WOMEN WORKFORCE PARTICIPATION IN INDIA: A STUDY OF TRENDS AND DETERMINANTS

BY

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I, Ms. Deigracia Nongkynrih, hereby declare that the subject matter of this thesis is the record of work done by me, that the contents of this thesis did not form the basis of the award of any previous degree to me or to the best of my knowledge to anyone else, and that the thesis has not been submitted by me for any research degree in any other University/Institute.

This is being submitted to the North-Eastern Hill University for the degree of Doctor of Philosophy in Economics.

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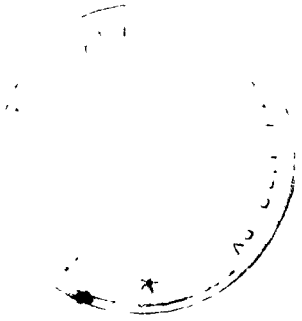

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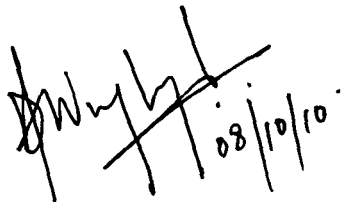

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LIST OF ABBREVIATIONS

ILO:	**International Labour Organisation.**
NCO:	**National Classification of Occupations.**
OECD:	**Organisation for Economic Co-operation and Development.**
SC:	**Scheduled Castes.**
ST:	**Scheduled Tribes.**
UN:	**United Nations.**
UNDP:	**United Nations Development Programme.**
WPR:	**Work Participation Rate.**
WWPR:	**Women Work Participation Rate.**

CHAPTER 1

INTRODUCTION

1.1 Introduction

In an ever changing world changes in almost all aspects of life are taking place, from the personal to the economic front. One constant and outstanding feature however continues to be the disparities that exist within and amongst countries. This is propelling policy makers and researchers alike to find ways and means and to undertake measures in favour of growth and development. At the outset, it must be pointed out that any policy aimed at growth and development would not be possible without adequate and equal attention being paid to all members of the society. This point assumes importance due to the fact that in developing countries gender disparities continue to permeate such societies. The disparities encompass diverse aspects of the everyday lives of people. As we shall see in the subsequent chapters disparities among men and women continues to persist, more so in the case of India.

While accepting that women are a discriminated lot, especially in developing countries, the United Nations declared the decade 1975 to 1985 as the 'Decade of Women'. The declaration aimed at uplifting the status of women and abolishing discriminatory treatment against them (UN, 1982). Prior to this, with the creation of the International Labour Organisation (ILO) in 1919, the principles of promoting the status, education, development and employment of women and their integration into the economic and civic life of the country was embodied. Numerous policy declarations were subsequently adopted to alleviate their position and protection from discrimination especially in developing countries as they lagged behind in respect of employment, poverty, education, training and status. It was also pointed out that special measures are

required to stimulate the equal access of women and their integration into the work force (ILO, 1980).

These initiatives and guidelines assume importance against the backdrop of a large number of countries becoming economically vibrant and a greater integration of not just individuals but also workers is increasingly witnessed in this age and time. It is imperative, however, that we examine the historical trend in terms of the role played by women to give us an insight into the role that they could play in the future growth and development of not just their individual and family life but also of their country.

1.2 Nature of Work of Women

From the early stages of civilization to modern times, women have been playing a much diversified role and had undergone much change since then, evolving over time to suit the prevailing circumstances.

Going back prior to the pre-industrial societies, women's role and their contribution was primarily limited to toiling the fields to supplement the much needed labour and home-based activities. Women's labour in the fields was largely ancillary to their household work (Davies, 1975). Their main responsibilities were largely concentrated on household chores like cooking, cleaning and caring for the young, the old and the infirm. Hence their status was no more than subservient (Blau and Ferber, 1986).

Industrialization brought about a number of changes in the work roles of women. It represented the big female labour force, able to perform work outside the house (Butschek, 2006). The domestic production unit disappeared and home and paid work

became physically separate (Lown, 1990). This shift from home to work in factory and offices also changed the dimension of work of women. Gender roles became more pronounced as men and women performed different economic roles and tasks. Women in the initial stages of industrialization exhibited lower participation in the workforce, owing to factors as low skill and jobs being technical in nature (Goodman and Honeyman, 1991).

With continued industrialization and progressive modernization more changes were ushered in women's work roles in the labour market. Coupled with the increased level of educational attainment and skill acquisition, women became more actively involved in paid work leading to their increased participation in the labour force (Blau and Ferber, 1986). The expansion of the service sector and the declining fertility levels also made it possible for women to work (Fukuda, 2006).

In the case of developing countries, however, women roles remained largely limited to agricultural and home-based activities and have not evolved much over the years. Right from their childhood days women were fed on the idea that their place was home and continues to remain so (Shanmugasundaram, 1993).

In India, for instance, Seth (2001) noted that traditionally Indian women appeared to have had a dependency syndrome as far as employment and participation in paid employment was concerned. The Indian society being largely and strongly tied to traditional roots, women's roles was naturally limited. Taking care of the family and other domestic duties was largely viewed as the domain of women and activities outside the home were limited. While men undertook the major part of the work and were the

primary bread winners, women undertook only subsidiary work. This did not give them enough flexibility to make a higher income and improve their economic condition. With respect to her status as a wife there was little control over the family income as the major decision for family expenditure depended on the husband-the income earner of the family (Ramu, 1989).

1.3 Statement of the Problem

The Human Development Report (UNDP, 1995) stressed on investing in women's capabilities and empowering them as a way to contribute towards economic growth and overall development. Thus as human development takes centre stage; gender equality and gender equity are emerging as major challenges in today's context. At the same time a greater need for integration of women into development is also emphasized. The need therefore would be to raise the status of women to enable them to participate effectively and improve their decision-making power, both at home and outside.

An assessment of the status of women would be tantamount to an analysis of the roles that they play. Women's work participation and occupational distribution have been taken as indicators to assess the impact of economic development (Tansel, 2002). The presumed importance of women's participation in the work force is mainly due to their ability to bridge the supply gap in employment especially in a growing economy and narrowing the gender gap. The ILO (1980) also emphasized on the role of women workers as indispensable agents for the achievement of economic and social development.

Women have never been a privileged lot, especially in the developing and underdeveloped world (Beneria, 1981; Klasen, 2002; Klasen and Wink, 2003; Boserup, 2008). They have not been treated at par with men in almost all aspects of living - from education to participation in decision making at home or outside. This naturally limits their opportunities to serve as positive agents of change as they are bounded by familial and societal roles and pressures. Gender discrimination continues to permeate such societies further narrowing the favourable chances for women.

Economic growth and the development process require a strong commitment from both government and society at large. Development strategies therefore need to address these core issues relating to overall improvement in the position of women in the society. Recognition of men and women as agents of change for the progress of the country requires attention of immediate urgency. Provision of equal rights and opportunities, as well as access to resources to all sections of women becomes an essential aspect of the development process.

India has around 48 million women with just 38 per cent of them recorded as workers (Census, 2001); there is still a lot that could be expected out of them. Being a developing country, however many issues relating to the promotion and improvement in the lives and status of women in terms of their work participation does not appear to have seen much breakthrough. Work participation rate (WPR) is not just an input but also an output of the development process. The incorporation of women into the work force represents a challenge for the attainment and fulfillment of the goals of

contemporary welfare states not only from a quantitative but also a qualitative point of view.

In view of the importance of women's work participation in contributing and promoting overall development, there is scope to examine this issue in the Indian context, which we propose to carry out in this study. This study is an attempt to examine the trends of women work participation in India for the period 1983 to 2004-05 and the determinants thereof.

1.4 Objectives of the Study

The main objectives of our study are listed as follows:

i. To examine the disparities in the work participation rates among men and women in the rural and urban areas of India

ii. To examine the variations in the disparities in the work participation rates among women across states in India

iii. To examine the disparities in the work participation rates of women by different social and religious groups, and

iv. To identify the determinants of the participation rates of women at various levels of disaggregation.

The above objectives would be analysed using data from secondary sources, covering a period of twenty (20) years i.e., from 1983 to 2005.

1.5 Hypotheses of the Study

We propose to test the following hypotheses:

i. With higher educational attainment by women, there will be an increase in the participation rates of women in the work force.

ii. Participation of women in the work force is unaffected by various kinds of segmentations in the labour market such as religion or caste.

1.6 Outline of the Study

In this section we provide a brief structure of the organization of this dissertation. The dissertation comprise of six chapters. Starting with the present chapter, it introduces the objective of our study as well as a statement of the problem that we intend to investigate into. It also details the hypotheses related to the objectives of study.

Chapter 2 provides a detailed account of the existing literature related to our area of study. In this chapter an attempt has been made to review the contribution of authors and researchers on the various factors that impact the participation of women in the labour force in different countries. It also reviews the linkages between economic development and female labour participation. Further the role of education and its subsequent impact on the participation rate of women workers is also reviewed. A brief review is also made on the role and impact of demographic factors, such as age and marital status. Finally the relation between women participation in the work force and their social and religious characteristics is highlighted.

Chapter 3 deals with the data and methodological issues related to the present study. This chapter discusses the secondary sources of data that are used in the study. It

also spells out the methodology that is undertaken to carry out the study. A profile of the area of study is also highlighted in this chapter.

Chapter 4 gives an account of the profile of women workers in India in terms of the magnitude and extent of WPR in India by gender and place of residence. Consequently, it looks at the distribution of women workers and the variation in the participation rates of women according to education, age, marital status and their social and religious identity.

Chapter 5 evaluates the determinants of women work participation using the probit analysis. The probit analysis is carried out using STATA (8).

Lastly, Chapter 6 summarizes the main findings as well as the limitations of the study. It also provides the policy implications and the suggestions emerging out of the study.

CHAPTER 2

REVIEW OF LITERATURE

2.1 Introduction

The objective of this chapter is to attempt a brief review of the theoretical and empirical literature on various aspects such as the relationship between economic development and participation, the role of education, impact of demographic factors like marital status and age as well as the importance of social and religious factors in influencing participation, all of which are the topics related to the subject matter at hand.

The chapter is organized in the following manner. The next section examines the extent of female participation in the work force. Section 2.3 looks at the various aspects of development and its relation to labour participation. Section 2.4 examines the role of education and also looks into the linkage between education and work participation. Section 2.5 examines the extent and role of demographic factors in influencing work participation. This section is further sub-divided into the following sub-sections; section 2.5.1 looks at the possible linkages between age and work participation. Section 2.5.2 examines the impact of the marital status of individuals on their work roles; and Section 2.5.3 explores the role of religion and customs in influencing and shaping the role of individuals in the society at large and work participation in particular. In section 2.6 we summarize the review of literature and, finally, in the following section 2.7 we identify the gap areas and analyse the subsequent scope for further study.

2.2 Extent of Female Participation in the Labour Force

Examining the participation rates of women in the labour force pointed to one single fact of a large variation in the participation rates of women compared to men. Undoubtedly, the participation of women in the labour market had increased over time, yet differences

continue to persist in diverse areas of work. Social and economic development affects men and women in different ways, producing significant changes in the division of labour between them. The participation of women in developed nations are much higher in comparison to their counterparts in the developing nations.

The ILO estimated that in 1980, out of a total of about 1,800 million workers, women accounted for over one-thirds, that is 600 million women workers. The highest female participation rates for ages 15 years and over was in the former USSR at 60 per cent and in the European centrally planned economies it was about 50 per cent. Out of this, the level of participation was 48.5 per cent in Bulgaria, 41.6 in the former German Democratic Republic and 30 per cent in Czechoslovakia. The lowest, then, was in the Latin American countries which stood at about 24 per cent and about 4 per cent in North Africa. (ILO, 1985)

McMahon (1986) compared the labour force participation of women in six countries, viz., United States, Japan, West Germany, Canada, Australia and Sweden for the period 1977 to 1984. He noted that labour force participation rate (LFPR) had risen for women in all six countries. In 1984, the LFPR ranged from 68.9 per cent to 80.4 per cent, the highest being for Sweden followed by Canada, West Germany, the United States and Japan. Between 1975 and 1984 the participation rate of prime aged women (25 to 54 years) rose by 12 to 16 percentage points for all countries. Further, in 1984 female LFPR was the lowest at 55 per cent in Australia and the highest at 88.1 per cent in Sweden. The changes in the LFPR were attributed to demographic shifts within the

demographic groups or/and changes in the age and sex composition of the population along with the behavioural changes on the attitude towards work.

In 1998, the labour participation rate of women stood at 77 per cent for Canada, 95 per cent for France, 74 per cent for Germany, 67 per cent for Japan, 84 per cent for Sweden and 77 per cent for the United States, respectively (Ehrenberg and Smith, 2000). The proportion of employed women rose substantially in the European and North American countries. In 2002, the percentage of women in the age group 15 to 64 years stood at 75.6 per cent in Denmark and Sweden and 78.6 per cent in Norway (Ferber et al., 2006).

Examining women's work participation in India since 1951, Dutt and Sundharam, (1998) argued that the work participation revealed a contradictory trend. They reported that female participation rates were much lower than male participation rate. This was in spite of the fact that women's participation rate had substantially improved over the last few decades.

Toossi (2002) gave a profile of the labour force of the United States for the period 1950 to 2050. It was shown that while the labour force grew at an annual growth rate of 1.6 per cent per year for the period 1950-2000, it was expected to grow by 0.6 per cent annually for the period 2000-2050 i.e., 192 million workers by 2050. Women's participation increased by 2.6 per cent annually from 1950 (34 per cent) to 2000 (60 per cent). The projected number of working women by 2050 was 92 million, with an annual growth rate of 0.7 per cent. By then, it was also pointed out that women's share in the workforce was expected to be nearly 48 per cent. The author also noted that the share of

Hispanics, Blacks and Asians were all projected to increase - from 5 per cent to 11 per cent during 2000 to 2050 - with Asians to be the fastest growing group.

While the variations between countries were much noticeable, variations within different regions of a country were also present. A study on the participation of women in Canada showed that women in the Western provinces of Canada and Ontario were more likely to be employed than those from Quebec and the Atlantic provinces. In 2000, about 63 per cent of women in Alberta and 58 per cent in Ontario were employed compared to only 47 per cent in Newfoundland and 55 per cent in Quebec. However, in all provinces women had lower levels of employment compared to men (GoC, 2004).

Analyzing the employment of women in Turkey, by place of residence, Ozdemir and Yucesan-Ozdemir (2004) had showed that urban women had a lower participation rate at 19.1 per cent compared to the rural women at 41.4 per cent. However, rural women's participation was reported to have had declined from 55.3 per cent in 1991 to 41.4 per cent in 2002. It was also shown that overall women's participation declined from 34.1 per cent in 1991 to 27.9 per cent in 2002. Unpaid family workers accounted for almost half of the total female employment and a majority of women were employed in the informal sector as casual and temporary workers. The participation rate by education was the highest for women who had a primary level education at 47.5 per cent followed by high school graduates and higher education with 12.5 per cent and 11.3 per cent respectively.

One important aspect of women's participation was that participation rates differed between countries due to role of certain factors. For instance, Brusentsev (2006)

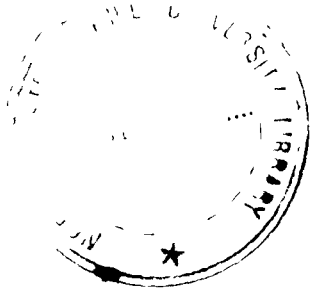
analyzed the labour force participation of women in the United States from 1967 to 2003 and found that since 1990 the increased participation of women in the labor force had slowed down from previous decades. Adverse labour market conditions were the main factors which impacted employment choices of women and hence responsible for the slowing down effect. Other factors, such as improved educational attainment and the need to contribute to the family income were responsible for rising female labor force participation rates over the last few decades.

A similar finding was also noted by Hotchkiss (2006) where it was reported that after decades of consistent increase, the labor force participation of women in the United States flattened out in the late 1990s and declined after 2000.

2.3 Economic Development and Labour Participation

The early arguments on the relationship between the female labour force participation rates (FLPR) and the level of economic development was hypothesized by the U-shaped curve. Starting with the work of Mincer (1962) and later refined by Killingsworth and Heckman (1986), Goldin (1995) and Tansel (2002), a theoretical exposition of high FLPR in developed countries and lower FLPR in developing countries has emerged. Using cross-country data they argued that the FLPR could be captured by what is known as the U-shaped curve.

Their hypothesis is that at the initial level of development of a country, the FLPR is observed to be at one of its highest levels. The high level of FLPR at the initial stages of development is due to the fact that large proportion of the labour force is unskilled and wages of both male and female labourers are lower. More women, therefore,



participate in the labour force to supplement the household income. With the passage of development, the FLPR begins to exhibit a downward decline due to raising male wages and increasing the family's income. The women were withdrawn from the labour force partly due to lower skill levels and lower wages and partly because of socio-cultural norms prevailing in the society. At higher levels of development, as women's education and skill level improve and as their wages rise the FLPR also rises. This would be represented by the rising portion of the U shaped curve. Besides, the expansion of the tertiary sector increased the demand for women's labour, which contributed to the increasing FLPR. Theoretical expositions to empirically verify this hypothesis has been numerous.

Collver and Langlois (1962) in their work pointed an inverse relationship between work participation rate and the level of development. They argued that in the course of economic development, in countries where there was high rate of participation, the decline in participation in the subsistence sector may be faster than the growth of employment in the industrial or tertiary sectors. The overall impact would be a fall of the total participation rate. They also suggested that in the long run, the economy would be benefitted primarily from the up gradation of women labour in the latter sectors. They further argued that increasing work participation rate of women does not necessarily lead to high levels of development but a high level of productivity can be achieved with relatively lesser participation rate of women.

Semyonov (1980) on the other hand, pointed out the positive relationship between economic development and the level of participation rate of women. Economic

development was viewed as not only creating a demand for women labour but also expanded it. This was attributed to the fact that industrialized societies tended to and were more likely to recruit women workers to their economically active labour force than do the developing countries. Even though economic development generates a demand for labour which could be augmented by the incorporation of women, yet their participation could mediated by a number of factors viz., family composition or fertility.

Pampel and Tanaka (1986) while specifying the effects of female labour force participation on economic development analyzed a sample of 70 nations which had a population of over one million, over two time periods 1965 and 1970 covering different levels of development. Using energy use per capita as a measurement of development, the results of the study showed a curvilinear or U-shaped relationship between energy use (as a proxy for economic development) and female labour force participation. Further, variables such as family size, female education, the adult sex ratio, economic dependency and labour force growth were also found to be important determinants of female labour force participation, which had different effects depending on the level of development.

Kottis (1988) examined the participation rates of women in Greece during the period 1961-1981 on the basis of the U-shaped hypothesis. The major finding of the study was that the pace of development had a discouraging effect on women's labour where their unemployment was two to three times higher than the reported unemployment. It was also pointed out that education had a negative impact on their employment. The increase in the educational attainment of women led to a shortage of

employment opportunities for them in areas other than urban centres, which was not so for the uneducated women where there was no lack of job opportunities. Hence, it was concluded that the effects of education on the female labour force would be positively felt only after a certain stage of development has been achieved by a country and not during the initial stages of development.

Clark et al., (1999) examined the effect of economic development on the labour force participation of older persons in the age group 55 years and above for 134 countries. Their analysis found a negative relationship between per capita income and labour force participation rates. This relationship was found to be stronger for older men than for women. The reasons attributed were that a higher proportion of older population resulted in lower participation for older men, while for older women a higher participation rate was attributed to the high widow rates. Economic development resulted in industrial changes and the shift from agricultural employment; aging of the population and development of retirement programmes led to early retirements and low LFPR.

Goldin and Katz (2001) pointed out the relation between economic growth and educational attainment of the labour force. They stated that the benefits of education would lead to an improvement in human capital and the productivity of the workforce. This was due to the increasing rate of innovations and adoption of new technologies by the work force. They concluded that a country with a highly educated labour force, both men and women, experiences higher rates of growth.

Tansel (2002) provided time series evidence on female labour force participation in Turkey and considered its cross-provincial determinants for 67 provinces for the years 1980, 1985 and 1990. The relationship between economic development and female participation in the labour force was investigated, where cross-province estimates validated the U-shaped hypothesis. Other findings of the study reported a positive correlation between female education and female participation in the work force. Further, it was pointed that female labour force participation in Turkey actually exhibited a declining trend. The decline in female participation was from a high of 72 per cent in 1955 to a low of 26 per cent in 2000.

Warner (2004) pointed out the positive correlation between GDP and work participation. It was showed that employment shifts i.e., an increased participation in the labour force and a reduction in part time or semi-informal work was positively correlated with increased GDP per capita across countries. Taking evidences from Thailand and Mauritius he showed that participation rates increased during economic growth, and impacted poverty and income distribution. It was further pointed out that growth rarely happened without increased participation, though increased participation may occur, albeit rarely, without growth.

The growth in the labour force was also seen to be as one of the key determinants of the potential rate of economic expansion of a country. For instance, in the United States, it was pointed out that the country's potential rate of expansion during the past five decades (1948 to 2001) was boosted by a growing labour force. This was augmented not only by the baby boom but mostly by an increased participation of

women in the labour force. This led to an annual increase in the GDP of the country by around two per cent during the period (FRBSF, 2007).

From the above discussion it can be seen that the level of economic development of a country affects women's participation differently. In the case of developing countries where large scale poverty remained a strong feature, participation in paid labour was largely a response to economic needs. The level and pattern of participation was also seen mostly concentrated in the unorganized sector of the economies and in the rural areas. In developing countries, women constitute a substantial portion of the agricultural labour force and contribute about two-thirds of all hours of work as primary labour in subsistence farming and home-based production (Meier and Rauch, 2000). The participation in activities other than agriculture was severely constrained by several social and cultural factors. Employment in occupations, other than agriculture and allied activities, were limited to traditional female industries and low skilled jobs. Poverty and high levels of illiteracy were other factors that limited women's participation in the formal sector. On the other hand, in developed countries women's participation was a resultant of the development process, which coupled with several other factors, facilitated women's entry into the work force. This eventually was reflected in higher work participation for women and a positive addition to their respective countries' growth and development.

2.4 Education and Labour Participation

The role of education and its benefits to the individual receiving the education has been given due importance by researchers. It is noted that the main benefit of education is in

improving the capacity of an individual to be able to earn an income. Besides, education has a direct benefit to the society as well, where it benefits individuals who have obtained its services (Leftwich and Sharp, 1984). While placing importance to the role of education in the labour market experiences of individuals, much has been highlighted on what that role could possibly be. Individuals receiving an education while having the potential to improve their lives are also severely constrained by a number of factors, poverty being the most important of all.

Cohn (1979) stated the importance of education in determining the economic and social success of an individual. While emphasizing on the role of education in raising the productivity and earnings of the individuals receiving the education, he also focused on the social benefits of education. These are benefits that the individual concerned cannot appropriate but are accrued to other members of the society. Most importantly, the major benefit that could accrue from having an education is the intergeneration effect. Here persons are more likely to complete a given educational level provided their parents have equally received higher education. This would eventually result in increased potential income as well for the person concerned.

Standing (1982) explored the relationship between education and labour force participation of women. He asserted that it would be more likely for highly educated women to enter the work force even though there cannot be any prior justification for expecting them to have a higher probability for participation in the labour market. The direct and indirect influences of education were also highlighted. The former included the enhancement of opportunities for employment such as the postponement of marriage

and child bearing and the higher propensity for migration, while the indirect effects were increased opportunity cost of women's economic activity, higher reservation wage which could lead to an aversion for women employment in the informal sector.

Gregory et al., (1985) in their analysis of women in the Australian labour force has shown a high participation rate among women with higher educational attainment. It was shown that participation rates were positively related to education levels and women with university degrees were twice more likely to be employed compared to women with less than 10 years of schooling. It was further shown that the participation of married women increased by almost forty-five percentage points during 1975. This in fact, was the major contributor to the increased women participation in the labour force and 90 per cent of the increase was attributed to women employed part time.

Lichter and Costanzo (1987) pointed out that in the United States the educational up gradation of the female population had been one of the major forces of social change in the country. For women aged 25 or over, the median years of schooling increased from 12.1 to 12.6 years between 1970 and 1980 and the percentage of graduates from high school also increased from 52.8 to 65.8 during the same period. This increase in the educational level altered the outlook of women towards household work and manifested itself in the form of increased work participation for women with higher educational attainment.

Joekes (1991) highlighted on the positive correlation between higher education and work participation of women. The study examined the impact of education on the participation of women in the developed countries of South-east Asia which included

Hong Kong, Taiwan, Singapore and South Korea. The study concluded that the respective countries' economic growth was largely due to the influence of early attention paid to the education of women. This eventually resulted in the higher proportion of women workers in the labour force at large and the industrial workforce in particular.

Nam (1991) on the other hand, analysed the determinants of female labour force participation in Seoul, South Korea for the period 1970 to 1980. The analysis showed that the educational level and economic status were the main factors that influenced women's entry into the labour force. A higher educational attainment of women led to their higher participation where participation rate increased from 14.6 per cent in 1970 to 23.5 per cent in 1980. This increase in participation was also attributed to an expansion in the Korean economy which necessitated the need for more educated workforce. This was filled by women who had the requisite educational qualification. It was also shown that women from lower economic backgrounds had a higher probability of participation compared to those from higher economic backgrounds.

Cohen and House (1994) focused on the role of education and its consequent impact on the variation in productivity of workers and their earnings in the labour market in urban Khartoum, Sudan. Their analysis was restricted to employees in the formal sector, data for which was from the Khartoum Employment Survey. Their work showed a positive correlation between educational levels and wages. The returns to schooling were lower for primary educated as compared to higher returns for college educated workers. However, male earnings were reported to be 25 per cent more than females who were only restricted to lower-level white collared jobs. Lower productivity

was attributed to the poor quality of schooling in the country which in turn led to and shortages in skilled manpower.

O'Neill (1995) examined the extent to which human capital convergence could lead to changes in income distribution. The analysis was done by decomposing national income into three components and measuring their impact to changes in income dispersion. These were education levels, returns to education and a residual component, which included changes in physical capital and labour force. It was pointed out that shift in production towards highly skilled labour had resulted in higher returns to education. However, combined with large disparities in education and technological change between developed and less developed countries, this had led to an increase in inequality.

Baraka (1999) using data from the Taiwan Manpower Utilization Surveys examined the returns to education in Taiwan for the period 1979 to 1995. The population was divided into 5-years birth cohorts starting from people who were born in 1920-24 and ending with those born in 1965-69. Using regression analysis, the author found that women were less rewarded at lower levels of schooling and better rewarded at higher levels, while men's earnings declined at higher educational levels. It was reported that men with university degrees saw a decline in their earnings from 36 percent to 29 percent above those with middle school graduate degrees. Younger cohorts (both men and women in the age group 25 to 54 years) were reported to be earning less irrespective of their higher education levels, than their counterparts from earlier birth years, prior to

1940s. The changes in the earnings structure was attributed to changes in the relative size of education groups.

While examining the quality of schooling and the outcomes on the labour market, Case and Yogo (1999), estimated the returns to education for the population between 24 and 34 years of age. Using the 1996 South African Census data, the results of the regression analysis on completed years of schooling for marital status, age, current residence and district of origin, showed that the probability of employment was two to three times as large for women as it was for men depending upon the quality of schooling received by them.

Using data from the National Adult Literacy Survey, Ishikawa and Ryan (2002) examined the relationship between schooling and earnings in the United States. Basic skills were divided between those acquired through schooling and those acquired otherwise, termed as credentials. These were included as independent variables in estimating the effects of schooling on wages and earnings. The study found that substance of learning in school or the accumulated human capital accounted for higher earnings as compared to credentials. Further the strength of human capital versus credential returns to schooling also varied by race. A large variation between earnings and basic skills acquired through schooling, among ethnic groups was also found in the study. The largest return was realized by white females and males and Hispanic females while it was lowest for the blacks.

Petrakis and Stamakis (2002) studied the linkages between growth and educational levels among countries with different levels of development, in particular

between OECD countries and those outside the OECD. The level of educational attainment of the labour force, divided into primary, secondary and higher education and capital stock were taken as variables. Employing Weighted Least Square (WLS) regression, they found that as the level of development increased so did the contribution of higher education to growth. This was true only for the developed countries. In the less developed countries, on the other hand, primary as well as secondary educations were the main engines of growth. Hence, they concluded that growth and educational levels varied with the level of economic development of a country. Advanced countries benefitted more from higher education; while for the less developed it was more from primary and secondary education.

Beutel and Axinn (2002) suggested that gender differentiation in adult roles and the emphasis on family related roles for women led to gender differences in educational attainment. As a result a conflict between the pursuit of education and career roles with the pursuit of family roles had an adverse impact which led to the abandonment of schooling by the women at an early age. Societal expectations regarding women's behaviour and roles within their families, such as marriage and child rearing, led females to truncate their education earlier than males and affected their access to work. This reduced their chances at work participation.

Brown and Park (2002) examined the effects of poverty, intra-household decision making and school quality on educational investments and learning outcomes. It was pointed out that poverty affects educational investments and learning negatively. Children from poor families were three times more likely to drop out of school. It was

also noted that girls had a higher probability of being held back and dropping out of school at primary school level compared to boys. Women's empowerment, however, reduced the likelihood of dropping out but does not affect any other outcome. On intra-household decision, it was pointed that the level of a father's education had a stronger influence on educational investments than the mother's education. An additional year of father's education reduced the likelihood of dropping out of school by 12 to 14 per cent.

Klasen (2002) using cross-country and panel regression investigated gender inequality in education and its eventual impact on economic growth. It was pointed out that gender inequality in education directly affected the economic growth of a country by lowering the average level of human capital, and indirectly through investments and population growth. These observations were made for South and East Asia, Sub-Saharan Africa and the Middle East. The findings showed that gender inequality in education accounted for 0.77 percent of the growth difference between South and East Asia, 0.44 percent between Sub-Saharan Africa and East Asia and 0.69 percent between the Middle East, North Africa and East Asia. It was suggested that the promotion of gender equality in education would not only contribute to the advancement of the nation but also help in the promotion of human development goals, lowering mortality and fertility.

Sylwester (2002) examined the effect of increasing the expenditure on education and its eventual impact on the distribution of income within a country. The findings in the paper showed that devoting more resources to education, especially public education was associated with a reduction in income inequality. The conclusion implied in the findings was that the support for education would be beneficial for reasons other than

improving human capital to propel economic growth. Further, it was also noted that investing more resources on education would also reduced income inequalities that exist among households within a country.

Spohr (2003) sought to examine the extension of compulsory education at the junior level and its impact on the labour market outcomes of individuals. The findings reported a strong linkage between the two. Further, an additional year of schooling raised the probability of higher earnings and it had a stronger effect for females. The introduction of such compulsory formal education also raised the employment prospects for individuals from socially marginalized families. Also, it enabled educated individuals to obtain employment in both the government and private sector.

Self and Grabowski (2004) examined the impact of education on income growth in India for the period 1966 to 1996. Gross enrollment data and educational attainment of the population aged 15 years and above was used and time series techniques (simple and partial correlation) were applied to determine the impact of each educational category (primary, secondary and tertiary) on income growth. Their findings revealed a positive relation between education and growth, with a strong causal relation for primary and weak relation with secondary educational level and none for tertiary level education. Further they found that while females at all levels of education had a strong potential for generating growth, males had a strong causal impact only at the primary and a weak causal impact at the secondary level, respectively.

Glewwe and Jacoby (2004) on the other hand examined the relationship between household resources and the demand for education in Vietnam. Consumption

expenditure was used as a measure of household resources and hence the household wealth. The analysis covered the period from 1993 to 1998. The study found a positive relationship between household wealth and the demand for education. However, it was reported that while education led to growth, the latter raised the demand for schooling, and wealthier households invested in education to increase their wealth in future generations.

The level of educational attainment, while being positively related to the income and wealth of households, was also limited by their poverty. Thomas et al., (2004) while examining the household spending on education in Indonesia during the major economic and financial crisis of 1998 found that there was a reduction in spending by poorer households, especially those with younger children. However, low resource households had protected investments in the schooling of older children in favour of the education of their younger siblings. There was, however, no substantial reduction in the educational investment of children by the households at the top of the income distribution.

Sackey (2005) examined the effects of education on the labour participation of women in Ghana. It was pointed out that the decision to participate or not, in the labour market depended to a very great extent on schooling as well as the cost of living. While pointing out that participation rates of women had exhibited an increase, it was accompanied by a decline in the fertility at the same time. This was mainly due to an improvement in the educational status of women - both in terms of enrollment and years of schooling - which improved their labour market prospects as well as postponement in

the age of marriage. It was further suggested that efforts towards narrowing the gender gap in education to ensure benefits and gains for women needed to be sustained and intensified for overall improvements of women's lives and their families.

Euwals et al., (2007) were of similar views on the effects of education on participation rates of women. In their analysis they found that a high level of education resulted in higher probability of participation. Further, favourable market conditions facilitated women's entry into the labour market and contributed to one-eighth of the total growth in the participation rates. This also resulted in wives to participate in the labour market if their husbands were unemployed. Other factors like lesser number of children, lower unemployment rates, etc. also contributed to increased participation. On the other hand, unfavourable market conditions led to potential market participants to withdraw themselves from the labour market.

Boserup (2008) on the other hand, highlighted an aspect of education not as a cause for employment but rather of unemployment. She pointed out that it would largely be the educated who would suffer from unemployment as opposed to the illiterates. This was because the former were ambitious about the type of job they were prepared to accept as opposed to the latter who accepted any job in sight. Added to this was the fact that men would become hostile to the idea of having their jobs taken over by educated women. As pointed out by the author, the opposition was not with respect to female education but rather to the employment of educated women. It was further emphasized that even if women entered the labour market, they were often employed in occupations which would not be taken by men.

Pauw et al., (2008) on the other hand, pointed out the importance of skills and work experience, besides educational attainment as a factor for absorption in the labour market. They emphasized on the improvement in the quality of schooling, and the choice of an appropriate type of education for an enhancement of the employability of individuals. It was highlighted that in 2005, individuals with a qualifications in physical, mathematical, computer and life sciences accounted for 22.2 per cent of the unemployed, followed by human and social studies with 20.6 per cent and business, commerce and management studies with 19.1 per cent, respectively.

Chiappori et al., (2009) explored the impact of education not only in relation to labour market returns to schooling but in terms of the marriage market. They corroborated that education had a positive impact in terms of higher returns as compensation for additional years of schooling. They extended their work to the marriage market and observed that the expected share from marriage not only induced women to receive higher education but also induced them to fully internalize the gains from their premarital investments. Also the proportion of educated women that marry increased as they were released from household chores.

A summary of the above shows the positive and negative impacts of education not just on the individual receiving it but also for the prospect of labour market participation. While a higher educational attainment for individuals in general, and women in particular, had the potential for boosting their labour market performance as well as their wages; it also positively impacted on several other spheres of their lives such as the marriage market. However, the societal and cultural norm prevalent in

different societies, besides poverty, was not just a hindrance to their receiving education but also inhibited their effective participation in the work force. Further, gender discrimination, distinction in wage accrued between men and women; and skill difference hampered their further individual and professional growth.

2.5 Influence of Demographic Factors on Labour Participation

This section discusses the role of demographic characteristics, such as age and marital status, on labour participation.

2.5.1 Age

The impact of age on the participation of women in the labour market is closely linked to familial factors. Evidences from both the developed and developing countries showed variations in the participation rates of women depending on their age.

Chase (1995) analyzed the work participation rates of women during and after Communism in the Czech Republic and Slovakia. Under communist regimes central policies of providing citizens with work, delivering equity between workers and subsidized child care resulted in high participation rate of women in the work force. With the fall of communism in the respective countries the participation rates declined, as these social facilities no longer existed, even though wages remained substantially higher. This fall was observed in the case of younger women under 35 years of age. On the other hand, women in the age group 35-50 years had a higher participation rate, which was related to their higher earning potential and reduced likelihood of child care. Older women in the age group of 50 years and above dropped out of the labour force as they had the opportunity to retire or their earnings potential decreased.

Fair and Macunovic (1997) examined the labour force participation of women in the age group 20 to 24 years for the period from the mid 1960's to the mid 1990's. The potential wage rate and potential relative income were used as explanatory variables to explain labour participation of women. The main findings of the study was that the increased participation during the period 1964 to 1978 was a combination of the rise in the potential wage rate and a fall in potential relative income. A smaller increase in participation during 1978 to 1984 was attributed to the absence of an increase in the potential wage rate and a fall in potential relative income. On the other hand, a balance in participation was reported for the period 1985 to 1995 largely attributed to the effects of an increased potential wage and an increased potential relative income.

Dugan and Robidoux (1999) explained the variation in the participation of men and women in different age groups. It was pointed out that the participation of younger people in the age group 15 to 24 years was lower due to their attendance in school. The participation of adult males in the age group 25 to 54 years was reported to have declined during the 1990's while that of females increased albeit less. This was largely contributed by cyclical and structural factors. On the other hand, the participation rates of older females in the age group 55 to 64 years increased compared to a decline in that of males. This was attributed to differences in the social security net, which included pension plans and educational attainment.

A UN Report (2001) on participation of older people in the work force had pointed a decline worldwide. Noting that participation of people above 65 years of age had declined by 40 per cent globally; there were differences in the pattern of

participation of men and women among the older age groups. It was mentioned that the share of women in the older work force had actually increased compared to that of men's participation. In 2000, at the global level, the percentage of participation of older women increased to 31 per cent from 26 per cent in 1950, while that of men decreased from 55 per cent in 1950 to 30 per cent in 2000. Another feature was that older women's participation was higher in developed countries with a participation rate of 41 per cent, to 29 per cent for women in less developed countries.

A Report from the Commission of European Communities (CEC, 2002) noted that while the participation rates of women increased for those in the age group 25 to 60 years, the participation rate of older workers declined. It was also pointed out that higher the skill level, higher was the activity rate for all age groups, which was more marked for women than for men. Four main determinants of labour market participation were identified. These factors included availability and attractiveness to work, the balance of financial incentives (which was primarily the interaction of tax benefit systems and wage levels), education and training and the availability of and access to day-care facilities, transport and counseling services. The major reasons for inactivity included family or personal responsibilities, own illness and disabilities, education, training and retirement.

Domadenik and Pastore (2004) examined the impact of labour market institutions, such as education and employment policy on the labour market participation of young people in Poland and Slovenia. They noted that teenagers in the age group 15 to 19 years had lower participation rates largely due to school attendance. On the other

hand young adults, in the age group 25 to 34 years had a higher probability of being in temporary employment compared to prime aged (35 to 54 years) workers. Individuals over 55 years of age had a lower probability of being economically active and employed. Women had a higher non-participation rate compared to men. It was further reported that individuals without or with low education levels had higher unemployment rates as compared to those with a higher educational level. On an average, in both countries, young people who entered the labour market were twice as likely to be unemployed as adults.

The participation rates of women in the prime age groups 25 to 54 years ranged from about 60 per cent or less in Korea and Southern European countries, barring Portugal to about 80 per cent in the Nordic countries and Central European countries. It was pointed that, while it reflected higher participation, the actual participation rates were much lower. This was because the number of inactive women who would like to work but are not at work averaged to about 12 per cent (OECD, 2004).

In Pakistan, while lower participation was exhibited for women, yet participation was highest for the age group 35 to 59 years old. This, however, represented an increased participation from age groups less than 35 years. But a steady decline was observed in the age group 60 years and above. This was true for both the rural and urban areas of the country. However, the participation was substantially higher for women in the rural areas as opposed to those in the urban areas. In 2003-04 the participation between the aforesaid age group ranged from 18 per cent to around 21 per cent (GoP, 2005).

As can be seen from the above discussion, the age of an individual does appear to impact participation in work activities. However, the impact also differs according to the economic and social status and condition of individuals. Besides, the pace of development achieved by a country also mirrors the outlook and attitudes of individuals towards work. Nonetheless, work participation appears to be highest for individuals in their prime age group of around the late twenties to forties; henceforth, it appears to dwindle for those in the higher age group.

2.5.2 Marital Status and Fertility

Sobol (1973) in an analysis on the labour force participation of married women for a period of ten years from 1957 to 1967 related the behavior of married women to certain economic and non-economic factors. The study emphasized on non-economic factors affecting women's participation in the labour force. The main findings of the study showed that absolute income, that is husband's income, and relative income had a more important effect on married women's work status than changes in income level. Higher the income of the husband lesser was the likelihood for the wife to work or prepared to work. On the other hand, higher the income of the friends, greater was the inclination to work. Non economic variables such as a large family size deterred women from entering the work force; while the level of education had a positive correlation with participation in the work force.

Rosenzweig (1976) explored the relationship between the labour market experience, current employment status and fertility of women in the Philippines. In the analysis it was assumed that market employment and child rearing were competitive

activities. It was reported that the cost of rearing an additional child, in terms of foregone market earnings, varied according to how much she has worked in prior periods and would tend to change over the life cycle. The decision to enter the labour market was influenced by both the number of children already born or still living, and the amount of human capital accumulated by women after completing their schooling. An additional observation for Filipino women was that their past employment experience had a direct effect on their current employment and fertility behaviour. Further, women who had spent more time on the labour market in the past received higher wages in comparison to other women.

Mincer and Ofek (1979) while commenting on the distribution of lifetime labour force participation of married women were of the opinion that the participation of women in paid employment is not permanent. This was because of a number of factors influenced their work participation. Some of these factors were the cyclical changes in the economy; besides the variations in the length of their work which resulted in lower wages. These factors were observed to lower the probability of finding married women in the work force.

Concerning the conditions of work of married women, Goutier and Labourie-Racape (1980) had shown that in France the steady entry of married women in the labour force was attributed to a rise in the educational attainment and the growth of tertiary employment. This had been one of the major elements responsible for the transformation of labour forces of the industrialized nations since the World War II.

In examining the expected vis-à-vis actual work roles of women, Rexroat and Shehan (1984) investigated the effect of long term work plans on actual work plans for women who expressed their future work role plans in 1968 and 'would be 35' in 1980. The analysis was carried out for a cohort of women who were 35 years of age in 1980. The results of the findings showed that attitudes towards women's employment, employment experience, marital and fertility characteristics all affected women's employment. While employment experience influenced the labour force status of those anticipating employment, socio-demographic characteristics (educational attainment, marital status and the attitude towards women's work by the husband) also affected their employment. The study also reported that women who anticipated market activity were highly likely to be in the labour market by the age of 35 regardless of their marital or fertility status.

While employment expectations had the potential to increase women's subsequent attachment to the labour market, it was found that among families with pre-school children, wives were less likely to engage in paid labour even if they were highly educated (Rexroat, 1985). This was attributed to the fact that women's productivity in non-market activities increased and staying at home was often a superior option unless better paying jobs outside their homes were available.

Ofer and Vinokur (1985) examined the historical trends of work participation and family roles of Soviet women. They noted that women in Soviet Russia had reached the highest labor force participation rate in the world. This was accompanied by a sharp increased in their educational attainment, lower levels of fertility, reduced family size,

higher divorce rates and more one-parent family units. It was further pointed that short-run decisions on participation was influenced by factors such as expected wages, other family income and the presence of children. The long-run decisions on participation were more influenced by the level of education and fertility.

To study the impact of demographic changes on the participation of women in the labour force, Lichter and Constanzo (1987) incorporated the effects of fertility rates, marital status, educational levels and the age structure of women to examine how these variables may have contributed to a growth of female labour force participation in the United States since the 1970's. Their analysis was restricted to women in the age group 25 to 49 years, as most of them have completed their schooling by 25 years and their exit rates from the labour market accelerated significantly after the age of 45. Their results showed that the increased participation rate was attributed to the changing propensity to participate rather than due to changes in the demographic composition. Demographic factors such as fertility rates, marital status and age composition as well as educational attainment caused a 46 per cent of the increase in participation. They therefore concluded that changes in the demographic composition was an important factor for growth in women labour but not solely responsible for increased participation.

Bauer (1990) argued that the diversity in Asia's demographic trends has given rise to diversified labour market conditions. Some of these included the rising cost of labour due to low and declining fertility and hence declining labour force growth rates. The implications of which would be that more women are induced to remain in the labour market even after marriage.

Farkas (1992) on the other hand, assessed women's work behaviour and their familial obligations in the US. The study particularly concerned itself with women in their midlife, between the ages of 34 to 44 years. In this study it was found that while participation rates for all women increased significantly since the aftermath of the World War II, midlife women's participation rate grew profoundly to over 75 per cent. It was also found that current employment or a strong labour force attachment did not impact their familial obligations of care-giving or providing assistance to their adult children or elderly and aging parents. But the author noted that older birth cohorts were not found to have had similar patterns in their behaviour.

Del Bono (2002) examined the effects of unemployment on the total fertility rate (TFR) and labour force participation of women between 15 and 44 years in Great Britain and Italy. The findings of the analysis showed that male and female wages were positively correlated to fertility rates in both countries, except in Italy for women in the age group 35 to 44 years where a negative correlation was exhibited. Unemployment had a negative effect on fertility, and hence participation in both countries for all age groups. The major factors attributed to such observations were the increased education and economic participation of women and the increased economic dependence of the younger generations. Increased level of female participation led to the gradual postponement of motherhood, voluntary childlessness and smaller family size all leading to declining fertility rates.

Vere and Wong (2002) in their analysis of women's participation in the labour force noted that there was a higher probability of participation for women after marriage.

Further, married women were more likely to remain in the labour force even with the presence of children and in white-collar as opposed to blue-collar occupations. This was made possible due to the changes in the occupational structure during economic development of the country, which accounted for 30 per cent of increase in women participation in the labour force during the period 1979 to 1988.

In urban Morocco, Assaad and Zouari, (2002) compared the work participation between married and never-married women and found that highly educated never-married women were more likely to be economically active than the former. Their findings further indicated that marriage reduced participation in private wage work relative to public wage work. The presence of younger children did not have an impact on participation rate beyond that of marriage. The main reason was that the arrival of children was often anticipated once a woman gets married, hence its effect was already included in the effects of marriage. But the presence of six or more children affected a woman's participation whereby she tended to withdraw and more likely would not participate in wage work.

Jacobsen (2004) while analyzing female participation rate by marital and parental status, has shown a convergence and rise in participation rates. The increased participation was noticed among women with children under the age of six with over 60 per cent participation. For women with school age children, over three-quarters of them worked for pay. As far as the convergence in participation rates was concerned, it was remarked to be notable at the occupational level.

In a comparative study on the participation of married women in China and Congo, Kamitewoko and Jin (2004) had made an attempt to find the determinants of married women's participation in urban areas. The study draws on personal data survey of 1000 married women in Zhejiang province in China and Brazzaville in Congo. While accounting for factors such as age, education and training as well as husband's income and family size, they found that the number of children had different effects on participation of women in the two countries. In China, even with the government's one-child policy, it did not push women to participate in paid work. On the other hand, in Congo, having children did not limit the participation of women. This difference was mainly due to the childcare strategy prevalent in the two countries. Their conclusion was that while age, education and childcare (by the presence of adults) were important factors in both countries, number of children impacts married women's decision to work or not to work differently.

Fernandez and Fogli (2005) argued that a woman's heritage, which was her parents' country of origin and culture, influenced her work participation and fertility outcomes. Their study was based on a sample of women in the United States from 14 countries of ancestry. They found that culture particularly had a significant influence on fertility. The total fertility rate and number of children differed according to women's ancestry. For example, fertility ranged from an average of 6.8 children for Mexicans, to 2.2 children for Germans, while the average for the United States as a whole was 3.3 children. Similarly, the number of children across ancestries ranged from 3 children for

women of Mexican ancestry to 2 children for women of French and Italian ancestry, while the average for the country was 2.46 children.

Using panel data for 97 countries, from the year 1960 to 2000, Bloom et al., (2007) examined the effects of fertility on the participation rate of women. The labour market participation covered all age groups between 15 to 19 years and 60 to 64 years of age respectively, in five-year age increments. The empirical findings showed that the effect of fertility on female labour supply was strongest during the ages 20 to 39 years. Also, with each additional child the participation rate for women declined by about 10 to 15 percentage points in the age group 25 to 39 years and about five to 10 percentage points for those in the age group 40 to 49 years. This indicated that higher the fertility lower will be the participation even for women in the older age groups.

A similar trend was also seen in the Netherlands. While the participation of women with younger children was very low, it fell further with the presence of more children. This was also the case with single women with children below the age of 18 years. On the other hand the participation for both cohorts started to increase once the children attained the age of schooling usually at the age of four and 12 years. The highly educated women, even with minor children, were much more likely to participate in the labour force as compared to other women (Euwals et al., 2007).

Ray and Ray (2008) modeled labour force participation of women in the context of a two person household, namely, husband and wife. They showed that lower real wages, that is, lower nominal wages in relation to market prices of goods, induced women to step out of domestic duties in favour of market work. However when real

wages, that is the nominal wages is higher in relation to the prices of market goods, the wife would withdraw from the labour market as the husband's income would be sufficient for the family. On the other hand, higher inequalities within the households reduced the bargaining power of women leading to their lower participation in the labour force.

Maurer-Fazio et al., (2009) in their study of urban Chinese women's participation found that the presence of pre-school children significantly reduced the labour force participation of women by seven per cent. On the other hand, the presence of older women, those aged between 51 to 64 years, in the households increased the probability of prime-aged women's participation in market work by five per cent. This was largely due to the elderly withdrawing from the labour force and undertaking household tasks. Further, single women, such as never married, widowed and divorced women, had a higher probability of participation in the labour force compared to their counterparts who were currently married.

The marital status of women affects their work participation to the extent that it either encourages or hampers their roles. In other words, while the presence of younger children discourages participation; the presence of school going children leads them to work. Besides, being single which is having never been married, or being divorced or widowed also causes them to participate in the work force. Economic conditions of their families also affect their participation in the work force. The poorer economic conditions and lower income of their spouse lead them to work. However, withdrawal from the labour market is seen where there is a case of higher reservation wage and higher

income of the spouse. Generally, the single income household where an absence of a male head is observed, women's work participation is likely to be higher. On the other hand, for those who are currently married, they are seen to have had lower work participation.

2.5.3 Religion and Social Traditions

The cultural traditions shaping women's roles vary across class, caste, regional and religious groups. While women's work in the home may be considered universal in each society, it is largely shaped by the cultural traditions prevailing in such societies (Paulson, 1984). A large variation exists in the labour market participation by women who are largely influenced by the prevailing traditions and customs in society. Women's participation in employment is not only mediated by gender, but also by religion, caste and ethnicity.

Levitan et al., (1972) described the position of American Indians in relation to the white Americans. They pointed out that compared to the whites, the former were placed in lower occupational levels and earned lower incomes. Further they had lower labour force participation and higher unemployment rates, often for disproportionately longer periods. With respect to their educational attainment, the American Indians had lower and inferior schooling, and suffered from high drop-out rates from schools. The major reason attributed to their backwardness was cultural factors and lack of skill and knowledge to be productive workers. These were rooted deeply in the social and economic institutions which caused them to be at the end of the line.

Wong and Hirschman (1983) in their study examined the labour force participation and socio-economic roles of Asian-American women in the United States relative to Anglo women. Using data from the 1970 United States Census, they found that Asian-American women i.e., Chinese, Japanese and Filipino, distinguished themselves not only by their higher participation in the labour force but also by their above-average earnings relative to Anglo women. This earnings advantage of the former was largely attributed to their superior educational qualifications, greater levels of full-time work and geographical location.

Birdsall and Behrman (1991) sought to explain gender differences in labour force participation, sector of employment and earnings, on the urban labour market of Brazil. They found that the probability of women working in the formal sector was more likely to be influenced by the level of educational attainment, which was not so for men. Other factors such as marriage and the presence of young children deterred women from employment in the formal and not so in the informal sector. Their finding also showed earnings differential between men and women; within the formal and informal sectors men's earnings were 48 and 81 per cent more than women, respectively. Their study, however, showed that differential hours of work, differential human capital stocks or job discrimination were not important factors responsible for wage differentials, although they had a very small, rather negligible effect. Rather it was the unobserved factors that accounted for the differences in earnings, for which they were unable to determine the extent of its impact.

Knight and Sabot (1991) examined the extent of race and sex discrimination in Tanzania's manufacturing sector in 1971. It was pointed out that an under-representation and lower participation of females in wage employment and not low levels of education which resulted in under two per cent participation of women in the manufacturing sector. On the other hand, it was 15 per cent for men with higher wages for males compared to that of females. Their findings also showed that women were largely concentrated in clerical occupations where wages were higher.

Geschwender (1992) analyzed the relationship between married women's wage labour and their position in the racial stratification order by comparing the Chinese-Canadians in British Columbia and the Chinese-Americans in California and Hawaii. While the paper centered on the social construction of gender, it focused upon the set of social expectations that defined the position of married women working for wages outside their homes. It was observed that Chinese women initially had low work participation rates and mainly functioned as unpaid family labour. Their presence in North America transformed their outlook and attitude from the traditional and domestic place of a woman to that of working to help and support the family. Hence it was concluded that gender and ethnicity were social constructs which impacted women's diverse roles.

Davies and Jackson (1994) examined the participation rates of ethnic women in New Zealand, namely the 'Maori' and 'Pakeha'. Their findings showed a wide variation in labour force participation between the two groups of women; the Maori women had a negative growth in employment levels compared to those of Pakeha women which was

positive. The main reason advanced for their condition was the lower educational status of the Maori women as well as the lack of opportunity for the development of skills and work experience needed for the labour market. Further, it was noted that the Maori's low status and heavy concentration in poorly paid jobs in the past also contributed to their limited chance for future growth. On the other hand, while the employment status of Pakeha women were much better off compared to their women counterparts of different ethnic backgrounds, but they were much behind their male counterparts in employment and earnings.

Human Rights Watch (HRW, 2001) reported the perpetration of caste-based discrimination on most societies, particularly in Asian and African communities. For instance, allocation of labour was done mostly on the basis of caste, where members of lower castes were restricted to specific tasks and occupations deemed unfit for those belonging to the higher castes. Sanitation jobs, which included street cleaning and the handling of animal and human wastes were jobs performed exclusively by *Dalits*[1] in India, Sri Lanka, Nepal and Bangladesh. It was also reported that significant economic and educational disparities persisted among the lower castes. They lacked access to basic educational, health and housing facilities. It was observed that all this, coupled with discrimination "effectively bars them from many forms of employment, and the non-enforcement of protective legislation perpetuates caste-based employment" (ibid: 15).

England et al., (2004) explained racial-group ethnic differences in the United States and compared the employment of white women to Blacks, Latinas-Mexicans,

[1] *Dalit* is a term used in the Indian sub continent for a minority group often referred to as the lower caste.

Cubans and Puerto Ricans. Their findings suggested that children and not marriage and husbands incomes affected employment. The higher fertility of Blacks, Mexican and Puerto Rican women reduced their employment even while their low marriage rates did little or nothing to encourage their employment. Education, on the other hand, encouraged employment. White women had a higher employment rate to Black women and Latinas owing to their higher education levels. It was also pointed out that immigrant women had lower employment levels than native born women for all ethnic groups, with the exception of blacks. Hence, they observed that "women in more privileged groups on dimensions of race, national origin or education are more likely to be employed", while women of less privileged racial and ethnic group experienced "simultaneous decreases in their chances of employment, marriage, or welfare to provide a decent level of support for themselves and their children" (ibid: 495).

The Centre for Human Rights and Global Justice (CHRGJ, 2005) in its report highlighted the victimization of *Dalits* in Nepal. While they comprised over 20 per cent of Nepal's population, they possessed only one per cent of the nation's wealth and represented 80 per cent of the ultra poor in their country. *Dalit* women and children, on the other hand bore the double burden of caste and gender discrimination and they lagged far behind *Dalit* men and upper castes in terms of education, health care and wage remuneration. Even in terms of education, while the overall literacy for women in Nepal was 42.5 per cent in 2001, it was 24.2 percent for *Dalit* women and only 10 to 15 of them had a graduate or post-graduate degree. Health wise, they were vulnerable to

diseases and malnutrition and had higher maternal mortality rates and lower average life expectancies.

Munshi and Rosenzweig (2006) explored the role of caste system and the conflict between traditional and modern institutions in shaping the career choices of women in Bombay, India. It was pointed out that change in women's career was strongly influenced by modernity and that that girls might surpass boys in terms of both education and employment in future. This was mainly because girls from lower caste took advantage of such changes by switching to English medium schools, compared to boys from the same group who remained in traditional and local language schools.

Jodhka and Newman (2007) found the existence of discrimination in employment. It was noted that while the basis of employment was merit and performance alone, yet the hiring decision for most employers showed a preference for employees from a certain caste and class. The reason was likened to the inherent and innate qualities of individuals. The hiring decisions were often influenced by family background where people from higher class were not preferred due to their arrogance and were unlikely to stay in their work for long. They further asserted that there was a stereotyping of people on the basis of their caste or religion. This in turn vaporized the qualities of individuals and blocked the opportunities of low caste Indians, especially rural job applicants.

Khan (2007) assessed the role and identity of Muslim women in Mumbai, India. It was pointed out that religion-based restrictions imposed on women limited their area of work. This was because they were not allowed to work in jobs demanding longer

hours and being away from their homes or having prolonged contact with men outside their community. This was also the case for Muslim women coming from economically disadvantaged families who were rather encouraged to pursue home-based but low paying jobs. Such restrictions imposed on Muslim women were also closely linked to the exclusion of the Muslim community as a whole.

A similar study on the work participation of Muslim women in India based on the 2001 Census showed that there existed wide gaps between the work participation rates between men and women. Further it was pointed out that 85.9 per cent of the women were recorded as housewives compared to only 14.1 per cent of them as workers. The rural urban share in work was 17.5 per cent and 7.7 per cent respectively. Additionally, a significant part of them were recorded as unskilled workers. High illiteracy rates and low level of awareness about their status and role in the society limited their chances for participation in the society at large (Sarikhani, 2008).

Madheswaran and Attewell (2007) used data from the National Sample Survey of India to examine the wage gap between the higher and lower castes in the urban labour market. Their study found considerable differences in wages between the higher castes and the Scheduled Caste and Tribes (SC/STs). It was noted that the rate of return to education was much lower for the SC/STs and a major share of the earning differentials was attributed to discrimination in the marketplace. Discrimination caused 15 per cent lower wages for SC/STs compared to others who were equally qualified. They were also discriminated against in different areas of work; both in the public and private sectors with discrimination being more in the private sectors. They further

pointed out that occupational discrimination was more pronounced than wage discrimination.

While studying the issue of discrimination against the *Dalits*, Thorat and Newman (2007) had highlighted on the effects of discrimination and its consequences for the development of the country. They noted that discrimination or rather social exclusion of the *Dalit*s in various fields of education and economic life had perpetrated the system of inequality existing in the country. They further pointed out that the problem of discrimination remained a serious issue in the Indian context as attitudinal barriers subjected people from lower castes to remain at the sidelines and making it harder for them to compete with other people from more privileged backgrounds.

Zaiceva and Zimmermann (2007) analyzed the relationship between ethnicity, and its interaction with gender and time spent by women in traditional activities such as childcare, food preparation (or the kitchen) and religious activities. The analysis was carried out for women in the UK using the UK 2000 Time Use Survey. Two major ethnic groups were considered for the study, namely the whites and non-whites which included Indians, Pakistanis and Black-Caribbean. The result of the findings showed that while ethnicity mattered for time spent on religious activities and to some extent on food management, there were no ethnic differences on time spent for childcare for both groups. They observed that cultural differences across ethnicities affected and impacted the work behavior of individuals. This was reported in terms of labour force participation, where white females had a higher probability to participate in the labour force than non-whites while the effect of ethnicity was insignificant for males.

From the above discussion, it is clear that religion and ethnicity of individuals have a direct bearing on the work participation. Women belonging to certain religious and social groups, where customs and tradition do not permit them to work, are seen to be discouraged from participation in work outside their homes. However, the outlook and, in particular, discriminatory attitudes towards individuals belonging to certain ethnic groups hampered their effective participation in the job market.

2.6 Summary

The review of the existing literature provided in the preceding sections clearly brings to light the important facts behind women's participation in economic activities. Education was seen to have both positive and negative impact on participation, with the former more strongly visible. But the attainment of education alone was not seen as the main propelling factor towards employment opportunities. Skills and training were seen to be equally important towards this end. The acquisition of an education however was seen to be limited by a number of factors of which the most common was poverty and gender disparities. While poverty limited individuals' ability to receive an education, gender disparities and discrimination thereof permeated much deeper. Other factors such as marital status or fertility as reflected by the number of children appeared to have severely limited the opportunity for women to work. However as is evidenced from the literature this effect could be counteracted by the presence of childcare facilities or the elderly within the family. For some, however, staying at home was seen to be largely a matter of choice if their husband's income could suffice for the family. Participation in paid work was also seen to be affected by social and religious attributes of individuals.

Virtually much of the literature pointed to the fact that individuals from backward and marginalized communities were constrained due to various factors. Many reasons were seen to have contributed towards this end but most importantly it was seen that their belonging to a particular community or religious background had severely impacted their performance at virtually all levels particularly in the labour market. Societal and religious norms forbid individuals from undertaking certain tasks which went against the former hence limiting their chances for overall improvement in their lives. The marginalization of women was also accentuated by the level of development attained by a nation. While women in developed countries were seen to be more economically active, the case was less different for women in the developing world. Participation in paid activities was seen as residual to domestic responsibilities on the one hand, while preference for participation over domestic work was largely attributed to economic pressures on the other.

2.7 Gap Areas and Scope for Further Study

The limited review of literature in the preceding sections seems to suggest that the cross-country differences in participation of women could be explained with the help of the so-called U-shaped curve hypothesis. Further the temporal change in participation shows declining trends in developing counties. It is apparent that most of the studies reviewed here did consider various kinds of disaggregation, like women work participation across various states, by place of residence (rural and urban) and by different population groups within a country or regions in the country. Therefore, in this study we aim to fulfill these gaps in the existing literature by testing the hypotheses listed in the previous chapter.

While many of the studies outlined in the preceding sections examined the role and influence of various factors in influencing work participation, our aim is to examine the extent and possible influence of these variables listed above in the Indian conditions. This is because the unique structure of the Indian society and the social conditioning of women in India would allow us to explore further into the causes and factors that could determine their participation in the work force. We would attempt this exercise using the data set and the methodology which will be outlined in details in the next chapter.

CHAPTER 3

DATA AND METHODOLOGY

3.1 Introduction

The discriminatory attitude towards women in our country has echoed the need and promotion of their equality in all spheres of life, including the improvement in their work participation. A number of research works has been carried out from time to time to find out ways and means to improve women's social and economic statuses. At the same time, numerous works were undertaken to identify the hindrances that stand in their way towards improving their status in society at large. As per Census 2001, women constitute almost half of the total population in India, which is 48 per cent. Only 25.6 per cent of them were stated to be in the labour force of the country as compared to 51. 7 per cent of men recorded as workers.

This chapter discusses the data and methodology aspects of the study and is organized in the following manner. Section 3.2 details the various data sources we have employed in our study while the following section outlines the different concepts pertaining to our study. In section 3.4 we explain the method used for analyzing the data. This section also includes the statistical and econometric techniques used in our study.

3.2 Data Sources

The kind of analysis that we propose to carry out in this study requires a consistent and comparable data both over time and space. There are two data sources that fulfill this criterion; (1) the data collected during the population census and (2) the household survey data collected by the National Sample Survey Organisation (NSSO), Government of India.

The first is the census data. The census data were first collected during 1871-72. Beginning 1881, the census data was collected decennially. The census data is available for almost entire country, divided into states and union territories. The latest Census 2001 covers all the 35 states and union territories which were not included in the previous censuses.

In the 1951 Census, a worker was defined as one gainfully employed or one working for a livelihood, excluding unpaid family workers. In the 1961 Census the position was however reversed. The basis of work was considered to be satisfied if a person had some regular work of more than one hour a day throughout the greater part of the working season. As a result many persons were classified as workers. A more rigorous and meaningful definition of worker was adopted in the 1971 Census. A worker was defined as one whose main activity is participation in any economically productive work by his/her physical or mental activity. The 1981 Census while adopting the definition of worker as provided in the 1971 Census, has made a further classification of workers into 'main workers' and 'marginal workers'. Main workers are those who have worked in some economic activity over a period of 6 months or more i.e. 183 days or more. Marginal workers, on the other hand, are those who have not worked for a major part of the year, i.e. less than six months or 183 days. On the other hand, those who are not engaged in any form of activity were termed as 'non-workers'. These changes in the definition of workers have rendered the participation rates of workers in 1981 almost incomparable with the earlier censuses. However, the 1991 and 2001 Censuses adopted

almost the same definition and concepts of workers - main and marginal- used in the 1981 Census thus enabling the direct comparison of the results possible.

The second source of data is the one collected by the NSSO. It was initiated in the year 1950 and was initially known as the National Sample Survey (NSS). It is a nationwide, large-scale, continuous survey operation conducted in the form of successive rounds. It was established on the basis of a proposal from P.C.Mahalanobis to fill up data gaps for socio-economic planning and policy making through sample surveys. In March 1970, the NSS was reorganized and all aspects of its work were brought under a single Government organization, namely the National Sample Survey Organisation (NSSO), under the overall direction of Governing Council to impart objectivity and autonomy in the matter of collection, processing and publication of the NSS data.

The NSSO collects data on various socioeconomic and demographic aspects and also covers almost the entire territory of India. Though survey of the households in India started in the early 1950's, it was limited in its scope and coverage. However, since 1973 the data collection through sample surveys were streamlined with two types of surveys; large sample or quinquennial rounds of survey and thin sample survey between two quinquennial rounds. The data that is suitable for our purpose and used in this study is the employment and unemployment data (Schedule 10.0).

In this study we will be using the household level or unit record data on employment and unemployment collected by the NSSO. For making a meaningful comparison we will also use the household level data on employment and

unemployment collected by the NSSO. The household information in these surveys are collected using a two stage stratified sampling design technique. Therefore, weights are a natural part of the NSSO data sets. In the quinquennial rounds of survey, detailed information on place of residence, economic activities, social and demographic characteristics and household assets and expenditure were collected from diverse households covering different individuals at the all India level.

The data that we will be employing in our study includes the NSSO survey during the 38th, 43rd, 50th, 55th and 61st rounds. The 38th round corresponds to the 1983 calendar year while the other four rounds correspond to the 1987-88, 1993-94, 1999-00, and 2004-05, agricultural years, respectively. The choice of the study period largely corresponds to the latest Census survey of 1981 to 2001 and the incorporation of the latest thick sample survey (2004-05) on employment and unemployment collected by the NSSO. Thus the period that will be covered in the study will be from 1983 to 2004-05.

The basic difference between the Census and NSSO sources of data is the information content. While from the Census we only get basic demographic information about different population groups, NSSO data has information on several easily quantifiable welfare indicators. In view of the above, we use the NSSO data in this study. Moreover, this is the only detailed data that is available to researchers that has details of households. In other words, it is possible to identify the characteristics that could influence women to work.

3.3 Concepts and Definitions

This section discusses the various concepts and definitions used by the NSSO that we have also employed in our study. It is sub-divided into two sections; section 3.3.1 outlines the concepts related to activity status while the next sub-section discusses the different definitions.

3.3.1 Concepts

The quinquennial National Surveys on employment and unemployment are aimed at measuring the extent of employment and unemployment in quantitative terms disaggregated by various households and population characteristics. Consequently, the persons surveyed are classified into various activity categories based on the activities pursued by them.

The activity situation under which an individual was found during the reference period with regards to the individual's participation in any economic or non-economic activity is termed as his/her activity status. An individual could, therefore, be under any of the following three broad activity statuses during a reference period:

i. working or engaged in any economic activity.
ii. not working/engaging in any economic activity but making 'tangible' efforts to seek work or being available for work if work was available.
iii. not being engaged in any economic activity and also not being available for work.

The individuals in the broad activity status (i) and (ii) are classified as being in the labour force while those in activity status (iii) are classified as being out of the

labour force. The description of the activity status with the activity codes (given in bracket) that was used in the analysis is as follows:

i. Worked in household enterprise -self-employed:

   (a). Own account worker (11)

   (b). Employer (12)

ii. Worked as helper in household enterprise-unpaid family worker (21)

iii. Worked as regular salaried/ wage employee = 31

iv. Worked as casual labour in:

   (a). Public works = 41

   (b). Other types of work = 51

v. Did not work but was seeking and/or available for work = 81

i. Self-employed: Persons who worked in household enterprise - self-employed- were categorized as follows:

(a) Own account workers: Those self employed persons who operated their enterprises on their own account with one or a few of their partners and who during the reference period, by and large, ran their enterprises without hiring any labour. They could however have had unpaid helpers to assist them in the activity of their enterprise.

(b) Employers: Those self employed persons who worked on their own account or with one or a few partners and, who, by and large, ran their enterprise by hiring labour.

ii. Helper in Household Enterprise: Those self employed persons, mostly family members, who were engaged in their household enterprises, working full or part time and did not receive any regular salary or wages in return for the work performed. They did not run the household enterprise on their own but assisted the related persons living in the same household in running the household enterprise.

iii. Regular salaried/ wage employee: Those persons who worked in others' farm or non-farm enterprises, both household and non-household, and in return received wages or salary on a regular basis and not on the basis of daily or periodic renewal of work contract. It also included persons receiving piece wage or salary and paid apprentices, both full time and part time, and not only persons getting time wage.

iv. Casual wage labour: Those persons who were causally engaged in others' farm or non-farm enterprises (both household and non-household) and in return received wages in accordance to the terms of the daily or periodic work contract were classified as casual wage labour.

To ascertain the activity status of a person, three distinct status categories were used. They are the usual status, current weekly status and current daily status. These three different activity statuses have been used with respect to three distinct reference periods namely a year, a week and a day.

According to the NSSO, each individual is classified into one of the three possible categories on the basis of the time criterion namely (1) at work or gainfully employed, (2) unemployed (seeking for work and or available for work) and (3) out of

the labour force. The first two categories constitute the labour force, while work force consists of only the first category.

The *usual activity status* of a person is determined with reference to a major time criterion during the reference period of 365 days preceding the date of survey. Accordingly a person is considered as "working or employed" if the person was engaged for a relatively longer period during the past year in any one or more work related activities or economic activities, including seeking or being available for work. The person is considered as 'seeking or available' for work or 'unemployed' if the person was not working but was either seeking or available for work for a relatively longer time during the past year. If a person was engaged in any non-economic activities for a relatively longer time of the reference year, that particular individual is considered 'out of the labour force'. The specific activity category is determined on the basis of time spent criterion. In other words, the activity on which major time was spent was assigned as the usual activity status. A person categorized as 'worker' or 'employed' on the basis of the usual principal status is called a 'principal status worker' or 'principal status employed'.

For those reporting unemployment or out of the labour force activity status within the usual principal status category, a *subsidiary status* is recorded with respect to whether they were at work more or less regularly but not on major time basis. In other words, the subsidiary economic status of a person is defined as his/her principal usual status determined on the basis of the major time criterion pursuing some economic activity for a relatively shorter or minor time period during the reference period of 365

days preceding the date of survey. A non-worker by usual principal status may have pursued some economic activity for a relatively shorter period of time (minor time) during the reference period of 365 days preceding the date of survey. The status of such economic activity pursued is the subsidiary economic activity status of the person. It may be noted that engagement in work in a subsidiary capacity could arise out of the following two situations:

i. a person could be engaged for a relatively longer period during the last 365 days in one economic/non-economic activity and for a relatively shorter period in another economic activity; and

ii. a person could be pursuing one economic/non-economic activity almost throughout the year in a usual principal status activity and simultaneously pursuing another economic activity for a relatively shorter period of time.

A person categorized as a non-worker (i.e. unemployed or out of the labour force) is the one who pursued some economic activity in a subsidiary capacity and he/she is called a 'subsidiary status worker' or a 'subsidiary status employed'. These two groups, namely, principal status workers and subsidiary status workers together constitute all workers according to the usual status classification.

The *current weekly status* of a person is defined as the activity status in which a person is found during a reference period of seven days preceding the date of survey. A person is considered working or employed, by current weekly status if he/she had worked for at least one hour on any one or more days during the seven days preceding the date of survey. Having decided the broad current weekly activity status of a person

on the basis of a 'priority' criterion, the detailed current activity status of a person is decided on the basis of 'major time' criterion if a person is pursuing multiple economic activities. A person who had not worked for even one hour on any one day of the week, but had been seeking employment or had been available for work at any time for at least one hour during this period and fails to get work for even one hour on any day he/she is deemed to be 'seeking/available for work' or unemployed. Others were considered as 'not available for work' or out of the labour force. These two major classifications are the stock measure of employment and measure the number of workers.

The *current daily status,* on the other hand, is a flow measure of employment and measures the number of days worked. The current daily activity status of a person is determined on the basis of his/her activity status on each day of the reference week using a priority cum major time criterion. Each day of the reference week is looked upon comprising of either two half days or one full day for assigning the activity status. The unit of classification was thus half a day under the current daily status. A person is considered working or employed for the entire day if he/she had worked for four hours or more during the day. If a person who works for one hour but less than four hours is considered to be working (or employed) for half a day, and seeking or available for work (or unemployed) or not available for work (or out of the labour force) for the other half of the day depending on whether he/she was seeking or available for work. If, on the other hand, a person was not engaged in any work for even one hour a day but was seeking or available for work for four hours or more, he/she was considered unemployed for the entire day. If he/she was available for work for less than four hours only, he/she

was considered unemployed for half day and not in the labour force for the other half of the day. A person who neither had a work to do nor was available for work even for half of the day was considered not in the labour force for the entire day. The aggregate of person-days classified under the different activity categories for all the seven days gave the distribution of person-days by activity category during an average week over the survey period of one year.

The NSSO assigns an activity status to every individual in its employment and unemployment surveys based on these definitions and concepts. Thus a worker can be classified as a worker or employed and unemployed or out of the labour force accordingly.

3.3.2 Definitions

1. Economic Activity: Any activity which resulted in the production of goods and services that add value to the national product is considered an economic activity. Also included as economic activity is the production of only primary goods for own consumption. However processing of primary goods for own consumption is not considered an economic activity by the NSSO.

2. Workers or Employed: Persons who were engaged in any economic activity or who were temporarily absent or abstained from work due to illness, injury or other physical disability, bad weather, festivals, social or religious functions, despite their attachment to economic activity, constituted workers or the employed. Unpaid helpers who assisted in the operation of an economic activity of the household farm or non-farm activities were

also considered as workers. An activity status code 11 to 51 was assigned to persons in this category.

3. Work Participation Rate (WPR): It includes the proportion of the total number of persons in the work force to the total population aged 15 years and over. Work force consists of persons who were either working or employed.

4. Unemployed or Seeking or Available for Work: Persons, who owing to lack of work had not worked but sought work by making applications to prospective employers or employment exchanges or expressed their willingness to and availability for work under the prevailing conditions of work and remuneration, constituted the unemployed or those persons who are seeking or available for work. Activity status code 81 was assigned to those individuals in this category.

5. Labour Force: Persons who were either working or employed or seeking or available for work or unemployed constituted the labour force. Activity status codes from 11 to 81 constituted the persons in the labour force.

6. Not in the Labour Force: Persons who were neither working nor seeking or available for work during the reference period were considered to be out of the labour force. Persons under this category generally included students, those individuals who were engaged in their domestic duties, rentiers, pensioners, those living on alms, infirmed or disabled persons and casual labourers not working due to illness.

7. Education level: A person was considered literate if he/she was able to read and write a simple message with understanding, in at least one language. The highest level of education successfully completed by each member of a household was decided by

considering his/her general/ technical/ vocational educational level which was recorded under the following categories namely, (i) not literate, (ii) literate without formal schooling: (a) Education Guarantee Scheme(EGS)/ Non-formal Education Courses (NFEC)/ Adult Literacy Centres (AEC), (b) Total Literacy Campaign (TLC), (c) Others; (iii) literate but below primary, (iv) middle, (v) secondary, (vi) higher secondary, (vii) diploma/ certificate course, (viii) graduate, (ix) post-graduate and above. The criterion for deciding the different educational levels was adopted as per the norms laid down by the different states and union territories in the country. The category 'diploma/ certificate course' implied diploma or certificate courses in general education, technical education or vocational education which is below the graduate level. Diploma or certificate courses in general education, vocational education and technical education which were equivalent to graduate level education was considered under the category of graduate. Likewise for the diploma or certificate courses equivalent to post-graduate level education was considered under the category of post-graduate and above.

For the purpose of our study we have reclassified general education into six (6) broad groups, namely, (i) not literate, (ii) literate but below primary, which also included literates without formal schooling, (iii) literate but up to primary level, (iv) literate but up to middle school level, (v) literate but below graduate level, which included secondary and higher secondary level of education, and (vi) graduate and above, which included diploma/ certificate course, graduate and post-graduate levels of education.

8. National Classification of Occupations (NCO): The first effort in the direction of preparing an occupational classification system in India was made by the then

Directorate General of Resettlement and Employment, now called the Directorate General of Employment and Training (D.E.G.&T.), in 1946. It brought out a publication *Guide to Occupational Classification*, primarily for use by the employment service for the day-to-day work in the Employment Exchanges. It was an industrially biased classification framed after the British system. The International Labour Organization (ILO) brought out the first International Standard Classification of Occupations (ISCO) in 1958 with a view to bring a complete occupational classification system, which could help in promoting international comparability of statistical data relating to occupations. Based on the ISCO, 1958, the D.E.G.&T., prepared the National Classification of Occupation (NCO) in 1958. The Code Structure of the NCO, 1958 was finally adopted in March, 1958. The NCO, 1958 was used by the Registrar General of India (RGI), for the 1961 population census and by the national Employment service. On the other hand, the Central Statistical Organisation (CSO), NSSO and Indian Statistical Institue (ISI) used the Standard Occupational Classification (SOC) 1958. The SOC, 1958 was adopted by the CSO by modifying the NCO Code Structure, 1958.

The revised edition of the NCO, 1968, had been fashioned after the second edition of the ISCO, 1966 published by the ILO, 1968. This was done in order to ensure international comparability of reporting and analyzing of statistical data relating to occupations, manpower and population censuses.

In an occupational classification, the grouping of occupations was based on the fundamental criterion of type of work performed. Accordingly, occupations were classified in the NCO, 1968, so that all the workers engaged on the same type of work

were grouped together irrespective of the industrial classification of establishments where they were engaged. NCO, 1968 grouped together occupations according to combination of specific duties, tasks and work functions concerned with, while actually performing the same or closely related work. Consequently, job definitions or descriptions given in the NCO represented only the average national picture of the various occupations. Even though the revised definitions do not describe the level of education or institutional training or work experience, yet broad inferences can be drawn from the occupational grouping and the job description.

In the NCO 1968, there are 8 Divisions, 95 Groups, 462 Families and 2484 Occupations. The Code Structure is as follows:

(i) Occupational Divisions - one-digit code numbers.

(ii) Occupational Groups- two-digit code numbers.

(iii) Occupational Families - three-digit code numbers.

(iv) Occupational Codes - five-digit code numbers.

The following were the 8 Divisions (as indicated in the brackets) in the NCO, 1968 classification:

(i) Professional, Technical and Related Workers (0-1).

(ii) Administrative, Executive and Managerial Workers (2).

(iii) Clerical and Related Works (3).

(iv) Sales Workers (4).

(v) Farmers, Fishermen, Hunters, Loggers and Related Workers (5).

(vi) Service Workers (6).

(vii) Production and Related Workers, Transport Equipment Operators and Labourers (7-8-9).

(viii) Workers Not Classified by Occupations (X).

A brief description is provided as follows on the 8 Divisions

(i) Division 0-1: Professional, Technical & Related Workers: This Division broadly covers professional and technical workers (highly qualified manpower) and related technicians. Two code numbers (0-1) were allotted to this Division. Occupations like the scientific, engineering, technical and medical occupations were classified under Groups starting with digit code 0. Social scientists, teachers, lawyers and workers in literary, artistic, entertaining, athletic and creative professions were classified under groups starting with digit code 1.

(ii) Division 2: Administrative, Executive and Managerial Workers: All Managers, except those concerned with farming and plantation, were brought together under this Division: Groups 22, 23, 24, 25 and 26.

'Working Proprietors' included in this Division consists of all persons whose work was comparable to that of Directors and Managers in large and established organizations. However, own-account weaver, shop-keeper, hotel keeper or persons engaged in small cottage industries or business were excluded from the term 'Working Proprietor'. They, however, were given the nomenclature of Merchants and Shop-Keepers, Wholesale and Retail Trade (NCO, 1968, Families 400 and 401). To further avoid confusion, the use of the term 'Working Proprietor' was avoided in other Divisions.

(iii) Division 3: Clerical and Related Workers: All 'Office Jobs' which were primarily concerned with the setting up and maintenance of records pertaining to financial transactions, business and industrial operations, personnel correspondence, administrative and executive activities in Government and other offices were included in this Division. Also included are those jobs which are concerned with the handling and routing of messages (verbal or recorded) and those concerned with the handling of cash, combined with record-keeping functions. Also included in this Division are quite a few jobs which are carried out mainly outside the offices and workers report only periodically to the offices.

(iv) Division 4: Sales Workers: The term 'Merchants and Shop-Keepers' was used in place of 'Working Proprietors' to distinguish own-account Shop-Keepers, Merchants, running their own business, shops.

(v) Division 5: Service Workers: The term 'Hotel and Restaurant Keepers' was used to describe numerous persons running owner-operated hotels, restaurants, guest houses, café's bars.

(vi) Division 6: Farmers, Fishermen, Hunters, Loggers and Related Workers:

Agricultural, animal husbandry, forestry and related workers account for the largest percentage of the working population in India. Hence, this Division had been re-arranged in the context of conditions obtaining in the country though the pattern remained as in Div 4 of NCO 1958.

(vii) Division 7: Production and Related Workers, Transport Equipment Operators and Labourers: The sequence of occupations in Division 7-8-9 includes miners, quarrymen and related works, transport equipment operators and labourers not classified elsewhere.

(viii) Division X: Workers Not Classified by Occupations: The only changes introduced in the NCO 1968 were the re-examination of 'Intermediates' - indicating those who passed the Intermediate Examination-at the 5-digit level (X01-20). This Division was primarily for the classification of fresh or new workers seeking employment. Therefore, jobs or vacancies, even though meant for such freshers were not classified in this Division.

NCO Divisions 0-1 to 4 classify white collar workers and mainly non-manual occupations. Divisions 5, 6, 7-8-9 classify manual workers, while freshers come under Division X. The Classification started with the high-level professional manpower, going on to managerial and skilled workers and ends with labourers and freshers.

3.4 Method of Data Analysis

The method of data analysis is discussed as follows. First a description of the area of study is carried out in section 3.4.1 which is followed by a brief discussion on the instruments used for analysis in the subsequent section. Finally a detailed discussion on the econometric estimate is presented in section 3.4.3.

3.4.1 Area of Study

The reliability of any study depends invariably on the size of the sample. In our study the sample size that is the number of men and women surveyed across the urban and rural areas of the different states in the country during the five rounds of survey is

reported from Tables 3.1 up to 3.4. For administrative purposes there are 35 states and union territories in India. In our study we are not making any distinctions as such, hence we are treating all states and union territories as states. New states were carved out of Bihar, Madhya Pradesh and Uttar Pradesh in 2000. These included Jharkhand, Chhattisgarh and Uttaranchal, now known as Uttarakhand. The estimates for these six states are therefore taken as per the political boundaries drawn up before 2001 for all the five rounds of survey that are presented in our study.

The sample at the aggregate level while being fairly large, is not so at the state level for all the states in the country. In order to address this problem we have taken 16 states for which the sample size is reasonably large. These include Andhra Pradesh (AP), Bihar (BIH), Gujarat (GUJ), Haryana (HAR), Karnataka (KAR), Kerala (KER), Madhya Pradesh (MP), Maharashtra (MAH), Orissa (ORI), Punjab (PUN), Rajasthan (RAJ), Tamil Nadu (TN), Uttar Pradesh (UP), and West Bengal (WB). The newly created states of Jharkhand, Uttaranchal (Uttarakhand) and Chhattisgarh were grouped together with their parent states for the purpose of our study. The North Eastern Region (NER), including the states of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura were taken together as one geographical unit as the sample size for each of them was smaller. Similarly, the other remaining states and union territories, after having accounted for the North Eastern States, were also clubbed together as 'smaller states' (SS) for the same reasons. These 16 states taken together represent the sample of our present study.

3.4.2 Instruments Used

- Data and information were collected through secondary sources.
- The data have been analyzed using appropriate statistical methods and statistical packages which are discussed below:
    - Probit analysis was employed to analyze the determinants identified through the review of literature.
    - Regression analysis was done using STATA (8).

Analysis of the data collected includes descriptive and statistical tables.

3.4.3 Econometric Exercise

For the calculation of the contribution of different factors to the work participation of women, it is assumed that work participation is a phenomenon that is affected by a set of factors that could explain the outcome. Based on these considerations we define a binary variable y that takes values

y=1 if the women is working

y=0 otherwise.

This binary variable is then regressed on a set of explanatory variables that includes various individual and household characteristics. Such a specification of an econometric model has been extensively used in the literature. It is to be noted however, that since the dependent variable is binary, we cannot use least squares method to estimate the coefficients. Instead we would use maximum likelihood estimation techniques to calculate the coefficients. The issues involved in specification and estimation of these

models are discussed at length in Johnston (1984), Kmenta (1985), Amemia (1985), Johnston and DiNardo (1997), Greene (1997) and Gill (2001).

The probit model (the word probit is a contraction of "probability unit") is one of the statistical models that is used for discrete or binary models. In this study we have used the probit model in order to calculate the marginal contributions of different characteristics/factors on the work participation of women.

A probit model is defined as

$$\text{Prob}\ (y_i = 1) = \Phi\ (X_i, \beta_i) \qquad (1)$$

where Φ is the cumulative density in a standard normal distribution function

X_i are the characteristics

β_i are the coefficients associated with the characteristics, respectively.

An expansion of the above equation (1) yields the following:

$$P(i) = \beta_0 + \beta_1 x_1 + \ldots\ldots\ldots \beta_m x_m + \varepsilon_i \qquad (2)$$

Where β_0 = constant term

x_1 = never married young, below 35 years of age

x_2 = never married old, above 35 years of age

x_3 = widowed/ divorced or separated young, below 35 years of age

x_4 = widowed/ divorced or separated old, above 35 years of age

x_5 = Scheduled Tribe (ST)

x_6 = Scheduled Caste (SC)

x_7 = women in the age group 15 to 19 years

x_8 = women in the age group 20 to 29 years

x_9 = women in the age group 30 to 39 years

x_{10} = women in the age group 40 to 49 years

x_{11} = women in the age group 50 to 59 years

x_{12} = Not Literate

x_{13} = Literate but below Primary level

x_{14} = Literate but up to Primary level

x_{15} = Literate but up to Middle level

x_{16} = Literate but up to Secondary level

x_{17} = Hindu

x_{18} = Muslim

x_{19} = Christian

x_{20} = Self-employed in non-agricultural activities

x_{21} = Agricultural labour

x_{22} = Other labour

x_{23} = Self-employed in agricultural acitivites

x_{24} = Female headed household

x_{25} = Monthly Per Capita Expenditure

β_i = coefficients associated with the above-mentioned characteristics and where i=1 to 26 (=m).

ε_i = error term

Note: x_{20} to x_{23} is taken for the rural areas only.

For the urban areas the variables are replaced by the following:

x_{20} = Self-employed

x_{21} = Regular wage/ Salary earning

x_{22} = Casual labour

STATA (8) was used to run the regression equation involving the variables specified above. STATA is used because it is a statistical and econometric analysis package that is specially suited for large scale data analysis. The results of the regression analysis for the full sample and individual states both for the urban and rural sectors are presented in Chapter 5 and the probit estimates are presented in Tables 5.1 to 5.34.

3.5 Summary

In this chapter we have described the various sources of data and the method of data analysis used in the study and also the various concepts and definitions related to the study. In our study, we have used NSSO employment and unemployment data for the corresponding years 1983 to 2004-05 covering 16 states across rural and urban areas. We have adopted the Usual Status approach and have used only those workers classified under activity status codes 11 to 51. We have also strictly defined the workforce to include only those women who are engaged in an economic activity and are above 15 years of age. Those who are seeking or available for work have not been included in our study. The next chapter provides a brief profile of women workers in India based on the aforementioned concepts and definitions that we have adopted and which have been explained in this chapter.

Table 3.1: Total number of Men Surveyed in Rural Areas

Sl.No	States	1983	1987-88	1993-94	1999-00	2004-05
1	Andhra Pradesh (AP)	13295	14196	10667	11134	11251
2	Bihar (BIH)	21454	23007	19300	20634	18623
3	Gujarat (GUJ)	7472	7717	6105	6514	5972
4	Haryana (HAR)	3782	3854	3258	3429	4853
5	Karnataka (KAR)	9255	9013	7149	7230	6938
6	Kerala (KER)	7852	8329	5673	5799	6782
7	Madhya Pradesh (MP)	16189	18604	14994	14825	16379
8	Maharashtra (MAH)	13818	15411	11243	10463	12482
9	Orissa (ORI)	7900	9202	8346	8495	9301
10	Punjab (PUN)	7789	7971	5863	6195	6914
11	Rajasthan (RAJ)	10080	10417	8733	9687	10120
12	Tamil Nadu (TN)	9808	10030	8068	8664	7904
13	Uttar Pradesh (UP)	29503	31116	27241	29232	27881
14	West Bengal (WB)	13841	13836	11999	11895	12310
15	North Eastern Region (NER)	21959	27308	24458	23954	32511
16	Smaller States (SS)	17177	20534	10355	11993	13094
	ALL INDIA	**211174**	**230545**	**183452**	**190143**	**203315**

Table 3.2: Total number of Women Surveyed in Rural Areas

Sl.No	States	1983	1987-88	1993-94	1999-00	2004-05
1	Andhra Pradesh (AP)	13335	13980	10736	11102	11340
2	Bihar (BIH)	21060	21543	17267	19148	17422
3	Gujarat (GUJ)	7138	7460	5741	6299	5580
4	Haryana (HAR)	3399	3381	2877	3061	4397
5	Karnataka (KAR)	9217	8609	7053	7098	6727
6	Kerala (KER)	8384	8944	6180	6340	7537
7	Madhya Pradesh (MP)	15548	17354	13799	13708	15384
8	Maharashtra (MAH)	13890	14785	10857	10005	11794
9	Orissa (ORI)	7966	9170	8303	8557	9454
10	Punjab (PUN)	6886	7171	5285	5680	6270
11	Rajasthan (RAJ)	9391	9852	8111	9147	9767
12	Tamil Nadu (TN)	10005	10118	8183	8550	8124
13	Uttar Pradesh (UP)	26901	28145	24902	27697	26783
14	West Bengal (WB)	13294	13082	11447	11338	11972
15	North Eastern Region (NER)	19696	24742	21809	21931	29675
16	Smaller States (SS)	16387	19872	10270	11383	12484
	ALL INDIA	**202497**	**218208**	**172820**	**181044**	**194710**

Table 3.3: Total number of Men Surveyed in Urban Areas

Sl.No	States	1983	1987-88	1993-94	1999-00	2004-05
1	Andhra Pradesh (AP)	7813	7808	8173	8430	5835
2	Bihar (BIH)	5759	6063	5760	6131	6448
3	Gujarat (GUJ)	5985	5913	5803	6683	4687
4	Haryana (HAR)	1594	1622	1696	1962	2654
5	Karnataka (KAR)	5850	6009	5916	5772	4813
6	Kerala (KER)	3404	3472	3943	4383	4160
7	Madhya Pradesh (MP)	7669	7888	8415	8506	7379
8	Maharashtra (MAH)	12849	13747	12664	12544	11642
9	Orissa (ORI)	2267	2766	2358	2401	2810
10	Punjab (PUN)	4693	4909	4678	4584	4608
11	Rajasthan (RAJ)	4838	4673	4468	5312	4218
12	Tamil Nadu (TN)	9431	9446	8241	8411	7688
13	Uttar Pradesh (UP)	12078	12434	12292	13089	11281
14	West Bengal (WB)	7936	7982	7269	7443	6299
15	North Eastern Region (NER)	7599	9598	9762	9364	11592
16	Smaller States (SS)	9458	10239	7628	12450	9198
	ALL INDIA	**109223**	**114569**	**109066**	**117465**	**105312**

Table 3.4: Total number of Women Surveyed in Urban Areas

Sl.No	States	1983	1987-88	1993-94	1999-00	2004-05
1	Andhra Pradesh (AP)	7565	7772	7739	8019	5884
2	Bihar (BIH)	5052	5119	4856	5299	5851
3	Gujarat (GUJ)	5456	5484	5154	6213	4353
4	Haryana (HAR)	1374	1421	1427	1728	2280
5	Karnataka (KAR)	5543	5681	5635	5458	4718
6	Kerala (KER)	3709	3583	4238	4772	4549
7	Madhya Pradesh (MP)	6832	7167	7505	7755	6927
8	Maharashtra (MAH)	11525	12551	11604	11461	10979
9	Orissa (ORI)	2063	2417	2166	2183	2581
10	Punjab (PUN)	4007	4377	4101	3834	4197
11	Rajasthan (RAJ)	4351	4272	3971	4707	3926
12	Tamil Nadu (TN)	9433	9235	8158	8195	7799
13	Uttar Pradesh (UP)	10781	10827	10804	11743	10332
14	West Bengal (WB)	6783	6890	6232	6724	5807
15	North Eastern Region (NER)	6490	8457	8873	8734	11066
16	Smaller States (SS)	8101	8985	6819	11209	8246
	ALL INDIA	**99065**	**104238**	**99282**	**108034**	**99495**

CHAPTER 4

WOMEN WORK FORCE PARTICIPATION:

A STATISTICAL PROFILE

4.1 Introduction

In this chapter we explore at length the extent of women's participation in the work force in India. The magnitude of women work participation is captured according to the educational attainment, age group, marital status as well as their social and religious status. Given our data set, the study has been carried out at two levels- all India and states. The structure of the chapter is as follows. Section 4.2 describes the magnitude of work force participation in India by gender and place of residence. Section 4.3 deals with the participation across states and urban areas of the country. Section 4.4 examines women work force participation rate by different individual characteristics. Section 4.5 discusses the nature of employment and workforce participation, while section 4.6 concludes.

4.2 The Magnitude of Work Participation in India

From the review of literature it is evident that work roles for women in society are clearly defined, leading us to conclude that it limits their participation in paid activities outside their homes (Beutel and Axinn, 2002). Further, while participation is biased in favour of the male members of the society, females are not so far behind. Comparatively, the work participation of females especially in the developed countries, though it remains much lower than males, has shown improvements in the positive direction (Ehrenberg and Smith, 2000).

In India the society is structured in a manner that leaves very limited scope for women to leave home for work (Khan, 2007; Sarikhani, 2008). To be able to assess the magnitude of work force participation in the country, we will examine the Work

Participation Rate (WPR) by gender and place of residence. In India a sizeable portion of the population still resides in the rural areas with limited accessibility to resources. This would have to be considered when we make a comparative assessment of the work participation in the rural and urban areas of the country.

Tables 4.1.a to 4.1.e present the working population in the age group 15 years and above by gender and place of residence, that is rural and urban areas, for the years 1983, 1987-88, 1993-94, 1999-00 and 2004-05. An examination of the data shows that great disparities exist between the WPR of men and women. In 1983, women workers were almost half that of men workers, that is, around 44 per cent of the former as against the figure of 85 per cent for the latter, which declined to 42 and 82 per cent, respectively in 2004-05 (Figure 4.1). This situation is contrary to what we find in developed countries where WWPR has risen over a period of time and is now almost at par with WPR of men (Toossi, 2002).

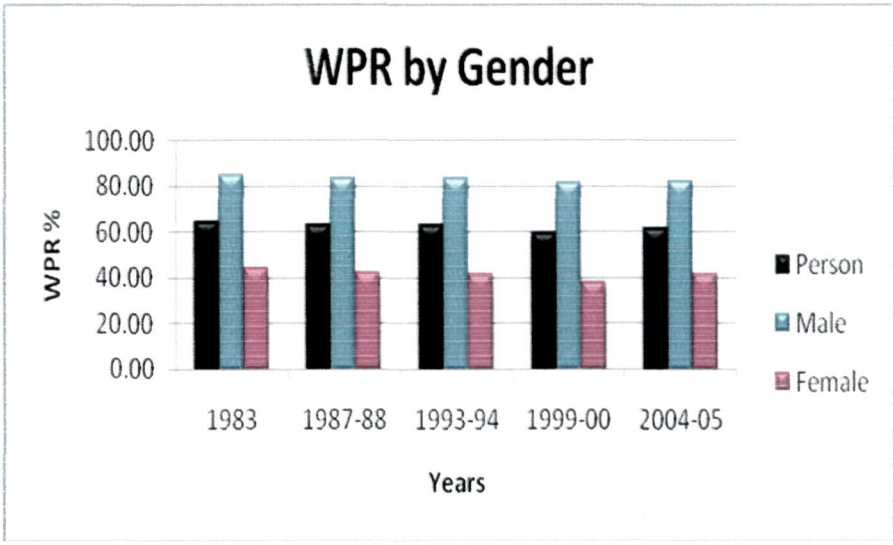


Figure 4.1: WPR by Gender in India

It is clearly noticeable from tables 4.1.a to 4.1.e that the overall WPR has shown a decline from 64.79 per cent to 62.21 per cent respectively from the period 1983 to 2004-05. Going by gender, the WWPR exhibited a two percentage point decline, from 44 to 42 per cent in 1983 and 2004-05. This decline is also evident in case of the WPR of men workers. For the corresponding years, the WPR for men stood at 85 per cent and 82 per cent, respectively. In the interim period, for both men and women, the WPR exhibited a gradual deceleration. Thus, we find that in the last 20 years there has been marginal decline of overall WPR. However, this decline in the WPR does not appear to impact the ratio of the WPR between men and women worker - with the WPR of men remaining almost double that of women.

WPR between 1983 and 2004-05 showed wide differences for the residents of the rural areas as compared to those in the urban areas, with higher participation for both men and women in the rural areas compared to their counterparts in the urban areas. Rural men exhibit a slightly higher participation rate than urban men - with an almost 10 percentage point variation. Their WPR was recorded at 85 and 76 per cent, respectively in 2004-05. This is also evident for each of the five different years of study (figure 4.2). However, the pattern of work participation for men in the rural and urban areas exhibited a decline during the same period as can be seen from the figure 4.2, with the decline in participation being much more prominent for the urban workers.

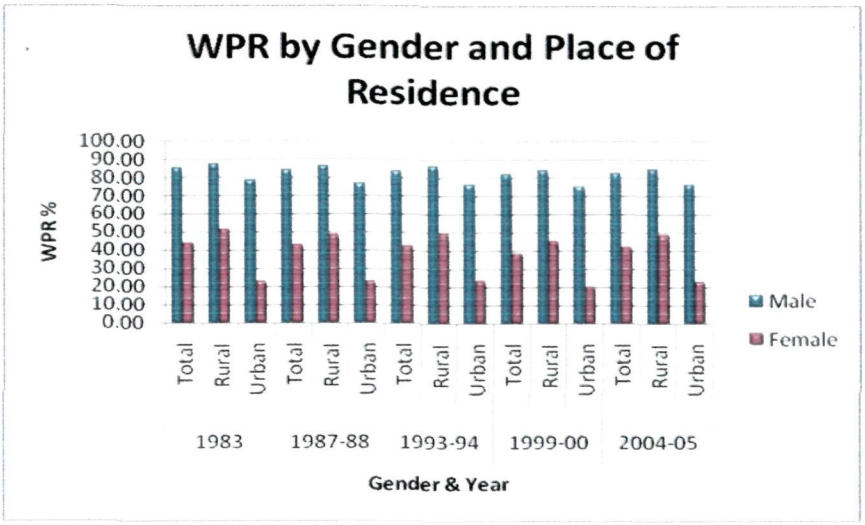


Figure 4.2: WPR by Gender and Place of Residence

Looking at WWPR by their place of residence it can be observed that WWPR is much higher in the rural areas than in urban areas. Urban women's participation was less than half that of the rural women's participation rates. From the period 1983 to 2004-05 rural WWPR hovered around 49 per cent. On the other hand, the participation rate of urban women leaves much to be desired for. Their WPR for the same period stood at around 22 per cent. These figures speak volume of the work disparities among rural and urban women. It can, therefore, be stated that the major contributor to WWPR is largely constituted by rural women workers.

A comparison of the WPR of men and women brings out the following. First, in the rural areas WWPR remains much lower than men's WPR. Rural women that were in the work force in 1983 represented 50.83 per cent of the total working population and in 2004-05 the percentage declined to around 48.48 per cent. In the same period, men WPR in the rural area, though it remained fairly higher than WWPR, also exhibited a downward trend. From 87.33 per cent in 1983, men WPR declined to 84.59 per cent in

2004-05. Overall, the WPR for both men and women in rural areas stood at 66.59 per cent in 2004-05, compared to 69 per cent in 1983.

Second, wide variations in WPR are also observed among men and women within the urban areas. The figures showed an almost five-fold participation of men as compared to women. For the corresponding years of 1983 and 2004-05, the participation of men was 78.35 per cent and 76.25 per cent respectively. On the other hand, WWPR was 22.47 per cent in 1983, which declined to 19.66 in 1999-00 and then marginally increased to 22.73 per cent in 2004-05. These figures hardly show any change as the overall WWPR can be safely remarked as stagnant. The overall WPR for both genders in the urban areas for the two corresponding years of 1983 and 2004-05 were 51.90 per cent and 50.60 per cent, respectively. This reveals a lower WPR for the urban workers by almost 16 percentage points compared to the rural workers.

The relatively high WPR of rural women shows the important contribution of rural women in the economic growth and development of the country. However the type and quality of their work in relation to their educational attainment as well as their social and economic status requires to be examined further to corroborate this finding. On the other hand, the lower WWPR in the urban areas needs further examination. As mentioned earlier, the declining trend in participation of men and women, as well as the low WWPR is a cause for concern. While it becomes imperative to thoroughly analyse the causes of such dramatic differences, the attitudes towards work and societal obligations can be responsible for such a poor showing on the part of the women workers compared to men workers.

4.3 The Magnitude of Work Participation by States

At the outset it would be important to note that in our final analysis of the study we have regrouped the 35 states of India into 16 states (see Chapter 3 for necessary explanation). Tables 4.1.a to 4.1.e show the magnitude of work participation by states. For examining the magnitude of WPR by states, we have divided the 16 states into five zones namely, the central, northern, southern, eastern and western zones.

For the central zone the states of Madhya Pradesh and Uttar Pradesh are taken into consideration. It may be reminded here that data for these states is inclusive of the newly created states of Chhattisgarh and Uttarakhand as outlined in the previous chapter. Male WPR averaged around 85 per cent for the period 1983 to 2004-05. In 1983 and 2004-05 men WPR stood at 87 and 85 per cent for Madhya Pradesh, while in Uttar Pradesh it was at 87 and 83 per cent for respectively. WWPR, on the other hand, averaged at 44 per cent for the period 1983 to 2004-05. In Madhya Pradesh WWPR stood at 57 and 53 per cent in 1983 and 2004-05 respectively, while in Uttar Pradesh the WWPR did not show any change and remained at around 35 per cent in the same period.

The northern zone includes the states of Rajasthan, Haryana and Punjab. Here too the trends in the WPR are almost similar to those found in the central zone. In virtually all the three states WWPR remained much lower than the male WPR. The average WPR for men in the north Indian states is around 82 per cent while WWPR averaged around 42 per cent during the period 1983 to 2004-05. Among the three states, the WPR of Rajasthan was the highest at 68 per cent, while it was around 59 per cent in the other two states in 2004-05. In 2004-05, Rajasthan had the highest WWPR at 54 per

cent and men WPR at around 82 per cent, while the lowest WWPR was in Punjab at 36 per cent and men WPR was in Haryana at 77 per cent.

The WPR for southern states namely, Kerala, Andhra Pradesh, Karnataka and Tamil Nadu was relatively higher than the national average for both men and women for the period under study. Like the all-India scenario, WWPR remained much lower compared to that of men WPR. The highest WPR was observed for Andhra Pradesh at 83.41 per cent for males and around 56 per cent for females in 2004-05. On the other hand, Kerala recorded the lowest WPR at 76.61 for males and 32 per cent for females in 2004-05. An important observation is that in these states WWPR is higher for the urban residents compared to the rural residents, unlike in the rest of the country.

Looking at the eastern zone - Orissa, Bihar, West Bengal and the North Eastern states - the patterns of work participation revealed a very weak performance especially for women. While men WPR average around 83 per cent for the period 1983 to 2004-05, WWPR average at just 30 per cent. In this zone, the WPR of men and women in Orissa is the highest followed by Bihar. However, WWPR in Bihar exhibited a sharp decline from 36 per cent in 1983 to 28 per cent in 2004-05. Comparatively, WPR in the states of West Bengal and the North Eastern region remained abysmally low. The only consolation being the North Eastern states' exhibition of a slight improvement in participation from around 24 per cent in 1983 to 33.46 per cent in 2004-05.

For the western zone we have taken the states of Maharashtra and Gujarat. WPR for men and women in the western zone average at 83 per cent and 49 per cent, respectively for the period 1983 to 2004-05. For instance, in Maharashtra WWPR was

54.45 per cent in 1983, which declined to around 50 per cent in 2004-05, while for Gujarat it was around 47 and 48 per cent respectively, for the same period. Male WPR showed an increase for Gujarat from 83.47 per cent in 1983 to around 86 per cent in 2004-05, while it exhibited a decrease for Maharashtra from 84 to 80 per cent for the same period.

From the above, it can be stated that the western and southern zones are the best performers in terms of higher WPR and the eastern zone has a lot to catch up in improving their overall WPR. Northern zone's good performance, however, can be attributed to their higher rural WPR.

Examining the rural and urban WPR by states reveal the following. First, WWPR across states in the rural and urban areas is observed to be much lower than men WPR. Second, WPR of men in rural areas is higher (at an average of 85 per cent) than in urban areas (at an average of 76 per cent) during 1983 to 2004-05. Highest rural WPR is observed for states like Gujarat, Andhra Pradesh and Madhya Pradesh and the lowest for Kerala. Similarly, in the urban areas highest WPR is observed for the aforementioned states including Tamil Nadu and Karnataka. Third, WWPR across states in rural areas is observed to be much higher than in urban areas with a difference of almost 20 percentage points. WWPR in urban areas average around 22 per cent and 48 per cent in the rural area during the period 1983 to 2004-05. The lowest WWPR is witnessed for the states of UP and Bihar and a relatively higher WWPR is observed for Karnataka, Kerala, Maharashtra and Andhra Pradesh. This pattern of WPR clearly exhibits a disparity in the involvement of women in the economic activity in the rural and urban areas. There is

clearly much to be desired for when we look at such low participation rates in the urban areas as this is far from comparable to the urban women workers in other developed countries.

The magnitude of WWPR and the changes therein is captured in figure 4.3. It shows that WWPR has declined within different states in the country from the period 1983 to 2004-05. Second, the magnitude of WWPR is inconsistent, with high participation rates for some states like Andhra Pradesh, Maharashtra, Tamil Nadu and Rajasthan while it is not so for others like the North Eastern States, West Bengal and Bihar. Does this reflect attitudinal or simply apathy to work? Or could it simply reflect the lack of opportunities and the absence of infrastructure to facilitate women's entry into the labour market?

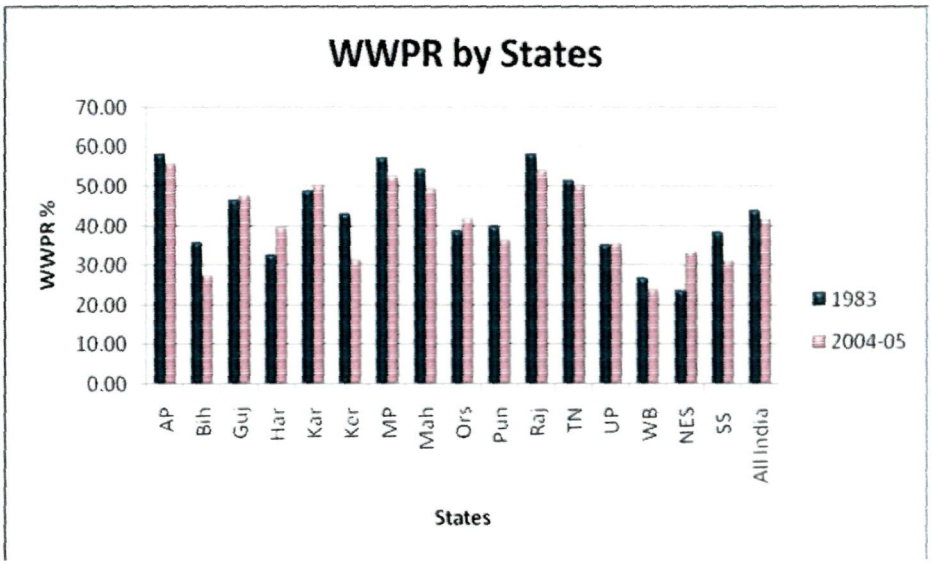


Figure 4.3: WWPR by States

4.4 Characteristics of Women Work Participation Rate

In this section we examine the patterns of women work participation in relation to a group of selected variables such as educational attainment, age-group, marital status, as well as the social and religious characteristics.

4.4.1 Women Work Participation Rate by Educational Attainment

In this section we examine WWPR by different educational attainment namely, illiterates, literate below Primary, literate up to Primary, Middle, Secondary and Graduates and above. WWPR by different educational attainment is reported in tables 4.2.a to 4.2.e.

From the tables it can be seen that the overall WWPR by different educational attainment was the highest in 1983 at 25.43 per cent. Thereafter, it declined and remained almost stagnant at around 24 per cent till 2004-05. Going by different levels of educational attainment of women, the WPR of illiterate women is observed to be the highest. Their participation rate remained steady around 32 to 35 per cent for all years under survey. Another striking feature is that WWPR exhibits a decline for all educational levels barring for those with a graduate degree or above. However, the proportion of workers in the last category out of the total workers is very less at just 11 per cent in 2004-05.

Again a point to note is that on the basis of different educational levels, the rural WWPR is much higher than urban WWPR, barring for those in the category of graduates and above. For instance, in 1983, 25.43 per cent of women in the rural area were engaged in some form of economic activity compared to just 10.63 per cent of the

urban workers. WWPR declined marginally in rural areas to 24.18 per cent and stagnated at 10.89 per cent for urban areas in 2004-05.

Across states not much variations is observed form that of the all India level. For the different states across the country it is observed that illiterates and graduates and above have a much higher WWPR. On the other hand, a declining WWPR for lower levels of formal education is observed. Further, higher rural participation rate in comparison to lower urban participation is also seen across states.

However, due to variations in the composition of the population across states some minor differences are also observed. For instance, higher WWPR in the rural area is observed compared to the urban WWPR. However in states like Tamil Nadu and Kerala – with the highest literacy rate in the country- WWPR in urban areas is much higher at 15.66 and 13.39 per cent respectively in 2004-05 than even the all-India average (10.89 per cent in 2004-05) for all educational levels and almost at par with the rural residents. Unfortunately, the same cannot be said for the other states, even though for a few, the urban WWPR is seen to be marginally above the national average. The lowest WWPR by states in the urban area was seen for states like Bihar (six per cent) and Uttar Pradesh (eight per cent) in 2004-05. While their rural WWPR stood at 14.58 per cent and 20 per cent, respectively in 2004-05.

WWPR by different educational attainment and place of residence for 1983 and 2004-05 is presented in figure 4.4.

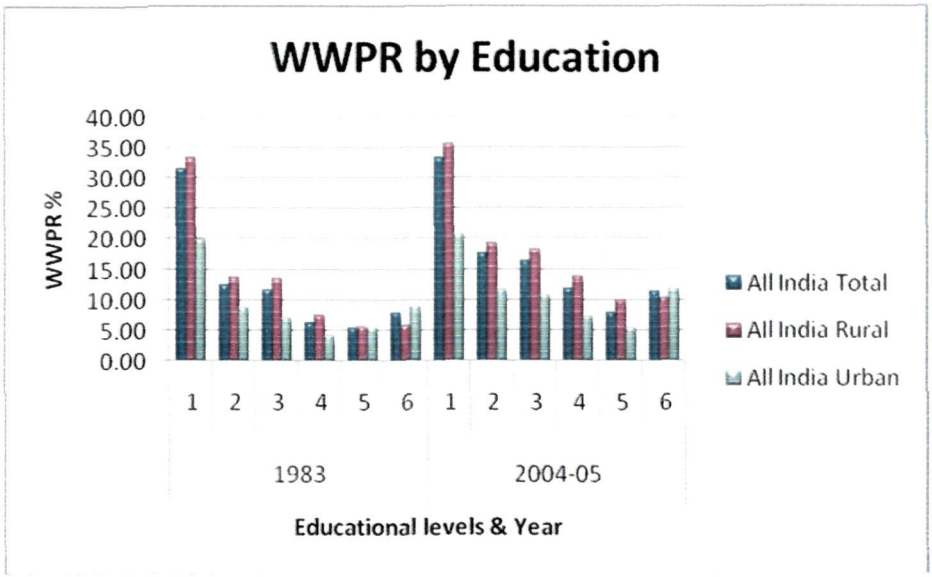


Figure 4.4: WWPR by Educational level and Place of Residence

Note: 1=Illiterates, 2=Literate without formal education, 3=Literate up to primary, 4=Literate up to Middle, 5= Literate up to Secondary, 6=Graduates and above.

While it could be certain that in an urban set up facilities for education would be much better, yet this did not appear to have made any dent in terms of increased WWPR. Here it may be mentioned that WWPR remained relatively higher for lower educational levels and then declines as the levels of education starts increasing (higher than the primary level). From then onwards the decline continues till it again shows an increase for those with a graduate degree or above. One consolation for the urban women is that they have the highest and increasing level of participation for this particular educational group, as compared to their rural counterparts.

While we may attempt to provide a possible explanation for such observations, yet it throws more questions than answers. In India, it is common knowledge that poverty is rampant which limits the scope for further investments in schooling. Hence

only those with better means can afford to send their daughters to school. When a choice arises between the education of girls or boys, it would naturally be the latter, as is evident from the higher WPR of illiterate women. Could this be a manifestation of the social conditioning of the country-boys in favour of girls - or simply unfavourable labour market conditions for women? Or are there other reasons to explain this phenomenon?

We would examine WWPR in relation to other variables in the following sub-sections, to see whether it is just education or other factors conjoint would determine WWPR.

4.4.2 Women Work Participation Rate by Age Group

Tables 4.3.a to 4.3.e show WWPR by age group. Women workers have been divided into the following age groups. They are 15 to 19 years, 20 to 29 years, 30 to 39 years, 40 to 49 years, 50 to 59 years and 60 years and above.

From the tables, it can be observed that the participation rate first declines at lower age groups but starts to increase in the prime age group and then eventually dips for higher age groups. WWPR is the highest in the age group 30-40 years of age. On the other hand, lower WWPR is observed for those in the age groups less than 30 years and greater than 60 years of age. It is important to note, however that WWPR of the latter (60 years and above) is much lesser as compared to the former (less than 30 years).

For women in the age group 15-19 years participation is very low in both rural and urban areas. However the participation of rural women remains much higher than that of urban women. A plausible explanation of lower work participation for urban

women could be their attendance in schools as opposed to rural women who in place of school attendance could be at work in their farms or simply they lack in opportunity for schooling. WWPR starts to pick up as we move along the higher age brackets. From age 20 onwards the participation rate starts to increase, though it has not reached its prime.

Literature suggested that women in this particular age, especially for those in the urban areas, have a high opportunity cost in terms of education. As a result they would prefer to spend a few more years to acquire higher education thereby raising their prospects for a better job and hence better wages in future (Borjas, 2005). Alternatively, it could also be that women who do not have the opportunity or ability to move higher in the educational fields may opt for the job market. These appear to augment and substantiate the view that while WWPR is low for the age group 20-29 years, yet it remained much higher than those in the preceding age group 15-19 years.

Participation of women in the work force reached its peak at the age group of 30-39 years. This is observed for all women. However, rural WWPR is still much higher than urban WWPR by this particular age group. This positive increase in WWPR for this particular age bracket should not divert our attention from the fact that participation of the urban women falls far short - less than half - of their rural counterparts. From then onwards, for age groups 40 years and above, WWPR starts its downward move till it again reaches its nadir for women in the age group 60 years and above. The participation of women, in age group 60 years and above although relatively low, could be attributed to reasons such as poverty and low income which compels them to continue working.

At the level of the states for the entire period from 1983 to 2004-05, WWPR shows the same trend, though with different degree of intensities for different states. For instance, in states like UP, Rajasthan and Bihar, the WWPR averaged much below the national level for both sectors with a higher rural than urban participation. WWPR for all age groups remains very poor in the urban area, showing little or no signs of positive changes. On the other hand, for states like Kerala their good showing in WWPR continues; with a gradual decline in the participation of girls in the age group 15-19 years of age, especially in the urban sector. Mention may be made here of the low and declining participation for those in the age group 15-19 years in the states of Haryana and Punjab. Does this reflect a greater attention paid to the education of girls and hence withdrawal from the work place to educational institutions or an imbalance in the sex ratio? As per Census 2001, the sex ratios in Haryana and Punjab were 927 girls per 1000 boys, one of the lowest in the country revealing lesser number of girl children and hence lesser number of women workers in future.

WWPR by different age groups and places of residence, which is rural and urban areas, for 1983 and 2004-05, has been plotted in figure 4.5. From the figure, it can be seen that the WWPR exhibits an inverted U-shaped curve, revealing a lower WPR for women in the age group 15 to 19 years. Thereafter, it starts to increase for all age groups. Subsequently, it declines for women in the age group 50 years and above. Further, higher WWPR is seen for the age groups of 20 to 49 years and urban women are having a lower WPR in comparison to the rural women by all age groups.

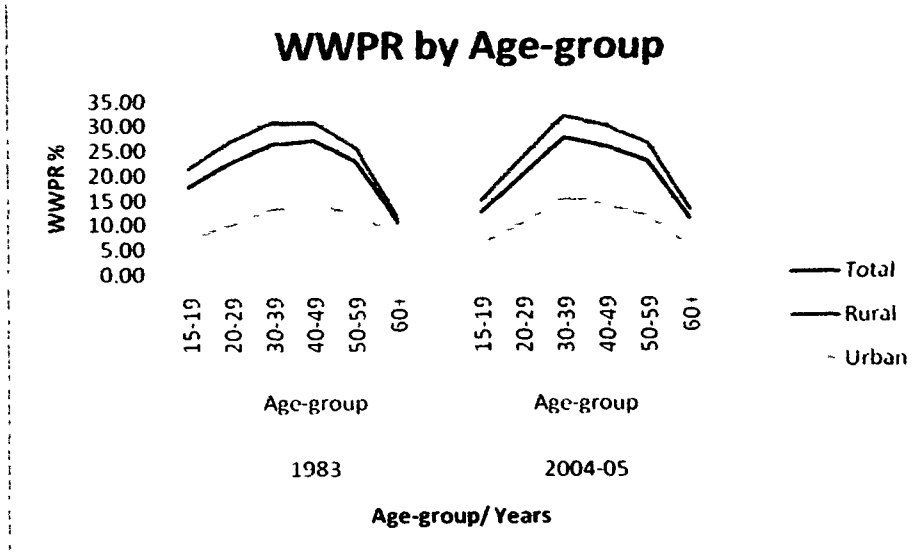


Figure 4.5: WWPR by Age-group and Place of Residence

4.4.3 Women Work Participation Rate by Marital Status

WWPR by marital status is given in tables 4.4.a to 4.4.e. Women workers have been divided into three distinct marital categories, namely, never married, currently married and a third category comprising of widowed, divorced and women separated from their spouse.

Comparing WWPR by different marital status we observe that women who are widowed, divorced and separated from their spouses have the highest WPR followed by the currently married. The lowest WPR is observed for women who fall under the category of never married. These observations are made for the entire period from 1983 to 2004-05 and across states. The WPR had remained almost stagnant for the never married category of women as it had shown a barely one per cent change during the entire period, from 10.38 per cent in 1983 to nearly ten per cent in 2004-05. The same is not the case for women of other marital status. For women who were divorced, widowed

or separated, the participation rate has not shown much change. From 29.39 per cent in 1983 WWPR barely increased to 29.84 per cent in 2004-05. For the currently married women it registered a marginal decline from 23.72 per cent in 1983 to 22.94 per cent in 2004-05.

Across the rural and urban areas, WWPR by different marital status shows the same results with the only difference being the higher rural WWPR compared to the lower urban WWPR. WWPR by marital status for 1983 and 2004-05 is plotted in Figure 4.6.

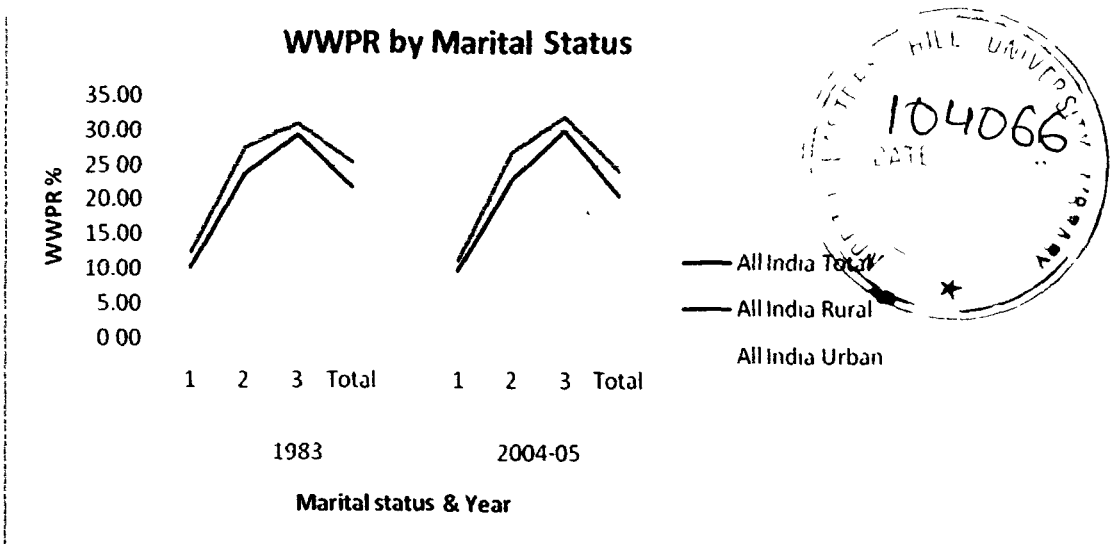


Figure 4.6: WWPR by Marital Status and Place of Residence

Note: 1=Never married, 2= Currently married, 3=Widowed/ Divorced/Separated.

The rural-urban divide in the WWPR is clearly evident in figure 4.6. Women in the rural area appear to be fairing much better than women in urban areas in terms of WPR. Overall WWPR which was 25.43 per cent in 1983 marginally declined to 24.18 per cent in 2004-05. In case of urban women, the WPR hardly recorded any change

whatsoever. In 1983 the WWPR for urban women was 10.63 which barely increased to 10.89 in 2004-05. In both rural and urban areas, the participation of widowed and divorced women was the highest, followed by currently married women, while never married women had a relatively lower participation. The participation of widowed and divorced women exhibits a relatively higher participation possibly because there is an absence of a male earning member and hence these women are obligated to support their children and families by going out to work or remaining in the work force.

4.4.4 Women Work Participation Rate by Social Group

Our examination of the WPR by women belonging to different social groups clearly shows the diversity of the Indian population and the differences therein. The main objective is to examine the performance of women belonging to different social groups in the work force of the country. We have divided them into the Scheduled Tribe (ST), Scheduled Caste (SC) and Other social groups- those not belonging to the ST or SC. WWPR by different social groups is given in tables 4.5.a to 4.5.e.

From the tables, it can be observed that in 1983, WWPR was the highest at 34 per cent for STs, while it was 26 per cent for the SCs. The lowest participation was for those belonging to the Other social group category (around 19 per cent). Between 1983 to 2004-05, a declining WWPR is observed for all social groups. In 2004-05, WWPR for ST, SC and Others stood at 33, 23 and 19 per cent, respectively. The decline in WWPR of the SCs was much sharper compared to a marginal decline for the STs. This decline is also observed for the North Eastern states which have a sizeable ST population and Punjab with a high SC population.

Figure 4.7 captures the magnitude of WWPR by different social groups in the rural and urban areas. Here also the rural WWPR is observed to be higher than the urban WWPR. The WPR of women for both areas however shows a decline from 1983 to 2004-05. Between 1983 and 2004-05, the WWPR of STs in the rural areas was 35.62 per cent and 34.64 per cent, respectively. For the SCs it was 28.61 and 25.41 per cent for the same period; while for those under the category of Other social group it was 23.20 and 22.30 per cent, respectively. The urban WWPR for STs was 16.84 per cent in 1983 compared to 17.23 per cent in 2004-05. For SCs it was 15.22 and 13.64 per cent, respectively, indicating a declining WPR. On the other hand, the WPR for urban women belonging to Other social group was around 10 per cent. From this we may conclude that compared to women of different social groups STs have the highest WWPR, both in the rural and urban areas.

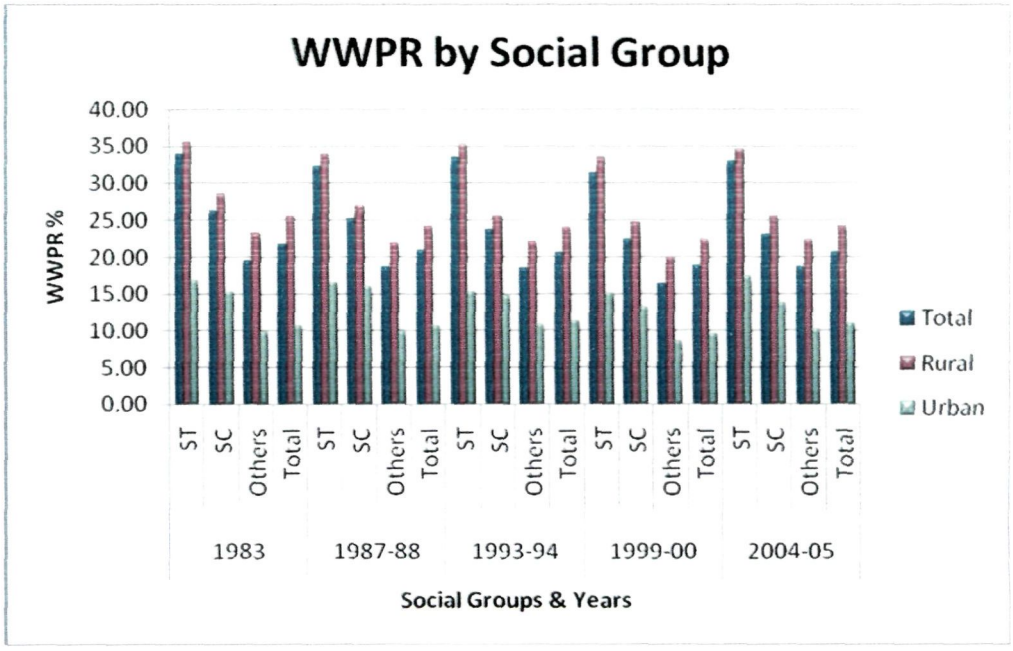


Figure 4.7: WWPR by Social Groups and Place of Residence

The variations in the WPR of women belonging to different social groups are also noticeable in figure 4.7. Overall their percentage contribution showed a higher participation rate of 21.74 per cent in 1983 and 20.54 per cent in 2004-05. The share of the ST's - the highest among all the groups - marginally declined by one per cent between 1983 to 2004-05. On the other hand, the percentage share of the SC's declined by two per cent from 33 per cent in 1983 to 31 per cent in 2004-05, while that of women belonging to other social groups registered a marginal increase of one per cent during the same period. The observations made of WWPR by different social groups in the country reflect a greater need for an improvement in their overall status for it to translate in higher WPR.

4.4.5 Women Work Participation Rate by Religious Group

WWPR by different religious groups is given in tables 4.6.a to 4.6.e. These include Hindus, Muslims, Christians and Other religions not belonging to the aforementioned religious groups.

Between 1983 and 2004-05, WWPR by different religious groups exhibited a decline barring Other religions. The WPR was the highest for all major religious groups in 1983 with Hindus, Muslims and Christians showing a WPR of 22.77 per cent, 13.58 per cent and 24.20 per cent, respectively. In 2004-05 WWPR by different religious groups declined and were 21.61, 12.09 and 22.41 per cent, respectively for the Hindus, Muslims and Christians. For women belonging to Other religions the WPR which was 19.11 per cent in 1983 increased to 22.16 per cent in 2004-05. The above figures indicate that WWPR was the highest for Christian women, followed closely by Hindu

women. The lowest participation was for the Muslims women. It is worth mentioning that Christians constitute one of the minority groups in India. Their proportion to the total population is barely 10 per cent, while Muslims comprise the second highest religious group, next only to the Hindus, out of the total Indian population.

WWPR by religious groups and place of residence that is rural and urban areas, is presented in Figure 4.8.

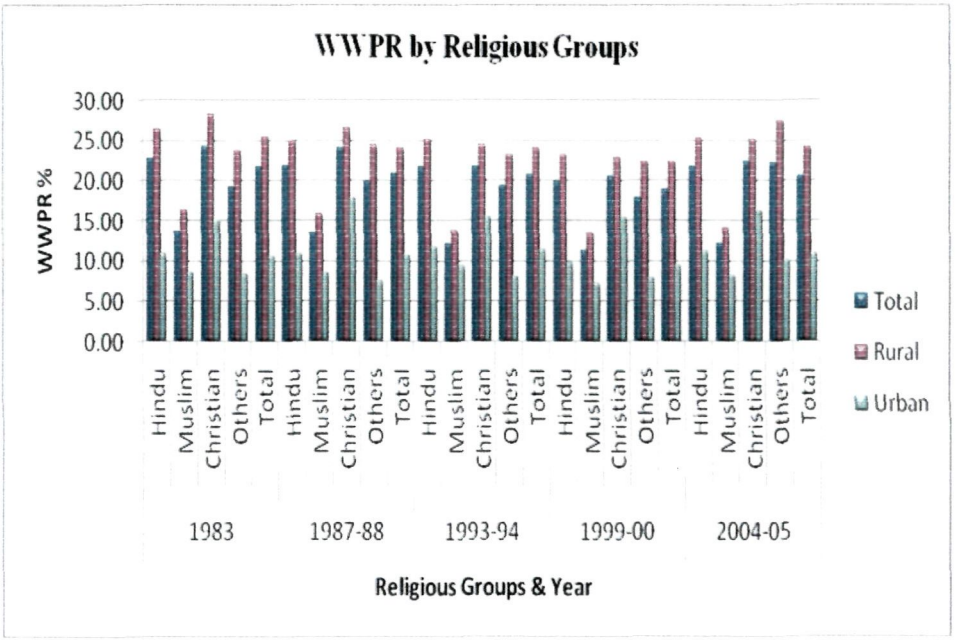


Figure 4.8: WWPR by Religious Groups and Place of Residence

From the figure, a higher participation rate for rural women for all religious groups is observed. In 1983 and 2004-05 their WPR stood at 25.43 and 24 per cent, respectively. Against the background of the deep-rooted cultural and religious practices prevalent in rural India, one possibility of explaining the observance of such high WPR by rural women could be the economic considerations. Poverty could be a force propelling women to find employment as a means of augmenting and supplementing

their families' income. In the urban areas, over the years with better access to education and a modernized economic and social set up, we would expect higher work participation for women, irrespective of their religious background. However, this is not the case as we find the WPR of urban women remaining almost the same during 1983 to 2004-05 at around 11 per cent and much lower than the rural work participation. The observation of lower WWPR in urban areas is a cause for further analysis which will be taken up in subsequent chapters.

For all the religious groups, barring Other religions, the WPR has decreased for the period between 1983 to 2004-05. Perhaps a much clearer picture would emerge when we examine the percentage change in the composition of women workers by their religious groups. From tables 4.6.a to 4.6.e, it can be observed that the WPR of Muslim women is the lowest and their WPR declined by two per cent from 1983 to 2004-05. On the other hand, Hindu WWPR declined by one percentage point for the group as a whole, and Christians WPR declined by two per cent for the Muslims. On the other, women workers who belong to Other religions registered an increase in WPR by three per cent. It thus appears that the changes in terms of the declining WWPR of Hindu, Muslim and Christians have been absorbed by the increased WPR of women belonging to other religious group.

Could the WWPR reflect the ongoing attitude towards work and employment or do they reflect much more? It is also important to keep in mind the patrifocal set up of most communities in India where there is a virtual male dominance in all aspects of decision making, be it at home or in the society. It is a well-known fact that for both

Hindu and Muslim women, their particular customs and traditions virtually debars women from moving out of home for work (Khan, 2007).

4.5 Nature of Employment and Work

In this section we will briefly discuss the type of work that women performs and changes therein for the year 1983 and 2004-05. For this we have used the National Classification of Occupations (NCO) of 1968.

Our initial assessment is of the work division in the urban and then in the rural sectors. Towards this end, for the urban workers we divide them into two groups (i) white-collar or non-manual workers and (ii) blue-collar or manual workers. As per NCO classifications, those belonging to divisions 0, 1, 2 and 3; groups 40, 41, 42, 44 and 45 of division 4 consisting of merchants and shopkeepers, wholesale and retail trade, manufacturers, agents, technical salesmen and commercial travelers, insurance, real estate, securities and business service salesmen and auctioneers and money lenders and pawn brokers; group 57 of division 5 except families 570, 574 and 579 who are categorized under the group of protective service workers consisting of firefighters, watchmen, chowkidars and gatekeepers (excluding village watchmen) and protective service workers, not elsewhere classified; group 60 of division 6 comprising of farm plantation, dairy and other managers and supervisors and groups 85 and 86 of division 7-8-9 consisting of electrical fitters and related electrical and electronic workers, broadcasting station and sound equipment operators and cinema projectionists are classified as the white-collar workers. The rest of the occupations are categorized under manual jobs.

In order to examine the work performance of the rural workers we divide them into two groups (i) farm or agricultural workers and (ii) non-farm or non-agricultural workers. As per NCO classification all occupations related to farm or agricultural works are under division 6 and cover groups 60 to 68. These comprise of cultivators, farmers, agricultural and plantation labourers, forestry workers, hunters and fishermen and their related workers. Non-farm workers, on the other hand consist of all occupations other than those that fall under division 6.

Table 4.7 shows the distribution of women worker as per the NCO, 1968 two-digit classification for rural and urban area for the 1983 and 2004-05.

Table 4.7: WWPR by NCO-1968

	1983			2004-05		
NCO division	Rural	Urban	Total	Rural	Urban	Total
Farm	95.84	4.16	100.00	96.72	3.28	100.00
Non-farm	57.67	42.33	100.00	54.03	45.97	100.00
Non manual	45.29	54.71	100.00	46.41	53.59	100.00
Manual	56.92	43.08	100.00	53.30	46.70	100.00
Total	78.76	21.24	100.00	75.40	24.60	100.00

Source: Author's own calculation.

From the table 4.7, out of the total women workers 95.84 per cent were engaged in farm activities in the rural sector in 1983 which marginally increased to 96.72 per cent in 2004-05. This increase of one percent in the rural women workers is due to the decrease in the percentage of workers in the urban sector by the same percentage- from 4.16 per cent in 1983 it decreased to 3.28 per cent in 2004-05. These observations would be as expected because a major form of occupation in the rural areas is largely farm-

based activity. The higher WWPR in this particular sector also shows the increasing dependency for work in this sector.

In case of non-farm activities, there is a decline for rural women workers by four per cent from 57.67 per cent in 1983 to around 54 per cent in 2004-05. For urban women workers however it showed an increase by the same percentage, from around 42 per cent in 1983 to 45.97 in 2004-05. This increase participation rate of urban women workers in non-farm activities is largely due to their contribution in areas of work such as professional, technical and related works which includes life scientists, mathematicians, statisticians, accountants and related activities. The declining WWPR in rural areas in non-farm activities is largely a result of their increased participation in agricultural and related activities.

Between 1983 and 2004-05, the proportion of rural women engaged in manual work declined by around four percentage points from 56.92 per cent to 53.30 per cent, while in the same period the proportion of urban women engaged in the same activity increased from 43.08 per cent to around 47 per cent. This increase in manual work is a result of their increased participation in areas of work such as architecture, engineers and technologists. However their participation in activities such as miners and related works remained very low, mainly because such physically demanding work is largely seen as jobs mostly fitted for the men. The change in the composition of manual work is also manifested in the non-manual work. From table 4.7 it can be seen that the proportion of non-manual workers remained slightly higher for urban women than the rural women.

However not much variations is seen from 1983 as their proportions in non-manual work remained almost static.

To examine WWPR by different categories of employment, we have divided the different types of employment into three categories namely, self-employed, casual labour and regular wage earners. The WWPR by different employment categories is given in Table 4.8.

Table 4.8: WWPR by Employment Categories

Employment Categories	1983			2004-05		
	Rural	Urban	Total	Rural	Urban	Total
Self-Employment	53.21	37.03	51.08	56.30	39.94	53.72
Regular Wage	3.63	32.13	7.38	4.82	42.57	10.76
Casual Labour	43.16	30.84	41.54	38.88	17.50	35.51
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Author's own calculation.

From table 4.8 it can be observed that in rural areas in 2004-05 the proportion of self-employed women was the highest at 56.30 per cent, followed by casual labour at around 39 per cent. The lowest proportions of women were employed as regular wage earners at only around five per cent. In the urban areas the highest percentage of women workers is observed to be employed as regular wage earners at 42.57 per cent, followed by self-employed workers at around 40 per cent. On the other hand, the lowest percentage of women workers is recorded for casual labourers at 17.50 per cent.

The situation can be further clarified when we compare WWPR by different employment categories in rural and urban areas. Figure 4.9 shows the percentage of

women in different categories of employment for the year 1983 and 2004-05. It is apparent that the percentage share of women in different employment categories has shown some variations. This is observed for both the rural and urban sectors. While some changes, during the same period are noticeable, their proportion as self-employed and regular wage-earners showed an increase by around two to three percentage points; but a decrease by around six percentage points as casual labourers. Between 1983 and 2004-05, the proportion of rural and urban women workers shows a decline in their capacity as casual labourers and an increase in their capacity as regular wage-earners or self employment.

It is also evident from figure 4.9 that there are some variations in the capacity in which women are employed. While in the rural area it is seen that self-employment and casual labour appears to be the major employment avenues for women, the regular-salaried workers appear to dominate in the urban area. It could be that the main occupations of urban residents come primarily from the secondary and tertiary sector. On the other hand, the absence of such employment in the rural areas could be the reason of high employment of women workers in household enterprises, on their own account or as unpaid family workers in the family owned farms. This high proportion of rural WWPR could also be due to the low levels of literacy and lack of access to better facilities to improve their lives.

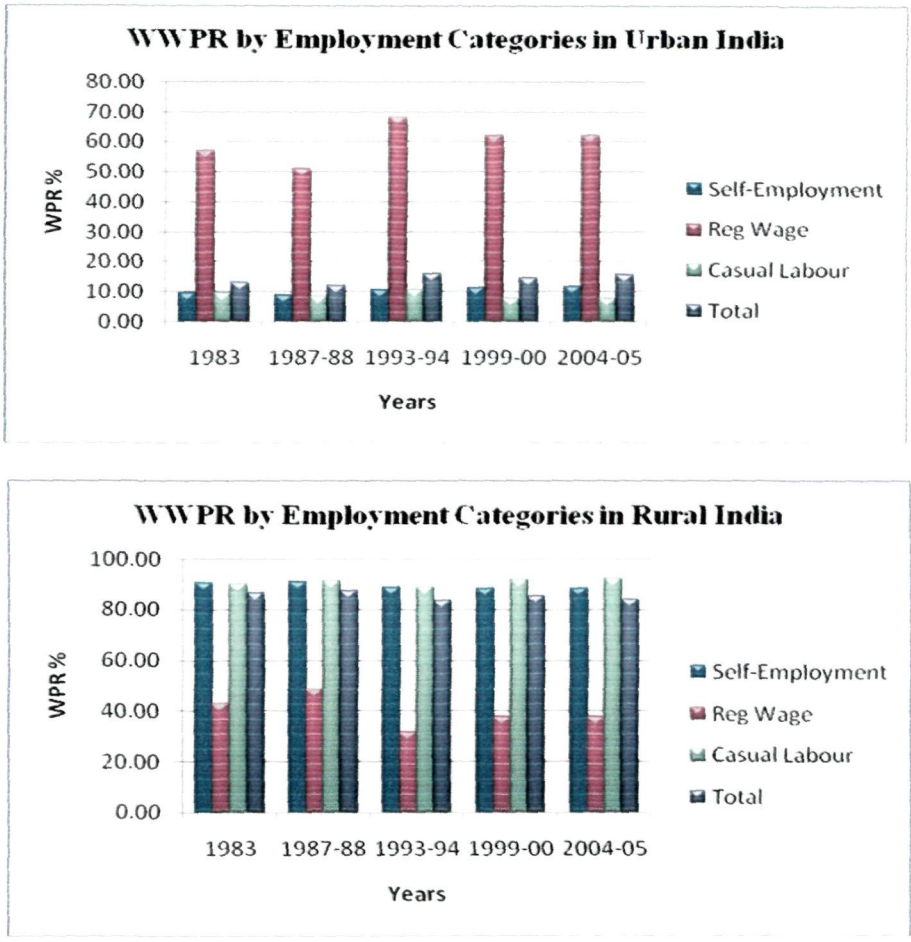


Figure 4.9: WWPR by Employment Categories and Place of Residence

4.6 Summary

The discussion in the preceding sections clearly brings to light the importance of the issue of women work participation. It is seen that their WPR is much lower compared to their male counterparts and wide variations are noticed in their WPR across states and the rural and urban areas. Further, an examination of their WPR by age, educational attainment and social and religious characteristics reveal more inadequacies in WWPR in India. Despite the shortcomings of secondary data, it can be stated that there are diverse issues pertaining to women's active participation in the work force that requires

immediate attention. Our brief attempt at highlighting some of the factors and their potential relation with women's participation in the work force also requires an in-depth examination on the influence of these factors on WWPR. This is addressed in the following Chapter 5 wherein we examine the determinants of WWPR in the rural and urban areas.

Table 4.1.a: WPR by Gender and Place of Residence (15 years and above): 1983

States	Rural			Urban			Total		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Madhya Pradesh	90.26	67.29	78.86	77.76	22.20	51.70	87.22	57.18	72.51
Uttar Pradesh	88.81	39.69	64.80	80.06	15.34	50.37	87.11	35.40	62.12
Haryana	79.19	36.43	58.90	81.53	15.70	50.94	79.64	32.56	57.39
Punjab	86.11	46.59	67.21	82.00	19.40	53.42	85.02	39.84	63.67
Rajasthan	88.83	67.08	78.10	77.54	29.32	54.68	85.98	58.09	72.35
Andhra Pradesh	89.66	67.68	78.52	79.03	26.64	53.02	87.09	58.08	72.45
Karnataka	88.18	57.36	72.91	78.86	29.65	55.19	85.21	48.86	67.37
Kerala	77.09	45.93	60.40	74.52	31.50	51.49	76.61	43.25	58.74
Tamil Nadu	87.92	63.24	75.22	79.73	29.61	54.36	84.98	51.43	67.81
Bihar	87.18	38.31	62.04	76.81	16.82	49.18	85.83	36.00	60.51
Orissa	88.33	42.26	64.90	78.63	16.46	48.94	86.90	38.85	62.67
West Bengal	86.26	29.90	58.46	76.23	17.47	49.71	83.45	26.83	56.14
North Eastern States	81.93	24.46	54.84	72.74	18.25	48.86	80.60	23.66	54.01
Gujarat	87.82	61.51	74.70	76.74	19.86	50.47	83.47	46.61	65.60
Maharashtra	87.98	70.61	79.11	78.06	22.76	51.97	84.27	54.45	69.45
Smaller States	87.06	55.36	71.09	80.17	17.14	51.66	83.66	38.46	61.98
All India	**87.33**	**50.83**	**69.07**	**78.35**	**22.47**	**51.90**	**85.00**	**44.05**	**64.79**

Source: Author's own calculation.

Table 4.1.b: WPR by Gender and Place of Residence (15 years and above): 1987-88

States	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Madhya Pradesh	89.80	64.70	77.51	75.34	22.13	49.97	86.77	56.13	71.85
Uttar Pradesh	87.04	34.58	61.52	78.69	15.17	49.39	85.43	31.13	59.27
Haryana	79.64	46.71	63.90	82.93	17.91	53.16	80.43	40.19	61.39
Punjab	84.62	45.94	66.07	80.46	18.69	51.81	83.44	38.54	62.10
Rajasthan	86.09	68.68	77.41	76.25	28.90	53.42	83.92	60.33	72.25
Andhra Pradesh	88.96	66.63	77.72	77.88	31.24	54.27	86.48	58.64	72.45
Karnataka	87.34	55.82	71.85	76.02	28.72	52.70	83.95	47.67	66.10
Kerala	76.35	40.40	57.13	73.76	26.68	49.43	75.88	38.05	55.77
Tamil Nadu	87.17	63.79	75.14	79.76	30.87	55.57	84.40	52.08	68.00
Bihar	86.33	31.17	58.63	73.45	13.33	46.17	84.54	29.08	57.03
Orissa	86.58	40.11	63.06	77.83	18.82	50.42	85.51	37.86	61.62
West Bengal	87.29	28.12	58.03	75.43	16.96	48.59	83.85	25.20	55.42
North Eastern States	81.72	28.79	56.83	73.32	18.49	47.87	80.72	27.59	55.78
Gujarat	86.21	56.04	71.22	78.28	16.45	48.39	83.93	45.09	64.78
Maharashtra	85.54	67.77	76.61	73.31	23.78	50.00	81.15	53.25	67.44
Smaller States	84.49	56.69	70.56	77.07	16.41	49.31	81.09	39.97	61.27
All India	**86.29**	**48.44**	**67.48**	**76.73**	**22.40**	**50.86**	**83.95**	**42.45**	**63.53**

Source: Author's own calculation.

Table 4.1.c: WPR by Gender and Place of Residence (15 years and above): 1993-94

States	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Madhya Pradesh	89.17	63.06	76.52	74.66	21.87	49.84	85.63	53.44	70.15
Uttar Pradesh	88.07	35.67	62.54	76.81	18.01	49.17	85.77	32.25	59.87
Haryana	78.75	44.18	62.18	80.88	23.34	54.57	79.35	38.70	60.11
Punjab	84.49	31.00	59.13	82.00	13.61	49.78	83.78	26.09	56.48
Rajasthan	87.71	66.45	77.36	77.28	23.64	51.85	85.16	56.39	71.24
Andhra Pradesh	89.06	73.64	81.43	71.19	35.30	53.89	83.17	61.44	72.51
Karnataka	87.42	58.90	73.05	80.09	22.27	52.58	84.91	47.27	66.29
Kerala	78.20	34.88	54.52	75.91	26.75	50.32	77.65	33.08	53.55
Tamil Nadu	85.60	63.54	74.35	79.29	33.35	56.20	83.28	52.62	67.73
Bihar	85.11	25.92	56.56	62.89	8.42	38.44	81.63	23.47	53.86
Orissa	84.88	45.59	65.13	72.41	21.48	48.76	83.16	42.69	63.02
West Bengal	88.06	28.54	58.87	76.38	18.58	49.70	84.90	26.06	56.48
North Eastern States	80.92	30.43	56.84	71.94	16.39	45.34	79.79	28.65	55.39
Gujarat	84.97	54.87	69.91	78.45	20.59	50.90	82.89	44.62	64.03
Maharashtra	85.62	70.58	77.94	75.58	24.16	50.50	81.63	53.15	67.33
Smaller States	86.45	61.82	74.07	79.12	21.25	47.70	82.04	35.86	57.67
All India	**86.27**	**48.55**	**67.61**	**75.89**	**23.47**	**50.62**	**83.42**	**41.92**	**63.03**

Source: Author's own calculation.

Table 4.1.d: WPR by Gender and Place of Residence (15 years and above): 1999-2000

States	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Madhya Pradesh	86.08	60.56	73.80	74.81	19.89	48.41	83.41	50.91	67.77
Uttar Pradesh	83.49	33.53	58.79	76.55	14.73	47.83	81.92	29.67	56.43
Haryana	77.13	31.04	55.14	74.59	16.06	47.57	76.38	26.79	52.94
Punjab	80.69	41.36	61.45	79.04	16.34	49.87	80.12	33.28	57.59
Rajasthan	84.52	59.09	71.91	73.88	19.87	48.59	81.84	49.99	66.25
Andhra Pradesh	87.10	66.33	76.67	74.65	24.62	49.87	83.37	54.09	68.73
Karnataka	87.63	55.47	71.69	76.91	24.26	50.84	84.49	46.35	65.59
Kerala	76.35	31.53	52.34	74.77	26.92	49.45	75.93	30.31	51.57
Tamil Nadu	83.42	55.84	69.36	77.13	28.69	53.25	81.11	46.31	63.58
Bihar	85.39	28.47	57.32	69.78	12.07	42.70	83.16	26.32	55.31
Orissa	83.39	42.87	62.76	70.58	21.27	46.79	81.11	39.34	60.03
West Bengal	83.68	21.83	53.40	74.17	14.73	46.12	81.26	20.12	51.59
North Eastern States	80.65	28.07	55.68	70.74	18.92	46.23	79.20	26.74	54.31
Gujarat	86.79	58.97	72.85	78.14	17.60	48.53	83.85	45.36	64.72
Maharashtra	*81.85*	*62.58*	72.21	74.96	19.33	48.82	78.98	45.85	62.82
Smaller States	81.14	44.91	63.53	73.84	14.23	45.97	77.64	30.77	55.27
All India	**83.90**	**44.93**	**64.57**	**75.16**	**19.66**	**48.57**	**81.48**	**38.26**	**60.24**

Source: Author's own calculation.

Table 4.1.e: WPR by Gender and Place of Residence (15 years and above): 2004-05

States	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Madhya Pradesh	86.98	61.20	74.50	77.27	22.78	51.07	84.77	52.54	69.19
Uttar Pradesh	84.63	40.28	62.50	77.36	17.06	49.20	82.96	35.46	59.59
Haryana	77.88	47.93	63.73	74.90	18.13	48.21	77.04	39.59	59.37
Punjab	81.79	45.22	63.76	77.92	18.10	49.60	80.47	36.42	59.04
Rajasthan	83.76	62.58	73.15	75.31	27.46	52.30	81.59	54.10	67.96
Andhra Pradesh	85.81	65.30	75.35	76.86	29.76	53.11	83.41	55.94	69.44
Karnataka	87.07	61.55	74.26	78.60	24.63	52.58	84.32	50.21	67.41
Kerala	76.82	33.38	53.45	74.25	25.70	48.95	76.19	31.59	52.37
Tamil Nadu	84.28	62.34	72.94	78.81	31.31	55.04	82.05	50.20	65.80
Bihar	86.28	29.36	58.04	68.28	13.74	42.96	83.92	27.53	56.17
Orissa	85.52	45.14	64.84	71.06	20.35	46.63	83.38	41.83	62.28
West Bengal	84.79	25.87	55.87	74.82	19.19	48.54	81.92	24.04	53.81
North Eastern States	83.86	35.29	60.65	72.99	21.62	47.77	82.47	33.46	58.97
Gujarat	88.72	61.97	75.61	80.45	20.32	51.87	85.78	47.73	67.32
Maharashtra	82.25	65.50	73.91	76.29	25.90	52.43	79.71	49.54	65.00
Smaller States	79.84	50.66	65.46	72.90	14.04	46.08	75.89	31.18	54.77
All India	**84.59**	**48.48**	**66.59**	**76.25**	**22.73**	**50.60**	**82.24**	**41.63**	**62.21**

Source: Author's own calculation.

Table: 4.2.a: WWPR by Educational Attainment and Place of Residence: 1983

States	Rural							Urban							Total						
	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
AP	42 37	14 25	13 34	6 97	3 37	5 28	34 31	24 85	8 97	6 28	3 98	4 46	7 09	13 22	39 90	12 82	10 80	5 54	4 02	6 55	29 30
BIH	25 19	5 59	3 79	2 55	1 70	2 64	19 71	14 61	5 51	2 40	1 56	1 54	3 59	7 74	24 43	5 58	3 53	2 33	1 65	3 13	18 29
GUJ	40 15	24 00	15 81	11 30	7 83	6 89	30 68	18 67	7 47	4 86	5 40	3 35	7 99	9 17	35 39	17 95	10 40	8 34	4 78	7 79	22 60
HAR	23 16	7 79	9 61	3 17	1 75	2 02	17 29	10 86	3 89	4 45	3 03	7 85	4 67	7 29	21 75	6 63	8 35	3 13	4 21	3 77	15 39
KAR	36 27	17 16	17 21	10 89	4 72	2 50	28 41	25 40	16 07	12 13	6 13	6 97	9 63	14 26	34 32	16 84	15 34	8 49	6 20	7 89	23 98
KER	34 08	27 12	25 97	17 69	15 02	23 24	24 60	28 28	17 72	16 86	11 72	14 15	21 49	16 86	33 34	25 57	24 48	16 43	14 80	22 49	23 16
MP	42 45	11 76	8 57	4 86	3 00	4 27	33 38	21 82	5 93	3 88	3 33	3 42	5 89	10 41	39 81	10 28	6 97	4 10	3 29	5 56	28 01
MAH	49 12	22 46	20 94	11 26	5 22	5 81	36 07	23 66	10 06	7 81	3 23	5 76	10 61	10 74	44 40	18 52	15 94	7 03	5 61	10 02	27 06
ORI	30 75	6 21	5 56	2 54	3 13	4 98	21 49	18 26	2 86	2 50	0 98	1 64	6 96	7 86	29 73	5 80	4 93	2 10	2 47	6 07	19 59
PUN	28 27	12 55	16 77	10 30	10 21	10 21	22 28	12 11	4 94	5 44	7 00	5 55	17 03	8 86	25 58	10 44	13 76	9 13	8 00	14 75	18 83
RAJ	40 43	11 02	6 28	3 59	1 76	6 61	33 09	24 79	6 89	5 06	2 04	2 39	5 39	13 91	37 85	9 63	5 86	2 86	2 15	5 82	28 39
TN	44 62	19 04	20 55	9 55	10 31	7 85	32 55	28 23	12 80	11 33	5 91	8 66	8 77	14 99	41 01	16 76	16 82	7 73	9 21	8 56	26 31
UP	24 94	7 14	7 34	3 38	3 05	1 73	19 40	11 87	5 76	2 20	1 60	2 80	6 05	7 03	23 39	6 79	6 28	2 87	2 94	4 52	17 11
WB	21 98	8 07	6 41	4 05	2 59	4 58	14 75	14 73	8 53	5 69	4 10	4 46	9 81	7 88	21 09	8 20	6 19	4 07	3 57	8 28	12 94
NES	16 72	11 09	6 66	3 92	4 29	6 11	11 53	16 54	9 95	5 29	3 92	5 46	11 46	8 00	16 71	10 98	6 46	3 92	4 69	8 56	11 05
SS	34 01	18 65	23 81	14 08	13 03	5 37	27 90	11 44	5 92	5 43	2 78	6 38	11 21	7 75	27 63	12 43	15 37	7 50	8 07	10 67	18 45
India	**33.40**	**13.56**	**13.52**	**7.39**	**5.58**	**5.73**	**25.43**	**19.75**	**8.78**	**7.10**	**4.16**	**5.29**	**8.79**	**10.63**	**31.47**	**12.30**	**11.50**	**6.12**	**5.42**	**7.93**	**21.74**

Note: Education Code: 1=Illiterates, 2= Literate below Primary, 3=Literate up to Primary, 4=Middle, 5=Secondary, 6= Graduates and above.
Source: Author's own calculation.

Table: 4.2.b: WWPR by Educational Attainment and Place of Residence: 1987-88

States	Rural							Urban							Total						
	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
AP	42 02	16 91	15 77	8 64	4 75	6 39	33 55	30 14	11 48	9 10	4 80	5 03	8 70	15 82	40 47	15 40	13 67	7 09	4 90	8 00	29 56
BIH	20 81	3 79	3 98	1 96	1 52	2 25	15 66	12 21	3 00	2 29	0 93	1 20	4 52	6 06	20 17	3 65	3 65	1 73	1 42	3 35	14 43
GUJ	38 99	18 68	14 86	9 54	8 83	6 36	27 83	14 63	6 35	6 40	3 40	4 19	9 48	7 96	35 26	15 18	11 60	7 30	6 56	8 56	22 24
HAR	31 97	10 33	9 90	3 25	6 81	0 67	22 32	15 15	3 66	1 63	3 51	7 86	10 09	8 15	29 91	8 35	7 89	3 33	7 29	7 35	19 01
KAR	36 68	15 77	16 43	11 13	6 84	3 98	27 45	25 98	12 30	12 69	6 75	6 50	9 20	14 16	34 77	14 80	15 11	9 16	6 65	7 89	23 46
KER	32 69	26 67	20 72	16 00	14 02	19 89	21 60	23 05	13 13	11 92	10 50	12 86	22 46	13 79	31 63	25 09	19 34	14 94	13 72	20 95	20 22
MP	40 99	13 00	8 67	4 41	5 04	1 51	31 68	21 51	7 40	5 63	1 97	5 67	9 36	10 55	39 02	11 83	7 84	3 35	5 43	7 74	27 34
MAH	47 89	25 17	20 73	14 14	6 80	4 56	34 03	22 58	10 28	7 60	6 17	6 46	12 41	11 20	43 27	20 81	15 36	11 09	6 58	10 77	26 16
ORI	30 59	6 08	5 11	3 59	3 69	4 36	20 32	19 71	6 99	3 22	2 10	3 77	7 37	8 76	29 95	6 17	4 77	3 28	3 72	5 81	19 00
PUN	29 33	16 90	18 49	12 32	8 17	5 68	22 06	16 61	5 07	5 59	2 90	6 16	9 33	8 70	27 21	13 43	15 01	8 78	7 29	8 15	18 34
RAJ	42 39	10 09	12 12	4 64	4 57	4 05	34 22	27 10	8 67	6 91	2 66	3 80	7 66	13 97	40 50	9 69	10 48	3 90	4 11	6 75	29 87
TN	45 41	22 62	21 02	13 93	9 76	6 75	32 84	29 76	17 24	11 62	6 94	8 42	10 74	15 36	42 13	20 77	17 08	10 32	8 91	9 82	26 49
UP	22 99	5 99	4 83	2 41	2 56	2 06	16 83	11 87	3 17	2 41	1 56	3 54	8 46	7 01	21 65	5 34	4 30	2 21	2 95	5 81	15 01
WB	20 04	8 46	6 21	5 09	4 13	4 78	13 90	14 90	6 14	4 66	4 52	4 96	10 75	7 87	19 35	7 74	5 76	4 86	4 61	9 29	12 25
NES	19 33	11 39	8 75	7 96	6 66	5 29	13 40	10 78	12 08	7 34	7 26	6 47	12 02	8 60	18 91	11 44	8 58	7 83	6 61	8 18	12 83
SS	37 95	23 36	20 25	9 52	10 64	10 32	28 40	10 86	4 88	3 76	3 18	4 85	14 88	7 52	31 24	15 48	13 18	6 32	6 71	14 38	19 27
India	**32.57**	**13.74**	**12.84**	**7.96**	**6.19**	**5.29**	**24.08**	**19.95**	**8.79**	**7.22**	**4.62**	**5.73**	**10.48**	**10.69**	**30.94**	**12.55**	**11.16**	**6.82**	**5.96**	**8.87**	**20.90**

Note: Education Code: 1=Illiterates, 2= Literate below Primary, 3=Literate up to Primary, 4=Middle, 5=Secondary, 6= Graduates and above.
Source: Author's own calculation.

Table: 4.2.c: WWPR by Educational Attainment and Place of Residence: 1993-94

States	Rural							Urban							Total						
	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
AP	45 73	21 54	19 50	11 61	6 90	4 09	36 45	30 93	18 30	6 41	4 22	3 64	10 71	17 02	42 77	20 03	13 26	8 33	5 08	8 74	30 16
BIH	17 63	4 06	2 94	2 21	1 19	2 03	12 51	6 60	2 54	2 82	1 99	1 36	4 60	3 78	16 68	3 82	2 93	2 17	1 25	3 22	11 21
GUJ	38 75	21 86	15 88	10 81	9 85	1 14	27 45	21 34	7 75	8 33	6 58	5 47	5 75	9 80	36 11	17 34	13 09	9 19	7 57	4 60	22 00
HAR	30 82	12 30	13 15	9 47	6 89	2 19	21 20	19 18	11 04	9 34	5 15	6 10	9 41	10 69	28 93	11 98	12 19	7 91	6 56	7 47	18 34
KAR	38 46	20 86	20 09	15 17	7 77	10 11	29 68	19 62	12 17	7 32	6 27	5 23	6 96	10 60	34 75	19 05	14 64	11 69	6 19	7 56	23 38
KER	22 36	22 80	31 68	11 44	11 61	15 31	19 07	22 09	18 61	14 80	10 75	11 32	17 57	13 92	22 32	21 96	28 40	11 28	11 53	16 35	17 88
MP	41 08	15 18	11 76	6 76	3 23	2 13	30 55	21 33	6 15	6 46	3 50	3 97	11 25	10 29	38 68	13 15	10 16	5 52	3 64	9 59	25 71
MAH	50 90	31 26	27 69	20 52	7 98	6 86	36 05	25 07	10 52	9 07	6 29	5 80	16 72	11 79	45 65	24 73	20 78	13 90	6 64	15 18	26 68
ORI	34 58	9 95	5 91	4 01	2 39	4 76	22 92	23 94	5 64	3 86	2 34	4 14	11 60	9 97	33 91	9 50	5 60	3 67	3 06	8 51	21 25
PUN	19 42	10 46	14 41	9 05	7 67	10 44	14 70	8 48	5 91	5 06	3 61	5 41	10 73	6 42	17 65	9 30	11 93	7 12	6 73	10 65	12 35
RAJ	42 66	11 92	9 43	5 48	2 95	6 13	32 39	20 40	7 83	7 73	3 09	4 39	9 76	11 22	39 54	10 87	8 92	4 55	3 75	8 77	27 31
TN	47 82	23 33	22 94	16 34	11 93	13 01	32 42	28 50	17 12	13 09	7 81	10 46	26 06	16 77	43 50	21 29	19 21	12 49	11 11	22 33	26 70
UP	24 80	7 15	6 54	2 98	2 48	3 03	17 38	13 25	6 50	4 26	2 74	2 99	14 31	8 46	23 43	7 00	6 06	2 93	2 67	10 41	15 60
WB	21 42	10 10	8 25	5 60	4 83	3 30	14 00	17 85	8 18	8 11	4 09	4 40	9 12	8 58	20 97	9 67	8 22	5 09	4 60	7 40	12 59
NES	23 27	11 08	10 33	6 33	5 74	10 11	14 50	11 97	9 78	7 43	5 54	6 43	9 89	7 84	22 66	10 99	10 01	6 19	5 93	10 00	13 66
SS	44 01	29 05	29 95	19 90	14 27	14 41	31 05	11 00	5 69	3 23	2 61	3 09	33 50	11 56	29 69	17 91	17 18	10 31	5 77	32 27	18.93
India	**33.60**	**15.34**	**15.47**	**9.32**	**6.33**	**5.95**	**24.02**	**20.45**	**11.13**	**8.06**	**5.26**	**5.21**	**15.18**	**11.32**	**31.67**	**14.26**	**13.26**	**7.94**	**5.77**	**12.61**	**20.60**

Note: Education Code: 1=Illiterates, 2= Literate below Primary, 3=Literate up to Primary, 4=Middle, 5=Secondary, 6= Graduates and above.
Source: Author's own calculation.

Table: 4.2.d: WWPR by Educational Attainment and Place of Residence: 1999-00

States	Rural							Urban							Total						
	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
AP	42 95	24 02	21 19	13 90	8 93	13 93	33 29	25 16	11 34	6 17	6 07	4 12	9 23	12 19	39 97	20 58	16 39	10 64	6 33	10 35	27 04
BIH	19 75	6 59	5 12	3 17	2 06	0 92	14 04	12 78	2 87	1 26	2 31	1 60	3 69	5 66	19 23	6 12	4 53	3 01	1 92	2 37	12 89
GUJ	43 31	25 32	24 79	14 74	12 92	8 84	29 56	18 39	7 68	8 74	5 25	4 50	9 32	8 61	38 95	20 47	19 43	11 06	8 52	9 20	22 55
HAR	23 16	7 67	12 86	6 83	5 77	2 99	14 82	13 06	10 00	5 20	2 74	4 69	9 35	7 43	21 21	8 23	10 90	5 47	5 35	7 47	12 67
KAR	39 06	19 97	17 91	12 95	8 34	7 25	27 54	23 96	13 54	9 53	7 10	7 35	12 40	12 04	36 98	18 50	15 56	10 85	7 82	11 15	23 01
KER	25 76	20 28	20 26	14 22	11 33	16 91	16 89	15 74	18 12	16 96	11 31	13 12	18 25	14 24	23 93	19 83	19 44	13 44	11 89	17 45	16 18
MP	40 90	20 35	15 04	8 16	5 00	3 16	29 13	21 92	8 92	4 82	3 17	3 48	7 17	9 57	38 51	18 01	12 67	6 53	4 23	6 23	24 49
MAH	47 34	30 32	28 53	19 35	8 83	7 60	31 28	18 22	8 16	8 75	5 79	5 38	12 91	9 08	41 21	22 97	20 95	13 39	6 83	11 67	22 36
ORI	34 63	10 48	9 60	6 09	2 99	3 63	21 83	23 54	8 11	9 84	3 63	3 19	5 57	10 26	33 55	10 14	9 64	5 55	3 06	4 71	19 86
PUN	25 36	21 65	21 04	10 20	13 79	11 87	20 23	11 53	3 86	6 24	5 54	5 60	11 58	7 61	22 56	15 91	16 61	8 51	10 05	11 64	16 01
RAJ	41 46	15 53	10 92	5 62	3 78	4 82	29 31	19 30	5 69	5 72	3 77	3 42	9 22	9 31	38 57	13 45	9 52	5 01	3 60	8 07	24 46
TN	43 53	25 36	21 09	15 27	10 88	10 52	28 48	27 69	17 39	13 08	9 08	7 77	14 93	14 14	40 46	22 78	18 26	12 84	9 23	13 87	23 34
UP	24 37	8 41	9 53	4 69	4 07	3 59	16 58	12 43	6 29	3 11	2 73	2 00	8 46	6 85	22 73	7 92	8 07	4 24	3 32	6 39	14 47
WB	17 39	7 39	6 42	4 53	2 97	4 72	10 69	15 27	6 99	5 43	3 76	3 47	6 90	6 96	17 12	7 32	6 20	4 31	3 21	6 24	9 76
NES	18 51	15 43	11 06	8 44	7 95	8 68	13 34	14 21	9 78	6 43	5 55	6 80	16 37	8 95	18 26	15 00	10 60	7 95	7 60	12 96	12 70
SS	33 56	17 93	23 73	13 19	12 40	6 43	21 85	9 28	5 87	4 58	4 95	3 29	11 51	6 67	26 21	13 43	16 94	9 74	7 14	10 72	14 71
India	**32.32**	**16.40**	**15.77**	**10.02**	**7.30**	**6.54**	**22.28**	**18.23**	**9.31**	**7.64**	**5.50**	**4.89**	**10.20**	**9.42**	**30.30**	**14.79**	**13.56**	**8.58**	**6.18**	**9.08**	**18.80**

Note: Education Code: 1=Illiterates, 2= Literate below Primary, 3=Literate up to Primary, 4=Middle, 5=Secondary, 6= Graduates and above.
Source: Author's own calculation.

Table: 4.2.e: WWPR by Educational Attainment and Place of Residence: 2004-05

States	Rural							Urban							Total						
	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
AP	44 21	28 93	22 93	17 21	12 00	7 63	33 29	28 64	15 16	13 62	7 99	5 60	10 96	15 01	41 81	25 64	20 18	14 22	9 31	9 88	28 43
BIH	22 01	8 71	5 48	4 96	3 39	2 64	14 58	14 53	6 77	5 61	4 09	2 23	4 37	6 38	21 59	8 54	5 49	4 81	3 08	3 52	13 56
GUJ	46 46	24 21	23 58	17 50	15 20	9 84	30 38	21 23	8 49	10 65	7 77	5 14	9 65	9 66	42 43	19 75	19 54	13 64	9 76	9 71	23 15
HAR	34 78	20 72	17 48	14 24	11 79	6 59	22 64	14 57	2 96	8 38	5 10	4 70	12 56	8 52	31 36	16 74	15 52	11 37	8 97	9 83	18 68
KAR	42 57	27 24	26 07	20 45	11 42	12 51	30 91	23 63	11 77	11 52	10 73	5 60	11 87	11 88	39 70	23 67	21 57	17 09	8 37	12 03	24 90
KER	22 94	20 61	20 27	16 17	12 38	23 78	17 96	21 83	17 57	13 53	9 89	8 52	19 74	13 39	22 76	20 04	18 77	14 78	11 40	22 24	16 87
MP	44 17	21 37	16 83	10 10	6 42	5 47	29 63	23 25	10 16	9 96	6 90	3 89	10 09	10 96	24 54	12 34	11 04	5 79	3 23	3 72	15 92
MAH	48 67	32 18	33 04	24 15	14 04	12 66	32 60	22 00	13 63	14 17	7 77	6 75	16 67	12 26	42 68	26 11	25 49	16 98	10 12	15 52	24 16
ORI	37 19	15 00	13 26	12 13	6 17	5 16	23 13	23 59	6 79	6 13	4 02	4 82	10 17	9 79	36 21	14 04	12 48	10 90	5 75	7 38	21 25
PUN	28 00	20 67	25 59	16 86	14 69	18 68	22 30	10 74	6 42	7 27	2 83	4 74	18 87	8 57	24 56	16 72	20 31	12 54	10 43	18 81	17 72
RAJ	44 57	15 49	16 87	10 69	6 67	5 32	31 35	25 47	11 06	7 81	6 84	4 30	10 10	13 20	41 65	14 37	14 72	9 40	5 64	8 49	26 83
TN	45 86	33 27	27 54	20 70	15 56	16 07	32 22	29 38	21 69	18 17	11 86	8 02	13 20	15 66	42 35	29 71	23 86	16 87	11 27	13 96	25 61
UP	30 32	11 70	12 28	8 14	6 17	5 63	20 10	15 16	8 56	5 36	3 74	3 31	6 94	7 97	28 30	10 93	10 72	7 17	5 22	6 39	17 44
WB	19 14	10 62	10 59	6 44	5 13	4 22	12 70	16 06	11 04	8 39	6 22	5 76	10 26	9 07	18 73	10 70	10 08	6 36	5 44	8 59	11 68
NES	20 87	19 54	17 09	14 54	9 22	10 54	16 89	18 03	9 70	11 55	6 74	8 86	14 69	10 62	20 70	18 95	16 67	13 36	9 12	12 77	16 07
SS	32 62	28 99	27 89	16 64	17 32	20 40	24 97	11 96	4 66	4 80	2 96	2 46	11 49	6 40	25 05	16 76	16 94	9 50	7 88	13 04	14 73
India	**35.50**	**19.25**	**18.27**	**13.76**	**9.82**	**10.32**	**24.18**	**20.66**	**11.57**	**10.78**	**7.15**	**5.29**	**11.86**	**10.89**	**33.41**	**17.63**	**16.30**	**11.71**	**7.83**	**11.33**	**20.54**

Note: Education Code: 1=Illiterates, 2= Literate below Primary, 3=Literate up to Primary, 4=Middle, 5=Secondary, 6= Graduates and above.
Source: Author's own calculation.

Table: 4.3.a: WWPR by Age Group and Place of Residence: 1983

States	Rural							Urban							Total						
	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
AP	9 28	11 74	15 75	17 64	17 88	7 95	13 22	33 34	38 27	38 55	38 37	32 63	13 13	34 31	26 65	31 58	33 11	33 89	29 57	12 08	29 30
BIH	13 45	19 44	24 30	24 47	24 01	9 70	19 71	4 32	5 65	10 65	9 80	10 03	6 41	7 74	12 21	17 78	22 54	22 72	22 57	9 41	18 29
GUJ	28 49	35 11	36 70	32 45	26 12	10 86	30 68	7 50	6 73	11 62	12 83	9 55	8 57	9 17	20 47	23 74	27 67	25 00	20 56	10 04	22 60
HAR	13 25	22 06	22 15	21 43	13 78	3 28	17 29	5 36	8 07	7 09	13 36	6 21	2 03	7 29	11 75	19 00	19 36	20 12	12 26	3 09	15 39
KAR	27 19	31 55	34 26	31 45	24 74	11 37	28 41	9 40	15 50	16 62	15 52	17 51	8 67	14 26	21 40	26 16	28 59	26 69	22 77	10 64	23 98
KER	13 20	23 54	33 99	34 64	27 23	16 05	24 60	7 53	15 56	22 48	24 56	20 21	12 69	16 86	12 15	22 00	31 77	32 77	25 97	15 48	23 16
MP	29 56	36 65	38 33	38 21	33 23	14 86	33 38	4 49	8 46	14 04	15 39	13 83	7 67	10 41	22 96	29 48	32 66	33 00	29 26	13 59	28 01
MAH	32 29	40 26	43 99	42 41	31 87	13 76	36 07	6 35	9 21	13 76	15 46	12 32	7 31	10 74	22 82	27 69	33 21	33 36	25 68	11 92	27 06
ORI	21 35	22 31	24 66	24 85	21 18	8 88	21 49	6 33	7 70	10 31	7 55	10 56	2 67	7 86	19 03	20 19	22 62	22 44	19 82	8 21	19 59
PUN	18 44	23 41	27 86	30 22	22 91	8 65	22 28	4 86	9 07	9 14	12 28	12 31	6 07	8 86	15 29	19 30	22 50	25 66	20 50	8 13	18 83
RAJ	31 44	37 56	36 88	37 87	31 42	13 82	33 09	11 11	14 49	18 23	17 03	10 74	7 29	13 91	25 73	31 47	32 38	33 12	26 99	12 49	28 39
TN	33 28	33 10	37 76	38 70	31 04	13 90	32 55	13 19	14 34	18 28	18 50	13 58	9 63	14 99	25 60	26 12	30 85	31 89	25 46	12 46	26 31
UP	11 75	18 14	25 20	26 67	21 33	10 75	19 40	3 93	5 64	7 70	11 26	10 01	5 56	7 03	10 09	15 65	21 82	24 00	19 53	9 95	17 11
WB	11 62	15 37	17 59	16 97	17 61	6 29	14 75	6 33	7 71	9 51	9 12	8 22	5 18	7 88	10 27	13 36	15 38	14 77	15 24	6 00	12 94
NES	8 89	13 18	13 63	13 68	8 99	3 39	11 53	2 90	7 84	9 29	10 68	14 07	3 70	8 00	8 04	12 48	13 01	13 24	9 64	3 43	11 05
SS	23 89	31 42	32 06	31 42	27 99	14 96	27 90	3 71	7 40	11 13	10 18	6 96	5 32	7 75	14 50	19 04	22 03	21 24	18 96	11 68	18 45
India	**21.39**	**26.99**	**30.50**	**30.65**	**25.49**	**11.25**	**25.43**	**7.17**	**9.75**	**13.12**	**14.07**	**12.14**	**7.24**	**10.63**	**17.60**	**22.36**	**26.12**	**26.65**	**22.53**	**10.41**	**21.74**

Note: Age Group Code: 1=15 to 19 years, 2= 20 to 29 years, 3=30 to 39 years, 4=40 to 49 years, 5=50 to 59 years, 6= 60 years and above.
Source: Author's own calculation.

Table: 4.3.b: WWPR by Age Group and Place of Residence: 1987-88

States	Rural							Urban							Total						
	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
AP	31 03	38 04	38 82	38 06	31 01	12 32	33 55	11 09	15 22	17 58	21 77	18 22	10 87	15 81	25 82	32 67	33 84	34 76	28 48	12 04	29 56
BIH	9 88	16 10	18 51	21 26	16 69	7 19	15 65	1 99	5 49	7 81	7 45	9 34	4 44	6 05	8 75	14 75	17 06	19 49	15 85	6 89	14 42
GUJ	26 05	31 06	32 71	30 77	25 15	9 35	27 84	5 30	7 31	10 78	10 64	7 42	3 85	7 95	20 47	23 99	26 28	25 35	20 11	7 97	22 23
HAR	18 66	25 88	29 48	28 15	21 94	6 19	22 32	5 09	6 67	13 72	9 95	6 70	4 88	8 20	15 85	21 13	25 24	23 70	18 64	5 94	19 02
KAR	20 55	32 54	33 75	29 98	23 94	11 25	27 44	12 26	13 34	18 23	15 79	16 34	6 32	14 16	17 90	26 42	29 08	25 98	21 91	9 88	23 46
KER	11 38	18 77	29 87	29 52	27 45	15 26	21 60	5 39	11 98	18 24	21 81	17 97	9 42	13 79	10 39	17 48	27 86	28 22	25 66	14 29	20 22
MP	25 38	35 37	36 93	36 62	30 68	13 49	31 68	5 20	8 57	14 87	14 52	12 92	8 18	10 55	20 69	29 57	32 56	31 96	27 57	12 57	27 34
MAH	25 25	37 88	40 47	41 07	33 59	15 75	34 06	6 06	10 21	14 42	16 12	12 83	5 80	11 19	18 36	27 49	31 26	32 83	27 27	12 87	26 17
ORI	15 44	20 19	26 40	27 24	20 21	6 96	20 31	4 49	8 97	12 81	8 76	10 30	2 64	8 74	14 17	18 93	24 57	25 10	19 21	6 59	18 99
PUN	14 97	20 07	29 70	34 02	25 12	8 60	22 03	3 98	7 76	12 16	12 58	10 39	3 75	8 67	12 20	16 40	24 63	27 57	21 19	7 46	18 32
RAJ	31 36	38 96	39 96	38 01	30 75	14 75	34 22	9 05	11 88	20 07	19 21	14 79	7 40	13 94	26 06	32 61	35 61	34 17	27 92	13 43	29 85
TN	31 12	32 48	38 45	39 84	31 91	15 93	32 83	12 55	14 28	18 82	20 64	15 56	7 51	15 28	23 91	25 32	31 27	33 47	26 61	13 00	26 43
UP	8 68	15 20	23 34	23 75	19 95	8 34	16 82	2 77	5 70	9 35	10 47	10 05	4 36	7 00	7 54	13 26	20 54	21 43	18 36	7 77	15 00
WB	12 22	16 00	15 29	15 18	11 08	7 18	13 90	5 73	7 61	10 08	8 31	8 37	4 84	7 78	10 56	13 90	13 84	13 06	10 28	6 44	12 22
NES	9 80	16 23	16 11	12 99	12 05	5 80	13 53	5 44	9 67	9 53	9 54	8 76	5 46	8 58	10 44	18 28	17 78	16 95	15 62	8 71	15 75
SS	21 66	31 03	36 23	33 44	29 35	12 69	28 40	3 02	8 02	10 65	9 25	7 26	2 70	7 51	13 86	20 38	23 97	22 68	20 37	9 42	19 27
India	**18.56**	**25.60**	**29.19**	**29.58**	**24.18**	**10.70**	**24.08**	**6.76**	**9.83**	**13.72**	**14.07**	**12.18**	**6.07**	**10.67**	**15.64**	**21.66**	**25.40**	**25.98**	**21.58**	**9.75**	**20.89**

Note Age Group Code: 1=15 to 19 years, 2= 20 to 29 years, 3=30 to 39 years, 4=40 to 49 years, 5=50 to 59 years, 6= 60 years and above.

. Source: Author's own calculation.

Table: 4.3.c: WWPR by Age Group and Place of Residence: 1993-94

States	Rural							Urban							Total						
	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
AP	33 20	41 63	39 15	43 71	32 80	16 07	36 45	4 34	11 77	22 47	23 40	25 70	22 68	17 01	21 37	32 77	33 81	37 90	30 88	18 54	30 16
BIH	5 39	12 61	15 96	16 65	14 41	6 41	12 50	2 04	2 84	5 05	5 66	6 52	1 77	3 78	5 40	11 31	14 91	16 59	14 75	5 16	11 85
GUJ	20 13	28 00	40 61	27 47	22 15	11 85	27 45	4 47	8 12	14 03	12 87	13 57	5 11	9 81	15 17	21 66	32 09	23 02	20 04	9 68	21 99
HAR	14 51	24 30	29 28	27 72	18 18	6 82	21 18	3 21	8 72	15 25	16 39	12 77	5 62	10 67	11 74	19 85	24 95	24 28	16 73	6 60	18 32
KAR	23 34	34 78	36 18	32 58	31 96	9 33	29 68	4 55	6 77	10 81	7 17	6 53	2 11	6 85	15 40	22 29	25 43	21 26	21 28	6 27	19 81
KER	2 89	14 91	31 95	30 26	17 12	10 52	19 07	5 46	11 64	17 02	21 10	20 15	8 79	13 92	3 44	14 03	28 48	28 41	17 83	10 15	17 88
MP	21 73	34 15	35 87	36 20	29 61	14 32	30 54	3 31	8 93	14 33	16 02	11 17	5 39	10 28	16 85	28 17	30 42	31 24	25 86	12 55	25 70
MAH	21 83	41 30	42 90	42 08	35 91	22 48	36 05	5 05	11 43	15 57	18 44	10 28	5 92	23 02	14 86	28 70	32 06	33 35	26 96	17 37	32 87
ORI	17 97	25 46	26 82	28 86	22 71	7 35	22 91	4 83	9 70	12 20	14 18	14 72	2 19	9 97	16 01	23 52	24 72	26 95	21 80	6 82	21 24
PUN	9 15	13 10	19 35	23 62	14 78	7 35	14 69	2 37	4 73	8 60	10 98	9 00	2 63	6 41	7 37	10 52	15 97	19 91	13 40	6 27	12 35
RAJ	27 01	35 07	38 54	38 26	31 08	14 58	32 37	4 75	12 12	13 96	15 45	11 88	5 97	11 21	21 40	29 50	32 48	32 53	27 22	12 64	27 29
TN	28 50	32 98	34 91	42 51	32 37	16 83	32 40	12 01	17 71	18 25	19 03	22 92	8 25	16 76	22 07	27 06	28 98	34 14	29 16	13 99	26 69
UP	9 10	15 15	22 65	24 54	22 22	10 82	17 38	4 31	8 37	11 64	10 75	10 14	4 02	8 46	8 07	13 82	20 16	21 89	20 16	9 65	15 60
WB	9 58	16 33	17 48	15 29	12 57	4 61	14 00	5 03	8 82	11 57	10 37	7 45	3 70	8 58	8 52	14 50	15 97	13 86	11 02	4 37	12 59
NES	9 44	16 20	17 28	18 09	13 30	4 72	14 51	3 91	7 99	11 10	8 53	7 78	3 70	7 85	8 70	15 25	16 44	16 76	12 66	4 61	13 67
SS	22 56	31 04	35 81	40 45	35 06	20 78	31 07	1 77	4 91	10 20	39 81	8 49	1 94	11 54	9 06	14 18	20 25	40 02	20 10	11 77	18 92
India	**16.32**	**25.49**	**29.33**	**29.89**	**24.50**	**11.92**	**24.01**	**5.04**	**10.05**	**14.37**	**16.50**	**13.66**	**7.69**	**11.31**	**13.11**	**21.25**	**25.16**	**26.28**	**21.90**	**10.88**	**20.59**

Note: Age Group Code: 1=15 to 19 years, 2= 20 to 29 years, 3=30 to 39 years, 4=40 to 49 years, 5=50 to 59 years, 6= 60 years and above.
Source: Author's own calculation.

Table: 4.3.d: WWPR by Age Group and Place of Residence: 1999-00

States	Rural							Urban							Total						
	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
AP	25 88	37 40	40 95	37 67	31 83	12 96	33 30	6 88	11 68	15 15	16 01	14 00	6 57	12 19	19 67	29 33	33 18	31 34	27 15	11 43	27 05
BIH	5 44	14 01	19 37	18 13	14 30	6 78	14 04	2 81	3 96	8 51	6 89	6 97	4 63	5 66	5 01	12 72	17 90	16 49	13 38	6 51	12 89
GUJ	21 75	31 86	36 70	35 64	31 26	10 51	29 55	4 38	7 26	12 65	12 29	8 88	2 83	8 61	15 57	23 85	28 61	27 15	24 32	8 22	22 55
HAR	6 67	15 03	22 78	19 65	18 28	4 34	14 81	2 08	8 70	11 57	5 81	9 61	4 85	7 42	5 29	13 03	19 51	15 38	16 08	4 45	12 66
KAR	19 88	28 27	35 81	30 15	28 61	13 05	27 49	7 08	11 33	17 49	14 42	11 52	5 33	12 01	16 23	22 88	30 67	25 49	23 91	10 98	22 97
KER	4 93	13 79	25 57	25 95	20 08	9 35	16 89	4 37	11 50	19 77	23 91	15 82	6 67	14 25	4 79	13 18	23 91	25 41	18 94	8 68	16 19
MP	18 01	30 12	37 60	35 75	30 42	13 97	29 14	3 19	8 42	11 39	14 70	14 68	5 32	9 57	14 39	24 85	31 25	30 76	26 79	12 16	24 49
MAH	17 87	32 53	40 07	39 07	35 07	17 21	31 29	3 68	8 09	12 63	11 61	10 56	6 07	9 08	12 04	21 83	28 92	27 55	26 03	13 79	22 37
ORI	14 56	24 66	27 56	26 77	21 19	8 25	21 82	6 74	9 90	14 63	12 00	6 75	6 06	10 26	13 06	22 09	25 27	23 96	19 04	7 99	19 85
PUN	10 87	20 64	26 19	28 63	23 22	10 10	20 23	5 60	5 37	10 26	11 24	10 72	2 93	7 60	9 17	14 97	20 84	22 46	19 38	8 24	16 01
RAJ	20 26	32 90	36 64	36 44	28 59	10 94	29 31	3 66	8 95	13 64	11 96	12 20	3 24	9 30	15 86	27 02	30 89	30 19	25 32	9 34	24 46
TN	19 40	28 63	34 98	36 03	30 63	13 99	28 48	9 64	13 18	18 39	16 43	17 81	6 41	14 14	16 08	22 90	28 56	29 48	26 35	11 24	23 34
UP	7 90	14 49	22 40	23 93	21 88	9 73	16 58	3 70	4 35	9 68	10 86	8 11	5 37	6 84	6 90	12 20	19 57	20 83	19 29	9 09	14 48
WB	10 49	12 89	13 69	9 36	7 19	2 38	10 69	4 44	6 93	9 61	9 05	7 12	1 09	6 95	9 21	11 56	12 67	9 27	7 17	1 99	9 76
NES	8 02	14 09	17 02	16 63	12 27	4 70	13 33	5 24	7 47	12 98	10 54	10 26	3 27	8 95	7 65	13 13	16 42	15 72	11 96	4 50	12 69
SS	9 16	23 83	25 26	24 21	29 52	19 23	21 83	3 48	6 81	9 58	7 89	5 81	2 73	6 65	6 55	15 74	17 63	16 38	19 06	11 80	14 69
India	**13.66**	**22.95**	**28.73**	**27.66**	**24.08**	**10.71**	**22.28**	**4.78**	**8.38**	**12.90**	**12.43**	**11.05**	**4.84**	**9.42**	**11.20**	**18.89**	**24.36**	**23.39**	**20.81**	**9.33**	**18.80**

Note: Age Group Code: 1=15 to 19 years, 2= 20 to 29 years, 3=30 to 39 years, 4=40 to 49 years, 5=50 to 59 years, 6= 60 years and above.
Source: Author's own calculation.

Table: 4.3.e: WWPR by Age Group and Place of Residence: 2004-05

States	Rural							Urban							Total						
	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
AP	25 11	35 05	44 54	37 14	32 91	12 86	33 30	8 52	13 90	23 11	16 63	14 24	7 57	15 01	20 72	28 92	38 86	31 84	28 11	11 63	28 44
BIH	5 10	13 59	20 36	18 56	15 86	6 88	14 57	1 48	4 64	8 07	8 70	11 99	5 12	6 38	4 53	12 48	18 93	17 34	15 41	6 70	13 55
GUJ	19 98	30 56	37 35	39 14	32 47	10 34	30 38	6 48	8 61	14 72	11 63	8 53	2 62	9 66	15 29	22 50	29 29	29 39	25 58	7 72	23 15
HAR	12 98	23 46	30 23	32 14	21 50	9 33	22 64	5 39	6 17	13 21	13 31	8 47	1 42	8 52	10 96	18 45	25 41	26 34	17 86	7 42	18 68
KAR	19 68	29 72	41 26	40 80	29 42	14 57	30 91	6 44	11 93	16 33	14 44	12 93	3 81	11 88	15 80	23 43	33 23	32 77	24 88	11 34	24 90
KER	3 89	13 30	26 86	26 59	22 09	10 75	17 96	1 75	10 37	16 33	20 46	19 06	9 31	13 39	3 41	12 60	24 31	25 15	21 31	10 42	16 87
MP	19 41	29 40	38 38	34 99	31 89	14 69	29 63	6 19	9 40	14 64	14 43	11 38	7 09	10 95	16 28	24 82	33 04	30 24	27 03	13 25	25 40
MAH	16 37	33 51	43 49	39 53	38 47	19 87	32 60	5 63	11 02	18 48	16 16	11 36	5 47	12 26	12 03	23 27	32 94	29 46	27 36	15 23	24 16
ORI	19 65	22 86	28 38	28 56	22 72	10 11	23 11	3 37	9 38	12 21	13 71	10 89	6 36	9 81	17 25	20 98	25 98	26 33	21 16	9 68	21 24
PUN	10 78	21 29	30 86	28 39	27 61	12 37	22 30	2 75	8 18	12 06	11 86	11 23	3 11	8 57	8 20	16 68	24 95	22 42	21 83	9 65	17 72
RAJ	23 43	33 80	40 67	36 41	31 46	13 28	31 35	7 84	12 41	20 36	14 97	14 17	5 74	13 20	19 38	28 26	35 54	31 38	27 15	11 59	26 83
TN	20 77	30 56	41 11	38 97	35 69	17 50	32 22	8 76	15 36	21 89	18 07	14 60	7 28	15 66	16 01	24 09	33 21	30 53	27 98	13 88	25 61
UP	11 82	16 45	26 47	27 04	26 32	14 26	20 10	6 00	5 84	9 28	10 95	10 26	6 96	7 97	10 50	10 04	22 59	23 40	22 81	13 04	17 44
WB	8 36	13 41	18 84	13 68	9 67	4 05	12 70	7 21	11 15	11 71	9 74	8 23	1 75	9 06	8 09	12 79	16 91	12 52	9 23	3 28	11 68
NES	8 79	17 50	22 38	18 85	15 91	7 71	16 86	4 21	10 82	14 17	12 98	10 31	4 42	10 62	8 22	16 63	21 28	18 07	15 24	7 23	16 05
SS	13 21	28 77	28 58	29 66	29 08	16 07	25 14	1 63	6 76	8 04	11 40	4 96	1 75	6 40	7 01	16 06	17 22	19 29	16 21	9 16	14 77
India	**14.79**	**23.58**	**31.76**	**29.77**	**26.30**	**12.76**	**24.18**	**5.79**	**10.09**	**15.21**	**13.83**	**11.45**	**5.19**	**10.89**	**12.36**	**19.70**	**27.23**	**25.32**	**22.34**	**10.89**	**20.54**

Note: Age Group Code: 1=15 to 19 years, 2= 20 to 29 years, 3=30 to 39 years, 4=40 to 49 years, 5=50 to 59 years, 6= 60 years and above.
Source: Author's own calculation.

Table 4.4.a: WWPR by Marital Status and Place of Residence: 1983

	Rural				Urban				Total			
States	**1**	**2**	**3**	**Total**	**1**	**2**	**3**	**Total**	**1**	**2**	**3**	**Total**
AP	11.10	36.63	43.31	34.33	6.32	13.07	28.65	13.23	9.34	31.55	40.18	29.31
BIH	7.91	20.53	25.53	19.71	3.33	7.99	17.56	7.75	6.94	19.17	24.82	18.29
GUJ	19.93	33.77	28.05	30.72	5.63	9.42	19.14	9.17	13.52	24.97	25.21	22.62
HAR	6.92	20.23	11.95	17.26	4.96	7.60	13.05	7.29	6.44	17.95	12.11	15.37
KAR	16.28	30.42	39.01	28.40	7.72	15.77	24.87	14.27	12.98	26.13	35.16	23.98
KER	14.05	26.75	41.85	24.61	10.88	17.80	33.27	16.86	13.38	25.18	40.42	23.17
MP	15.01	35.85	31.82	33.38	3.52	11.08	23.57	10.42	10.25	30.67	30.20	28.01
MAH	15.48	39.83	40.44	36.08	5.40	11.02	25.41	10.73	10.55	30.41	35.99	27.06
ORI	14.80	22.38	27.77	21.49	5.10	7.93	16.26	7.86	13.02	20.49	26.49	19.59
PUN	15.35	25.85	17.80	22.27	6.38	8.81	19.55	8.87	13.19	21.31	18.20	18.83
RAJ	12.45	36.54	29.66	33.11	2.55	16.31	18.56	13.92	9.08	31.83	27.35	28.41
TN	22.31	33.85	42.98	32.55	10.56	14.86	27.11	14.97	17.38	27.43	37.91	26.31
UP	7.04	21.39	19.82	19.41	3.24	7.16	17.09	7.04	5.90	19.00	19.41	17.11
WB	6.94	15.05	29.27	14.76	7.24	5.97	23.38	7.87	7.03	12.79	28.00	12.94
NES	7.48	12.14	21.44	11.54	4.52	8.70	20.65	8.01	7.00	11.70	21.35	11.05
SS	17.22	31.10	29.91	27.90	6.23	7.42	17.19	7.75	11.31	20.37	25.00	18.46
India	**12.55**	**27.58**	**31.08**	**25.43**	**6.19**	**10.78**	**23.06**	**10.63**	**10.38**	**23.72**	**29.39**	**21.74**

Note: Marital Status Code: 1= Never married, 2=Currently married, 3=Widowed, Divorced and Separated
Source: Author's own calculation.

Table 4.4.b: WWPR by Marital Status and Place of Residence: 1987-88

	Rural				Urban				Total			
States	**1**	**2**	**3**	**Total**	**1**	**2**	**3**	**Total**	**1**	**2**	**3**	**Total**
AP	11.73	36.50	38.71	33.55	7.39	16.16	31.36	15.81	10.26	32.36	37.17	29.56
BIH	6.46	16.27	23.70	15.65	2.03	6.31	15.71	6.05	5.58	15.10	22.85	14.42
GUJ	20.51	30.22	26.75	27.84	6.03	7.55	17.85	7.95	15.83	24.06	24.49	22.23
HAR	8.37	26.68	12.80	22.32	4.26	9.15	12.42	8.20	7.19	22.80	12.71	19.02
KAR	14.14	30.38	36.72	27.44	9.31	14.31	28.95	14.16	12.37	25.87	34.66	23.46
KER	12.50	22.99	39.44	21.60	8.64	14.91	25.76	13.79	11.73	21.64	37.20	20.22
MP	11.89	34.59	29.66	31.68	5.21	11.24	22.75	10.55	9.39	30.38	28.52	27.34
MAH	12.60	38.35	39.80	34.06	6.54	11.32	26.91	11.19	9.83	29.70	36.22	26.17
ORI	11.01	22.08	27.58	20.31	4.79	8.93	21.08	8.74	10.14	20.63	27.01	18.99
PUN	11.65	26.48	21.87	22.03	4.68	9.45	15.49	8.67	9.86	21.55	20.22	18.32
RAJ	14.52	37.92	27.14	34.22	4.87	15.75	22.41	13.94	11.36	33.48	26.33	29.85
TN	20.75	34.19	46.59	32.83	11.32	15.28	27.82	15.28	16.63	27.60	40.92	26.43
UP	3.61	18.87	19.26	16.82	2.99	7.16	17.57	7.00	3.44	16.87	19.01	15.00
WB	7.27	14.22	25.73	13.90	6.91	6.26	22.72	7.78	7.15	12.15	25.02	12.22
NES	8.47	15.03	20.61	13.53	6.85	7.72	24.99	8.58	8.25	14.23	21.07	12.95
SS	15.62	33.18	28.34	28.40	6.33	7.42	15.00	7.51	11.13	22.10	23.93	19.27
India	**11.16**	**26.42**	**29.83**	**24.08**	**6.64**	**10.72**	**23.58**	**10.67**	**9.72**	**22.97**	**28.57**	**20.89**

Note: Marital Status Code: 1= Never married, 2=Currently married, 3=Widowed, Divorced and Separated
Source: Author's own calculation.

Table 4.4.c: WWPR by Marital Status and Place of Residence: 1993-94

States	Rural				Urban				Total			
	1	2	3	Total	1	2	3	Total	1	2	3	Total
AP	15.24	39.58	41.50	36.45	3.73	18.84	34.01	17.01	9.90	33.64	38.94	30.16
BIH	4.62	17.66	29.63	16.64	1.67	4.68	19.01	4.64	3.97	15.69	28.59	14.73
GUJ	13.28	32.97	21.14	27.45	5.29	10.43	21.38	9.81	10.61	25.98	21.20	21.99
HAR	7.55	24.77	19.35	21.19	2.39	12.13	28.74	10.67	5.92	21.44	21.54	18.32
KAR	17.23	31.68	39.11	29.68	7.37	10.96	16.30	10.60	13.59	24.85	33.13	23.38
KER	7.44	22.33	29.32	19.07	9.51	13.69	30.16	13.92	7.98	20.45	29.50	17.88
MP	9.74	25.69	23.08	23.02	2.69	10.28	20.43	9.06	7.59	22.71	22.62	20.07
MAH	13.37	40.25	45.62	36.05	7.84	11.25	29.09	11.79	10.58	29.92	40.17	26.68
ORI	14.30	24.95	28.68	22.91	5.74	11.06	21.10	9.97	12.78	23.33	27.94	21.24
PUN	7.36	17.80	10.90	14.69	3.53	6.47	17.05	6.41	6.27	14.53	12.34	12.35
RAJ	12.63	36.21	27.90	32.38	3.74	12.53	20.73	11.21	9.66	30.92	26.34	27.30
TN	20.75	34.06	45.89	32.40	14.30	15.85	32.20	16.76	17.91	27.80	41.63	26.69
UP	5.76	19.55	20.09	17.38	6.10	8.31	19.77	8.46	5.86	17.55	20.04	15.60
WB	6.56	14.78	25.63	14.00	6.53	7.53	24.44	8.58	6.55	13.01	25.35	12.59
NES	8.18	16.59	22.55	14.50	6.19	7.67	19.85	7.85	7.89	15.54	22.27	13.66
SS	18.38	34.64	41.31	31.06	3.21	6.97	64.39	11.54	7.90	18.62	56.67	18.92
India	**10.86**	**26.58**	**30.86**	**24.02**	**6.45**	**11.17**	**28.63**	**11.31**	**9.32**	**22.75**	**30.31**	**20.59**

Note: Marital Status Code: 1= Never married, 2=Currently married, 3=Widowed, Divorced and Separated
Source: Author's own calculation.

Table 4.4.d: WWPR by Marital Status and Place of Residence: 1999-2000

States	Rural				Urban				Total			
	1	2	3	Total	1	2	3	Total	1	2	3	Total
AP	15.00	36.69	36.90	33.31	5.77	12.82	25.34	12.19	11.39	30.04	34.01	27.05
BIH	3.64	15.57	21.66	14.05	1.61	5.74	23.07	5.66	3.21	14.38	21.84	12.90
GUJ	17.71	33.01	26.79	29.55	5.47	9.08	16.25	8.61	12.69	25.43	23.79	22.55
HAR	2.87	18.57	11.43	14.81	3.08	8.64	13.93	7.42	2.94	15.80	11.99	12.67
KAR	12.64	30.31	42.81	27.50	8.41	12.15	24.88	12.01	11.18	25.23	38.49	22.97
KER	9.50	17.66	32.31	16.89	10.23	14.37	26.43	14.25	9.71	16.80	30.83	16.19
MP	11.60	33.08	29.23	29.15	2.69	10.60	24.21	9.57	8.74	28.19	28.13	24.50
MAH	11.11	35.81	39.61	31.29	5.56	9.01	24.32	9.08	8.36	25.70	34.41	22.37
ORI	11.58	24.49	27.45	21.83	6.53	10.65	23.59	10.26	10.48	22.31	26.90	19.86
PUN	10.54	24.28	16.90	20.24	5.37	7.31	21.54	7.60	8.78	18.60	18.26	16.02
RAJ	11.33	33.12	25.99	29.31	2.87	10.98	16.28	9.30	8.46	28.13	24.19	24.46
TN	15.60	30.68	44.15	28.48	9.99	14.05	26.71	14.15	13.45	24.82	38.24	23.34
UP	6.01	18.87	19.24	16.58	3.52	7.36	17.65	6.84	5.24	16.63	18.98	14.48
WB	6.23	10.88	21.37	10.69	5.02	6.45	17.43	6.95	5.87	9.86	20.35	9.76
NES	8.87	14.64	22.44	13.33	6.65	8.54	27.38	8.95	8.52	13.78	23.05	12.69
SS	9.73	25.44	35.58	21.81	4.50	6.88	16.16	6.65	7.14	16.82	27.31	14.68
India	**9.84**	**24.95**	**29.14**	**22.29**	**5.46**	**9.71**	**22.22**	**9.42**	**8.36**	**21.10**	**27.49**	**18.80**

Note: Marital Status Code: 1= Never married, 2=Currently married, 3=Widowed, Divorced and Separated
Source: Author's own calculation.

Table 4.4.e: WWPR by Marital Status and Place of Residence: 2004-05

States	Rural				Urban				Total			
	1	2	3	Total	1	2	3	Total	1	2	3	Total
AP	16.24	35.99	42.94	33.30	6.55	15.64	32.07	15.01	13.00	30.89	40.34	28.44
BIH	3.85	16.21	21.84	14.56	2.16	6.43	30.03	6.38	3.49	15.20	22.78	13.55
GUJ	16.46	33.87	32.99	30.38	7.98	9.15	20.82	9.66	12.99	25.61	29.16	23.15
HAR	7.91	27.11	24.32	22.64	4.71	9.45	14.68	8.52	6.89	22.37	21.63	18.68
KAR	14.29	35.06	44.85	30.91	8.13	11.88	25.55	11.88	12.09	27.99	39.54	24.90
KER	8.97	19.28	32.00	17.96	6.94	13.99	26.76	13.39	8.48	18.02	30.79	16.87
MP	11.98	33.77	30.73	29.63	5.73	12.26	19.18	10.95	10.09	29.27	28.52	25.40
MAH	11.42	37.70	41.25	32.60	8.13	12.70	24.27	12.26	9.80	27.84	35.11	24.16
ORI	16.54	24.53	31.29	23.12	5.89	10.03	24.37	9.81	14.79	22.59	30.43	21.25
PUN	10.29	26.97	23.64	22.30	7.00	8.65	14.04	8.57	9.17	20.92	20.40	17.72
RAJ	13.06	35.40	29.23	31.35	5.47	15.34	18.29	13.20	10.58	30.68	27.05	26.83
TN	18.14	34.74	43.45	32.22	9.91	16.00	29.07	15.66	14.46	27.45	38.34	25.61
UP	9.48	22.82	23.20	20.10	5.82	7.88	19.67	7.97	8.41	19.83	22.57	17.45
WB	6.51	13.59	21.32	12.70	10.21	7.49	17.57	9.06	7.80	12.02	20.22	11.68
NES	10.94	18.37	29.04	16.86	9.94	9.50	25.51	10.62	10.80	17.27	28.57	16.05
SS	13.73	29.71	28.41	24.97	3.56	6.35	22.46	6.40	7.96	16.87	25.48	14.73
India	**11.33**	**27.01**	**31.96**	**24.18**	**7.04**	**11.12**	**23.57**	**10.89**	**9.89**	**22.94**	**29.84**	**20.54**

Note: Marital Status Code: 1= Never married, 2=Currently married, 3=Widowed, Divorced and Separated
Source: Author's own calculation.

Table 4.5.a: WWPR by Social Group and Place of Residence: 1983

States	Rural				Urban				Total			
	ST	SC	Others	Total	ST	SC	Others	Total	ST	SC	Others	Total
AP	42.17	39.75	32.31	34.31	24.48	18.90	12.29	13.23	40.22	36.87	26.95	29.30
BIH	38.58	28.95	15.05	19.71	21.27	17.82	5.89	7.74	37.48	28.20	13.80	18.29
GUJ	34.24	31.96	29.45	30.68	15.19	11.32	8.49	9.17	31.44	24.23	20.63	22.60
HAR	24.98	19.75	16.41	17.29	0.00	6.29	7.55	7.29	16.94	17.86	14.59	15.39
KAR	28.01	33.40	27.57	28.41	13.72	16.63	13.97	14.26	26.53	28.91	23.04	23.98
KER	23.71	31.38	23.70	24.60	12.56	25.40	16.19	16.86	23.00	30.62	22.24	23.16
MP	39.32	36.48	28.77	33.38	11.72	17.51	9.00	10.41	37.61	31.92	22.58	28.01
MAH	41.77	38.88	34.72	36.07	19.55	16.98	9.80	10.74	38.73	32.31	25.03	27.06
ORI	33.53	24.70	15.41	21.49	19.77	12.09	5.26	7.86	32.54	23.32	13.65	19.59
PUN	16.85	22.55	22.25	22.28	13.73	11.43	8.14	8.86	16.05	20.30	18.36	18.83
RAJ	43.11	32.78	31.02	33.09	22.94	19.28	12.35	13.91	41.89	29.52	25.85	28.39
TN	39.25	37.21	31.08	32.55	24.13	19.59	14.36	14.99	32.71	33.95	24.53	26.31
UP	16.04	24.48	17.99	19.40	8.47	14.88	5.94	7.03	14.89	23.43	15.51	17.11
WB	30.10	18.00	11.65	14.75	13.01	10.68	7.32	7.88	28.40	16.96	10.27	12.94
NES	18.81	7.96	9.37	11.53	15.37	6.05	7.03	8.00	18.55	7.67	9.01	11.05
SS	35.79	30.29	27.08	27.90	12.09	11.58	6.92	7.75	28.81	21.74	17.47	18.45
India	**35.62**	**28.61**	**23.20**	**25.43**	**16.84**	**15.22**	**9.78**	**10.63**	**33.84**	**26.27**	**19.40**	**21.74**

Source: Author's own calculation.

Table 4.5.b: WWPR by Social Group and Place of Residence: 1987-88

States	Rural				Urban				Total			
	ST	SC	Others	Total	ST	SC	Others	Total	ST	SC	Others	Total
AP	40.66	37.24	32.15	33.54	22.08	23.11	14.79	15.81	39.11	35.04	27.85	29.55
BIH	28.67	23.42	11.79	15.66	17.78	13.62	4.26	6.05	28.04	22.46	10.70	14.42
GUJ	38.12	29.16	24.72	27.84	15.09	11.83	6.86	7.95	35.53	24.58	18.98	22.23
HAR	30.92	24.75	21.37	22.32	0.00	11.35	7.67	8.20	24.27	22.28	17.96	19.02
KAR	30.48	33.98	25.93	27.44	19.36	17.60	13.66	14.16	28.63	30.73	21.95	23.46
KER	27.81	28.99	20.45	21.60	9.15	20.69	13.39	13.79	23.64	28.13	19.14	20.22
MP	38.06	33.53	27.68	31.68	17.57	17.05	9.04	10.55	36.72	31.08	22.50	27.34
MAH	37.54	34.76	33.45	34.06	19.69	16.13	10.30	11.19	34.42	29.44	24.86	26.17
ORI	34.88	23.30	13.99	20.31	15.18	16.37	7.05	8.74	33.66	22.91	12.98	18.99
PUN	15.49	25.21	20.69	22.03	17.91	16.54	6.69	8.67	16.60	23.57	16.35	18.32
RAJ	41.41	33.27	32.70	34.21	20.68	22.80	11.96	13.94	40.39	31.35	27.38	29.84
TN	41.73	37.10	31.35	32.84	14.55	22.74	14.35	15.28	33.93	34.06	24.51	26.43
UP	20.27	22.34	14.97	16.82	6.92	13.04	6.23	7.00	17.42	21.45	13.13	15.00
WB	26.03	15.71	11.55	13.89	12.35	10.17	7.36	7.78	24.92	14.96	10.11	12.20
NES	21.40	10.72	11.01	13.53	19.99	7.75	5.96	8.58	21.28	10.38	10.36	12.95
SS	31.60	30.27	27.85	28.40	6.34	9.45	7.22	7.51	24.57	22.29	18.51	19.27
India	**33.90**	**26.89**	**21.93**	**24.08**	**16.52**	**16.01**	**9.74**	**10.67**	**32.24**	**25.18**	**18.61**	**20.89**

Source: Author's own calculation.

Table 4.5.c: WWPR by Social Group and Place of Residence: 1993-94

States	Rural				Urban				Total			
	ST	SC	Others	Total	ST	SC	Others	Total	ST	SC	Others	Total
AP	44.35	40.73	34.22	36.45	18.37	20.08	16.80	17.01	42.18	38.29	27.51	30.16
BIH	20.27	26.50	12.80	16.63	11.61	11.56	3.51	4.63	19.71	25.35	10.96	14.72
GUJ	35.65	22.76	26.45	27.45	23.14	13.01	8.69	9.81	34.50	20.73	19.69	21.99
HAR	34.23	21.41	20.91	21.18	0.00	15.15	9.85	10.67	30.93	20.18	17.63	18.32
KAR	23.74	28.46	30.79	29.68	7.68	20.23	9.88	10.60	20.19	27.07	22.95	23.38
KER	29.63	26.33	18.34	19.07	10.10	17.31	13.71	13.92	27.59	24.60	17.25	17.88
MP	43.71	21.49	16.97	23.02	15.03	12.41	7.99	9.06	41.63	19.91	14.66	20.07
MAH	39.70	34.83	35.67	36.05	19.94	16.21	11.17	11.79	36.74	28.21	25.59	26.68
ORI	37.46	27.03	14.67	22.91	20.19	14.59	7.86	9.97	36.48	25.94	13.50	21.24
PUN	26.81	15.10	14.30	14.69	0.35	8.15	6.03	6.41	20.11	13.74	11.65	12.35
RAJ	41.12	32.73	30.22	32.37	10.37	16.33	10.26	11.21	39.92	29.12	24.63	27.29
TN	38.40	38.66	30.14	32.40	16.13	22.29	15.98	16.76	31.98	35.03	24.43	26.69
UP	22.97	21.84	15.88	17.38	17.71	11.14	8.06	8.46	22.34	20.69	14.11	15.60
WB	36.08	15.26	10.59	14.00	8.34	12.94	7.79	8.58	34.35	14.92	9.68	12.59
NES	20.83	10.78	13.18	14.51	14.63	5.86	6.81	7.85	20.26	10.32	12.30	13.67
SS	38.38	30.30	30.84	31.07	6.34	8.75	11.99	11.54	28.71	19.88	18.46	18.92
India	**35.28**	**25.48**	**21.97**	**24.01**	**15.15**	**14.63**	**10.78**	**11.31**	**33.40**	**23.69**	**18.47**	**20.59**

Source: Author's own calculation.

Table 4.5.d: WWPR by Social Group and Place of Residence: 1999-2000

States	Rural				Urban				Total			
	ST	SC	Others	Total	ST	SC	Others	Total	ST	SC	Others	Total
AP	41.11	36.89	31.38	33.30	16.10	15.27	11.57	12.19	37.60	32.54	24.78	27.05
BIH	22.61	21.44	10.99	14.04	9.82	12.27	4.41	5.66	21.13	20.69	9.98	12.89
GUJ	35.64	31.54	27.34	29.55	21.90	13.82	7.23	8.61	34.24	26.33	19.52	22.55
HAR	13.88	14.27	14.98	14.81	0.00	14.66	6.00	7.42	9.37	14.36	12.24	12.66
KAR	33.57	31.80	25.49	27.49	17.19	16.18	11.16	12.01	30.27	29.10	20.77	22.97
KER	23.97	22.70	15.97	16.89	29.19	20.83	13.64	14.25	24.71	22.38	15.32	16.19
MP	37.08	29.89	24.94	29.14	15.68	14.45	8.03	9.57	35.05	26.85	19.82	24.49
MAH	37.47	31.30	29.85	31.29	12.64	12.04	8.47	9.08	34.04	24.02	20.32	22.37
ORI	36.73	24.36	14.00	21.82	17.18	23.04	6.72	10.26	35.15	24.19	12.40	19.85
PUN	8.92	19.72	20.74	20.23	8.43	9.41	6.80	7.60	8.70	16.93	15.59	16.01
RAJ	37.23	27.74	27.46	29.31	5.28	16.41	7.75	9.30	35.09	24.85	21.98	24.46
TN	37.59	32.12	26.65	28.48	18.45	19.71	13.39	14.14	32.13	30.03	21.09	23.34
UP	20.83	21.04	15.02	16.58	17.89	9.73	6.23	6.84	20.31	19.49	12.91	14.48
WB	27.40	12.01	8.60	10.69	15.02	10.81	5.95	6.95	26.51	11.81	7.83	9.76
NES	22.00	10.85	10.30	13.33	16.79	4.68	7.60	8.95	21.42	9.85	9.88	12.69
SS	22.23	28.15	20.71	21.83	9.10	7.24	6.51	6.65	18.55	18.55	13.92	14.69
India	**33.42**	**24.58**	**19.89**	**22.28**	**15.01**	**13.12**	**8.56**	**9.42**	**31.29**	**22.36**	**16.39**	**18.80**

Source: Author's own calculation.

Table 4.5.e: WWPR by Social Group and Place of Residence: 2004-05

States	Rural				Urban				Total			
	ST	SC	Others	Total	ST	SC	Others	Total	ST	SC	Others	Total
AP	41.24	35.40	32.03	33.30	13.53	15.95	14.93	15.01	37.00	31.63	27.06	28.44
BIH	30.09	18.44	11.77	14.57	18.54	9.49	5.27	6.38	29.19	17.76	10.84	13.55
GUJ	38.36	31.61	27.84	30.38	21.41	13.76	8.67	9.66	36.34	27.62	19.94	23.15
HAR	26.20	21.70	22.96	22.64	17.99	13.29	7.64	8.52	24.08	20.13	18.23	18.68
KAR	34.87	34.39	29.43	30.91	23.72	17.80	10.72	11.88	33.56	30.87	22.74	24.90
KER	27.45	23.40	16.98	17.96	18.23	16.97	13.09	13.39	27.29	22.29	16.00	16.87
MP	38.08	29.50	25.64	29.63	12.80	14.82	10.27	10.95	36.69	26.97	21.01	25.40
MAH	37.16	33.92	31.63	32.60	18.56	15.57	11.30	12.26	34.22	25.57	22.82	24.16
ORI	37.13	23.96	17.02	23.12	22.81	10.47	7.96	9.81	36.23	22.36	15.42	21.25
PUN	15.10	19.29	24.35	22.30	6.44	8.79	8.51	8.57	10.41	16.78	18.27	17.72
RAJ	40.19	29.43	29.91	31.35	17.16	18.48	11.68	13.20	37.70	27.02	24.73	26.83
TN	46.18	35.11	31.12	32.22	22.60	20.33	14.86	15.66	36.80	31.20	24.04	25.61
UP	28.61	24.29	18.62	20.10	15.51	10.01	7.62	7.94	26.75	22.56	15.90	17.44
WB	24.70	13.46	10.92	12.71	9.27	10.71	8.67	9.05	23.63	12.89	10.18	11.68
NES	24.10	12.39	14.05	16.86	17.65	10.75	8.12	10.62	23.42	12.16	13.22	16.04
SS	35.78	27.74	23.72	24.97	7.45	7.49	6.11	6.40	27.33	16.65	13.85	14.73
India	**34.64**	**25.41**	**22.30**	**24.18**	**17.23**	**13.64**	**10.18**	**10.89**	**32.92**	**22.95**	**18.54**	**20.54**

Source: Author's own calculation.

Table 4.6.a: WWPR by Religious Group and Place of Residence: 1983

States	Rural					Urban					Total				
	1	2	3	4	Total	1	2	3	4	Total	1	2	3	4	Total
AP	34.59	26.01	36.48	44.90	34.31	13.75	10.59	12.80	14.58	13.22	30.16	17.90	29.36	34.98	29.30
BIH	20.08	15.62	37.37	12.76	19.71	7.58	7.77	20.83	4.46	7.74	18.76	14.07	34.90	10.07	18.29
GUJ	31.08	24.14	28.66	20.25	30.68	9.45	8.76	6.50	3.26	9.17	23.54	14.54	15.99	8.61	22.60
HAR	17.57	24.41		10.58	17.29	7.65	3.80		1.34	7.29	15.63	22.51		9.20	15.39
KAR	29.18	22.23	15.14	17.57	28.41	14.40	11.52	15.12	24.29	14.26	25.12	17.08	15.12	22.14	23.98
KER	26.65	16.43	25.56	8.71	24.60	18.20	10.95	18.68	10.59	16.86	25.05	15.30	24.45	9.17	23.16
MP	33.52	25.73	40.84	17.64	33.38	11.28	8.46	4.44	4.14	10.41	29.05	13.32	22.90	7.85	28.01
MAH	36.31	28.92	32.74	38.23	36.07	11.37	8.01	10.84	9.73	10.74	28.30	15.75	19.55	26.85	27.06
ORI	21.76	2.86	20.47	21.01	21.49	8.00	2.47	10.42	5.90	7.86	19.89	2.75	18.84	15.01	19.59
PUN	23.66	22.03	31.22	21.57	22.28	8.42	9.99	1.36	9.99	8.86	16.91	16.68	24.73	20.08	18.83
RAJ	33.50	33.46		16.99	33.09	14.67	12.51		5.56	13.91	29.33	23.60		12.36	28.39
TN	33.40	17.92	28.05	28.96	32.55	15.22	11.63	18.12	5.25	14.99	27.32	14.12	24.08	10.42	26.31
UP	19.93	15.58	0.00	13.50	19.40	7.50	6.01	16.92	2.61	7.03	18.12	11.90	15.64	8.70	17.11
WB	15.58	11.34	28.63	13.27	14.75	8.11	5.86	5.46	6.96	7.88	13.41	10.62	22.76	8.52	12.94
NES	10.60	4.92	26.60	26.33	11.53	6.09	13.28	16.42	10.56	8.00	9.91	5.55	25.09	23.95	11.05
SS	32.67	16.90	28.90	27.03	27.90	7.77	6.75	17.59	5.35	7.75	19.92	14.37	23.61	9.43	18.45
India	**26.35**	**16.36**	**28.26**	**23.73**	**25.43**	**10.97**	**8.51**	**14.94**	**8.34**	**10.63**	**22.77**	**13.58**	**24.20**	**19.11**	**21.74**

Note: Religion Code: 1=Hindu, 2=Muslim, 3=Christian, 4= Other Religion

Source: Author's own calculation.

Table 4.6.b: WWPR by Religious Group and Place of Residence: 1987-88

States	Rural					Urban					Total				
	1	2	3	4	Total	1	2	3	4	Total	1	2	3	4	Total
AP	33.89	26.29	34.25	42.84	33.55	16.47	11.30	22.60	11.82	15.81	30.38	18.86	31.18	33.33	29.56
BIH	15.78	13.61	32.26	24.14	15.66	6.34	4.43	18.23	2.98	6.05	14.64	12.14	30.33	16.57	14.43
GUJ	28.31	17.13	33.54	23.18	27.83	7.70	9.79	20.08	3.47	7.96	23.09	12.80	32.25	12.37	22.23
HAR	22.90	22.71	-	12.58	22.32	8.16	7.47	44.37	6.86	8.17	19.38	20.49	44.37	11.43	19.02
KAR	27.81	23.49	19.47	30.76	27.46	14.44	12.38	18.26	12.39	14.16	24.32	17.49	18.71	23.32	23.46
KER	23.72	16.32	21.01	9.90	21.58	14.63	8.64	16.31	6.31	13.79	22.02	15.11	20.25	8.63	20.21
MP	32.03	24.34	30.92	16.08	31.68	10.36	10.44	26.91	7.19	10.56	28.13	16.64	29.05	11.45	27.34
MAH	34.61	24.26	20.96	35.30	34.05	11.95	7.49	19.62	8.64	11.20	27.54	14.66	20.00	24.17	26.17
ORI	20.12	4.96	33.97	29.52	20.31	8.74	6.71	16.70	0.00	8.74	18.86	5.52	31.92	21.63	18.99
PUN	21.79	28.13	13.65	22.24	22.07	7.91	18.81	2.12	9.77	8.67	14.81	24.15	12.07	20.39	18.33
RAJ	34.67	28.60	42.68	29.85	34.21	14.75	12.76	5.77	4.27	13.95	30.89	21.00	22.24	23.77	29.85
TN	33.53	19.40	29.32	23.68	32.84	15.59	13.48	14.63	2.98	15.27	27.29	16.01	22.85	11.03	26.43
UP	17.42	11.91	14.14	13.72	16.82	7.57	5.29	31.38	3.36	6.98	15.87	9.57	26.71	9.88	14.99
WB	14.63	11.06	24.95	25.10	13.91	7.90	6.77	18.78	1.22	7.78	12.58	10.31	21.20	21.69	12.22
NES	11.76	8.14	30.33	26.36	13.53	6.42	3.54	22.58	8.46	8.58	11.05	7.90	29.08	25.33	12.95
SS	30.05	26.78	15.01	14.07	28.39	7.57	7.58	13.29	4.75	7.51	19.38	21.48	14.29	7.54	19.26
India	**24.95**	**15.74**	**26.52**	**24.34**	**24.08**	**10.97**	**8.52**	**17.86**	**7.53**	**10.67**	**21.82**	**13.41**	**24.05**	**19.86**	**20.89**

Note: Religion Code: 1=Hindu, 2=Muslim, 3=Christian, 4= Other Religion

Source: Author's own calculation.

Table 4.6.c: WWPR by Religious Group and Place of Residence: 1993-94

States	Rural					Urban					Total				
	1	2	3	4	Total	1	2	3	4	Total	1	2	3	4	Total
AP	36.95	26.82	35.40	25.60	36.45	16.96	17.49	17.65	4.42	17.01	30.82	21.42	31.36	16.14	30.16
BIH	17.16	12.07	26.74	8.40	16.63	5.36	2.48	7.47	7.26	4.63	15.55	9.48	23.94	8.01	14.72
GUJ	27.78	18.91	27.38	9.71	27.45	9.74	10.69	15.78	4.10	9.81	22.79	13.56	19.66	5.15	21.99
HAR	21.31	20.78		19.43	21.18	10.58	21.06	0.00	8.07	10.67	18.29	20.82	0.00	16.73	18.32
KAR	30.02	22.73	31.48	44.02	29.68	9.96	14.08	11.97	10.99	10.60	23.89	18.09	20.65	29.89	23.38
KER	21.16	11.40	18.42	23.44	19.07	15.63	9.07	12.46	0.00	13.92	19.90	10.87	16.97	20.45	17.88
MP	23.35	12.70	38.30	15.53	23.02	9.37	6.18	24.62	7.53	9.06	20.68	9.41	33.09	10.83	20.07
MAH	35.95	34.01	32.66	37.82	36.05	12.08	8.15	23.06	11.44	11.79	27.28	17.81	24.06	29.08	26.68
ORI	22.88	8.21	40.52	14.25	22.91	10.23	1.95	14.10	14.89	9.97	21.30	6.11	37.40	14.42	21.24
PUN	14.69	17.49	23.20	14.46	14.69	5.99	8.93	21.17	7.05	6.41	10.40	15.69	23.08	13.28	12.35
RAJ	33.38	19.30		31.18	32.37	11.51	10.76	18.55	5.75	11.21	28.51	15.95	18.55	22.98	27.29
TN	33.87	18.24	18.88	30.99	32.40	18.05	9.44	13.30	1.06	16.76	28.39	12.13	17.08	20.63	26.69
UP	18.06	12.08	23.00	16.43	17.38	8.60	8.05	21.73	2.63	8.46	16.47	10.58	21.77	12.94	15.60
WB	15.44	8.81	20.89	22.24	14.00	8.47	8.74	19.28	16.93	8.58	13.42	8.80	20.39	21.43	12.59
NES	12.03	7.79	26.86	30.44	14.51	6.53	7.55	17.58	7.98	7.85	11.19	7.77	25.65	29.71	13.67
SS	31.82	23.52	21.17	25.05	31.07	12.45	6.74	11.78	4.15	11.54	20.10	10.05	16.98	7.84	18.92
India	**25.07**	**13.69**	**24.32**	**23.25**	**24.01**	**11.66**	**9.31**	**15.36**	**8.09**	**11.31**	**21.62**	**12.05**	**21.71**	**19.39**	**20.59**

Note: Religion Code: 1=Hindu, 2=Muslim, 3=Christian, 4= Other Religion

Source: Author's own calculation.

Table 4.6.d: WWPR by Religious Group and Place of Residence: 1999-2000

States	Rural					Urban					Total				
	1	2	3	4	Total	1	2	3	4	Total	1	2	3	4	Total
AP	33.58	24.55	38.58	26.95	33.30	13.30	6.51	13.06	2.13	12.19	28.14	13.57	29.31	18.57	27.05
BIH	13.85	14.55	20.62	20.92	14.04	5.43	6.08	14.40	1.70	5.66	12.75	13.13	19.41	13.93	12.89
GUJ	30.09	15.74	35.46	11.20	29.55	9.01	6.42	13.77	4.02	8.61	23.56	10.05	28.82	5.04	22.55
HAR	15.30	12.56	50.00	7.78	14.81	7.64	2.45	20.54	1.66	7.42	13.00	11.24	30.58	6.60	12.66
KAR	28.13	17.96	29.11	27.18	27.49	12.44	9.83	13.08	18.24	12.02	24.18	13.25	20.51	24.22	22.97
KER	19.35	12.73	14.37	19.00	16.89	16.44	7.41	15.02	13.71	14.22	18.55	11.30	14.53	18.13	16.18
MP	29.50	19.82	30.82	11.66	29.14	10.32	7.09	8.03	3.60	9.57	25.55	11.77	20.88	6.59	24.49
MAH	31.75	18.71	20.39	34.47	31.29	9.61	4.97	15.30	10.45	9.08	23.84	9.18	15.88	24.29	22.37
ORI	21.61	3.38	40.33	36.58	21.82	9.98	16.77	11.31	0.00	10.26	19.67	8.55	35.34	33.27	19.85
PUN	19.80	21.75	12.44	20.48	20.23	7.74	4.72	15.67	7.46	7.60	13.24	11.92	12.99	17.96	16.01
RAJ	29.98	27.06	56.04	14.66	29.31	9.99	7.29	14.65	3.69	9.30	25.54	18.62	36.90	11.19	24.46
TN	29.59	10.55	19.49	12.70	28.48	14.21	10.80	18.19	16.89	14.14	24.41	10.73	19.00	15.64	23.33
UP	17.16	12.41	18.33	14.78	16.57	6.48	7.76	14.21	4.58	6.84	15.18	10.68	16.09	11.42	14.47
WB	17.17	12.42	18.33	13.20	16.55	6.48	7.86	14.08	4.31	6.88	15.18	10.73	16.04	10.47	14.46
NES	11.99	6.15	28.76	22.30	13.32	7.38	8.77	17.14	7.80	8.95	11.22	6.30	26.83	20.16	12.69
SS	24.77	10.89	12.14	24.34	21.83	6.62	3.92	22.90	6.38	6.65	16.11	8.25	18.18	12.44	14.69
India	**23.27**	**13.47**	**22.83**	**22.38**	**22.28**	**9.69**	**7.16**	**15.50**	**7.78**	**9.42**	**19.81**	**11.18**	**20.47**	**17.81**	**18.80**

Note: Religion Code: 1=Hindu, 2=Muslim, 3=Christian, 4= Other Religion

Source: Author's own calculation.

Table 4.6.e: WWPR by Religious Group and Place of Residence: 2004-05

States	Rural					Urban					Total				
	1	2	3	4	Total	1	2	3	4	Total	1	2	3	4	Total
AP	33.72	28.02	28.09	15.63	33.30	16.11	7.99	23.24	0.00	15.01	29.45	17.77	26.57	12.98	28.44
BIH	14.51	10.76	24.66	35.02	14.58	6.02	6.42	19.67	13.21	6.38	13.43	10.30	24.02	32.61	13.56
GUJ	31.00	23.34	25.84	28.89	30.38	10.54	5.83	5.51	2.07	9.66	24.26	14.95	20.08	6.48	23.15
HAR	22.82	25.66	0.00	18.40	22.64	8.39	1.17	34.46	12.12	8.52	18.67	21.21	26.67	17.24	18.68
KAR	31.70	23.46	15.01	16.46	30.91	12.95	8.22	13.33	1.42	11.88	26.55	14.92	13.79	9.16	24.90
KER	20.31	10.11	19.90	0.10	17.96	15.80	6.03	14.86	0.09	13.39	19.24	9.14	18.73	0.19	16.87
MP	30.01	20.48	26.08	9.82	29.63	11.21	10.73	18.71	5.09	10.95	26.33	14.13	24.17	6.70	25.40
MAH	33.03	19.83	23.45	35.97	32.60	12.73	8.70	13.59	14.38	12.26	25.36	12.03	15.73	26.77	24.16
ORI	22.84	22.32	36.46	3.06	23.11	9.92	2.81	15.74	4.47	9.81	21.10	12.56	32.25	3.86	21.24
PUN	14.79	31.83	19.73	24.26	22.30	7.80	7.92	13.34	10.08	8.57	10.50	22.31	18.47	21.82	17.72
RAJ	31.61	20.38	50.00	39.26	31.35	13.48	9.69	50.00	18.15	13.20	27.59	14.60	50.00	30.85	26.83
TN	33.10	10.44	26.26	0.21	32.22	16.39	8.12	16.17	1.51	15.66	26.74	8.91	21.61	1.71	25.61
UP	20.79	15.66	19.45	18.63	20.10	7.24	9.90	17.01	5.26	7.97	18.27	13.54	18.46	9.56	17.44
WB	13.28	10.06	28.19	32.56	12.70	9.17	8.21	14.60	3.73	9.06	11.94	9.80	24.35	27.00	11.68
NES	16.13	9.87	30.97	31.37	16.86	8.48	6.48	21.53	15.17	10.62	14.95	9.68	29.38	30.02	16.05
SS	29.67	14.47	10.47	16.66	24.97	6.89	3.34	13.14	5.30	6.40	16.41	9.86	11.66	8.62	14.73
India	**25.28**	**14.12**	**25.12**	**27.48**	**24.18**	**11.24**	**8.26**	**16.25**	**10.12**	**10.89**	**21.61**	**12.09**	**22.41**	**22.16**	**20.54**

Note: Religion Code: 1=Hindu, 2=Muslim, 3=Christian, 4= Other Religion

Source: Author's own calculation.

CHAPTER 5

DETERMINANTS OF WOMEN WORK PARTICIPATION

5.1 Introduction

In this chapter we have used several variables to check the robustness of our hypotheses. In chapter 1, we have hypothesized that higher the level of educational attainment of females, higher would be their WPR and eventually their contribution to the economic development of the country would also increase. We had also stated that belonging to a particular social or religious group would not impact WWPR. All of this would be examined in this chapter. In this chapter we have also focused on the changes of WWPR with the inclusion of different set of variables.

The rest of this chapter is organized as follows: section 5.2 examines the hypotheses using descriptive statistics. Section 5.3 examines the factors that we have taken as the determinants or dependent variables for our analysis. The econometric estimates of the determinants of WWPR are reported in the next section and section 5.5 concludes the chapter.

5.2 Examination of Hypotheses

In order to test the hypotheses we have divided the different states of the country into three distinct categories (Aiyyar, et al., 2007), namely, the high performing (Karnataka, Kerala, Maharashtra, Gujarat and Tamil Nadu), middle performing (Andhra Pradesh, Haryana, and Madhya Pradesh) and low performing states (North Eastern states, Uttar Pradesh, Bihar and Orissa) to assess the impact of development on WWPR.

1. With higher educational attainment by women it is likely that there will be an increase in their work participation.

WWPR by educational level has been categorized into six distinct groups as mentioned in Chapter 4. WWPR by educational attainment and the level of development has been plotted in figure 5.1 and 5.2.

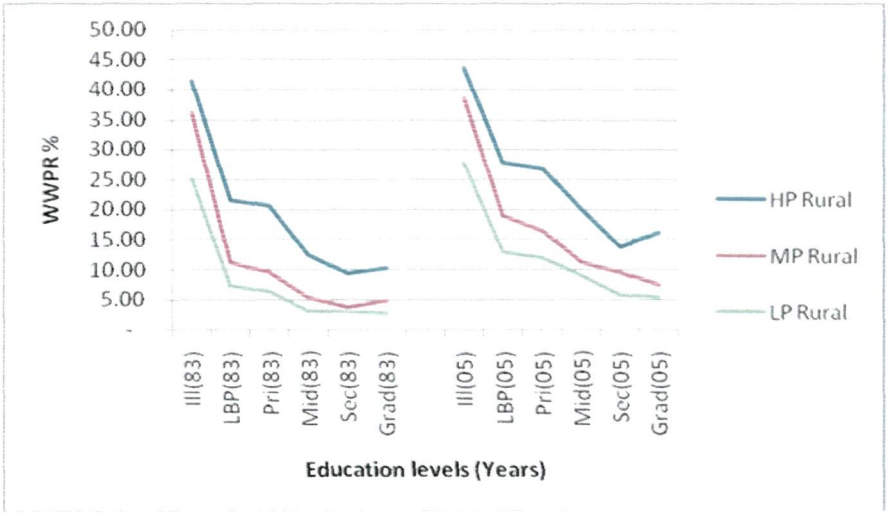


Figure 5.1: WWPR by Educational Attainment: Rural

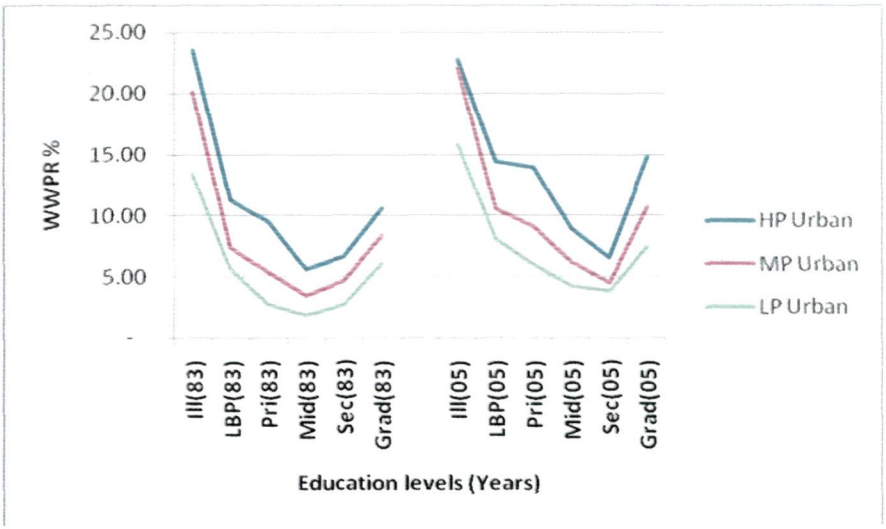


Figure 5.2: WWPR by Educational Attainment: Urban

Note: HP=high performing states; MP= medium performing states; LP= low performing states.

The following inferences can thus be drawn from the figures:

(i) We observe the existence of the U-shaped curve characterizing the relationship between education and WWPR. The participation of illiterate women remained the highest from among all the educational categories. But, as we move up the educational categories WWPR also decline. This reflects an inverse relationship between lower levels of education (barring the illiterates) and WWPR. WWPR then starts to increase for those under secondary and graduate and above education level thereby exhibiting positive relation between higher levels of education and WPR. WWPR in urban areas, though much lower compared to rural women for different educational categories, is observed to overtake that of the rural women only for the educational category of graduates and above.

(ii) It is evident from Figure 5.1 and 5.2 that variations in WWPR are exhibited with differing levels of development. High performing states are observed to be having a higher WWPR compared to middle and lower performing states. In the rural areas the lack of demand for highly educated women force is reflected in the slow increase in WWPR, while more avenues for highly educated women in the urban areas have resulted in the fast increase of WWPR.

In conclusion it can be said that support for this hypothesis is present but weak. This, therefore, leads us to hold that increasing the levels of education does not guarantee a positive increase in WWPR for all levels of education but only for secondary and graduate and above levels of education and that too mostly in the urban areas, while it leads only to a marginal increase in the rural areas.

2. Participation of women in the work force is unaffected by various kinds of segmentations in the labour market such as religion or caste.

To test this hypothesis we have taken women workers by religious and social groups. We have also correlated their WPR with the level of economic performance of the states as outlined earlier. The objective is to see whether WWPR is affected by their belonging to different religious/ social groups or do economic considerations take precedence over religious and social considerations. Consequently we will examine (i) WWPR by religion and level of economic development and (ii) WWPR by social groups and level of economic development.

(i) WWPR by Religious Groups

Classification of women workers by religious groups has been done as outlined in Chapter 4. WWPR by religion and level of economic development is presented in figure 5.3 and 5.4.

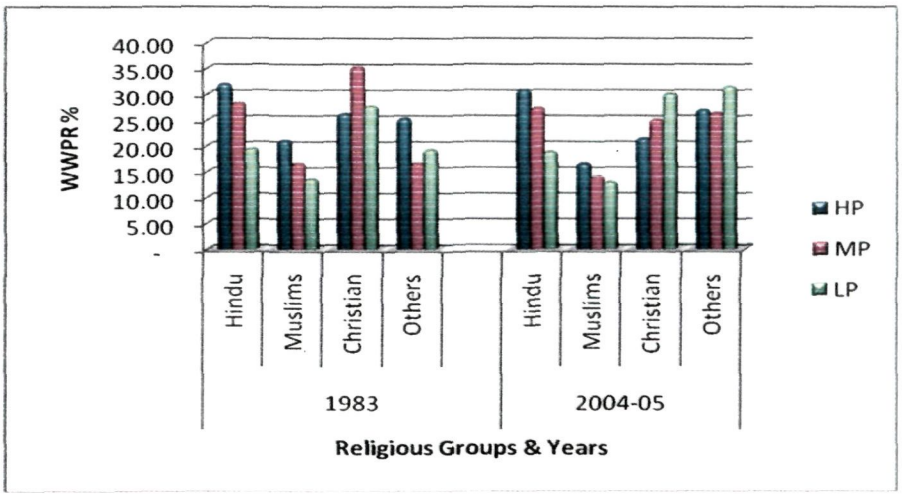


Figure 5.3: WWPR by Religious Group: Rural

Note: HP=high performing states; MP= medium performing states; LP= low performing states.

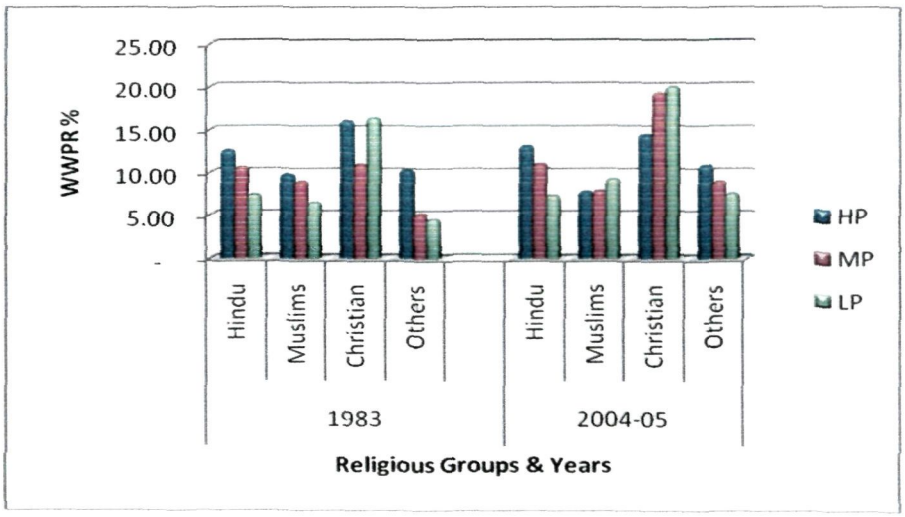


Figure 5.4: WWPR by Religious Group: Urban

Note: HP=high performing states; MP= medium performing states; LP= low performing states.

The observation made from figures 5.3 and 5.4 indicate that WWPR by different religious groups, barring the Other religions, exhibited a decline from the period 1983 to 2004-05; with rural WWPR declining but remaining much higher than the stagnating urban WWPR. However, the declining WWPR is observed only for Hindu and Muslim women irrespective of their levels of economic status and does not appear so for the Christians and Other religions. This is evident from figure 5.3, where higher and increasing WWPR is observed for Christians and Other religions belonging to the medium and low performing category states, which is not evident for Hindus and Muslims. In other words, for Hindu and Muslim women, irrespective of their economic status, especially in the rural areas, level of economic performance does not promote WPR. The only exception is for Muslim women in the urban areas (figure 5.4) where WPR is observed to have marginally increased for those residing in the low performing states.

(ii) WWPR by Social Groups

To examine WWPR by different social groups we have used the same classification as outlined in Chapter 4. WWPR by different social groups and level of economic development is explained with the help of figures 5.5 and 5.6.

From figures 5.5 and 5.6 it can be seen that while higher WWPR in rural and urban areas is observed for ST women; yet an equally impressive performance is seen for the SC and Other social group. For all groups of women a higher WPR is observed especially for those coming from low performing states. At the same time increased WPR is also observed for women coming from higher and medium performing states. This shows that WPR for women is induced largely by their economic status and their belonging to a particular social group is of little concern.

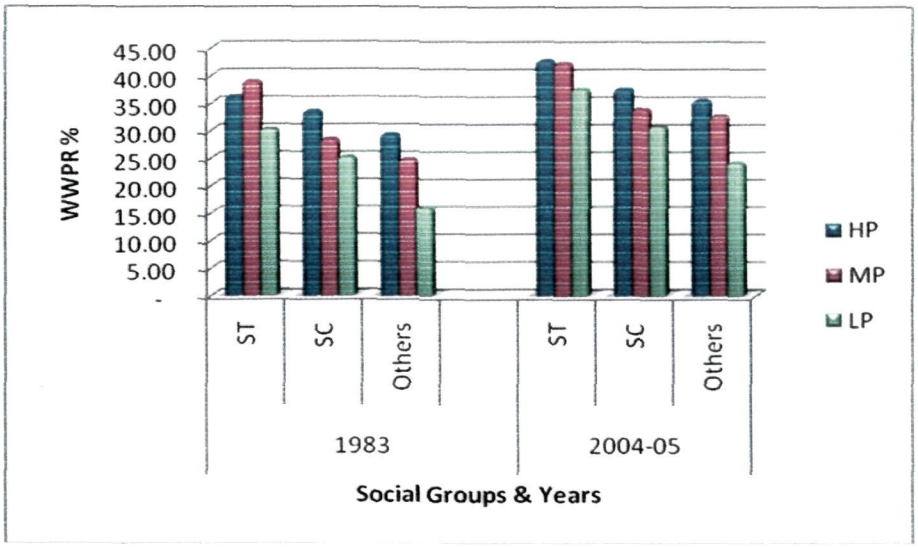


Figure 5.5: WWPR by Social Group: Rural

Note: HP=high performing states; MP= medium performing states; LP= low performing states.

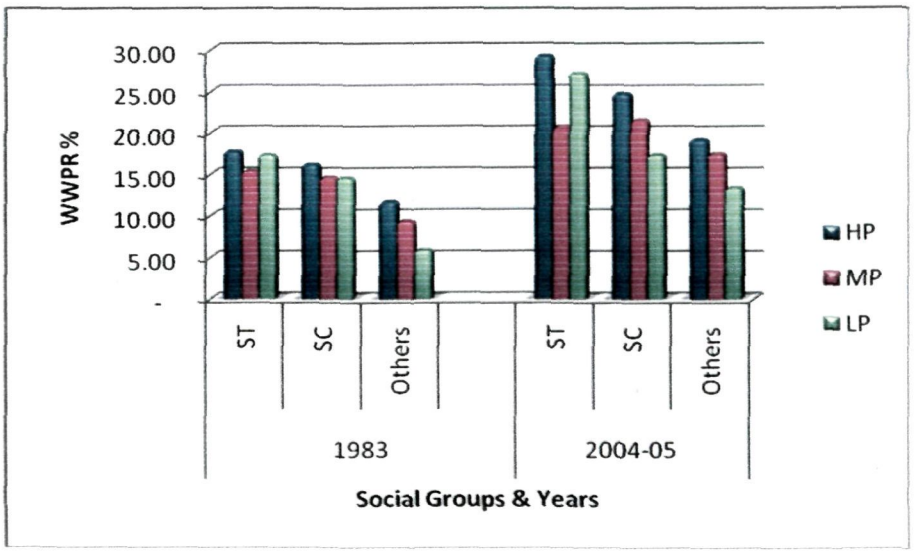


Figure 5.6: WWPR by Social Group: Urban

Note: HP=high performing states; MP= medium performing states; LP= low performing states.

The main inferences that can be drawn from the above discussion on WWPR by social and religious groups show that for some women (Hindus and Muslims) religion appear to take precedence over economic considerations, while it does not appear to be so for others (Christian and Other religions). On the other hand, social considerations hardly affect the decision to work for women, as importance appears to be given to economic considerations rather than social considerations. The findings lead us to conclude that the segmentations found in the Indian labour market affects the WWPR of women but only to a certain extent. While on the one hand, religion appear to have a strong link with WWPR for Hindus and Muslims, it is not so for Christians. On the other hand, a weak link is seen in the case of caste and WWPR.

These observations made in terms of women work participation is a case for further analysis which will be taken up in the following sub sections.

5.3 Factors Influencing Women Work Participation

So far, we have visualized how individual factors correlate with the WWPR individually. However, they may act jointly and simultaneously to shape WWPR. Our purpose is to examine further as to how these variables operate with each other to influence the work participation of women. In order to analyse the determinants of women work force participation we have used several explanatory variables which have also been discussed in the preceding Chapter 4. We list them as follows:

1. Education

In the review of literature we have briefly examined the impact of education on WWPR where education was viewed as one of the main factors influencing entry into the work force. Holding for other variables in our study, we have sought to examine the effect that education could have on workforce participation of women. For this empirical verification we had filtered the entire population into ages 15 years and above and divided the educational attainment into six sub-groups, namely, illiterate, literate but below primary education level, literate but only up to primary level, literate but only up to middle level only, literate but up to secondary level, literate who are graduates and above.

2. Marital Status

To empirically verify the effect on WPR of women who are married we had divided the women workers by marital status as per the age group, i.e., below 35 years and above 35 years of age. This is because women's prime child-bearing age is up to 35 years. Hence we have classified women by different marital status as under:

i. never married women in the age group 15 years to 35 years

ii. never married women in the age group 35 years and above

iii. currently married women

iv. widowed, divorced and women who are separated from their spouse in the age group 15 to 35 years old.

v. widowed, divorced and women who are separated from their spouse in the age group 35 years and above.

3. Age Group

For the purpose of further investigating the factors that could impact women's participation we also take into consideration the age factor. Here we divided women into six distinct age groups namely, 15 to 19, 20 to 29, 30 to 39, 40 to 49, 50 to 59 and 60 years and above.

4. Social Group

The unique social structure found in India makes for an important assessment of the work participation of women belonging to different social groups. Therefore, the incorporation of the work participation of women by different social groups assumes importance in our study. Consequently, we have divided women workers by different social groups into the Scheduled Caste (SC), Scheduled Tribes (ST) and Other Castes.

5. Religious Group

India is a country widely known for the presence of diverse religious groups. Consequently the role of religion and its impact on the work participation rate of women assumes significance. For the purpose of our study we had divided them into Hindus,

Islam, Christians and Other religious groups for those not classified under the preceding three religious groups.

6. Other Household Characteristics

Additionally, other household characteristics such as household type, female-headed households, and level of living of households as measured by the monthly per capita expenditure have also been employed in our study. These explanatory variables have been used for the Probit analysis that follows in the subsequent section.

5.4 Econometric Estimates

In this study the econometric estimation is done by the Probit analysis to examine the likelihood of women being in the work force conditioning on education, marital status, age as well as the social and religious factors as hinted at in the preceding section.

Further, Probit estimation is done for the population aged 15 years and above. The following dependent as well as explanatory (or independent) variables are derived from the NSSO employment and unemployment data set.

Women work force participation is used as a dependent variable. It is a binary variable. It takes value 1 if a woman is reported to be working and 0 if she is out of the work force. This variable is used to regress on the following independent variables.

Illiterate	= this variable is binary, 1 if the person is illiterate and zero otherwise.
Literate below Primary	= this is a binary variable taking value 1 if the persons are literate but below primary level and zero otherwise.

Literate up to Primary	= this is a binary variable taking value 1 if the persons are literate but up to the primary level and zero otherwise.
Literate up to Middle	= this is a binary variable taking value 1 if the persons are literate but up to the middle level only and zero otherwise.
Literate up to Secondary	= this is a binary variable taking value 1 if the persons are literate but up to the secondary level only and zero otherwise.
Graduate and above	= this is a binary variable taking value 1 if the persons are graduates and above and zero otherwise.
Hindu	= this is a binary variable. If the persons are Hindus it is 1 and zero otherwise.
Muslim	= this is a binary variable. If the persons are Muslims it is 1 and zero otherwise.
Christian	= this is a binary variable. If the persons are Christians it is 1 and zero otherwise.
Other Religion	= this is a binary variable. If the persons belong to a religious group other than Hindus, Muslims or Christians it is 1 and zero otherwise.
ST	= this variable is binary. It takes value 1 if the

	persons belong to the Scheduled Tribe and zero otherwise.
SC	= this variable is binary. It takes value 1 if the persons belong to the Scheduled Caste and zero otherwise.
Other Social Group	= this variable is binary. It takes value 1 if the persons belong to a social group other than the Scheduled Tribe or Scheduled Caste and zero otherwise.
Never Married Young	= this variable is binary, 1 if the women in the age group 15 to less than 35 years of age has never married and zero otherwise
Never Married Old	= this variable is binary, 1 if the women aged 35 years and above has never married and zero otherwise.
Currently Married	= this variable is binary, 1 if the women are currently married and zero otherwise.
Widowed/ Divorced/Separated-Young	= this variable is binary, 1 if the women are widowed / divorced or separated at a younger age that is less than 35 years old and zero otherwise.

Widowed/ Divorced/Separated-Older

= this variable is binary, 1 if the women are widowed / divorced or separated at an older age that is more than 35 years old and zero otherwise.

The *reference groups* in the estimation used are currently married for marital status, graduates and above for education, other social groups for social groups, other religion for religious groups, 60 years and above for age group and other rural household labour for the rural areas and other urban labour for the urban areas. Other variables such as female headed households as well as the monthly per capita expenditure were also used to examine their influence on women work participation. The estimation was carried out at the rural and urban level as well as across the states in India.

5.4.1 Probit Estimates for All India

The results of the estimation for the full sample in rural and urban areas are presented in tables. 5.1 and 5.2 respectively. The findings of the Probit analysis are as follows:

1. Education

In 1983 it was evident that in the rural areas the chances of illiterates to be in the work force were 16 per cent higher compared to those with an educational attainment of graduates and above. The same trend was also noticeable for 1987-88 where it was 13 per cent higher. This position did not show much change but the value of the coefficient for the illiterates declined significantly over the years. For instance, the probability of the illiterates of being in the work force relative to those with a graduate degree was 11 per cent in 1999-00 and then it eventually declined to around five per cent in 2004-05.

Along similar lines, literates below primary and up to primary educational level had a probability of about six and four per cent respectively, of being in the work force in 1983. However, the probability of such women being in the work force declined with each successive round i.e., from 1987-88 to 2004-05. The only difference was witnessed for 1993-94 where the employability of those up to primary level education was higher. On the contrary, women with above primary level education, that is middle and secondary education level, had a dampening effect on employability in the rural areas of India from 1983 to 2004-05. The estimates also show that with each successive year the probability of employment with higher educational attainment was greatly reduced. For instance, women with a secondary level education had six per cent less probability of participation in the work force in 1983. This increased to eight per cent in 1987-88 and to 14 per cent in 2004-05.

On the other hand, for urban women workers, the higher probability of work participation appears to be largely influenced by their educational attainment. Compared to women with graduate and above level of education, women with lesser levels of education do not appear to be having any chance for employment. From the period 1983 to 2004-05 the same results was observed with regards to educational attainment and work participation. The estimates showed a lower likelihood of work participation for women with lower levels of education. For instance, illiterates who had the highest chance of employment in the rural areas had only around five per cent chances of employability in 2004-05 in the urban areas. The probability of getting employment for those with a middle or secondary education ranged from 12 to 18 per cent respectively

for the entire period 1983 to 2004-05. The coefficients of the different education levels from the illiterates up to the secondary level education were negative. This reveals that lower levels of educational attainment has a waning influence on the work participation of women in urban areas.

2. Marital Status

Marital status of women was explained by various researchers as one of the most important determinants of women work participation. Our findings show that in the rural areas single women above the age of 35 who were either never married or widowed, divorced or separated from their spouses had lesser probability of being in the work force relative to those who were married. This observation is also seen for women in the urban areas barring the never married women. For the never married women above 35 years, the chance of being in the work force appears to be higher and ranged between 13 to 15 per cent during 1983 to 2004-05.

In case of those women who were less than 35 years of age, whether they belonged to the never married or the widowed or divorced group, the probability of being in the work force was higher in both the rural and urban areas. However, in the rural areas the widowed or divorced women had the highest probability of work participation, though their employability appears to be declining over the years. For instance it was 13 per cent in 1983 and declined to eight per cent in 1999-00 and eventually to two per cent in 2004-05. In the urban areas, on the other hand, their employability which was initially as high as 25 per cent in 1983 dropped to around eight per cent in 1999-00 and eventually to five per cent in 2004-05. Comparing the

probability of the never married in the younger age group to the currently married, their probability of being in the work force was much higher for those in the urban areas rather than for those in the rural areas.

3. Age

Age is another factor that was observed to have an influence on the work participation of women. In both the rural and the urban areas it was found that women in the age groups 30 to 49 years had the highest probability to be in the work force relative to those in higher age groups. However, the probability of being in the work force showed some differences for the rural women and the urban women. The estimation shows that the probability of rural women's participation in the work force ranged consistently around 36 to 37 per cent for the entire period from 1983 to 2004-05, which was reflected in theirs recording WPR. On the other hand, for urban women, in 1983 the probability of their work participation was 26 per cent which then steadily increased over the years to around 32 per cent in 2004-05.

Younger women in the age group 15 to 19 years had the lowest probability of work participation in the rural as well as the urban areas. However rural women have a higher likelihood of being in the work force compared to the urban women. An important observation that is made through the results of estimation is the declining probability of work participation for women in this particular age group over the years. This was also observed for women in the age group 20 to 29 years. Though, the likelihood of being in the work force for women in the age group 20 to 29 years was much higher than the 15 to 19 years.

It was also observed that women in the age group 50 to 59 years had a higher probability of being in the work force, which is shown to have increased consistently throughout the period under study. Their probability of work participation is much higher than women in the age group 20 to 29 years. However, the likelihood of work participation is much higher for women in the urban areas in comparison to a lower likelihood for rural women.

4. Social Characteristics

The social background or caste of households also determines the participation of women in the work force. The estimates for the socially disadvantaged groups, that is the Scheduled Tribes and Scheduled Caste, reveals that they have a higher probability of being in the work force compared to those belonging to Other social groups. Our findings show that in both the rural and urban areas of the country women belonging to these groups were more likely to participate in the labour market. However the likelihood of participation in the labour market was much higher for the Scheduled Tribes compared to the Scheduled Castes.

Comparing by place of residence, in the rural areas from 1983 to 2004-05, the probability of Scheduled Caste women to be in the work force was around two per cent. For instance, in 2004-05 the likelihood of their participation dwindled down further and was around 17 per cent for Scheduled Tribe women. In the urban areas, however, the prospects for SC's appeared to be much better than in the rural areas, though their probability of being in the work force was much lower compared to the ST's. In 1983 the probability of work participation for the ST and SC were 10 and six per cent,

respectively. This figure declined to seven and less than one per cent, respectively in 2004-05. It is important to note here that in both cases - and in both places of residences - the value of the coefficient was seen to be declining over the entire period from 1983 to 2004-05, resulting in lower probabilities of work participation in both the instances.

5. Religious Characteristics

The religious background of women workers were also examined as a determinant of work force participation. Using women belonging to other religious groups - other than Hindus, Muslims and Christians - as reference group, our findings showed that Christians were more likely to participate in the work force compared to Hindus and Muslims. However, the value of the coefficient was also observed to be declining over the years. Again it was also found that the probability of a Muslim women to be in the work force was lower relative to women from others religious groups. On the other hand, it was relatively higher for Hindus. This pattern was exhibited only in the case of urban areas. For instance, in 1983 the probability of work participation for Muslims was less than three per cent, while it was relatively better for Hindus and Christians at four and 17 per cent respectively. With a declining value of the coefficient, the probabilities also declined to be at less than one and seven per cent respectively for Hindus and Muslim women, but at around nine per cent for Christians in 2004-05. In the case of rural areas the findings reveal otherwise. The probability of Muslim women to participate in the work force continued to remain lower throughout 1983 to 2004-05; Hindu women's probability was almost negligible at 0.01 per cent in 1983 which

declined further from 1987-88 to 2004-05; Christian women's work probability was initially positive at nine per cent in 1983 but became negative from 1999-00 to 2004-05.

6. Other Household Characteristics

(i) Female-Headed Households

Gender of the head of household emerges as another important determinant of women work participation. It could be perceived that households who are headed by women would generally have a higher proportion of women working outside of their households. Our findings also suggest this; it can be seen that in both the rural and urban areas female-headed households have a higher probability of women being in the work force. The probability of women, belonging to female-headed households, being in the work force was around 34 per cent in 1983 in the rural area and 30 per cent in the urban areas. However a declining coefficient implied declining probabilities of work participation, where it was seen that probability of being in the work force declined to around 27 per cent for rural women and around 26 per cent for urban women. This could also be one of the contributing factors towards higher work participation of rural women compared to urban women.

(ii) Household Type

Household type indicates the main source of livelihood or income for households. In rural areas the household type were classified as follows: self employed in non-agriculture, agricultural labour, other labour, self employed in agriculture and others. The households in the urban areas were classified as self employed, regular wage or salary earning, casual labour and others. Household type as a determinant of work

participation assumes importance in our study as it enabled us to identify the source of employment and livelihood for women workers.

Our findings suggests that in the rural areas there is a very high likelihood of women belonging to households where their main source of income is from the agricultural sector to be in the work force compared to households that derive their main income from other types of work. Thus, for households that depended on the agricultural sector, whether as agricultural labour or self employed in agriculture, the probability of women being in the work force was much higher. The value of the coefficient, also suggests a higher and increasing probability of participation for agricultural labourers, from 1983 to 2004-05. For instance the value of the coefficient which was around 92 per cent in 1983 increased to 97 per cent in 2004-05. This translates into a 36 per cent higher probability of work participation for women in agricultural labor compared to other types of work in the rural area. Besides, the prospects of being in the work force for the self-employed in the agricultural or non-agricultural sector, also appears to be high in the rural area, with 31 and 21 per cent probabilities in both cases respectively in 2004-05.

In the case of urban areas our findings suggest that the probability of being in the work force for women whose main source of income is from working as casual labourer was much higher compared to other types of work. From 1987 to 2004-05 the value of the coefficient increased indicating more probability of work in this particular sector in the urban areas. For instance, in 2004-05 the probability of work participation for women was around 48 per cent. The results also suggest that for women whose

income accrues from self employment, the probability of being employed is reasonably high but not as much compared to being a casual labourer. The lowest probability of being in the work force is for women whose main source of income was derived from being a regular wage or a salaried worker.

(iii) Level of Living of Households

The level of living of households was also taken as one of the determinants of women work participation. In our estimates we have used the monthly per capita expenditure (MPCE) as a proxy variable to measure the level of living of the households. Our findings show that in both the rural and urban areas the coefficient is negative indicating that an additional increase in consumption (representing income) led to a declining participation of women in the work force. In other words, women who come from economically well off households are less likely to participate in any form of paid work outside their homes. On the other hand women who come from poorer households are more likely to participate in the work force.

A summary of the above shows that the likelihood of women work participation in India is dependent on diverse factors. While most household characteristics such as the type and level of living of households as well as the religion and social characteristics appear to influence the decision to participate in work, individual characteristics also impact the likelihood of women to work. Education, age and marital status of women all have a bearing on the probability of women to work.

5.4.2 Probit Estimates for States

We also carried out the Probit estimation for the rural and urban areas in each state of India. The results are reported in tables 5.3 to 5.34. However, the estimation for small states and union territories with a small sample size are done by grouping those states into one single geographical unit. Similarly, the northeastern states put together form another group to reflect the incidence of women work participation in these states. We have reported the results of the entire five rounds, i.e. 1983, 1987-88, 1993-94, 1999-00 and 2004-05 to enable us to exemplify the changes that have taken place during the last twenty years or so with respect to women workers.

Rural: The following are the results of the analysis carried out across the different states of the country in the rural areas.

1. Education

The result of the analysis for different states across rural India shows that the lower likelihood of work participation for women with less than a graduate degree education. In other words, compared to the graduates and above there appears to be little or no possibility for women with an educational attainment of less than graduate education, to have any chance of being in the work force. The marginal effect of a change in the level of education is inducing a negative effect on the work participation of women. The value of the coefficient for below-primary up to secondary educational level is negative for almost all the states. However, for a majority of states across the country illiterates have a higher likelihood of finding themselves in the labour market. However, the value of the coefficient differs from state to state. In some states though, the probability of being

in the labour market for women up to a middle level education appears to be encouraging.

For instance, in the states of Bihar, North East, Smaller States, Orissa, Rajasthan and Uttar Pradesh the chances of being in the work force for those women with an educational attainment of less than a graduate level is only few and far between. This is not so for the illiterates who are seen to be having a better likelihood of work participation. On the other hand, for states like Maharashtra, Madhya Pradesh, Kerala, Karnataka the probability of participation is much higher for women of different educational attainment barring for those with a secondary level education. In the states like Haryana and Gujarat, barring a few years, the probability of participation appears to be higher for women of different education levels.

2. Marital Status

For most states in the rural areas, all women of different marital status below the age of 35 years have a higher likelihood of being in the work force compared to the currently married; while those above the age of 35 years have a lower likelihood of work participation. These states included Bihar, Karnataka, Kerala, Madhya Pradesh, Orissa, Tamil Nadu, Punjab, Uttar Pradesh, West Bengal, the North Eastern states and the Smaller States. The value of the coefficient, both for the never married and the widowed divorced or women who have been separated from their spouses, is positive but have been declining over the years. The exception is only for the latter three states where the lower likelihood of work participation extends to only the case of the widowed and divorced women above the age of 35 years. Additionally for the states of Rajasthan,

Maharashtra, Haryana, Andhra Pradesh and Gujarat, there appears to be a lesser likelihood for never married women below 35 years to be in the work force. In some cases like Karnataka and Punjab, the coefficients for never married women below 35 years, which were initially positive declined to become negative in the latter years under study. A point noteworthy is that in certain states - and for certain years – mainly on account of small sample size, women who have never been married have been dropped from the analysis.

3. Age

In corroboration to the above finding, the results also show a high probability of work participation for women in the age group 30 to 49 years; with the highest being for women in the age group 30 to 39 years. This is found for all the states under study. Further, the value of the coefficient for the mentioned age group is seen to be increasing and higher relative to other age groups. Bihar, Orissa and Uttar Pradesh though exhibiting similar results, are observed to be having much lower coefficients compared to all the other states. Also, for states like Maharashtra, Uttar Pradesh and the Smaller states, the value of the coefficient though the highest for the 30 to 39 age group is seen to be declining over the years. However, in certain cases like that of West Bengal, Rajasthan and the North Eastern states, a higher probability of work participation is also witnessed for those in the age group 20 to 29 years of age; although the coefficient for the North Eastern states declined over the years.

4. Social Characteristics

The results of the estimation indicate that women belonging to the Scheduled Tribe (ST) are likely to have the highest probability of work participation compared to women belonging to other social groups. The results are similar for almost all the states in India. SC's have a lower likelihood of work participation than the ST's. The major exception is for the state of Haryana where the ST and SC have a very low likelihood of being in the work force. In the state of Punjab where there is a large Scheduled Caste (SC) population, the probability of work participation by SC women is seen to be much higher than women from different social groups. In the North Eastern States, the picture is just the opposite; STs have a higher likelihood of work participation and SC's have a lower likelihood. However, these are only a few certain exceptions, mainly due to the composition of the population, as the overall picture in the rural areas shows a higher participation for ST women compared to the SC.

5. Religious Characteristics

Religious characteristics of households also influence women's work participation. The results of the analysis in most cases show the highest probability of work participation for Christians followed by Hindus, with the lowest probability of work participation for Muslims, compared to women belonging to other religious groups. The only exception for Muslim women is seen in Punjab and Haryana where the result shows a better likelihood of their work participation. However, in some states like Haryana and Rajasthan, Christians were dropped from the analysis due to small sample size. For a vast majority of states like Uttar Pradesh, Madhya Pradesh, West Bengal and the Smaller

states the likelihood of their work participation is notably as mentioned ahead. However, for Maharashtra the likelihood of women by different religious group to be in the work force is quite low.

6. Other Household Characteristics

(i) Female-Headed Households

As far as household characteristics are concerned it is observed that female headed households have a very high probability of having women participate in labour market activities. This is witnessed for all the states under study without an exception.

(ii) Household Type

Further, women who come from households where the main source of income is derived from agriculture or are self-employed in agricultural activities are more likely to participate in the labour market compared to those whose main income is generated from other sources. Also, in this case not much variation is seen for the different states. Yet there are exceptions: the states like Bihar, Karnataka, Maharashtra, Uttar Pradesh, West Bengal and the Smaller states in addition to the aforementioned show higher participation for women whose main source of income is from other sources of labour. Further, the values of the coefficient were not constant over time and were either increasing for some or declining for these states.

(iii) Level of Living of Households

Higher probability of work participation is also observed for women coming from poorer households and lower probability of work participation for women coming from

richer households. For all states the value of the coefficient is negative indicating an inverse relationship between income levels and work participation.

A summary of the above findings shows that while household characteristics have a positive influence on the likelihood of women working in the rural areas, the case is not so for individual characteristics. Education appears to have a limited influence on work participation, as seen by the high probability of work participation by illiterate women and low probability of work participation by those in the higher educational levels. However, other individual characteristics such as age and marital status do appear to influence the possibility of women to work. Minor variations are observed across different states due to the heterogeneity in the composition of the population and the level of economic development achieved by them.

Urban: The following are the results of the analysis carried out across different states of the country in the urban areas.

1. Education

In the urban areas the probability of being in the work force for women with an educational attainment of less than a graduate education is meager. In other words compared to women with a graduate and above level of education, the likelihood of women who have lesser educational qualifications to be in the labour force is rather negligible. This is true for a majority of the states which include Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Orissa, Punjab, West Bengal and the Smaller states. However in Bihar, Madhya Pradesh, Rajasthan and the North Eastern states there are some exceptions for the illiterates as their chances of being in the labour

market appear to be encouraging. Nevertheless, the value of the coefficient though positive is still very small for the illiterates. On the other hand, for Uttar Pradesh and Tamil Nadu illiterates have a higher likelihood of work participation, while the likelihood of being in the work force for women with an educational attainment of less than a graduate level is lower. The only difference from the earlier states is that in these two states the value of the coefficient for the illiterates, while initially being higher, gradually declines over time. This reflects the demand for more educated persons in the urban areas as compared to the rural areas. In another aspect it also shows that lower the level of educational attainment lesser is the employability of women in the urban areas. Or it could reflect the structure of work in the urban areas which could have a greater demand for a more educated work force.

2. Marital Status

For a majority of states, the results show that women who have never been married or those who are divorced or widowed have the highest probability of being in the work force compared to those who are currently married. This is observed for women who are under the age of 35 years. On the other hand, for women who are above 35 years of age the likelihood of being in the work force differs according to their marital status. For instance, in states like Bihar, Madhya Pradesh, Gujarat, Karnataka, Orissa, Rajasthan, Uttar Pradesh, West Bengal and the Smaller and North Eastern states the likelihood of never married women above the age of 35 years to be in the work force is much higher. Nevertheless, the values of the coefficients differ for the different states. For the widowed or divorced women above 35 years, the likelihood of work participation is

much lower compared to the currently married women. Karnataka, Rajasthan, Andhra Pradesh and Haryana are some of the states for which such results are obtained. Even in cases where it is initially encouraging it eventually declines over time, such as in Madhya Pradesh, West Bengal, Rajasthan, Uttar Pradesh and West Bengal. Only in Maharashtra and the Smaller states there is a higher probability of widowed or divorced women above 35 years, to be employed in the labour market. It is also to be noted here that for certain years due to small sample size women who have never been married is dropped from the analysis.

3. Age

For all the states where analysis has been carried out, women in the age group 30 to 49 years have the highest likelihood of work participation compared to those in the age group 60 years and above. The increasing value of the coefficient over time, for this age group, indicates growing participation for women in this particular age group. In certain exceptional cases, like in Kerala, we find a very high probability of women in the 50 to 59 age group to be in the work force. Further, in Orissa and Haryana, the probability of work participation by women in the age group 40 to 49 years is observed to be higher than even the 30 to 39 years age group.

4. Social Characteristics

Women belonging to ST and SC social groups have a better likelihood of being in the labour market compared to women belonging to other social groups both women. However, the probability of work participation is likely to be much higher for ST women compared to SC women. The value of the coefficient for SC women though

positive is very less in comparison to that of the ST's. The results are uniform for almost all the states. However, in some states such as Punjab, Kerala and Karnataka the likelihood of ST women to be in the work force is generally lower; while that of the SC women is higher with a declining value of the coefficient. Another exception is in the North Eastern states where the SC's are observed to be having a lesser likelihood of work participation. In a few cases analysis was not possible due to a very small sample size either for SC or ST groups.

5. Religious Characteristics

In most of the states it can be seen that compared to other religious groups, Christians have the highest probability of being in the work force. They are closely followed by Hindus. However the probability of Hindu women having a higher probability of work participation than Christians is seen mostly in just a few states such as Maharashtra, Kerala and the Smaller states. On the other hand, Muslim women are likely to have lesser likelihood of participating in the labour market. This is seen in most states including Bihar, Maharashtra, Orissa and the North Eastern states. The value of the coefficient for Muslims remained near-zero or negative throughout the entire period under study reflecting a very low probability of work participation. In some states namely, Haryana and Rajasthan Christians have been dropped from the analysis due to small sample size.

6. Other Household Characteristics

(i) Female-Headed Households

Women who come from female-households headed have a higher probability of participating in the labour market. This is also reflected in the high values of the coefficients for all states during 1983 to 2004-05. The results are observed to be the same for all the states under study.

(ii) Household Type

Women who come from households where the main source of income is from casual labour have the highest probability of work participation compared to those who derive their income from other sources. Nevertheless, there are variations in the value of the coefficients resulting in varying scale of work participation. For instance, in Gujarat, households whose main source of income is from casual labour have a 55 per cent probability of sending the women to work. This is found for almost all the states barring a few. In Punjab and Rajasthan regular wage and salaried women appear to have a marginal one per cent edge over the casual wage earners in terms of probability of work participation. In the North Eastern States, Smaller states, Madhya Pradesh, Uttar Pradesh and Bihar women whose main source of household income is from self-employment, casual and regular wage are observed to have a lower likelihood of being in the labour market relative to those whose main source of income is from other forms of urban labour. This shows that these states majorly depend on other sources of income for their livelihood. Since information on casual and regular wage earners was not available for 1983, analysis of data is not inclusive of them.

(iii) Level of Living of Households

The results indicate a high probability of work participation for women coming from poorer households and a lower probability of work participation for women who come from richer households. This result is observed for all states. Additionally, the value of the coefficient is negative for all states in the urban areas of the country.

The results for the urban areas do not appear to differ much from that of the rural areas. Household and individual characteristics all influence women work participation, though with some degree of variations. For instance, the higher probability of work participation by educated women in urban areas as opposed to a lower probability in rural areas shows such variations.

5.5 Summary

In the preceding sections we have examined the likelihood of women being in the work force by examining the effects of a limited number of explanatory variables. From the econometric analysis it becomes evident that participation of women in the work force is largely influenced by both individual and household characteristics. Education emerges as an important determinant in influencing women's participation in the work force. The higher probability of their participation would largely depend on the level of education received by them. Other individual characteristics such as marital status and age also have an effect on women's work participation. Further, other household characteristics such as religion and social backgrounds of individuals also have some bearing on WWPR. The types of households that women come from such as the level of living of households, main source of livelihood and head of households are

also important indicators which characterize their employability. However, the influence of the explanatory variables on the probability of work participation of women also differs by place of residence. This is largely because the nature of and the demand for work differs in the rural and urban areas. The distinguishing feature of the result at the state level is the absence of uniformity. Bihar, Orissa, Uttar Pradesh, West Bengal and the North Eastern states are some of the lowest performers compared to Andhra Pradesh, Karnataka which are some of the high performers.

We observe that the explanatory variables do explain the probability of work participation by the women. Yet, the explanatory variables included in the Probit analysis do not fully explain the WWPR, and thus, although WWPR is an outcome of the joint operation of the included explanatory variables, there are many other unrecorded factors determining it. This gives rise to the residuals. In case of some states and some years, the residuals are larger in magnitude than in case of some other states/years. Further, we have visualized that the explanatory variables (in their transform) linearly determine the WWPR. In reality, it might not be the case.

Table 5.1: Results of the Maximum Likelihood Probit Estimates: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 088(02)	4 680	0 035	0 017(02)	0 900	0 007	0 018(04)	0 420	0 007	0 028(03)	1 030	0 011	0 008(02)	0 320	0 003
Never Married-Old	-0 278(09)	-2 930	-0 110	-0 375(08)	-4 500	-0 145	-0 351(13)	-2 610	-0 136	-0 215(10)	-2 060	-0 083	-0 388(09)	-4 500	-0 149
Widowed/ Divorced-Young	0 343(07)	5 100	0 134	0 386(04)	9 870	0 152	0 209(06)	3 310	0 083	0 115(06)	1 930	0 046	0 050(06)	0 830	0 020
Widowed/ Divorced-Old	-0 270(02)	-14 370	-0 107	-0 306(02)	-16 610	-0 120	-0 464(07)	-6 880	-0 179	-0 388(06)	-6 350	-0 147	-0 312(06)	-5 030	-0 122
ST	0 476(02)	31 420	0 184	0 453(01)	30 430	0 177	-0 047(04)	-1 340	-0 019	0 538(02)	30 080	0 212	0 430(02)	23 010	0 169
SC	0 058(01)	4 130	0 023	0 044(01)	3 460	0 017	0 546(03)	16 550	0 212	0 042(01)	3 040	0 017	-0 028(01)	-1 960	-0 011
15 to 19 years	0 666(02)	28 220	0 253	0 607(02)	24 850	0 235	0 512(06)	8 710	0 200	0 419(03)	12 310	0 166	0 377(03)	11 990	0 149
20 to 29 years	0 810(02)	39 420	0 309	0 768(02)	37 050	0 297	0 778(05)	15 690	0 300	0 743(02)	32 260	0 290	0 666(02)	28 030	0 259
30 to 39 years	0 993(02)	47 060	0 364	0 969(02)	46 180	0 362	1 023(05)	20 560	0 380	0 998(02)	44 000	0 380	0 996(02)	42 810	0 373
40 to 49 years	0 975(02)	46 450	0 353	0 962(02)	46 560	0 356	0 980(05)	20 910	0 361	0 970(02)	41 500	0 366	0 987(02)	41 940	0 364
50 to 59 years	0 743(02)	35 940	0 277	0 706(02)	34 280	0 269	0 682(07)	9 970	0 260	0 732(02)	31 020	0 283	0 739(02)	30 430	0 280
Not Literate	0 417(08)	5 530	0 164	0 348(06)	5 400	0 137	0 296(07)	4 100	0 117	0 281(05)	5 210	0 110	0 119(04)	3 070	0 047
Literate-Below Primary	0 165(08)	2 140	0 066	0 081(07)	1 230	0 032	0 006(08)	0 070	0 002	0 056(06)	1 010	0 022	-0 111(04)	-2 710	-0 044
Literate-Primary	0 104(08)	1 360	0 041	0 003(07)	0 040	0 001	-0 018(08)	-0 230	-0 007	0 049(06)	0 870	0 019	-0 097(04)	-2 410	-0 038
Literate-Middle	-0 174(08)	-2 250	-0 069	-0 187(07)	-2 800	-0 074	-0 240(08)	-3 130	-0 094	-0 187(06)	-3 370	-0 073	-0 224(04)	-5 650	-0 088
Literate-Secondary	-0 164(08)	-2 030	-0 065	-0 217(07)	-3 200	-0 086	-0 342(08)	-4 420	-0 133	-0 247(06)	-4 380	-0 095	-0 384(04)	-9 450	-0 149
Hindu	0 000(02)	0 010	0 000	-0 097(02)	-4 060	-0 039	-0 006(06)	-0 100	-0 002	-0 028(03)	-1 090	-0 011	-0 222(02)	-9 010	-0 089
Muslim	-0 530(03)	-19 010	-0 205	-0 590(03)	-20 980	-0 223	-0 632(07)	-9 250	-0 237	-0 542(03)	-15 640	-0 200	-0 803(03)	-26 750	-0 293
Christian	0 231(03)	6 640	0 091	0 047(04)	1 340	0 019	-0 039(11)	-0 360	-0 016	-0 095(04)	-2 400	-0 037	-0 241(04)	-6 250	-0 095
Self Employed-Non-agriculture	0 573(02)	24 240	0 220	0 922(02)	42 640	0 335	0 850(05)	17 060	0 326	0 447(02)	19 510	0 177	0 547(02)	25 820	0 214
Agriculture labour	0 916(02)	41 470	0 345	0 532(02)	24 100	0 207	0 617(05)	13 100	0 237	0 891(02)	42 640	0 344	0 966(02)	43 860	0 364
Other Labour	0 707(03)	25 950	0 262	0 841(02)	41 040	0 323	0 578(03)	16 880	0 227	0 523(03)	20 170	0 206	0 682(02)	28 910	0 261
Self Employed-agriculture	0 668(02)	33 220	0 261	0 701(02)	29 150	0 266	0 489(04)	13 450	0 191	0 619(02)	31 780	0 242	0 811(02)	41 620	0 315
Female Head	0 951(02)	38 910	0 336	0 601(02)	31 600	0 236	0 931(09)	10 490	0 338	0 855(02)	35 610	0 324	0 704(02)	28 260	0 267
MPCE	-0 006(00)	-2 970	-0 002	0 000(00)	-0 100	0 000	-0 003(00)	-0 690	-0 001	0 000(00)	-0 140	0 000	-0 021(00)	-9 820	-0 008
Constant	-1 775(08)	-21 360		-1 589(07)	-21 780		-1 538(12)	-12 670		-1 616(07)	-24 180		-1 126(05)	-21 040	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.2: Results of the Maximum Likelihood Probit Estimates: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 254(03)	8 160	0 076	0 351(03)	12 260	0 106	0 364(08)	4 750	0 112	0 292(03)	8 880	0 079	0 447(04)	11 870	0 137
Never Married-Old	0 458(09)	5 030	0 152	0 413(09)	4 710	0 133	0 411(12)	3 410	0 134	0 477(10)	4 790	0 145	0 451(11)	4 190	0 146
Widowed/ Divorced-Young	0 725(07)	10 760	0 254	0 701(06)	11 110	0 242	0 256(10)	2 500	0 078	0 077(10)	0 760	0 020	0 179(11)	1 600	0 052
Widowed/ Divorced-Old	0 013(04)	0 370	0 004	-0 023(03)	-0 680	-0 006	-0 263(12)	-2 130	-0 068	-0 025(10)	-0 240	-0 006	-0 097(11)	-0 850	-0 026
ST	0 310(05)	5 990	0 098	0 296(04)	7 820	0 092	0 220(09)	2 470	0 067	0 237(04)	5 830	0 065	0 245(05)	4 740	0 074
SC	0 201(02)	8 180	0 060	0 181(02)	7 780	0 053	0 097(04)	2 200	0 028	0 178(02)	7 260	0 047	0 020(03)	0 680	0 005
15 to 19 years	0 326(05)	5 960	0 100	0 209(05)	4 300	0 061	-0 038(22)	-0 170	-0 011	0 309(06)	5 450	0 085	0 222(07)	3 400	0 065
20 to 29 years	0 552(05)	11 580	0 169	0 505(04)	12 500	0 152	0 398(21)	1 920	0 120	0 657(04)	14 830	0 187	0 664(05)	13 520	0 205
30 to 39 years	0 775(05)	16 420	0 255	0 806(04)	20 160	0 262	0 733(21)	3 550	0 236	0 989(04)	23 050	0 302	1 019(05)	22 050	0 333
40 to 49 years	0 779(040	17 400	0 262	0 828(04)	21 200	0 278	0 846(20)	4 320	0 287	0 971(04)	22 330	0 310	0 946(05)	20 810	0 316
50 to 59 years	0 539(040	12 340	0 177	0 567(04)	14 610	0 185	0 598(19)	3 200	0 199	0 795(04)	18 700	0 254	0 739(05)	15 690	0 247
Not Literate	-0 037(04)	-0 930	-0 010	-0 156(03)	-4 790	-0 043	-0 489(10)	-4 960	-0 130	-0 175(04)	-4 500	-0 042	-0 181(04)	-4 740	-0 048
Literate-Below Primary	-0 342(05)	-7 550	-0 086	-0 407(04)	-11 040	-0 097	-0 439(11)	-3 960	-0 105	-0 373(04)	-8 660	-0 079	-0 335(04)	-7 570	-0 081
Literate-Primary	-0 489(04)	-11 670	-0 118	-0 528(03)	-15 450	-0 123	-0 748(09)	-8 280	-0 160	-0 497(04)	-11 920	-0 101	-0 355(04)	-8 840	-0 086
Literate-Middle	-0 717(04)	-16 190	-0 158	-0 696(04)	-19 410	-0 151	-0 884(09)	-10 310	-0 182	-0 584(04)	-14 900	-0 119	-0 574(04)	-14 910	-0 132
Literate-Secondary	-0 483(04)	-11 410	-0 116	-0 501(03)	-14 750	-0 119	-0 798(09)	-8 470	-0 181	-0 578(04)	-15 850	-0 123	-0 682(03)	-19 770	-0 157
Hindu	0 164(05)	3 220	0 045	0 211(04)	5 470	0 056	0 180(05)	3 790	0 048	0 151(05)	3 310	0 036	-0 017(06)	-0 300	-0 005
Muslim	-0 134(05)	-2 430	-0 036	-0 074(04)	-1 720	-0 020	-0 022(09)	-0 230	-0 006	-0 122(05)	-2 400	-0 029	-0 289(06)	-4 600	-0 073
Christian	0 510(07)	7 600	0 170	0 593(06)	10 690	0 199	0 429(06)	7 280	0 140	0 523(06)	8 290	0 160	0 281(07)	3 850	0 086
Self Employed	0 123(02)	7 350	0 035	0 899(05)	17 980	0 268	1 045(08)	13 750	0 318	0 830(05)	18 160	0 225	1 225(06)	21 140	0 355
Regular Wage/ Salaried	NA	NA	NA	0 737(05)	14 810	0 212	0 896(08)	11 740	0 260	0 690(05)	15 250	0 182	1 149(06)	19 880	0 337
Casual Labour	NA	NA	NA	1 223(05)	23 240	0 430	1 399(09)	15 910	0 495	1 047(05)	21 600	0 342	1 353(06)	21 970	0 478
Female Head	0 864(03)	25 470	0 304	0 999(03)	29 100	0 353	1 119(10)	11 180	0 400	1 112(04)	30 110	0 380	0 765(04)	17 400	0 260
MPCE	-0 041(00)	-12 970	-0 012	-0 036(00)	-11 610	-0 010	-0 061(01)	-6 690	-0 017	-0 045(00)	-11 930	-0 011	-0 071(00)	-16 890	-0 020
Constant	-1 129(08)	-14 610		-1 948	-24 280		-1 578(24)	-6 620		-1 994(08)	-23 770		-1 938(10)	-20 210	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.3: Results of the Maximum Likelihood Probit Estimates for Andhra Pradesh: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	-0 335(08)	-4 150	-0 124	-0 288(09)	-3 040	-0 107	-0 327(09)	-3 620	-0 107	-0 150(10)	-1 550	-0 054	-0 140(.10)	-1 420	-0 051
Never Married-Old	-0 720(39)	-1 860	-0 277	-0 797(36)	-2 230	-0 308	-0 178(30)	-0 590	-0 057	-0 481(40)	-1 210	-0 184	-0 760(44)	-1 740	-0 295
Widowed/ Divorced-Young	0 224(12)	1 870	0 073	0 139(14)	1 010	0 048	-0 296(19)	-1 570	-0 095	-0 334(19)	-1 790	-0 123	-0 309(17)	-1 770	-0 115
Widowed/ Divorced-Old	-0 419(07)	-6 430	-0 154	-0 489(07)	-7 160	-0 184	-0 082(20)	-0 420	-0 025	-0 456(19)	-2 370	-0 170	-0 047(18)	-0 260	-0 017
ST	0 404(08)	4 780	0 125	0 220(08)	2 810	0 074	0 469(12)	3 990	0 118	0 354(08)	4 540	0 115	0 291(09)	3 080	0 097
SC	0 261(05)	5 280	0 086	0 124(05)	2 390	0 043	0 328(07)	4 770	0 090	0 174(06)	3 050	0 060	0 107(06)	1 810	0 038
15 to 19 years	1 275(09)	14 820	0 311	1 185(09)	13 300	0 308	1 256(10)	12 560	0 244	1 056(11)	9 500	0 281	1 233(12)	10 400	0 318
20 to 29 years	1 345(08)	17 390	0 371	1 209(08)	15 570	0 358	1 265(09)	14 280	0 291	1 170(08)	14 130	0 342	1 323(09)	14 900	0 373
30 to 39 years	1 417(08)	17 800	0 352	1 444(08)	18 050	0 369	1 553(09)	17 690	0 309	1 439(08)	17 150	0 379	1 690(09)	19.180	0 427
40 to 49 years	1 323(08)	17 410	0 324	1 277(08)	16 370	0 329	1 297(09)	14 260	0 260	1 308(08)	15 500	0 332	1 399(09)	16 140	0 354
50 to 59 years	0 990(07)	13 600	0 259	0 896(07)	12 290	0 251	0 856(08)	10 660	0 188	0 917(09)	10 520	0 252	1 070(09)	12 300	0 282
Not Literate	1 091(31)	3 550	0 411	0 305(30)	1 030	0 113	0 840(33)	2 550	0 289	0 230(23)	1 010	0 084	0 560(21)	2 720	0 206
Literate-Below Primary	*0 480(31)*	*1 530*	*0 144*	*-0 174(30)*	*-0 580*	*-0 064*	*0 306(33)*	*0 920*	*0 082*	*-0 281(23)*	*-1 200*	*-0 104*	*0 271(21)*	*1 270*	*0 091*
Literate-Primary	0 243(31)	0 780	0 079	-0 451(30)	-1 500	-0 172	0 138(33)	0 410	0 039	-0 334(23)	-1 430	-0 125	-0 046(21)	-0 220	-0 017
Literate-Middle	0 124(32)	0 380	0 042	-0 606(30)	-1 990	-0 234	-0 085(34)	-0 250	-0 026	-0 686(24)	-2 910	-0 264	-0 102(21)	-0 480	-0 037
Literate-Secondary	-0 054(34)	-0 160	-0 019	-0 789(32)	-2 480	-0 305	-0 243(35)	-0 700	-0 079	-0 761(24)	-3 180	-0 293	-0 431(21)	-2 040	-0 163
Hindu	-0 586(26)	-2 300	-0 172	-0 172(43)	-0 400	-0 059	0 583(56)	1 040	0 201	0 513(.23)	2 220	0 195	0 502(47)	1 060	0 192
Muslim	-1 017(27)	-3 810	-0 388	-0 493(44)	-1 130	-0 188	0 087(57)	0 150	0 025	0 034(25)	0 140	0 012	0 205(48)	0 430	0 070
Christian	-0 296(28)	-1 060	-0 109	-0 095(44)	-0 210	-0 034	0 661(57)	1 150	0 148	0 784(27)	2 860	0 214	0 307(49)	0 620	0 101
Self Employed-Non-agriculture	0 926(08)	11 780	0 250	0 914(09)	9 900	0 259	1 012(09)	10 770	0 220	0 703(09)	7 770	0 210	1 003(08)	12 730	0 285
Agriculture labour	1 134(07)	15 640	0 354	1 022(09)	11 830	0 330	1 161(09)	12 930	0 311	0 992(08)	12 320	0 328	1 104(08)	14 240	0 350
Other Labour	0 775(09)	8 410	0 211	0 665(11)	6 060	0 198	0 869(10)	8 530	0 184	0 526(11)	4 830	0 161	0 719(09)	7 760	0 212
Self Employed-agriculture	1 023(07)	14 390	0 313	1 103(08)	13 080	0 339	1 158(08)	14 030	0 280	0 939(08)	11 610	0 289	1 308(08)	17 280	0 380
Female Head	1 079(08)	13 700	0 265	0 890(09)	10 380	0 243	0 984(10)	10 020	0 199	1 086(10)	11.260	0 277	0 788(09)	8 390	0 227
MPCE	-0 029(01)	-4 570	-0 010	-0 031(01)	-4 570	-0 011	-0 029(01)	-3 130	-0 009	-0 025(01)	-2 730	-0 009	-0 064(01)	-7 180	-0 023
Constant	-1 911(41)	-4 650		-1 394(53)	-2 630		-2 665(66)	-4 050		-1 858(34)	-5 540		-2 400(52)	-4 660	

Note: dy/dx are marginal effects, i.e., the change in probability of women working with a one-unit change in the right side variable. z is the test of the underlying coefficient being 0. The figures in brackets denote the standard error of estimates.

Table 5.4: Results of the Maximum Likelihood Probit Estimates for Andhra Pradesh: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 140(10)	1 380	0 045	0 196(10)	2 040	0 068	0 118(18)	0 670	0 043	0 169(11)	1 520	0 050	-0 069(14)	-0 480	-0 021
Never Married-Old	0 376(49)	0 760	0 129	-0 759(45)	-1 680	-0 190	0 087(44)	0 200	0 031	0 669(43)	1 560	0 232	0 818(40)	2 020	0 304
Widowed/ Divorced-Young	0 627(17)	3 630	0 225	0 851(21)	4 020	0 325	0 722(32)	2 270	0 270	0 305(44)	0 700	0 093	0 296(30)	0 990	0 098
Widowed/ Divorced-Old	-0 121(10)	-1 200	-0 036	-0 265(10)	-2 640	-0 084	-1 299(44)	-2 990	-0 349	-0 479(43)	-1 120	-0 115	-0 239(33)	-0 730	-0 070
ST	0 432(16)	2 680	0 150	0 336(16)	2 040	0 122	0 308(21)	1 500	0 115	0 021(16)	0 130	0 006	-0 087(16)	-0 540	-0 026
SC	0 258(09)	2 920	0 085	0 159(08)	1 930	0 055	0 397(14)	2 820	0 149	-0 006(09)	-0 070	-0 002	-0 131(11)	-1 240	-0 039
15 to 19 years	0 571(15)	3 920	0 195	0 347(14)	2 420	0 123	-0 557(45)	-1 240	-0 172	0 591(17)	3 480	0 193	0 750(23)	3 280	0 267
20 to 29 years	0 673(13)	5 180	0 223	0 477(12)	3 870	0 168	-0 322(44)	-0 720	-0 108	0 777(14)	5 680	0 244	0 822(18)	4 560	0 279
30 to 39 years	0 934(13)	7 200	0 329	0 690(12)	5 560	0 252	0 349(47)	0 740	0 128	1 017(13)	7 690	0 337	1 252(17)	7 220	0 443
40 to 49 years	0 908(12)	7 410	0 325	0 830(12)	6 970	0 310	0 640(47)	1 370	0 243	0 996(14)	7 370	0 343	0 869(18)	4 930	0 310
50 to 59 years	0 745(12)	6 200	0 266	0 527(12)	4 550	0 194	0 571(44)	1 300	0 217	0 793(13)	5 960	0 272	0 680(18)	3 840	0 243
Not Literate	-0 198(18)	-1 100	-0 061	-0 041(13)	-0 320	-0 014	-0 800(22)	-3 670	-0 280	0 049(11)	0 420	0 014	-0 210(14)	-1 530	-0 064
Literate-Below Primary	-0 656(19)	-3 400	-0 160	-0 508(14)	-3 640	-0 149	-0 288(23)	-1 260	-0 095	-0 319(14)	-2 280	-0 080	-0 544(16)	-3 360	-0 140
Literate-Primary	-0 915(19)	-4 860	-0 210	-0 601(14)	-4 250	-0 171	-1 210(22)	-5 520	-0 301	-0 763(14)	-5 650	-0 159	-0 579(15)	-3 780	-0 149
Literate-Middle	-0 907(19)	-4 720	-0 201	-0 870(14)	-6 040	-0 224	-1 174(16)	-7 240	-0 286	-0 662(12)	-5 330	-0 149	-0 870(15)	-5 810	-0 202
Literate-Secondary	-0 706(20)	-3 580	-0 170	-0 659(14)	-4 660	-0 184	-1 063(15)	-7 280	-0 276	-0 733(11)	-6 620	-0 168	-0 876(14)	-6 390	-0 216
Hindu	-0 283(35)	-0 810	-0 092	0 262(49)	0 530	0 084	0 540(61)	0 890	0 169	1 028(34)	3 050	0 213	5 332(31)	17 150	0 613
Muslim	-0 508(35)	-1 440	-0 135	-0 224(50)	-0 450	-0 072	0 530(64)	0 830	0 200	0 402(34)	1 170	0 126	4 728(33)	14 270	0 930
Christian	0 011(37)	0 030	0 003	0 615(51)	1 210	0 231	1 026(63)	1 630	0 392	1 319(37)	3 560	0 480	5 551(36)	15 260	0 801
Self Employed	0 325(05)	6 450	0 103	1 237(18)	6 720	0 429	1 360(24)	5 590	0 473	1 012(15)	6 590	0 315	2 042(27)	7 610	0 623
Regular Wage/ Salaried	NA	NA	NA	0 809(18)	4 390	0 279	0 919(22)	4 100	0 338	0 686(15)	4 500	0 202	1 692(27)	6 320	0 550
Casual Labour	NA	NA	NA	1 258(19)	6 700	0 465	1 792(30)	5 880	0 629	1 057(16)	6 610	0 359	1 862(27)	6 800	0 647
Female Head	1 025(10)	9 920	0 376	1 071(11)	9 560	0 404	1 369(37)	3 670	0 505	1 193(12)	9 580	0 430	0 811(17)	4 760	0 295
MPCE	-0 072(01)	-7 630	-0 022	-0 064(01)	-6 490	-0 021	-0 116(03)	-4 390	-0 041	-0 063(01)	-5 190	-0 018	-0 103(01)	-7 100	-0 032
Constant	-0 418(42)	-1 010		-1 674(55)	-3 040		-0 967(77)	-1 260		-2 713(40)	-6 710		-7 493		

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.5: Results of the Maximum Likelihood Probit Estimates for Bihar: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 240(07)	3 340	0 092	0 183(09)	2 050	0 064	0 008(09)	0 090	0 002	0 063(08)	0 760	0 020	-0 025(09)	-0 270	-0 008
Never Married-Old	-0 325(30)	-1 080	-0 111	-0 235(28)	-0 820	-0 072	0 067(29)	0 230	0 020	-0 624(36)	-1 720	-0 148	0 251(39)	0 650	0 087
Widowed/ Divorced-Young	0 405(11)	3 690	0 158	0 416(16)	2 620	0 153	0 640(33)	1 940	0 221	1 361(49)	2 790	0 499	0 551(34)	1 630	0 200
Widowed/ Divorced-Old	-0 161(05)	-3 130	-0 058	-0 027(06)	-0 460	-0 009	-0 519(34)	-1 540	-0 127	-1 279(49)	-2 600	-0 245	-0 396(34)	-1 170	-0 114
ST	1 168(05)	23 120	0 439	0 812(04)	18 980	0 304	0 904(07)	13 430	0 325	0 755(05)	13 970	0 274	0 848(07)	11 520	0 317
SC	0 479(04)	13 350	0 185	0 453(04)	11 210	0 163	0 365(07)	5 600	0 116	0 486(04)	11 860	0 164	0 282(05)	5 790	0 096
15 to 19 years	0 297(07)	4 250	0 114	0 337(09)	3 910	0 120	0 144(11)	1 350	0 044	0 031(10)	0 300	0 010	0 001(12)	0 010	0 000
20 to 29 years	0 532(06)	8 980	0 203	0 594(07)	8.680	0 210	0 457(08)	5 520	0 144	0 538(08)	6 780	0 179	0 464(09)	5 010	0 160
30 to 39 years	0 791(06)	13 280	0 304	0 739(07)	10 710	0 268	0 675(09)	7 110	0 223	0 810(08)	10 270	0 280	0 803(09)	8 730	0 285
40 to 49 years	0 823(06)	14 010	0 318	0 868(07)	12 860	0 322	0 687(08)	8 430	0 234	0 767(08)	9 710	0 271	0 750(09)	8 240	0 272
50 to 59 years	0 806(06)	13 590	0 313	0 637(07)	9 220	0 236	0 554(08)	6 620	0 187	0 522(08)	6 530	0 182	0 598(09)	6 370	0 217
Not Literate	-0 094(29)	-0 320	-0 035	-0 044(20)	-0 220	-0 015	-0 216(.19)	-1 140	-0 067	0 386(19)	2 040	0 110	-0 017(16)	-0 110	-0 006
Literate-Below Primary	-0 390(30)	-1 300	-0 132	-0 524(21)	-2 520	-0 147	-0 411(20)	-2 070	-0 104	0 099(20)	0 500	0 032	-0 244(17)	-1 450	-0 074
Literate-Primary	-0 634(31)	-2 070	-0 198	-0 460(21)	-2 170	-0 131	-0 477(21)	-2 300	-0 116	0 100(20)	0 490	0 032	-0 406(18)	-2 310	-0 116
Literate-Middle	-0 777(30)	-2 580	-0 233	-0 605(22)	-2 790	-0 163	-0 607(21)	-2 950	-0 140	-0 049(20)	-0 250	-0 015	-0 269(17)	-1 550	-0 081
Literate-Secondary	-0 533(32)	-1 660	-0 172	-0 513(22)	-2 290	-0 143	-0 680(21))	-3 200	-0 150	-0 128(20)	-0 630	-0 038	-0 372(18)	-2 060	-0 107
Hindu	0 688(24)	2 860	0 222	-0 087(19)	-0 460	-0 030	0 373(26)	1 420	0 099	-0 223(22)	-1 030	-0 073	-0 339(11)	-2 970	-0 117
Muslim	0 546(24)	2 240	0 212	-0 152(19)	-0 780	-0 049	0 270(27)	1 020	0 086	-0 100(22)	-0 450	-0 030	-0 502(13)	-3 960	-0 142
Christian	1 013(27)	3 770	0 385	0 340(22)	1 540	0 123	0 532(29)	1 810	0 184	-0 285(25)	-1 160	-0 079	-0 296(15)	-1 960	-0 087
Self Employed-Non-agriculture	0 632(06)	11 290	0 246	0 568(06)	9 150	0 208	0 575(10)	6 030	0 196	0 668(07)	10 160	0 237	0 488(07)	7 000	0 172
Agriculture labour	0 851(05)	17 430	0 321	0 855(06)	15 390	0 303	1 070(09)	11 330	0 346	0 997(06)	17 330	0 336	0 759(07)	10 400	0 271
Other Labour	0 753(10)	7 760	0 294	0 869(07)	12 270	0 329	0 787(12)	6 690	0 283	0 538(09)	5 990	0 191	0 768(09)	8 720	0 287
Self Employed-agriculture	0 484(05)	10 400	0 181	0 544(05)	10 470	0 186	0 499(08)	5 970	0 153	0 600(06)	10 700	0 196	0 639(06)	9 860	0 215
Female Head	0 991(06)	18 010	0 379	1 057(06)	17 700	0 399	1 274(07)	17 090	0 467	0 912(06)	14 210	0 336	0 495(08)	6 240	0 179
MPCE	-0 035(01)	-6 270	-0 013	-0 023(01)	-3 690	-0 008	-0 006(01)	-0 640	-0 002	0 010(01)	1 250	0 003	-0 010(01)	-1 210	-0 003
Constant	-2 139(38)	-5 620		-1 714(28)	-6 060		-2 192(33)	-6 550		-2 205(30)	-7 410		-1 383(22)	-6 200	

Note· dy/dx are marginal effects, i e., the change in probability of women working with a one-unit change in the right side variable. z is the test of the underlying coefficient being 0. The figures in brackets denote the standard error of estimates.

Table 5.6: Results of the Maximum Likelihood Probit Estimates for Bihar: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 271(12)	2 220	0 088	-0 043(11)	-0 370	-0 012	-0 072(12)	-0 590	-0 016	-0 295(13)	-2 340	-0 075	-0 249(11)	-2 340	-0 085
Never Married-Old	-0 549(41)	-1 350	-0 128	0 502(35)	1 450	0 170	0 710(42)	1 680	0 223	-0 927(49)	-1 880	-0 164	0 160(48)	0 330	0 059
Widowed/ Divorced-Young	0 378(17)	2 220	0 127	0 240(21)	1 150	0 075	0 347(52)	0 660	0 094	0 256(52)	0 490	0 066	0 524(31)	1 690	0 200
Widowed/ Divorced-Old	-0 165(08)	-1 960	-0 047	-0 073(09)	-0 840	-0 020	-0 200(53)	-0 380	-0 043	-0 482(52)	-0 930	0 157	-0 310(31)	-0 990	-0 104
ST	0 820(13)	6 150	0 298	0 604(14)	4 430	0 207	0 424(14)	3 020	0 120	0 311(13)	2 370	0 098	0 407(08)	4 870	0 152
SC	0 788(05)	15 240	0 271	0 703(05)	14 580	0 230	0 783(05)	14 590	0 227	0 531(06)	9 300	0 168	-0 034(07)	-0 460	-0 012
15 to 19 years	-0 065(12)	-0 560	-0 019	0 160(12)	1 340	0 048	0 256(15)	1 740	0 066	0 414(15)	2 800	0 131	0 340(16)	2 100	0 127
20 to 29 years	0 412(09)	4 380	0 131	0 617(10)	6 330	0 194	0 582(12)	4 710	0 155	0 717(12)	6 120	0 227	0 850(13)	6 330	0 319
30 to 39 years	0 669(09)	7 170	0 223	0 697(10)	7 120	0 226	0 882(12)	7 370	0 260	0 993(12)	8 550	0 328	1 096(14)	8 100	0 412
40 to 49 years	0 616(09)	6 590	0 209	0 794(10)	8 130	0 269	0 777(12)	6 470	0 227	0 904(12)	7 750	0 307	0 979(13)	7 390	0 371
50 to 59 years	0 671(09)	7 090	0 233	0 673(10)	6 770	0 228	0 692(12)	5 650	0 207	0 645(12)	5 530	0 216	0 817(13)	6 180	0 314
Not Literate	0 099(21)	0 480	0 029	-0 143(16)	-0 910	-0 042	-0 334(16)	-2 150	-0 084	0 027(14)	0 190	0 008	0 095(16)	0 580	0 034
Literate-Below Primary	-0 193(23)	-0 860	-0 054	-0 599(17)	-3 540	-0 136	-0 875(18)	-4 950	-0 134	-0 559(16)	-3 400	-0 127	-0 107(17)	-0 610	-0 038
Literate-Primary	-0 733(25)	-2 900	-0 160	-0 658(19)	-3 480	-0 142	-0 899(19)	-4 810	-0 131	-0 779(19)	-4 180	-0 156	-0 297(18)	-1 650	-0 099
Literate-Middle	-0 625(22)	-2 830	-0 147	-0 969(19)	-4 980	-0 182	-0 807(18)	-4 490	-0 127	-0 677(16)	-4 140	-0 146	-0 189(18)	-1 070	-0 065
Literate-Secondary	-0 479(24)	-2 030	-0 117	-0 658(19)	-3 510	-0 142	-0 800(17)	-4 620	-0 132	-0 638(16)	-4 030	-0 142	-0 429(19)	-2 270	-0 139
Hindu	0 695(26)	2 650	0 166	-0 039(22)	-0 180	-0 011	-0 137(26)	-0 520	-0 034	0 347(35)	0 980	0 087	-0 346(12)	-2 930	-0 129
Muslim	0 630(27)	2 340	0 216	-0 381(23)	-1 650	-0 096	-0 225(28)	-0 820	-0 049	0 441(36)	1 220	0 141	-0 310(14)	-2 220	-0 104
Christian	0 798(36)	2 190	0 291	0 590(39)	1 510	0 203	-0 012(37)	-0 030	-0 003	1 058(45)	2 330	0 386	-0 286(16)	-1 770	-0 095
Self Employed	-0 071(07)	-1 100	-0 021	-0 367(06)	-5 680	-0 093	-0 472(09)	-5 220	-0 094	-0 493(07)	-7 180	-0 119	-0 844(08)	-9 990	-0 252
Regular Wage/ Salaried	NA	NA	NA	-0 532(07)	-7 300	-0 127	-0 495(08)	-6 370	-0 094	-0 626(10)	-6 410	-0 142	-0 792(10)	-7 950	-0 232
Casual Labour	NA	NA	NA	-0 083(09)	-0 930	-0 023	-0 008(10)	-0 080	-0 002	-0 242(09)	-2 630	-0 062	-0 437(15)	-3 010	-0 139
Female Head	0 986(09)	10 640	0 360	0 862(09)	9 770	0 306	1 091(11)	9 490	0 366	0 473(11)	4 380	0 155	0 378(13)	2 840	0 144
MPCE	-0 073(01)	-8 200	-0 022	-0 044(01)	-4 960	-0 013	-0 070(01)	-6 100	-0 017	-0 028(01)	-2 540	-0 008	-0 045(01)	-4 260	-0 016
Constant	-1 691(35)	-4 820		-0 892(29)	-3 100		-0 733(33)	-2 230		-1 556(38)	-4 070		-0 534(25)	-2 160	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.7: Results of the Maximum Likelihood Probit Estimates for Gujarat: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	-0 151(09)	-1 670	-0 058	0 181(10)	1 890	0 070	-0 433(19)	-2 270	-0 171	0 120(12)	1 050	0 046	0 145(16)	0 930	0 053
Never Married-Old	-0 468(45)	-1 030	-0 184	-0 400(42)	-0 960	-0 158	Dropped			-1 180(43)	-2 720	-0 423	-0 491(43)	-1 140	-0 193
Widowed/ Divorced-Young	-0 036(23)	-0 160	-0 014	0 322(23)	1 390	0 122	-0 059(35)	-0 170	-0 023	0 063(26)	0 240	0 024	0 068(26)	0 260	0 025
Widowed/ Divorced-Old	-0 354(10)	-3 720	-0 138	-0 417(10)	-4 350	-0 165	-0 507(36)	-1 420	-0 200	-0 905(28)	-3 210	-0 348	-0 493(28)	-1 760	-0 192
ST	0 120(06)	1 990	0 045	0 511(07)	7 810	0 192	0 308(08)	3 800	0 119	0 178(07)	2 510	0 068	0 394(09)	4 170	0 139
SC	0 047(08)	0 600	0 018	-0 019(07)	-0 290	-0 008	-0 416(25)	-1 690	-0 165	0 078(09)	0 890	0 030	0 063(10)	0 620	0 023
15 to 19 years	1 194(12)	9 640	0 356	1 032(13)	7 780	0 351	0 726(18)	3 940	0 266	0 568(15)	3 840	0 202	0 895(19)	4 630	0 275
20 to 29 years	1 254(10)	12 300	0 401	1 279(10)	12 370	0 438	0 944(13)	7 340	0 340	1 140(11)	10 290	0 380	1 408(14)	10 350	0 424
30 to 39 years	1 374(10)	13 140	0 410	1 396(11)	13 290	0 447	1 369(17)	8 090	0 457	1 420(11)	12 820	0 436	1 745(13)	13 020	0 464
40 to 49 years	1 074(10)	10 380	0 327	1 251(10)	12 060	0 401	1 111(13)	8 760	0 368	1 347(11)	11 940	0 399	1 753(13)	13 060	0 445
50 to 59 years	0 725(10)	6 960	0 236	0 895(10)	8 620	0 304	0 462(17)	2 660	0 175	0 976(11)	8 730	0 311	1 253(14)	9 080	0 344
Not Literate	0 542(35)	1 540	0 210	0 730(25)	2 890	0 285	1 521(35)	4 350	0 545	0 802(27)	2 920	0 307	0 568(22)	2 600	0 212
Literate-Below Primary	0 617(36)	1 730	0 208	0 464(26)	1 790	0 173	1 612(36)	4 500	0 447	0 651(28)	2 320	0 225	0 315(23)	1 370	0 111
Literate-Primary	0 050(36)	0 140	0 019	0 423(26)	1 640	0 158	1 216(36)	3 380	0 382	0 578(28)	2 030	0 203	0 299(22)	1 340	0 106
Literate-Middle	-0 157(37)	-0 430	-0 061	-0 050(27)	-0 190	-0 020	1 168(38)	3 090	0 365	0 288(28)	1 030	0 107	0 220(22)	1 020	0 079
Literate-Secondary	-0 225(38)	-0 600	-0 088	0 177(27)	0 660	0 069	1 047(36)	2 890	0 341	0 294(28)	1 050	0 109	-0 082(23)	-0 360	-0 031
Hindu	0 389(25)	1 540	0 153	0 329(22)	1 490	0 130	0 454(57)	0 790	0 179	0 759(30)	2 530	0 294	-0 572(35)	-1 620	-0 189
Muslim	0 122(27)	0 450	0 045	-0 074(25)	-0 290	-0 029	-0 039(59)	-0 070	-0 016	0 333(33)	1 020	0 122	-0 854(36)	-2 350	-0 331
Christian	0 570(41)	1 390	0 188	0 757(30)	2 500	0 258	1 022(71)	1 450	0 324	0 806(42)	1 910	0 256	-1 626(47)	-3 470	-0 542
Self Employed-Non-agriculture	0 284(11)	2 640	0 103	0 420(11)	3 670	0 157	0 195(14)	1 370	0 076	-0 084(13)	-0 670	-0 033	0 144(13)	1 120	0 053
Agriculture labour	0 923(09)	10 550	0 313	1 118(10)	11 490	0 400	0 817(13)	6 090	0 312	0 862(11)	8 170	0 309	1 017(13)	7 800	0 339
Other Labour	0 439(11)	3 840	0 153	1 027(11)	9 600	0 346	0 456(16)	2 840	0 171	0 185(13)	1 390	0 070	0 438(14)	3 150	0 151
Self Employed-agriculture	0 664(08)	8 480	0 246	0 944(09)	10 300	0 349	0 889(12)	7 680	0 331	0 730(10)	7 610	0 269	1 087(12)	9 130	0 371
Female Head	0 807(13)	6 270	0 251	0 970(13)	7 380	0 315	0 007(36)	0 020	0 003	1 134(16)	7 060	0 331	0 594(22)	2 640	0 194
MPCE	0 010(01)	1 040	0 004	-0 015(01)	-1 510	-0 006	-0 023(01)	-1 610	-0 009	-0 043(01)	-3 440	-0 017	-0 061(01)	-4 640	-0 023
Constant	-2 255(45)	-5 010		-2 775(36)	-7 710		-3 038(70)	-4 360		-2 500(43)	-5 840		-1 341(45)	-2 990	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.8: Results of the Maximum Likelihood Probit Estimates for Gujarat: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 161(17)	0 970	0 044	0 415(12)	3 330	0 103	0 284(12)	2 410	0 080	0 547(14)	3 960	0 139	0 719(17)	4 130	0 169
Never Married-Old	0 433(33)	1 310	0 133	0 111(32)	0 350	0 026	0 724(34)	2 120	0 243	0 472(49)	0 960	0 129	0 678(40)	1 690	0 176
Widowed/ Divorced-Young	0 582(27)	2 190	0 187	1 072(30)	3 580	0 352	-0 069(45)	-0 150	-0 017	0 412(41)	0 990	0 105	0 543(44)	1 220	0 125
Widowed/ Divorced-Old	-0 204(21)	-0 960	-0 049	-0 076(16)	-0 480	-0 016	0 066(46)	0 140	0 018	-0 346(43)	-0 810	-0 064	-0 367(47)	-0 780	-0 055
ST	0 631(23)	2 720	0 203	0 628(12)	5 060	0 178	0 852(15)	5 550	0 289	0 594(14)	4 360	0 166	0 333(18)	1 870	0 072
SC	0 162(10)	1 650	0 044	0 360(09)	3 820	0 090	0 135(10)	1 300	0 037	0 299(10)	3 020	0 073	0 248(19)	1 340	0 051
15 to 19 years	0 197(34)	0 580	0 054	0 165(22)	0 740	0 038	0 068(23)	0 290	0 018	0 211(29)	0 730	0 049	0 811(36)	2 240	0 205
20 to 29 years	0 126(28)	0 440	0 033	0 506(18)	2 820	0 123	0 583(19)	3 090	0 169	0 761(25)	3 000	0 200	1 227(29)	4 230	0 299
30 to 39 years	0 527(28)	1 870	0 155	0 827(18)	4 630	0 225	0 984(18)	5 470	0 307	1 271(24)	5 240	0 369	1 760(28)	6 240	0 494
40 to 49 years	0 517(27)	1 930	0 155	0 787(17)	4 520	0 223	1 015(18)	5 640	0 338	1 344(24)	5 520	0 414	1 449(27)	5 360	0 409
50 to 59 years	0 261(26)	1 020	0 074	0 422(18)	2 400	0 109	0 895(22)	4 090	0 299	1 037(23)	4 490	0 321	1 093(28)	3 960	0 309
Not Literate	-0 049(16)	-0 310	-0 012	-0 392(14)	-2 780	-0 081	0 105(14)	0 730	0 028	-0 199(14)	-1 400	-0 041	-0 018(18)	-0 100	-0 003
Literate-Below Primary	-0 406(16)	-2 460	-0 090	-0 608(15)	-4 040	-0 102	-0 028(16)	-0 180	-0 007	-0 567(16)	-3 600	-0 094	-0 232(20)	-1 160	-0 037
Literate-Primary	-0 599(16)	-3 690	-0 124	-0 493(14)	-3 640	-0 091	-0 102(15)	-0 670	-0 026	-0 379(16)	-2 370	-0 070	-0 218(19)	-1 140	-0 035
Literate-Middle	-0 507(17)	-3 050	-0 108	-0 672(15)	-4 370	-0 106	-0 052(22)	-0 230	-0 013	-0 476(14)	-3 480	-0 087	-0 342(19)	-1 770	-0 055
Literate-Secondary	-0 634(17)	-3 840	-0 129	-0 560(14)	-3 880	-0 098	-0 221(14)	-1 560	-0 054	-0 509(13)	-3 800	-0 095	-0 536(17)	-3 140	-0 082
Hindu	0 597(24)	2 440	0 126	0 280(21)	1 350	0 056	0 532(26)	2 030	0 118	0 339(18)	1 890	0 064	0 695(24)	2 900	0 094
Muslim	0 425(26)	1 630	0 125	0 399(22)	1 830	0 100	0 432(28)	1 570	0 128	0 142(21)	0 680	0 033	0 282(26)	1 080	0 058
Christian	0 457(53)	0 860	0 141	1 279(59)	2 160	0 435	0 851(40)	2 120	0 291	1 000(43)	2 310	0 323	0 095(45)	0 210	0 018
Self Employed	0 284(07)	3 900	0 076	1 449(26)	5 480	0 373	0 754(26)	2 910	0 214	1 501(30)	5 020	0 380	7 886(45)	17 670	0 999
Regular Wage/ Salaried	NA	NA	NA	1 219(26)	4 630	0 286	0 554(27)	2 080	0 147	1 334(30)	4 500	0 339	7 846(45)	17 370	0 999
Casual Labour	NA	NA	NA	1 535(27)	5 670	0 494	0 989(27)	3 710	0 327	1 759(30)	5 780	0 553	8 304(46)	17 990	0 975
Female Head	1 147(18)	6 250	0 401	1 224(17)	7 270	0 399	0 978(17)	5 720	0 335	1 250(18)	7 100	0 412	1 570(25)	6 300	0 497
MPCE	-0 046(02)	-3 050	-0 012	-0 074(02)	-4 810	-0 016	-0 042(02)	-2 710	-0 011	-0 063(02)	-3 870	-0 014	-0 087(02)	-3 770	-0 016
Constant	-1 340(42)	-3 190		-2 462(40)	-6 140		-2 547(44)	-5 830		-3 056(45)	-6 810		-10 030		

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.9: Results of the Maximum Likelihood Probit Estimates for Haryana: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 049(20)	0 240	0 018	-0 315(17)	-1 900	-0 121	-0 252(17)	-1 480	-0 096	-0 552(20)	-2 790	-0 159	-0 455(14)	-3 200	-0 175
Never Married-Old	1 031(93)	1 110	0 392	-0 021(57)	-0 040	-0 008	-0 735(53)	-1 380	-0 248	Dropped			Dropped		
Widowed/ Divorced-Young	1 340(52)	2 560	0 485	0 427(46)	0 920	0 168	1 080(75)	1 430	0 398	-6 071(17)	-35 330	-0 492	0 240(64)	0 380	0 096
Widowed/ Divorced-Old	-0 181(25)	-0 740	-0 064	-0 389(21)	-1 820	-0 148	-1 414(75)	-1 880	-0 405	5 754( )		0 872	-0 613(64)	-0 950	-0 229
ST	0 640(37)	1 730	0 250	0 557(24)	2 350	0 217	0 621(35)	1 780	0 242	-0 152(42)	-0 360	-0 048	-0 044(46)	-0 100	-0 018
SC	0 115(14)	0 830	0 042	0 304(12)	2 430	0 121	-0 131(10)	-1 260	-0 051	-0 030(12)	-0 250	-0 010	-0 055(09)	-0 650	-0 022
15 to 19 years	0 956(24)	4 040	0 366	1 080(17)	6 290	0 400	0 897(19)	4 690	0 344	0 695(24)	2 870	0 255	0 862(17)	4 930	0 325
20 to 29 years	1 190(20)	5 850	0 442	1 190(15)	7 760	0 446	1 038(15)	7 150	0 396	0 966(20)	4 840	0 351	1 160(13)	9 220	0 431
30 to 39 years	1 250(22)	5 810	0 468	1 298(16)	8 230	0 469	1 227(15)	8 260	0 455	1 221(19)	6 270	0 443	1 360(12)	11 290	0 484
40 to 49 years	1 161(22)	5 170	0 438	1 376(17)	8 100	0 473	1 163(16)	7 450	0 427	1 202(20)	5 940	0 448	1 410(13)	11 130	0 479
50 to 59 years	0 947(20)	4 740	0 364	0 944(19)	4 940	0 351	0 598(17)	3 490	0 235	0 980(20)	4 850	0 370	0 829(14)	6 140	0 310
Not Literate	0 493(65)	0 760	0 163	2 012(51)	3 970	0 570	0 376(54)	0 700	0 144	0 508(46)	1 110	0 163	0 845(25)	3 450	0 325
Literate-Below Primary	0 312(68)	0 460	0 120	1 719(53)	3 270	0 515	0 120(56)	0 210	0 047	0 100(49)	0 200	0 034	0 655(27)	2 430	0 251
Literate-Primary	0 608(68)	0 900	0 236	1 345(53)	2 560	0 461	0 008(55)	0 010	0 003	0 438(47)	0 940	0 158	0 576(25)	2 330	0 225
Literate-Middle	0 747(70)	1 070	0 291	1 110(53)	2 080	0 392	-0 026(55)	-0 050	-0 010	0 157(47)	0 330	0 054	0 493(25)	1 940	0 193
Literate-Secondary	0 085(73)	0 120	0 031	1 713(54)	3 200	0 508	0 010(55)	0 020	0 004	0 299(47)	0 630	0 106	0 602(25)	2 440	0 234
Hindu	0 568(13)	4 230	0 182	0 501(15)	3 420	0 188	0 112(14)	0 790	0 044	0 550(19)	2 840	0 156	0 402(13)	3 000	0 155
Muslim	1 002(21)	4 810	0 383	0 416(20)	2 030	0 164	0 022(22)	0 100	0 009	0 127(35)	0 360	0 044	0 589(21)	2 780	0 226
Christian	Dropped			Dropped			Dropped			Dropped			Dropped		
Self Employed-Non-agriculture	0 428(17)	2 560	0 164	0 311(20)	1 590	0 124	0 559(15)	3 660	0 220	-0 028(15)	-0 190	-0 009	0 136(10)	1 350	0 054
Agriculture labour	0 994(19)	5 330	0 379	0 478(19)	2 510	0 189	1 040(16)	6 440	0 391	0 258(16)	1 660	0 090	0 521(14)	3 730	0 204
Other Labour	0 535(21)	2 500	0 207	0 325(21)	1 550	0 129	0 678(17)	4 060	0 265	0 339(19)	1 800	0 122	0 195(13)	1 490	0 078
Self Employed-agriculture	0 986(14)	6 980	0 357	0 942(16)	5 730	0 360	0 772(13)	6 020	0 297	0 437(11)	3 900	0 148	0 789(09)	8 770	0 307
Female Head	0 525(21)	2 490	0 204	0 345(23)	1 500	0 137	0 793(17)	4 640	0 304	0 567(18)	3 150	0 211	0 545(16)	3 400	0 211
MPCE	-0 002(02)	-0 100	-0 001	0 009(02)	0 510	0 004	0 010(01)	0 650	0 004	-0 034(02)	-1 820	-0 011	-0 038(01)	-2 750	-0 015
Constant	-3 231(72)	-4 510		-4 234(59)	-7 130		-2 149(58)	-3 690		-2 339(54)	-4 370		-2 273(33)	-6 990	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.10: Results of the Maximum Likelihood Probit Estimates for Haryana: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 097(25)	0 390	0 022	0 018(22)	0 080	0 004	-0 282(27)	-1 060	-0 073	0 049(22)	0 220	0 010	0 092(22)	0 420	0 021
Never Married-Old	Dropped			Dropped			0 701(79)	0 880	0 245	1 034(84)	1 230	0 326	Dropped		
Widowed/ Divorced-Young	-0 275(64)	-0 430	-0 051	0 771(67)	1 150	0 245	1 722(77)	2 230	0 608	-1 631(88)	-1 850	-0 147	-0 884(61)	-1 460	-0 134
Widowed/ Divorced-Old	-0 216(35)	-0 620	-0 042	-0 217(30)	-0 720	-0 046	-1 989(82)	-2 410	-0 249	1 459(85)	1 720	0 470	0 533(56)	0 950	0 147
ST	Dropped			Dropped			Dropped			Dropped			1 359(72)	1 890	0 473
SC	-0 205(18)	-1 140	-0 041	0 226(18)	1 270	0 057	0 198(18)	1 080	0 059	0 712(19)	3 690	0 185	0 315(14)	2 290	0 080
15 to 19 years	0 706(44)	1 590	0 192	0 053(35)	0 150	0 013	-0 102(39)	-0 260	-0 028	-0 220(43)	-0 510	-0 041	0 798(33)	2 440	0 234
20 to 29 years	0 860(39)	2 180	0 212	0 088(28)	0 310	0 021	0 314(28)	1 140	0 094	0 507(37)	1 380	0 117	0 724(23)	3 180	0 191
30 to 39 years	0 913(40)	2 300	0 264	0 769(28)	2 700	0 221	0 688(27)	2 570	0 218	0 710(36)	1 970	0 174	1 296(22)	5 820	0 387
40 to 49 years	1 040(40)	2 630	0 308	0 538(28)	1 900	0 152	0 736(27)	2 760	0 247	0 328(35)	0 930	0 075	1 262(23)	5 440	0 397
50 to 59 years	0 701(39)	1 790	0 196	0 282(38)	0 730	0 074	0 550(28)	1 940	0 183	0 712(40)	1 780	0 196	0 818(23)	3 530	0 248
Not Literate	0 024(33)	0 070	0 005	-0 215(24)	-0 910	-0 049	-0 203(24)	-0 850	-0 056	-0 585(24)	-2 390	-0 108	-0 409(21)	-1 980	-0 085
Literate-Below Primary	-0 559(40)	-1 380	-0 090	-0 783(28)	-2 840	-0 129	0 014(38)	0 040	0 004	-0 165(37)	-0 450	-0 031	-0 964(25)	-3 800	-0 130
Literate-Primary	-0 358(36)	-0 990	-0 066	-1 136(31)	-3 700	-0 159	-0 203(29)	-0 710	-0 054	-0 534(24)	-2 220	-0 084	-0 324(22)	-1 460	-0 064
Literate-Middle	-0 407(38)	-1 080	-0 072	-0 690(27)	-2 600	-0 120	-0 229(28)	-0 810	-0 060	-0 616(26)	-2 340	-0 094	-0 810(22)	-3 630	-0 128
Literate-Secondary	0 145(35)	0 420	0 033	-0 233(22)	-1 080	-0 051	-0 288(24)	-1 190	-0 076	-0 328(21)	-1 560	-0 060	-0 744(18)	-4 190	-0 142
Hindu	0 871(35)	2 520	0 117	0 052(29)	0 180	0 012	0 070(24)	0 290	0 019	0 573(32)	1 790	0 083	-0 416(37)	-1 110	-0 113
Muslim	0 517(60)	0 870	0 142	0 107(64)	0 170	0 026	0 280(43)	0 650	0 087	0 526(55)	0 950	0 139	-1 528(45)	-3 400	-0 145
Christian	Dropped			0 810(64)	1 260	0 261	Dropped			0 970(58)	1 680	0 300	1 399(78)	1 800	0 487
Self Employed	0 140(03)	1 100	0 030	0 148(34)	0 430	0 035	1 065(46)	2 330	0 312	1 001(31)	3 270	0 220	0 509(28)	1 840	0 117
Regular Wage/ Salaried	NA	NA	NA	0 347(35)	1 000	0 085	0 937(46)	2 040	0 281	0 981(30)	3 220	0 229	0 515(28)	1 840	0 122
Casual Labour	NA	NA	NA	0 524(40)	1 310	0 151	1 570(49)	3 210	0 558	0 939(34)	2 720	0 265	0 877(32)	2 700	0 276
Female Head	1 353(31)	4 350	0 448	0 462(30)	1 550	0 131	1 420(36)	3 940	0 512	1 180(31)	3 770	0 374	0 880(25)	3 500	0 275
MPCE	-0 036(03)	-1 220	-0 008	0 003(03)	0 120	0 001	-0 012(03)	-0 480	-0 004	-0 103(03)	-3 080	-0 021	-0 024(03)	-0 840	-0 005
Constant	-2 481(63)	-3 940		-1 271(60)	-2 110		-2 079(62)	-3 380		-1 955(68)	-2 870		-1 440(55)	-2 600	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.11: Results of the Maximum Likelihood Probit Estimates for Karnataka: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 216(07)	2 890	0 083	0 148(08)	1 870	0 058	0 170(10)	1 670	0 064	-0 049(10)	-0 510	-0 019	-0 047(11)	-0 440	-0 018
Never Married-Old	-0 945(39)	-2 430	-0 351	-0 218(31)	-0 700	-0 087	-0 368(33)	-1 110	-0 146	-0 640(40)	-1 590	-0 248	-0 745(38)	-1 960	-0 290
Widowed/ Divorced-Young	0 345(14)	2 540	0 128	0 186(15)	1 220	0 072	0 416(26)	1 600	0 154	0 163(20)	0 800	0 063	0 131(24)	0 540	0 048
Widowed/ Divorced-Old	-0 192(08)	-2 530	-0 076	-0 262(09)	-2 960	-0 104	-0 443(28)	-1 570	-0 174	-0 364(21)	-1 730	-0 144	-0 531(25)	-2 150	-0 206
ST	-0 181(08)	-2 340	-0 072	0 053(10)	0 520	0 021	-0 247(10)	-2 390	-0 097	0 162(09)	1 840	0 063	0 108(11)	0 970	0 040
SC	-0 018(06)	-0 300	-0 007	0 130(06)	2 090	0 051	-0 301(22)	-1 370	-0 118	0 062(07)	0 920	0 024	0 117(07)	1 610	0 043
15 to 19 years	0 924(10)	9 000	0 314	0 734(12)	6 280	0 263	1 282(27)	4 720	0 380	0 923(14)	6 810	0 318	0 723(15)	4 690	0 236
20 to 29 years	1 076(09)	12 110	0 377	1 147(10)	11 400	0 404	1 510(30)	5 020	0 483	1 087(11)	10 090	0 383	1 037(12)	8 570	0 334
30 to 39 years	1 265(09)	13 990	0 409	1 389(10)	13 760	0 448	1 987(26)	7 710	0 534	1 403(11)	13 030	0 459	1 557(12)	12 720	0 434
40 to 49 years	1 139(09)	12 860	0 365	1 101(10)	11 010	0 364	1 771(23)	7 560	0 454	1 104(11)	10 430	0 367	1 494(12)	12 850	0 405
50 to 59 years	0 655(09)	7 530	0 232	0 674(10)	7 010	0 242	1 274(21)	6 100	0 369	0 744(11)	6 950	0 264	0 907(12)	7 690	0 278
Not Literate	0 959(49)	1 970	0 367	1 027(32)	3 260	0 391	0 404(33)	1 240	0 158	0 755(22)	3 370	0 294	0 411(20)	2 050	0 155
Literate-Below Primary	0 789(49)	1 610	0 265	0 687(32)	2 140	0 244	0 379(33)	1 150	0 138	0 317(23)	1 360	0 121	0 264(21)	1 250	0 094
Literate-Primary	0 720(49)	1 480	0 249	0 661(32)	2 070	0 236	0 007(33)	0 020	0 003	0 342(24)	1 450	0 130	0 306(21)	1 470	0 109
Literate-Middle	0 436(49)	0 890	0 160	0 518(32)	1 590	0 190	-0 277(33)	-0 850	-0 109	-0 016(23)	-0 070	-0 006	-0 012(20)	-0 060	-0 005
Literate-Secondary	-0 122(50)	-0 240	-0 048	0 249(33)	0 760	0 095	-0 524(33)	-1 580	-0 207	-0 175(23)	-0 750	-0 070	-0 439(20)	-2 150	-0 171
Hindu	0 504(24)	2 110	0 199	-0 077(20)	-0 390	-0 030	-0 632(26)	-2 410	-0 218	-0 118(19)	-0 630	-0 046	0 339(29)	1 150	0 131
Muslim	0 132(25)	0 540	0 051	-0 241(21)	-1 130	-0 096	-1 119(28)	-3 970	-0 413	-0 547(21)	-2 590	-0 215	-0 019(31)	-0 060	-0 007
Christian	0 029(32)	0 090	0 011	-0 065(29)	-0 230	-0 026	-0 463(33)	-1 400	-0 183	-0 253(27)	-0 930	-0 101	-0 092(47)	-0 200	-0 035
Self Employed-Non-agriculture	0 476(11)	4 530	0 174	0 794(11)	6 950	0 277	0 679(12)	5 740	0 234	0 332(12)	2 860	0 127	0 410(12)	3 560	0 142
Agriculture labour	1 096(09)	11 620	0 390	1 217(11)	11 460	0 436	0 982(13)	7 460	0 358	0 719(10)	7 070	0 274	0 827(11)	7 380	0 293
Other Labour	0 840(12)	7 310	0 280	0 925(13)	6 970	0 308	0 812(18)	4 620	0 261	0 382(14)	2 760	0 144	0 378(13)	2 990	0 132
Self Employed-agriculture	0 691(09)	7 690	0 263	0 704(10)	6 910	0 268	0 723(10)	7 060	0 267	0 583(10)	5 950	0 224	0 779(11)	7 120	0 272
Female Head	0 910(10)	9 560	0 299	0 848(10)	8 270	0 290	0 960(16)	6 140	0 301	0 812(11)	7 380	0 281	0 706(12)	5 870	0 227
MPCE	0 020(01)	2 790	0 008	0 027(01)	3 130	0 010	0 010(01)	0 710	0 004	-0 017(01)	-1 710	-0 007	-0 071(01)	-6 210	-0 027
Constant	-3 013(56)	-5 370		-2 687(40)	-6 720		-1 587(51)	-3 100		-1 759(32)	-5 450		-1 682(39)	-4 350	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.12: Results of the Maximum Likelihood Probit Estimates for Karnataka: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 120(12)	1 000	0 041	0 280(10)	2 810	0 094	0 469(13)	3 640	0 143	0 439(11)	3 950	0 137	0 554(14)	3 960	0 142
Never Married-Old	-0 081(30)	-0 270	-0 026	0 361(28)	1 280	0 127	0 187(46)	0 400	0 055	0 296(27)	1 080	0 094	0 866(46)	1 870	0 270
Widowed/ Divorced-Young	0 680(26)	2 580	0 257	0 412(21)	1 960	0 147	0 478(34)	1 420	0 147	-0 196(39)	-0 500	-0 052	-0 347(50)	-0 700	-0 065
Widowed/ Divorced-Old	-0 308(12)	-2 520	-0 096	0 005(13)	0 040	0 002	-0 677(36)	-1 900	-0 144	0 026(42)	0 060	0 007	0 203(52)	0 390	0 048
ST	-0 186(18)	-1 020	-0 059	-0 057(20)	-0 290	-0 018	-0 259(45)	-0 580	-0 063	-0 015(11)	-0 140	-0 004	0 408(18)	2 330	0 107
SC	0 044(10)	0 460	0 015	-0 066(11)	-0 610	-0 021	0 400(14)	2 910	0 123	-0 002(11)	-0 010	0 000	0 063(12)	0 530	0 014
15 to 19 years	0 415(17)	2 380	0 148	0 836(19)	4 320	0 301	0 035(22)	0 160	0 010	0 396(21)	1 890	0 125	0 388(26)	1 470	0 097
20 to 29 years	0 695(15)	4 550	0 244	0 959(18)	5 450	0 331	0 553(20)	2 720	0 164	0 726(16)	4 470	0 227	0 975(22)	4 450	0 256
30 to 39 years	0 842(15)	5 470	0 309	1 276(18)	7 210	0 459	0 695(23)	3 070	0 207	1 264(16)	7 850	0 431	1 254(21)	5 850	0 368
40 to 49 years	0 717(14)	5 010	0 266	1 083(17)	6 440	0 399	0 922(17)	5 400	0 313	1 018(16)	6 440	0 353	1 094(21)	5 270	0 326
50 to 59 years	0 669(14)	4 650	0 249	0 890(17)	5 250	0 329	0 466(24)	1 950	0 146	0 653(16)	4 150	0 221	0 832(21)	3 900	0 242
Not Literate	0 280(23)	1 210	0 094	-0 059(16)	-0 370	-0 019	-0 458(20)	-2 250	-0 119	-0 051(13)	-0 380	-0 014	-0 188(16)	-1 180	-0 039
Literate-Below Primary	0 059(27)	0 220	0 020	-0 208(18)	-1 190	-0 063	-0 367(17)	-2 130	-0 085	-0 306(16)	-1 910	-0 077	-0 461(18)	-2 530	-0 079
Literate-Primary	-0 162(24)	-0 690	-0 052	-0 268(16)	-1 660	-0 080	-0 864(22)	-3 980	-0 168	-0 599(15)	-4 080	-0 135	-0 314(17)	-1 820	-0 059
Literate-Middle	-0 585(26)	-2 260	-0 169	-0 596(16)	-3 670	-0 161	-0 905(15)	-6 100	-0 175	-0 729(13)	-5 440	-0 167	-0 422(15)	-2 810	-0 078
Literate-Secondary	-0 467(25)	-1 890	-0 140	-0 560(16)	-3 470	-0 156	-0 809(15)	-5 410	-0 179	-0 597(12)	-5 110	-0 152	-0 716(14)	-4 970	-0 129
Hindu	-0 486(29)	-1 690	-0 172	0 103(18)	0 570	0 032	-0 569(27)	-2 090	-0 176	-0 213(17)	-1 230	-0 063	1 021(46)	2 240	0 165
Muslim	-0 787(29)	-2 690	-0 216	-0 119(19)	-0 620	-0 037	-0 410(29)	-1 430	-0 097	-0 442(19)	-2 340	-0 112	0 584(46)	1 270	0 151
Christian	-0 223(32)	-0 690	-0 070	0 655(24)	2 750	0 241	-0 204(30)	-0 680	-0 051	-0 261(23)	-1 120	-0 067	1 508(49)	3 070	0 515
Self Employed	0 122(07)	1 760	0 041	1 008(17)	5 950	0 338	1 189(23)	5 260	0 348	0 891(17)	5 110	0 277	7 287(55)	13 310	0 999
Regular Wage/ Salaried	NA	NA	NA	0 689(17)	4 040	0 230	0 871(21)	4 120	0 244	0 729(17)	4 210	0 215	7 026(55)	12 760	0 999
Casual Labour	NA	NA	NA	1 694(18)	9 530	0 599	1 535(22)	7 090	0 537	1 192(18)	6 460	0 415	7 471(55)	13 460	0 989
Female Head	0 678(12)	5 580	0 254	0 894(12)	7 380	0 330	0 836(20)	4 240	0 287	1 191(13)	9 070	0 429	1 112(17)	6 730	0 347
MPCE	-0 030(01)	-2 530	-0 010	-0 034(01)	-2 910	-0 011	-0 059(02)	-2 560	-0 016	-0 037(02)	-2 390	-0 011	-0 081(01)	-5 640	-0 018
Constant	-0 506(39)	-1 290		-2 269(34)	-6 600		-1 042(44)	-2 360		-1 638(31)	-5 300		-9 072		

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.13: Results of the Maximum Likelihood Probit Estimates for Kerala: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 080(07)	1 210	0 032	0 198(07)	2 920	0 077	0 144(09)	1 530	0 051	0 518(09)	5 560	0 188	0 309(10)	3 150	0 112
Never Married-Old	-0 238(19)	-1 220	-0 092	-0 117(17)	-0 710	-0 044	-0 066(21)	-0 310	-0 023	-0 078(18)	-0 430	-0 026	-0 290(15)	-1 910	-0 092
Widowed/ Divorced-Young	0 372(13)	2 770	0 147	0 255(13)	1 930	0 100	0 082(26)	0 310	0 029	-0 361(19)	-1 910	-0 113	-0 439(17)	-2 630	-0 138
Widowed/ Divorced-Old	-0 237(08)	-2 940	-0 093	-0 307(08)	-3 760	-0 114	-0 354(27)	-1 300	-0 115	0 219(19)	1 160	0 077	0 308(16)	1 870	0 112
ST	0 053(18)	0 300	0 021	0 254(16)	1 590	0 100	0 587(25)	2 380	0 226	0 406(15)	2 650	0 150	0 401(17)	2 290	0 150
SC	0 276(06)	4 520	0 110	0 328(06)	5 210	0 129	0 218(11)	1 920	0 080	0 224(08)	2 700	0 079	0 158(07)	2 110	0 056
15 to 19 years	0 154(11)	1 410	0 061	-0 014(11)	-0 130	-0 005	-0 289(22)	-1 340	-0 096	-0 252(17)	-1 520	-0 081	-0 490(18)	-2 780	-0 150
20 to 29 years	0 611(09)	6 890	0 240	0 426(09)	4 800	0 166	0 723(14)	5 350	0 269	0 707(12)	5 740	0 257	0 329(11)	2 970	0 119
30 to 39 years	1 081(09)	12 510	0 402	0 877(08)	10 410	0 339	1 327(17)	7 630	0 489	1 237(11)	11 170	0 456	0 983(10)	10 060	0 366
40 to 49 years	1 095(08)	13 060	0 402	0 907(08)	10 930	0 349	1 436(15)	9 430	0 527	1 204(11)	11 320	0 447	1 060(09)	11 300	0 398
50 to 59 years	0 734(09)	8 580	0 282	0 605(08)	7 410	0 237	0 632(13)	5 050	0 240	0 839(11)	7 940	0 316	0 858(09)	9 210	0 326
Not Literate	0 028(16)	0 170	0 011	0 242(14)	1 720	0 094	0 152(18)	0 820	0 054	0 302(15)	2 040	0 108	-0 374(12)	-3 070	-0 119
Literate-Below Primary	0 035(16)	0 220	0 014	0 294(14)	2 140	0 115	0 229(17)	1 360	0 083	0 237(14)	1 670	0 084	-0 336(11)	-3 170	-0 108
Literate-Primary	0 096(16)	0 600	0 038	0 155(13)	1 160	0 060	0 402(20)	2 010	0 147	0 203(14)	1 500	0 071	-0 379(10)	-3 780	-0 121
Literate-Middle	-0 209(16)	-1 330	-0 082	-0 104(13)	-0 790	-0 039	-0 180(15)	-1 160	-0 062	0 005(13)	0 040	0 002	-0 404(09)	-4 640	-0 133
Literate-Secondary	-0 393(16)	-2 450	-0 150	-0 245(13)	-1 840	-0 091	-0 201(16)	-1 280	-0 068	-0 143(13)	-1 120	-0 047	-0 576(09)	-6 420	-0 179
Hindu	0 983(41)	2 430	0 370	0 926(39)	2 390	0 337	-0 427(39)	-1 100	-0 154	0 305(46)	0 660	0 102	0 603(06)	9 370	0 202
Muslim	0 396(41)	0 970	0 157	0 478(39)	1 220	0 187	-1 107(40)	-2 790	-0 296	-0 102(47)	-0 220	-0 034	Dropped		
Christian	1 136(41)	2 790	0 423	0 926(39)	2 380	0 357	-0 346(39)	-0 880	-0 113	0 097(46)	0 210	0 033	0 656(08)	0 077	0 244
Self Employed-Non-agriculture	0 117(08)	1 560	0 047	0 207(08)	2 750	0 081	0 054(09)	0 570	0 019	0 247(08)	2 980	0 087	0 222(08)	2 910	0 080
Agriculture labour	0 288(07)	3 990	0 114	0 225(07)	3 180	0 087	0 268(14)	1 930	0 095	0 342(09)	4 000	0 121	0 461(09)	5 390	0 170
Other Labour	0 130(07)	1 740	0 052	0 127(07)	1 710	0 049	-0 018(10)	-0 190	-0 006	0 201(08)	2 520	0 070	0 188(08)	2 470	0 066
Self Employed-agriculture	0 048(07)	0 710	0 019	0 031(07)	0 470	0 012	-0 127(08)	-1 500	-0 044	0 090(08)	1 120	0 031	0 381(07)	5 230	0 138
Female Head	0 998(08)	13 140	0 371	0 870(07)	11 670	0 336	1 165(13)	8 810	0 439	0 883(09)	10 380	0 331	0 798(07)	10 890	0 302
MPCE	0 014(01)	1 890	0 006	0 037(01)	4 650	0 014	0 006(02)	0 390	0 002	0 052(01)	4 890	0 018	-0 022(01)	-2 360	-0 008
Constant	-1 968(45)	-4 370		-2 160(42)	-5 110		-1 005(46)	-2 180		-2 249(50)	-4 480		-1 407(17)	-8 340	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.14: Results of the Maximum Likelihood Probit Estimates for Kerala: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 155(11)	1 460	0 054	0 255(11)	2 250	0 083	0 486(11)	4 590	0 162	0 504(12)	4 320	0 167	0 450(15)	3 080	0 142
Never Married-Old	-0 230(24)	-0 950	-0 074	-0 261(21)	-1 230	-0 074	0 298(21)	1 430	0 100	0 344(19)	1 790	0 116	-0 094(220	-0 430	-0 026
Widowed/ Divorced-Young	0 739(31)	2 360	0 284	0 721(23)	3 140	0 266	0 092(29)	0 320	0 029	0 272(26)	1 030	0 088	0 322(27)	1 180	0 082
Widowed/ Divorced-Old	-0 203(12)	-1 660	-0 067	-0 230(14)	-1 630	-0 068	-0 034(29)	-0 120	-0 010	-0 264(27)	-0 980	-0 075	-0 303(28)	-1 090	-0 093
ST	0 231(57)	0 410	0 084	-0 119(37)	-0 320	-0 036	-0 153(40)	-0 380	-0 044	0 585(35)	1 680	0 208	-0 451(48)	-0 940	-0 103
SC	0 474(11)	4 380	0 177	0 322(14)	2 370	0 110	0 156(13)	1 220	0 050	0 218(11)	2 030	0 071	0 134(13)	1 020	0 040
15 to 19 years	-0 069(20)	-0 360	-0 024	-0 457(22)	-2 120	-0 126	-0 165(20)	-0 840	-0 048	-0 163(23)	-0 710	-0 047	-0 727(25)	-2 850	-0 155
20 to 29 years	0 403(16)	2 490	0 144	0 018(18)	0 100	0 006	0 499(15)	3 380	0 165	0 556(17)	3 310	0 184	0 334(16)	2 060	0 101
30 to 39 years	0 828(15)	5 350	0 310	0 571(16)	3 480	0 198	0 898(14)	6 540	0 313	1 175(15)	7 770	0 412	0 740(14)	5 190	0 239
40 to 49 years	0 931(15)	6 360	0 352	0 712(16)	4 510	0 254	1 108(13)	8 380	0 400	1 340(14)	9 260	0 479	0 932(13)	6 900	0 316
50 to 59 years	0 646(15)	4 290	0 244	0 453(15)	3 020	0 157	0 856(13)	6 490	0 309	0 877(14)	6 150	0 316	0 763(13)	5 720	0 257
Not Literate	-0 029(17)	-0 180	-0 010	-0 581(19)	-3 120	-0 154	-0 225(16)	-1 370	-0 065	-0 251(18)	-1 430	-0 070	-0 139(17)	-0 830	-0 037
Literate-Below Primary	-0 202(17)	-1 210	-0 067	-0 734(18)	-4 130	-0 180	-0 105(15)	-0 680	-0 031	-0 047(15)	-0 310	-0 014	-0 302(15)	-2 080	-0 077
Literate-Primary	-0 088(15)	-0 580	-0 030	-0 738(16)	-4 680	-0 194	-0 227(14)	-1 590	-0 066	-0 110(14)	-0 790	-0 033	-0 283(13)	-2 120	-0 073
Literate-Middle	-0 339(15)	-2 330	-0 111	-0 681(15)	-4 540	-0 186	-0 339(13)	-2 630	-0 098	-0 326(13)	-2 570	-0 094	-0 550(11)	-4 810	-0 139
Literate-Secondary	-0 317(15)	-2 150	-0 102	-0 583(15)	-3 860	-0 160	-0 388(13)	-3 080	-0 110	-0 222(12)	-1 830	-0 065	-0 600(11)	-5 320	-0 147
Hindu	0 595(41)	1 440	0 196	0 589(45)	1 320	0 174	6 288(26)	24 210	0 934	-0 144(57)	-0 260	-0 044	5 668(24)	23 270	0 941
Muslim	0 169(42)	0 400	0 060	0 264(46)	0 580	0 087	5 846(27)	21 320	0 958	-0 693(57)	-1 210	-0 178	5 079(27)	18 970	0 976
Christian	0 710(42)	1 700	0 264	0 566(45)	1 260	0 195	6 189(26)	23 610	0 966	-0 235(57)	-0 410	-0 067	5 662(25)	22 530	0 972
Self Employed	-0 091(07)	-1 370	-0 031	0 601(15)	3 930	0 198	0 705(16)	4 480	0 230	0 945(18)	5 310	0 308	1 152(16)	7 090	0 357
Regular Wage/ Salaried	NA	NA	NA	0 643(15)	4 250	0 213	0 724(16)	4 540	0 242	0 909(18)	5 040	0 303	1 253(16)	7 740	0 412
Casual Labour	NA	NA	NA	0 769(16)	4 720	0 267	0 699(16)	4 280	0 233	0 918(18)	5 110	0 311	0 982(17)	5 860	0 321
Female Head	0 812(11)	7 220	0 307	0 773(12)	6 550	0 278	0 855(11)	8 070	0 305	0 907(12)	7 690	0 324	0 629(12)	5 250	0 206
MPCE	-0 014(01)	-1 140	-0 005	0 021(01)	1 610	0 007	-0 008(01)	-0 570	-0 002	0 000(01)	-0 030	0 000	-0 047(02)	-3 120	-0 013
Constant	-1 355(46)	-2 930		-1 684(53)	-3 200		-8 045( )			-2 040(64)	-3 200		-7 257( )		

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.15: Results of the Maximum Likelihood Probit Estimates for Madhya Pradesh: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 111(08)	1 410	0 038	-0 051(09)	-0 580	-0 019	0 130(08)	1 650	0 048	0 051(09)	0 570	0 020	-0 147(08)	-1 860	-0 059
Never Married-Old	-0 491(47)	-1 050	-0 189	-1 324(39)	-3 430	-0 478	-0 401(33)	-1 220	-0 157	-0 439(38)	-1 160	-0 174	-0 573(42)	-1 360	-0 222
Widowed/ Divorced-Young	0 275(14)	2 000	0 091	0 162(14)	1 190	0 058	0 066(21)	0 320	0 024	0 159(17)	0 930	0 060	0 381(20)	1 890	0 146
Widowed/ Divorced-Old	-0 527(06)	-8 420	-0 200	-0 563(06)	-8 890	-0 218	-0 677(21)	-3 220	-0 264	-0 650(18)	-3 620	-0 255	-0 818(21)	-3 940	-0 310
ST	0 344(04)	9 260	0 119	0 410(04)	10 500	0 145	0 594(04)	14 240	0 209	0 572(06)	10 260	0 209	0 389(05)	8 410	0 151
SC	0 320(05)	6 490	0 107	0 218(05)	4 590	0 078	0 196(05)	4 250	0 072	0 187(05)	3 710	0 071	0 030(05)	0 600	0 012
15 to 19 years	0 751(07)	10 090	0 225	0 686(08)	9 080	0 220	0 561(09)	6 460	0 189	0 342(10)	3 530	0 126	0 601(10)	5 890	0 225
20 to 29 years	0 995(07)	15 060	0 305	0 982(07)	14 960	0 318	0 900(07)	12 940	0 303	0 842(07)	11 570	0 295	0 831(08)	10 650	0 308
30 to 39 years	1 206(07)	17 510	0 334	1 131(07)	16 810	0 339	1 165(07)	16 030	0 354	1 200(07)	16 510	0 387	1 162(08)	15 240	0 409
40 to 49 years	1 210(07)	17 820	0 319	1 157(07)	17 310	0 328	1 093(07)	14 920	0 326	1 255(08)	15 210	0 378	1 130(08)	14 320	0 384
50 to 59 years	0 913(07)	13 310	0 254	0 813(07)	12 260	0 248	0 735(07)	10 130	0 235	0 809(08)	10 470	0 266	0 854(08)	10 480	0 301
Not Literate	0 724(31)	2 350	0 278	0 693(25)	2 780	0 269	0 051(25)	0 210	0 019	0 287(21)	1 390	0 112	-0 011(11)	-0 100	-0 004
Literate-Below Primary	0 353(31)	1 130	0 115	0 442(25)	1 740	0 147	-0 313(25)	-1 250	-0 121	0 168(21)	0 800	0 063	-0 256(11)	-2 240	-0 102
Literate-Primary	0 207(31)	0 660	0 070	0 088(25)	0 350	0 032	-0 417(25)	-1 660	-0 163	-0 029(23)	-0 130	-0 011	-0 368(11)	-3 250	-0 146
Literate-Middle	-0 240(33)	-0 730	-0 090	-0 074(27)	-0 280	-0 028	-0 585(26)	-2 250	-0 229	-0 267(22)	-1 240	-0 105	-0 578(12)	-5 000	-0 225
Literate-Secondary	0 012(36)	0 030	0 004	0 031(27)	0 110	0 011	-0 965(27)	-3 620	-0 369	-0 442(23)	-1 890	-0 174	-0 699(12)	-5 680	-0 268
Hindu	0 154(21)	0 720	0 056	0 628(13)	4 740	0 245	0 160(21)	0 750	0 061	0 593(24)	2 460	0 233	0 513(17)	3 000	0 201
Muslim	-0 064(23)	-0 270	-0 023	0 348(15)	2 250	0 118	0 201(24)	0 850	0 072	0 334(26)	1 280	0 121	0 326(19)	1 750	0 126
Christian	0 303(26)	1 160	0 099	0 402(24)	1 650	0 134	1 429(31)	4 680	0 326	0 374(30)	1 240	0 134	0 346(26)	1 320	0 132
Self Employed-Non-agriculture	0 503(08)	6 070	0 156	0 615(08)	7 980	0 196	0 467(09)	5 140	0 158	0 395(11)	3 700	0 143	0 459(06)	7 230	0 174
Agriculture labour	0 957(07)	14 310	0 292	0 909(07)	13 400	0 296	1 082(07)	14 530	0 355	1 083(09)	11 830	0 375	0 981(06)	16 970	0 354
Other Labour	0 592(11)	5 600	0 177	0 434(10)	4 240	0 144	0 798(11)	7 570	0 242	0 631(12)	5 090	0 213	0 751(08)	9 210	0 267
Self Employed-agriculture	0 925(06)	14 810	0 331	0 727(06)	12 310	0 266	0 935(07)	13 490	0 342	0 836(09)	9 080	0 310	0 731(05)	15 350	0 281
Female Head	1 107(10)	11 640	0 271	1 206(11)	10 880	0 303	1 331(11)	12 120	0 329	0 993(12)	7 950	0 298	0 715(10)	7 330	0 256
MPCE	-0 062(01)	-10 100	-0 022	-0 035(01)	-5 890	-0 013	-0 033(01)	-4 980	-0 012	-0 040(01)	-4 310	-0 015	-0 076(01)	-10 920	-0 030
Constant	-1 952(37)	-5 210		-2 433(29)	-8 460		-1 536(32)	-4 770		-2 158(32)	-6 790		-1 400(22)	-6 400	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.16: Results of the Maximum Likelihood Probit Estimates for Madhya Pradesh: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 170(11)	1 570	0 062	0 274(10)	2 820	0 098	-0 169(11)	-1 500	-0 054	-0 109(11)	-0 980	-0 034	-0 149(09)	-1 710	-0 059
Never Married-Old	0 328(51)	0 640	0 123	0 349(37)	0 940	0 128	0 444(56)	0 800	0 163	-0 121(43)	-0 280	-0 037	-0 385(44)	-0 880	-0 146
Widowed/ Divorced-Young	0 828(20)	4 210	0 320	1 011(19)	5 320	0 386	0 516(27)	1 900	0 187	-0 011(30)	-0 030	-0 003	0 215(22)	0 980	0 086
Widowed/ Divorced-Old	-0 164(11)	-1 530	-0 056	-0 375(11)	-3 270	-0 116	-0 599(28)	-2 150	-0 168	-0 118(31)	-0 380	-0 036	-0 479(22)	-2 140	-0 181
ST	0 615(09)	6 810	0 232	0 575(07)	7 680	0 212	0 465(08)	5 940	0 168	0 340(08)	4 350	0 116	0 384(05)	7 100	0 152
SC	0 113(08)	1 440	0 041	0 417(07	5 860	0 152	-0 023(07)	-0 320	-0 008	0 076(08)	0 970	0 025	0 033(05)	0 600	0 013
15 to 19 years	0 582(15)	3 940	0 220	0 279(14)	1 930	0 100	0 602(15)	3 960	0 220	0 511(17)	3 050	0 179	0 666(11)	5 880	0 259
20 to 29 years	0 722(13)	5 380	0 266	0 555(13)	4 380	0 198	0 871(12)	7 250	0 311	0 922(13)	7 330	0 322	0 820(09)	9 250	0 317
30 to 39 years	1 028(13)	7 750	0 386	1 006(13)	7 940	0 372	1 204(12)	10 050	0 436	1 098(12)	8 900	0 392	1 136(09)	13 110	0 424
40 to 49 years	1 087(13)	8 590	0 411	1 034(12)	8 300	0 388	1 376(12)	11 220	0 505	1 315(12)	10 610	0 480	1 066(09)	11 980	0 394
50 to 59 years	0 762(13)	6 060	0 292	0 738(13)	5 800	0 279	0 764(12)	6 150	0 285	1 040(13)	7 990	0 386	0 839(09)	8 950	0 317
Not Literate	0 416(16)	2 550	0 143	-0 293(12)	-2 530	-0 100	-0 286(11)	-2 710	-0 095	0 019(11)	0 170	0 006	0 120(11)	1 110	0 048
Literate-Below Primary	-0 177(18)	-0 990	-0 060	-0 755(13)	-5 810	-0 204	-0 691(12)	-5 690	-0 185	-0 271(13)	-2 110	-0 080	-0 256(12)	-2 180	-0 100
Literate-Primary	-0 356(18)	-2 030	-0 116	-0 849(13)	-6 560	-0 225	-0 743(12)	-6 110	-0 196	-0 550(12)	-4 410	-0 148	-0 330(12)	-2 850	-0 127
Literate-Middle	-0 626(19)	-3 240	-0 187	-1 278(15)	-8 310	-0 283	-1 064(13)	-8 120	-0 245	-0 693(14)	-5 010	-0 178	-0 548(12)	-4 500	-0 204
Literate-Secondary	-0 275(17)	-1 600	-0 091	-0 719(13)	-5 660	-0 200	-0 774(12)	-6 490	-0 208	-0 602(12)	-4 910	-0 163	-0 707(13)	-5 660	-0 256
Hindu	0 613(18)	3 430	0 189	0 332(15)	2 170	0 105	0 057(15)	0 380	0 019	0 463(18)	2 630	0 131	0 518(18)	2 810	0 194
Muslim	0 202(20)	1 020	0 074	0 293(17)	1 730	0 105	-0 252(17)	-1 470	-0 078	0 147(19)	0 780	0 049	0 299(20)	1 520	0 119
Christian	-0 286(41)	-0 690	-0.093	1 255(26)	4 840	0 469	0 899(27)	3 310	0 343	0 246(41)	0 590	0 084	0 708(38)	1 840	0 269
Self Employed	-0 219(06)	-3 800	-0 075	-0 558(06)	-8 620	-0 175	-0 488(07)	-7 230	-0 150	-0 682(07)	-9 930	-0 197	-0 441(07)	-6 740	-0 168
Regular Wage/ Salaried	NA	NA	NA	-1 009(07)	-14 670	-0 304	-0 922(07)	-12 710	-0 274	-0 895(08)	-11 560	-0 246	-0 618(07)	-9 220	-0 229
Casual Labour	NA	NA	NA	-0 456(09)	-4 950	-0 136	-0 280(09)	-3 200	-0 086	-0 445(08)	-5 250	-0 124	-0 335(08)	-4 140	-0 129
Female Head	1 252(13)	9 690	0 468	1 065(16)	6 810	0 405	0 785(13)	5 950	0 296	0 883(14)	6 320	0 330	0 518(12)	4 450	0 203
MPCE	-0 102(01)	-8 450	-0 036	-0 076(01)	-8 010	-0 026	-0 083(01)	-8 350	-0 028	-0 084(01)	-7 590	-0 027	-0 089(01)	-11 740	-0 035
Constant	-1 448(28)	-5 120		-0 250(22)	-1 160		-0 186(22)	-0 840		-0 807(23)	-3 460		-0 850(23)	-3 650	

Note. dy/dx are marginal effects, i.e., the change in probability of women working with a one-unit change in the right side variable. z is the test of the underlying coefficient being 0. The figures in brackets denote the standard error of estimates.

Table 5.17: Results of the Maximum Likelihood Probit Estimates for Maharashtra: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	-0 352(08)	-4 680	-0 123	-0 449(08)	-5 840	-0 166	-0 385(10)	-3 810	-0 134	-0 567(10)	-5 880	-0 219	-0 465(10)	-4 600	-0 174
Never Married-Old	0 083(53)	0 160	0 026	-0 559(41)	-1 350	-0 213	-0 100(44)	-0 230	-0 033	-0 420(41)	-1 020	-0 163	-1 387(59)	-2 370	-0 505
Widowed/ Divorced-Young	0 132(12)	1 080	0 041	0 045(15)	0 300	0 015	0 046(17)	0 280	0 015	-0 039(18)	-0 220	-0 014	-0 238(17)	-1 370	-0 087
Widowed/ Divorced-Old	-0 504(06)	-7 890	-0 177	-0 530(07)	-7 680	-0 196	-0 565(18)	-3 190	-0 198	-0 485(19)	-2 590	-0 187	-0 420(18)	-2 350	-0 156
ST	0 244(06)	4 200	0 073	-0 044(05)	-0 800	-0 015	0 002(09)	0 020	0 001	0 125(06)	1 980	0 045	0 099(08)	1 310	0 034
SC	0 152(06)	2 440	0 047	-0 001(07)	-0 010	0 000	-0 054(09)	-0 580	-0 017	-0 154(08)	-1 830	-0 058	0 015(08)	0 180	0 005
15 to 19 years	1 401(09)	16 100	0 294	1 073(10)	10 750	0 274	0 829(14)	5 940	0 202	0 907(12)	7 590	0 269	0 526(12)	4 310	0 162
20 to 29 years	1 464(07)	19 790	0 346	1 149(09)	13 460	0 324	1 231(12)	9 960	0 305	1 028(09)	11 660	0 321	0 929(08)	11 090	0 274
30 to 39 years	1 644(08)	21 490	0 346	1 357(09)	15 810	0 342	1 468(12)	12 560	0 321	1 373(08)	16 330	0 391	1 399(08)	17 460	0 367
40 to 49 years	1 524(07)	21 020	0 314	1 249(08)	15 050	0 310	1 107(21)	5 170	0 258	1 425(09)	15 710	0 367	1 311(08)	15 840	0 325
50 to 59 years	0 898(07)	12 890	0 215	0 853(08)	10 940	0 231	0 888(13)	7 010	0 210	0 946(09)	10 680	0 274	0 834(08)	10 220	0 232
Not Literate	0 667(40)	1 650	0 233	0 568(34)	1 650	0 205	0 265(26)	1 040	0 087	0 345(22)	1 550	0 127	0 218(15)	1 490	0 076
Literate-Below Primary	0 427(41)	1 050	0 118	0 362(35)	1 040	0 113	0 181(24)	0 750	0 055	0 404(23)	1 750	0 136	0 077(16)	0 490	0 027
Literate-Primary	0 224(41)	0 550	0 067	0 136(35)	0 390	0 045	0 014(24)	0 060	0 005	0 062(22)	0 280	0 023	0 089(15)	0 600	0 031
Literate-Middle	-0 211(41)	-0 520	-0 071	-0 055(35)	-0 160	-0 019	-0 228(26)	-0 880	-0 077	-0 221(22)	-1 010	-0 083	-0 185(14)	-1 310	-0 067
Literate-Secondary	-0 552(42)	-1 310	-0 202	-0 444(35)	-1 260	-0 166	-0 580(24)	-2 380	-0 210	-0 521(22)	-2 320	-0 202	-0 483(14)	-3 360	-0 181
Hindu	-0 136(07)	-1 830	-0 042	0 040(07)	0 600	0 014	0 104(17)	0 590	0 034	-0 079(10)	-0 770	-0 029	-0 159(11)	-1 440	-0 054
Muslim	-0 566(10)	-5 450	-0 206	-0 445(09)	-4 770	-0 166	-0 010(31)	-0 030	-0 003	-0 792(16)	-4 980	-0 307	-0 826(15)	-5 450	-0 318
Christian	0 018(21)	0 090	0 006	-0 414(32)	-1 290	-0 155	0 909(41)	2 220	0 194	-0 054(45)	-0 120	-0 020	-0 085(38)	-0 230	-0 030
Self Employed-Non-agriculture	0 345(08)	4 160	0 099	0 287(09)	3 360	0 092	0 616(11)	5 840	0 159	0 133(09)	1 410	0 048	0 722(08)	8 620	0 210
Agriculture labour	0 951(07)	13 250	0 271	0 928(07)	12 500	0 289	1 222(19)	6 440	0 354	0 977(08)	12 770	0 333	1 422(08)	17 390	0 415
Other Labour	0 301(09)	3 340	0 088	0 204(09)	2 260	0 066	0 593(12)	4 960	0 153	0 104(11)	0 930	0 038	0 817(10)	8 460	0 226
Self Employed-agriculture	0 877(07)	13 140	0 265	0 784(07)	11 440	0 253	1 172(09)	12 840	0 320	0 934(07)	12 850	0 306	1 413(08)	18 620	0 422
Female Head	1 083(10)	11 030	0 232	1 046(09)	11 590	0 254	1 258(27)	4 720	0 248	0 764(13)	5 900	0 228	0 807(10)	7 940	0 221
MPCE	-0 032(01)	-4 750	-0 010	-0 021(01)	-3 000	-0 007	-0 063(03)	-2 100	-0 020	-0 044(01)	-4 440	-0 016	-0 035(01)	-4 070	-0 012
Constant	-1 621(42)	-3 880		-1 463(36)	-4 090		-1 262(46)	-2 740		-1 025(26)	-3 910		-1 146(20)	-5 850	

Note: dy/dx are marginal effects, i.e., the change in probability of women working with a one-unit change in the right side variable. z is the test of the underlying coefficient being 0. The figures in brackets denote the standard error of estimates.

Table 5.18: Results of the Maximum Likelihood Probit Estimates for Maharashtra: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 186(08)	2 300	0 054	0 384(08)	4 830	0 119	0 562(17)	3 390	0 178	0 447(09)	5 200	0 125	0 539(10)	5 650	0 180
Never Married-Old	0 597(27)	2 220	0 201	0 501(24)	2 090	0 168	0 680(19)	3 640	0 236	0 814(29)	2 820	0 271	0 827(24)	3 490	0 304
Widowed/ Divorced-Young	0 882(25)	3 500	0 312	0 429(16)	2 610	0 141	0 217(20)	1 090	0 065	-0 177(26)	-0 680	-0 041	-0 195(22)	-0 910	-0 055
Widowed/ Divorced-Old	0 034(09)	0 380	0 009	0 043(09)	0 450	0 012	-0 130(21)	-0 630	-0 035	0 323(26)	1 240	0 089	0 284(22)	1 300	0 092
ST	0 276(10)	2 870	0 084	0 354(09)	3 990	0 113	0 338(11)	3 170	0 107	0 193(13)	1 540	0 052	0 103(12)	0 850	0 032
SC	0 145(07)	1 950	0 042	0 020(07)	0 270	0 006	0 174(09)	1 890	0 052	0 173(07)	2 350	0 045	0 065(08)	0 820	0 020
15 to 19 years	0 276(14)	2 010	0 082	0 170(14)	1 240	0 051	-0 066(21)	-0 310	-0 018	-0 005(17)	-0 030	-0 001	-0 059(18)	-0 330	-0 017
20 to 29 years	0 564(11)	5 100	0 169	0 608(11)	5 330	0 189	0 626(15)	4 240	0 193	0 617(13)	4 870	0 173	0 534(12)	4 470	0 174
30 to 39 years	0 829(11)	7 680	0 269	0 938(11)	8 290	0 313	1 056(14)	7 770	0 355	0 974(12)	8 050	0 295	1 069(11)	9 440	0 371
40 to 49 years	0 942(11)	8 900	0 319	1 078(11)	9 710	0 376	1 091(14)	8 000	0 378	0 912(12)	7 520	0 287	0 954(11)	8 540	0 335
50 to 59 years	0 556(10)	5 410	0 179	0 688(11)	6 080	0 233	0 390(22)	1 760	0 123	0 752(12)	6 080	0 237	0 704(11)	6 140	0 248
Not Literate	-0 379(10)	-3 810	-0 100	-0 393(09)	-4 500	-0 106	-0 429(15)	-2 880	-0 112	-0 330(09)	-3 490	-0 075	-0 491(09)	-5 570	-0 132
Literate-Below Primary	-0 668(11)	-5 910	-0 139	-0 510(10)	-4 860	-0 119	-0 650(15)	-4 280	-0 140	-0 587(11)	-5 330	-0 111	-0 474(12)	-3 970	-0 120
Literate-Primary	-0 828(10)	-8 080	-0 175	-0 759(09)	-8 620	-0 174	-0 815(15)	-5 520	-0 170	-0 547(11)	-5 180	-0 110	-0 498(10)	-5 030	-0 128
Literate-Middle	-1 159(11)	-10 940	-0 214	-0 769(10)	-7 970	-0 165	-0 860(16)	-5 510	-0 188	-0 697(09)	-7 640	-0 140	-0 790(08)	-9 320	-0 196
Literate-Secondary	-0 673(10)	-6 730	-0 150	-0 611(09)	-7 080	-0 147	-0 794(15)	-5 150	-0 182	-0 618(09)	-7 250	-0 130	-0 745(07)	-9 990	-0 188
Hindu	0 125(08)	1 530	0 033	0 350(07)	4 670	0 092	0 016(08)	0 200	0 004	0 145(11)	1 360	0 035	0 087(09)	0 920	0 026
Muslim	-0 288(10)	-2 800	-0 072	-0 127(09)	-1 360	-0 035	-0 321(09)	-3 460	-0 081	-0 364(13)	-2 890	-0 079	-0 165(12)	-1 430	-0 047
Christian	0 251(15)	1 690	0 076	0 698(16)	4 420	0 243	0 600(14)	4 260	0 204	0 436(16)	2 750	0 129	0 073(19)	0 390	0 023
Self Employed	0 063(05)	1 320	0 018	1 111(14)	7 670	0 358	1 225(23)	5 310	0 393	0 624(14)	4 490	0 170	1 044(15)	6 990	0 337
Regular Wage/ Salaried	NA	NA	NA	0 971(14)	6 830	0 263	1 140(24)	4 760	0 295	0 518(14)	3 810	0 127	1 058(15)	7 170	0 318
Casual Labour	NA	NA	NA	1 626(16)	10 260	0 575	1 680(23)	7 230	0 595	0 675(15)	4 490	0 207	1 402(16)	8 620	0 508
Female Head	0 754(09)	8 160	0 257	1 035(10)	10 420	0 371	0 991(20)	4 950	0 350	1 075(11)	9 900	0 366	0 674(11)	6 010	0 239
MPCE	-0 108(01)	-11 990	-0 030	-0 058(01)	-6 420	-0 016	-0 076(01)	-6 130	-0 021	-0 068(01)	-6 170	-0 017	-0 066(01)	-6 200	-0 020
Constant	-0 238(17)	-1 370		-1 986(22)	-9 140		-1 649(37)	-4 460		-1 404(22)	-6 330		-1 608(21)	-7 490	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.19: Results of the Maximum Likelihood Probit Estimates for Orissa: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 295(09)	3 220	0 116	0 156(08)	1 850	0 060	0 244(09)	2 590	0 097	0 004(10)	0 040	0 002	0 207(09)	2 220	0 082
Never Married-Old	-0 082(43)	-0 190	-0 031	0 135(40)	0 340	0 052	-1 301(33)	-3 920	-0 366	-0 474(50)	-0 950	-0 165	0 118(25)	0 470	0 047
Widowed/ Divorced-Young	0 773(26)	2 940	0 299	0 618(19)	3 180	0 242	0 482(24)	1 980	0 191	0 357(23)	1 520	0 140	-0 013(28)	-0 050	-0 005
Widowed/ Divorced-Old	-0 261(10)	-2 700	-0 097	-0 242(09)	-2 740	-0 088	-0 617(25)	-2 460	-0 225	-0 612(24)	-2 530	-0 213	-0 257(29)	-0 900	-0 099
ST	0 709(06)	11 820	0 276	0 922(06)	16 660	0 354	1 029(07)	13 850	0 392	0 879(06)	14 960	0 339	0 654(06)	10 600	0 256
SC	0 257(06)	4 160	0 101	0 330(06)	5 700	0 128	0 499(06)	8 380	0 197	0 371(06)	6 440	0 145	0 221(06)	3 750	0 088
15 to 19 years	0 649(12)	5 210	0 254	0 667(13)	5 090	0 260	0 904(14)	6 570	0 344	0 854(15)	5 710	0 330	0 726(14)	5 030	0 282
20 to 29 years	0 795(11)	7 340	0 308	0 896(11)	8 000	0 343	1 165(12)	9 540	0 439	1 070(11)	9 900	0 407	0 825(11)	7 510	0 320
30 to 39 years	0 934(11)	8 420	0 359	1 330(11)	11 700	0 492	1 372(11)	12 600	0 492	1 264(11)	11 820	0 471	1 154(11)	10 810	0 431
40 to 49 years	0 920(10)	8 950	0 354	1 175(11)	10 760	0 442	1 301(11)	12 110	0 466	1 177(11)	10 820	0 440	1 206(11)	11 330	0 442
50 to 59 years	0 701(11)	6 290	0 274	0 854(11)	8 100	0 331	0 906(11)	8 600	0 343	0 773(11)	7 210	0 301	0 727(11)	6 790	0 282
Not Literate	0 181(44)	0 410	0 069	0 233(37)	0 630	0 086	0 298(28)	1 080	0 115	0 551(25)	2 200	0 204	0 493(17)	2 910	0 191
Literate-Below Primary	-0 382(45)	-0 860	-0 139	-0 363(37)	-0 980	-0 129	-0 321(28)	-1 140	-0 123	-0 041(25)	-0 160	-0 016	-0 030(17)	-0 170	-0 012
Literate-Primary	-0 599(45)	-1 320	-0 205	-0 597(38)	-1 570	-0 197	-0 639(.29)	-2 200	-0 227	-0 077(27)	-0 290	-0 029	-0 056(18)	-0 310	-0 022
Literate-Middle	-0 874(46)	-1 910	-0 275	-0 548(38)	-1 450	-0 184	-0 901(29)	-3 150	-0 303	-0 267(26)	-1 040	-0 099	-0 089(17)	-0 520	-0 035
Literate-Secondary	-0 491(50)	-0 980	-0 171	-0 250(39)	-0 630	-0 090	-1 042(31)	-3 380	-0 328	-0 554(28)	-2 010	-0 192	-0 367(19)	-1 970	-0 138
Hindu	0 121(38)	0 320	0 046	-0 093(33)	-0 280	-0 036	0 107(29)	0 370	0 042	-0 477(33)	-1 460	-0 188	1 482(65)	2 280	0 397
Muslim	-1 398(47)	-2 960	-0 353	-1 265(43)	-2 930	-0 318	-0 570(34)	-1 660	-0 205	-1 690(42)	-4 040	-0 376	1 738(70)	2 500	0 511
Christian	0 072(41)	0 170	0 028	0 060(36)	0 170	0 023	0 834(.35)	2 360	0 314	-0 119(36)	-0 330	-0 045	1 561(66)	2 350	0 493
Self Employed-Non-agriculture	0 812(10)	8 020	0 315	0 878(.10)	8 620	0 339	0 234(10)	2 300	0 093	0 989(11)	9 230	0 377	0 876(09)	9 650	0 337
Agriculture labour	0 658(09)	6 950	0 254	0 662(10)	6 920	0 254	0 274(10)	2 620	0 109	0 993(09)	10 530	0 375	0 924(09)	10 020	0 355
Other Labour	0 747(13)	5 850	0 290	0 729(12)	6 110	0 284	-0 689(48)	-1 450	-0 242	0 892(14)	6 360	0 341	0 660(11)	6 050	0 257
Self Employed-agriculture	0 535(09)	5 920	0 207	0 571(09)	6 200	0 217	0 227(10)	2 360	0 090	0 869(10)	9 130	0 335	0 953(09)	10 910	0 366
Female Head	0 992(11)	9 280	0 375	1 118(10)	10 950	0 419	0 930(10)	9 150	0 347	1 031(10)	10 080	0 388	0 893(11)	8 200	0 337
MPCE	-0 044(01)	-4 710	-0 017	-0 015(01)	-1 560	-0 006	-0 046(01)	-3 640	-0 018	-0 039(01)	-3 210	-0 015	-0 088(.01)	-7 390	-0 034
Constant	-1 783(60)	-2 980		-2 062(52)	-3 990		-1 807(42)	-4 320		-2 038(43)	-4 740		-3 529(68)	-5 180	

Note: dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates.

Table 5.20: Results of the Maximum Likelihood Probit Estimates for Orissa: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 167(21)	0 790	0 033	0 441(21)	2 120	0 105	0 292(19)	1 550	0 069	0 271(19)	1 420	0 067	0 476(21)	2 300	0 131
Never Married-Old	Dropped			0 630(39)	1 630	0 176	0 083(51)	0 160	0 019	0 034(57)	0 060	0 008	-0 195(46)	-0 420	-0 043
Widowed/ Divorced-Young	1 967(54)	3 670	0 657	0 485(29)	1 660	0 127	-0 258(72)	-0 360	-0 050	-5 782( )		-0 342	1 376(47)	2 940	0 463
Widowed/ Divorced-Old	0 047(32)	0 150	0 009	0 256(23)	1 090	0 059	0 581(74)	0 790	0 159	6 301(30)	21 150	0 958	-1 328(48)	-2 780	-0 184
ST	0 776(16)	4 900	0 197	0 269(17)	1 620	0 062	0 546(16)	3 340	0 147	0 346(18)	1 910	0 091	0 492(15)	3 310	0 142
SC	0 522(17)	3 150	0 121	0 426(16)	2 740	0 106	0 266(14)	1 850	0 065	0 737(14)	5 090	0 213	0 052(14)	0 360	0 013
15 to 19 years	0 873(45)	1 960	0 218	0 817(35)	2 360	0 222	0 918(39)	2 380	0 264	0 800(43)	1 850	0 233	-0 082(34)	-0 240	-0 019
20 to 29 years	0 863(44)	1 970	0 199	1 133(30)	3 830	0 290	1 242(32)	3 860	0 344	0 971(39)	2 510	0 274	0 430(29)	1 500	0 114
30 to 39 years	1 128(43)	2 600	0 300	1 569(29)	5 400	0 456	1 635(32)	5 160	0 499	1 385(38)	3 660	0 419	0 879(27)	3 280	0 260
40 to 49 years	0 804(41)	1 980	0 203	1 433(29)	4 930	0 445	1 832(31)	5 910	0 595	1 235(37)	3 320	0 389	0 968(26)	3 760	0 301
50 to 59 years	0 857(42)	2 060	0 229	1 326(27)	4 950	0 423	1 630(30)	5 420	0 539	0 352(34)	1 030	0 094	0 644(28)	2 310	0 195
Not Literate	-0 504(37)	-1 370	-0 096	-0 447(27)	-1 630	-0 089	-0 916(22)	-4 090	-0 178	-0 364(25)	-1 440	-0 080	-0 015(24)	-0 060	-0 004
Literate-Below Primary	-1 088(40)	-2 720	-0 118	-0 674(28)	-2 420	-0 104	-1 450(23)	-6 390	-0 171	-0 644(28)	-2 330	-0 115	-0 605(24)	-2 490	-0 117
Literate-Primary	-1 429(38)	-3 740	-0 136	-1 081(29)	-3 740	-0 133	-1 593(27)	-5 870	-0 162	-0 527(28)	-1 850	-0 094	-0 480(26)	-1 860	-0 093
Literate-Middle	-1 596(37)	-4 360	-0 153	-1 225(28)	-4 350	-0 157	-1 718(22)	-7 670	-0 210	-0 946(27)	-3 570	-0 154	-0 838(24)	-3 450	-0 153
Literate-Secondary	-1 206(36)	-3 360	-0 119	-0 741(27)	-2 740	-0 108	-0 941(22)	-4 320	-0 144	-0 775(25)	-3 130	-0 135	-0 656(25)	-2 600	-0 130
Hindu	0 254(54)	0 470	0 041	5 543(48)	11 520	0 231	-0 169(40)	-0 420	-0 040	5 279(49)	10 880	0 240	0 516(72)	0 710	0 099
Muslim	-0 136(63)	-0 220	-0 023	5 338(55)	9 620	0 912	-1 213(50)	-2 430	-0 137	5 406(56)	9 630	0 899	-0 077(78)	-0 100	-0 018
Christian	0 369(65)	0 570	0 084	5 923(56)	10 520	0 902	-0 508(59)	-0 860	-0 083	5 288(55)	9 670	0 876	0 789(77)	1 030	0 255
Self Employed	0 368(12)	2 960	0 074	1 187(27)	4 340	0 281	0 949(24)	3 980	0 247	0 612(22)	2 780	0 157	0 706(25)	2 850	0 185
Regular Wage/ Salaried	NA	NA	NA	0 786(27)	2 860	0 173	0 500(24)	2 120	0 110	0 367(22)	1 630	0 088	0 466(26)	1 820	0 119
Casual Labour	NA	NA	NA	1 477(31)	4 830	0 471	1 203(26)	4 560	0 383	0 937(25)	3 810	0 279	0 830(27)	3 100	0 256
Female Head	0 903(33)	2 740	0 251	1 426(20)	7 060	0 468	1 009(22)	4 610	0 318	1 388(28)	4 910	0 472	1 204(29)	4 220	0 410
MPCE	-0 052(03)	-2 040	-0 010	-0 015(02)	-0 680	-0 003	-0 098(02)	-4 200	-0 021	-0 108(03)	-4 280	-0 025	-0 034(02)	-1 570	-0 008
Constant	-1 491(76)	-1 960		-8 208( )			-1 339(62)	-2 160		-6 967( )			-2 267(83)	-2 720	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.21: Results of the Maximum Likelihood Probit Estimates for Punjab: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 241(09)	2 800	0 096	0 024(09)	0 260	0 009	-0 087(14)	-0 630	-0 029	-0 035(12)	-0 290	-0 014	-0 194(11)	-1 830	-0 075
Never Married-Old	-0 968(42)	-2 320	-0 317	0 350(49)	0 720	0 139	-0 395(63)	-0 630	-0 119	-0 129(84)	-0 150	-0 049	-0 763(36)	-2 150	-0 260
Widowed/ Divorced-Young	0 187(30)	0 620	0 074	-0 629(28)	-2 230	-0 226	0 148(62)	0 240	0 052	0 238(65)	0 370	0 094	-0 030(60)	-0 050	-0 012
Widowed/ Divorced-Old	-0 284(10)	-2 800	-0 110	-0 205(13)	-1 610	-0 080	-0 585(62)	-0 950	-0 170	-0 600(65)	-0 920	-0 209	-0 346(60)	-0 580	-0 132
ST	-0 093(22)	-0 430	-0 037	-0 326(28)	-1 170	-0 124	0 805(25)	3 280	0 309	-0 654(28)	-2 350	-0 219	-0 367(40)	-0 920	-0 138
SC	-0 135(07)	-1 890	-0 053	0 044(07)	0 620	0 017	0 152(07)	2 050	0 053	0 102(07)	1 420	0 039	0 027(07)	0 410	0 011
15 to 19 years	0 460(13)	3 660	0 182	0 611(14)	4 440	0 239	0 255(16)	1 570	0 091	0 190(16)	1 180	0 074	0 229(15)	1 500	0 091
20 to 29 years	0 706(10)	6 940	0 276	0 808(10)	7 710	0 313	0 279(13)	2 100	0 099	0 612(11)	5 550	0 239	0 675(11)	6 310	0 264
30 to 39 years	0 994(10)	9 900	0 373	1 196(10)	11 500	0 440	0 766(11)	6 790	0 285	0 838(10)	8 030	0 325	1 028(10)	10 190	0 390
40 to 49 years	0 959(10)	9 570	0 359	1 355(12)	11 670	0 474	0 871(11)	7 860	0 328	1 058(11)	9 670	0 400	1 030(11)	9 750	0 385
50 to 59 years	0 656(11)	6 180	0 254	0 941(12)	8 180	0 351	0 544(12)	4 630	0 204	0 716(11)	6 310	0 279	0 799(11)	7 430	0 306
Not Literate	0 511(21)	2 420	0 197	0 851(19)	4 450	0 321	0 003(31)	0 010	0 001	0 293(21)	1 380	0 112	0 003(15)	0 020	0 001
Literate-Below Primary	0 203(23)	0 900	0 081	0 608(21)	2 880	0 236	-0 073(32)	-0 230	-0 025	0 292(23)	1 270	0 115	-0 155(17)	-0 930	-0 060
Literate-Primary	0 149(21)	0 690	0 059	0 566(21)	2 850	0 222	-0 152(34)	-0 440	-0 051	0 154(22)	0 710	0 060	-0 017(15)	-0 120	-0 007
Literate-Middle	0 012(22)	0 050	0 005	0 554(22)	2 470	0 217	-0 208(31)	-0 670	-0 068	-0 130(22)	-0 590	-0 049	-0 241(15)	-1 570	-0 093
Literate-Secondary	0 129(23)	0 570	0 051	0 218(20)	1 080	0 087	-0 155(31)	-0 510	-0 051	0 049(21)	0 230	0 019	-0 426(15)	-2 930	-0 162
Hindu	0 177(05)	3 380	0 070	-0 083(06)	-1 370	-0 033	0 061(06)	0 970	0 021	0 118(06)	1 840	0 046	-0 390(07)	-5 630	-0 149
Muslim	0 061(21)	0 290	0 024	0 317(24)	1 290	0 126	0 405(22)	1 870	0 151	0 463(28)	1 670	0 183	0 691(22)	3 080	0 266
Christian	0 444(23)	1 900	0 174	-0 610(23)	-2 650	-0 220	0 521(24)	2 140	0 197	-0 304(29)	-1 050	-0 112	-0 084(22)	-0 390	-0 033
Self Employed-Non-agriculture	0 419(09)	4 540	0 166	0 292(11)	2 680	0 116	0 126(10)	1 230	0 044	-0 024(10)	-0 250	-0 009	0 389(10)	3 820	0 154
Agriculture labour	0 878(10)	9 100	0 336	0 578(10)	5 620	0 227	0 409(10)	4 070	0 147	0 237(10)	2 400	0 093	0 627(11)	5 720	0 246
Other Labour	0 356(12)	3 080	0 141	0 303(15)	1 960	0 120	0 415(14)	2 960	0 154	0 101(12)	0 860	0 039	0 471(11)	4 460	0 186
Self Employed-agriculture	0 755(08)	10 040	0 293	0 310(09)	3 470	0 123	0 465(10)	4 710	0 162	0 505(08)	6 110	0 196	0 984(09)	10 930	0 377
Female Head	0 425(11)	3 910	0 168	0 639(13)	5 010	0 248	0 819(15)	5 580	0 314	0 246(13)	1 860	0 097	0 421(13)	3 260	0 166
MPCE	0 006(01)	0 680	0 003	0 027(01)	2 540	0 011	0 080(02)	4 470	0 028	0 029(01)	2 220	0 011	0 016(01)	1 300	0 006
Constant	-1 903(25)	-7 730		-2 197(24)	-9 040		-1 883(35)	-5 430		-1 497(26)	-5 680		-1 254(21)	-5 930	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.22: Results of the Maximum Likelihood Probit Estimates for Punjab: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 478(15)	3 250	0 140	0 375(14)	2 650	0 100	0 194(15)	1 280	0 039	0 384(16)	2 420	0 094	0 583(18)	3 330	0 155
Never Married-Old	-0 648(57)	-1 130	-0 119	Dropped			0 591(47)	1 260	0 152	0 881(42)	2 080	0 278	1 068(46)	2 320	0 357
Widowed/ Divorced-Young	0 927(30)	3 110	0 322	0 458(35)	1 310	0 133	0 037(71)	0 050	0 007	1 804(67)	2 690	0 603	0 621(39)	1 590	0 176
Widowed/ Divorced-Old	0 474(19)	2 550	0 144	0 133(16)	0 820	0 033	0 145(71)	0 200	0 029	-1 504(69)	-2 180	-0 162	-0 426(42)	-1 020	-0 080
ST	0 457(31)	1 470	0 142	0 950(31)	3 110	0 317	-1 399(42)	-3 300	-0 107	0 450(36)	1 240	0 122	-0 471(43)	-1 100	-0 082
SC	0 375(11)	3 500	0 107	0 700(10)	6 970	0 202	0 228(11)	2 140	0 046	0 224(10)	2 180	0 051	0 137(12)	1 130	0 032
15 to 19 years	-0 228(25)	-0 920	-0 055	0 050(24)	0 210	0 012	0 195(29)	0 680	0 040	0 447(28)	1 620	0 115	-0 095(33)	-0 290	-0 021
20 to 29 years	0 423(22)	1 960	0 117	0 482(19)	2 600	0 125	0 520(23)	2 250	0 110	0 594(22)	2 690	0 149	0 463(28)	1 680	0 118
30 to 39 years	0 576(19)	2 960	0 172	0 922(18)	5 140	0 273	0 933(22)	4 160	0 231	1 032(21)	4 930	0 292	1 096(24)	4 620	0 326
40 to 49 years	0 730(19)	3 840	0 231	0 927(18)	5 250	0 285	1 084(22)	4 880	0 298	1 155(21)	5 510	0 349	0 980(23)	4 180	0 291
50 to 59 years	0 800(20)	3 980	0 262	0 624(19)	3 290	0 185	0 904(22)	4 050	0 246	0 997(21)	4 710	0 310	0 999(24)	4 120	0 311
Not Literate	-0 660(20)	-3 380	-0 166	-0 015(14)	-0 110	-0 004	-0 417(15)	-2 800	-0 070	-0 279(16)	-1 780	-0 058	-0 701(18)	-3 850	-0 131
Literate-Below Primary	-0 840(22)	-3 850	-0 147	-0 479(17)	-2 740	-0 091	-0 406(19)	-2 160	-0 060	-0 564(23)	-2 490	-0 092	-0 557(21)	-2 680	-0 094
Literate-Primary	-0 848(18)	-4 720	-0 158	-0 349(15)	-2 270	-0 072	-0 478(16)	-2 970	-0 071	-0 474(16)	-2 880	-0 084	-0 726(16)	-4 630	-0 120
Literate-Middle	-0 599(19)	-3 170	-0 123	-0 617(17)	-3 600	-0 113	-0 566(17)	-3 360	-0 082	-0 372(17)	-2 210	-0 069	-1 178(16)	-7 230	-0 152
Literate-Secondary	-0 755(17)	-4 490	-0 153	-0 231(13)	-1 730	-0 052	-0 387(12)	-3 110	-0 065	-0 499(13)	-3 750	-0 098	-0 944(12)	-7 840	-0 181
Hindu	-0 128(09)	-1 490	-0 034	-0 242(08)	-3 190	-0 059	-0 026(08)	-0 340	-0 005	0 085(08)	1 020	0 018	-0 193(09)	-2 130	-0 045
Muslim	0 192(28)	0 690	0 054	0 336(23)	1 460	0 093	0 833(44)	1 880	0 235	0 036(36)	0 100	0 008	0 135(26)	0 520	0 033
Christian	-1 044(45)	-2 310	-0 154	-1 067(50)	-2 130	-0 137	1 339(54)	2 470	0 433	0 508(41)	1 240	0 142	0 570(33)	1 730	0 167
Self Employed	-0 029(09)	-0 330	-0 007	0 935(23)	4 120	0 222	0 604(25)	2 440	0 113	0 258(20)	1 290	0 057	0 737(25)	2 940	0 168
Regular Wage/ Salaried	NA	NA	NA	1 065(22)	4 740	0 291	0 789(24)	3 230	0 165	0 546(20)	2 710	0 128	0 931(25)	3 730	0 231
Casual Labour	NA	NA	NA	1 003(25)	4 060	0 325	1 295(27)	4 810	0 397	0 722(23)	3 140	0 209	0 737(28)	2 610	0 222
Female Head	0 132(19)	0 710	0 036	0 697(18)	3 890	0 215	0 988(19)	5 230	0 284	1 044(19)	5 500	0 333	0 390(20)	1 910	0 104
MPCE	0 009(02)	0 530	0 002	0 002(02)	0 150	0 001	0 059(02)	2 790	0 011	0 017(02)	0 820	0 004	-0 048(02)	-1 980	-0 011
Constant	-0 841(33)	-2 560		-2 417(35)	-7 000		-2 755(38)	-7 200		-2 277(34)	-6 770		-1 487(39)	-3 840	.

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.23: Results of the Maximum Likelihood Probit Estimates for Rajasthan: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	-0 256(10)	-2 540	-0 094	-0 127(10)	-1 240	-0 045	-0 208(11)	-1 940	-0 077	-0 247(10)	-2 390	-0 097	-0 335(10)	-3 340	-0 129
Never Married-Old	-0 803(47)	-1 710	-0 310	Dropped			-1 366(53)	-2 560	-0 497	Dropped			-1 142(50)	-2 270	-0 424
Widowed/ Divorced-Young	0 149(24)	0 630	0 050	0 113(21)	0 540	0 037	5 110(09)	57 690	0 524	-0 687(31)	-2 220	-0 269	-0 146(40)	-0 370	-0 055
Widowed/ Divorced-Old	-0 442(08)	-5 560	-0 165	-0 613(08)	-7 820	-0 229	-5 529( )		-0 855	0 375(31)	1 190	0 138	-0 129(40)	-0 330	-0 049
ST	0 751(07)	10 830	0 220	0 716(07)	10 100	0 205	0 524(08)	6 890	0 167	0 515(06)	8 470	0 187	0 622(08)	7 890	0 206
SC	0 124(06)	2 230	0 043	0 089(06)	1 580	0 030	0 108(07)	1 640	0 038	0 052(06)	0 850	0 020	0 074(06)	1 200	0 027
15 to 19 years	1 090(10)	11 130	0 288	0 976(10)	10 070	0 257	0 928(11)	8 510	0 262	0 951(11)	8 380	0 311	1 040(11)	9 260	0 310
20 to 29 years	1 123(09)	12 900	0 330	1 101(09)	12 930	0 312	0 988(10)	10 360	0 302	1 150(09)	12 750	0 387	1 172(09)	13 030	0 365
30 to 39 years	1 186(09)	13 110	0 317	1 179(09)	13 170	0 308	1 199(10)	12 620	0 333	1 298(09)	14 240	0 415	1 498(09)	16 110	0 421
40 to 49 years	1 266(09)	14 080	0 321	1 158(09)	13 160	0 289	1 132(10)	11 810	0 307	1 355(09)	14 280	0 402	1 371(10)	14 380	0 371
50 to 59 years	0 883(09)	9 940	0 243	0 928(09)	10 690	0 240	0 820(10)	8 580	0 235	0 959(10)	9 950	0 308	0 922(10)	9 530	0 274
Not Literate	0 484(43)	1 110	0 183	0 264(44)	0 600	0 095	0 153(33)	0 470	0 056	0 315(38)	0 820	0 124	0 149(26)	0 570	0 056
Literate-Below Primary	0 131(45)	0 290	0 044	-0 025(46)	-0 050	-0 008	-0 276(34)	-0 820	-0 103	0 098(39)	0 250	0 037	-0 314(27)	-1 150	-0 122
Literate-Primary	-0 225(45)	-0 500	-0 083	0 058(46)	0 130	0 019	-0 345(34)	-1 020	-0 130	-0 160(39)	-0 410	-0 063	-0 213(27)	-0 790	-0 081
Literate-Middle	-0 083(48)	-0 170	-0 030	-0 227(47)	-0 480	-0 082	-0 510(34)	-1 490	-0 196	-0 300(40)	-0 760	-0 118	-0 450(27)	-1 660	-0 176
Literate-Secondary	-0 518(54)	-0 950	-0 198	-0 051(50)	-0 100	-0 018	-0 964(37)	-2 590	-0 370	-0 566(40)	-1 410	-0 223	-0 587(28)	-2 070	-0 230
Hindu	0 630(13)	4 930	0 241	0 050(12)	0 410	0 017	-0 288(14)	-2 010	-0 096	0 639(12)	5 560	0 251	-0 867(15)	-5 930	-0 258
Muslim	0 844(15)	5 560	0 225	-0 227(15)	-1 560	-0 081	-1 067(22)	-4 860	-0 406	0 670(14)	4 680	0 228	-1 262(17)	-7 310	-0 463
Christian	Dropped			1 152(62)	1 870	0 245	Dropped			Dropped			Dropped		
Self Employed-Non-agriculture	0 253(10)	2 500	0 084	0 552(10)	5 670	0 164	0 099(10)	0 970	0 035	0 387(09)	4 190	0 143	0 442(10)	4 400	0 153
Agriculture labour	0 500(10)	4 840	0 154	0 475(11)	4 490	0 143	0 517(12)	4 490	0 161	0 694(12)	6 010	0 235	0 821(13)	6 320	0 247
Other Labour	0 254(12)	2 130	0 083	0 794(10)	8 090	0 228	0 515(11)	4 900	0 164	0 385(10)	4 000	0 142	0 730(11)	6 950	0 237
Self Employed-agriculture	0 726(08)	8 670	0 265	1 161(09)	13 370	0 379	0 720(09)	8 400	0 259	0 747(08)	9 650	0 286	1 205(09)	13 060	0 432
Female Head	0 882(12)	7 580	0 231	0 884(11)	8 050	0 224	0 689(12)	5 700	0 200	0 463(11)	4 250	0 166	0 264(11)	2 460	0 093
MPCE	-0 035(01)	-5 030	-0 012	0 002(01)	0 270	0 001	-0 027(01)	-2 480	-0 010	0 001(01)	0 090	0 000	-0 018(01)	-1 900	-0 007
Constant	-2 058(47)	-4 380		-1 651(47)	-3 510		-0 687(37)	-1 880		-2 290(42)	-5 500		-0 748(32)	-2 350	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.24: Results of the Maximum Likelihood Probit Estimates for Rajasthan: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	-0 438(15)	-2 870	-0 125	-0 102(15)	-0 670	-0 032	-0 195(18)	-1 080	-0 052	-0 109(15)	-0 720	-0 025	-0 133(17)	-0 770	-0 039
Never Married-Old	Dropped			1 011(49)	2 060	0 382	0 327(68)	0 480	0 105	-0 218(90)	-0 240	-0 046	0 558(68)	0 820	0 199
Widowed/ Divorced-Young	0 076(25)	0 300	0 025	0 431(39)	1 090	0 154	-0 837(47)	-1 800	-0 176	0 413(51)	0 800	0 115	-0 216(44)	-0 490	-0 062
Widowed/ Divorced-Old	-0 042(15)	-0 280	-0 013	-0 063(15)	-0 410	-0 020	0 861(48)	1 810	0 297	-0 318(52)	-0 610	-0 066	0 421(46)	0 910	0 143
ST	0 621(20)	3 160	0 230	0 335(19)	1 750	0 117	-0 045(27)	-0 170	-0 013	-0 314(20)	-1 540	-0 064	0 216(25)	0 870	0 071
SC	0 177(10)	1 810	0 059	0 340(09)	3 600	0 116	0 148(11)	1 360	0 044	0 421(10)	4 120	0 114	0 107(13)	0 820	0 033
15 to 19 years	0 980(18)	5 300	0 358	0 705(21)	3 360	0 252	0 568(25)	2 260	0 185	0 599(26)	2 290	0 172	0 868(25)	3 410	0 308
20 to 29 years	0 960(16)	5 840	0 336	0 603(18)	3 370	0 205	0 853(19)	4 370	0 274	0 840(23)	3 730	0 239	0 944(22)	4 210	0 322
30 to 39 years	1 095(17)	6 590	0 399	1 074(18)	5 900	0 387	0 904(19)	4 700	0 301	1 173(22)	5 330	0 354	1 270(22)	5 890	0 445
40 to 49 years	0 873(16)	5 320	0 320	0 985(18)	5 460	0 361	0 946(20)	4 820	0 323	1 126(22)	5 140	0 359	0 967(21)	4 500	0 348
50 to 59 years	0 545(17)	3 170	0 197	0 558(17)	3 240	0 200	0 537(19)	2 800	0 177	0 978(23)	4 320	0 318	0 794(23)	3 460	0 285
Not Literate	0 250(22)	1 140	0 079	0 253(15)	1 660	0 080	-0 128(16)	-0 810	-0 036	-0 354(15)	-2 430	-0 083	0 426(20)	2 080	0 131
Literate-Below Primary	-0 362(25)	-1 480	-0 105	-0 223(19)	-1 200	-0 066	-0 518(18)	-2 800	-0 121	-0 693(19)	-3 720	-0 118	0 186(23)	0 820	0 060
Literate-Primary	-0 503(25)	-2 030	-0 139	-0 340(18)	-1 930	-0 098	-0 515(18)	-2 830	-0 121	-0 601(17)	-3 500	-0 110	-0 144(23)	-0 620	-0 042
Literate-Middle	-0 908(25)	-3 670	-0 216	-0 783(20)	-3 990	-0 193	-0 941(19)	-4 990	-0 187	-0 756(18)	-4 310	-0 131	-0 352(22)	-1 590	-0 097
Literate-Secondary	-0 707(26)	-2 740	-0 179	-0 509(17)	-2 930	-0 139	-0 624(17)	-3 570	-0 143	-0 694(16)	-4 310	-0 130	-0 558(27)	-2 040	-0 145
Hindu	0 393(18)	2 120	0 117	0 588(21)	2 810	0 166	0 520(17)	3 020	0 127	0 494(19)	2 580	0 101	-0 500(31)	-1 600	-0 167
Muslim	0 046(21)	0 220	0 015	0 344(22)	1 540	0 117	0 368(21)	1 770	0 115	0 247(22)	1 110	0 064	-0 909(33)	-2 730	-0 213
Christian	Dropped			0 378(38)	1 010	0 134	0 702(69)	1 020	0 246	1 040(47)	2 220	0 355	dropped		
Self Employed	0 280(07)	3 910	0 090	1 296(24)	5 490	0 414	0 979(21)	4 710	0 288	0 851(23)	3 720	0 211	1 687(25)	6 710	0 502
Regular Wage/ Salaried	NA	NA	NA	1 001(24)	4 200	0 329	0 776(21)	3 660	0 230	0 717(23)	3 160	0 185	1 556(26)	6 010	0 499
Casual Labour	NA	NA	NA	1 328(26)	5 200	0 490	1 235(23)	5 300	0 446	1 299(24)	5 330	0 436	1 331(28)	4 790	0 486
Female Head	0 662(16)	4 180	0 245	1 269(19)	6 800	0 472	0 916(17)	5 500	0 324	1 091(19)	5 850	0 368	0 265(24)	1 080	0 088
MPCE	0 010(01)	0 740	0 003	0 000(01)	-0 010	0 000	0 006(02)	0 350	0 002	-0 051(02)	-2 620	-0 012	-0 015(02)	-0 740	-0 005
Constant	-2 022(33)	-6 130		-3 084(39)	-7 880		-2 605(36)	-7 290		-2 354(39)	-6 060		-2 586(46)	-5 620	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.25: Results of the Maximum Likelihood Probit Estimates for Tamil Nadu: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 193(07)	2 820	0 070	0 122(07)	1 680	0 044	0 302(09)	3 260	0 105	0 195(09)	2 230	0 076	0 182(09)	1 960	0 066
Never Married-Old	-0 355(43)	-0 830	-0 138	-0 700(29)	-2 410	-0 273	-0 594(35)	-1 670	-0 232	-0 327(32)	-1 010	-0 130	-0 584(29)	-1 980	-0 229
Widowed/ Divorced-Young	0 740(18)	4 090	0 223	0 576(17)	3 330	0 182	0 526(20)	2 600	0 176	0 031(18)	0 180	0 012	0 091(21)	0 420	0 034
Widowed/ Divorced-Old	-0 335(07)	-4 660	-0 128	-0 345(07)	-4 670	-0 132	-0 958(21)	-4 560	-0 367	-0 311(19)	-1 670	-0 124	-0 559(22)	-2 570	-0 217
ST	0 224(19)	1 190	0 079	0 598(20)	2 990	0 187	0 084(17)	0 500	0 030	0 529(20)	2 690	0 192	0 329(37)	0 890	0 113
SC	0 128(06)	2 300	0 047	0 094(05)	1 980	0 034	0 238(06)	3 940	0 085	0 095(05)	1 850	0 037	-0 001(05)	-0 010	0 000
15 to 19 years	0 905(10)	9 040	0 279	0 736(10)	7 240	0 234	0 500(12)	4 100	0 167	0 528(13)	4 100	0 196	0 351(14)	2 490	0 123
20 to 29 years	0 927(09)	10 880	0 303	0 763(08)	9 140	0 254	0 790(09)	8 400	0 260	0 844(10)	8 610	0 307	0 697(10)	6 740	0 235
30 to 39 years	1 222(09)	14 160	0 356	1 065(09)	12 520	0 321	1 076(11)	9 490	0 324	1 205(10)	12 600	0 403	1 208(10)	12 680	0 367
40 to 49 years	1 179(08)	14 820	0 340	1 127(08)	14 030	0 327	1 264(10)	13 280	0 351	1 100(09)	11 710	0 371	1 255(10)	13 020	0 359
50 to 59 years	0 765(08)	9 650	0 240	0 703(08)	8 940	0 222	0 776(09)	8 450	0 238	0 772(09)	8 230	0 272	0 913(09)	9 800	0 278
Not Literate	0 946(35)	2 730	0 359	0 782(27)	2 930	0 295	0 109(33)	0 330	0 040	0 690(19)	3 600	0 268	0 223(15)	1 450	0 083
Literate-Below Primary	0 732(35)	2 090	0 227	0 613(27)	2 260	0 197	-0 218(35)	-0 630	-0 082	0 526(20)	2 650	0 194	0 153(16)	0 970	0 056
Literate-Primary	0 606(35)	1 740	0 198	0 378(27)	1 410	0 130	-0 266(33)	-0 810	-0 101	0 295(19)	1 530	0 113	0 058(15)	0 380	0 021
Literate-Middle	0 100(35)	0 280	0 037	0 116(27)	0 430	0 042	-0 394(33)	-1 190	-0 152	-0 053(19)	-0 270	-0 021	-0 272(15)	-1 780	-0 104
Literate-Secondary	0 324(36)	0 890	0 112	-0 018(28)	-0 060	-0 007	-0 495(34)	-1 460	-0 192	-0 121(20)	-0 620	-0 048	-0 506(15)	-3 320	-0 197
Hindu	-0 186(33)	-0 560	-0 067	0 898(29)	3 130	0 347	-0 346(37)	-0 930	-0 119	1 064(47)	2 250	0 392	1 039(15)	7 150	0 396
Muslim	-0 988(34)	-2 880	-0 378	0 167(30)	0 550	0 059	-0 966(39)	-2 500	-0 371	-0 032(50)	-0 060	-0 013	Dropped		
Christian	-0 351(34)	-1 030	-0 136	0 777(30)	2 610	0 232	-1 079(44)	-2 430	-0 410	0 703(48)	1 460	0 247	0 875(18)	4 960	0 257
Self Employed-Non-agriculture	0 587(08)	7 350	0 195	0 698(08)	8 540	0 223	0 722(10)	7 530	0 227	0 788(09)	8 490	0 278	0 963(09)	10 560	0 293
Agriculture labour	0 924(08)	12 230	0 322	0 874(08)	11 390	0 301	0 912(10)	9 010	0 315	0 949(08)	11 430	0 357	1 198(09)	13 790	0 396
Other Labour	0 636(09)	7 270	0 205	0 552(08)	6 540	0 182	0 514(10)	5 160	0 170	0 437(10)	4 470	0 164	0 619(09)	6 820	0 207
Self Employed-agriculture	0 822(08)	10 930	0 272	0 765(07)	10 380	0 253	0 958(09)	10 900	0 299	0 789(09)	9 190	0 284	1 354(09)	15 430	0 396
Female Head	0 878(08)	11 510	0 265	0 743(08)	9 410	0 231	0 874(10)	8 930	0 260	0 681(09)	7 370	0 244	0 723(10)	7 550	0 231
MPCE	-0 004(01)	-0 650	-0 002	0 013(01)	1 850	0 005	-0 036(01)	-4 180	-0 013	0 005(01)	0 600	0 002	-0 026(01)	-2 530	-0 010
Constant	-1 945(49)	-4 000		-2 748(40)	-6 860		-0 646(51)	-1 280		-2 950(52)	-5 670		-2 410(24)	-10 210	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.26: Results of the Maximum Likelihood Probit Estimates for Tamil Nadu: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 333(08)	4 250	0 117	0 523(08)	6 980	0 189	0 687(14)	5 080	0 255	0 504(10)	5 080	0 176	0 541(11)	4 980	0 148
Never Married-Old	0 301(24)	1 270	0 108	0 101(32)	0 320	0 035	-0 119(28)	-0 420	-0 040	0 466(27)	1 720	0 168	-0 553(34)	-1 610	-0 093
Widowed/ Divorced-Young	0 943(15)	6 420	0 359	0 721(16)	4 410	0 274	0 119(23)	0 520	0 043	-0 077(20)	-0 390	-0 024	0 392(30)	1 310	0 103
Widowed/ Divorced-Old	-0 108(08)	-1 350	-0 035	-0 364(09)	-4 130	-0 112	-0 393(25)	-1 580	-0 126	-0 139(20)	-0 680	-0 043	-0 592(32)	-1 850	-0 109
ST	0 510(15)	3 320	0 190	0 198(24)	0 810	0 070	-0 028(29)	-0 100	-0 010	0 222(24)	0 930	0 076	0 450(33)	1 350	0 128
SC	0 103(07)	1 530	0 035	0 214(07)	3 210	0 075	0 145(07)	2 160	0 052	0 187(07)	2 520	0 063	0 016(07)	0 210	0 004
15 to 19 years	0 445(12)	3 640	0 159	0 048(13)	0 370	0 016	-0 149(20)	-0 740	-0 051	0 250(16)	1 600	0 085	0 136(18)	0 740	0 033
20 to 29 years	0 668(10)	6 620	0 238	0 477(10)	4 610	0 168	0 394(16)	2 490	0 143	0 592(12)	4 920	0 204	0 680(13)	5 070	0 184
30 to 39 years	0 871(10)	8 780	0 321	0 779(10)	7 440	0 287	0 707(16)	4 450	0 265	0 968(12)	8 080	0 344	1 111(12)	9 000	0 327
40 to 49 years	0 815(10)	8 530	0 302	0 808(10)	7 920	0 301	0 727(14)	5 280	0 275	0 908(11)	8 000	0 332	1 002(12)	8 140	0 302
50 to 59 years	0 453(10)	4 670	0 165	0 470(10)	4 600	0 172	0 894(19)	4 700	0 341	0 842(12)	7 050	0 309	0 717(13)	5 440	0 211
Not Literate	0 079(16)	0 500	0 026	0 177(12)	1 470	0 061	-0 576(20)	-2 940	-0 189	0 094(15)	0 630	0 031	-0 105(13)	-0 830	-0 024
Literate-Below Primary	-0 244(16)	-1 490	-0 076	0 084(13)	0 660	0 029	-0 685(20)	-3 450	-0 201	-0 157(16)	-0 990	-0 048	-0 175(13)	-1 370	-0 037
Literate-Primary	-0 448(16)	-2 840	-0 136	-0 277(12)	-2 270	-0 088	-0 866(20)	-4 370	-0 245	-0 324(15)	-2 130	-0 096	-0 248(12)	-2 100	-0 053
Literate-Middle	-0 831(16)	-5 140	-0 221	-0 491(13)	-3 900	-0 146	-1 154(20)	-5 770	-0 297	-0 458(15)	-3 050	-0 130	-0 494(12)	-4 250	-0 095
Literate-Secondary	-0 424(16)	-2 670	-0 127	-0 309(12)	-2 480	-0 097	-0 975(25)	-3 980	-0 281	-0 493(15)	-3 360	-0 143	-0 645(11)	-5 910	-0 125
Hindu	0 776(24)	3 220	0 215	0 937(32)	2 900	0 246	1 493(43)	3 460	0 358	-0 131(23)	-0 570	-0 043	1 229(35)	3 510	0 174
Muslim	0 373(25)	1 500	0 134	0 764(33)	2 320	0 288	0 966(44)	2 180	0 368	-0 445(24)	-1 880	-0 125	0 647(36)	1 780	0 190
Christian	1 056(25)	4 170	0 399	0 995(33)	2 990	0 377	1 230(44)	2 800	0 461	0 100(25)	0 400	0 033	1 311(37)	3 510	0 444
Self Employed	0 207(04)	4 720	0 071	1 635(17)	9 650	0 566	1 498(17)	8 660	0 536	1 386(16)	8 680	0 474	7 239(40)	18 190	1 000
Regular Wage/ Salaried	NA	NA	NA	1 422(17)	8 390	0 465	1 330(19)	7 160	0 453	1 254(16)	7 950	0 407	7 067(40)	17 600	0 998
Casual Labour	NA	NA	NA	1 639(17)	9 470	0 587	1 523(19)	8 210	0 553	1 335(16)	8 120	0 486	7 142(40)	17 710	0 979
Female Head	0 845(09)	9 770	0 319	1 097(10)	11 380	0 414	1 032(11)	9 730	0 393	0 956(10)	10 030	0 355	0 897(13)	6 970	0 277
MPCE	-0 041(01)	-5 180	-0 014	-0 040(01)	-4 850	-0 014	-0 040(01)	-3 500	-0 014	-0 049(01)	-4 970	-0 016	-0 111(01)	-9 730	-0 026
Constant	-1 631(30)	-5 360		-3 246(39)	-8 320		-2 921(50)	-5 840		-1 969(32)	-6 170		-8 716( )		

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.27: Results of the Maximum Likelihood Probit Estimates for Uttar Pradesh: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 510(06)	8 260	0 201	0 007(06)	0 110	0 003	0 205(22)	0 930	0 077	0 293(07)	4 500	0 109	0 346(06)	5 630	0 131
Never Married-Old	-0 217(32)	-0 680	-0 080	-0 492(43)	-1 140	-0 154	-0 049(25)	-0 200	-0 018	-0 194(32)	-0 600	-0 065	0 074(44)	0 170	0 027
Widowed/ Divorced-Young	0 274(12)	2 240	0 107	0 466(11)	4 390	0 180	-0 015(32)	-0 050	-0 005	0 315(25)	1 280	0 117	0 346(23)	1 490	0 132
Widowed/ Divorced-Old	-0 288(04)	-6 650	-0 106	-0 234(05)	-5 020	-0 081	-0 253(32)	-0 790	-0 088	-0 549(25)	-2 220	-0 170	-0 610(23)	-2 600	-0 193
ST	-0 106(09)	-1 130	-0 040	0 252(09)	2 760	0 095	0 403(13)	3 180	0 156	0 275(11)	2 470	0 103	0 486(13)	3 820	0 189
SC	0 153(03)	5 210	0 059	0 252(03)	8 480	0 093	0 192(06)	3 220	0 071	0 177(03)	5 490	0 064	0 186(03)	5 540	0 069
15 to 19 years	-0 057(06)	-0 970	-0 021	0 166(06)	2 710	0 062	-0 021(25)	-0 080	-0 008	-0 188(07)	-2 580	-0 065	-0 122(08)	-1 570	-0 044
20 to 29 years	0 275(05)	5 790	0 106	0 373(05)	7 290	0 139	0 331(08)	4 220	0 124	0 252(05)	4 790	0 092	0 124(06)	2 230	0 046
30 to 39 years	0 602(05)	12 510	0 235	0 724(05)	14 000	0 276	0 666(06)	11 880	0 255	0 619(05)	11 860	0 233	0 540(05)	9 850	0 205
40 to 49 years	0 700(05)	14 820	0 273	0 794(05)	15 530	0 304	0 722(09)	8 480	0 278	0 718(05)	13 420	0 273	0 664(06)	11 570	0 256
50 to 59 years	0 543(05)	11 270	0 213	0 677(05)	13 110	0 261	0 647(09)	7 090	0 251	0 663(06)	11 980	0 253	0 580(06)	9 740	0 224
Not Literate	0 907(21)	4 220	0 289	0 504(16)	3 100	0 165	0 300(14)	2 100	0 105	0 068(13)	0 530	0 024	0 181(08)	2 200	0 065
Literate-Below Primary	0 507(22)	2 280	0 200	0 188(17)	1 090	0 070	-0 150(18)	-0 850	-0 053	-0 150(14)	-1 080	-0 051	0 009(10)	0 090	0 003
Literate-Primary	0 637(22)	2 890	0 250	0 068(17)	0 400	0 025	-0 204(16)	-1 310	-0 072	-0 107(14)	-0 790	-0 037	-0 135(09)	-1 520	-0 048
Literate-Middle	0 630(23)	2 770	0 247	0 042(18)	0 240	0 015	-0 351(16)	-2 190	-0 118	-0 319(14)	-2 330	-0 105	-0 247(09)	-2 810	-0 086
Literate-Secondary	0 609(24)	2 580	0 239	0 154(18)	0 850	0 058	-0 368(16)	-2 340	-0 123	-0 357(14)	-2 500	-0 116	-0 388(09)	-4 410	-0 131
Hindu	0 205(17)	1 180	0 076	0 094(14)	0 680	0 033	-0 151(13)	-1 130	-0 057	-0 032(17)	-0 190	-0 011	0 096(19)	0 500	0 034
Muslim	-0 121(18)	-0 690	-0 046	-0 252(14)	-1 760	-0 087	-0 538(14)	-3 890	-0 176	-0 333(17)	-1 950	-0 110	-0 087(19)	-0 450	-0 031
Christian	Dropped			0 616(60)	1 020	0 240	1 192(77)	1 540	0 442	-0 157(36)	-0 440	-0 053	0 133(34)	0 400	0 050
Self Employed-Non-agriculture	0 684(06)	12 060	0 268	0 425(06)	6 990	0 162	0 397(09)	4 320	0 152	0 506(05)	9 410	0 191	0 561(04)	13 050	0 216
Agriculture labour	0 863(06)	15 530	0 334	0 637(06)	10 760	0 244	0 513(10)	5 050	0 198	0 645(05)	12 130	0 244	0 652(06)	11 790	0 253
Other Labour	0 854(08)	10 600	0 329	0 417(08)	5 510	0 160	0 452(11)	3 940	0 175	0 442(07)	6 110	0 168	0 618(06)	10 430	0 240
Self Employed-agriculture	0 590(05)	12 000	0 218	0 477(05)	9 020	0 168	0 432(09)	4 820	0 154	0 532(05)	11 680	0 186	0 675(04)	18 760	0 247
Female Head	1 120(05)	22 080	0 417	1 071(05)	19 830	0 408	1 202(07)	17 940	0 449	1 046(05)	19 500	0 399	0 841(06)	14 670	0 326
MPCE	-0 011(00)	-2 550	-0 004	-0 034(00)	-7 540	-0 012	-0 024(01)	-2 750	-0 009	-0 049(01)	-9 010	-0 017	-0 024(01)	-4 610	-0 009
Constant	-2 338(28)	-8 380		-1 830(22)	-8 280		-1 201(23)	-5 310		-1 131(22)	-5 130		-1 292(20)	-6 320	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.28: Results of the Maximum Likelihood Probit Estimates for Uttar Pradesh: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	-0 046(10)	-0 480	-0 013	-0 061(11)	-0 580	-0 016	0 234(21)	1 110	0 066	0 238(12)	2 060	0 058	0 330(06)	5 170	0 124
Never Married-Old	0 664(33)	1 980	0 229	0 653(29)	2 290	0 218	0 475(29)	1 640	0 151	0 172(35)	0 490	0 042	0 081(43)	0 190	0 030
Widowed/ Divorced-Young	0 383(18)	2 130	0 123	0 410(21)	1 940	0 127	-0 102(32)	-0 320	-0 026	0 726(33)	2 180	0 212	0 416(24)	1 730	0 158
Widowed/ Divorced-Old	0 032(09)	0 350	0 009	0 122(09)	1 340	0 034	0 213(33)	0 650	0 061	-0 685(34)	-2 020	-0 112	-0 663(24)	-2 730	-0 201
ST	-0 164(19)	-0 880	-0 043	-0 167(18)	-0 920	-0 041	0 162(31)	0 520	0 046	0 707(25)	2 770	0 215	0 268(16)	1 650	0 101
SC	0 271(06)	4 360	0 082	0 217(06)	3 400	0 062	0 227(07)	3 320	0 064	0 285(08)	3 710	0 071	0 188(03)	5 630	0 069
15 to 19 years	0 422(13)	3 200	0 132	0 502(14)	3 700	0 153	0 548(20)	2 810	0 168	0 203(16)	1 300	0 049	-0 057(08)	-0 710	-0 020
20 to 29 years	0 440(11)	3 940	0 133	0 658(11)	5 880	0 194	0 823(14)	5 710	0 253	0 447(12)	3 850	0 112	0 138(06)	2 390	0 050
30 to 39 years	0 586(11)	5 280	0 185	0 938(11)	8 500	0 298	1 016(12)	8 420	0 324	0 832(11)	7 290	0 231	0 562(06)	9 880	0 211
40 to 49 years	0 741(11)	6 950	0 245	0 982(11)	8 950	0 325	1 129(12)	9 810	0 380	0 874(13)	6 730	0 256	0 681(06)	11 500	0 261
50 to 59 years	0 555(11)	4 970	0 181	0 819(11)	7 410	0 271	0 906(11)	7 890	0 305	0 773(11)	6 840	0 230	0 575(06)	9 320	0 220
Not Literate	0 149(10)	1 480	0 041	-0 168(10)	-1 680	-0 045	-0 326(26)	-1 250	-0 087	-0 246(18	-1 360	-0 055	0 314(08)	3 860	0 110
Literate-Below Primary	-0 276(13)	-2 160	-0 070	-0 669(13)	-5 290	-0 132	-0 565(27)	-2 080	-0 118	-0 410(18)	-2 220	-0 075	0 081(10)	0 790	0 029
Literate-Primary	-0 597(13)	-4 470	-0 131	-0 910(13)	-6 850	-0 164	-0 838(28)	-2 980	-0 153	-0 711(19)	-3 780	-0 114	-0 086(09)	-0 950	-0 030
Literate-Middle	-0 739(14)	-5 290	-0 152	-0 968(14)	-6 730	-0 166	-1 059(28)	-3 760	-0 179	-0 820(18)	-4 520	-0 127	-0 210(09)	-2 380	-0 072
Literate-Secondary	-0 505(12)	-4 210	-0 116	-0 576(12)	-4 620	-0 121	-1 000(28)	-3 580	-0 183	-0 984(17)	-5 780	-0 153	-0 383(09)	-4 280	-0 126
Hindu	0 337(22)	1 540	0 089	0 154(21)	0 730	0 039	0 532(30)	1 750	0 123	-0 068(24)	-0 280	-0 016	0 322(25)	1 280	0 109
Muslim	-0 153(22)	-0 690	-0 042	-0 354(22)	-1 640	-0 085	0 352(31)	1 130	0 101	-0 178(25)	-0 720	-0 038	0 115(25)	0 450	0 042
Christian	0 889(31)	2 830	0 318	0 852(40)	2 130	0 296	1 542(42)	3 660	0 555	0 628(41)	1 510	0 187	0 507(36)	1 420	0 196
Self Employed	-0 304(04)	-6 840	-0 083	-0 701(06)	-12 110	-0 176	-0 296(06)	-4 580	-0 077	-0 158(08)	-1 900	-0 035	-0 410(05)	-8 360	-0 135
Regular Wage/ Salaried	NA	NA	NA	-0 745(06)	-11 540	-0 168	-0 306(10)	-3 100	-0 077	-0 343(09)	-3 990	-0 071	-0 559(07)	-8 530	-0 174
Casual Labour	NA	NA	NA	-0 632(09)	-6 960	-0 127	-0 152(09)	-1 730	-0 038	-0 472(10)	-4 740	-0 085	-0 483(10)	-4 980	-0 151
Female Head	0 722(10)	7 050	0 248	0 616(11)	5 480	0 200	0 972(17)	5 590	0 336	0 893(12)	7 660	0 281	0 648(06)	10 760	0 250
MPCE	-0 068(01)	-8 380	-0 019	-0 067(01)	-7 390	-0 018	-0 041(01)	-3 910	-0 011	-0 071(01)	-6 840	-0 016	-0 021(01)	-4 050	-0 008
Constant	-1 057(27)	-3 950		-0 439(26)	-1 680		-1 351(32)	-4 270		-0 614(31)	-1 970		-1 098(26)	-4 220	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.29: Results of the Maximum Likelihood Probit Estimates for West Bengal: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 200(07)	2 970	0 070	0 174(07)	2 410	0 059	0 152(08)	1 930	0 051	0 081(16)	0 500	0 021	0 201(09)	2 130	0 064
Never Married-Old	-0 315(38)	-0 830	-0 095	-0 710(32)	-2 190	-0 174	-0 082(43)	-0 190	-0 025	0 741(54)	1 380	0 247	-0 261(34)	-0 770	-0 072
Widowed/ Divorced-Young	0 058(21)	0 270	0 020	0 421(12)	3 450	0 152	0 134(18)	0 720	0 044	0 387(25)	1 560	0 112	0 196(26)	0 740	0 063
Widowed/ Divorced-Old	0 147(08)	1 820	0 051	0 029(07)	0 400	0 009	0 053(19)	0 280	0 017	-0 090(26)	-0 340	-0 022	-0 198(27)	-0 730	-0 057
ST	0 774(07)	10 760	0 292	0 554(07)	8 340	0 201	1 077(08)	14 340	0 401	1 039(09)	11 210	0 356	0 362(09)	4 030	0 122
SC	0 199(05)	3 660	0 068	0 024(05)	0 540	0 008	0 064(05)	1 360	0 021	0 290(06)	4 870	0 078	-0 070(05)	-1 290	-0 021
15 to 19 years	0 685(11)	6 170	0 252	0 618(11)	5 600	0 222	0 935(13)	7 360	0 341	1 496(23)	6 490	0 507	0 718(14)	5 190	0 252
20 to 29 years	0 917(10)	9 050	0 327	0 800(10)	8 180	0 277	1 246(11)	11 360	0 432	1 519(16)	9 530	0 470	1 006(12)	8 690	0 344
30 to 39 years	0 998(10)	9 730	0 369	0 819(10)	8 300	0 297	1 432(11)	13 120	0 511	1 570(15)	10 310	0 507	1 260(11)	11 200	0 438
40 to 49 years	0 818(10)	8 360	0 304	0 672(09)	7 100	0 244	1 136(11)	10 410	0 417	1 298(15)	8 520	0 437	1 034(11)	9 150	0 370
50 to 59 years	0 754(10)	7 840	0 282	0 358(09)	3 850	0 126	0 903(11)	8 340	0 334	0 901(15)	6 110	0 299	0 664(11)	5 870	0 235
Not Literate	-0 061(24)	-0 260	-0 021	-0 833(27)	-3 120	-0 291	0 109(24)	0 460	0 035	-0 468(22)	-2 120	-0 122	0 152(18)	0 820	0 046
Literate-Below Primary	-0 176(25)	-0 710	-0 056	-1 105(27)	-4 070	-0 246	-0 167(24)	-0 700	-0 051	-0 725(23)	-3 220	-0 141	-0 083(19)	-0 440	-0 025
Literate-Primary	-0 429(23)	-1 830	-0 128	-1 226(27)	-4 550	-0 270	-0 231(24)	-0 970	-0 070	-0 778(23)	-3 410	-0 147	-0 017(19)	-0 090	-0 005
Literate-Middle	-0 581(24)	-2 420	-0 161	-1 236(27)	-4 520	-0 251	-0 349(24)	-1 450	-0 100	-0 815(24)	-3 400	-0 151	-0 306(19)	-1 630	-0 085
Literate-Secondary	-0 468(26)	-1 820	-0 134	-1 065(28)	-3 740	-0 223	-0 098(25)	-0 390	-0 030	-0 638(24)	-2 690	-0 120	-0 365(20)	-1 830	-0 098
Hindu	0 484(40)	1 200	0 148	-0 166(16)	-1 010	-0 055	-0 600(16)	-3 650	-0 208	0 617(19)	3 310	0 141	-0 546(18)	-3 040	-0 178
Muslim	0 305(41)	0 750	0 107	-0 416(17)	-2 460	-0 125	-1 023(17)	-6 160	-0 261	0 800(21)	3 850	0 233	-0 839(19)	-4 460	-0 219
Christian	0 819(47)	1 740	0 313	0 111(53)	0 210	0 037	-1 105(36)	-3 030	-0 215	0 555(33)	1 690	0 176	-0 472(27)	-1 720	-0 118
Self Employed-Non-agriculture	0 663(11)	6 120	0 245	0 628(09)	7 010	0 226	0 876(09)	9 720	0 314	0 732(10)	7 120	0 220	0 722(10)	7 120	0 247
Agriculture labour	0 626(11)	5 690	0 218	0 644(09)	7 360	0 221	0 798(09)	8 840	0 276	0 769(11)	7 160	0 216	0 821(10)	7 830	0 273
Other Labour	0 757(12)	6 560	0 285	0 683(10)	6 630	0 253	1 030(10)	10 310	0 383	0 603(14)	4 440	0 190	0 767(12)	6 570	0 276
Self Employed-agriculture	0 550(10)	5 720	0 192	0 513(08)	6 170	0 174	0 565(09)	6 540	0 191	0 348(12)	2 980	0 096	0 653(10)	6 430	0 215
Female Head	1 095(12)	9 180	0 414	1 111(08)	13 270	0 418	1 101(09)	11 630	0 413	1 369(11)	12 320	0 484	1 041(10)	10 100	0 384
MPCE	-0 022(01)	-2 270	-0 007	-0 023(01)	-2 960	-0 008	-0 007(01)	-0 750	-0 002	-0 071(02)	-4 580	-0 018	-0 015(01)	-1 620	-0 005
Constant	-2 336(48)	-4 860		-0 700(33)	-2 130		-1 880(31)	-6 060		-2 852(33)	-8 520		-1 715(29)	-5 920	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.30: Results of the Maximum Likelihood Probit Estimates for West Bengal: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 728(10)	7 510	0 204	0 614(10)	6 210	0 168	0 448(10)	4 420	0 118	0 309(12)	2 470	0 060	0 992(12)	8 290	0 298
Never Married-Old	0 786(25)	3 110	0 251	1 132(25)	4 610	0 384	0 964(25)	3 810	0 318	0 718(28)	2 570	0 182	0 718(24)	3 040	0 223
Widowed/ Divorced-Young	0 887(20)	4 390	0 288	0 957(24)	4 070	0 314	0 367(26)	1 420	0 096	0 026(29)	0 090	0 004	0 806(47)	1 720	0 240
Widowed/ Divorced-Old	0 412(12)	3 380	0 110	0 346(12)	2 840	0 090	0 117(27)	0 440	0 028	0 165(30)	0 550	0 031	-0 520(47)	-1 100	-0 098
ST	0 251(22)	1 150	0 066	0 234(21)	1 110	0 060	-0 111(21)	-0 520	-0 024	0 403(18)	2 230	0 088	0 156(29)	0 540	0 039
SC	0 158(08)	1 920	0 039	0 115(08)	1 410	0 028	0 243(08)	2 890	0 061	0 206(08)	2 450	0 039	-0 042(09)	-0 480	-0 010
15 to 19 years	0 287(19)	1 520	0 074	0 139(19)	0 740	0 034	0 725(22)	3 220	0 212	1 071(25)	4 360	0 283	0 571(28)	2 040	0 162
20 to 29 years	0 623(17)	3 740	0 164	0 501(16)	3 120	0 128	1 122(20)	5 700	0 319	1 291(19)	6 860	0 319	1 233(24)	5 050	0 369
30 to 39 years	0 914(16)	5 620	0 270	0 740(15)	4 830	0 206	1 430(19)	7 440	0 435	1 562(18)	8 710	0 407	1 479(24)	6 260	0 455
40 to 49 years	0 922(15)	6 090	0 282	0 702(15)	4 620	0 201	1 391(19)	7 470	0 450	1 563(18)	8 860	0 446	1 366(23)	6 060	0 433
50 to 59 years	0 624(14)	4 320	0 182	0 452(15)	3 120	0 123	0 808(18)	4 560	0 244	1 273(19)	6 790	0 363	1 183(22)	5 430	0 383
Not Literate	-0 226(13)	-1 790	-0 050	-0 191(11)	-1 670	-0 042	-0 134(12)	-1 120	-0 030	-0 272(13)	-2 130	-0 043	-0 184(15)	-1 260	-0 040
Literate-Below Primary	-0 378(13)	-2 830	-0 076	-0 490(12)	-4 070	-0 092	-0 287(13)	-2 170	-0 059	-0 456(13)	-3 450	-0 062	-0 252(15)	-1 700	-0 053
Literate-Primary	-0 653(12)	-5 330	-0 123	-0 650(11)	-5 700	-0 117	-0 387(12)	-3 210	-0 077	-0 702(13)	-5 440	-0 086	-0 449(14)	-3 290	-0 089
Literate-Middle	-0 824(13)	-6 580	-0 144	-0 667(11)	-5 810	-0 119	-0 679(12)	-5 600	-0 123	-0 758(12)	-6 370	-0 095	-0 596(12)	-4 870	-0 114
Literate-Secondary	-0 632(13)	-4 980	-0 113	-0 415(11)	-3 750	-0 080	-0 526(12)	-4 560	-0 101	-0 631(12)	-5 320	-0 086	-0 515(13)	-4 100	-0 101
Hindu	0 085(23)	0 370	0 019	1 083(45)	2 390	0 160	-0 574(27)	-2 090	-0 162	-0 393(24)	-1 640	-0 082	0 318(50)	0 640	0 065
Muslim	-0 146(27)	-0 530	-0 032	0 966(46)	2 080	0 298	-0 729(29)	-2 530	-0 121	-0 548(26)	-2 090	-0 070	0 159(51)	0 310	0 039
Christian	-0 153(41)	-0 380	-0 033	1 698(53)	3 210	0 593	-0 245(45)	-0 550	-0 049	0 049(38)	0 130	0 009	0 302(58)	0 520	0 081
Self Employed	0 117(06)	1 840	0 028	0 433(17)	2 610	0 107	0 810(17)	4 810	0 211	1 278(21)	6 130	0 267	0 893(16)	5 460	0 223
Regular Wage/ Salaried	NA	NA	NA	0 403(16)	2 510	0 092	0 684(17)	4 110	0 160	0 956(21)	4 520	0 182	0 764(16)	4 680	0 190
Casual Labour	NA	NA	NA	0 632(19)	3 290	0 184	1 091(18)	5 990	0 350	1 295(22)	5 870	0 372	0 730(18)	4 040	0 218
Female Head	0 675(11)	6 190	0 203	0 855(12)	7 180	0 267	1 044(12)	8 720	0 337	1 174(15)	7 690	0 332	0 680(16)	4 290	0 202
MPCE	-0 022(01)	-1 840	-0 005	-0 031(01)	-2 460	-0 007	-0 058(01)	-4 360	-0 013	-0 072(02)	-4 630	-0 012	-0 101(01)	-6 740	-0 023
Constant	-1 433(32)	-4 520		-2 663(51)	-5 220		-1 755(39)	-4 560		-2 371(39)	-6 050		-2 451(57)	-4 300	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.31: Results of the Maximum Likelihood Probit Estimates for North Eastern States: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 266(06)	4 720	0 080	0 100(06)	1 670	0 033	0 161(07)	2 250	0 053	0 189(06)	3 410	0 060	0 191(05)	3 730	0 074
Never Married-Old	0 291(20)	1 460	0 091	0 065(17)	0 380	0 021	-0 420(31)	-1 350	-0 115	0 107(18)	0 610	0 034	0 759(16)	4 840	0 295
Widowed/ Divorced-Young	0 465(12)	3 850	0 153	0 485(15)	3 160	0 175	0 263(19)	1 360	0 090	0 056(15)	0 370	0 017	0 041(16)	0 250	-0 016
Widowed/ Divorced-Old	-0 012(08)	-0 160	-0 003	-0 071(08)	-0 920	-0 022	-0 513(25)	-2 070	-0 141	-0 050(16)	-0 320	-0 016	-0 012(17)	-0 070	0 005
ST	0 128(05)	2 670	0 037	0 113(05)	2 310	0 037	0 188(06)	3 160	0 063	0 238(05)	5 000	0 076	0 003(06)	0 050	0 001
SC	-0 184(08)	-2 290	-0 048	-0 041(07)	-0 630	-0 013	-0 054(07)	-0 720	-0 017	-0 099(06)	-1 650	-0 030	-0 348(08)	-4 470	-0 126
15 to 19 years	0 739(12)	6 190	0 245	0 374(11)	3 410	0 128	0 647(17)	3 830	0 232	0 581(12)	4 910	0 201	0 121(10)	1 180	0 047
20 to 29 years	1 017(11)	9 520	0 319	0 704(09)	7 670	0 239	0 947(16)	5 880	0 328	0 964(10)	9 410	0 327	0 932(08)	11 150	0 358
30 to 39 years	1 111(11)	10 440	0 370	0 804(09)	8 920	0 283	1 117(14)	7 950	0 401	1 194(10)	11 960	0 416	1 218(08)	15 420	0 457
40 to 49 years	1 077(10)	10 380	0 374	0 633(09)	7 070	0 227	1 044(13)	7 980	0 382	1 143(10)	11 580	0 413	1 137(08)	14 400	0 428
50 to 59 years	0 740(11)	7 040	0 252	0 506(09)	5 390	0 180	0 772(11)	6 910	0 285	0 803(10)	8 030	0 291	0 854(08)	10 970	0 330
Not Literate	-0 204(12)	-1 670	-0 058	-0 534(10)	-5 530	-0 171	-0 218(11)	-2 010	-0 070	-0 323(10)	-3 380	-0 097	0 062(08)	0 760	0 024
Literate-Below Primary	-0 278(12)	-2 240	-0 071	-0 553(10)	-5 490	-0 151	-0 525(11)	-4 930	-0 145	-0 367(10)	-3 780	-0 102	-0 082(08)	-1 010	-0 031
Literate-Primary	-0 635(12)	-5 090	-0 143	-0 682(10)	-6 800	-0 177	-0 614(11)	-5 780	-0 165	-0 551(10)	-5 750	-0 144	-0 249(08)	-3 130	-0 092
Literate-Middle	-0 883(13)	-7 040	-0 178	-0 648(10)	-6 510	-0 169	-0 807(10)	-7 720	-0 205	-0 657(09)	-7 030	-0 170	-0 447(08)	-5 790	-0 161
Literate-Secondary	-0 553(14)	-4 030	-0 122	-0 580(11)	-5 480	-0 151	-0 754(11)	-7 100	-0 188	-0 588(09)	-6 350	-0 150	-0 624(08)	-7 920	-0 215
Hindu	-0 745(06)	-11 890	-0 230	-0 920(08)	-11 190	-0 312	-0 991(07)	-15 140	-0 338	-0 403(06)	-7 260	-0 129	-0 913(06)	-15 070	-0 337
Muslim	-1 240(08)	-14 980	-0 237	-1 201(10)	-12 610	-0 281	-1 320(07)	-18 790	-0 287	-0 845(08)	-11 210	-0 206	-1 069(10)	-11 140	-0 309
Christian	0 056(06)	0 880	0 016	-0 032(08)	-0 410	-0 010	-0 304(09)	-3 450	-0 089	0 245(06)	4 340	0 080	0 098(04)	2 180	0 038
Self Employed-Non-agriculture	0 042(07)	0 620	0 012	-0 010(06)	-0 150	-0 003	0 021(06)	0 350	0 007	0 128(07)	1 940	0 041	0 338(05)	6 780	0 132
Agriculture labour	0 488(06)	8 170	0 156	0 552(06)	8 660	0 196	0 395(06)	6 150	0 138	0 594(07)	8 750	0 207	0 539(09)	5 780	0 212
Other Labour	0 742(07)	10 970	0 253	0 544(07)	7 450	0 195	0 184(14)	1 280	0 062	0 516(07)	7 790	0 178	0 101(07)	1 360	0 039
Self Employed-agriculture	0 045(04)	1 030	0 013	0 244(04)	5 730	0 078	0 181(05)	4 030	0 059	0 383(04)	8 600	0 122	0 646(04)	17 910	0 246
Female Head	1 123(07)	15 050	0 405	1 009(08)	12 800	0 378	1 272(14)	8 930	0 474	1 062(07)	14 520	0 393	1 066(08)	12 870	0 401
MPCE	0 001(01)	0 120	0 000	-0 035(01)	-4 980	-0 011	-0 017(01)	-2 180	-0 006	0 021(01)	2 730	0 006	0 058(01)	8 920	0 022
Constant	-0 936(18)	-5 340		0 011(16)	0 070		-0 348(21)	-1 670		-1 341(16)	-8 620		-1 214(14)	-8 980	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates NES* stands for the North Eastern States

Table 5.32: Results of the Maximum Likelihood Probit Estimates for North Eastern States: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 253(06)	4 410	0 076	0 049(06)	0 800	0 016	0 196(08)	2 430	0 061	0 167(06)	2 910	0 053	0 252(05)	4 640	0 097
Never Married-Old	0 239(20)	1 210	0 074	0 145(18)	0 810	0 048	-0 235(35)	-0 670	-0 064	0 155(19)	0 820	0 050	0 756(17)	4 580	0 294
Widowed/ Divorced-Young	0 455(12)	3 800	0 150	0 602(15)	4 100	0 219	0 268(19)	1 380	0 086	0 012(16)	0 080	0 004	0 037(18)	0 210	0 014
Widowed/ Divorced-Old	0 004(08)	0 050	0 001	-0 009(08)	-0 120	-0 003	-0 529(27)	-1 980	-0 133	0 017(16)	0 100	0 005	-0 002(19)	-0 010	-0 001
ST	0 064(05)	1 360	0 019	0 073(05)	1 480	0 023	0 065(07)	0 910	0 020	0 214(05)	4 270	0 068	0 082(06)	1 350	0 031
SC	-0 212(08)	-2 730	-0 056	-0 034(07)	-0 520	-0 011	-0 071(07)	-0 970	-0 021	-0 125(06)	-2 090	-0 037	-0 365(08)	-4 540	-0 131
15 to 19 years	0 841(12)	7 010	0 285	0 518(11)	4 570	0 179	0 752(20)	3 830	0 261	0 703(12)	5 910	0 246	0 098(10)	0 940	0 038
20 to 29 years	1 098(11)	10 270	0 349	0 805(09))	8 480	0 273	1 040(19)	5 450	0 344	1 064(10)	10 250	0 360	0 924(08)	10 890	0 354
30 to 39 years	1 160(11)	10 900	0 391	0 877(09)	9 380	0 308	1 209(16)	7 730	0 419	1 270(10)	12 600	0 441	1 220(08)	15 250	0 458
40 to 49 years	1 111(10)	10 740	0 389	0 682(09)	7 360	0 244	1 148(14)	8 010	0 410	1 218(10)	12 140	0 440	1 145(08)	14 260	0 432
50 to 59 years	0 741(10)	7 140	0 254	0 565(10)	5 840	0 201	0 807(12)	6 560	0 289	0 863(10)	8 510	0 313	0 895(08)	11 290	0 345
Not Literate	-0 079(12)	-0 680	-0 023	-0 522(10)	-5 130	-0 164	-0 296(12)	-2 550	-0 088	-0 293(10)	-3 010	-0 088	0 156(08)	1 850	0 060
Literate-Below Primary	-0 223(12)	-1 860	-0 059	-0 581(11)	-5 510	-0 155	-0 543(11)	-5 090	-0 137	-0 343(10)	-3 470	-0 095	0 009(08)	0 110	0 003
Literate-Primary	-0 630(12)	-5 220	-0 144	-0 716(10)	-6 840	-0 181	-0 642(11)	-6 070	-0 157	-0 569(10)	-5 820	-0 146	-0 156(08)	-1 850	-0 058
Literate-Middle	-0 907(12)	-7 450	-0 184	-0 706(10)	-6 800	-0 178	-0 865(10)	-8 290	-0 197	-0 694(09)	-7 320	-0 176	-0 397(08)	-4 850	-0 144
Literate-Secondary	-0 589(13)	-4 390	-0 130	-0 627(11)	-5 770	-0 157	-0 815(11)	-7 750	-0 181	-0 653(09)	-6 890	-0 161	-0 617(08)	-7 260	-0 212
Hindu	-0 661(06)	-10 710	-0 205	-0 788(07)	-11 910	-0 265	-0 533(08)	-6 440	-0 171	-0 172(07)	-2 430	-0 054	-1 048(07)	-16 010	-0 381
Muslim	-1 176(08)	-14 780	-0 233	-1 086(08)	-13 450	-0 259	-0 843(08)	-10 520	-0 197	-0 649(09)	-7 400	-0 167	-1 116(10)	-11 350	-0 314
Christian	0 118(06)	1 890	0 035	0 133(07)	2 010	0 043	0 264(11)	2 500	0 085	0 543(08)	7 210	0 186	0 043(05)	0 890	0 016
Self Employed	0 154(07)	2 300	0 046	-0 463(05)	-8 620	-0 123	-0 346(06)	-5 740	-0 091	-0 355(06)	-6 400	-0 095	-0 245(05)	-5 130	-0 090
Regular Wage/ Salaried	NA	NA	NA	-0 369(06)	-6 490	-0 102	-0 315(06)	-5 110	-0 084	-0 355(07)	-5 390	-0 096	-0 433(06)	-7 440	-0 153
Casual Labour	NA	NA	NA	-0 157(10)	-1 630	-0 047	-0 092(12)	-0 800	-0 027	-0 040(16)	-0 250	-0 012	-0 493(17)	-2 920	-0 168
Female Head	1 151(07)	15 620	0 417	0 969(08)	11 880	0 362	1 311(16)	8 340	0 482	1 024(08)	13 520	0 377	0 946(09)	10 960	0 362
MPCE	-0 022(01)	-3 250	-0 006	-0 050(01)	-7 130	-0 016	-0 020(01)	-2 400	-0 006	-0 002(01)	-0 230	-0 001	0 052(01)	7 590	0 020
Constant	-0 839(17)	-4 820		0 171(15)	1 130		-0 647(22)	-2 890		-1 198(16)	-7 450		-0 818(14)	-5 890	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.33: Results of the Maximum Likelihood Probit Estimates for Small States: Rural. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 123(06)	1 890	0 046	0 043(07)	0 650	0 016	-0 111(16)	-0 700	-0 039	0 070(09)	0 820	0 024	0 071(09)	0 840	0 024
Never Married-Old	0 406(28)	1 470	0 159	0 328(28)	1 170	0 129	-0 681(30)	-2 300	-0 190	-0 929(28)	-3 340	-0 211	-0 127(28)	-0 450	-0 041
Widowed/ Divorced-Young	0 296(17)	1 700	0 115	0 096(16)	0 590	0 037	0 304(44)	0 700	0 112	0 290(26)	1 120	0 089	0 475(39)	1 210	0 141
Widowed/ Divorced-Old	-0 197(08)	-2 500	-0 071	-0 356(08)	-4 440	-0 127	-0 023(43)	-0 050	-0 008	-0 008(27)	-0 030	-0 003	-0 317(39)	-0 800	-0 114
ST	0 449(11)	4 170	0 176	0 144(07)	2 200	0 056	0 382(08)	4 590	0 144	0 095(09)	1 050	0 032	0 445(08)	5 520	0 165
SC	0 163(060	2 890	0 062	0 137(05)	2 990	0 053	0 031(07)	0 440	0 011	0 141(06)	2 250	0 048	-0 005(06)	-0 090	-0 002
15 to 19 years	0 319(10)	3 120	0 123	0 501(09)	5 320	0 196	0 509(23)	2 190	0 190	-0 113(14)	-0 810	-0 037	0 220(13)	1 740	0 078
20 to 29 years	0 653(09)	7 490	0 249	0 814(08)	10 480	0 313	0 799(15)	5 460	0 294	0 490(10)	4 820	0 172	0 867(10)	8 930	0 315
30 to 39 years	0 844(09)	9 570	0 325	1 026(08)	12 870	0 392	1 099(15)	7 530	0 414	0 659(10)	6 450	0 236	0 842(09)	9 490	0 309
40 to 49 years	0 768(09)	8 700	0 298	0 941(08)	12 250	0 362	1 458(20)	7 310	0 534	0 643(11)	6 070	0 235	1 010(09)	11 610	0 377
50 to 59 years	0 574(09)	6 120	0 224	0 741(08)	9 250	0 289	0 894(13)	6 990	0 343	0 654(10)	6 350	0 243	0 675(08)	8 260	0 253
Not Literate	-0 253(10)	-2 620	-0 095	-0 419(09)	-4 920	-0 159	-0 785(15)	-5 240	-0 252	-0 337(11)	-3 130	-0 109	-0 330(11)	-3 020	-0 108
Literate-Below Primary	-0 543(12)	-4 670	-0 179	-0 552(10)	-5 340	-0 187	-0 727(15)	-4 790	-0 206	-0 287(15)	-1 940	-0 088	-0 323(12)	-2 810	-0 100
Literate-Primary	-0 403(11)	-3 790	-0 139	-0 677(09)	-7 510	-0 225	-0 694(14)	-4 800	-0 202	-0 294(11)	-2 660	-0 090	-0 353(10)	-3 360	-0 109
Literate-Middle	-0 599(11)	-5 610	-0 195	-0 916(10)	-9 460	-0 282	-0 770(14)	-5 450	-0 217	-0 458(12)	-3 740	-0 135	-0 603(10)	-5 990	-0 174
Literate-Secondary	-0 495(11)	-4 700	-0 168	-0 729(10)	-7 290	-0 241	-0 904(16)	-5 750	-0 279	-0 466(09)	-5 000	-0 141	-0 616(09)	-6 690	-0 185
Hindu	0 323(09)	3 500	0 116	0 405(11)	3 820	0 148	0 477(12)	3 980	0 150	-0 112(11)	-1 030	-0 038	0 386(14)	2 800	0 122
Muslim	-0 285(10)	-2 910	-0 102	0 336(11)	3 170	0 130	0 297(17)	1 780	0 110	-0 730(12)	-5 980	-0 201	-0 280(14)	-2 000	-0 089
Christian	0 320(19)	1 710	0 124	0 107(15)	0 700	0 041	0 287(19)	1 500	0 107	-0 130(24)	-0 550	-0 042	0 078(20)	0 390	0 027
Self Employed-Non-agriculture	0 825(08)	10 850	0 320	0 728(05)	13 340	0 284	0 880(10)	9 060	0 338	0 397(12)	3 280	0 143	0 912(07)	12 290	0 345
Agriculture labour	1 126(09)	12 840	0 422	0 672(07)	10 170	0 263	1 023(12)	8 400	0 391	0 370(11)	3 290	0 134	0 862(12)	7 380	0 329
Other Labour	0 997(08)	12 940	0 381	1 090(06)	19 040	0 410	1 317(08)	15 790	0 488	1 001(08)	12 590	0 379	1 091(07)	14 870	0 413
Self Employed-agriculture	1 341(04)	31 940	0 489	1 316(04)	36 810	0 488	1 639(06)	26 380	0 587	1 304(06)	20 780	0 473	1 363(05)	28 100	0 498
Female Head	0 848(08)	9 980	0 328	0 872(08)	11 420	0 336	1 044(15)	6 780	0 396	1 116(12)	9 570	0 421	0 790(10)	7 770	0 299
MPCE	-0 014(01)	-2 030	-0 005	-0 032(01)	-5 340	-0 012	-0 077(01)	-7 030	-0 027	-0 098(01)	-8 350	-0 033	-0 049(01)	-5 270	-0 017
Constant	-1 445(16)	-9 040		-1 348(17)	-8 160		-1 109(22)	-5 100		-0 225(21)	-1 080		-1 290(19)	-6 770	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

Table 5.34: Results of the Maximum Likelihood Probit Estimates for Small States: Urban. Dependent Variable: Women Worker

Independent Variable	1983			1987-88			1993-94			1999-00			2004-05		
	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx	Coefficient	z	dy/dx
Never Married-Young	0 105(06)	1 690	0 040	-0 004(07)	-0 060	-0 002	-0 136(15)	-0 890	-0 046	0 170(10)	1 750	0 058	0 046(10)	0 460	0 015
Never Married-Old	0 440(23)	1 950	0 172	0 326(30)	1 080	0 127	-0 850(29)	-2 960	-0 213	-0 552(25)	-2 170	-0 148	0 165(29)	0 580	0 054
Widowed/ Divorced-Young	0 279(17)	1 630	0 108	0 066(17)	0 390	0 025	0 131(40)	0 330	0 046	-0 219(23)	-0 940	-0 068	-0 370(41)	-0 910	-0 103
Widowed/ Divorced-Old	-0 259(08)	-3 440	-0 092	-0 241(08)	-2 930	-0 087	0 308(40)	0 770	0 111	0 023(24)	0 100	0 008	0 445(41)	1 100	0 153
ST	0 584(12)	4 950	0 229	0 128(06)	1 980	0 049	0 367(08)	4 410	0 136	0 053(10)	0 510	0 018	0 391(08)	4 760	0 136
SC	0 078(05)	1 420	0 029	0 036(05)	0 750	0 014	-0 075(07)	-1 110	-0 025	0 065(07)	0 920	0 022	0 007(07)	0 100	0 002
15 to 19 years	0 355(10)	3 540	0 136	0 583(10)	6 010	0 227	0 683(24)	2 860	0 253	-0 174(15)	-1 120	-0 055	0 446(15)	2 930	0 152
20 to 29 years	0 614(09)	7 120	0 234	0 790(08)	10 400	0 303	0 840(15)	5 460	0 305	0 447(12)	3 840	0 155	1 061(11)	9 290	0 369
30 to 39 years	0 702(09)	8 140	0 271	1 022(08)	13 260	0 391	1 136(15)	7 450	0 425	0 595(12)	5 030	0 211	0 981(11)	8 850	0 344
40 to 49 years	0 662(08)	7 810	0 257	0 978(08)	12 950	0 375	1 587(21)	7 600	0 572	0 600(12)	4 920	0 217	1 264(10)	12 180	0 457
50 to 59 years	0 522(09)	5 870	0 203	0 772(08)	9 890	0 300	0 991(13)	7 620	0 377	0 620(11)	5 460	0 229	0 733(10)	7 630	0 264
Not Literate	0 334(10)	3 510	0 122	-0 459(09)	-5 140	-0 173	-0 716(16)	-4 620	-0 226	-0 324(12)	-2 760	-0 104	-0 209(12)	-1 790	-0 063
Literate-Below Primary	-0 076(11)	-0 670	-0 028	-0 634(11)	-6 000	-0 207	-0 744(16)	-4 580	-0 202	-0 407(16)	-2 470	-0 118	-0 345(13)	-2 690	-0 095
Literate-Primary	0 109(10)	1 050	0 041	-0 796(09)	-8 490	-0 253	-0 677(15)	-4 420	-0 192	-0 346(12)	-2 880	-0 104	-0 409(11)	-3 610	-0 113
Literate-Middle	-0 332(11)	-3 130	-0 115	-1 054(10)	-10 420	-0 306	-0 817(15)	-5 420	-0 220	-0 504(13)	-3 790	-0 146	-0 701(12)	-6 090	-0 175
Literate-Secondary	-0 321(10)	-3 100	-0 113	-0 859(10)	-8 230	-0 271	-0 895(17)	-5 410	-0 269	-0 550(09)	-5 850	-0 161	-0 676(10)	-6 950	-0 183
Hindu	0 434(10)	4 320	0 154	0 491(11)	4 530	0 176	0 391(13)	3 110	0 122	-0 085(11)	-0 740	-0 028	0 312(16)	1 960	0 090
Muslim	-0 001(10)	-0 010	0 000	0 358(11)	3 290	0 138	0 196(17)	1 170	0 070	-0 622(13)	-4 890	-0 176	-0 082(18)	-0 450	-0 025
Christian	0 300(16)	1 850	0 116	0 505(15)	3 350	0 199	0 280(28)	1 010	0 103	0 206(25)	0 830	0 072	-0 248(21)	-1 160	-0 070
Self Employed	-0 723(06)	-11 940	-0 237	-1 168(06)	-18 740	-0 349	-1 331(09)	-14 950	-0 330	-0 831(09)	-9 100	-0 222	-1 347(08)	-16 950	-0 312
Regular Wage/ Salaried	NA	NA	NA	-1 137(05)	-22 220	-0 354	-1 177(09)	-12 610	-0 370	-0 840(07)	-12 730	-0 235	-1 186(07)	-17 500	-0 314
Casual Labour	NA	NA	NA	-0 667(10)	-6 950	-0 212	-0 929(18)	-5 030	-0 229	-0 768(11)	-6 950	-0 189	-0 875(18)	-4 910	-0 188
Female Head	0 774(08)	10 240	0 301	0 541(09)	6 230	0 212	0 808(17)	4 830	0 305	0 954(13)	7 530	0 360	0 479(12)	4 100	0 167
MPCE	-0 040(01)	-5 900	-0 015	-0 041(01)	-6 460	-0 015	-0 106(01)	-9 700	-0 037	-0 134(02)	-8 820	-0 044	-0 031(01)	-2 710	-0 010
Constant	-1 023(16)	-6 340		-0 245(17)	-1 480		0 284(22)	1 300		0 836(24)	3 460		-0 479(22)	-2 230	

Note dy/dx are marginal effects, i e , the change in probability of women working with a one-unit change in the right side variable z is the test of the underlying coefficient being 0 The figures in brackets denote the standard error of estimates

CHAPTER 6

CONCLUSION AND POLICY IMPLICATIONS

6.1 Overview

Within the framework of women work participation an attempt was made in the study to find out the different dimensions of women work force participation and their determinants. In this study, we began with a review of the different literature pertaining to women's work and the role of individual and household characteristics. A number of studies emphasized on the impact of education, fertility as well as marital status and age on the work participation of women. Factors such as the level of economic development and the level of living of the households were also seen to be important determinants of work. Further, social and religious factors were observed to have an important effect on the way society and individuals acclimatize themselves towards women's participation in the labour market.

An assessment was then made in our study on WPR and the distinction thereof by gender and place of residence in India. The major observations as highlighted in the previous chapters show the declining trend in WPR and the disparities that exist among men and women's WPR. Differences in WPR in rural and urban areas of the country is also seen where rural WPR for both men and women is much higher than in urban areas. An attempt was then made to further examine the cause of such disparities in the work participation by specifically looking into the factors that could determine the work participation of women in India, both in the rural and urban areas. In this connection we have employed limited dependent variables or characteristics to find their influence on work participation of women in the country. The econometric estimation is done using the Probit method to examine the likelihood of women being

in the work force conditioning on education, marital status, age as well as the social and religious factors. Other variables such as the type and level of living of households were also employed in the analysis. A summary of the findings is presented briefly in the following section.

6.2 Summary of the Findings

As stated, our study has highlighted on a limited number of individual and household characteristics. Accordingly, the summary of the main findings of the study are broadly discussed as follows. We first present the findings on the trends of WPR in India based on objectives of the study, which is then followed by the results of the probit estimation on individual and household characteristics.

(i) Addressing our objectives, we find the presence of disparities in the WPR of men and women in India. WPR of women is observed to be much less in comparison to that of the WPR of men. This observation is also made across states and the rural and urban areas of the country. Another noticeable feature is the wide variations in the WPR in rural and urban areas with higher rural than urban participation. Similar variations in WWPR across states are also observed, with minor exceptions. For instance, in Kerala and Madhya Pradesh we observe high WWPR which is not so in West Bengal, Uttar Pradesh and Bihar. Overall it is observed that WPR has marginally declined from 1983 to 2004-05.

(ii) The following results are obtained from the estimates on the relation between individual characteristics such as education, age and marital status and work participation of women.

The results show the existence of a strong correlation between work and education. Differences in the level of educational attainment are reflected in the probability of work participation of women. Women with higher educational attainment have a higher probability of work participation. This is observed mostly in urban areas than in rural areas. The analysis shows a lower likelihood of work participation for women who are below graduates in the urban areas. On the other hand, in rural areas the situation differs; here the probability of being in the work force or not is seen to be less conditioned on education. In other words, in rural areas the scope of participation for women with higher educational attainment is lower, while for those up to a primary level education is comparatively higher. However, in both rural and urban areas, the results also show a higher probability of work participation for illiterates compared to graduates or above.

These observations appear to validate the existence of the U-shaped relationship between education and work participation. While illiterates have a higher likelihood of work participation, each increase in the educational level (above illiterates) results in a declining probability of work participation by women. However, the decline is mitigated by an upswing in work participation for women with even higher levels of education.

Other individual characteristics such as marital status and age are observed to affect the probability of women work participation. Single women who have never been married, widowed, divorced and separated from their spouses are seen to be having a positive likelihood of work participation. Besides, younger women of

different marital status below 35 years of age are observed to have a higher probability of work participation than women above 35 years of age. Further, the results of the analysis also show the highest probability of work participation for women in the age group 30 to 39 years of age. This observation is made for both the rural and urban sectors. However, in the rural sectors the probability of work participation for those below the age of 30 is much higher than in the urban sector.

(iii) To examine the influence of household characteristics on the likelihood of women work participation we considered the social and religious makeup of households, female-headed households, household type and level of living of the households.

The estimates for social groups show a higher probability of work participation for Scheduled Tribe women. Comparatively, Scheduled Caste women are less likely to be actively involved in the work force. Even if they are, they are likely to be less active than the Scheduled Tribes. The few instances where Scheduled Caste women are observed to be having a higher probability of work participation is only in states where they are in majority such as Punjab. Otherwise the overall results of the estimates reveal higher likelihood of work participation for Scheduled Tribe women and lower likelihood of work participation for Scheduled Caste women.

The results of the estimate on the probability of work participation by women of different religious groups reveal the following. Christian women are seen to have the highest likelihood of work participation followed by Hindu women. The same cannot be said for Muslim women as the estimates show a negative likelihood of work participation in a majority of states. These results are also observed for different states

in both the rural and urban sectors of the country barring a few states (Rajasthan) where the sample size for Christians is too small and analysis could not be carried out.

With regards to other household characteristics, the results of the estimates show that women who come from female-headed households are likely to have a very high probability of work participation. This is seen for women in both the rural and urban sectors. This observation further strengthen the fact of higher work participation of young single women be it the never married or the widowed, divorced and women who are separated from their spouses.

On household type, which is the main source of income for households, the results differ for the rural and urban areas. The different source from which households derive income in the rural and urban areas has been divided into the following: self-employed, casual labour and regular wage earners. In the rural areas, higher work participation is estimated for women who come from households where the main source of income is from agriculture or self employment in agricultural activities. On the other hand, in the urban areas, higher work participation is estimated for women whose households derive their main source of income from casual labour.

In our estimates we have also used the monthly per capita expenditure (MPCE) as a proxy variable to measure the level of living of households. Our findings show that the coefficient is negative indicating that an additional increase in consumption (representing income) leads to declining women work participation. This, therefore, shows that women who come from richer households are less likely to participate in

work compared to women who come from poorer households. This observation is seen in both the rural and urban areas and across states.

In conclusion, our study highlights on a few aspects related to work participation of women. From our study we are able to see that the relative position of women has not changed much over the years. Further, the structure of employment by different religious and social groups also show that the position of women in this aspect requires much improvement for them to be at par with women from not just other countries but more so within the country.

6.3 Policy Implications

In this section we present the policy implications of our study.

(i) The observed differences in the WPR of men and women clearly indicate either an inability on the part of women to acquire a job or simply a differential attitude towards them. This could be due to their low levels of educational attainment and low skill acquisition. The lower WWPR by different educational attainment also points to this end. Such observations was also made by Beutel and Axinn (2002) who stated that emphasis on familial roles and low educational attainment of women hampers their skill development and chances in the labour market.

The differences in WPR among men and women could be the result of a number of factors. The patrifocal setup of the Indian society could be a cause of such wide disparities in WPR in favour of men. Kalbagh (1991) argued that focus on women's domestic responsibilities vis-a-vis men limited their capacity to participate

efficiently in the production process. This resulted in their loss of sharing in the benefits accruing to society at large.

Differences in WPR by place of residence could be attributed to the nature of work and employment in the rural and urban areas. In the rural areas, the main form of employment comes from the agriculture and allied activities. In India, it is common knowledge that agricultural labour suffers from the problem of disguised unemployment. This could manifest itself in terms of high WWPR in this particular sector. However, in a few states like West Bengal and Bihar, outmigration could be a factor leading to their exhibiting low levels of WPR. In the urban areas, employment is more structured which entails a demand for skilled labour. This would not be met as long as woman's educational and skill requirement is low. Variations in the performance of the states could be a result of the respective states' developmental progress.

Uniformity and balanced development for all states would go a long way towards ensuring balanced and equitable opportunities for the country as a whole and for women in particular. It is also imperative that rural economies be upgraded to make them more competitive. This would not only solve the backwardness of the rural economies but also stem migration of the rural population.

(ii) Examining WWPR by education shows the existence of a U-shaped relation between the two. It is, however, a cause for concern as the low rates of work participation of women by different levels of educational category reflect the low education attained by women. The causes of such low educational attainment could be

due to a number of factors. Low levels of enrolment in schools and strong preferences for boy's education could be some of the factors affecting girl's education. Further, the existing social and cultural norms which prohibit women to play a pro-active role outside of their homes could be another possible reason for such observations.

The need for skilled manpower and the pace of development achieved by a state, region or country creates a demand for workers which can only come by way of human capital build up through education. This therefore, necessitates the need for a more concerted effort towards the cause of women's education in the country.

(iii) In our study we have also observed WWPR by different social and religious groups. The results of our findings show the effect of religious and social customs and traditions on the work decisions of individuals. For instance, women from the Muslim community are observed to be having lower participation rates compared to women belonging to other religious communities. This is because in such societies women are not encouraged to work and move out of their homes. Such findings have also been reported by Khan (2007) in her study of Muslim women in Mumbai, India and also by Sarikhani (2008). The observed high WWPR by Christians compared to the different religious groups however will not make any significant dent on the overall WWPR as they only constitute a small portion of the total population (around two per cent).

Further, the low participation rates of the Scheduled Castes can be explained by their lack of access to education and the discriminatory attitudes towards them. Jodhka and Newman (2007) reported the preference of employers for employees from a certain caste and class which led to stereotyping people on the basis of their caste or religion.

Overall, these results could imply the existence of a hierarchy or rather a lop-sided social structure within the country. This apparent difference in work participations of women by different social and religious groups could also reflect apathy towards the marginalized groups of the society which still appears to be divided along the basis of caste and community. While it is essential that the overall conditions of women needs to be improved, any policy in this respect needs to be developed in a balanced fashion taking into account the diversity of distinctive cultures and religions of people in the country.

(iv) Age and marital status also emerge as important factors in determining the work participation of women. Our study shows the highest level of participation by women of 30 to 40 years old. This is also similar to the finding of the work done by Farkas (1992) which showed a 75 per cent increase in participation rates for women in the age group 34 to 44 years of age in the US. As far as the marital status of women and its influence on work participation is concerned, we have found from our analysis that WPR is the highest for single women- that is never married, divorced and widowed- compared to the currently married. This result is consistent with the finding of Maurer-Fazio et al. (2009), on a study of work participation of Chinese women.

The higher WWPR, for single women in the age group 30 to 40 years signals a positive approach towards work. It also, on the other hand, shows a greater need for improving WWPR for other age groups and marital status. Change in attitude towards work and perception of women as equal partners in nation building needs to be

recognized. This is required in order to force outcomes to be more holistic and inclusive.

(v) The conceptual issues related to women's work could be attributed as a factor leading to the undervaluation of their work. Beneria (1981) raised the issue of the use of conventional definitions of economic activity which led to the underestimation of women's contribution and participation in economic activity. In India women are seen to be largely engaged in unpaid family work, be it at the family farms or their own homes (Desai and Jain, 1994). A declining WWPR could also imply an increase in women workers in such activities. With much ambiguity surrounding what constitutes 'work', implementing a gender based framework will provide critical insight into the current situation resulting in a clear working definition of 'work' which will reflect the actual contribution of women in the work force inclusive of work hitherto regarded as non economic.

A summary of the above suggests an imbalance between demand for and supply of workers. From the supply side, supply of women workers is distress supply which could be modified by human capital investments. On the other hand, demand for workers is a function of pull factors which is an outcome of the economic prosperity of the state/region concerned. Therefore, this distress supply results in a mismatch with the demand pull factors leading to low WWPR. Further, a clear working definition on the concept of work would help in incorporating productive work done by women which is not necessarily regarded as economically viable.

6.4 Limitations of the Study:

Our study is limited by a number of factors of which the main ones are discussed below. One of the main limitations of the study is the use of a limited number of dependent variables in our study. Further research is needed to examine into the causal relation and impact of other variables not considered in the study. Additionally, the work participation of the socially marginalized groups of the society needs to be thoroughly investigated as it has important implications for the growing inequalities in the society and the further development of the country at large. Regional imbalances also need to be addressed to remove regional disparities that are in existence in our country. Besides, the availability of data and inadequate number of sampled households, e.g, in the North Eastern regions, is also a hindrance in identifying the characteristics responsible for WWPR in these areas.

6.5 Scope for Further Research:

Work participation is one of the tools to accelerate the pace of development in the society. An effective deployment of work participation as a strategy would therefore require a better perception about the idea and the methodology. Our study has made a humble attempt to examine the level of women work participation, the determinants involved thereof and their potential relations. However, much study is still needed toward this end. Undertaking new studies on this area will throw more light and enrich the idea of work participation perfecting it as an instrument for constructive change of the society.

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