly one third in eighties to two-fifth in nineties. This indicates that the sectoral transforma-

Fig.4: Proportion of Child and Elderly Workers by Sex, India, 1981-2001



tion of the labour towards non-agricultural activities has been rapid during the phase of liberalization and privatization of Indian economy.

- Child workers among both males and females (age group 5-14) have declined consistently from 1981 to 2001. The child labour constitutes 2.4 per cent of the male and 4.6 per cent of female workforce in 2001. On the other hand, there is considerable increase among the elderly workers among males and females in 2001. It is also found that child workers are predominantly employed as marginal workers, whereas elderly are equally engaged as main and marginal workers.
- Increasing decline in the share of illiterate workers among both males and females has been a noteworthy feature of the consecutive censuses. The share of the matriculate and

above among male workforce has increased from 6 per cent in 1981 to 27 per cent in 2001. Similarly, the share of matriculate and above among female workforce has increased from 2 per cent in 1981 to 9 percent in 2001. The educational level of the workforce has increased very rapidly during the 1990s both among males and females.

- The work participation rates derived from 2001 census are consistent with the work participation rates from NSS (1999-2000) for both males and females at the national level. But when the marginal workforce of the census is compared with that of the subsidiary workforce of NSS, the difference between the two sources of data has been significant. It may be noted that the special efforts by the Census in 2001 has been successful in better enumerating the female workforce, particularly those engaged as marginal workers.

For further details about this study, please contact:

Prof. R. B. Bhagat
rbbhagat@iips.net

Editorial Team

Prof. Subrata Lahiri	Editorial Guidance
Dr. T. V. Sekher	Editor, Research Brief Series
Prof. R. B. Bhagat	Chairman, Publication Committee
Ms. P. Princy Yesudian	Senior Research Officer