UNEMPLOYMENT SITUATION IN INDIA AND IN MAHARASHTRA, 1981 : A DEMOGRAPHIC PERSPECTIVE

Dissertation submitted to the Jawaharlal Nehru University in partial fulfilment of the requirements for the award of the Degree of MASTER OF PHILOSOPHY

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C E R T I F I C A T E

This is to certify that this dissertation entitled **"UNEMPLOYMENT SITUATION IN INDIA, AND IN MAHARASHTRA, 1981 : A DEMOGRAPHIC PERSPECTIVE"** submitted by **MISS BHASWATI GANGOPADHYAY**, in fulfilment of six credits out of the total requirements for the award of the degree of **MASTER OF PHILOSOPHY**, is a bonafide work to the best of my knowledge and may be placed before the examiners for evaluation.

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TO MY PARENTS

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Bhaswati Gangopadhyay.

BHASWATI GANGOPADHYAY

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CHAPTER - I

INTRODUCTION

HISTORICAL BACKGROUND :

Unemployment is one of the most serious problems which affects the economic, social and cultural wellbeing and prosperity of any society. The abundance or absence of job is also considered as an indicator of the health of the economy. Unemployment though economic in nature has a great impact on individual as well as on the society. It is said that in its true perspective it is the root cause of economic disparities and social imbalances. "When psychologically analysed this idle man of the working force is carrying a load of worries and about his future economic life. Temperamentaly he is not only frustrated but also impatient, restless and sometimes even militant. His non-utilisation for a long time in the constructive channel of nation building poses a problem and remains always a potential danger to our country" (Committee on Education & total employment, 1972:1). Even though the Government of India has made various efforts in different Five Year Plans, the magnitude of unemployment has kept on increasing from one Five Year Plan to the next. The Second 'Five Year Plan started with a backlog of unemployment of 5.3 million which has doubled itself within a decade. The Sixth and Seventh Plan have given an estimate of 12.Ø2 and 9.2Ø million unemployed based on the usual status unemployment of NSS. Population census of India has given a

figure of 19.4 million unemployed in 1981. But neither India nor any other country of the world has experienced this acute unemployment during their recent past. The idleness of an able-bodied adult was considered a part of his/her unwillingness to work rather than the inefficiency of the economy. Although during the Great Depression of 1930s the world had experienced an acute unemployment problem yet the acuteness rose much more when the two wars had shaken the social and economic foundation of the world. It is said that the word 'unemployment' first came into common use in English speaking countries only towards the fag end of the 19th century (Das, 1960:2) Lord Beveridge's published work named UNEMPLOYMENT: A PROBLEM OF INDUSTRY (1909) was an attempt to identify it as an economic problem. Before that in 1906 Karl Marx mentioned about surplus labour and identified it as a particular feature of capitalist mode of production where accumulation of capital leads to a change in the proportion of constant and variable capital and produces a relatively redundant population of labourer.

Predominance of self employment in the economy kept, the magnitude of the problem at a low level for a long period of time in India. The first evidence about unemployment has come out in the Report of Royal Commission on labour (1931). It mentioned that, 'throughout the greater part of its history, organised industry in India has experienced a shortage of labour... It is, however, obvious that as soon as the supply of labour become equal to the demand, the problem of unemployment begins to appear

and there is no doubt that within the last few years, genuine unemployment has made its appearence in some centres and industries. "(India, Governmemt of India, 1931: 21-22). The census of 1931 collected the data on unemployment among the educated for the first time. In 1938 the issue was considered by National Planning Committee. In this regard, Giri said in 1938, together with Shri Subhas Chandra Bose and Sir M. Visveswaraya, "I had the unique privilege of convening the National Planning Committee under the Chairmanship of Pandit Jawaharlal Nehru. One of the principal recommendations of this pioneering forum of India's national planning related to a total programme of manpower utilisation for the benefit of all sections of the people (Giri, 1970: 5-6).

But before Independence, the enquiry about unemployment was very limited. The data collected in 1941 census on this subject were not tabulated. Data on unemployment was collected in the 1951 census in certain states viz., Bombay, Saurastra, Kutch, Vindhya Pradesh, Uttar Pradesh, Mysore and Hyderabad. It is only after Independence that a consistent effort has been made by different government organisations to enquire about unemployment situation in the country. Information on employment and underemployment was collected for the first time, on all India basis in the 9th Round of the NSS during May to November 1955. Various concepts and definitions were tried in some of the latter rounds of the NSS. The Expert Committee Report on unemployment Estimates (1970) is considered as a corner stone to bring a major

change. Following its recommendation the first survey was conducted during October 1972 to September 1973 in the 27th round of the NSS. A new conceptual framework was formulated in this survey taking into account the recommendations of the Expert Committee. The second survey of this series (32nd round) was also on the same basic conceptual frame which continued in the 38th round also. India's population census also collected countrywide information on unemployment from 1981 census. In this census a question was asked to the non-workers and also the marginal workers whether the person was seeking/available for work. Thus, among the total unemployed persons as of 1981 census, there were some of those also who had worked for part of the year preceding the census. Though the history of unemployment in India is not a long one but its increasing magnitude is posing a challenge to the Indian economy. This is what made me interested in studying the problem thoroughly.

In Independent India the new Constitution has adopted a Directive Principle of State Policy stating that the citizens have the right to adequate means of livelihood. Again Article 41 has stated that "The state shall, within the limits of its economic capacity and development, make effective provisions for securing the right to work, to education and public assistance in case of unemployment, old age, sickness and disablement, and in other cases of underserved want (Constitution of India, 1989:30). To make a better India within the constitutional frame work India started with Five Year Plans for socio-economic development.

Inspite of different measures taken during the various plans to generate employment in the country, unemployment has also increased over time. This implied that the employment generation programmes could not generate as many jobs as the net addition to the labour force. According to 1981 census, out of a total of 19 million, 16.5 million were unemployed in the working age group of 15-59. Though the labour intensive agriculture helps to keep the rate of unemployment low in rural areas, yet in terms of absolute magnitude it is higher in rural area with a volume of 1Ø million unemployed. This is not only a measure of the wastage of manpower, but is also a measure of the degree to which an economy has failed to provide opportunity to earn livelihood through employment. In other words this creates an imbalance in income. So the study has an immense policy implication.

But a single numerical value hardly captures the crux of the problem. The nature of the problem shows that it has two distinct aspects to be discussed - i) economic and ii) demographic. But the problem has received very little attention from the demographers. The problems posed by expanding population are discussed by the demographers interms of threats to food supply or densities. But a more immediate problem is the scarcity of job which creates inequality to acquire livelihood. Realising the dimension of the problem in India Dantwala Commission was set up by Planning Commission to suggest an unemployment estimate in 1970. The Committee has mentioned that, it is necessary to know not only the nature of the observed unemployment and the

number of those affected in each category, but also the regions in which the problem is more acute, the age groups and educational equipment of the unemployed" (Dantwala, 1970: 14).

DEFINITION

Throughout the history, whatever may be the type of the economy, unemployment means more supply of labour than demand. The International Labour Organisation has suggested that, "the line is drawn differently in different national definitions but the usual practice is to limit the concept of unemployment to involuntary idleness due to lack of work, excluding idleness due, for example, to labour disputes, illness or vacations" (ILO, 1964:13). The recommendation of Eigth International Conference of Labour Statisticians has defined unemployment as all persons above a specified age who, on the specified day or for a specified week, were in the category of workers available for employment whose contract of employment had been terminated or temprorarily suspended and who were without a job and seeking work for pay or profit (Ther International Standardistion of Labour Statistics - No.53, 1959:45). So it has excluded all the persons who are neither seeking nor available for jobs. US census also mentions that the persons who would like to work but are unable to work are not counted in the labour force.

Following the above definition the NSSO and Population Census of India included all persons seeking or available for work among the unemployed. It can, therefore, be said that in

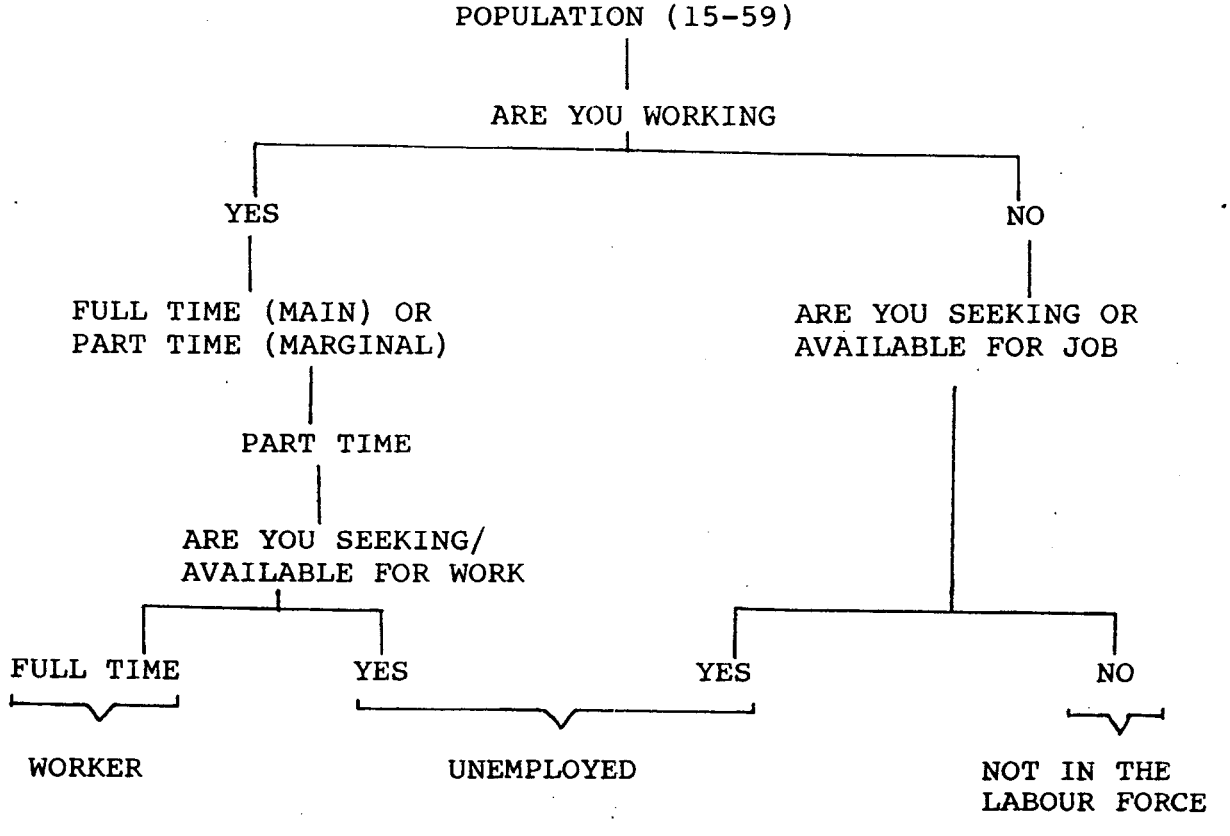
India population of working age group i.e. 15-59 is distributed into three categories :

a) Worker : Those who are working for full time or a marginal period of time of a particular reference period.

b) Unemployed : Those who are seeking or available for work at the time of enquiry.

c) Neither worker nor unemployed : Those who are neither working nor seeking or available for job for a particular period of time.

Diagramatically it can be represented in the following way -



For the purpose of the present study the total unemployed have been taken into consideration.

Though in a simple way unemployed can be defined as all those who are not working for the full time anywhere else and now are seeking or available for job yet their type varies in an economy. It is necessary to know the various types of unemployment before going into any detailed analysis.

TYPES OF UNEMPLOYMENT :

Seasonal Unemployment

It is caused by the fluctuations in demand which occur regularly at a certian time or season of the year. In our country it is related with agriculture where depencdence of agriculture on monsoon rain keeps the demand very high at rainy season and discharges the labour out from agriculture for rest of the year. Some industries are also seasonal in nature, e.g. sugar industry.

Frictional Unemployment

Temporary unemployment due to temporary changes in demand and other factors may be termed as frictional unemployment. It is also said to exist while people are changing jobs from one to another.

Casual Unemployment

When the demand for labour is irregular e.g. work affected by the weather, repair work and work on the dockside.

Structural Unemployment

In modern societies different structural changes are going on within the economy with the introduction of new machinery, modification and improvement of the existing techniques of production and so on. These changes throw out labour from depressed industries and cause unemployment.

Cyclical Unemployment

During business depression the decline in demand for goods and services leads to a decline in production and employment. Such unemployment is known as cyclical unemployment.

Chronic Unemployment

In backward economies the lack of sufficient number of industries leads to a low production and consequently low demand for goods. This type of unemployment is permanent in nature and existing for many decades and hence known as chronic unemployment.

Disguised Unemployment

In underdeveloped countries there is a great pressure of population on land and joint family system enables too many persons to work on the same land. But there is no additional increase in production with additional employment and their removal from work will also not effect the production and so their marginal output is zero or even negative. This phenomenon is called disguised unemployment, (Taylor, 1969).

With this theoretical backgroud the present study will make an effort to analyse the problem in the demographic setting of our country. For this purpose Chapter II will give a review of literature where demographic characteristics and causes of unemployment have been discussed. After the literature survey, the concrete objectives and hypotheses of the study have been developed. This also deals with the data base and limitations of the available data.

To test the hypotheses a state level analysis of the unemployment situation on the basis of 1981 data has been presented in Chapter III. Unemployment by sex, age, residence and education has been analysed in the discussion along with a brief mention of the probable causes,

The phenomenon of unemployment at the district level has been analysed in Chapter IV for the state of Maharashtra. It brings out the demographic differentials relating to sex, age, residence and education. Probable causes have also been presented at appropriate places.

In the concluding chapter a summery of the findings of the previous chapters followed by a review of the employment policy of the Government of India as depicted in the Five Year Plans has been presented. Some recommendations have also been made for the improvement of employment situation in our country.

CHAPTER - II

LITERATURE SURVEY

When the leaders of Independent India thought about a planned economy, they emphasised on the planing of human resource development along with other social and economic developements. When the Indian economy is threatened by the increasing labour force along with the increasing wastage of labour resources in the form of unemployment, concerned efforts are required to tackle the problem. It has often been emphasised that the level of unemployment and underemployment in a country is primarily determined by economic conditions, though demographic trends affecting the size and composition of the labour force also exert an influence (UN, 1971:329). Present study is also an effort towards the demographic analysis of the unemployed section of the labour force. Though there are not many studies in this respect yet their examination is in order in the context of the present study.

With a view that unemployment problem has two distinct aspects, namely i) demographic and ii) economic, the present chapter will review the previous studies on the demographic differentials and economic or more widely the developmental factors responsible for that. The available literature is classified into two categories for discussion:

1. Demographic Differentials related to unemployment.
2. Education and unemployment.
3. Analysis of the causes behind unemployment.

The demographic differentials in unemployment are considered under the following sub-heads.

a. Age differential

b. Gender differential

c. Rural - Urban differential

AGE DIFFERNTIALS

The main demographic characteristics of any population is its age composition. The concept of working age varies from country to country. Generally the age group of 15-59 is considered as working agegroup and hence unemployed of this age group is considered as a major problem. The supply of labour force to a considerable extent depends on the age structure of the population. 'Assuming that other factors of production and level of technology remain unchanged, the age distribution may, through its effect on labour supply, exert an influence on the levels of unemployment (UN, 1973:47Ø). Different conferences held by International Labour organisation reiterated the importance of the age distribution of labour force. The World Employment Conference mentioned that 'in both developed and developing countries, young people constitute a substantial proportion of the unemployed. (ILO, 1979 : 29). The study of us labour force from 1947 to 1972 observed a considerably higher unemployment rate for teenage workers than the unemployment rate for adult workers. The reasons mentioned in the study emphasised on the

larger proportion of new entrants into the job market and their experience of high frictional unemployment in search for a satisfactory position. Since young people generally have fewer family responsibilities than adult workers, they experience higher job turnover rates in searching for a right job and are unlikely to accept a position paying a relatively low wage even if they have been without work for sometime (Sorkin, 1974 : 46). World Employment Conference mentioned that in the developing countries young people suffer the most because it clearly becomes increasingly difficult to absorb large and growing contingents of young people on already saturated employment markets (ILO, 1979). The Committee on unemployment Estimates also suggested that, 'the high incidence of unemployment in ages 15-24 or 16-26 is hardly surprising because in a situation where employment opportunities do not expand rapidly, the new entrants into the labour force naturally bear the brunt of the unemployment problem. Those formulating the employment policy must pay particular attention to these critical age groups (Dantwala, 1970-93). (In India both the comparatively more developed and less developed states show the same evidence about youth unemployment though again the age considered by the authors are different). The study on Kumaon region of Uttar Pradesh showed that most of the unemployed are fresh entrants into the labour force and the highest incidence of unemployment, therefore, is found among those aged 15-34 years. (Khanka, 1988). The better off economy of Punjab also shows the same pattern where the age structure of the unemployed persons reveals that

most of them are below 30 years. (Oberai and Singh, 1983.) The investigation of the unemployed in Bombay Metropolis indicated that "Majority of the unemployed were young persons of 15-24 years of age. As much as 55.9% of the unemployed were young persons. The next important age group was that of 25-34 years and accounted for 21.7% of the total unemployment. The age structure of the unemployed males and females was broadly similar" (Lakdawala et.al., 1963 : 483). As the population of most of the developing countries have young age structure, one may expect the same pattern for all the developing countries. The experience of the economy of Sri Lanka is showing that of the Open unemployment the great majority are male and are aged 15-24 years (Richards, 1971). Though the ages mentioned in the studies are not exactly similar but it is true that all the countries are having a high concentration of unemployed in the young age groups which requires special attention to generate employment for them.

GENDER DIFFRENTIAL

Along with age, gender also plays an important role in the labour force. In our economy exact estimation of female workers is still a matter of debate and discussion. Unfavourable attitude towards female work keep their participation low in the labour force Rao's estimation based on the fourteenth round of NSS data gave a figure of 45.3% female of the working age groups (15-54) who formed part of the labour force in 1951. But in other

countries like Japan and the USSR, the proportion of women participating in the labourforce is much higher (Rao, 1960). unemployment is a balance between the labour force participation and available jobs. Different types of economy have different types of experience in this regard. The study in US shows that women workers have generally experienced higher unemployment rate than male workers. One reason for higher unemployment rate of women than men at a moment of time is that a greater number of the former are re-entering the labour force and changing jobs, thus leading to a higher level of frictional unemployment for women workers (Sorkin, 1974 :41). The experience of US females is more true in developed societies. But contemporary study in UK showed that the registration of the unemployed reveals a wide spread unemployment among male than among female (Daniel, 1973). Prevalance of registration system might have an effect in this result. The Planning Commission's study in India on the basis of NSS data from 1952 to 1967 suggests that the percentage unemployed was generally lower among females than among males. Analysis of the 1961 census data has reported much less unemployment among females than males both in rural and urban areas (Dantwala, 1970:91). Visaria's study on the basis of NSS data pointed out an interesting decline of rural unemployed males and an increase of female unemployment between 1952 and 1967, though he has mentioned that female unemployment does not show a clear trend. He further says that even if the incidence of unemployment was higher among females in some rounds after 1957, their lower labour force participation rates imply a smaller

absolute number of females classified as unemployed than of males (Visaria; 1971). The study regarding female unemployment are really not many and the cause which prevent female to come into the job market are not sufficiently studied which is essential to increase their participation in labour force.

Apart from age-sex composition of the unemployed, the rural-urban differential in unemployment is another interesting aspect of the analysis as they represent two different types of economy. The unemployment differential for rural and urban areas are common in developed and developing countries. For example, the US study shows that unemployment rates are higher in central cities than in the suburbs and higher in poverty neighbourhood than in other positions of central cities (Sorkin: 1974). But the study of 34 developing countries from different continents of the world shows that in 1/3 of the countries, the urban unemployment rate exceeds 15 percent, while,in nearly 2/3 of them it exceeds 8 percent.... In almost every case the urban unemployment rate is higher than the rural (ILO, 1976:51). In case of Sri Lanka the unemployment rates in urban areas were higher than in rural areas. This was probably caused by the job expectations flowing from higher education level, fewer family enterprises etc. in urban areas (Richard, 1971: 57) Khanka's study of Kumaon region also speaks of similar experience of higher unemployment rate in urban areas and lower in rural areas. He has mentioned that in the rural areas the adult members of the family generally remain engaged in their family holdings though there might not be

sufficient work for all of them. And in the censuses all such persons have been recorded as employed. On the contrary, the urban occupations are of a diferent nature and do not provide employment to all the members of the family (Khanka, 1988:62). There is a lot of theoretical discussion on rural-urban differential in unemployment which emphasises rural urban drift caused by the difference of economic opportunities. The deterioration of employment conditions in agriculture due to an increasing pressure of population on land is one of the most important 'push' factors in rural-urban migration. In the absence of sufficient employment opportunities in the cities, these migrations imply the transfer of underemployment from rural to urban areas or the increase of open unemployment in the cities (ILO: 1960). Push migration from rural to urban areas has been identified as a major cause of higher urban unemployment in our country also (Bhagavati, 1973:21). The urban unemploymed, thus contain a considerable proportion of rural migrations whose reason for migration is employment.

EDUCATION AND UNEMPLOYMENT

Following the above discussion we can go for a quick look at the education specific unemployment pattern. A good deal of work has been done by different scholars because increasing educated unemployment involves a political threat to a country and so they need an intensive attention through policy formulations. According to Sorking (1974) with a goal to achieve

education for all, it is expected that workers with fewer years of formal schooling tend to have considerably higher rates of unemployment than workers with above average levels of education... One important reason for the higher unemployment rate occurring among less-educated workers is that these persons tend to be employed in unskilled or semiskilled jobs, or in occupations that are sensitive to fluctuations in overall economic activity. However, workers who have achieved above average levels of formal schooling are more likely to be employed in white-collar occupations which are generally shielded from business fluctuations (Sorkin, 1974:52-53). But above experience is a US experience which is different from Indian experience. The study based on the 1971 census shows that there is a greater degree of unemployment among those who have bachelors degree or who possess diploma or certificate. Post graduates are relatively better off (Atal, 1974). One can expect a different picture for rural and urban areas. In Bombay metropolis 17.9 percent of the unemployed were illiterate and 31.4 percent were literate or had attended primary school. Forty eight percent had gone beyond the primary school, 15.6 percent were matriculates or with some other qualifications. Graduates formed only 2.5 percent of the total. Illiteracy was more widespread among unemployed females. (Lakdawala, 1963: 86) The Bombay study showed the percentage distribution where as Atal's study showed the unemployment rate and so they are not comparable. In Punjab among males unemployment does not vary much with the level of education except for those who are graduates. In contrast, among females

graduates and above have a considerably higher unemployment rate than those who possess higher secondary education or less (Oberai and Singh: 1983). The high female graduate unemployment is not a new phenomenon. The NSS data of the 1960s showed a higher rate of unemployment among women graduates than among men (Blaug: 1969).

Indian Educational Planning since 1947 followed an open door policy to the secondary education and both, the selective and open door, for higher and technical education. The commission in its review mentioned that this double system produced an excess output of matriculates and graduates in arts and commerce than their demand while trained personnel for the development of agriculture, industry or research remained in short supply (Report of the Education Commission: 1966).

ANALYSIS OF CAUSES:

According to classical analysis, general unemployment is impossible because that is based on the assumption that an economy would normally be in full employment. Economy may have some amount of seasonal, frictional and structural unemployment which is only for a shorter period of time but there will be no involuntary unemployment.

Keynes, though agreed with the classical writers about the coexistence of structural, frictional, and seasonal unemployment, said that an economy will not be automatically in full employment. According to Keynes, it is a situation beyond which

an increase in effective aggregate demand will not result in an increase of output and employment. As a result this increase of aggregate demand will lead to inflation because keeping pace with the demand supply will not increase as the economy is in full employment stage. So he said that with the dynamic level of supply and demand full employment cannot exist. Here in comes the role of policy intervention, to keep the level of unemployment low.

Different scholars have made efforts to identify the causes behind the problem of unemployment. Though basically it is the inefficiency of the economic system of the country to create jobs keeping pace with the annual increase in the labour force, they have also tried to identify the factors behind this inefficiency. It is often said that the faster rate of population growth in comparison to the creation of new jobs in successive plans has contributed to the increasing backlog of the unemployed (Shah, 1977:24-32; Draft Five Year Plan, 1978-83:81). The primary effect of rapid demographic expansion is to lower the share of labour in national product and thereby to increase inequality in the distribution of income (Khaka, 1988). ILO has pointed out that in developing countries it is the phenomenon of rural exodus which leads to urban unemployment. In addition, technological changes (e.g. tractorisation in agriculture), the declining use of certain raw materials of which certain developing countries were tha main source (e.g. jute) and, for tradeable manufactured goods, the impact of international competition as well as the mobility of cetain industries, can lead to massive displacement

of workers (ILO, 1979:30).

The Committee on unemployment also mentioned in their report that technological changes in some of the urban occupations like industry, trade, commerce and in public offices not only reduced the rate of absorption of new labour but also involved the displacement of some labour, therby increasing the number of unemployed (Bhagavati, 1973: 21-22). Many economists are criticising the pattern of growth which is mainly becoming a capital intensive rather than labour intensive (Kurma, 1980; Subhanayakam, 1988).

Some primary surveys have tried to analyse the perception of the unemployed. Rajasthan is a state with high level of unemployment, a study conducted there shows that in the rural areas, about one-third of the unemployed male did not make any effort to get a job and more than 50 percent of females were in this category. In urban areas, about one-third of the unemployed females did not make any effort to seek a job. About 9 percent of the unemployed males in urban areas too did not make such efforts (Sharma, 1978-79: 101). In Kerala, in a primary survey of educated unemployed the reasons given by the respondents were the nature of education system, industrial backwardness, lack of information on jobs, preference of experienced people in jobs etc. (Rajeev, 1983). A survey conducted in West Bengal gave detailed intricacies in getting a job. The survey showed that, 'more responses are associated with lack of help from reations

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and friends or from political connections and that lack of minimum qualifications needed was cited by only 10.8 percent of the respondents - and that too not as the sole reason - for failure to get a job. Even caste reservations have stood in the way of 15.3 percent of the respondents from getting a job while 11.7 percent of them ascribed such failure to poor performance in interviews, at least partly. 9.0 percent of the respondents aprehended poor school or campus back ground as one reason for not getting a job (Bose, Sanyal, Mukherjee, 1983).

A few studies have tried to identify the reasons behind the unemployment problem subjectively. For example while studying the reasons for unemployment in five villages of Rajasthan, Kanta Ahuja classified the explanatory variables under activity varaiables, asset variables and composition of labour supply variables. These variables together explained the variance in unemployment rate to a high level but in some cases the signs were opposite to the expectations (Ahuja, 1978). Another study in rural Rajasthan conducted by Rao (1973) on underemployment in agriculture considered availability of water as an important explanatory variable. This was determined by such variables as the ratio of irrigated area to cultivated area, the average rainfall, the intensity of cropping and the pecentage of area under kharip to total cultivated area. The zero order correlations turned out to be very high with more than 80 percent of underemployment being explained by the above variables (Rao, 1973). The study conducted by Krishnamurty in rural Tamil Nadu

showed that the co-efficient of rank correlation between variability of unemployment and percentage of area irrigated is high and negative (Krishnamurty, 1979).

Some authors have discussed the role of industrialisation, type of industries, rural urban drift etc. as the causes behind unemployment specially urban unemployment (Mahalanobis, 1968; Bairoch, 1976; Davenport, 1960) because of its complexities in nature, is difficult to interrelate with the same set of factors in each and every situation. This has been observed in the empirical studies undertaken in rural areas. In contrast there is a dearth of good studies in urban areas and it is still a grey area.

OBJECTIVES

i) It is evident from the above discussion that a single numerical value of unemployment rate is not enough to analyse the problem. It is needed, therefore, to see the composition of unemployed by sex, age, residence, education and to analyse the probable causes behind the problem.

ii) Considering its variation with situation the regional pattern of the phenomenon will also be tried to be analysed.

HYPOTHESES

Based on the above discussion the following hypotheses have been developed here for this study.

a. Incidence of unemployment is lower among the females than males and so in rural areas compared to urban areas.

b. Young adults are the most affected group and experience the highest incidence of unemployment.

c. Unemployment rate is very high among the educated unemployed.

d. Among the cause oriented variables industrialisation is considered to have a positive effect on unemployment that is, higher the level of industrilisation, higher is the unemployment rate, although industrilisation is considered as a means of job creation.

DATA BASE

To start the study along the line of hypotheses the data have been collected from Indian population census of 1981 which has published systamatically the data on persons seeking or available for job. It has published two tables in its economic tables of Seried 1 (India). Table B-9 gives the data on Persons Seeking/Available for Job by Age, Sex and place of Residence among the Non-Workers and Marginal Workers. Information about the level of education of the unemployed by Age, Sex and place of Residence is given in Table B-1Ø. The data have been published for the states and union territories (UTs) only. Data at the district level have not been published but those obtained from the Registrar General's office of India through the courtsey of the Registrar General and Census Commissioner, India.

Apart from this the data for several explanatory variables have also been taken from the census.

DATA PROBLEMS AND THEIR LIMITATIONS

Some problems related to the unemployment data are also being discussed here. The major problem was related to the unpublished data because adjustments required before publication were not done. So the total unemployed recorded in table B-9 and table B-1Ø was different. But the figures for unemployed at the working age group (15-59) were more or less the same for both the tables and so this has been taken into consideration for a analysis.

The second problem is related with Table B-9 where some of the marginal workers who are seeking or available for full time jobs had been counted as unemployed. This double counting of a set of marginal workers needed some adjustment at the time when calculation of the labour force was done. Apart from these, the data were fair to work with it.

METHODOLOGY

Selection of the appropriate methodology have an immense effect on any research work because it is the foundation of the work and the entire analysis depends on that. Depending on the objective of the present work, that is , to examine the extent of unemployment and demographic dimensions of unemployment in India some demographic and cartographic methods have been choosen.

Different studies have shown that the unemployment rate is the best yard stick to measure unemployment. It is also termed as incidence of unemployment. The measurement involves some problem regarding the selection of its denominator whereas numerator clearly involves the persons who are seeking or available for job. Expert Committee on unemployment estimates (Dantwala Committee) suggested that the incidence of unemployment be defined in terms of unemployed as percentage of persons in the labour force (Dantwala, 1970: 90; 19 :60). This is more relevant than finding out the rate in terms of total population because the latter includes persons who are non-workers and are available for work. So, precisely it will be :

$$\text{Unemployment Rate (UR)} = \frac{\text{Number of unemplyed of a particular age and sex of a place at a point of time}}{\text{Size of the labour force of that particluar age and sex of that place and time}}$$

After defining this a note on labour force is essential to mention here. As we have mentioned earlier, labour force is potential man power and so it includes all the workers and unemployed of the age group of 15-59. Indian Census gives the account of two types of workers - i) main and ii) marginal. The workers who worked for more than 183 days in a year are main workers and others are marginal workers. A section of this marginal workers are also in job market and searching full time job means in other words, a double counting of a section of

population. Though it is only a very small fraction yet to find out the labour force for the present purpose the overlapping should be avoided. Following this process the unemployment rate has been found out for the population by their age, sex, place of residence.

Table B-1Ø gives the educational composition of the unemployed without considerting their category as non-workers and marginal workers. Computation of labour force in that case is erroneous. In that case only percentage of each educational category to total is computed.

A special emphasis is given to find out the extent of educated unemployment in the states and UTS of India and the districts of Maharashtra. For this, the percentage of educated unemployed to the unemployed who have some formal education have been found out. The formula is

$$\text{Index of educated unemployed} = \frac{\text{Unemployed of matriculate and above in a particular area and sex}}{\text{Unemployed with some formal education of that area and sex}}$$

Apart from this the rates and composition of unemployment over the states of India and districts of Maharashtra have been represented cartographically. Suitable methods which include bar diagram, line diagram, pie-chart, choropleth and chorocromatic techniques have been used to find out the regional pattern for systematic analysis in later chapters.

CHAPTER - III

COMPOSITION OF THE UNEMPLOYED AND THEIR GEOGRAPHICAL DISTRIBUTION

This chapter presents an analysis of the unemployment situation in India. It has been discussed in terms of total unemployment, age specific unemployment and the educational composition and rates of unemployment by sex and place of residence based on the 1981 census data. The data on the uemployed have been analysed at the state level.

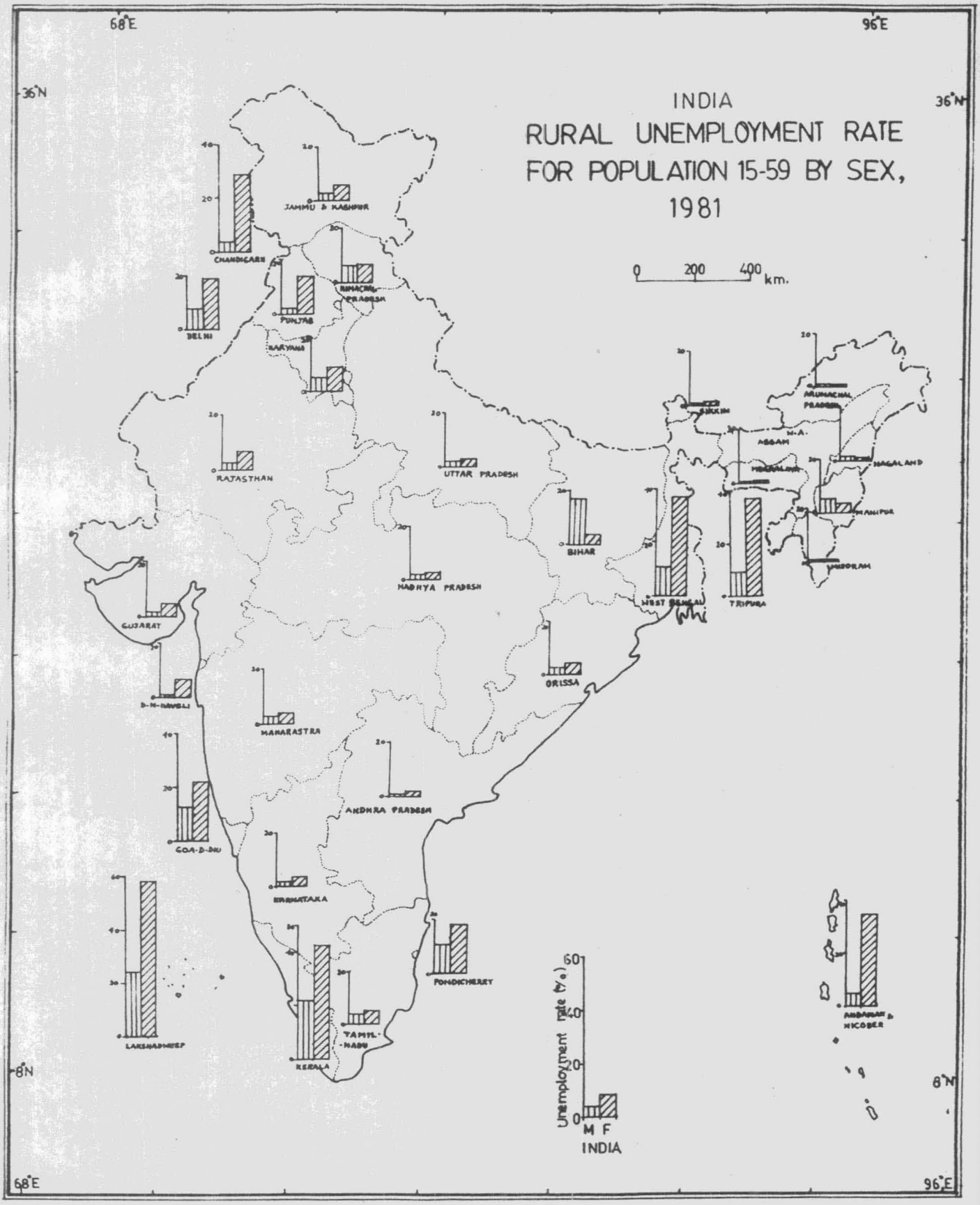
Though Indian census do not put any bar of age at the time of recording a person as worker yet 15-59 age group is generally considered as the working age, hence the analysis is confined to that age group only. The unemployed below 15 years and above 59 years have been excluded because those who are below 15 years of age are in compulsory education age and those who are above 59 have crossed the working age group.

The persons who are recorded as unemployed involve non-workers and marginal workers. Again to find out that labour force total workers (main and marginal) and total unemployed have been taken in the denominator. The overlapping proportion of marginal workers counted among the unemployed have also been adjusted.

GEOGRAPHICAL DISTRIBUTION

Variations in Rural Unemployment Rates by Sex:

The pattern of unemployment shows a lot of variation over


INDIA
RURAL UNEMPLOYMENT RATE FOR POPULATION 15-59 BY SEX, 1981
0 200 400 km.
68°E
96°E
36°N
8°N
JAMMU & KASHMIR
CHANDIGARH
HIMACHAL PRADESH
PUNJAB
DELHI
HARYANA
RAJASTHAN
UTTAR PRADESH
SIKKIM
ARUNACHAL PRADESH
N.A.
ASSAM
NAGALAND
MEGHALAYA
MANIPUR
MIZORAM
TRIPURA
BIHAR
WEST BENGAL
MADHYA PRADESH
GUJARAT
D-N-HAVELI
ORISSA
MAHARASTRA
ANDHRA PRADESH
GOA-D-DIU
KARNATAKA
PONDICHERRY
TAMIL-NADU
KERALA
LAKSHADWEEP
ANDAMAN & NICOBER
Unemployment rate (%)
60
40
20
0
M F
INDIA

MAP - 3.1

TABLE 3.1 : LABOUR FORCE UNEMPLOYMENT RATE OF POPULATION 15-59 BY SEX AND PLACE OF RESIDENCE-INDIA, 1981

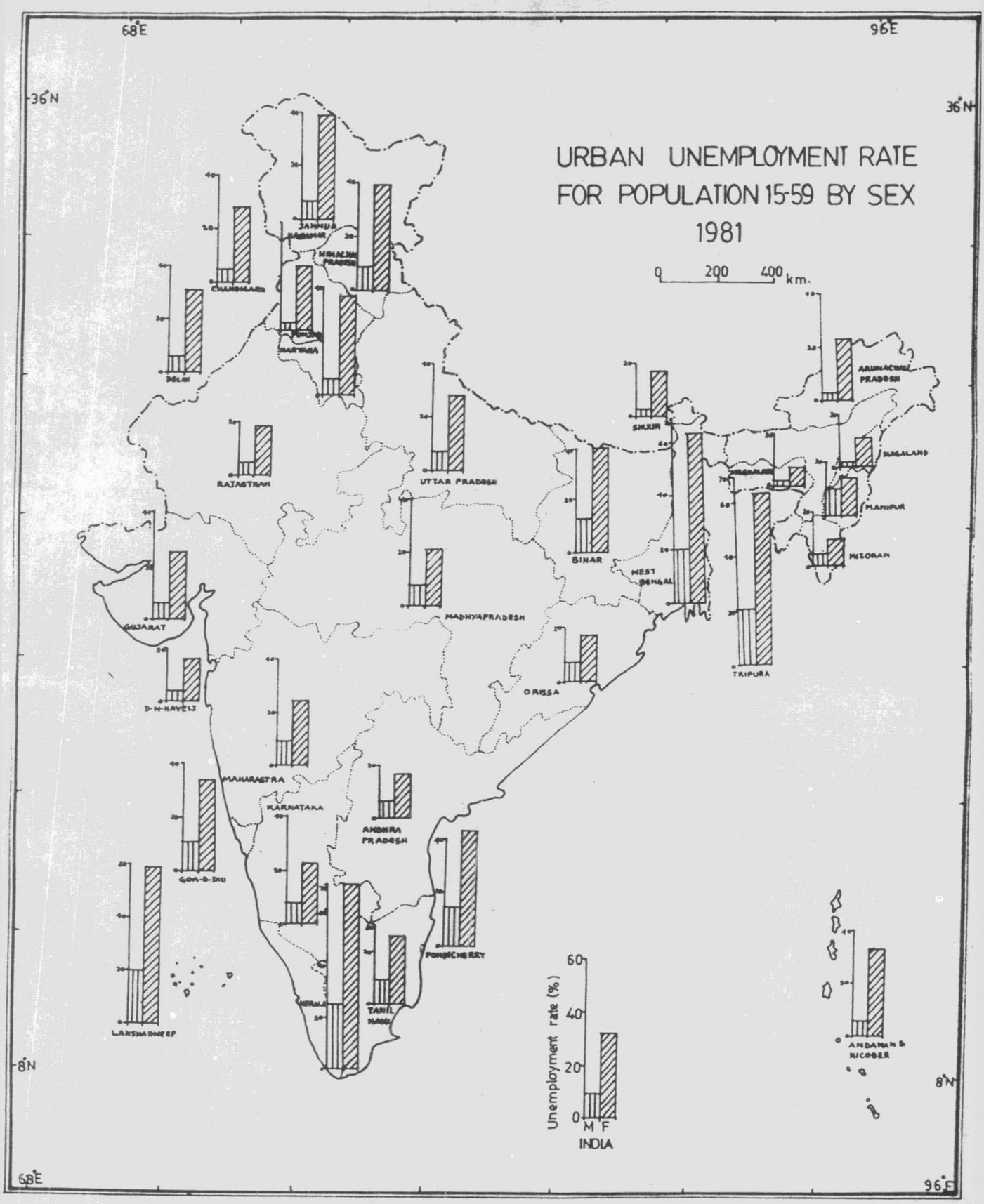
		RURAL		URBAN	
		M	F	M	F
	INDIA	4.50	8.80	9.60	32.71
1.	Andhra Pradesh	1.26	2.20	6.46	17.29
2.	Bihar	18.16	4.27	14.23	42.54
3.	Gujarat	2.20	4.93	5.73	26.32
4.	Haryana	6.03	6.19	9.40	39.72
5.	Himachal Pradesh	3.54	9.46	6.20	39.61
6.	Jammu & Kashmir	2.87	6.03	6.51	40.73
7.	Karnataka	1.93	3.51	8.09	23.11
8.	kerala	23.49	46.27	26.70	72.17
9.	Madhya Pradesh	1.69	2.96	7.99	21.78
10.	Maharastra	3.02	3.86	8.62	24.39
11.	Manipur	5.39	3.43	10.90	15.23
12.	Meghalaya	0.32	0.70	1.93	7.04
13.	Nagaland	1.26	0.87	1.89	11.25
14.	Orissa	3.10	4.43	7.24	17.41
15.	Punjab	2.26	14.51	2.99	24.52
16.	Rajasthan	2.73	7.14	7.06	18.83
17.	Sikkim	0.69	1.23	2.70	17.41
18.	Tamil Nadu	3.61	5.53	9.59	26.39
19.	Tripura	8.97	40.08	21.34	65.16
20.	Uttar Pradesh	1.97	3.32	6.70	28.55
21.	West Bengal	11.13	39.04	19.87	65.81
22.	Union Territories				
23.	A & N Islands	4.89	36.42	5.83	33.32
24.	Arunachal Pradesh	1.30	1.10	3.27	24.03
25.	Chandigarh	3.77	28.90	4.67	27.78
26.	Dadra&Nagar-Haveli	1.03	7.40	3.78	16.42
27.	Delhi	8.09	20.08	5.81	30.95
28.	Goa-Daman&Diu	12.94	22.84	10.82	35.34
29.	Lakshadweep	27.05	63.47	20.25	60.53
30.	Mizoram	0.85	0.74	4.30	9.55
31.	Pondicherry	11.19	18.50	15.03	44.30

the states. In general, there is higher unemployment rate in urban areas than in rural areas. Moreover, it shows that female unemployment rate is more than the male for both rural and urban areas, though the difference between male and female unemployment rate is much more in urban than in rural areas.

In rural India the unemployment rates are 4.2 percent and 8.5 percent for male and female respectively. (Table 3.1). The states and UTs which are having unemployment rate for rural male above the national average are Bihar, Himachal Pradesh, Kerala, Manipur, Tripura and West Bengal and Andaman and Nicobar islands, Delhi, Goa-Daman and Diu, Lakshadweep and Pondicherry (Table 3.1). The rest of the states have male unemployment rate below national average among which Meghalaya shows the lowest unemployment rate. North West India comprising the states and UTs of Haryana, Punjab, Chandigarh and Delhi are showing high female unemployment along with the states and UTs of Kerala, Tripura, West Bengal and Andaman and Nicobar islands, Goa Daman and Diu, Lakshadweep and Pondicherry. In most of the states unemployment rate is higher for the females than for the males except in Bihar, Manipur, and marginally in Nagaland, Arunachal Pradesh and Mizoram (Map No.3.1).

Variations in Urban Unemployment rates by Sex.

Urban unemployment rates are much higher than rural rates. It is highest among urban females. Kerala recorded the highest male unemployment rate (26.7%) followed by Tripura and West


URBAN UNEMPLOYMENT RATE
FOR POPULATION 15-59 BY SEX
1981
0 200 400 km.
68°E
96°E
36°N
8°N
JAMMU & KASHMIR
HIMACHAL PRADESH
CHANDIGARH
DELHI
HARYANA
RAJASTHAN
UTTAR PRADESH
BIHAR
SIKKIM
ARUNACHAL PRADESH
NAGALAND
MANIPUR
MIZORAM
TRIPURA
WEST BENGAL
ORISSA
MADHYAPRADESH
GUJARAT
D-N-HAVELI
MAHARASTRA
GOA-D-DIU
KARNATAKA
ANDHRA PRADESH
PONDICHERRY
TAMIL NADU
KERALA
LAKSHADWEEP
ANDAMAN & NICOBER
Unemployment rate (%)
60
40
20
0
M F
INDIA

MAP-3.2

Bengal respectively (Map 3.2). The other states and UTs which have recorded higher unempoyment rate (above the national average) are Bihar, Manipur, Lakshadweep, Pondicherry and Goa-Daman and Diu (Table 3.1). Female unemployment is excessively high in Kerala, West Bengal and Tripura where all the states have more than 50% of the female labour force as unemployed which means that the unemployed are more in number than the workers recorded by 1981 census. This raises the question about the economy of the states and about the data they had provided. Bihar, Himachal Pradesh, Jammu and Kashmir and Haryana and the UTs of Lakshadweep, Pondicherry and Goa-Daman and Diu have recorded higher unemployment rate than the national average. Meghalaya has the lowest female unemployment in urban areas of only 7 percent.

Reason for High Female Unemployment Rate

The unfavourable attitude towards the economic role of female keeps their participation low in the labour force. According to 1981 census there are only 30 percent females in rural labour force whereas the corresponding figure for the urban females is 16.5%. But it has increased over the years. It is said that growing commercialisation of the economy and changes in traditional techniques for the production of goods and services within the house hold reduces the labour intensity and drudgery of domestic work and thus releases more women into the labour force (Jose, 1989:7). Though labour force participation of the

females is still low but their rapidly increasing flow has created an influx of the unemployed among them because of many social constraints. Females constitute 46 percent and 39 percent of the total rural and urban unemployment respectively. Vast majority of the female unemployed are in rural areas though unemployment rate is lower there than in urban areas. The factors which are aggravating the problem are limited skills and illiteracy, restrictd mobility and lack of autonomous status.

The occupational status of a woman worker is linked to that of her husband or father, particularly so in the rural areas (Report on Status of women in India).

Female-Male Differential in Unemployment rate

There are regional differences between male and female unemployment rate. The female male unemployment rate differential in rural areas is found highest in Lakshadweep (36.4 points) followed by Andaman and Nicobar islands (31.5 points). It is also high for Kerala, West Bengal and Tripura (Map No. 3.1). Even in urban areas the difference between female and male unemployment rates is as high as 45.5 percent points in Kerala. This is followed by West Bengal (45 points) and Tripura (43.3 points). All the states and UTs mentioned above have a higher literacy for both male and female which are above national average (Appendix 1). Keeping these two facts together the proposition emerges that high literacy rate is responsible for higher unemployment. Even if it is so, one should not suggest to

increase illiteracy to check unemployment, instead there should be greater emphasis on job creation along with improvement of literacy which still continues to be very low in India.

Reasons behind high Unemployment

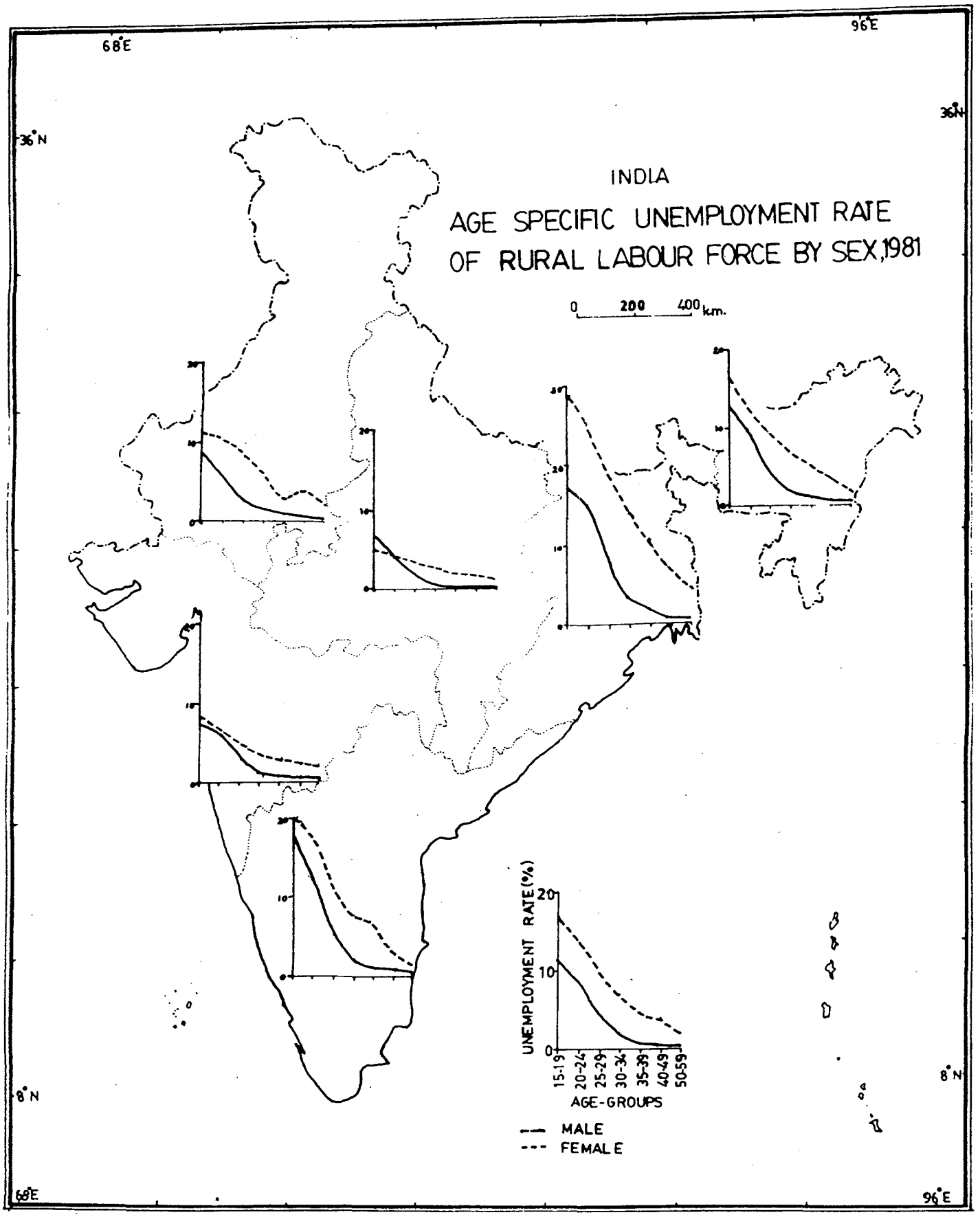
The entire analysis shows that the states of Kerala, West Bengal and Tripura are having the higest incidence of unemployment in rural and urban areas for both the sexes. These three states together are accounting 13 percent of the total, rural male labour force and 44.8 percent of the unemployed of the country. These three states are also containing 11 percent of the rural female labour force and 52 percent of the unemployed female. These three states account for 41 percent of the total unemployed in the country but only 12.4 percent of the labourforce. The budget of the state of Kerala indicates that it kept around 4 percent of its total outlay for Industries, Labour and Employment. State investment in the development of infrastructure to improve the economic situation was also low (10 percent for irrigation in 1978-79). Whereas the state's investment on education was 40.3 percent of the total outlay. So, increased literacy rate making the people of the state concious and more people are offering themselves for job but at the same time less investment for job creation creating a wide gap between the demand and supply of labour. The stagnation in the economy is even observed for West Bengal where ever increasing labour disputes and mandays lost have identified the area as an

unprofitable zone for investment which in turn reduced the job creation.

Not only the business houses have lost their interest to invest in West Bengal, but also the investment done by the centre has been fallen from 11.7 percent in 1970 to only 7.1 percent in 1985, whereas investment done in Maharastra has increased from 3.1 percent to 16.1 percent within the same period of time (Banerjee: 1991). This low investment in turn leads to an excessive pressure of unemployment in the state's economy by creating lesser number of jobs.

AGE SPECIFIC UNEMPLOYMENT

Overall unemployment rate of the labour force is not enough to understand the dimension of the problem. Age, being a major classificatory variable of a population, it has great significance in the study of unemployment. unemployment varies with age and all the earlier studies have shown that it is the youths of the society who are affected the most by the unemployment problem. This is mainly because they are the fresh entrants into the labour force and want to take up a job after scrutinising the job market. The profile of age specific unemployment rate (ASUR) of the country shows a peak at the age group of 15-19 and marked with a continuous decline over the age span. There is a substantial decline in unemployment rate among the males for both rural and urban areas by the age of 30. The ASUR profile is completely an inverted J shaped curve for the


INDIA
AGE SPECIFIC UNEMPLOYMENT RATE
OF RURAL LABOUR FORCE BY SEX,1981
0 200 400 km.
68°E
96°E
36°N
8°N
UNEMPLOYMENT RATE(%)
20
10
0
15-19
20-24
25-29
30-34
35-39
40-49
50-59
AGE-GROUPS
MALE
FEMALE

MAP - 3.3

males. Though the unemployment rate among the females are also continously declining over the age span, both for rural and urban areas, but the decline is not as much as it was observed for the males.

For convenience of discussion the entire country has been divided into the following regions on the basis of similar ASUR profile of the states which are similar to the zones into which the census divides the country. i) North India - comprising Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Chandigarh and Delhi.

ii) Central India - Comprising Uttar Pradesh and Madhya Pradesh.

iii) West India - Comprising the states and UTs of Gujarat, Maharastra, Dadra-Nagar haveli, Goa-Daman and Diu.

iv) South India - Comprising Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Lakshadweep and Pondicherry.

v) East India - Comprises the states and UTs of Bihar, Orissa, Sikkim, West Bengal, and Andaman and Nicobar islands.

vi) North East India - Comprising Manipur, Meghalaya, Nagaland, Tripura, Arunachal Pradesh and Mizoram.

Regional variations of Rural ASUR by Sex

Rural males of all the regions of India have experienced a decline in ASUR after 15-19 age group though there are variations in the decline. The decline is much rapid for South India whereas it is almost flat topped for West India where the decline is negligible upto 20-24 age group (Map 3.3) Although a rapid

TABLE 3.2: AGE SPECIFIC UNEMPLOYMENT RATE (ASUR) OF THE REGIONS OF INDIA BY SEX AND PLACE OF RESIDENCE, 1981

	15-19		20-24		25-29		30-34		35-39		40-49		50-59	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
North India														
Rural	8.81	13.04	5.64	10.28	2.41	7.84	1.17	6.42	0.94	3.25	0.71	4.29	0.58	3.05
Urban	21.84	57.35	12.33	48.10	3.81	27.46	1.43	16.65	0.98	11.81	0.84	8.56	1.17	6.93
Central India														
Rural	6.26	5.21	3.84	4.38	1.94	3.52	0.74	2.77	0.39	2.42	0.24	1.89	0.18	1.45
Urban	25.45	50.59	17.76	45.05	5.94	26.90	1.96	16.30	1.10	11.69	0.79	7.23	0.82	4.83
South India														
Rural	17.10	20.39	11.81	16.36	4.56	10.35	2.00	6.82	1.58	6.50	1.22	3.24	0.99	1.85
Urban	21.64	52.79	23.82	31.38	9.51	33.62	3.69	21.31	2.24	13.73	1.76	9.07	1.81	5.51
East India														
Rural	16.84	29.18	13.65	24.98	7.61	18.78	3.72	13.39	1.97	10.69	1.15	7.57	0.75	4.72
Urban	52.98	79.02	39.55	75.56	18.32	68.89	7.36	43.34	3.79	32.95	2.71	18.82	2.18	15.32
North East India														
Rural	12.56	15.79	9.82	12.82	4.73	9.54	2.03	6.98	1.02	5.62	0.62	3.57	0.53	2.00
Urban	31.12	40.32	21.22	39.46	9.55	28.02	3.96	17.97	1.94	11.72	1.17	6.47	1.03	2.66
West India														
Rural	7.62	7.92	6.05	6.12	2.84	4.62	1.35	3.71	0.81	3.29	0.65	2.60	0.49	1.93
Urban	28.83	51.50	16.58	43.51	6.17	27.93	2.73	17.69	1.85	13.31	1.56	8.78	1.52	5.35
INDIA														
Rural	11.85	16.48	9.07	13.83	4.48	9.73	2.10	6.99	1.20	5.33	0.81	3.78	0.60	2.46
Urban	32.54	57.80	21.83	52.48	8.80	35.62	3.51	22.85	2.08	15.88	1.60	9.99	1.53	6.42

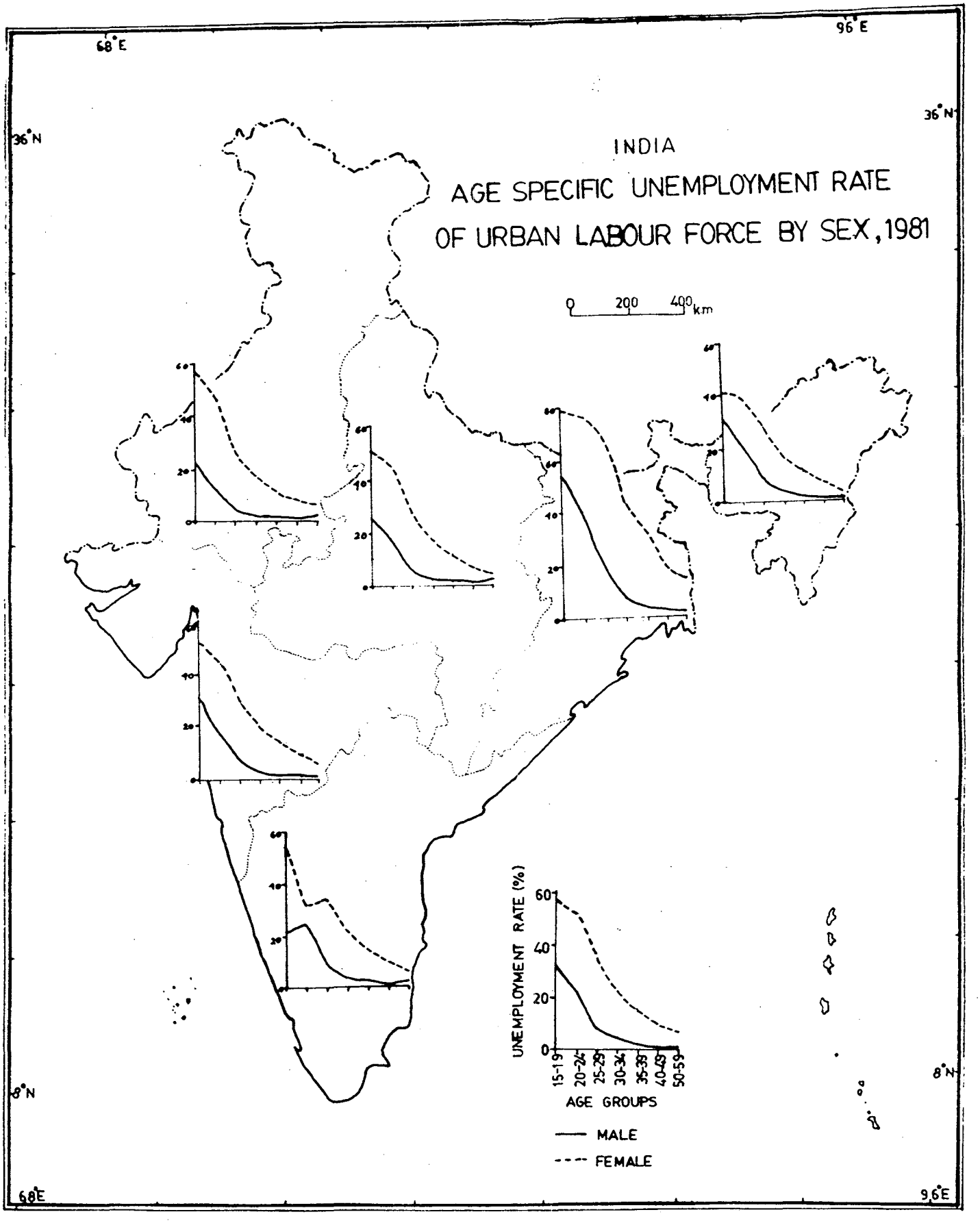
decline is observed at later age groups still only Central India has achieved an ASUR below 1 percent at the age of 30. North and West India achieved it the by age of 35 whereas East India recorded only in the last age group which had a high male ASUR profile but South India failed to achieve that level (Table - 3.2). Central India only has recorded a negligible proportion of unemployment at 50-59 age group.

Rural females experienced constantly high unemployment rates over the different age groups. Here also Central India is marked with the lowest profile of female unemployment whereas the highest is recorded by East India. None of the regions had female unemployment rate below 1 percent for any of the age group. Though female unemployment rate is higher than male in every age group, a gradual decline with advancing age is also there. This decline is minimum between the age groups 30-34 and 35-39 for Central India, South India, North East India and West India and for rest of the regions it is a smooth curve.

The nature of urban economy kept the level of unemployment higher there in comparison to rural areas throughout the age span. It is quite high at 15-19 age group where the highest rate has been recorded by East India. All the regions experienced a decline over the age span. By the age of 30, the ASUR declined substantially in all the regions (Table 3.2)

Regional variations of urban ASUR by Sex

Urban females are the worst affected group by the


68°E
96°E
36°N
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INDIA
AGE SPECIFIC UNEMPLOYMENT RATE
OF URBAN LABOUR FORCE BY SEX, 1981
0 200 400 km
UNEMPLOYMENT RATE (%)
60
40
20
0
15-19
20-24
25-29
30-34
35-39
40-49
50-59
AGE GROUPS
MALE
FEMALE

MAP - 3.4

unemployment problem. Except North-East India all the regions have recorded unemployment rates above 50 percent for the 15-19 age group. Though a continuous decline is observed over the ages but the rates are quite high even at the later age groups (Table 3.2). Except North-East India all the regions have recorded an ASUR of 5 percent and above even at the age group of 50-59.

Though the results of ASUR by sex and place of residence are consistant with the hypothesis, but the different profiles for males and females help in determining playsible causes behing the phenomenon. In Indian society the role of a man in a family is of an earner and role of a female is to perform the household duties and rearing and bearing of children. For these two different roles men try to engage themselves with some economic activities as early as possible in their working age. But females in the initial working age groups are generally tied with their primary duties within the household. They prefer to join the labour force at later ages which keep the female unemployment rates higher even beyond the age of 30 years. Moreover, the social constraints which are faced by females make them less mobile and provide them with very limited options.

EDUCATION AND UNEMPLOYMENT

Educational Composition of Unemployed

Education is the basic acquired quality of a person. In job market skills gained through education help a person in

getting more rewarding jobs. Any discussion on manpower will remain incomplete without a discussion of skills attained by men and women. India has shown wide regional variations in literacy rates and is also expected to show differentials in available skills. India census provides the data on nine different levels of education but for the convenience of discussion in this section the various categories have been regrouped into five categories only. These are -

a) Illiterate

b) Literate without any formal education and upto primary level (unskilled)

c) Middle and matriculate (Semi skilled)

d) Higher Secondary, Non-technical diploma not equal to degreee and technical diploma not equal to degree (skilled)

e) Graduate and above (higly skilled).

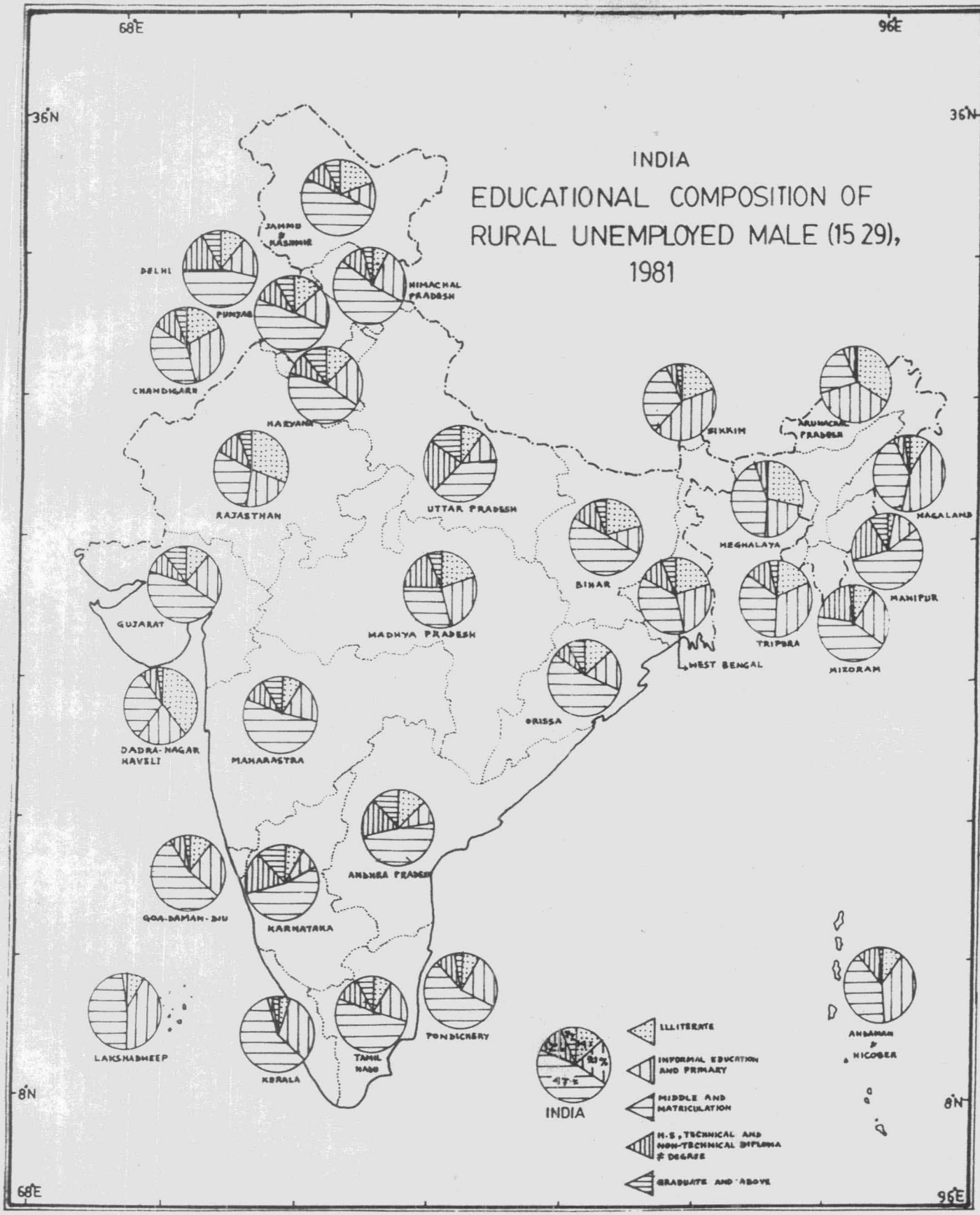
For the present analysis the age group of 15-29 has been taken into consideration in each educational category because it was expected that most the individuals attain his/her level of education by that age and persons getting education after that age are very less in number. Moreover, this is the age group where the proportion of unemployment is maximum.

Educational composition as well as unemployment rate by the level of education have been calculated for the states. Composition of unemploymed by their level of education gives the

TABLE 3.3: STATEWISE EDUCATIONAL COMPOSITION OF THE UNEMPLOYED AGED 15 - 29 BY SEX IN RURAL INDIA, 1981

Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
	M	F	M	F	M	F	M	F	M	F
INDIA	13.53	39.10	20.71	20.20	47.24	33.40	11.75	4.70	6.76	2.59
1. Andhra Pradesh	12.79	61.62	9.73	13.37	48.12	18.19	17.27	4.09	12.09	2.72
2. Bihar	20.69	70.89	11.93	8.35	49.09	17.88	12.13	2.07	6.16	0.80
3. Gujarat	11.98	51.22	23.62	20.35	46.57	21.90	9.69	2.84	8.13	3.68
4. Haryana	12.72	62.45	22.76	10.98	46.18	17.67	9.56	5.43	8.77	3.46
5. Himachal Pradesh	7.04	26.00	25.60	27.00	52.17	35.83	9.92	7.56	5.27	3.80
6. Jammu & Kashmir	20.30	65.69	12.60	6.12	56.33	23.79	10.28	2.88	7.04	1.52
7. Karnataka	7.17	44.70	8.30	12.27	53.70	32.70	17.11	6.70	13.72	3.63
8. Kerala	4.30	7.32	31.11	27.41	58.82	56.86	2.60	5.86	3.17	2.55
9. Madhya Pradesh	18.81	79.85	25.77	10.17	30.03	5.87	18.15	2.91	7.23	1.19
10. Maharastra	11.48	55.56	18.87	18.17	52.58	21.72	9.82	2.54	7.25	2.00
11. Manipur	2.61	16.94	11.55	14.50	55.27	43.34	20.09	14.98	11.29	10.22
12. Meghalaya	27.53	32.63	22.53	23.85	43.28	37.62	4.74	3.69	1.92	2.19
13. Nagaland	8.74	8.94	44.39	44.34	39.44	39.73	5.61	5.45	1.63	2.10
14. Orissa	12.97	57.57	19.14	14.87	53.04	23.96	7.42	2.05	7.43	1.71
15. Punjab	13.39	28.17	19.25	14.52	48.75	39.61	9.67	9.83	8.94	7.87
16. Rajasthan	31.57	92.66	21.25	3.90	31.02	1.98	11.47	0.83	4.67	0.62
17. Sikkim	19.32	33.76	42.03	31.20	30.92	30.34	4.35	1.92	3.86	2.56
18. Tamil Nadu	8.61	32.60	19.64	21.63	50.97	40.67	11.27	0.99	9.51	4.10
19. Tripura	17.34	41.55	31.97	31.63	34.32	20.28	11.75	5.17	4.62	1.36
20. Uttar Pradesh	10.52	55.88	13.43	11.96	38.92	17.64	22.15	8.75	14.97	5.76
21. West Bengal	20.94	50.19	26.01	21.42	36.00	21.22	11.50	4.50	5.56	2.66
22. A & N Islands	11.39	24.02	38.52	38.79	40.09	29.29	9.04	6.40	0.84	1.57
23. Arunachal Pradesh	33.20	37.86	36.92	23.98	23.74	24.08	3.83	5.44	2.35	8.64
24. Chandigarh	16.12	15.62	28.36	24.22	38.80	51.56	10.75	7.03	6.57	4.69
25. Dadra &Nagar-Hoveli	38.56	68.99	21.97	16.80	30.04	11.43	6.73	0.89	2.69	2.19

Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
	M	F	M	F	M	F	M	F	M	F
26. Delhi	9.23	24.24	17.88	10.32	46.37	33.62	17.38	21.53	9.10	10.26
27. Goa-Daman&Diu	8.58	21.00	26.16	23.03	55.10	48.20	6.92	4.59	3.24	3.17
28. Lakshadweep	6.52	15.80	41.60	56.28	50.00	27.65	1.75	0.17	0.63	0.26
29. Mizoram	9.13	2.63	25.29	33.33	42.89	54.82	21.25	8.55	1.56	0.66
30. Pondicherry	6.60	21.23	23.56	30.06	56.08	42.18	9.44	4.76	4.28	1.74


INDIA
EDUCATIONAL COMPOSITION OF
RURAL UNEMPLOYED MALE (15 29),
1981
68°E
96°E
36°N
8°N
JAMMU & KASHMIR
DELHI
HIMACHAL PRADESH
PUNJAB
CHANDIGARH
HARYANA
RAJASTHAN
UTTAR PRADESH
SIKKIM
ARUNACHAL PRADESH
NAGALAND
MEGHALAYA
BIHAR
MANIPUR
TRIPURA
MIZORAM
WEST BENGAL
GUJARAT
MADHYA PRADESH
ORISSA
DADRA-NAGAR HAVELI
MAHARASTRA
ANDHRA PRADESH
GOA-DAMAN-DIU
KARNATAKA
LAKSHADWEEP
KERALA
TAMIL NADU
PONDICHERY
ANDAMAN & NICOBER
INDIA
ILLITERATE
INFORMAL EDUCATION AND PRIMARY
MIDDLE AND MATRICULATION
H.S, TECHNICAL AND NON-TECHNICAL DIPLOMA & DEGREE
GRADUATE AND ABOVE

MAP - 3.5

share of different skill groups among the unemployed whereas education specific unemployment rates are useful to get a patern of the volume of unemployment in each category.

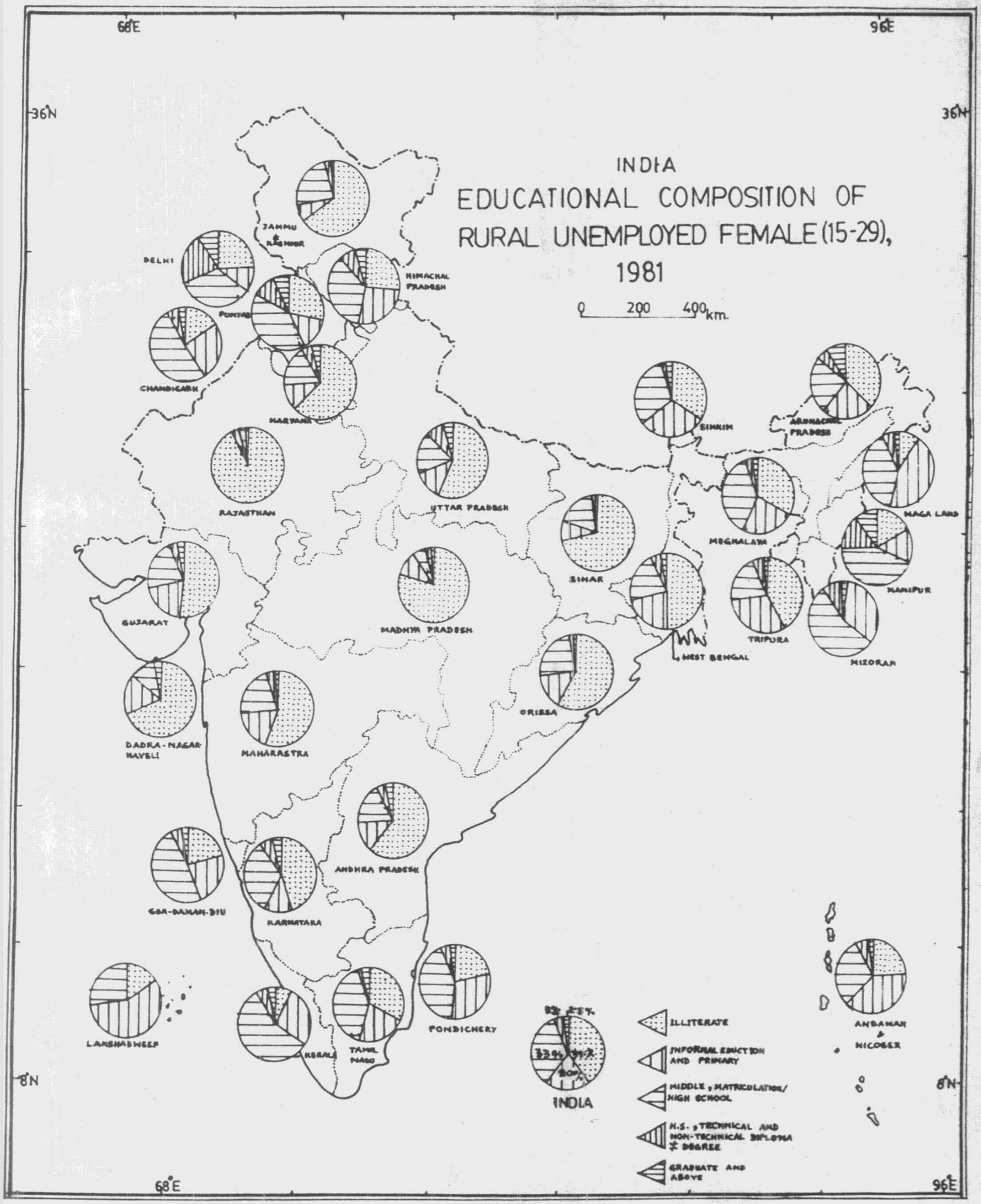
Educational Composition of Rural male unemployed

The predominence of illiteracy in Indian society keeps the share of illiterates high among the unemployed though it varies from state to state and among union territories. Illeterate males are forming more than one-fourth of the rural male unemployed in Meghalaya, Rajasthan and Union territories of Arunachal Pradesh and Dadra and Nagar Haveli where male literacy rate is much below the national average. In Kerala and Manipur where male literacy rate is high, the proportion of illeterate among the unemployed is low (Map 3.5).

Almost all the states have recorded a higher number of persons in middle and matriculate category which is reflectd in the education specific unemployment rate also (Appendix 2). Kerala has 59 percent of its rural male unemployed in this category. But further higher educational levels have a lower share among the unemployed because very few people pursue their studies beyond this in rural areas.

Educational composition of Rural Female unemployed

This is more true for rural females wehere the share of the illiterates among the unemployed is still higher because a vast majority of them are illiterate. Rajasthan with very low


INDIA
EDUCATIONAL COMPOSITION OF RURAL UNEMPLOYED FEMALE (15-29), 1981
0 200 400 km.
68°E
96°E
36°N
8°N
JAMMU & KASHMIR
DELHI
HIMACHAL PRADESH
PUNJAB
CHANDIGARH
HARYANA
RAJASTHAN
UTTAR PRADESH
SIKKIM
ARUNACHAL PRADESH
NAGA LAND
MEGHALAYA
BIHAR
MANIPUR
TRIPURA
MIZORAM
WEST BENGAL
GUJARAT
MADHYA PRADESH
ORISSA
DADRA-NAGAR HAVELI
MAHARASTRA
ANDHRA PRADESH
GOA-DAMAN-DIU
KARNATAKA
LAKSHADWEEP
KERALA
TAMIL NADU
PONDICHERY
ANDAMAN & NICOBER
INDIA
ILLITERATE
INFORMAL EDUCTION AND PRIMARY
MIDDLE, MATRICULATION/ HIGH SCHOOL
H.S., TECHNICAL AND NON-TECHNICAL DIPLOMA & DEGREE
GRADUATE AND ABOVE

MAP -.3.6

female literacy rate showed that 93% female unemployed are illiterate. Due to very high illiteracy the proportion of people with informal and primary education is very low all over India. But middle and matriculates have a higher share because most of the females who pursue their sudies at higher level offer themselves for job. Here also the highest share of 5.7% is recorded by Kerala and the lowest of 2% by Rajasthan (Map. 3.6). Manipur, Punjab and Delhi have a substantially high percentage of unemployed females in semi-skilled and skilled category which shows the expansion of the educational facilities giving the rural females such an exposure that they also try for jobs or are at least available for the same if one such can be made available to them.

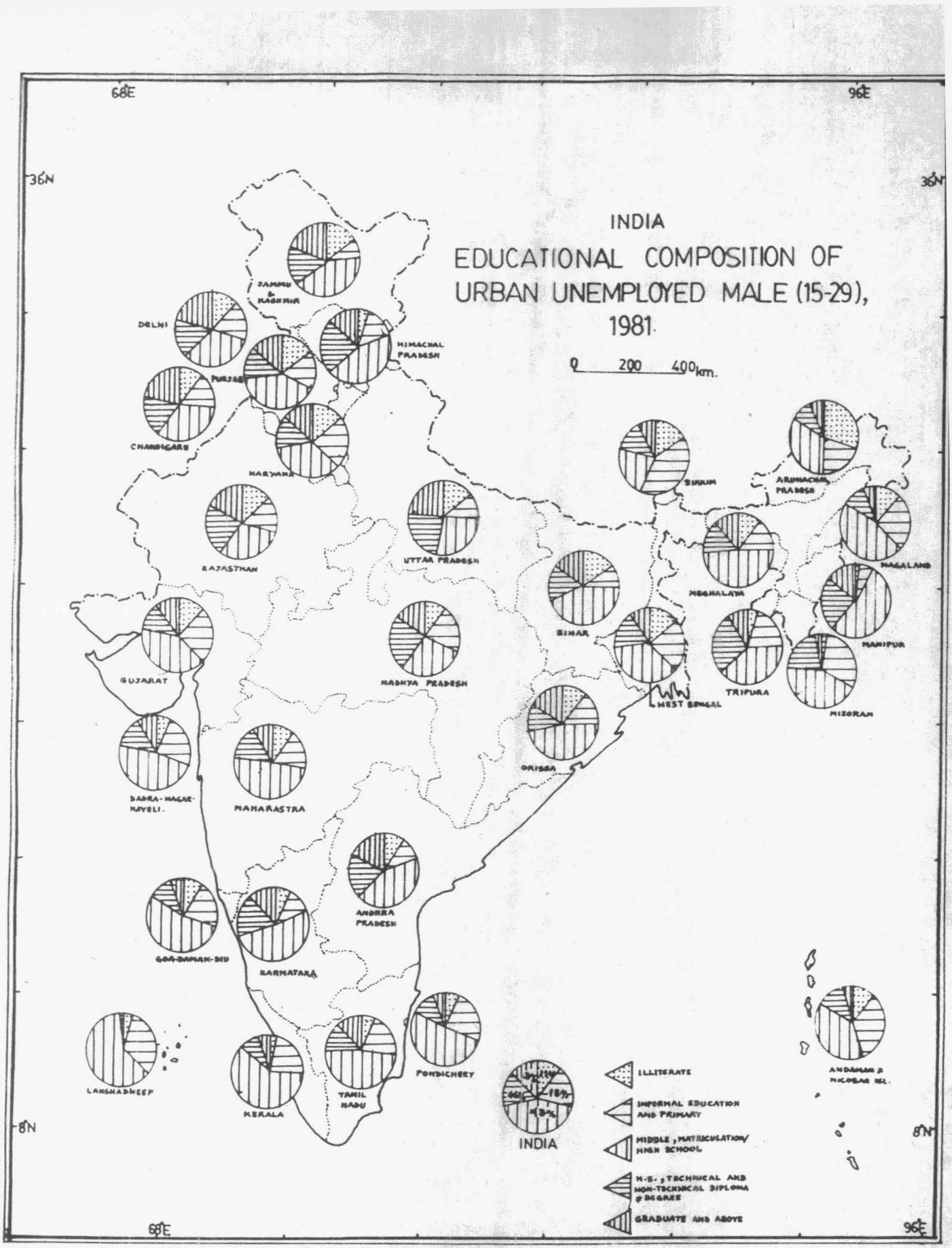
Educational Composition of urban Male Unemployed

The situation is different in urban areas where illiteracy is not so widespread as it is in rural areas and so the share of illiterates among the unemployed is lower than in rural areas (Map 3.7), being well below 30 percent in almost all the states and UTs. The unemployed with primary or informal level also had a low share. The proportion of unemployed with middle and matriculates level of educational attainment (highest) which shows that the bulk of the urban male unemployed are semiskilled. The share of the other two groups, that is, the skilled and highly skilled declined gradually in most of the states and UTs except Punjab, Orissa, U.P., Delhi and Chandigarh. This could be

TABLE 3.4: EDUCATIONAL COMPOSITION OF THE URBAN UNEMPLOYED IN THE 15-29 AGE GROUP BY SEX, INDIA, 1981

	Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
		M	F	M	F	M	F	M	F	M	F
	INDIA	10.61	14.70	18.07	15.38	42.98	40.89	15.68	12.97	12.64	16.06
1.	Andhra Pradesh	9.20	23.12	10.44	11.42	42.64	35.39	19.05	13.87	18.64	16.20
2.	Bihar	15.19	25.77	9.79	7.37	43.46	37.52	16.54	13.14	15.02	16.20
3.	Gujarat	12.23	18.05	24.71	15.49	40.42	35.92	11.41	10.08	11.22	20.45
4.	Haryana	13.93	9.84	22.61	7.01	35.33	34.45	14.18	18.88	13.94	29.89
5.	Himachal Pradesh	4.61	6.74	15.07	9.99	43.37	37.89	22.27	22.09	14.68	23.25
6.	Jammu & Kashmir	14.66	26.89	8.27	4.97	40.29	36.62	17.98	13.58	18.80	17.93
7.	Karnataka	6.54	14.98	11.00	9.15	50.53	47.18	18.48	14.48	13.99	14.21
8.	Kerala	2.41	4.28	23.39	23.56	61.72	59.45	8.34	7.45	4.14	5.25
9.	Madhya Pradesh	10.03	23.29	21.44	13.66	28.41	19.60	23.59	19.70	16.53	23.75
10.	Maharastra	9.14	18.17	18.24	13.25	52.37	44.39	11.27	10.47	8.98	13.71
11.	Manipur	1.59	9.64	6.08	8.40	52.14	45.36	24.07	20.13	16.09	16.45
12.	Meghalaya	10.97	13.82	14.06	12.89	49.45	47.12	14.56	11.87	11.07	14.28
13.	Nagaland	11.98	7.19	26.13	22.38	45.38	53.39	10.80	9.24	5.70	8.21
14.	Orissa	10.84	24.95	14.21	9.11	45.60	36.55	12.33	10.54	17.03	18.84
15.	Punjab	14.89	6.57	17.34	5.87	40.76	34.33	12.72	17.49	14.28	35.75
16.	Rajasthan	13.21	29.50	15.72	11.35	31.67	20.47	22.61	18.19	16.78	20.49
17.	Sikkim	15.69	23.91	41.18	27.70	22.30	35.48	13.48	5.01	7.35	7.83
18.	Tamil Nadu	6.32	11.44	20.26	16.83	47.78	50.60	12.36	9.40	10.46	11.00
19.	Tripura	4.38	7.44	19.77	19.34	40.32	36.03	27.43	25.73	8.06	11.38
20.	Uttar Pradesh	14.58	14.17	11.74	7.31	30.43	19.50	20.51	20.58	22.73	38.15
21.	West Bengal	13.90	14.53	22.64	19.54	36.87	36.61	16.81	14.35	9.77	14.84
22.	A & N Islands	11.04	9.40	34.78	14.00	39.48	47.52	11.98	17.55	2.82	11.88
23.	Arunachal Pradesh	29.68	22.43	20.77	19.66	34.47	35.90	9.36	10.00	5.02	11.75
24.	Chandigarh	10.79	9.48	15.28	4.20	34.42	25.15	17.61	15.88	21.88	41.59
25.	Dadra &Nagar-Haveli	6.35	8.33	23.81	24.17	47.62	50.83	12.70	6.67	9.52	8.33

Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
	M	F	M	F	M	F	M	F	M	F
26. Delhi	12.21	11.94	17.39	7.12	33.81	19.10	16.27	15.85	20.31	44.41
27. Goa-Daman&Diu	8.38	14.51	20.97	15.75	53.30	53.46	10.48	5.90	6.89	8.46
28. Lakshadweep	4.07	17.45	32.97	50.59	60.79	30.64	1.49	1.62	0.41	0.29
29. Mizoram	2.31	2.03	31.23	36.62	43.57	46.08	20.41	13.53	2.57	1.52
30. pondicherry	6.62	16.90	23.96	25.72	51.06	44.43	11.61	7.09	6.72	5.38


INDIA
EDUCATIONAL COMPOSITION OF URBAN UNEMPLOYED MALE (15-29), 1981
0 200 400 km.
68E
96E
36N
8N
JAMMU & KASHMIR
DELHI
HIMACHAL PRADESH
PUNJAB
CHANDIGARH
HARYANA
RAJASTHAN
UTTAR PRADESH
SIKKIM
ARUNACHAL PRADESH
NAGALAND
MEGHALAYA
BIHAR
MANIPUR
TRIPURA
MIZORAM
WEST BENGAL
ORISSA
GUJARAT
MADHYA PRADESH
DADRA-NAGAR-HAVELI
MAHARASTRA
ANDHRA PRADESH
GOA-DAMAN-DIU
KARNATAKA
LAKSHADWEEP
KERALA
TAMIL NADU
PONDICHERY
ANDAMAN & NICOBAR ISL.
INDIA
ILLITERATE
INFORMAL EDUCATION AND PRIMARY
MIDDLE, MATRICULATION/ HIGH SCHOOL
H.S., TECHNICAL AND NON-TECHNICAL DIPLOMA & DEGREE
GRADUATE AND ABOVE

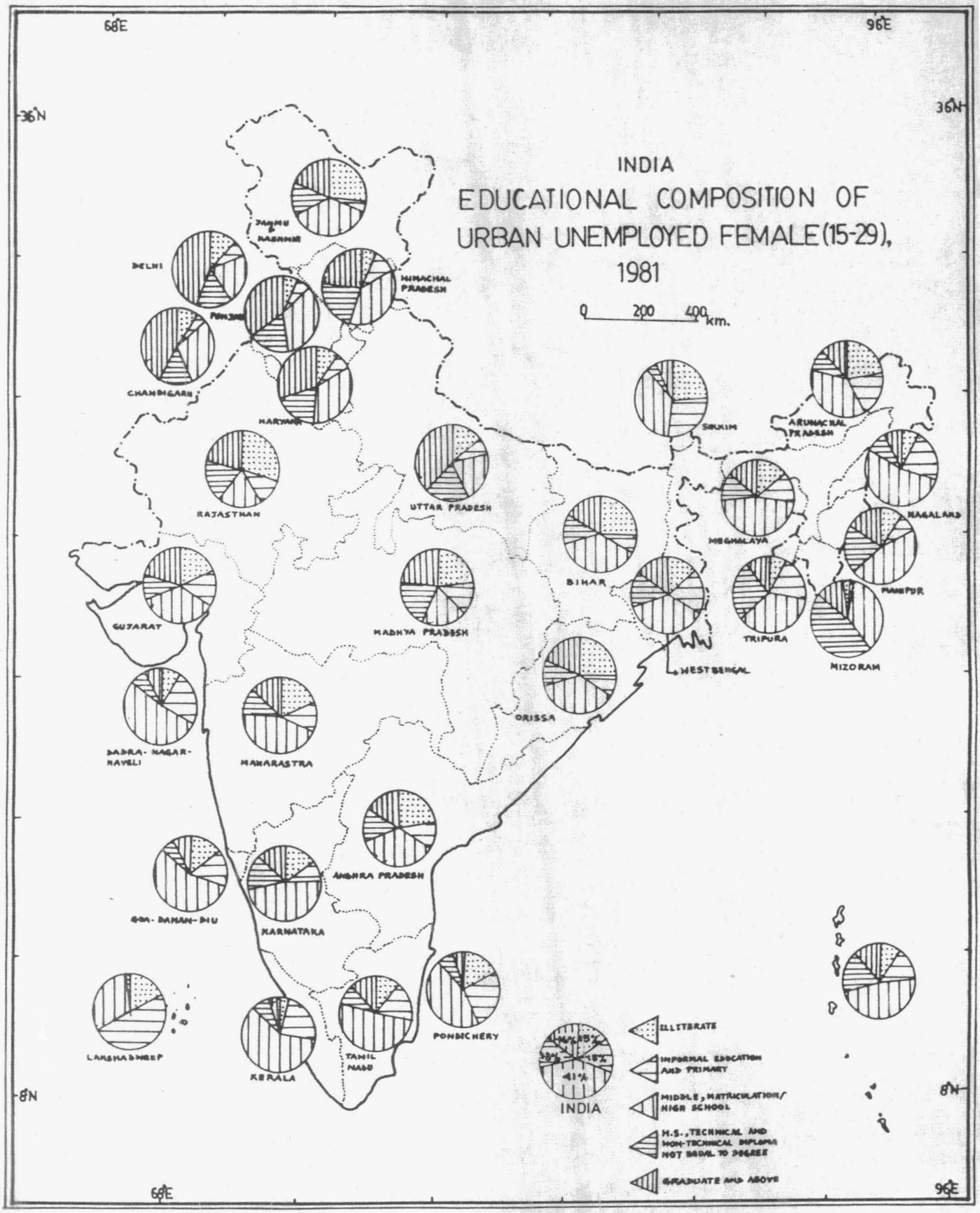
MAP - 3.7

because of graduate inmigrants who are searching for jobs in urban areas.

Educational Composition of Urban Female Unemployed

Unlike rural females the urban females have a lower share among the unemloyed and a higher share in middle and matriculation category (Map no. 3.8). Here also, like rural areas, Rajasthan with a low literacy has the highest share of illiterate job seekers, whereas the low proportion is observed in Mizoram. More than 50% of the female unemployed are of middle and matriculate category in Kerala, Tamilnadu, Karnataka, Goa-Daman and Diu, Dadra and Nagar Haveli, Meghalaya and Nagaland. But urban females have a considerable share of graduate unemployed. The share of graduate unemployed among the total employed was very high in central India and in parts of north west India, that is, in Haryana, Himachal Pradesh, Punjab, Delhi and Chandigarh.

The comparatively higher proportion of graduate unemployed, specially in urban areas, is basically due to large number of graduates looking for jobs soon after completing their studies. Many of them prefer to remain unemployed waiting for a suitable job commensurate to their qualifications rather than accepting any job which first comes in their way. The proportion of graduate unemployed in urban areas also gets swelled by rural-to-urban migration of the educated youth.


INDIA
EDUCATIONAL COMPOSITION OF
URBAN UNEMPLOYED FEMALE (15-29),
1981
0 200 400 km.
68E
96E
36N
8N
JAMMU & KASHMIR
DELHI
HIMACHAL PRADESH
PUNJAB
CHANDIGARH
HARYANA
RAJASTHAN
UTTAR PRADESH
SIKKIM
ARUNACHAL PRADESH
NAGALAND
MEGHALAYA
MANIPUR
BIHAR
TRIPURA
MIZORAM
WEST BENGAL
ORISSA
MADHYA PRADESH
GUJARAT
DADRA-NAGAR-HAVELI
MAHARASTRA
ANDHRA PRADESH
GOA-DAMAN-DIU
KARNATAKA
LAKSHADWEEP
KERALA
TAMIL NADU
PONDICHERY
INDIA
16%
15%
18%
41%
ILLITERATE
INFORMAL EDUCATION AND PRIMARY
MIDDLE, MATRICULATION/ HIGH SCHOOL
M.S., TECHNICAL AND NON-TECHNICAL DIPLOMA NOT EQUAL TO DEGREE
GRADUATE AND ABOVE

MAP - 3.8

Educational Level Specific unemployment Rate

Unemployment rate gives the percentage of population that remains unemployed in each educational group or skills. This also have been done for the five educational categories in which the educational composition has been discussed in the previous section.

The illiterates have the lowest unemployment rate for both male and female in rural areas. This is mainly because very few illiterates offer themselves for job. They take up any employment which comes in their way. There is a gradual increase in unemployment rate with the level of education for both males and females but the increase is quite sharp between informal and primary group and middle and matriculate group. This is mainly because with the increase of skill, aspirations also go high which in many cases, are not accomplished in the stagnant village economy.

Education specific unemployment rate show very clear regional variations. For the unemployment rates among rural males in the states of Bihar, Kerala, Tripura, West Bengal, Pondicherry, have been very high for every educational category (Table 3.5). Though Goa-Daman and Diu and Lakshadweep have recorded a very high unemployment rate for the unskilled group but they have a high educated unemployment also. This regional variation is mainly because of some developmental factors. Bihar recorded 83 percent of its rural male main worker in agriculture. Most of them are expected to be from a lower educational strata.

TABLE 3.5: EDUCATION SPECIFIC RURAL UNEMPLOYMENT RATE BY SEX OF INDIA AND STATES IN THE AGE GROUP 15-29, 1981

	Name of the State	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduatea and above	
		M	F	M	F	M	F	M	F	M	F
	INDIA	2.30	2.90	5.39	6.51	12.72	17.59	20.30	28.62	27.68	42.56
1.	Andhara Pradesh	0.53	1.47	1.12	1.98	6.15	5.28	14.39	7.35	25.33	26.44
2.	Bihar	3.16	3.12	5.90	4.00	12.53	10.27	26.66	26.05	37.59	33.89
3.	Gujarat	1.22	2.37	2.31	2.70	6.98	7.04	13.18	12.91	18.65	27.23
4.	Haryana	1.86	2.25	4.16	2.25	7.41	6.98	13.87	19.34	24.01	30.82
5.	Himachal Pradesh	2.99	2.79	6.55	4.74	14.62	15.08	22.09	32.21	24.70	38.72
6.	Jammu & Kashmir	2.03	4.41	3.60	4.39	9.08	15.53	15.18	15.35	20.28	27.64
7.	Karnataka	0.56	1.67	1.17	2.04	6.81	6.84	17.27	20.94	27.46	34.01
8.	Kerala	16.36	18.32	23.76	25.91	27.66	42.75	52.01	68.78	44.47	57.16
9.	Madhya Pradesh	1.13	2.08	2.34	2.03	6.70	4.91	15.03	12.52	21.36	17.15
10.	Maharastra	2.08	3.21	3.10	2.89	7.26	4.91	14.55	12.84	18.93	21.59
11.	Manipur	0.71	1.24	2.98	2.98	12.01	11.76	31.33	32.52	34.14	21.49
12.	Meghalaya	0.29	0.35	0.47	0.59	1.42	2.00	3.55	4.74	2.77	5.83
13.	Nagaland	0.47	0.19	1.62	0.93	3.15	3.68	4.61	8.00	3.39	6.37
14.	Orissa	1.78	1.87	3.46	1.74	11.37	6.15	19.45	12.95	27.51	22.69
15.	Punjab	1.10	1.35	2.60	1.59	5.32	6.39	10.83	21.92	15.03	24.37
16.	Rajasthan	2.58	4.12	3.81	2.59	7.96	12.92	15.20	9.55	11.26	3.31
17.	Sikkim	0.44	0.60	1.03	2.20	2.46	6.71	1.93	4.03	2.92	8.82
18.	Tamil Nadu	1.76	2.51	3.67	4.27	12.34	13.55	22.78	25.08	40.77	46.87
19.	Tripura	6.71	13.07	11.51	21.77	25.03	24.99	41.05	55.28	42.58	61.02
20.	Uttar Pradesh	0.88	0.49	2.18	0.88	5.57	2.89	12.88	5.44	20.25	14.57

	Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
		M	F	M	F	M	F	M	F	M	F
21.	West Bengal	8.32	9.72	13.25	10.81	29.64	47.61	48.13	51.01	50.93	61.02
22.	A & N Islands	3.72	8.13	7.62	16.98	14.00	27.11	15.49	31.78	6.06	28.57
23.	Arunachal Pradesh	1.39	0.67	3.07	3.21	4.45	8.32	2.40	13.76	2.92	18.39
24.	Chandigarh	3.03	1.05	6.47	3.32	5.91	9.88	12.33	15.52	15.28	25.00
25.	Dadra & Nagar Haveli	1.39	6.53	1.39	11.96	3.16	12.92	7.5	14.28	2.78	26.51
26.	Delhi	5.88	2.59	6.56	2.38	12.08	9.44	16.29	25.45	21.03	34.85
27.	Goa, Daman & Diu	9.14	10.41	15.48	14.58	21.16	24.41	21.30	27.68	18.79	30.10
28.	Lakshadweep	38.23	30.56	27.41	42.03	42.18	49.29	27.45	10.53	8.11	37.5
29.	Mizoram	0.67	0.10	0.56	0.44	3.63	4.41	9.88	8.06	2.48	5.17
30.	Pondicherry	5.72	4.64	13.68	10.22	26.10	21.75	8.74	33.74	39.27	42.26

This extra burden on soil is putting a large number of young adults out of jobs, which in turn, leads to increasing unemployment. Though the percentage of male workers engaged in agriculture is not so high in the other states and UTs, where there is high education specific uneployment rate but, perhaps, their high literacy has some effect on unemployment. High literacy helps to increase the labour force participation and also choice of job among them causes high unemployment. For illiterate and unskilled labour the job required is not through out the year in rural areas. Less developed irrigation and other infrastructural facilities have restricted the agricultural works only into few months of a year. All these different factors affecting the supply and demand side of the labour is creating the imbalance.

All the north eastern states (except Tripura), Sikkim, Punab and Chandigarh have a very low unemployment rate of rural males in different educational categories. Most of the hilly states of India are still dominated by the tribes and till today tribal economy is mainly subsistance economy in nature. Most often they donot want to expose themselves to the ouside world. So very few of them come out to search for a job. But in Chandigarh the situation is different. Its high urbanisation and industrialisation has created a distinct wage differential between primary and secondary sector and has attracted a substantial population from primary to other sectors. This probably kept the unemployment at a lower level. Punjab and

Haryana, though both of them are very developed in agriculture and expected to have a leser unemployment rate, but Haryana deviates from this expected pattern. It could be because the state has a very high (36 percent) proportion of marginal workers who are seeking full-time jobs.

For the females, the situation is slightly different. Most of the states and UTs have a low unemployment rate at the unskilled level but have very high unemployment rates among youths with higher educational attainment. The rates are mainly below the male unemployment rate in the two unskilled groups while the picture is a mixed one for the unemployed persons. Females have much higher level of unemployment rate among the skilled and highly skilled categories than the males. This may be because of sex specific migration to urban areas which reduces the bulk of the male educated unemployment in rural areas. Like males, females in Kerala, Tripura, West Bengal, Goa-Daman-Diu and Pondicherry have shown a higher unemployment for all the educational categories. This shows that these regions though have high literacy but have failed to bring a balance between the aspirations created by the exposure to higher education. But the types of jobs created are mostly blue-collar ones and are not preferred by educated women. Moreover, most of them search for jobs within their villages only, which is not always possible. Apart from those, Himachal Pradesh, Jammu and Kashmir, Bihar and Manipur have a very high female unemployment rate in graduate and above category. Though it is known that most of these states are

TABLE 3.6: EDUCATION SPECIFIC URBAN UNEMPLOYMENT RATE BY SEX OF INDIA AND STATES IN THE AGE GROUP 15-29, 1981.

	Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
		M	F	M	F	M	F	M	F	M	F
	INDIA	8.34	4.09	11.83	7.06	15.03	12.52	20.26	17.24	21.32	25.29
1.	Andhra Pradesh	3.98	2.99	5.83	3.47	10.27	7.29	14.12	14.02	22.16	26.42
2.	Bihar	13.60	4.80	14.38	4.42	18.11	10.30	25.58	20.56	35.69	34.90
3.	Gujarat	6.64	3.55	7.08	3.52	8.37	7.40	11.97	12.87	12.23	22.81
4.	Haryana	6.13	2.20	8.79	3.11	6.74	7.81	9.78	14.32	13.74	25.74
5.	Himachal Pradesh	7.15	6.77	11.73	9.54	15.80	19.76	20.71	26.52	20.55	36.38
6.	Jammu & Kashmir	5.10	8.90	6.90	8.47	9.74	17.24	13.35	20.65	20.32	33.68
7.	Karnataka	4.09	3.76	7.20	4.67	13.37	11.24	17.97	19.09	21.43	27.71
8.	Kerala	21.68	23.20	30.45	31.93	42.17	44.67	46.12	45.14	35.25	46.91
9.	Madhya Pradesh	7.20	3.69	9.17	3.69	10.64	6.00	16.49	12.24	20.71	22.37
10.	Maharashtra	9.37	5.29	11.93	5.26	12.88	8.25	13.47	12.67	14.62	18.20
11.	Manipur	1.60	3.26	4.52	6.68	14.54	16.83	26.88	31.14	29.43	67.44
12.	Meghalaya	1.78	1.65	2.20	2.24	2.37	2.96	3.68	4.33	4.01	6.02
13.	Nagaland	1.45	0.92	1.51	2.02	2.62	4.35	3.56	5.33	3.46	9.15
14.	Orissa	6.66	3.05	8.25	2.27	11.69	5.95	13.54	11.30	21.59	23.34
15.	Punjab	2.67	0.81	4.06	1.26	4.47	3.05	4.88	5.55	7.70	14.09
16.	Rajasthan	6.20	2.07	6.90	2.20	8.92	8.38	14.12	9.22	23.04	25.43
17.	Sikkim	2.16	4.72	4.44	7.54	2.85	8.98	4.90	5.84	5.47	12.08
18.	Tamil Nadu	8.49	4.35	11.12	5.99	16.36	14.48	18.48	18.06	25.00	31.94
19.	Tripura	17.63	17.48	22.34	23.38	27.66	32.58	43.86	58.89	33.68	59.75
20.	Uttar Pradesh	5.12	1.06	6.39	1.75	9.73	3.76	16.49	9.20	20.88	15.84
21.	West Bengal	23.69	11.55	27.74	24.41	35.25	27.70	44.52	41.54	39.09	49.45
22.	A & N Islands	7.10	2.65	9.12	4.27	10.03	12.69	9.56	12.57	7.29	20.12

	Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
		M	F	M	F	M	F	M	F	M	F
23.	Arunachal Pradesh	5.10	4.23	3.43	7.47	4.79	12.21	5.14	17.09	4.71	24.12
24.	Chandigarh	3.97	3.58	7.29	3.32	7.09	7.70	6.68	10.40	9.07	17.70
25.	Dadra & Nagar Haveli	2.03	2.43	4.30	12.83	8.15	22.02	10.96	29.63	13.95	25.64
26.	Delhi	5.99	2.94	7.93	3.44	8.05	5.19	15.01	10.66	13.23	21.29
27.	Goa, Daman & Diu	10.07	11.66	14.78	13.12	15.77	23.86	15.22	23.16	13.99	27.70
28.	Lakshadweep	29.70	21.67	23.87	23.97	37.84	38.21	16.67	40.74	4.69	28.57
29.	Mizoram	2.06	1.85	3.47	3.54	6.55	6.78	11.15	10.36	6.07	5.43
30.	Pondicherry	12.94	11.46	19.14	14.76	25.14	22.53	26.37	25.04	25.90	34.02

not economically very developed but it is a matter of investigation that how much aspiration for a better job and the low spatial mobility affects educated female unemployment in rural areas.

The situation in urban areas is a little different. Here unemployment rates among the illiterates, and those possessing informal and primary education is very low mainly because of their smaller number and majority of them employing themselves in the urban informal sector. There is however a sudden increase in unemployment rate for both males and females at middle and matriculation level of education.

Both males and female in urban areas of Kerala, Tripura, West Bengal, Goa-Daman and Diu have very high unemployment rate. Though Lakshadweep has a very high unemployment rate for illiterates but the rates were similar for graduate unemployed. This is mainly due to very small number of persons on which the rates were computed. Though at the time of discussion of general unemployment the low investment in West Bengal and Kerala had been accused but one can raise querries about the role of state politics. All the three states - Kerala, West Bengal and Tripura have strong Leftist politics within the state. Politics at the grass-root level may have some impact to increase political consciousness as well as increase the participation not only in politics but also in the economy. This huge participation in labour force, in effect, increases unemployment. Though from

secondary source of data it is not possible to get the extent of political influence but it would be interesting enough to study it further. Another interesting deviation is observed for the states of Bihar, U.P., Rajasthan & M.P. where female unemployment rates are lower than male for higher educated categories. This is perhaps because of the withdrawal of young adult females from the labour force as majority of the females get married by that time and confine themselves with household activities.

Skilled Manower Among the Educated Manpower.

In order to assess the nature of unemployment of skilled manpower among the educated persons an index has been prepared for rural and urban areas for both the sexes. For this index, matriculate and above have been considered as skilled whereas those who have some formal education is considered as educated. So, the proportion of matriculate and above among those who have got some formal education (Primary and above), have been computed.

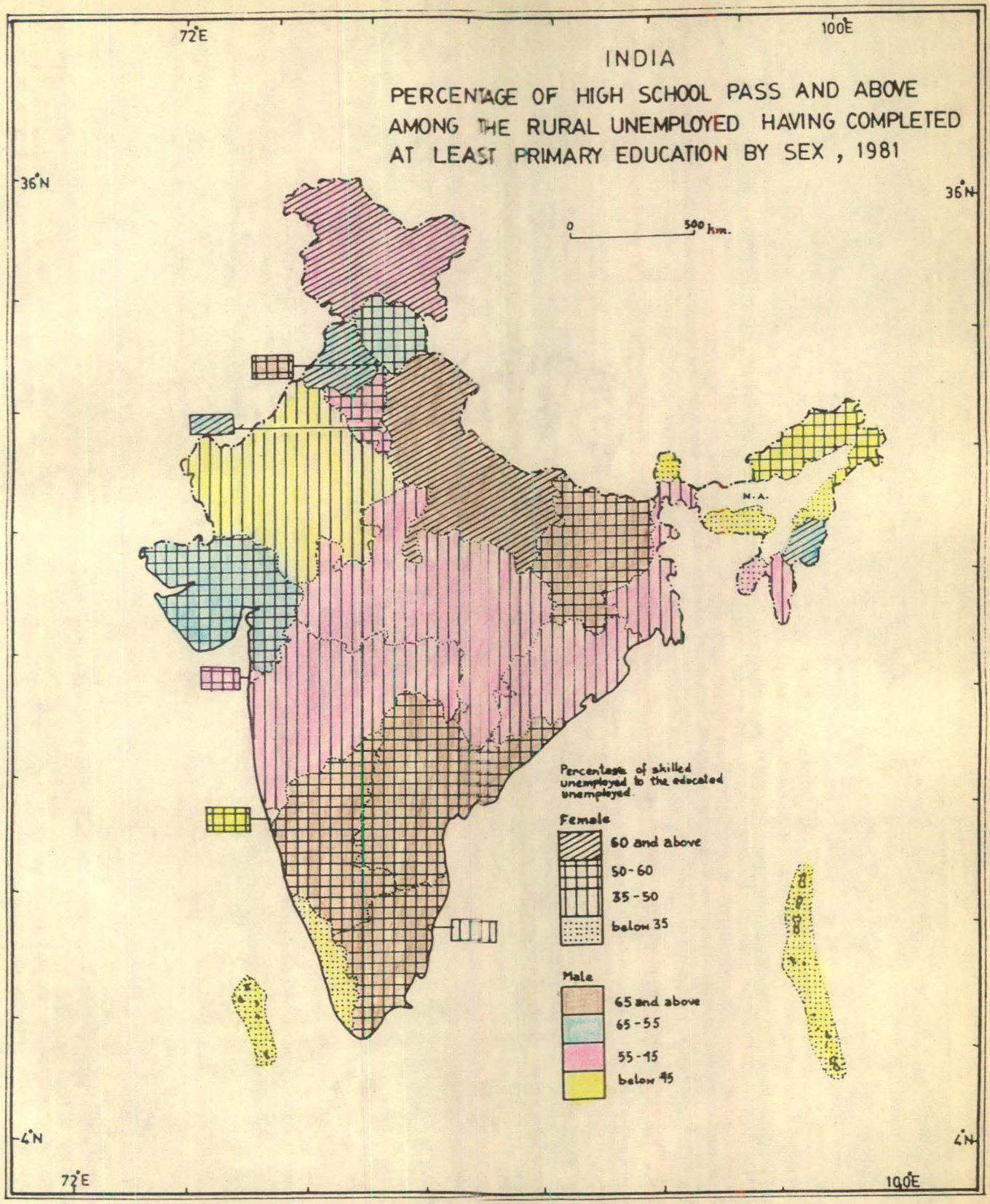
Skilled among the educated manpower in Rural Areas.

In rural areas Meghalays, Nagaland , Sikkim, Andaman and Nicobar island and Lakshadweep have shown low educated unemployment for both male and female mainly because very few people continue with higher studies and that number can easily be absorbed in jobs within the local economy. Female educated unemployment was higher than that of males in Rajasthan, Arunachal Pradesh and Goa, Daman and Diu (Table 3.7). It was

TABLE 3.7:

PERCENTAGE OF HIGH SCHOOL PASS AND ABOVE AMONG THE UNEMPLOYED WHO HAVE COMPLETED PRIMARY EDUCATION BY SEX AND RESIDENCE - INDIA, 1981

NAME OF THE STATES	RURAL		URBAN	
	M	F	M	F
INDIA	52.31	40.56	59.87	67.83
Andhra Pradesh	69.16	47.22	70.03	70.35
Bihar	69.44	46.77	76.73	94.50
Gujarat	62.24	57.33	60.23	78.49
Haryana	53.29	57.70	51.90	85.72
Himachal Pradesh	55.15	51.62	73.23	81.63
Jammy & Kashmir	48.60	59.82	69.80	74.37
Karnataka	74.02	58.55	69.53	73.67
Kerala	44.08	35.20	34.39	39.36
M.P.	50.21	40.52	61.88	74.64
Maharashtra	50.96	36.00	52.82	63.73
Manipur	64.88	60.43	72.52	71.97
Meghalaya	36.99	32.75	57.88	58.22
Nagaland	36.51	33.48	45.77	49.05
Orissa	45.90	38.90	61.05	71.31
Punjab	61.15	71.13	62.37	89.26
Rajasthan	43.55	36.31	64.37	73.78
Sikkim	27.40	32.56	41.04	43.60
Tamil Nadu	66.22	58.24	65.10	70.03
Tripura	45.45	33.59	63.99	66.51
U.P.	68.65	61.24	72.41	87.41
West Bengal	47.43	37.14	69.31	58.81
A & N Islands	44.63	32.88	40.53	73.50
Arunachal Pradesh	31.04	55.18	45.89	62.06
Chandigarh	73.33	56.36	71.40	91.71
Dadra & Nagar Haveli	53.70	47.46	63.64	76.24
Delhi	63.85	77.02	64.65	87.40
Goa Daman & Diu	40.17	45.81	50.34	61.26
Lakshadweep	16.90	9.33	24.61	23.83
Mizoram	54.05	37.96	48.98	42.17
Pondicherry	69.79	43.57	58.05	54.27

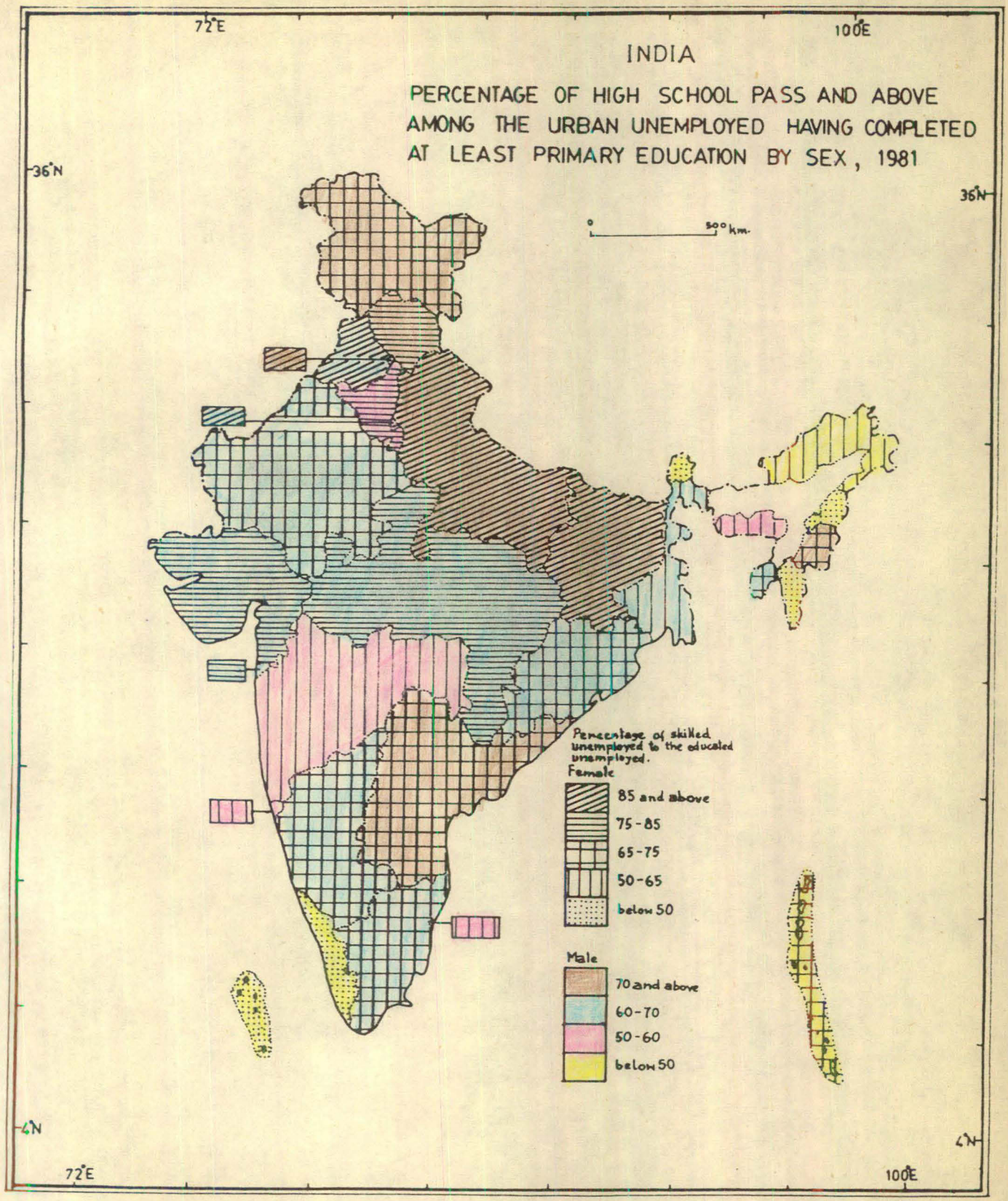

INDIA
PERCENTAGE OF HIGH SCHOOL PASS AND ABOVE AMONG THE RURAL UNEMPLOYED HAVING COMPLETED AT LEAST PRIMARY EDUCATION BY SEX , 1981
72°E
100°E
36°N
4°N
0
500 km.
N.A.
Percentage of skilled unemployed to the educated unemployed.
Female
60 and above
50-60
35-50
below 35
Male
65 and above
65-55
55-45
below 45

MAP - 3.9

howver, lower in Tripura. Educated unemployment was high for both males and female in Gujarat and Himachal Pradesh. It was also high for the females of Bihar, Haryana, Arunachal Pradesh, Chandigarh, Dadar and Nagar Haveli, Goa, Daman and Diu. Males of Manipur, Punjab, Delhi and Mizoram experienced high educated unemployment (Map 3.9). All the states and UTs which have recorded high educated unemployment are mostly dominated by agriculture in their economy. Very high educated unemployment was experienced by both males and females in Uttar Pradesh. The highest female unemployment was experienced by Delhi and Jammu and Kashmir, Manipur and Punjab. Though Delhi is more developed yet it is an inmigrating unit which may have made the influx of educated unemployed in the union territory.

Skilled among the educated Manpower in Urban areas

Like rural areas, urban areas also recorded low educated uneployment for both male and female in Kerala, Nagaland, Sikkim, Laskhadweep and Mizoram (Map No.3.10). Maharashtra, Meghalaya, Goa, Daman and Diu and Pondicherry have moderate unemployment for both males and females. Jammu and Kashmir, Karnataka, Madhya Pradesh, Orissa, Rajasthan, Dadra and Nagar Haveli have high male and female educated unemployed. Males have also shown high skilled unemployment in Punjab, Tamil nadu, Tripura, West Bengal and Delhi, while Andhra Pradesh, Gujarat, Manipur, Andaman and Nicobar islands have high female educated unemployed. Like its rural part Uttar Pradesh has very high proportion of educated


INDIA
PERCENTAGE OF HIGH SCHOOL PASS AND ABOVE AMONG THE URBAN UNEMPLOYED HAVING COMPLETED AT LEAST PRIMARY EDUCATION BY SEX, 1981
72°E
100°E
36°N
4°N
0
500 km.
Percentage of skilled unemployed to the educated unemployed.
Female
85 and above
75-85
65-75
50-65
below 50
Male
70 and above
60-70
50-60
below 50

MAP - 3.10

unemployment of both males and females in its urban areas. Urban areas of Bihar and Chandigarh have very high educated unemployment for both the sexes whereas it was very high for males of Andhra Pradesh and Manipur and for females of Punjab, Haryana and Delhi. So the prosperous regions have a high educated unemployment because of higher literacy and because of higher labour force participation. These regions also get the educated population from their rural counterpart. Moreover, educated persons prefer mainly white-collar and permanent job and the preference might have som effect on the huge educated unemployment in some regions.

Conclusion

The chapter has tried to see the regional pattern of uneployment and probable associated socio-economic factors behind it, but in a country where there is wide socio-cultural variation and participation in the economy, specially female participation is determined by economic as well as cultural variation, is difficult to get the extent of influence of other developmental factors. Moreover, in rural areas concept of work also varies and these preconeived ideas have an effect on local enumeration also. The study in such a macro-level is bound to give a very generalised picture.

On important aspect here is whether women considered as unemployed at all made an effort to look for a job or have they largely responded to the question, "Are you available for work if

the same becomes available to you". This is
question and has increased the unemployment
women, to very high levels. It may be usef
those persons as unemployed who have made a
to secure a job which may reflect a mor
unemployment.

Apart from that in most of the case
male and we have recorded in the census, th
regarding the female member of the househ
available there. One would have known the r
way if the reply had been given by the per
in-depth study would be helpful in this rega

CHAPTER - IV

A DISTRICT LEVEL ANALYSIS OF UNEMPLOYMENT - A CASE STUDY OF MAHARASHTRA

Unemployment rate shows variations over the regions and indicates some impact of demographic parametres. The state level study done in the previous chapter shows a wide range of variations in unemployment rates by age, sex, place of residence and educational categories. All most all the states and UTs have shown a higher female unemployment rates than male for both rural and urban areas. Profile of age specific unemployment rates are also higher for females than for males. Another interesting fact of ASUR is the very high young age unemployment rates by sex and residence. The educational composition shows a vriety where females are predominated by illiteracy in rural areas while males have a high share in middle and matriculation category. But in urban areas both male and females have a substantial share in middle and matriculation category onward. Predominance of illiterates is less in urban areas for both the sexes. But unemployment rates have an increasing trends with rise in educational categories for both sexes in rural and urban areas. So there is low unemployment among the illiterates and very high unemployment among graduates.

To see whether same type of variations exist in micro-regions also, study of Maharastra has been undertaken at the district level. It is an interesting state to study because it is

a progressive state in respect of its socio-economic development. It took a brave step to implement the Employment Guarantee Scheme (EGS) during the major drought of 1971-72 and 1973-74. The scheme was evaluated by different scholars differntly. But briefly it can be said that the scheme was initiated as a drought relief measure for those who suffered the brunt of unemployment or severe underemployment, but in due course it assumed a permanent position since the demand for wage work among rural poor was seen to be continuous. In this regard, the EGS is perhaps the first programme which guarantees the right to work as a basic right in a developing country (Acharya, 1990:1).

With this background it will be interesting to study the dimension of the problem of unemployment in Maharashtra by sex, age, residence, education and the probable factors which are likely to cause regional variations. The effect of EGS on employment will also be studied.

UNEMPLOYMENT BY SEX AND RESIDENCE :

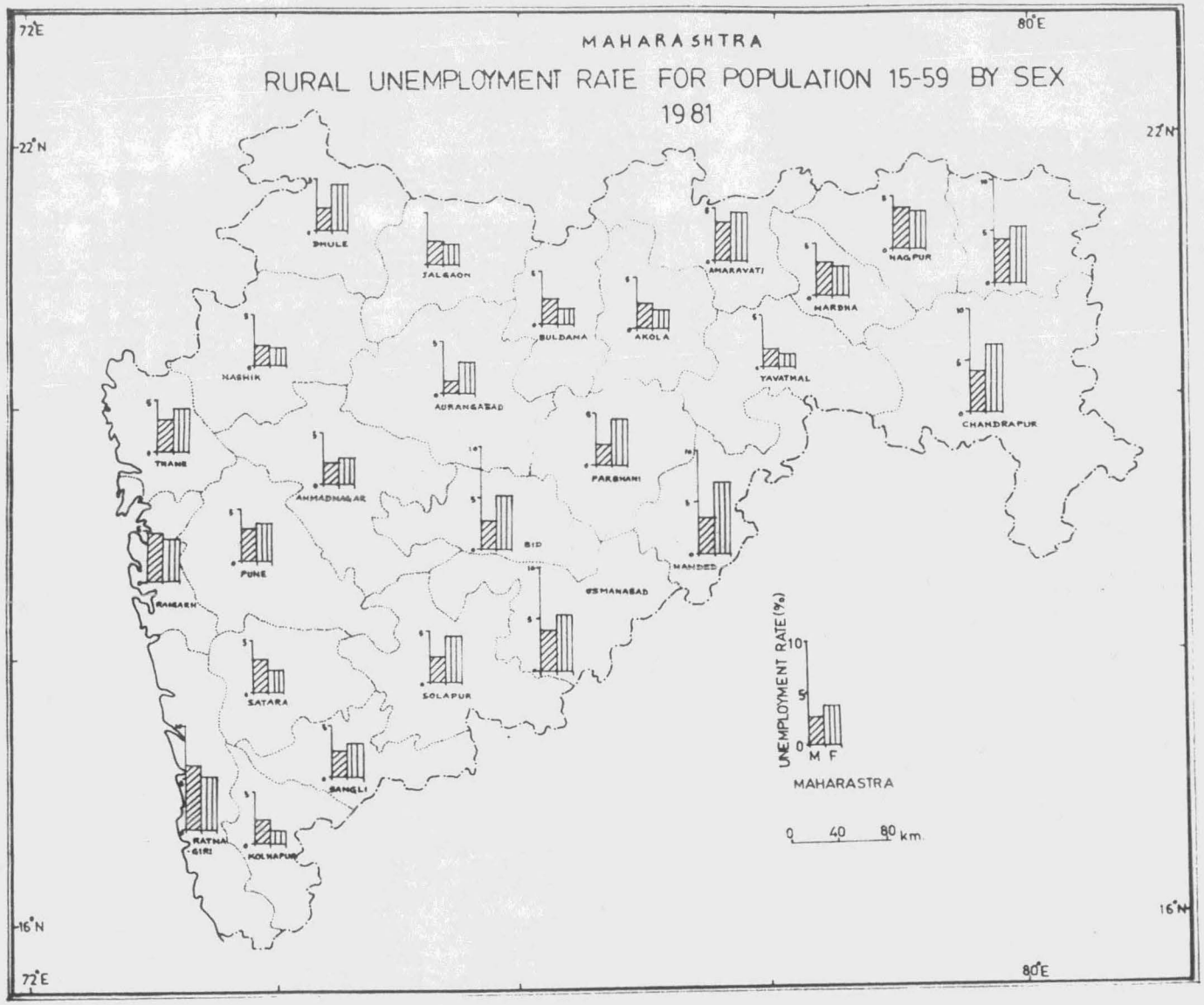
Rural Unemployment Rate by Sex

The districts of Maharashtra did not showing wide variation in the rural unemployment rate, it varied between 1.6 percent and 6.6 percent among males and between 1.47 percent to 7.43 percent among females. (Table 4.1). Three distinct regions of high male unemployment emerged in the state on the basis of 1981 unemployment data at district level. One region included

TABLE 4.1 :

DISTRICTWISE LABOUR FORCE UNEMPLOYMENT RATE BY SEX AND PLACE OF RESIDENCE - MAHARASHTRA,1981.

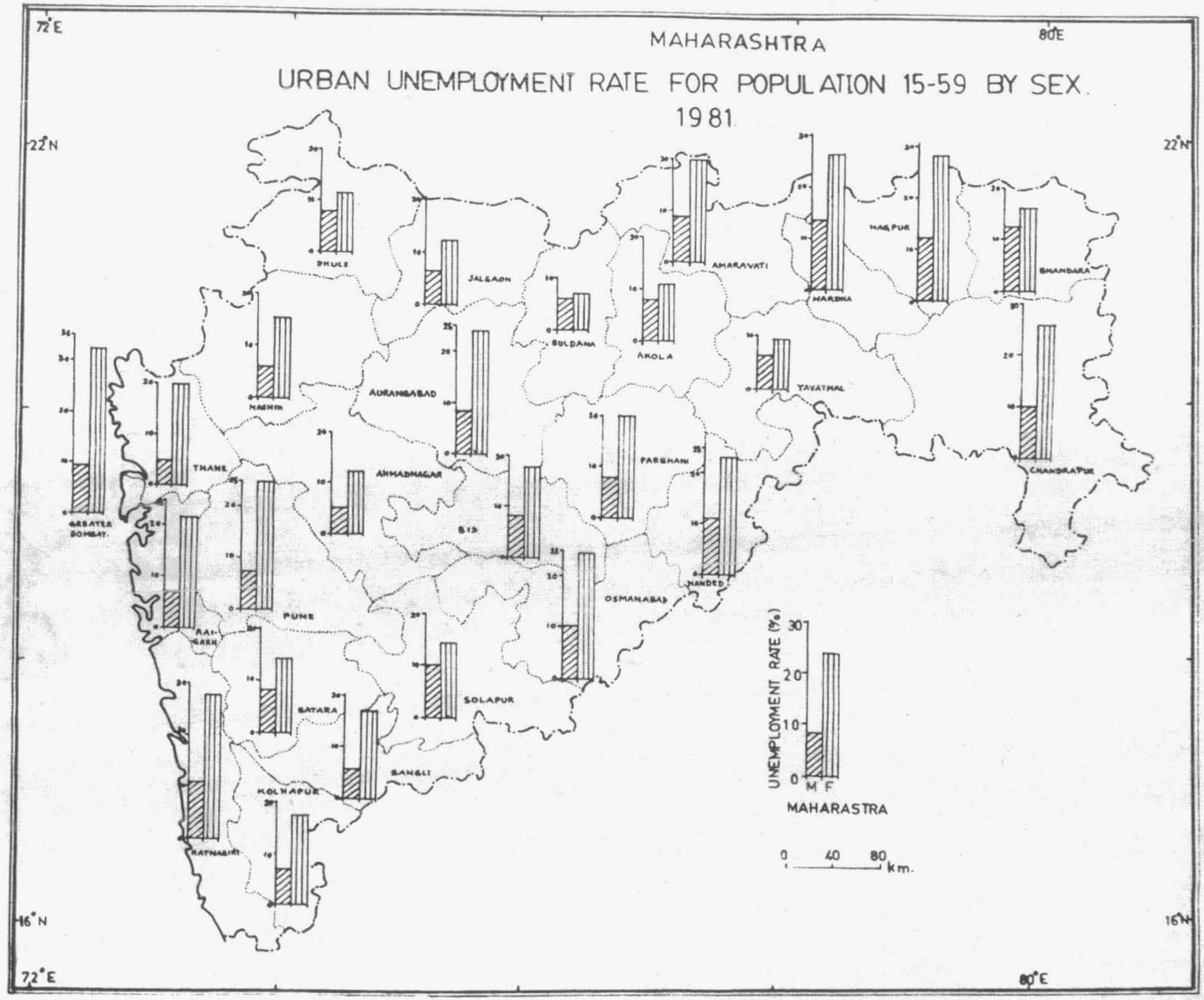
	NAME OF THE DISTRICTS	RURAL		URBAN	
		M	F	M	F
	MAHARASHTRA	2.98	3.83	8.55	23.91
1.	Greater Bombay	-	-	9.38	32.63
2.	Thane	3.38	4.53	5.15	20.50
3.	Raigarh	4.93	4.35	6.96	22.01
4.	Ratnagiri	6.62	5.45	10.89	28.83
5.	Nasik	1.99	1.98	5.96	15.99
6.	Dhule	2.35	4.61	7.27	11.79
7.	Jalgaon	2.14	2.06	6.69	12.61
8.	Ahmadnagar	2.13	2.97	5.21	12.68
9.	Pune	3.54	3.68	7.32	25.88
10.	Satara	3.28	2.16	8.39	14.73
11.	Sangli	2.61	3.28	6.06	17.86
12.	Solapur	2.39	4.69	10.22	14.69
13.	Kolhapur	2.40	1.69	6.93	17.60
14.	Aurangabad	1.62	2.92	8.62	24.55
15.	Parbhani	2.06	4.58	8.17	20.97
16.	Bid	2.77	5.64	8.17	18.35
17.	Nanded	3.60	7.43	10.77	23.89
18.	Osmanabad	4.05	6.06	10.35	25.54
19.	Buldana	2.27	1.54	7.01	7.86
20.	Akola	2.27	1.99	7.66	10.74
21.	Amaravati	3.85	4.49	8.99	21.39
22.	Yavatamal	1.56	1.47	6.72	9.75
23.	Wardha	3.30	3.14	12.98	26.37
24.	Nagpur	4.01	3.84	12.22	28.56
25.	Bhandara	4.48	5.67	12.88	16.66
26.	Chandrapur	3.62	6.96	10.08	27.15


MAHARASHTRA
RURAL UNEMPLOYMENT RATE FOR POPULATION 15-59 BY SEX
1981
72°E
80°E
22°N
16°N
DHULE
JALGAON
AMARAVATI
NAGPUR
BULDANA
AKOLA
WARDHA
NASHIK
YAVATMAL
AURANGABAD
CHANDRAPUR
THANE
PARBHANI
AHMADNAGAR
BID
NANDED
PUNE
OSMANABAD
RAIGARH
SATARA
SOLAPUR
SANGLI
RATNAGIRI
KOLHAPUR
UNEMPLOYMENT RATE (%)
10
5
0
M F
MAHARASTRA
0 40 80 km

MAP - 4.1

all the districts of Coastal Maharastra (except Greater Bombay which is an entirely urban district) with adjacent districts of Pune and Satara; the second region comprised. Nanded and Osmanabad of Eastern Plateau and the third region was formed by all the eastern districts which included Amaravati, Wardha, Nagpur, Bhandara and Chandrapur (Map 4.1). Among the twenty six districts, twelve districts in the above described three regions showed rural male unemployment rate above 3 percent.

No particular trend in respect to the female unemployment rate emerged in rural areas of Maharashtra. Here fourteen districts showed higher female unemployment rate that of than males while the reverse was true in the remaining districts. The variation in unemployment rates among male and female was, however, not very high. Two contiguous regions emerged where female unemployment rate was lower than that of the males. These are (i) Raigarh, Ratnagiri, Kolhapur and Satara and ii) Nasik Jalgaon, Buldana, Akola, Yavatimal, Wardha and Nagpur (Map. 4.2) Except the districts of Jalgaon, Buldana, Akola and Ratnagiri all have a relatively developed secndary sector whereas the districts with less developed secondary sector are adjacent to the well developed districts. It may be because of this the males have shifted from agriculture due to existing wage differentials. This has left the agricultural work for the females and, in turn, reduced the female unemployment rate. It is also likely that due to higher female literacy rates in the districts of the above two identified regions, they are in a much


MAHARASHTRA
URBAN UNEMPLOYMENT RATE FOR POPULATION 15-59 BY SEX.
1981
72°E
80°E
22°N
16°N
DHULE
JALGAON
BULDANA
AMARAVATI
NAGPUR
BHANDARA
NASHIK
AURANGABAD
AKOLA
YAVATMAL
THANE
AHMADNAGAR
PARBHANI
CHANDRAPUR
GREATER BOMBAY
BID
NANDED
OSMANABAD
PUNE
RAI-GARH
SOLAPUR
SATARA
SANGLI
KOLHAPUR
RATNAGIRI
UNEMPLOYMENT RATE (%)
30
20
10
0
M F
MAHARASTRA
0 40 80 km.

MAP - 4.2

better position to find out a job than the females living in other districts. The actual cause can only be identified after a detailed study.

Urban Unemployment Rate by Sex

Urban unemployment rates are higher in the states of India as also in the districts of Maharashtra. The highest unemployment rate among urban male was recorded in Wardha (13.Ø percent) and the lowest is in Thane (5.2 percent). The regional variation in male urban unemployment rate is contained to a small range of 8 per cent of points. Eastern Plateau districts of Nanded , Osmanabad and Solapur and easternmost districts of Wardha, Nagpur, Bhandara and Chandrapur experienced high unemployment rate (1Ø percent and above). In coastal Maharashtra only Ratnagiri had unemployment rate of more than 1Ø percent. Like urban males, urban females also experienced very high unemployment rates in Maharashtra. The highest unemployment rate was recorded in Greater Bombay (32.6 precent) and the lowest in Buldana (7.9 percent). Female had very high unemployment rate (2Ø percent and above) in three distinct regions, namely,

i) Coastal districts along with Thane,

ii) Districts of Eastern Plateau region, namely, Aurnagabad, Parbhani, Nanded, Osmanabad.

iii) and the districts of eastern Maharashtra including the districts of Wardha, Nagpur, Chandrapur and Amaravati. (Map 4.2).

Atempt for an Explanation of High Unemployment Rate

From above discussion three regions are emerging with high unemployment rate in both rural and urban areas. Coastal Maharashtra with dominating existence of Bombay city is one of the most important economic region in India. It extends its influence to other neighbouring districts (e.g. Pune).

The districts of Grater Bombay, Pune, Solapur all are having more than 40 percent of the workrs in secondary sector and at the same time recording very high unemployment rates (above 10 percent) in urban areas. This is true for Nagpur and Bhandara also where above 30 prcnet workers are engaged in secondary sector and region is having high urban unemployment rate. In contrast the eastern region of the state with high unemployment rates comprising the districts of Parbhani, Bid, Nanded and Osmanabad have low percentage of workers in secondary sector* (Appendix 6). These two types of relationship are making some confusion about the fact that though industrialisation or in other words development as such is considered to have a negative relationship with unemployment but is this relationship really applicable to India? Observing some positive relationship

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* An attempt was made to find out the influence of developmental variables (e.g. urbanisation, literacy rate, percentage of workers in secondary sector) on unemployment in urban areas (Correlation and Stepwise REgression analysis) which have not shown any significant relationship among the dependent and independent variables and have not explained the phenomenon of unemployment and so not taken into considertion.

between these two, the Planning Commission felt the need to emphasise the small scale and cottage industries which are more labour intensive rather than only large scale capital intensive industries.

Another engrossing result has come out from rural unemployment which is high in coastal districts, and Eastern Maharashtra, though they get abandant rainfall in monsoon months.* Probably the concentration of rainfall during the few months of the rainy season limits the farming operations to one crop because the proportion of net sown area getting irrigation facility is very small in these two regions except the districts of Bhandara and Chandrapur (Appendix 6).

A brief mention of EGS may probably be helpful to explain the situation. It is a rural scheme with major emphasis on agricultural development. The scheme has registered the smallest proportion of agricultual workers under it in coastal Maharashtra (1.6 percent) with second smallest in the eastern region covering the districts of Buldana, Akola, Amaravati, Wardha, Nagpur (locally known as Vidharba) rates (Appendix 7). The district level performance of EGS would have given a better relationship but non-availability of data act as a hinderance towards arriving at some inference.

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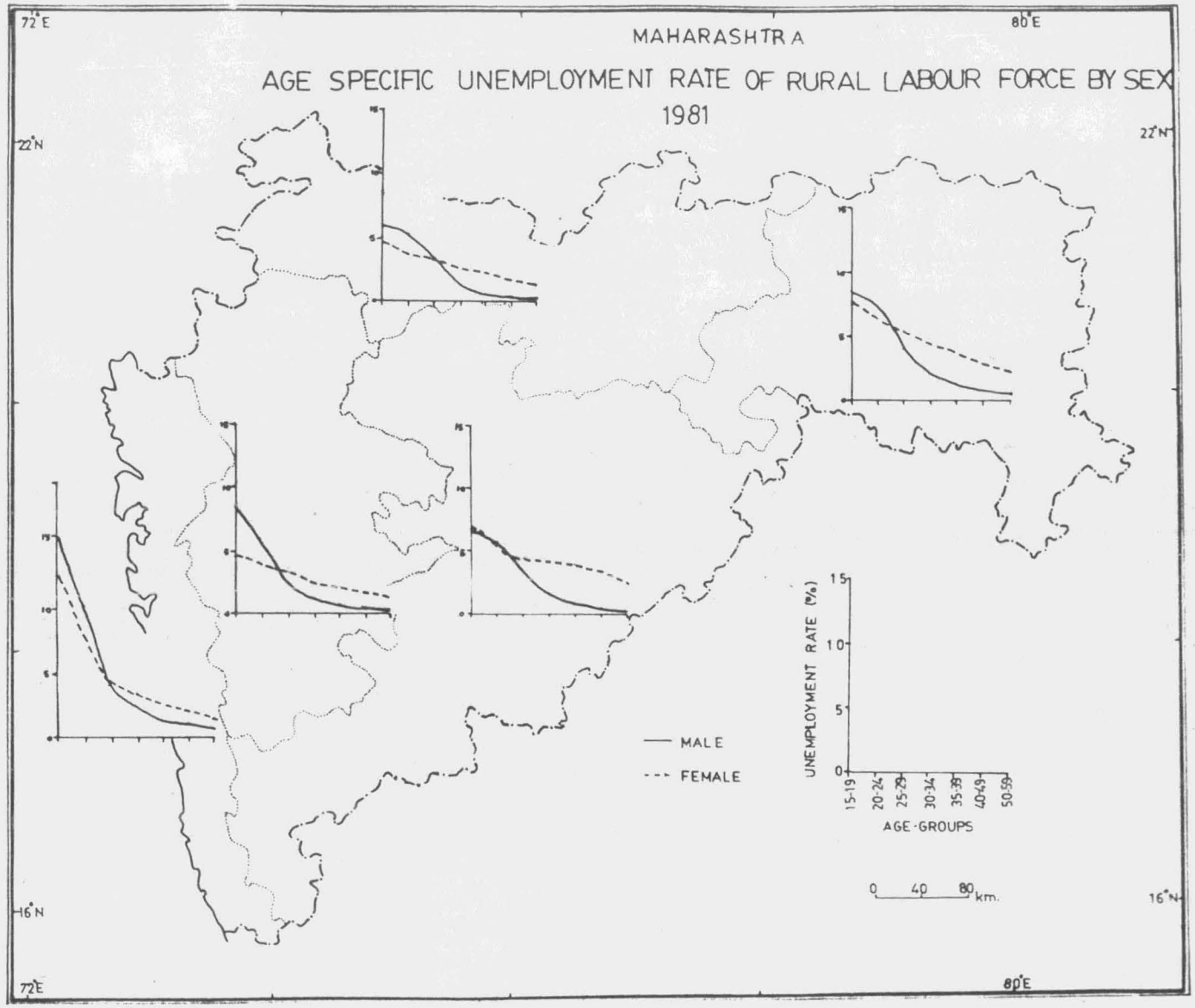
* An attempt was made to find out the most important explanatory variables of rural unemployment where we found the amount of rainfall as an important factor (r=Ø.56*) but surprisingly it has positive relationship with the phenomenon whereas other factors like population growth, literacy etc. failed to explain the phenomenon on correlation and stepwise regression analysis.


MAHARASHTRA
AGE SPECIFIC UNEMPLOYMENT RATE OF RURAL LABOUR FORCE BY SEX
1981
72°E
80°E
22°N
16°N
MALE
FEMALE
UNEMPLOYMENT RATE (%)
15
10
5
0
15-19
20-24
25-29
30-34
35-39
40-49
50-59
AGE-GROUPS
0 40 80 km.

MAP - 4.3

Age Specific Unemployment rate

It was observed in Chapter III that unemployment rate is the highest in the younger age groups for both males and females in rural as well as urban areas. To have the profiles of age specific unemployment rate, the same have been computed for each district of Maharashtra where a lot of overlapping in the profiles of ASUR of different district is observed. The districts with similar trend of ASUR have therefore been clubbed to form a region. The regions which have come out are geographically known as -

i) Coastal Maharashtra (Greater Bombay, Thane, Raigarh & Ratnagiri)

ii) Western Plateau (Nasik, Ahmadnagar, Pune, Satara).

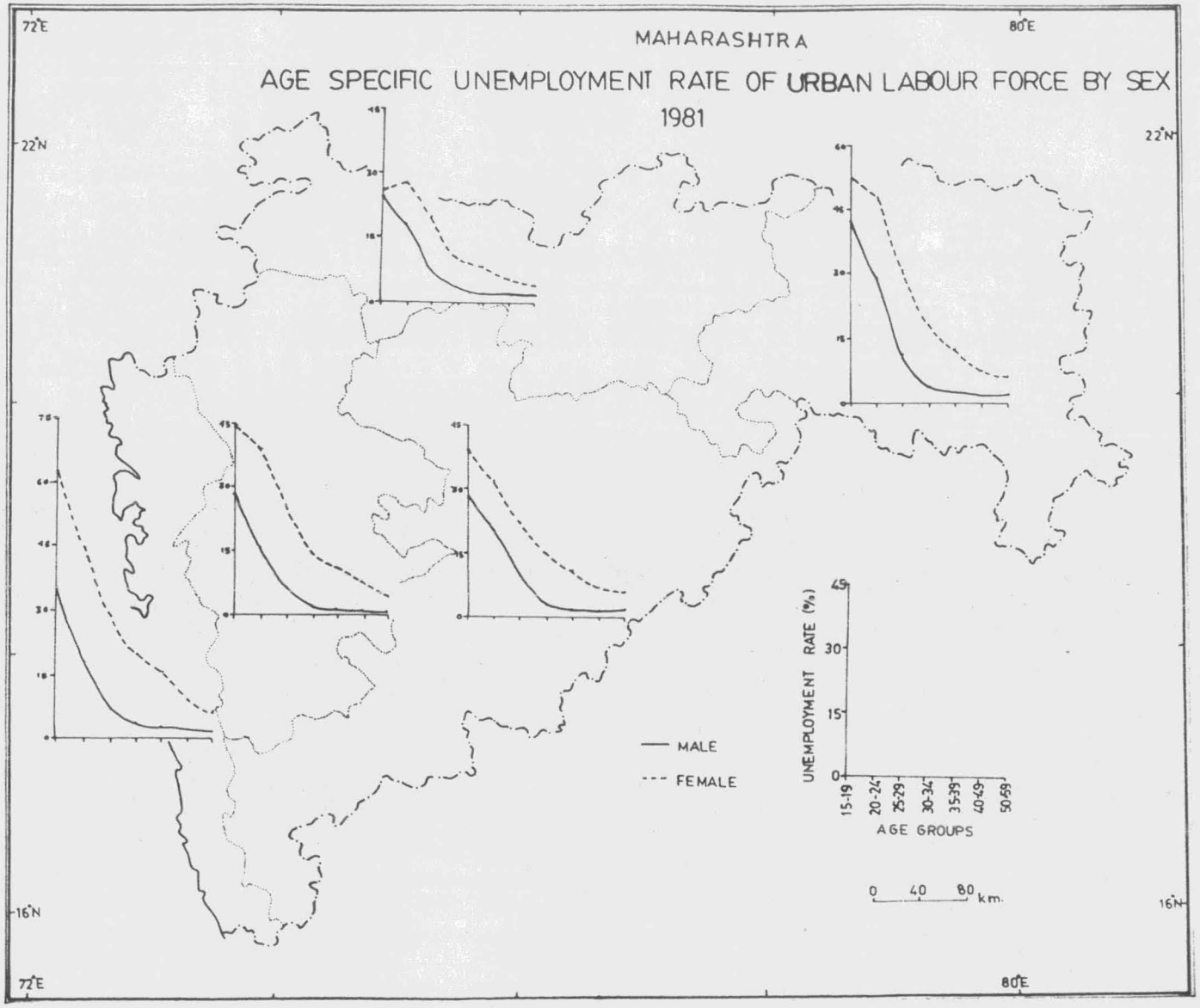
iii) Eastern Plateau (Aurangabad, Parbhani, Bid, Nanded, Osmanabad, Solapur, Sangli, Kolhapur).

iv) Tapi-Purna Valley (Dhule, Jalgaon, Buldana, Akola, Amaravati).

v) Wardha - Penganga - Wainganga Plain (Yavatmal, Wardha, Nagpur, Bhandara and Chandrapur.)

Regional Variations of Rural ASUR by Sex

In Maharashtra all the regions (except Estern Plateau) have shown a low female ASUR than male in rural area for the initial ages i.e. in 5-19 and 20-24 age groups. Though male ASUR is higher in initial ages but most of them make themselves


MAHARASHTRA
AGE SPECIFIC UNEMPLOYMENT RATE OF URBAN LABOUR FORCE BY SEX
1981
72°E
80°E
22°N
16°N
MALE
FEMALE
UNEMPLOYMENT RATE (%)
45
30
15
0
15-19
20-24
25-29
30-34
35-39
40-49
50-59
AGE GROUPS
0 40 80 km.

MAP - 4.4

absorbed in some work by the age of 25. But females taking their primary role in household activities, very often search jobs even after the age of 30 years which makes their unemployment rate higher at later ages.

A high profile of ASUR is maintained both by the males and females of rural Coastal Maharashtra. This region is followed by Wardha - Penganga - Wainganaga Plain of the East which and shown high unemployment rate (15-59) (Map No.3.3). Only Eastern Plateau had higher profile of female ASUR than males in rural area though the rate varies marginally (Table 4.2). Coastal Maharshtra attained 1 percent unemployment rate for rural males at 50-59 age group and Wardha - Penganga - Wainganga Plain attained it at 40-49 age group but the rural males for rest of the regions experienced less than 1 percent unemployment rate at the age 35 itself. Rural females have unemployment rate of more than 1 percent for all the age groups and regions. It is higher in Eastern Plateau and Wardha - Penganga - Wainganga Plain (table 4.2)

Regional Variations in Urban ASUR by Sex

Urban unemployment, as we have seen for the state, is higher than rural for both the sexes. But urban female unemployment is the highest among all sections. For all the regions female unemployment is higher than male in all ages. Both male and female have recorded a very high ASUR at the age of 15-19 after which it decresed sharply for male but very slowly for

TABLE 4.2: AGE SPECIFIC UNEMPLOYMENT RATE FOR THE REGIONS OF MAHARASHTRA BY SEX AND PLACE OF RESIDENCE - 1981.

REGIONS		COASTAL	MAHARA-SHTRA	WESTERN	PLATEAU	EASTERN	PLATEAU	TAPI-PURNA VALLEY		WARDHA-WAINGANGA	PENGANGA PLAIN
AGE GROUPS AND SEX		RURAL	URBAN	RURAL	URBAN	RURAL	URBAN	RURAL	URBAN	RURAL	URBAN
15 - 19	M	15.55	35.09	8.27	27.77	6.50	27.65	5.91	24.63	8.60	42.19
	F	12.48	61.72	4.83	45.15	6.66	38.33	4.67	26.01	7.64	52.52
20 -24	M	10.24	17.89	5.98	16.05	5.89	19.75	5.67	17.92	7.44	28.06
	F	7.89	44.22	3.93	38.98	5.64	32.49	3.84	27.72	6.38	47.90
25 - 29	M	3.95	6.72	2.52	5.69	3.39	7.57	3.15	7.31	3.98	10.93
	F	4.65	28.51	3.13	24.89	4.52	22.16	3.34	19.88	5.30	30.37
30 - 34	M	2.41	3.97	1.21	2.23	1.69	2.87	1.43	2.66	2.10	3.85
	F	3.16	19.90	2.27	14.56	4.23	14.96	2.71	10.21	4.58	18.53
35 - 39	M	1.57	2.67	0.75	1.29	0.79	1.74	0.76	1.63	1.22	2.26
	F	2.56	15.73	2.08	11.45	4.00	11.15	2.39	8.11	3.98	12.51
40 - 49	M	1.39	2.24	0.53	1.09	0.65	1.48	0.53	1.18	0.86	1.80
	F	1.89	12.09	1.86	7.96	3.55	8.56	1.78	4.85	2.99	8.07
50 - 59	M	0.95	2.13	0.43	1.08	0.49	1.66	0.43	1.17	0.64	1.96
	F	1.26	6.66	1.19	5.34	2.71	7.24	1.40	4.09	2.21	5.99

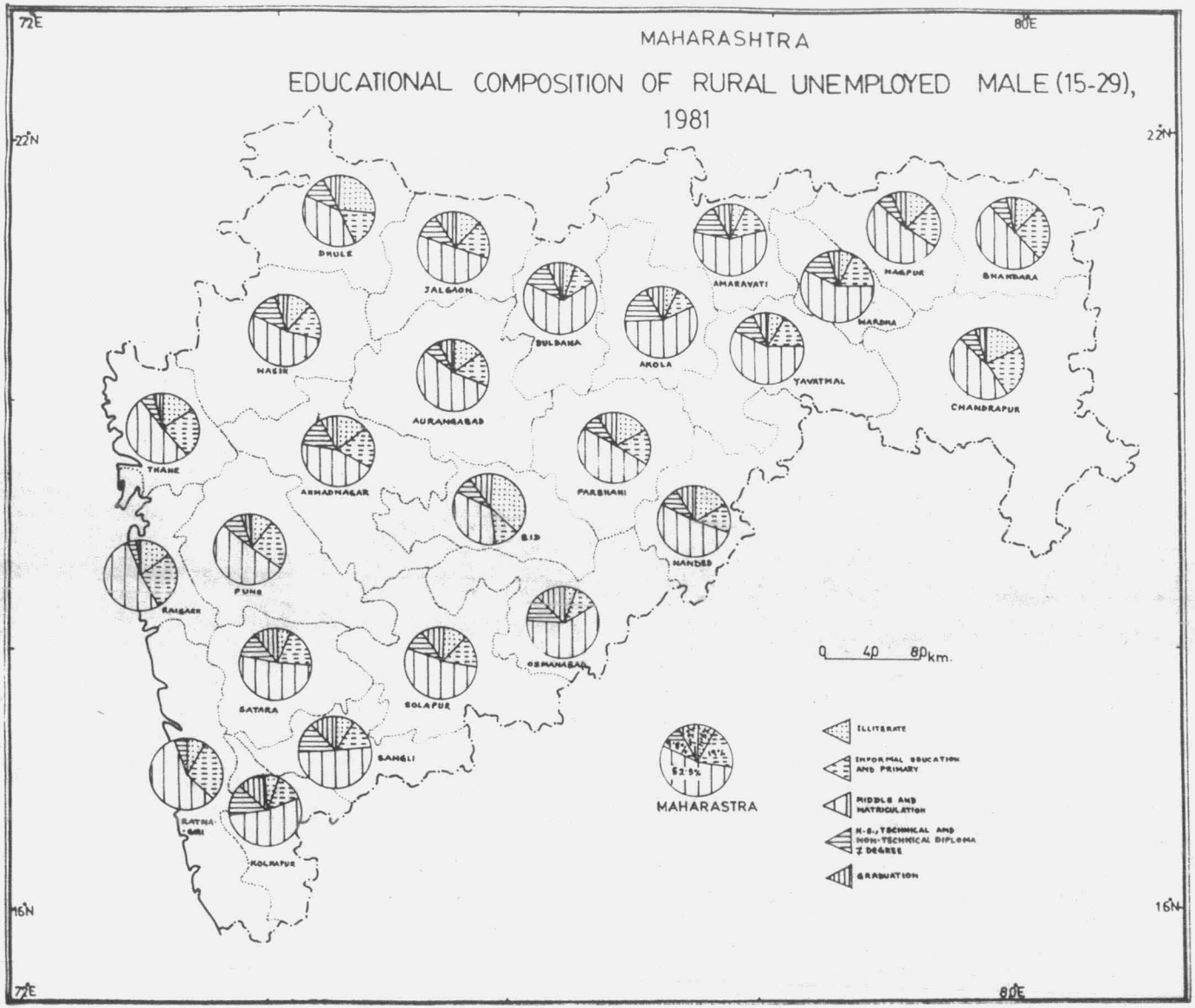
females (Map 4.4). Females never recorded unemployment rate of less than 5 percent in any age group whereas male unemployment rate was around 2 percent in 50-59 age group. Another feature is that there is not much improvement of the situation for males after the age of 35. Even some increase is observed at the last age group in some regions (Table 4.2). This could probably be attributed to searching for job by the ex-servicemen.

The very high unemployment rate at younger age group is mainly because of large number of new entrants into the job market. They are inexperienced and it takes some time for them to find out suitable job. Of the total unemployed more than 50 percent are below 30 years. In contrast rural female unemployeds do not show much concentration in this age group. In urban areas, however more than 50 percent of the unemployed are in below 30 years for all the districts. The situation is worse for urban male where 70 percent or more are below 30 (Appendix 8). This is, to some extent influxed by the migrants from rural areas who come in search of jobs. But due to non-availability of district level data their magnitude cannot be tested.

Education and Unemployment

Educational composition of unemployment -

For the discussion of educational composition or skill the grouping of educational categories done for the state level analysis is followed here also. Here too the analysis is limited to the 15-29 age group because of very high concentration of the


MAHARASHTRA
EDUCATIONAL COMPOSITION OF RURAL UNEMPLOYED MALE (15-29), 1981
72°E
80°E
22°N
16°N
DHULE
JALGAON
BULDANA
AKOLA
AMARAVATI
WARDHA
NAGPUR
BHANDARA
YAVATMAL
CHANDRAPUR
NASIK
AURANGABAD
THANE
AHMADNAGAR
PARBHANI
BID
NANDED
RAIGARH
PUNE
OSMANABAD
SATARA
SOLAPUR
SANGLI
RATNA-GIRI
KOLHAPUR
0 40 80 km.
MAHARASTRA
ILLITERATE
INFORMAL EDUCATION AND PRIMARY
MIDDLE AND MATRICULATION
H.S., TECHNICAL AND NON-TECHNICAL DIPLOMA & DEGREE
GRADUATION

MAP - 4.5

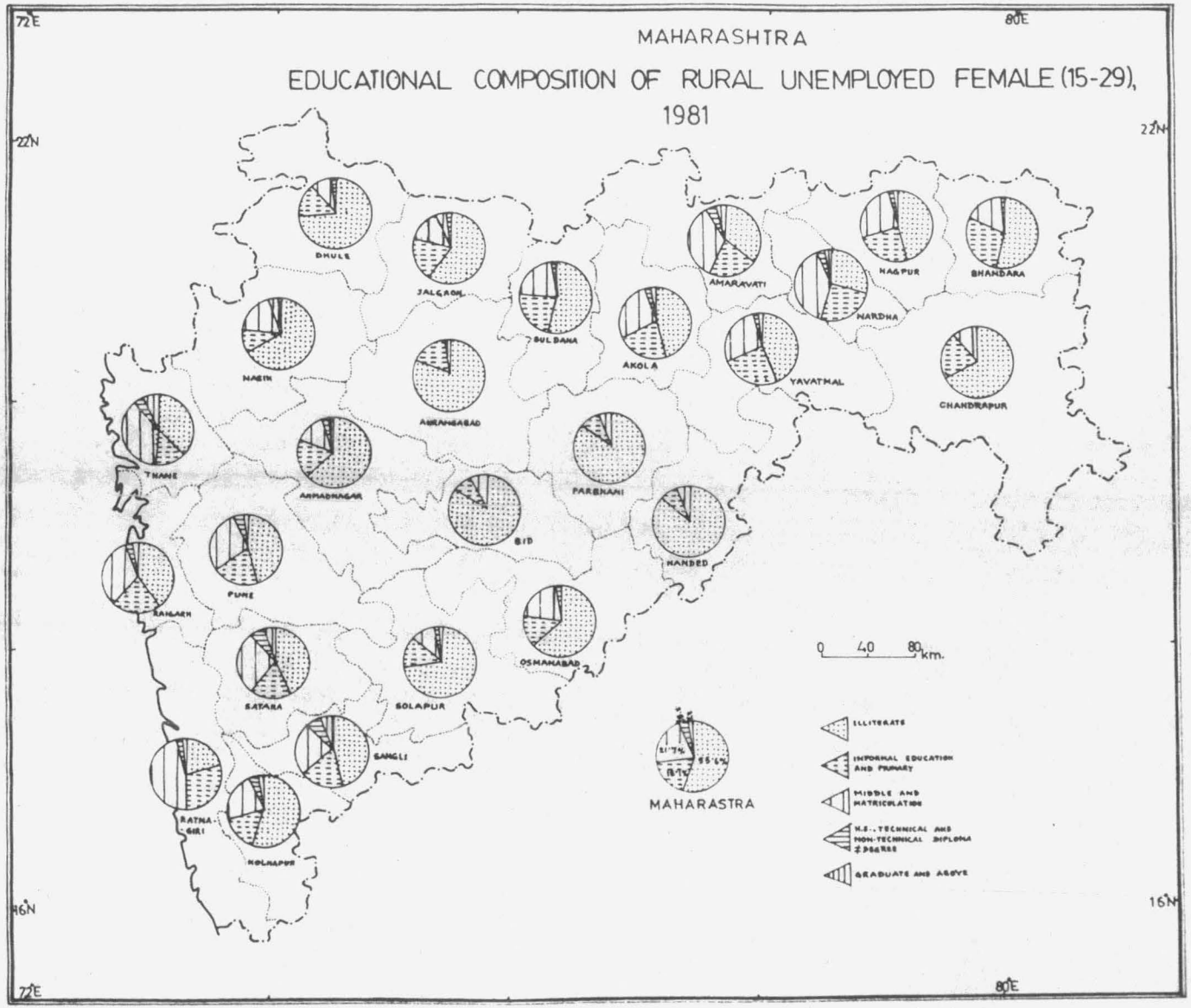
unemployed therein and also keeping it in mind that majority of the population attain their educational level by this age group.

Educational Composition of Rural male Unemployed

The illiterate unemployed males in rural areas recorded the highest proportion in Bid (36.7 percent) followed by Dhule (26 percent). Only ten districts of the state have recorded below 1Ø percent rural male unemployed though others are not showing very high proportion (Map 4.5). Buldana, Akola Amaravati of north Maharashtra and Osmanabad, Kolhapur and Sangli in south eastern part of the state formed the regions with low proportion of unemployed in primary and informal education group. Though Ratnagiri recorded as high as 28.5% rural male unemployed in primary education category but other coastal districts along with Thane and eastern districts of Nagpur, Bhandara and Chandrapur recorded a smaller proportion. Except a few districts comprising Dhule, Ahmadnagar, Bid, Chandrapur; all the other districts have recorded almost half or more of the unemployed males in the category of middle and matriculates. Buldana recorded the highest proportion (65.5%) in this category. The remaining two categories had lower proportions of unemployed in them. Both the categories of Higher Secondary and Diploma Holder, and Graduates showed relatively low proportion in coastal Maharashtra and eastern part of the state and Ratnagiri and Raigarh have recorded very low proportions of graduate unemployment.

TABLE 4.3: EDUCATIONAL COMPOSITION OF THE RURAL UNEMPLOYED IN THE 15-29 AGE GROUP BY SEX OF MAHARASHTRA,1981.

	Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
		M	F	M	F	M	F	M	F	M	F
1.	Greater Bombay	-	-	-	-	-	-	-	-	-	-
2.	Thane	15.33	37.33	23.48	14.73	50.98	37.24	6.06	4.53	4.16	6.17
3.	Raigarh	14.87	39.92	27.37	22.38	51.90	31.53	4.24	3.07	1.59	3.10
4.	Ratnagiri	8.22	20.29	28.50	29.86	57.10	45.63	5.19	2.52	1.00	1.67
5.	Nasik	12.01	66.25	16.41	9.19	53.47	18.57	12.56	3.74	5.57	2.24
6.	Dhula	25.98	73.57	16.67	15.44	37.91	10.27	10.94	1.45	8.48	0.59
7.	Jalgaon	11.81	59.62	18.02	18.57	49.54	14.94	11.23	4.45	9.49	2.54
8.	Ahmadnagar	13.85	62.66	19.25	18.07	44.32	14.09	14.47	2.93	8.11	2.27
9.	Pune	10.87	45.26	23.83	19.30	51.33	27.80	9.62	5.18	4.34	2.45
10.	Satara	6.42	42.72	19.07	17.30	52.45	27.59	11.01	6.75	11.06	5.63
11.	Sangli	8.35	45.76	14.33	17.15	50.77	23.91	14.04	7.43	12.52	5.76
12.	Solapur	11.27	71.56	16.06	13.67	52.25	10.81	10.55	2.14	9.90	1.80
13.	Kolhapur	6.31	55.35	13.44	13.54	53.43	22.29	14.46	4.67	12.38	2.59
14.	Aurangabad	15.02	79.82	15.44	9.37	54.69	9.03	7.00	1.13	7.81	0.65
15.	Parbhani	16.34	84.89	16.91	8.74	49.20	5.89	8.08	0.24	9.42	0.26
16.	Bid	36.69	82.44	11.12	8.47	34.09	8.90	7.63	0.35	10.47	0.70
17.	Nanded	15.75	85.55	14.52	7.88	51.65	6.04	8.63	0.31	9.43	0.22
18.	Osmanabad	5.21	62.71	8.42	13.52	61.59	20.43	12.02	2.08	12.93	1.24
19.	Buldana	4.87	53.50	10.72	22.61	65.55	21.54	11.84	2.10	7.03	0.29
20.	Akola	6.90	46.32	11.28	21.09	55.89	27.24	17.47	2.90	8.45	2.51
21.	Amaravati	6.30	35.70	13.45	20.27	57.76	35.10	12.59	4.83	9.45	4.12
22.	Yavatmal	7.57	43.49	16.29	24.35	57.87	27.62	10.21	2.70	8.09	1.91
23.	Wardha	6.13	28.82	18.18	24.77	59.56	38.99	10.69	3.74	5.38	3.67
24.	Nagpur	12.48	45.98	22.18	24.08	53.12	25.39	7.08	2.04	6.34	2.54
25.	Bhandara	12.11	53.34	26.27	28.12	49.62	17.21	8.00	1.02	3.99	0.31
26.	Chandrapur	18.02	67.21	22.87	20.39	46.57	11.31	7.74	0.64	4.81	0.70


MAHARASHTRA
EDUCATIONAL COMPOSITION OF RURAL UNEMPLOYED FEMALE (15-29), 1981
72°E
80°E
22°N
16°N
DHULE
JALGAON
BULDANA
AKOLA
AMARAVATI
NAGPUR
BHANDARA
WARDHA
YAVATMAL
CHANDRAPUR
NASIK
AURANGABAD
PARBHANI
THANE
AHMADNAGAR
BID
NANDED
PUNE
RAIGARH
OSMANABAD
SATARA
SOLAPUR
SANGLI
RATNA-GIRI
KOLHAPUR
0 40 80 km.
MAHARASTRA
21·7%
65·6%
13·1%
ILLITERATE
INFORMAL EDUCATION AND PRIMARY
MIDDLE AND MATRICULATION
H.S., TECHNICAL AND NON-TECHNICAL DIPLOMA & DEGREE
GRADUATE AND ABOVE

MAP - 4.6

Educational Composition of Rural female Unemployed

As regards rural females coastal and eastern districts of the state had low proportion of illerate unemployed and a higher proportion of literate unemployed. For most of the educational categories these two broad regions along with some other minor exception have recorded higher proportion of unemployed. But like the states the districts are also dominated by a large number of illiterate job seeking females. Dhule, Aurangabad, Parbhani, Bid, Nanded have three-fourth of the female unemployed in the illiterate group. As this category has a large proportion, so a drastic fall in other categories is expected. Consequently unemployed graduates among the females are negligible and here we find that only Thane, Satara and Sangli (Table 4.3) are having above 5% unemployed whereas Aurangabad, Parbhani, Bid, Nanded, Bhandara and Chandrapur are having below 1 percent unemployed rural females with graduate degree.

Educational Composition of Urban Male Unemployed

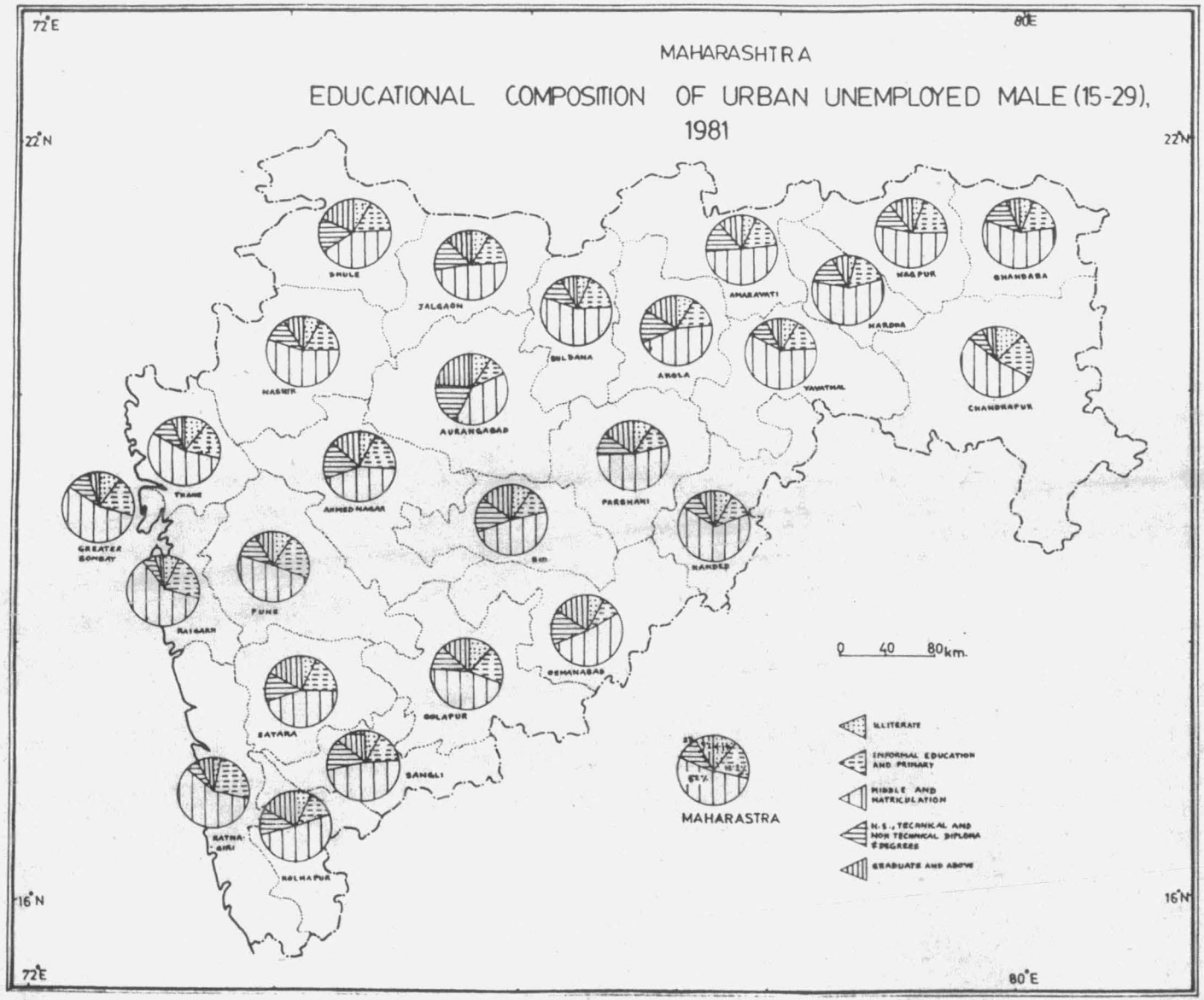
With a high literacy urban areas record a small share of the illiterates among the male unemployed. But three obsevations are important to mention here -

a) Share of illiterate males among the unemployed are not much in urban areas than rural.

b) The districs of Greater Bombay, Thane, Solapur and Chandrapur have recorded a high share of illiterate male unemployed.

TABLE 4.4: EDUCATIONAL COMPOSITION OF THE URBAN UNEMPLOYED IN THE 15-29 AGE GROUP BY SEX OF MAHARASHTRA, 1981.

	Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
		M	F	M	F	M	F	M	F	M	F
1.	Greater Bombay	10.27	15.76	19.20	13.34	54.13	48.88	10.50	10.59	7.05	11.41
2.	Thane	10.70	16.54	18.35	9.74	54.38	48.30	10.31	10.16	6.27	15.25
3.	Raigarh	7.52	12.40	22.48	16.55	59.76	54.60	6.75	11.33	3.39	5.15
4.	Ratnagiri	3.92	8.54	25.05	18.44	62.74	52.65	6.10	9.67	7.48	10.65
5.	Nasik	8.14	21.49	16.77	11.99	54.83	36.63	11.35	10.66	8.90	19.26
6.	Dhula	8.26	26.90	15.96	12.62	41.37	30.12	16.17	14.06	18.29	16.30
7.	Jalgaon	8.64	20.17	15.30	10.14	49.04	35.09	14.71	8.74	12.30	25.93
8.	Ahmadnagar	7.34	10.71	18.62	7.87	43.61	33.15	16.76	16.57	13.65	31.70
9.	Pune	8.88	18.09	21.95	13.83	48.49	39.69	12.08	10.80	8.58	17.58
10.	Satara	6.86	19.42	19.14	8.55	44.40	30.17	12.71	13.36	16.87	28.44
11.	Sangli	8.10	18.84	16.15	8.52	47.50	35.13	14.19	11.69	13.98	25.82
12.	Solapur	11.77	30.64	18.84	11.47	45.53	31.24	10.51	8.42	13.36	18.35
13.	Kolhapur	7.13	22.49	13.48	13.57	50.66	35.80	12.19	8.16	16.57	20.00
14.	Aurangabad	9.17	25.64	9.63	10.94	38.69	34.52	18.58	12.08	23.95	16.81
15.	Parbhani	9.14	52.36	12.31	12.83	53.75	25.33	10.46	4.62	14.35	4.82
16.	Bid	9.06	42.48	12.07	12.81	48.10	27.57	15.76	8.28	15.04	8.78
17.	Nanded	8.46	36.23	11.02	11.46	49.69	36.32	15.27	7.88	15.58	8.17
18.	Osmanabad	7.92	39.23	8.80	11.33	51.86	36.25	15.94	5.76	15.59	7.56
19.	Buldana	6.53	23.51	18.49	16.90	55.61	32.61	11.69	11.48	7.70	15.82
20.	Akola	8.85	15.34	15.75	9.68	55.55	43.93	11.46	14.82	6.33	16.16
21.	Amaravati	6.66	21.23	15.81	14.61	50.86	40.84	14.65	11.31	12.03	12.08
22.	Yavatmal	8.33	20.48	16.19	9.69	58.35	44.49	9.77	11.01	7.38	9.91
23.	Wardha	3.86	6.43	17.06	13.31	56.49	48.96	14.49	14.30	8.08	17.00
24.	Nagpur	5.70	11.32	19.42	16.80	53.19	43.75	11.49	11.10	10.20	17.04
25.	Bhandara	6.66	20.95	16.82	15.16	57.56	42.86	12.74	9.71	6.29	11.46
26.	Chandrapur	13.55	30.78	20.35	14.38	52.17	43.38	7.46	5.62	6.47	6.34


MAHARASHTRA
EDUCATIONAL COMPOSITION OF URBAN UNEMPLOYED MALE (15-29), 1981
72°E
80°E
22°N
16°N
DHULE
JALGAON
BULDANA
AKOLA
AMRAVATI
WARDHA
NAGPUR
BHANDARA
YAVATMAL
CHANDRAPUR
NASIK
AURANGABAD
THANE
AHMEDNAGAR
PARBHANI
GREATER BOMBAY
BEED
NANDED
RAIGARH
PUNE
OSMANABAD
SOLAPUR
SATARA
SANGLI
RATNAGIRI
KOLHAPUR
0 40 80km.
MAHARASTRA
ILLITERATE
INFORMAL EDUCATION AND PRIMARY
MIDDLE AND MATRICULATION
N.S., TECHNICAL AND NON TECHNICAL DIPLOMA & DEGREES
GRADUATE AND ABOVE

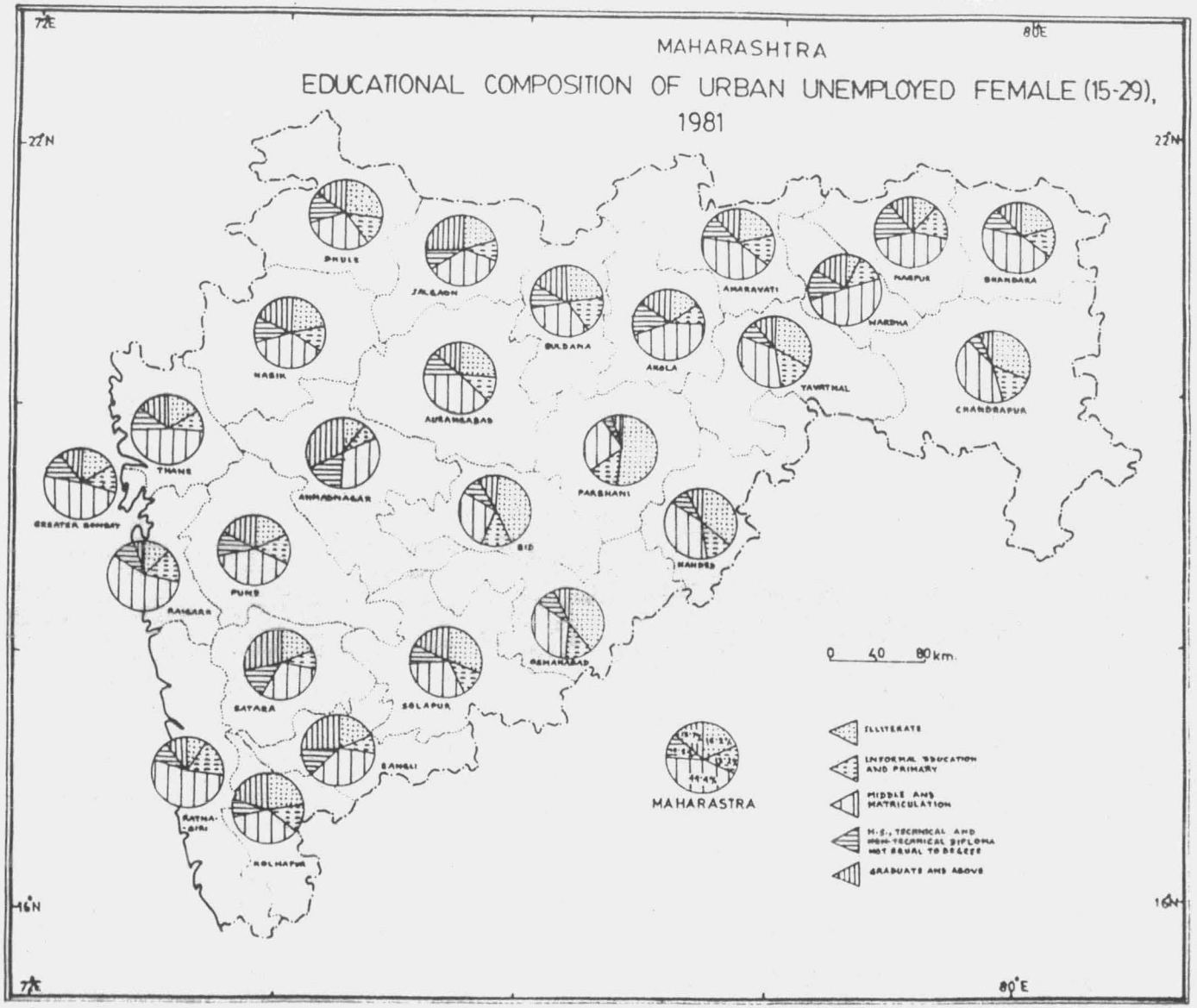
MAP -.4.7

c) Quite a few districts, namely, Satara, Solapur, Kolhapur, Osmanabad, Buldana, Akola, Amaravati and yavatmal have higher proportion of illiterate male unemplyed in urban areas than that of rural.

Informal and primary education is showing little variation within a small range of 10-25 percent (Map 4.7). Auranagabad and Osamanabad have slightly below 10 percent unemployed at this educational level. Like rural areas urban unemployed are also more with middle and matriculate certificate. Coastal Maharashtra with its extension upto Kolhapur and Nasik and eastern districts with extension upto Buldana, Parbhani, Osmanabad have more than 50 percent of the unemployed with middle and matriculate level whereas, other districts have around 50 percent of the unemployed urban males in this category. The urban unemployed males with Higher Secondary and technical/ non-technical diploma have more than 10 percent unemployed except Raigarh, Ratnagiri and Osmanabad. Graduates are high in proportion in Dhule, Satara, Kolhapur, Bid, Nanded, Osmanabad, Aurangabad with 15 percent or more unemployed in this category which are economically backward and less industrialised districts.

Educational Composition of Urban Female Unemployed

Urban females in contrast to their rural counter-part show a smaller share of illiterates among the unemployed. Parbhani, Bid, Nanded, Osmanabad, Kolhapur and Chandrapur have recorded high share of illiterates. Like urban males, urban


MAHARASHTRA
EDUCATIONAL COMPOSITION OF URBAN UNEMPLOYED FEMALE (15-29), 1981
7°E
8°E
22°N
16°N
DHULE
JALGAON
BULDANA
AKOLA
AMRAVATI
WARDHA
NAGPUR
BHANDARA
CHANDRAPUR
YAVATMAL
NASIK
AURANGABAD
PARBHANI
NANDED
BID
THANE
GREATER BOMBAY
AHMADNAGAR
PUNE
RAIGARH
OSMANABAD
SOLAPUR
SATARA
SANGLI
RATNA-GIRI
KOLHAPUR
0 40 80 km.
MAHARASTRA
ILLITERATE
INFORMAL EDUCATION AND PRIMARY
MIDDLE AND MATRICULATION
H.S., TECHNICAL AND NON-TECHNICAL DIPLOMA NOT EQUAL TO DEGREE
GRADUATE AND ABOVE

MAP - 4.8

females are also producing monotonous picture for informal and primary education category with a minor variation - from 8.5 percent in Sangli to 17 percent in Buldana

Coastal and eastern district have recorded a substantial proportion of unemployed with middle and matriculate level of education with Raigrh and Ratnagiri having more than 50% of unemployment urban females. Higher Seondary and diploma-holders did not show much variation as Parphani recorded the lowest (4.6 percent) and Ahmadnagar the highest (16.6 percent).

Like the states the districts also have very high proportion of graduate female unemployment in urban areas. Jalgaon, Ahmadnagar, Satara, Sangli have about one-fourth of the female unemployed with graduate degree (Map no.4.8). Apart from Raigarh, Parbhani, Bid, Nanded, Osmanabad, Yavatmal, Chandrapur all the other districts have recorded more than 10 percent of female with graduate degree.

Education specific Unemployment Rate:

Like the states of India, the district of Maharashtra have also shown variation in unemployment rates with diferent educational level.

Rural unemployment rate is observed quite low among the illiterate for both male and female. Like the rural areas of the states, the districts are also showing an increasing trend with the incease in the level of education. The major break is

TABLE 4.5: EDUCATION SPECIFIC RURAL UNEMPLOYMENT RATE BY SEX OF MAHARASHTRA, 1981

Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
	M	F	M	F	M	F	M	F	M	F
MAHARASHTRA										
1. Greater Bombay	-	-	-	-	-	-	-	-	-	-
2. Thane	2.31	2.44	4.71	3.24	7.78	8.00	10.60	14.42	10.88	17.67
3. Raigarh	11.91	7.48	10.15	3.63	12.43	7.69	14.80	21.09	10.09	36.69
4. Ratnagiri	5.45	3.16	8.85	5.47	14.46	12.43	23.23	23.77	8.13	28.96
5. Nasik	1.24	2.09	2.05	1.05	4.97	2.71	10.76	8.42	11.28	17.80
6. Dhule	2.20	3.66	2.35	3.13	4.73	2.53	14.63	8.21	26.03	19.63
7. Jalgaon	1.82	1.91	1.92	1.25	4.25	1.32	10.31	8.12	14.70	5.01
8. Ahmadnagar	1.96	2.51	2.21	2.05	4.17	2.35	8.23	6.13	11.52	16.13
9. Pune	3.10	2.64	4.93	2.89	7.45	5.21	10.93	14.44	11.98	15.64
10. Satara	2.07	1.79	3.98	1.40	6.33	2.31	9.99	11.84	36.07	22.17
11. Sangli	1.59	1.81	2.28	1.74	5.34	2.55	11.11	11.23	15.94	22.57
12. Solapur	1.39	3.50	2.23	2.40	6.28	2.99	15.72	17.02	21.00	23.54
13. Kolhapur	1.19	1.18	2.05	0.99	5.36	1.96	15.57	11.66	17.73	11.29
14. Aurangabad	1.28	2.74	1.38	1.84	5.25	3.59	10.95	9.29	13.91	15.01
15. Parbhani	1.42	3.88	2.38	7.31	6.93	4.92	19.27	9.49	27.73	20.25
16. Bid	5.38	4.71	2.24	2.88	5.60	4.77	15.83	6.10	23.10	21.87
17. Nanded	2.39	6.84	3.34	4.26	11.36	7.05	23.79	15.19	34.64	18.03
18. Osmanabad	1.18	4.43	2.67	4.33	11.29	8.19	26.75	23.29	38.18	23.02
19. Buldana	0.92	1.56	1.18	1.13	7.04	2.84	21.51	18.68	26.30	21.14
20. Akola	1.31	0.73	1.21	1.35	5.87	2.85	16.94	11.47	19.16	21.11
21. Amaravati	2.00	3.76	2.66	2.78	9.04	4.79	22.04	17.36	29.86	42.69
22. Yavatmal	0.71	1.06	1.29	1.65	5.02	2.94	12.46	8.43	17.73	14.63
23. Wardha	2.07	2.50	2.77	2.56	8.47	5.34	20.27	15.15	10.98	13.28
24. Nagpur	4.08	4.23	4.22	3.09	9.95	12.62	18.51	12.39	24.50	23.45
25. Bhandara	4.25	6.32	4.54	5.73	10.27	8.23	21.76	16.48	24.68	21.35
26. Chandrapur	3.15	6.55	4.11	6.79	10.26	7.46	21.83	12.53	18.96	18.10

TABLE 4.6: EDUCATION SPECIFIC URBAN UNEMPLOYMENT RATE BY SEX OF MAHARSHTRA, 1981

	Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
		M	F	M	F	M	F	M	F	M	F
	MAHARASHTRA										
1.	Greater Bombay	11.43	6.98	14.05	7.95	14.45	11.70	14.43	14.03	12.31	14.99
2.	Thane	5.47	2.99	7.26	2.67	8.12	4.87	8.86	7.63	6.72	12.63
3.	Raigarh	5.90	5.07	10.17	6.54	8.22	11.30	8.43	19.03	5.71	14.10
4.	Ratnagiri	2.80	5.77	15.58	8.31	16.94	11.86	9.83	16.03	15.99	21.67
5.	Nasik	5.95	3.56	7.65	2.89	9.16	4.03	9.72	9.73	11.48	21.30
6.	Dhule	5.20	2.77	7.46	1.85	7.73	2.52	14.65	11.92	24.88	25.66
7.	Jalgaon	6.46	2.07	7.09	1.53	8.85	2.94	13.84	6.13	21.12	28.11
8.	Ahmadnagar	3.65	1.41	8.14	1.60	7.76	3.25	6.39	7.25	10.43	22.69
9.	Pune	9.45	6.06	13.31	6.17	10.74	7.95	8.66	10.52	9.82	19.28
10.	Satara	9.29	4.07	11.88	2.02	8.66	3.91	10.45	9.48	12.14	23.44
11.	Sangli	2.28	2.46	6.66	1.82	8.54	3.96	8.23	9.43	13.57	21.32
12.	Solapur	9.93	3.94	12.28	3.56	13.99	5.63	16.04	12.59	24.92	31.62
13.	Kolhapur	6.08	2.95	6.61	2.62	10.04	3.31	13.26	8.37	18.38	18.72
14.	Aurangabad	8.21	4.77	7.54	4.58	10.25	4.80	16.70	16.78	22.73	24.46
15.	Parbhani	5.40	7.73	7.91	4.86	15.26	6.83	12.26	13.15	22.66	17.29
16.	Bid	5.45	4.38	6.40	3.49	9.55	4.31	10.65	9.84	15.11	17.68
17.	Nanded	7.55	6.21	10.33	5.14	17.58	10.01	25.13	20.63	27.74	26.81
18.	Osmanabad	7.43	7.31	8.18	5.39	15.95	10.56	21.25	14.72	28.74	25.11
19.	Buldana	5.38	2.21	9.15	1.88	10.60	2.18	12.11	7.42	14.65	49.49
20.	Akola	7.06	1.72	8.39	1.04	11.73	3.22	13.59	10.70	13.28	18.32
21.	Amaravati	7.03	6.79	9.48	3.50	13.13	5.66	20.75	14.97	24.84	23.29
22.	Yavatmal	7.82	2.16	7.67	1.01	8.54	2.85	8.95	6.83	9.99	9.57
23.	Wardha	9.17	3.18	17.25	3.94	17.94	6.77	2.75	19.30	25.42	35.13
24.	Nagpur	12.84	6.02	16.65	6.40	17.52	9.08	20.37	17.03	21.73	27.92
25.	Bhandara	18.06	8.33	15.17	4.72	18.35	8.33	22.62	18.54	20.80	34.26
26.	Chandrapur	17.18	7.44	15.27	4.04	13.99	6.84	10.96	9.85	14.85	16.97

observed at higher secondary, technical and non-technical group where the unemployment rate is substantially high for all the districts. This is mainly because with education labour force participation and job aspirations increase which are not always fulfilled by a slow growing economy. A continuous high rate over the educational categories for both the sexes are observed in Raigarh, Ratnagiri, Pune of Western Maharashtra and Nagpur, Bhandara, Chandrapur of eastern Maharashtra. The districts in and around the industrial zone of Bombay-Pune-Nasik experienced a low male graduate unemployment rate probably because of migration of educated males to the urban areas in search of jobs. But the eastern districts of Nagpur and Bhandara although industrially developed have a high male graduate unemployment. This may be because of the less migratory nature of the population or could be beacuse the aspiration is very high among the educated which is not being fulfilled in rural areas.

In contrast, the urban areas have relatively higher unemployment rate than rural areas because of its formal nature of the economy. Only a few districts of Greater Bombay, Pune, Nagpur, Bhandara, Chandrapur, have a very high illiterate unemployment for both males and females. This may be because the unskilled jobs there are few. Female graduate unemployment rate is relatively low in Greater Bombay, Thane, Raigarh for both males and females. Most of the districts, however, have high female graduate unemployment. This is mainly because of lack of white-collar jobs which are preferred by women. A large number of

graduate females want to work but are not getting suitable opportunities. The developed eastern districts (Wardha, Nagpur, Bhandara) are showing high graduate unemployment rates among the females which is perhaps due to excessive supply of labour through migration to the eastern region from other surrounding districts. In contrast high graduate unemployment rate in relatively less developed districts of Dhule, Jalgaon, Nanded, Osmanabad, Buldana was probably due to their inability to absorb their own graduates.

Although the states have shown a continuous increase in unemployment rate of urban females but most districts of Maharashtra experienced a slight decline in unemployment rate in informal and primary education category. It is not known whether for very informal work also there is a preference for at least a literate.

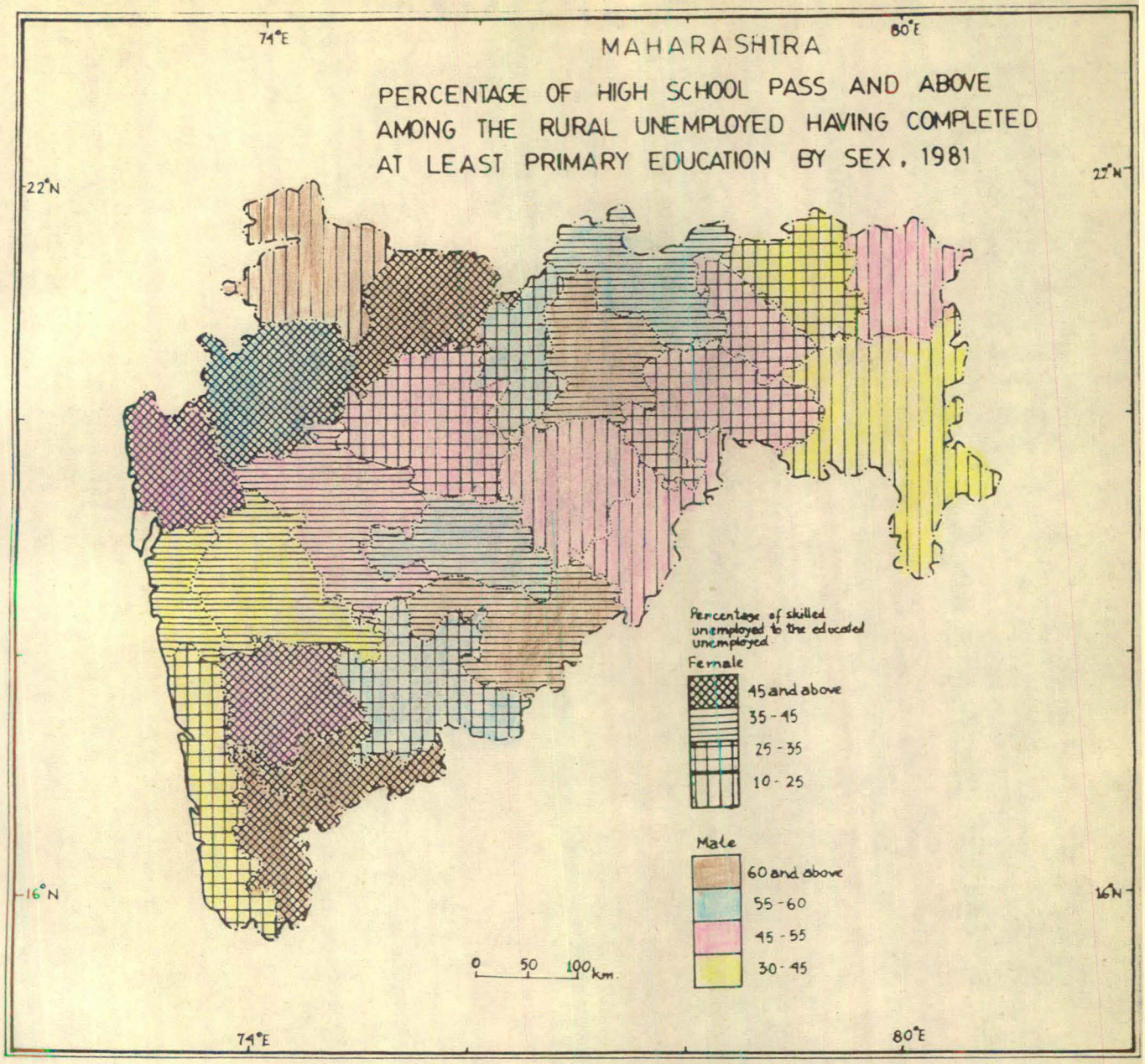
A district Level Analysis of Skilled Manpower Among the Educated Manpower

An index similar to that of Chapter III, have been prepared for district level analysis also, where those who have at least some formal education is considered as educated and those who are above matriculate level is considered as skilled. The ratio of these two gives the stock of skilled labour in the districts which has an immense policy implication also.

The regions are emerging out of this index which are

TABLE 4.7: PERCENTAGE OF HIGH SCHOOL PASS AND ABOVE AMONG THE UNEMPLOYED WHO HAVE COMPLETED PRIMARY EDUCATION, BY SEX AND PLACE OF RESIDENCE MAHARASHTRA, 1981

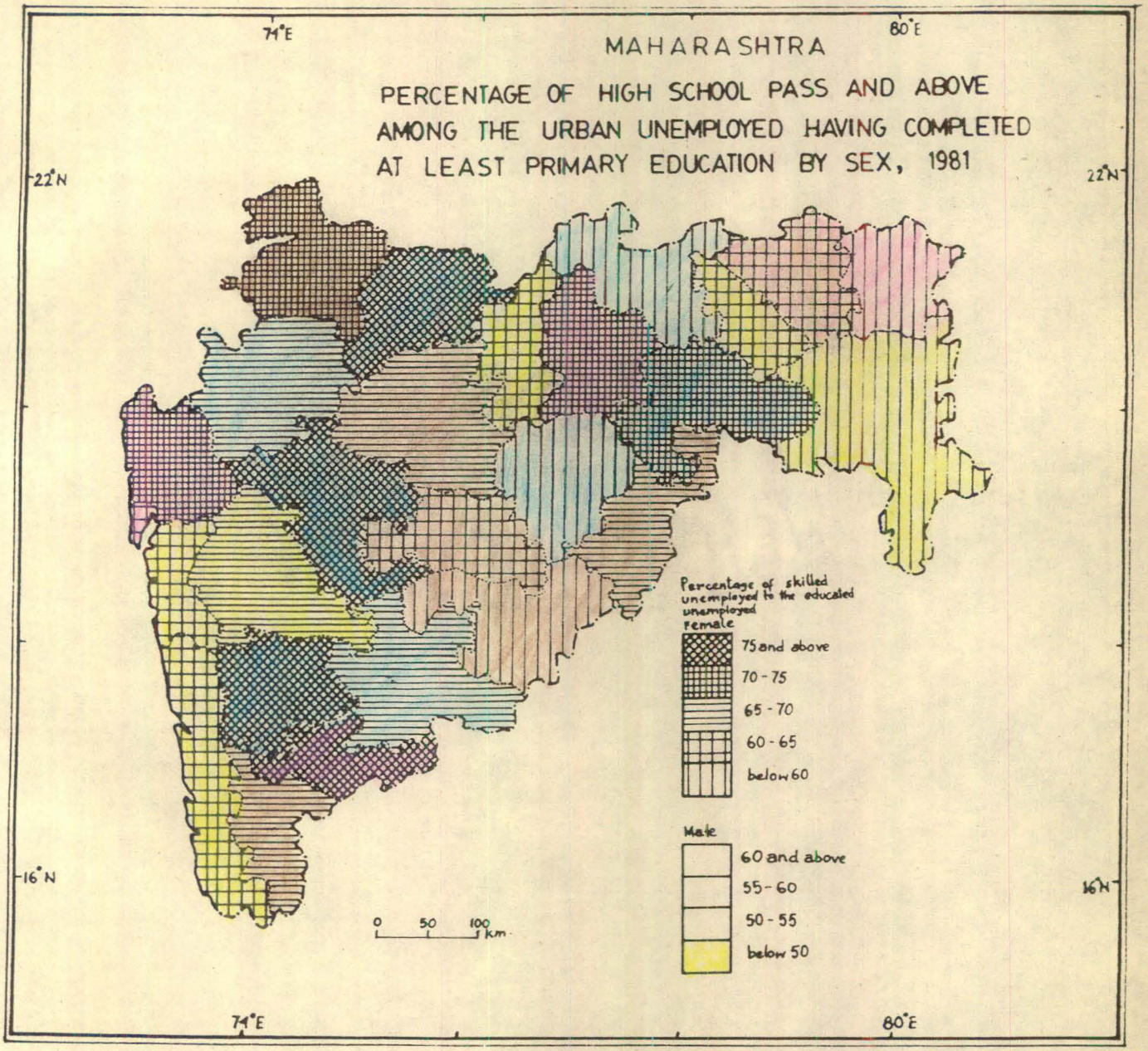
	NAME OF THE DISTRICTS	RURAL		URBAN	
		M	F	M	F
	MAHARASHTRA	50.96	36.00	52.82	63.73
1.	Greater Bombay	-	-	50.64	62.13
2.	Thane	50.00	58.49	53.51	72.97
3.	Raigarh	33.85	36.56	42.50	63.72
4.	Ratnagiri	33.85	30.13	40.70	60.44
5.	Nasik	56.66	48.34	55.34	67.32
6.	Dhule	61.01	25.46	62.84	72.92
7.	Jalgaon	60.54	45.65	57.82	75.61
8.	Ahmadnagar	54.75	35.35	58.21	83.04
9.	Pune	41.69	42.32	49.92	64.66
10.	Satara	54.37	52.05	59.70	78.10
11.	Sangli	63.98	54.72	60.61	76.37
12.	Solapur	54.92	32.97	55.06	66.90
13.	Kolhapur	65.52	46.75	61.12	65.53
14.	Aurangabad	50.43	30.36	70.24	68.72
15.	Parbhani	52.38	24.28	60.15	50.88
16.	Bid	60.05	35.29	60.75	61.27
17.	Nanded	54.34	22.79	62.92	68.95
18.	Osmanabad	61.22	40.87	68.39	57.59
19.	Buldana	57.71	31.13	48.54	59.82
20.	Akola	60.74	35.99	51.05	72.56
21.	Amaravati	58.40	39.00	56.00	59.07
22.	Yavatmal	55.09	29.29	56.09	70.39
23.	Wardha	48.89	27.78	49.92	62.02
24.	Nagpur	42.22	32.84	50.04	61.38
25.	Bhandara	46.09	17.46	50.35	57.60
26.	Chandrapur	36.67	14.79	42.00	48.40


MAHARASHTRA
PERCENTAGE OF HIGH SCHOOL PASS AND ABOVE AMONG THE RURAL UNEMPLOYED HAVING COMPLETED AT LEAST PRIMARY EDUCATION BY SEX, 1981
74°E
80°E
22°N
22°N
16°N
16°N
Percentage of skilled unemployed to the educated unemployed
Female
45 and above
35 - 45
25 - 35
10 - 25
Male
60 and above
55 - 60
45 - 55
30 - 45
0 50 100 km.

MAP - 4.9

mostly similar for both the sexes of rural and urban areas. The coastal strip of Maharashtra comprising the districts of Raigarh, Ratnagiri and the adjacent district of Pune have recorded lower proportion of skilled unemployed among the educated. Another such region with lower proportion of skilled labour is Eastern Maharshtra comprising of the districts of Wardha, Nagpur, Bhandara and Chandrapur. Mostly Northern and Southern districts of Maharashtra formed the region with higher proportion of skilled labour among the rural females but for the urban females some districts of central Maharashtra also showed higher proportion of skilled unemployment. The regions with high proportion of skilled male unemployed are not a continuous one. The northern districts of Dhule and Jalgaon, Southern districts of Kolhapur and Sangli and south-eastern districts of Osmanabad and Bid formed the regions with high proportion of male skilled unemployed for both the rural and urban areas. Though there are some minor deviations from this general pattern, yet it is helpful to identify the regions with high and low proportions of skilled unemployed. This is indication of the state of the economy of the districts. Future employment policy can be directed by this regional pattern of the proportion of skilled labour in different sections of the population.

Although attempt was made to identify the causes of variations in unemployment rates, but data on unemployment cannot be meaningfully analysed without a close scrutiny of the social, cultural and economic situation of the region. The regions with


MAHARASHTRA
PERCENTAGE OF HIGH SCHOOL PASS AND ABOVE AMONG THE URBAN UNEMPLOYED HAVING COMPLETED AT LEAST PRIMARY EDUCATION BY SEX, 1981
74°E
80°E
22°N
16°N
Percentage of skilled unemployed to the educated unemployed
Female
75 and above
70 - 75
65 - 70
60 - 65
below 60
Male
60 and above
55 - 60
50 - 55
below 50
0 50 100 km

MAP - 4.10

similar unemployment phenomenon may have different causes behind that. Moreover, census data give us a very generalised picture of unemployment. Further modifications can be done on this frame work.

CHAPTER - V

SUMMARY AND CONCLUSIONS

Major Findings

Acuteness of unemployment since Second World War is deep rooted in the economy of all underdeveloped nation. India is also not an exception. Large scale open unemployment and underemployment have been prevailing in our economy. But the extent of unemployment varies over the states and even over the districts. It also varies by sex, age, place of residence and educational levels.

When unemployment rate is defined as the ratio of unemployed in the total labour force (workers unemployed) rural unemployment rates in India in 1981 were 4.5 percent and 8.8 percent for males and females respectively. But in urban areas the rates were much higher - 9.6 percent for males 32.7% for females. Predominance of family enterprises involves the family labour which may keep the level of open unemployment low but disguised unemployment quite high. But it is very difficult to measure where unorganised sector prevails in the economy. Age structure of the unemployed have been considered in the study where the rate is very high at younger ages for both males and females. Males are marked with very low unemployment rates after 30 years of age whereas females maintain a higher profile than the males because a majority of them join the labour force at

later ages after meeting their role within the household. Age specific unemployment rates were lower in rural areas than urban for both males and females.

Education or the skill of the labour force is essentially showing the predominance of illiterates in rural areas. among the unemployed males those possessing middle and matriculation level qualifications were in far greater proportion than those with other educational levels both rural and urban areas. Urban areas have lower proportion of illiterate among the unemployed for both the sexes. The share of graduate unemployment was quite substantial in urban areas 12.6 percent for males and 16 percent for females.

Unemployemnt rate by educational level computed as the ratio of unemployed with a particular educaional level to total population possessing that level showed that the same rose with the rise in educational level, from illiterate to the graduates in all the states and UTs. A substantial increase was marked between the below middle school and above middle school group. This is mainly because of high labour force participation among the educated on the one hand prosperity to remain unemployed in search of suitable job commensurate with the qualifications on the other.

The index showing the stock of the skilled labour (Graduate and above) among the educated shows some distinct regional picture. Some part of north India and the whole central

India have recorded very high proportion of the skilled unemployed among the educated for both sexes and residences. This is mainly because of the dominating primary sector in the above two regions.

Almost all the results are in accordance with the hypotheses developed for this study and proved thier validity even at the microlevel.

Conclusion and Recommendation

Any planned economy aims to get maximum output using its potential natural and human resources. So, from the very beginning, Indian planners also tried to do so. At the time of formulation of the second Five year Plan they had estimated a backlog of 5.3 million unemployed. The Plan emphasized development of large scale industries to get better results in the long run. It was estimated that the Second Plan would generate 10 million new enployment considering the backlog and new entrants into the labour force. The plan, however, could actually generate 8 million employment. "The backlog of unemployment at the end of the Second Plan is reckoned at 9 million. This estimate is admittedly rough. It takes account of the estimate of unemployment as at the begining of the Second Plan (5.3 million), the larger increase in labour force during the Second Plan period than had been visualised earlier (1.7 million), & the estimated shorfall in the employment traget originally proposed for the Second Plan which was 2 million."

(Third Five year Plan; p.156). It also had failed to achieve any reduction in the total size of unemployed labour force. In Fourth Plan a clear estimation of unemployment was criticised because of its typical nature in Indian Economy. The prevalence of under-employment and the marginal workers who are seeking full time job were emphasised a lot. But the usual status estimation approach of the 32nd round of NSS estimated 12.Ø2 million unemployed at the start of the Sixth Plan (198Ø).

With this increasing volume Indian Planners also have shifted their emphasis from large scale to small scale industries. Fourth Plan onwards major emphasis was given to labour intensive schemes. In Fourth Plan some important rural developmental programmes were also undertaken. The Maharashtra Government's pilot Employment Guarantee Scheme (EGS) aims at providing unskilled manual work to all able bodied persons looking for unemployment. All the Plans afterwards emphasised on generation of employment through local resource mobilisation. But, somehow, this has not succeeded, partly because the centralised planning which we have adopted for our country has made the people more and more dependent upon government's investments and government functionaries. The mobilisation of local resources with a view to generate employment basically requires community involvement without which large scale employment generation programmes cannot succeed.

For example, several studies have suggested to use unskilled labour into different community development works e.g.

minor irrigation, construction of road etc. (Acharya: 1990; Maitra: 1982). This has a vast scope to utilise the local resources with appropriate local technology. This will be able to involve two typed of staff: i) construction and ii) maintainance. These programmes are directly linked with the development of infrastructure which will be helpful for further development.

It has not been feasible to identify the explanatory variables which is mostly due to inadequacy of data at the district level separately for rural and urban areas. It is also felt that the cultural and social-psychological factors which vary from region to region and whose quantification is very difficult have largely been responsible for the variations in unemployment rate. There are yet other factors which create noise in arriving at the exact unemployment situation. The unemployed comprise those seeking work and also available for works. The latter category is basically theoretical as, in reality, one does not know that the person would actually take employment if one becomes availble specially if it is not commensurate with his/her educational qualifications. Secondly, in the census most questions are answered by the head of the household who is the respondent for each and every member of the household; hence, answer to the question "seeking/available for work" is the perception of this person about other members of the household. According, part of the regional variations may arise from the thinking and perception of the respondents. This, probably, would be a good area for further studies.

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APPENDIX 1: LITERACY RATES & RANKS BY SEX FOR STATES AND UNION TERRITORIES OF INDIA, 1981.

	Name of the States	Literacy Rate		Ranks	
		Males	Females	Males	Females
	INDIA	46.9	24.8	-	-
1.	Andhra Pradesh	39.3	20.4	23	23
2.	Bihar	38.1	13.6	25	28
3.	Gujarat	54.4	32.3	11	13
4.	Haryana	48.2	22.3	18	20
5.	Himachal Pradesh	53.2	31.5	13	15
6.	Jammu & Kashmir	36.3	15.9	29	25
7.	Karnataka	48.8	27.7	17	19
8.	Kerala	75.3	65.7	1	1
9.	Madhya Pradesh	39.5	15.5	22	26
10.	Maharashtra	58.8	34.8	8	10
11.	Manipur	53.3	29.1	12	18
12.	Meghalaya	37.9	30.1	26	17
13.	Nagaland	50.1	33.9	16	11
14.	Orissa	47.1	21.1	20	22
15.	Punjab	47.2	33.7	19	12
16.	Rajasthan	36.3	11.4	28	29
17.	Sikkim	43.9	22.2	21	21
18.	Tamil Nadu	58.3	35.0	10	9
19.	Tripura	51.7	32.0	14	14
20.	Uttar Pradesh	38.8	14.0	24	27
21.	West Bengal	50.7	30.3	15	16
22.	A & N Islands	58.7	42.1	9	8
23.	Arunachal Pradesh	28.9	11.3	30	30
24.	Chandigarh	69.0	59.3	2	2
25.	Dadra & Nagar Haveli	36.3	16.8	27	24
26.	Delhi	68.4	53.1	3	4
27.	Goa, Daman & Diu	65.6	47.6	5	5
28.	Lakshadweep	65.2	44.6	6	7
29.	Mizoram	64.5	54.9	7	3
30.	Pondicherry	65.8	45.7	4	6

APPENDIX 2: RURAL POPULATION OF 15-29 AGE GROUP IN EACH EDUCATIONAL CATEGORY BY SEX - INDIA, 1981.

Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
	M	F	M	F	M	F	M	F	M	F
INDIA	26324305	44428494	17218180	10222470	16628891	6258148	2591778	541251	1094216	226088
1. Andhra Pradesh	2775099	3935314	995773	635302	894679	324220	137101	26831	54541	9704
2. Bihar	3523932	6022464	1170419	715868	762666	296057	84105	20962	49862	12854
3. Gujarat	1119586	2058212	1170419	715868	762666	296057	50651	9818	26822	3936
4. Haryana	502010	969580	401706	170445	458003	88558	50651	9818	26822	3926
5. Himachal Pradesh	109953	275448	182103	168496	166285	70244	20924	6942	9943	2900
6. Jammu & Kashmir	303185	469068	106251	43792	188240	48125	20546	5902	10535	1733
7. Karnataka	1463447	2333044	811469	525395	898939	417171	112993	27928	56969	9323
8. Kerala	210651	441016	1050122	1166789	1518056	1467594	139739	122232	57241	49179
9. Madhya Pradesh	2478737	4118018	1643816	538566	668453	128099	180209	24935	50512	7467
10. Maharashtra	1358121	2935618	1496059	1067980	1780813	751394	165835	33585	94099	15739
11. Manipur	42663	91023	45272	32448	53795	24576	7498	3072	3866	3174
12. Meghalaya	74327	92876	37395	37211	23862	18825	1043	780	541	377
13. Nagaland	30717	43606	45448	34536	20738	10293	2016	650	821	314
14. Orissa	1159370	2053694	879025	569258	740823	259861	60583	10544	42906	5034
15. Punjab	713601	890097	435335	390488	538473	264990	52471	19168	34947	13810
16. Rajasthan	1815814	2872253	830432	192660	579445	19602	112176	11124	61713	24183
17. Sikkim	18061	26352	16827	6643	5198	2116	930	223	548	136
18. Tamil Nadu	1348933	2645947	1474580	1032125	1139132	545360	136369	43940	64305	17823
19. Tripura	90186	145587	96847	66537	49816	26538	9980	4284	2616	1019
20. Uttar Pradesh	43511	57814	21973	7695	9748	2982	1483	407	1471	473

Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
	M	F	M	F	M	F	M	F	M	F
21.West Bengal	2366031	3498372	1846725	1342958	1142941	301989	224861	59721	102661	29504
22.A & N Islands	5860	7900	9676	6107	5477	2888	1117	538	264	147
23.Arunachal Pradesh	43511	57814	21973	7695	9748	2982	1483	407	1471	473
24.Chandigarh	1780	1895	1468	933	2201	668	292	58	144	24
25.Dadra & Nagar Haveli	6197	10626	3512	1413	2118	890	200	63	216	83
26.Delhi	13489	30763	2763	10324	31960	11695	9165	2778	3718	967
27.Goa, Daman & Diu	17205	35083	30950	27479	47689	34354	5947	2883	3156	1834
28.Lakshadweep	136	589	1211	1525	946	639	51	19	37	
29.Mizoram	10497	12264	34292	9068	5663	1649	484		319	58
30.Pondicherry	8437	18653	12600	11981	15717	7902	2061	575	797	168

APPENDIX 3: URBAN POPULATION OF 15-29 AGE GROUP IN EACH EDUCATIONAL CATEGORY BY SEX-INDIA, 1981.

Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
	M	F	M	F	M	F	M	F	M	F
INDIA	4492965	7491676	5400045	4542838	10102175	6814536	2734661	1568898	2094591	1325074
1. Andhra Pradesh	412710	797625	320226	338877	741957	500943	240970	102016	150548	63257
2. Bihar	277456	472963	169129	146825	596323	320952	160634	56300	104528	40888
3. Gujarat	263474	490239	499521	423657	691085	467447	136434	75444	131345	86408
4. Haryana	87477	130278	98929	65701	201775	128744	55769	38312	39055	33886
5. Himachal Pradesh	5743	8681	11416	9137	24334	16734	9550	6890	6344	5577
6. Jammu & Kashmir	55734	78726	23259	15294	80238	55366	26126	17137	17944	13881
7. Karnataka	312870	539523	298717	264922	738882	568063	201089	102641	127449	69397
8. Kerala	30538	56065	211107	223916	402298	403802	49695	50117	32279	33954
9. Madhya Pradesh	269230	558900	451534	328201	515910	289437	276477	142648	154235	94105
10. Maharashtra	444426	787437	696972	575621	1853213	1233934	381070	189505	279854	172856
11. Manipur	7256	19775	9855	8411	26228	18019	6547	4323	4000	1631
12. Meghalaya	6193	9027	6405	6204	20963	17158	3965	2958	2767	2560
13. Nagaland	4219	3796	8783	5398	8815	5974	1545	844	839	437
14. Orissa	89810	165634	94994	81261	215234	124575	50251	18906	42536	16349
15. Punjab	182963	188245	139972	108235	298893	232645	85275	73396	60743	59054
16. Rajasthan	234635	474163	251197	171642	391259	81390	176415	65678	80279	26836
17. Sikkim	2964	2667	3782	1937	3192	2083	1123	497	548	298
18. Tamil Nadu	267072	635224	653177	679125	1047060	843889	239880	121520	150035	83193
19. Tripura	2586	5262	9220	10231	15187	13677	6515	5420	2494	2355
20. Uttar Pradesh	864469	1197558	557858	374302	949077	464616	377592	207041	330268	215682
21. West Bengal	455436	582979	633397	371019	811636	612769	292944	161377	194050	139130
22. A & N Islands	1324	2002	3244	1849	3348	2112	1067	787	329	333

Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
	M	F	M	F	M	F	M	F	M	F
23.Arunachal Pradesh	2548	2484	2652	1231	3150	1376	798	275	467	228
24.Chandigrah	15012	14158	11570	6776	26832	17494	14146	10074	13327	12581
25.Dadra & Nagar Haveli	197	412	349	226	368	277	73	27	43	39
26.Delhi	183195	242263	197220	123478	377694	220596	139851	97476	138075	124876
27.Goa, Daman & Diu	6928	11767	11823	11346	28146	20934	5737	3428	4104	2888
28.Lakshadweep	101	549	1018	1439	1184	547	66	26	64	7
29.Mizoram	1262	1081	10140	10156	7493	6684	2063	1284	478	276
30.Pondicherry	5137	12196	12574	14412	20400	16310	4421	2484	2606	1308

APPENDIX 4 : CENSUS & NSSO UNEMPLOYMENT RATE FOR 15-59 AGE GROUP BY SEX AND RESIDENCE - INDIA

	NAME OF THE STATES	NSS UNEMPLOYMENT RATE (1983)				CENSUS UNEMPLOYMENT RATE (1981)			
		RURAL		URBAN		RURAL		URBAN	
		M	F	M	F	M	F	M	F
1.	Andhra Pradehs	1.01	0.44	3.28	0.97	0.69	0.58	3.68	2.46
2.	Assam	1.62	0.32	2.80	0.85	-	-	-	-
3.	Bihar	1.39	0.11	3.11	0.20	2.12	1.31	7.06	3.55
4.	Gujarat	0.63	.20	3.00	0.47	1.15	1.05	3.40	1.50
5.	Haryana	2.07	.07	2.89	0.80	1.42	1.06	3.72	3.17
6.	Himachal Pradesh	1.31	.30	5.14	1.57	1.90	1.67	5.87	8.05
7.	Jammu & Kashmir	0.51	.09	2.12	0.87	0.99	1.39	3.93	6.21
8.	Karnataka	0.69	.25	3.41	1.10	1.07	1.09	4.57	3.80
9.	Kerala	6.03	3.97	7.11	5.09	11.53	13.95	14.62	17.66
10.	Madhya Pradesh	0.28	.06	1.93	0.22	0.94	0.68	4.59	2.86
11.	Maharashtra	0.81	.07	3.57	0.71	1.05	0.77	4.94	3.36
12.	Manipur	0.33	-	0.22	0.04	2.83	1.60	4.99	4.44
13.	Meghalaya	0.50	0.05	4.95	2.13	0.25	0.29	1.07	1.36
14.	Nagaland	-	-	0.25	-	0.63	0.42	1.09	1.65
15.	Orissa	1.22	0.33	3.24	0.78	1.40	0.72	4.15	2.17
16.	Punjab	2.06	0.62	2.53	0.89	1.05	0.85	1.81	1.48
17.	Rajasthan	0.47	0.05	2.36	0.21	1.98	1.45	4.50	1.96
18.	Sikkim	0.90	0.19	6.49	1.19	0.38	0.54	1.67	3.53
19.	Tamil Nadu	2.29	1.24	5.10	1.77	1.90	1.60	5.68	4.26
20.	Tripura	1.01	1.31	4.51	3.4	4.69	8.08	11.17	16.30
21.	Uttar Pradesh	0.78	0.02	2.66	0.29	1.04	0.31	3.86	1.51
22.	West Bengal	2.36	0.49	6.28	2.44	5.89	5.72	12.83	10.47
23.	A & N Islands	2.42	0.93	4.31	4.01	2.56	6.20	3.28	4.20
24.	Arunachal Pradesh	-	-	-	-	0.65	0.58	2.21	4.37
25.	Chandigarh	0.73	0.30	-	-	2.54	1.73	2.90	3.08

	NAME OF THE STATES	NSS UNEMPLOYMENT RATE (1983)				CENSUS UNEMPLOYMENT RATE (1981)			
		RURAL		URBAN		RURAL		URBAN	
		M	F	M	F	M	F	M	F
26.	Dadra & Nagar Haveli	2.19	-	2.07	0.52	0.97	2.34	2.32	4.96
27.	Delhi	0.95	0.96	4.02	4.51	3.94	2.18	3.66	3.39
28.	Goa, Daman & Diu	0.04	-	0.64	0.26	5.78	5.68	5.96	7.73
29.	Lakshadweep	-	-	-	-	11.74	17.65	10.26	11.64
30.	Mizoram	0.04	-	0.64	0.26	0.29	0.24	2.08	2.07
31.	Pondicherry	1.63	1.19	5.72	1.65	6.13	4.01	8.45	7.75

Source: Sarvekshana Vol.XI. No.4
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(NSS 38th Round)

A note on appendix No. 4 & 5

A comparison of census and NSS data on unemployment :

Indian census is a system of data collection where entire population of the country is being counted and their characteristics are being recorded. On the otherhand, national Sample Survey, by its own name proves that it is a method of data collection by sampling method. NSS carried out different round of surveys on different specific topic at different point of time. The two systems are completely independent of each other and so naturally there are quite dissimilarites in the concepts and definitions adopted by the two systems and so these two sets are not strictly comparable. Moreover the time period, when these surveys were conducted are also slightly different. Still one can expect that a similar trend will emerge from these two major data sources. This part will look through the unemployment rates produced by NSS and computed from Census data along with their similarities and dissimilarities.

The 42nd round of NSS has published the informations on employment and unemployment. NSS collects the information on unemployed by their usual, weekly and daily status. But as the reference period for census data is one year which is similar with usual status, the unemployment rates of usual status unemployed have been taken into considertion. NSS published the unemployment rate by sex and place of residence for the age group

of 15-29, 30-44 and 45-59 whereas census gives the data at 5 years age group (except the three age groups 0-14, 40-49 and 50-59). So here also only the young age i.e. 15-29 age group is comparable.

Third but most important thing is that Indian census publish the data of persons seeking or available for job by marginal worker and non-worker. As marginal workers who are seeking or available for job constitute a substantial proportion of unemployeds, it is better to keep them apart to make it more comparable. The education specific unemployment rate is less comparable because census has published this data for total unemployeds which includes both the marginal and non-workers. All these aspects have been taken into account before going for the analysis.

Unemployment by sex and place of residence

Though the census and NSS rates are different yet both of them have produced a higher unemployment rate for the males for both rural and urban than the female for the sttes of Andhra Pradesh, Bihar, Gujarat, Haryana, Madhya Pradesh, Maharashtra, Manipur, Nagaland, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh, West bengal, Delhi, Mizoram and Pondicherry (Table: 1). Inconsistency is observed in the states and UTs of Himachal Pradesh, Jammu and Kashmir, Kerala, Sikkim, Tripura, A & N islands, Chandigarh and Dadar, Nagar-haveli where the rates produced by urban females are substantially higher than urban

males. and in Meghalaya it is marginally higher. For rural areas the states and UTs of kerala, Tripura, A & N inslands and Dadar-nagar-Haveli females have substantially higher rate than male but for Karnataka, Meghalaya, Sikkim and Go-Daman-Diu it is marginally higher. Kerala, Tripura, West Bengal have recorded higher unemployment rate for both sexes of rural and urban areas in both NSS and census. Everywhere the rates produced by NSS are substantially lower than the rates produced by the census.

Age specific unemployment

It has been mentioned earlier that unemployment rate of 15-29 age group has taken for comparison. Here too the rates are smaller in NSS and higher in census data. Most of the states and UTs have shown consistency with a higher rate for males than females in both rural and urban areas only with a few exceptions. The states and UTs of Jammu and Kashmir, Kerala, meghalaya, Sikkim & A and N islands have recorded higher female unemployment rate for rural and urban both. For the urban areas of Sikkim, A & N island have recorded in NSS is higher than census rate which is really an exceptional case. Age specific unemployment rate is also recorded very high in Kerala, Tripura and West Bengal. Though the census rate for the UTs of Delhi, Goa-Daman-Diu, and Pondicherry is also high but NSS rate is not following the same trend. The rate for Lakshdweep and rural part of Nagaland not be produced by the NSS like Assam was not enumerated by 1981 census which keep them away from the comparison.

APPENDIX 5: CENSUS AND NSSO UNEMPLOYMENT RATE FOR 15-29 AGE GROUP BY SEX AND RESIDENCE - INDIA

	NAME OF THE STATES	CENSUS UNEMPLOYMENT RATE (15-29) 1981				NSS UNEMPLOYMENT RATE (15-29) 1983			
		RURAL		URBAN		RURAL		URBAN	
		M	F	M	F	M	F	M	F
1.	Andhra Pradesh	1.80	1.05	9.20	5.40	2.82	0.57	7.75	2.30
2.	Assam -	-	-	-	-	4.36	0.82	8.01	2.86
3.	Bihar	5.70	2.52	18.18	8.23	4.56	0.18	9.08	0.59
4.	Gujarat	3.17	1.76	7.82	5.92	1.78	0.45	7.43	1.16
5.	Haryana	3.19	1.88	8.37	7.12	5.29	0.22	6.82	2.16
6.	Himachal Pradesh	4.74	3.65	14.22	17.92	4.66	0.95	14.13	3.98
7.	Jammu & Kashmir	2.17	2.58	8.93	13.32	1.65	0.23	5.54	2.42
8.	Karnataka	2.55	1.73	10.97	8.43	1.92	0.63	8.63	2.95
9.	Kerala	27.03	30.17	33.28	37.56	16.22	10.19	17.82	12.16
10.	Madhya Pradesh	1.87	0.95	10.83	5.92	0.82	0.16	4.37	0.59
11.	Maharashtra	2.74	1.50	11.45	7.32	2.47	0.23	8.71	1.88
12.	Manipur	6.17	3.50	11.97	10.08	0.69	-	0.35	0.11
13.	Meghalaya	0.42	0.45	2.35	2.71	1.00	0.14	10.52	4.49
14.	Nagland	1.33	0.84	1.99	2.92	-	-	0.60	-
15.	Orissa	3.51	1.32	10.09	4.62	3.51	0.53	9.76	1.86
16.	Punjab	2.48	2.02	4.05	3.41	5.57	1.64	6.13	2.48
17.	Rajasthan	5.48	1.78	9.03	3.25	1.38	0.14	5.83	0.16
18.	Sikkim	0.73	1.10	3.15	6.93	2.29	0.53	15.93	3.37
19.	Tamil Nadu	5.25	3.66	14.61	9.86	6.34	2.54	12.95	4.45
20.	Tripura	11.22	16.39	27.17	33.03	3.23	4.03	12.42	9.58
21.	Uttar Pradesh	2.85	0.51	9.60	3.48	2.68	0.05	7.45	0.77
22.	West Bengal	13.31	11.40	31.05	22.31	5.78	1.24	15.74	6.45
23.	A & N Islands	5.77	12.28	6.82	7.58	8.24	2.07	11.03	8.18
24.	Arunachal Pradesh	1.36	1.19	4.20	8.10	-	-	-	-
25.	Chandigarh	5.31	3.57	6.44	8.61	14.71	-	14.51	6.44

	NAME OF THE STATES	CENSUS UNEMPLOYMENT RATE (15-29) 1981				NSS UNEMPLOYMENT RATE (15-29) 1983			
		RURAL		URBAN		RURAL		URBAN	
		M	F	M	F	M	F	M	F
26.	Dadra & Nagar Haveli	1.00	3.33	4.76	11.02	1.84	0.48	-	-
27.	Delhi	9.78	5.07	8.43	7.27	3.92	-	5.38	1.45
28.	Goa, Daman & Diu	13.63	13.45	13.01	17.07	3.84	2.83	10.13	8.58
29.	Lakshdweep	26.62	36.53	27.03	25.68	-	-	-	-
30.	Mizoram	0.52	0.39	4.38	4.11	0.13	-	1.76	0.62
31.	Pondicherry	16.58	9.34	21.06	17.20	4.86	2.97	16.25	3.97

APPENDIX 6: RURAL AND URBAN UNEMPLOYMENT RATE AND PERCENTAGE OF AREA IRRIGATED, RAINFALL, WORKERS IN SECONDARY SECTOR RECORDED IN MAHARASHTRA

	Name of the States	Unemployment Rate - 1981		Amount of Rainfall (in mm) 1934-64	% of area irrigated (1980-81)	% of workers in Secondary Sector 1981
1.	Greater Bombay	-	12.57	2931.0	-	44.76
2.	Thane	3.75	6.86	2258.6	2.32	48.32
3.	Raigarh	4.57	10.07	2966.3	4.25	32.94
4.	Ratnagiri	5.84	14.51	3305.7	2.91	21.61
5.	Nasik	1.97	7.62	1022.0	10.41	43.54
6.	Dhule	3.20	8.87	674.0	9.26	29.07
7.	Jalgaon	2.14	7.62	740.7	12.17	23.30
8.	Ahmadnagar	2.45	6.49	578.8	10.79	31.99
9.	Pune	3.53	10.63	1150.3	17.03	41.09
10.	Satara	2.72	9.58	803.2	17.93	25.69
11.	Sangli	2.80	7.72	624.8	27.69	27.44
12.	Solapur	3.20	11.13	584.3	10.75	49.05
13.	Kolhapur	2.10	8.29	1931.5	15.04	40.85
14.	Aurangabad	2.15	11.29	725.8	9.09	32.20
15.	Parbhani	3.07	10.71	821.0	6.20	18.71
16.	Bid	3.86	10.18	668.4	11.77	18.65
17.	Nanded	5.06	13.16	901.1	5.17	23.31
18.	Osmanabad	4.75	13.21	809.9	7.44	17.49
19.	Buldana	1.92	7.03	802.8	4.26	15.01
20.	Akola	2.13	5.00	846.5	2.51	19.31
21.	Amaravati	4.02	11.20	877.3	2.71	19.46
22.	Yavatmal	1.51	7.20	991.6	2.74	19.96
23.	Wardha	3.18	15.28	1090.3	4.24	24.89
24.	Nagpur	3.07	15.17	1175.0	7.91	32.78
25.	Bhandara	4.89	13.62	1446.4	39.53	36.49
26.	Chandrapur	4.94	12.54	1397.6	18.15	26.89

APPENDIX 7: EGS WORKERS AS PROPORTION OF AGRICULTURAL WORKERS IN DIFFERENT REGIONS OF MAHARASHTRA, 1981

Districts	Local Name	EGS Workers As a Proportion of Agricultural Workers
Thane Raigarh Ratnagiri	KONKAN	1.63
Ahmadnagar Pune, Satara, Sangli, Kolhapur, Solapur	SOUTH MAHARASHTRA	3.52
Dhule, Nasik, Jalgaon	KHANDESH	5.24
Aurangabad, Parbhani, Bid, Nanded, Osmanabad	MARATHWADA	3.68
Akola, Buldana, Wardha, Nagpur, Yavatmal and Amaravati	VIDHARBA	3.32
Chandrapur & Bhandara	EAST	3.60
MAHARASTRA		3.59

Source : Acharya, Sarthi (1990) - The Maharashtra Employment Guarantee Scheme : A study of Labour Market Intervention. ILO-ARTEP. New Delhi.

APPENDIX 8: SHARE OF 15-29 AGE GROUP TO TOTAL UNEMPLOYMENT BY SEX AND PLACE OF RESIDENCE - MAHARASHTRA, 1981

Name of the States	RURAL		URBAN	
	M	F	M	F
MAHARASHTRA				
1. Greater Bombay	-	-	77.95	73.98
2. Thane	70.27	63.01	77.58	77.10
3. Raigarh	72.19	59.86	76.85	77.93
4. Ratnagiri	72.36	67.95	78.68	78.59
5. Nasik	71.77	49.88	79.18	65.14
6. Dhule	59.79	45.53	76.45	63.15
7. Jalgaon	65.50	43.88	78.72	63.29
8. Ahmadnagar	69.94	45.18	84.51	70.77
9. Pune	75.63	52.21	81.77	69.90
10. Satara	76.89	57.43	79.62	61.75
11. Sangli	73.48	51.82	75.98	55.98
12. Solapur	68.56	45.79	78.07	62.55
13. Kolhapur	80.92	52.35	78.65	67.73
14. Aurangabad	63.63	41.20	81.66	69.13
15. Parbhani	51.42	35.22	67.88	51.10
16. Bid	59.27	39.85	74.54	58.14
17. Nanded	52.93	37.03	72.72	55.09
18. Osmanabad	70.40	43.70	74.75	58.35
19. Buldana	63.84	43.46	79.74	57.44
20. Akola	72.07	50.41	76.08	67.56
21. Amaravati	72.65	51.70	78.02	62.82
22. Yavatmal	68.58	46.65	74.04	63.41
23. Wardha	74.10	54.82	85.34	69.78
24. Nagpur	73.28	46.69	81.06	70.70
25. Bhandara	60.42	49.62	77.91	65.64
26. Chandrapur	64.46	45.17	75.57	60.28

APPENDIX 9: RURAL POPULATION OF 15-29 AGE GROUP IN EACH EDUCATIONAL CATEGORY BY THEIR SEX MAHARASHTRA, 1981

Name of the States	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
	M	F	M	F	M	F	M	F	M	F
1. Greater Bombay	-	-	-	-	-	-	-	-	-	-
2. Thane	91186	149629	68572	44476	90216	45560	7873	3071	5266	3418
3. Raigarh	33665	85086	44716	43831	47371	28385	3249	1010	1784	586
4. Ratnagiri	27955	105691	59694	89695	73154	60361	4136	1750	2276	946
5. Nasik	82838	162475	68766	44997	92425	35174	10022	2279	4237	646
6. Dhule	86258	142158	51973	34778	58632	25702	5476	986	2386	214
7. Jalgaon	56819	125236	82192	59884	102233	45492	9553	2203	5660	2037
8. Ahmadnagar	69357	170421	85148	59936	103939	40920	17203	3264	6894	961
9. Pune	56137	151499	77413	59429	110408	47100	14113	3165	5799	1381
10. Satara	31510	107161	48737	55397	84244	53540	11202	2558	3116	1141
11. Sangli	39787	93716	47517	36631	72008	34878	9573	2457	5953	948
12. Solapur	76424	146202	68092	40664	78637	25843	6043	899	4456	548
13. Kolhapur	52386	148708	65057	43184	98979	45945	9216	1269	6933	726
14. Auranagabad	72016	164330	68580	28744	63949	14748	3925	506	3451	3505
15. Parbhani	68568	135562	55241	21831	42280	7418	2496	158	2023	79
16. Bid	50197	104031	37073	17474	45445	11121	3601	344	3386	193
17. Nanded	65921	126060	43490	18622	45461	8643	3628	204	2722	122
18. Osmanabad	70085	150144	48985	33085	86662	26458	7140	949	5380	139
19. Buldana	33358	83282	57216	41166	58796	18395	3477	273	1688	613
20. Akola	36223	81200	64183	47223	65639	28945	7111	767	3043	360
21. Amaravati	34293	58492	55145	44936	69662	45117	6226	1716	3449	595
22. Yavatmal	51453	103407	60862	37201	55590	23601	3948	807	2199	328
23. Wardha	14603	30750	32357	25807	34665	19504	2600	660	2414	738
24. Nagpur	30190	51733	51804	37090	52670	9573	3777	783	2104	516
25. Bhandara	39188	103768	79455	59513	66370	25042	5056	752	2224	178
26. Chandrapur	75859	144791	73687	42376	60153	21408	4700	726	3364	547

APPENDIX 10: URBAN POPULATION OF 15-29 AGE GROUP IN EACH EDUCATIONAL CATEGORY BY SEX - MAHARASHTRA, 1981

Name of the Districts	Illiterate		Informal and primary education		Middle and Matriculation		Higher Secondary, Technical & Non-Technical Diploma ≠ degree		Graduates and above	
	M	F	M	F	M	F	M	F	M	F
1. Greater Bobay	191019	260245	290515	193474	796505	481486	147151	87004	123450	87720
2. Thane	37566	53290	48533	35205	128595	95599	22333	12843	17923	11650
3. Raigarh	4136	6887	7169	7119	23568	13603	2597	1676	1925	1028
4. Rantnagiri	5078	3934	5823	5899	13410	11796	2248	1603	1695	1306
5. Nasik	16850	35473	26950	24378	73649	53326	14355	6431	9534	5309
6. Dhule	8924	16918	12027	11888	30064	20788	6203	2055	4132	1278
7. Jalgaon	12096	27778	19250	19821	50162	33972	9626	4061	5274	2929
8. Ahmadnagar	8554	13596	9714	8804	23869	18301	11148	4096	5562	2503
9. Pune	31818	67741	55821	50863	152790	113296	47222	23294	29574	20694
10. Satara	3388	8030	7398	7139	23548	13005	5589	2374	6383	2043
11. Sangli	7381	17368	11880	10578	27245	20114	8447	2811	5048	2744
12. Solapur	19533	45509	25283	18798	53597	32464	10799	3915	8832	3327
13. Kolhapur	11822	26046	20584	17674	50908	36984	9276	3332	9093	3653
14. Aurangabad	11150	28196	12750	12519	37722	23015	11112	3778	10521	3606
15. Parbhani	10032	20805	9230	8111	20880	11389	5055	1080	3756	856
16. Bid	4863	13458	5514	5099	14724	8885	4327	1169	2912	690
17. Nanded	8275	18285	7876	6877	20880	11363	4489	1197	4149	955
18. Osmanabad	7837	19651	7907	7687	23915	12578	5516	1433	3987	1103
19. Buldana	5001	9813	8313	9015	21585	13806	3972	1428	2164	295
20. Akola	8953	15307	13398	15983	33788	23366	6015	2374	3404	1512
21. Amaravati	9974	13831	17529	18475	40722	31914	7423	3346	5092	2297
22. Yavatmal	3555	8613	7044	8741	22791	14193	3643	4165	2463	940
23. Wardha	2748	4500	6504	7505	20577	16081	3448	1648	2077	1076
24. Nagpur	17387	35602	45684	49684	118915	91132	20088	12331	18390	11546
25. Bhandara	2231	6781	6708	8665	18985	13883	3409	1413	1832	902
26. Chandrapur	4378	9782	7392	8422	20682	15003	3777	1350	2417	884

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