HOUSELESSNESS IN INDIA

WITH SPECIAL REFERENCE TO

Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh 1971 and 1981

Dissertation submitted to the Jawaharlal Nehru University
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MASTER OF PHILOSOPHY

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CERTIFICATE

This is to certify that the dissertation entitled, "HOUSELESSNESS IN INDIA with Special Reference to ANDHRA PRADESH, KERALA, MADHYA PRADESH AND UTTAR PRADESH, 1971 and 1981" submitted by Mr. D. SAMBANGI, in fulfilment of the six credit out of the total of twenty-four credits for the award of the Degree of Master of Philosophy (M.Phil) of this University, is a bonafide work to the best of our knowledge and may be placed before the examiners for evaluation.

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CHAPTER - I

Introduction

The basic needs such as food, cloth and shelter are considered equally important for healthy and civilized existence of man. However, in the hierarchy of these three shelter receives an utmost priority because the conditions in which people live determines to a greater extent their health, well-being and ability to engage in gainful employment, to pursue self improvement through education and recreation and in consequence to attain a better standard of living. In otherwords, it is so due to the fact that the improvement of over all quality development of human life is largely determined by the fulfilment of this very basic need. Hence, shelter is a basic human right and necessity. The importance of shelter and its unique role in human life and society can be further understood in the following context.

First of all, shelter has a profound influence over the health of the people. Indeed, it provides a favourable health environment by providing protection against climatic impacts and diseases which directly contributed to the individual's health and productivity which are ultimately important for national economic growth and improved standard of living. It also has a significant influence on improving the quality life of certain vulnerable human groups such as children, women, handicapped and aged persons who are always in need of special health care.

Secondly, shelter exerts a far-reaching impact on social development of individuals. Shelter is not just a roof over four walls or physical unit but made by human beings for human beings. The social context is always important to consider. Shelter creates social climate which is a must for an orderly development of a society. In otherwords, it is the capital part of the social fabric of society and above all it is a major setting for family life. Family is a very important social institution, whose fundamental missions which are carried out at house are : reproduction and prepetuation, rearing of children, ensuring family stability, provision of privacy, personal security, creating conduc ive environment for meaningful social interactions between individuals and groups, widening of intellectual and emotional horizons among the members and influencing them for active participation in the functioning society. A child is given birth to in a house where he or she spends him or her adolescent period, the influence, the training that he or she receives and the physical and mental health that he or she enjoys during that period will have a life long influence on him or her. That is why in general, it is said that man builds house but house moulds man. Buskins[1] explains the social role of housing by observing the "individual and family life can not develop a long sound lines unless a dwelling is available where it is possible to be both alone and together, where life within the

1. Buskins, H.M., Housingand Building in Netherlands, International Freedom of Christians Trade Union, Belgium, 1959, p.21.

family can come to full development and sound relationship in promoted between the family and its individual members on the one hand and the society with all its possibilities on the other by the proper location of the dwelling in neighbourhood and towns". In the same line of thought, Friedlander[2] remarks that "social welfare or social well-being is deeply concerned with housing; next to food and clothing, housing is one of the basic necessities of man, particularly for the maintenance of family life". An expert group set up by the United Nations[3] to work on social programming in 1970 similarly observed that in the fulfilment of social needs, house plays two important roles. In it's direct role, it serves as a place where it becomes possible for individual to experience community, privacy, social level-being and protection against hostile forces. In it's indirect role being an area it creates a conducive atmosphere for an abundant supply of social interaction, social relationships and services. Thus family formation of development of personality are same of the vital function of housing.

Finally, shelter has a greater potentality in the promotion of economic development. In the opinion of

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2. Madan, G.R., Indian Social Problems; Allied Publishers, New Delhi, Vol.2, 1983, p.275.

3. United Nations. Social Programming of Housing in Urban Areas, United Nations, New York, 1976, p.13.

Varghese[4], the economic importance of housing may be judged from the point of view of housing as an economic activity with reference to its contribution to national income, national wealth and national employment. In otherwords, housing is an important component of the process of capital formation of country. It tends to generate household saving as people would like to possess a house, and thereby and speeding up of the capital formation which is an indispensible utility item without having an appropriate substitutes. Besides, the housing industry has relatively multiple effects on industries menufacturing common duration goods for the house. Many of these industries are labour (r) intensive. As a complex product housing absorbs many finished products of other industries. It needs materials much as bricks, tiles, wood, cement, paints and solution. Thus, this complex commodity by using amany finished products of other industries and creating demand for many economic activities provides forward and backward linkages affects an other sectors of the economy.

In view of housing's immense utility, it can be said that its potentiality in promoting human welfare and economic growth is so great and that nothing can be little it's importance. The improvement and outstanding role played by shelter in human life could be understood clearly from a precise

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4. Varghese, K.V., Housing Problem in India : Economic and Social Aspects, Eureka Publications, New Delhi, p.8.

definition given by a group of experts of United Nations[5]. According to them, "house is a physical framework in which man's human, social, economic and cultural resumes are released, enriched and integrated for the orderly social and economic development of a country". Therefore, shelter is pre-requisite or basic right and necessity for every human beings in order to attain a better standard of living.

It is a universal experience that the whole world is confronted with the problem of houslessness. The problem of houselessness is as old as civilisation. However, it has no time posed a greater threat and challenge to the world than today. Those who cannot at all afford a house or those who can barely afford but have not been able to do so owing to various reasons, may be described as houseless. Houselessness is a common phenomenon not only in poor and developing countries but also in affluence and advanced countries of Europe and America. As per a recent estimate of the United Nations[6] (HABITAT) one fifth of the world's population or more than one billion human beings do not have adequate conditions. More than one hundred million people are absolutely houseless and destitutes dwelling on the streets, pavements, underbridges and doorways. It is

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5. United Nations, Report of the Ad Hoc Group of Experts on Housing and Urban Development, United Nations, New York, 1976, p.1.

6. United Nations. Building for the Homeless, United Nations, New York, 1987, pp. 3-4.

estimated that one-third of the population of developing countries are absolutely houseless. This implies that houselessness is grave and distressing in the developing countries. In order to draw the attention of the world to this problem of houselessness of millions particularly in the developing countries, United SNations declared 1987 as THE INTERNATIONAL YEAR OF SHELTER FOR HOMELESS and made an appeal to all governmental organizations as well as non-governmental organizations to make a special and concerted efforts helping each other to provide shelter the very basic need of every human being.

The importance of housing has always been recognised in India from time immemorial. The historical facts reveal that India had a glorious part with regard to housing. It is worth mentioning that about five thousand years ago, Indus valley people enjoyed commendable housing standard around western part of India. This fact has been highly acknowledged by Sir John Marchall[7]. According to him, "there is nothing that we know of in pre-historic Egypt or Mosepotania or anywhere also in Western Asia to compare with the well-knit-baths and commodians houses of the citizens of Mohanjadaro. In these cities of West Asia, much money and thought were lavished on the building of

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7. Government of India, Housing in India, Ministry of Information and Broadcasting, New Delhi, July 1954, p.3.

magnificient temples for the Gods and on the palaces and tombs of kings, but the rest of the people had to content themselves with insiginificant dwellings of mud. In the Indian Valley, the picture is reverse and the finest structures are those created for the convenience of citizens". Davis[8] has reflected the same view by observing that "the Indus valley people had massive public buildings and comfortable dwellings houses built mostly of brick; well planned streets and open spaces, good sanitation and an elaborate draining system". All these demonstrate that housing was given due importance and attention in the olden days.

During the British period, housing sceneric, however, changed in the country. Housing problem in various forms emerged particularly in major cities like Bombay, Calcutta, Delhi and Madras. The first known reference regarding the existence of housing problem was made by Lord Lyde[9] in a letter to the Secretary of the State which remarked that "housing problem is really a nightmare". In addition, a number of committees[10] viz the Industrial Commission (1909),

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8. Davis, R., An Outline History of the World, Oxford University Press, London, 1969, p.78.

9. Jayaram, N., and Sandhu, R.S., Housing inI India : Problems, policy and Prospectives, B.R. Publishing Corporation, Delhi, 1988, p.

10. Ibid. p.

the Assam Labour Enquiry Committee (1920) the Royal Commission on Labour (1931), the Bombay Strike Enquiry Committee (1929), the Rent Enquiry Committee (1939), the Cawnpore Labour Enquiry Committee (1939), the Bihar Labour Enquiry Committee (1940), the Labour Investigation Committee (1946), have reported the existing of housing problem during their respective times. This indicates that though housing problem did not exist at the aggregate level it did so in some industrial areas even in the early part of this century. Besides this, housing problem was also reported in other places apart from industrial areas.

According to Jayaram and Sandhu[11], "there was a serere shortage of housing in the country during the World War II on account of following circumstances. There was a great scarcity for labourers in the urban areas who were put to work in factories for producing ammunition and other war supplies. This acted as pull-factor and encouraged rural-urban migration". As a result, a large number of workers migrated to urban areas from rural pockets in order to make more earning but were not properly trained in manufacturing arms and ammunition. At the same time, there was also a scarcity for basic housing materials which paralysed the housing construction throughout the country. When the

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11. Ibid., p.

World War II came to an end, most of the migrants did not return to their villages, instead they continued to stay in urban areas and thus housing problem began to grow.

At the time of independence, the housing problem was further aggrevated by the influx of displaced persons. As per in official record[12] about 75 lakhs of displaced persons came to India from Pakistan in the wake of the partition of the country. Gradually industries were also coming up in different regions. Along with these factors, population was growing and outstripping all the efforts of housing the masses. Thus, World War II, industrial growth and population growth were major factors which contributed to the growth of housing problem during this century.

India is the second most populous and the largest democratic country in the world. It is one of the major developing countries where houselessness is an issue of serious concern. That is to say, shelter is still a distant reality for a large number of people in this country. The census of India[13] defines houselsss person as "a person who does not have his normal residence in any particular

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12. Government of India, The First Five-Year Plan Report, Planning Commission, Govt. of India, New Delhi, 1952, p.595.

13. Census of India, Series-I Part II-A(i) General Population Tables, Census of India, (1981), p.

house. Nomad s, wandering trives, pavement dwellers and other persons are included among the category of persons". On the other hand, houseless household is defined by census of India[14] as "such households comprises of persons who do not have any fixed place of residence but go on moving from place to place, camp at night on their own choosing or in open places". According to Census of India[15], there were 2,342 thousand houseless persons and 629 thousand houseless households spreading all over India in 1981.

Houseless population has almost doubled during the last two decades i.e. 1961-81. According to the Census of 1961[16], there were 1265 thousand houseless persons in the country. The census of India in 1971 enumerated 1985 thousand persons as houseless. However, in 1981 it was 2342 thousands. This obviously means that 1077 thousands were added to the total houseless population during the course of two decades. It has to be noticed carefully that there is a vast difference in the growth pattern of houseless population between the decades of 1971-71 and 1971-81. The contribution of 1961-71 to the total houseless population was quite high (720 thousands) but the contribution of 1971-81 decade to the total houseless population was relatively low (357 thousands). In otherwords,

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14. Ibid. p.
15. Ibid. p.
16. Census of India, Series-I, Part-II-A (i) General Population Tables, Census of India,

houseless population grow at an annual growth rate of 4.59 per cent during 1961-71 and during 1971-81 it had grown at annual growth rate of 1.67 per cent. This clearly indicates that houseless situation is worse in India.

It is a matter of serious concern that despite so many years of independence that a section of the population still remains houseless in India. If we were to include the population that is living in crowded and dilapidated conditions, housing situation becomes worse in India. But in the present study, we examine only the the houseless population in the country. We first examine the trend of houselessness in the country and then analyse the factors that determine the houselessness. The latter part attempts to explore demographic, social and economic factors which determine houselessness. Four states have been selected for this study. These states are Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh. The reasons for selecting these states for analysis are explained in chapter III. A district level statistical analysis has been conducted for the above states for both 1971 and 1981 and the decade of 1971-81. The main objectives of the present work are given here.

Objectives of the Study:

This study aims at accomplishing the following :-

(i) To study and understand the problem of houselessness in India with particular reference to 1971 and 1981.

(ii) To explore demographic, social and economic factors determining houselessness at district level in four major states of India namely, Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh in 1971, 1981 and during the decade of 1971-81.

Hypotheses of the Study:

The following hypotheses have been framed and put forward for the examination in the present work:

(i) Higher the urbanization, higher will be the houselessness.

(ii) Higher the illiteracy, higher will be the houselessness.

(iii) Higher the population of scheduled scaste and scheduled tribes, higher will be the houselessness.

(iv) Higher the workforce in non-household industries of manufacturing, processing, servicing, repairs, higher will be the houselessness.

(v) Higher the per capita income/per capita net output of commodity producing sectors, higher will be the houselessness.

Plan of Study :

The present study is organized in the following manner :

The first Chapter contains introduction, objectives, hypotheses and the plan of study.

Chapter II provides a brief review of relevant literature available on houselessness.

Chapter III presents India's houselessness sceneric through a comprehensive state level analysis for 14 major states with a reference period of 1971 and 1981.

In Chapter IV, the results of district level are analysis based on zero order correlation and linear multiple regression. The principle aim of chapter is to explore factors determining houselessness in the districts of Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh for the periods, 1971, 1981 and 1971-81.

The final Chapter contains a summary of the main findings and conclusion.

CHAPTER - II

REVIEW OF LITERATURE

This chapter deals with the review of literature of the problem of houselessness. The review is confined to findings of relevant studies conducted on the problem as well the views and opinions of subject matter specialists, institutions and organizations concerned.

Houselessness is a complex phenomenon. An attempt to make enquiry about the reasons behind it is the most difficult task of an analysis. The various studies that have been conducted in recent years further strengthen the realization that factors associated with it are not easy to trace. It is also difficult to generalize findings so as to make the same applicable in different situations, because the factors or causes controlling houselessness and the significance of them may very from place to place.

In general, houseless is the result of various demographic, social, economic, political and other physical, technological and managerial factors. However, the determinants of houselessness for the convenince of better understanding may be classified into three broad categories viz. demographic determinants, social determinants, and economic determinants.

Demographic Determinants :

Demographic factors play a predominant role in creating and promoting the problem of houselessness in a broader context. In

general there are three important demographic factors which may be expected to have a considerable impact on houselessness. The factors are rapid population growth, rapid urbanization and rural-urban migration. The existing relationship between the growth of houselessness and aforesaid variables or factors have been adequately acknowledged through various studies undertaken and views and opinions of subject matter specialists and organizations. It is important to mention here on account of inadequate literature available in this regard, researcher may be unable to provide a large number of case studies.

Rapid population growth is considered to be the most important demographic factor having a close relationship with the problem of shelter. Charles Abrams[1] has acknowledged the role of rapid population growth in causing househessness by observing that "one of the major reasons for the present problem of shelter is the rapid growth of world population which has doubled in the last 100 years."

Similarly, Marcia N. Koth et al.[2] in there series of studies on housing in various countries of Latin America observed that rapid population growth increases the number of dependants which inturn keeps personal income level low and national budgets

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1. Charles Abrams, Man's Struggle for Shelter in Modern World, Vikils Feffer & Simons, Bombay, 1966, p.28.

2. Marcia N. Koth et al., Housing in Latin America, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1965, pp. 8-9.

available for basic needs such as food, cloth and shelter, also low, but at the same time physical needs for housing increases through population increases.

Jayaram N. and Sandhu, R.S.[3] on housing remark that population explosion and over-urbanization contribute to the immensity and coplexity of shelter problems. They also added that as the population grows housing supply also should floow suit, if not people have to go without shelter or adequate shelter.

In another studies Jayaram N. and Sandhu R.S.[4] observed that in India urbanization is caused predominantely by push factors like agricultural, stagnaning and the resultant poverty of rural areas. With the partion of the country, landless and penniless refugies flooded urban areas. These factors coupled with population explosion led to housing an endemic problem in India.

The grave consequence of rapid urban population growth on housing has alsobeen pointed out by a group of studies

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3. Jayaram N and Sandhu R.S., Housing in India : Problem, Policy and Perspectives, B.R. Publishing Company, Delhi, 1988, pp. 25-35.

4. Ibid.p.30.

conducted by the International Development Community[5] which included UNESCO, U.S. Agency for International Development, the Ford Foundation, the World Bank, The International Labour Office, The United Nations Centre for Housing, Building and Planning for the 1976 HABITAT Conference. All these studies observed that the rapid increase in urban population have put extreme physical pressures on land, housing, transportation, water supply, severage and other infrastructural facilities.

A Report of the Group of Experts of United Nations[6] on housing and urban development has reflected the same view by observing that rapid increase in population has placed a lot of constraints on the resources for food, employment and housing. It further added that housing problem has been aggrevated due to increase in the population of urban areas. The rising urban population especially in the low-income groups, the increasing high cost of construction materials and spiraling land prices have created a sizeable gap between housing demand and supplying. The magnitude of the gap is reflected in many slums, squatter settlements, over-crowding housing units and obsolescent units requiring replacement in cities.

Michael Dewit and Hans Schenk[7] also observed in the same line when they studied Indian housing probelmm that

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5. Harold Lubell, Third World Urbanization and International Assistance in Urban Studies, 1984, p.1.

6. United States, Report of the Ad hoc Group of Experts on Housing and Urban development, United Nations, New York, p. 1.

7. Michael Dewit and Hans Schenk, Shelter for the Poors in India, Manohar Publication, New Delhi, 1987, p.27.

"since independence urban population has assumed an alarming proportion owing to migration to urban centres and national growth of population. They further observe that urban growth of population have resulted in high degree of over crowding, insanitation, in adequate water supply and expensive proliferation of squalid and screamped hutmants in metropolitian cities, this led to a great deal of illegialo occupation and squatting on municipal garbage dumps, on any vacant areas or impoverished and miserably shelters on public pavements.

Similarly, Meera Bapat[8] in her studies on slums and pavement dwelling in Bombay observed that the slums and pavement dwelling are the consequence of rapid urban growth due to industrialization in India.

All these studies clearly and evidently reveal that the rapid population growth and rapid growth of urban population are playing a vital role in causing housing problems.

Social Determinants :

Social factors seem to be play an important role in causing the situation of houselessness for the people. A number of factors are believed to be responsible for the people to become homeless in a country. Several studies undertaken in the last two decades or so have exploid some key social factors which are found frequently responsible for houselessness.

8. Meera Bapat, Hut and City Planning, in Economic and Political Weekly, March 12, 1983, p. 399.

Among the various social factors, family disputs or breakup of family or family disorganisation is said to be playing a crucial role in generating houselessness. A study conducted on houseless in England by the Department of Envorn-ment[9], Government of Great Britain, explored that more than half (52 per cent) of the total homeless covered under the study were forced to become homeless as a result of conflict or dispute in their family.

Galnstonbury[10] in his study conducted in some areas of South Wales and West of England found that again family dispute has a main factor for these people to end up with homeless. In his study, he also observed that the personal people are partially responsible for them to become homeless, although he did not explain what he ment by personal problem.

Similarly, Richard B. Freeman and Brian Halls[11] in their study remarked that the breakup fof the family was mainly responsible for houselessness. According to them more than 50 per cent of the total families who were houseless in the study had lost their residente because of family conflict, as they had doubled up with friends or relatives. The study

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9. Gill Burke, Housing and Social Justice : The Role of Policy in British Housing, Longman, London & New York, 1981, p.69.
10. Glastonebury, A Study of Homeless Families in South- Wales and the West of England, Allen & Onwin, London, 1971,p.57
11. Richard B. Freeman and Brian Halls, Permanent Homeless in America. National Bureau of Economic Research, Cambridge September 1986, p.15.

indicates that where families are well-knit and intergrated the likelihood of a member of the family becoming houseless is reduced.

It has also been observed that houselessness and criminal activity of an individual are related in many studies. Christal & Writic[12] found that in New York, persons who have spent nearly three-fourth of their life in Jail were homeless. According to them criminals activities is the result as well as the cause of houselessness.

The problem of houselessness has also been linked with the psychological factors of the individual. The factors like mental disorder, mental aberration, addiction to alcohol and drugs, escapces from mental hospitals and prisons, the discharges from the psychiatric hospitals and prison confinement seem to aggrevate the problem of houselessness. A group of experts[13] in their studies have corraborated the fact that between 25 and 50 per cent of the houseless were somewhere or other mentally ill in America.

A survey conducted by the U.S. Housing and Urban Development[14] on shelter further confirms 22 per cent of the samples of mentally disorders were found to be homeless.

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12. Richard A, Freeman and Brian Halls, Permanent Homeless in America, in Population Research and Policy Review, Vol. 6, No.2, 1987, p.12.

13. Stevans Redburn F, and Terry F. Buss, Responding to America's Homeless, Peaeger, New York, 1986, p.32.

14. U.S. Department of Housing and Urban Development, A Report to the Secretary on the Homeless and Emergency Shelters, May 1984, pp. 8-21.

A study conducted by Wilkinsons A. et al.[15], evidently illustrates that the individuals suffering from mental illness individuals who have been discharged from psychiatric hospitals or prisons, and the individuals who were alcoholies and drug-addicts represented the category of single homeless.

A wide variety of studies conducted by US department of Housing and Urban Development[16] observed that "approximately one in three houseless persons suffers from mental illness. In terms of the comparison group a rough estimate is that less than 2 per cent US Population is mentally ill in U.S.A., which implies that mentally are 15 times more likely to become homeless than someoneless."

In the same manner the study conducted by Philadelphia[17] Task Force[17] (comprising members from city-wide federations of protestant, catholic and Jurish organisation, State-welfare, department, the Red Cross, the Salvation Army, the United way several hospitals affiliated mental helath centres) observed that 25 per cent of the total homeless of the city of Philadelphia were chronically mentally ill and another 15 per cent were acute or chronic alcoholics.

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15. Wilkinsons A, et al., "The Problem of the Single Homeless", National Advisory Committee of the Young Conservative, London, 1973, p.38.
16. Op.Cit., ref.10, p.57.
17. Paul Sagar and Marion Reitz, The Philadelphia Task Force on Homelessness, Butter Worth & Co. Ltd., Philadelphia, USA, 1987, p.74.

All these studies reveal that mental illness is one of the major factors which is a reason for houselessness.

There seems to be a connection between the illiteracy of the population and houselessness. The possibility of not having a shelter appears to be directly proportional to the low literacy of the population. Several studies have talked about the existing relationship between these two different variables.

A study conducted on homeless by Rosie and Majid Ashan and Shahney Hug Hussain[18] in Bangladesh found out that out of 25,000 Biharies homeless in Khalishpur areas, 76 per cent were illiterates. Similarly, a case study conducted by S Garg[19] in Bhopal explored that majority of the squatters constituting 75 per cent of the total squatters were illiterates.

The socio-economic study conducted by Patel[20] in Ahamadabad on pavement dwellers reflected the same view by observing that more than half of (53.54 per cent) the total pavement dwellers were illiterates.

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18. HABITAT, Shelter for Homeless : Policy, Constrains and Strategy, HABITAT, Calcutta, 1987, p. 28.

19. Garg, S.C., Shelter for Homeless Urban Poor: An Alternative Strategy Approach: A Case Study of Bhopal, New Delhi, 1981, p.31.

20. Patel, B.D., Housing : Socio-Economic Issues of Slums Dwellers in Metropolitan Ahemadabad, National Building Organisation, New Delhi, 1977, p.12.

Likewise in an another study conducted by Richard B. Freeman & Brian Hall[21] found out that the homeless were a far less educated than the population as a whole with a half having failed to graduate from high school.in U.S.A.

All these studies, very clearly demonstrate that high illiteracy is very much prevalent among houselessn people in many cases. This also implies that illiteracy and low literacy levels directly or indirectly were responsible for houselessness. Therefore, it could be consider as an important cause of houselessness.

Economic Determinants

Economic factors also appear to be responsible for houselessness. Among the various economic factors, unemployment low work participation rate, low income generating employment, poor income and poverty are often linked with the growth of houselessness. A wide variety of studies through their observations have acknowledged that existinge of relationship between growth of houselessness and the above mentioned factors.

Stevens Redburn and Terry F. Buss[22] in their extensive studies on homeless found that unemployment was very acute among homeless. They further observed in their analysis that unemployment was the first and foremost factor causing homeless in American

21. Op.Cit., ref.11, p.15.

22. Ibid. p.16.

Similarly, US Department of Housing and Urban Development[23] in its various local studies reported widesparead unemployment among houseless and attributed the factor to the growth of homeless in America. In its studies it was found out that 78 per cent of the total houseless were umemployed and only 22 per cent of the total homeless were engaged in some kind of low income generating jobs. This clearly demonstrates that unemployment was certainly having a stronghold on the growth of homeless in America.

In another survey conducted by the office of the population census and survey[24] on homeless, it was found out that a very low proportion were engaged in work and others were not so. According to this study only 43 per cent of the total male homeless and 40 per cent of the total female homeless were in employment. This study showed that more than half of the total homeless in U.S.A. of male and female were out of workforce. From this observation, one may assumed that work participation rate of the homeless was considerably very low and it was acting as a factor for these people to end up with homeless.

Tasleem Shaker[25] in his case study of squatters in Dhaka of Bangladesh found that a overwhelming majority (88 per cent)

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23. Ibid. p.17.
24. Erlam and Brown, Catering for Single People : A Report by the Low pay unit and CHAR on Homeless workers in the catering trade, London, 1977.p.38.
25. Tasleem Shamer, Implication for Policy formulation towards Sheltering the Homeless : A Case Study of Squatters in Dhaka of Bangladesh, Habitat Intl. Great Britian, 1988, pp. 53.66.

of the total squatters were working in the informal sector. More than half of these persons were involved in ma nual transport and ma nual labour and most of these day labourers engaged in poor income generating work like hawking, waste collecting for sale and begging. This observation reveals that since the majority of the homeless were engaged in low income generating employment, they were able to meet why their day to day expansion and therefore, they could not afford to have shelter, which involves a huge amount.

In parallel to the above observations, a study conducted on homeless in Bangaladesh by Rasie Majid Ashan and Shahnaz Haq Hassain[26] observed that relationship homelessnees and low income generating employment is common phenomenon in any ccountry. According to them, out of the total houseless 15 per cent were unemployed. A large portion of houseless were in causal jobs, of which 51 per cent were day labourers and 11 per cent were Rickshaw pullers, skilled labourers engaged in temporarly employment in different factories and only 2 per cent of the total houseless were in permanent employment.

Erlam and Brown[27] in their studies on houseless workers in the catering trade observed that most of the homeless were middle age and elderly. Most of them were at causal jobsof which many were catering trade and the wages recived was far

26. Op.Cit., ref.18, p.31.
27. Op.Cit., Ref.24, p.37.

below the legal minimum. As most of the homeless were middle age and old, they could engage themselves only in causal jobs and low income jobs.

The case of study of Vijay Jaganathan and Animesh Holder[28] conducted in calcutta Metropolitan city on pavement dwellers revealed similar findings. In their study majority of the total pavement dwellers were in informal sector with the average weekly income ranging between Rs. 80 and Rs. 110 on the daily wage basis. About 40 per cent of them were in transport sector employed asporters, head-load-earners and other half were almost equally divided between hand cart puller and rickshaw pullers, and other were working as shopkeepers vegetable venders, hawkers, sweepers, painters, cobblers etc. This study explains that most of the pavement dwellers were engaged in informal sector earning very low income. Therefore, it is clear that due to their very poor economic donditions, they were reduced to live a shelterless life.

A case study conducted by Vijay Jaganathan and Animesh Holder[29] on occupational pattern and rural-urban mobility among pavement dwellers in Calcutta Metropolitan City found out that majority of the total pavement dwellers were in informal sector. They earned a livelihood through various employment comprising ragpicking, paper picketing, begging, coal collecting, cowdung making, and domestic workers. An important observation of this

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28. Vijay Jagnathan and Animesh Holder, Income Housing Linkages: A Case Study of Pavement Dwellers in Calcutta, in Economic and Political Weekly, June 4, 1988,
29. Vijay Jagnathan and Animesh Holder, Occupation, Mobility, and Rural-Urban Linkages, in Economic and Political Weekly, Dec. 3,1988,p.2602-2604.

study was that a sizable individuals and families of pavement dwellers were earning per capita monlty income below Rs. 120 per month. It was also found out that in thisstudy most of the pavement dwellers earned very poor incomes for example, hand cart pullers Rs. 98, per week, Rikshaw pullers Rs. 79 per week and Porters Rs. 96 per week, Daily causal labourers Rs. 84 per week, domestic workers Rs. 84, Rag pickers Rs. 57 and baggers earned Rs. 30 per week. Most of the occupations reflect the lack of earning opportunities and high-light the socially and economically degrading aspect of urban poverty. It is very clear from this study that low income imployment and low per capita income both were bottlenecks for houseless for meeting the need of shelter.

An another study conducted Purnima Parekh[30] on slums and pavements settlements in Bombay found out that 56 per cent of the pavement dwelling families had only one working member, 20 per cent of total pavement dwellers were labourers of various casual and temporary work, 23 per cent workers were in ragpicking and hawking. The study also estimated 75 per cent of the pavement dwellers families of income of less than Rs. 400 per month.

As mentioned above in the case of other studies conducted by Garg[31] also explain the low level of income as a major cause for houslessness. In this study he found out that majority

30. Purnima Parekh, Slum Dwellers and Constitutions, in Economic and Political Weekly, Aug. 4, 1982, pp.1308-1310.
31. Garg, Op.Cit. ref. 19, p.31.

(75 per cent) of the total houseless people, earned their income between Rs. 150 and Rs. 350 per month.

Richard B. Freeman and Brian Hall[32] in their study of permanent homeless in America observe houseless was endemic among the same group of people for whom urban poverty, unemployment, living-in welfare and crime were endemic. The study also observed that houselessness was not a problem to be studied by itself but rather was a part and partial of the overall social problems of low incomes, income inequality and social pathology in U.S. This study obviously indicates that urban poverty, unemployment, living-on-welfare were major contributors for the growth of homeless in America.

A survey conducted by the US Bureau of Census[33] came out with an observation that the increase in the number of persons with exceptionally low income had contributed significantly to the growth of houseless in the particular period. According to this survey, in 1979, 11.8 per cent of man, 18 and over in the current population survey, had incomes below $ 3000 or were without incomes. In 1983, 16.2 per cent had incomes that were below $ 4000 (approximately $ 3000 in 1979 prices), or were without incomes. They also argued that as persons with low income are especiallylikely to endup homeless, this increase certainly contributed to the 1979-89 growth of homeless. It is clear from the above quoted example that the

32. Op.Cit. ref.12, p.12.
33. Op.Cit. ref.14, p.15.

the concordance of increased poverty and income inequality best explains that low income was one of the the major cause of homelessness in America.

There seems to be early between shelter and high price of land Bhattacharya[34] in his studies argued that one of the reasonsfor the problem of shelter is the high price of land.

The review of literature which has been conducted on houselessness in this chapter clearly demonstrate that houselessness is the result of a number of factors which are of demographic, social, psychological, economical and other. As literature reveals, the factors which have been freqently responsible for the houselessness in most of the studies of urbanization, family disputes, family break-up or family disorganization, criminal activity, mental illness, addition to alcohol and drugs, employment, casual and temporary employment, poor income generating employment, low income of the family and individuals, high price of land etc. All these factors can not be generalized because their effect and significance differ from place to place. Therefore, takinginto consideration, the relevanteand appliciability, to the Indian social-economic condition and the availability of variables, a set of variables have been selected to understand the houselessness in India. The selected variables are, urban population, illiterate population, SC/ST population

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34. Bhattacharya, "Shelter for the Homeless in Indian Context: Problem, Policy and Action programmes"in Shelter for the Homeless : Policy, Constrains and Strategy, HABTTAT, Calcutta, 1987, p.41.

main workers engaged in non-household industries of manufacturing, processing, services & repairs and per capita income. The details about the scope of these variables are being discussed below for better understanding:

The variable, urban population has been selected for the present work as a demographic indicator to explain houselessness in India.xx as already the existing relationship between urban population and houselessness has been high lighted in the literature, the important reason for selecting this variables to explain the houselessness in India could be that India's one fourth of the total population lives in urban areas and the urban population has been growing a little faster in recent years. The process of industrialisation is on fast move during the last one decade. [illegible], Assuming that urban population may contribute or controlling the houselessness in India, urban population has been selected to explain the houselessness.

SC & ST population forms nearly one fourth of the total population of the country. The people SC & ST are socially and economically backward and their living conditions is relatively poor. Since independence a large number of socio-economic programmes have been introduced to up lift these people. But still a large sections of SC/ST population are believed to be living below poverty line, some even

depriving the basic needs such food, shelter and employment etc. Taking into consideration their socio-economic status SC/ST population has been selected for this present work has as a social indicator to explain houselessness in India. Though none of the reviewed studies distussed about the relevance of SC/ST population as factor for houselessness in India, an attempt is being made for the first time through this work to find out whether there is any link between the growth of houseless population and SC/ST population.

Illiterate population has also been selected as a social indicator for the present study to explain the houselessness in India. As already a large number of studies reviewed in this chapter have high lited the relationship between illiteracy and houselessness, it relevante and applicability is failed by the researchers. The important reason for choosing this particular variable could be that illiteracy is predominantly very high in India. Infact about 2/3 of the total population of the country are still illiterate. Therefore, an attempt is being made through this study for the sfirst time to study the relationship between illiteracy and houseless population in India. Hence, illiterate population has been choosen.

The main workers engaged in non-household industries of manufacturing, processing, services & repairs has been selected as an economic indicator to explain the houselessness in India. The literature has high lighted the major economic factors such

as unemployment, low income generating employment, poor income, and poverty was responsible for houselessness. But due to the constraint involved in the availability of these mentioned variables in India, An alteranative was failed by the researchers to fill the gap. Taking into the consideration the relevance and the availability of data, main workers engaged in non-household industries of manufacturing, processing, services & repairs has been selected to explain the houselessness in India. It should be mentioned that for the first time an attempt is being made to study the relationship between these two variables through this work.

Per capita income and per capita net output from the commodity producing sectors or two variables which have been selected as economic indicators to explain the houselessness in India. The relationship between poor income and houselessness has alaredy been acknowledged by a number of studies reviewed ir the literature. However, the availability of data for per capita income for all the states undertaken in this study, was a serious constrain or limitation. In other words, data for per capita income was available only for the state of Kerala. Therefore, per capita income has been selected as economic variable for the state of Kerala. Itwas also a serious limitation for the present study that the data for Net Demostic Product was not available for all the four states undertaken in this present study. Since researcher wanted to have an alternative variable to replace Net Demostric Product, the per capita Net Output from commodity

producing sectors was consider for other three states. However, the data for this particular variable was available only for the state of Uttar Pradesh. Therefore, this particular variable has been considered as an economic indicator for the state of Uttar Pradesh to explain houselessness.

Thus, taking into consideration the findings of the studies reviewed in the literature, the relevance and the availability of data, the variables such as urban population illiterate, population, SC & ST population, main workers engaged in non-household industries of manufacturing, processing, services & repairs, per capita income and per capita net output from commodity producing, sectors, have been selected as socio-economic and demographic variables to explain houselessness in the states of Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh for two census years i.e. 1971 and 1981. The data base for the selected variables and the methodology used for analysis are given in detail here:

Data Base :

The variables, both dependent and independent that are used in this study were taken from secondary sources. The district-wise data for dependent variables i.e. Houseless rate, houselessness ratio and annual growth rate of houseless population (all calculated) have been drawn from census of India, series-I, part-II-A (i), General population Tables for 1971 & 1981.

As far as independent variables are concerned, data for demographic indicator i.e urban population have been obtained from

Census of India series-I part-II-A (i) General population Tables for 1971 & 1981. The data for social indicators i.e. illiterate population and SC/ST population have been taken from Census of India, Part-II(i) Social and Cultural tables and part VA, Special tables on Scheduled Castes and Scheduled Tribes for Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh for 1971 and 1981. The data regarding economic indicators i.e. main workers engaged in non-household industries of manufacturing, processing, services & repairs have been taken from Census of India series-II-part-III-A & B (i) General Economic tables for Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh for 1971 and 1981. For indicator i.e. per capita income /per capita net out from commodity producing sectors have been computed from Statistics for Planning (1983) published by Department of Economics and Statistics, Govt. of Kerala & Statistical Hand Book (1987) published by Directorate of Economics and Statistics, Government of Uttar Pradesh respectively.

Methodology Used for Analysis

The hypotheses of this study have been examined with the help of some statistical techniques. First, in order to findout the inter-relationship between dependent and independent variables, zero-order correlation coefficient is used. This technique helps us to understand not only the relationship between the dependent and independent, but also the type of relationship i.e positive or negative. In order to estimate or predict the change in the dependent variable, for a unit of change in the independent variables, regression technique is used. Since there are more

than one independent variables and in order to find out the influence of all them variables in the dependent variables linear multiple regression technique is used.

CHAPTER - III

India's Houselessness Scen rio in 1971 and 1981

The problem of houselessness is a complex one in India. Inorder to understand its nature and magnitude an indepth analysis is imperative. Hence this chapter is dedicated to a brief study on the basis of data collected by the Census of India for the two Census years i.e., 1971 and 1981. This study covers 14 major states of India. By a major state we mean here, that the state having its total population of 10 million and more according to 1981 Census. These states are: Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan Tamil Nadu, Uttar Pradesh and West Bengal. First let us examine the houselessness scenerio at the national level. The growth of houseless population for whole of India in terms of number of houseless persons' in thousand, houselessness rate, houselessness ratio and annual growth rate are presented in Table 1.0.

Houseless Population : 1961-81

According to the table there were 1265 thousands houseless persons in 1961 in the country. In the following Census of 1971, 1985 thousands houseless persons were identified forming about 03.6% of the total population of the country. It is clear from the above figure that the houseless population has growin rapidly during 1961-71. In other words 720 thousands persons were added to the total houseless population in that decade. In 1981 the total houseless population enumerated was 2342 thousands accounting for 03.5% of the total population of the country. This implies that houseless

houseless population has not grown during 1971-81 so rapidly as compared to 1961-71. In fact houseless population has increased during this decade to the tune of 357 thousands against 720 thousands in 1961-71.

Houselessness Rate

Houselessness rate is a simple method which gives a general understanding about houseless situation in a country. It is usually expressed in terms of number of houseless persons per thousand general population. In the measurement of houselessness rate total population is used as denominator.

As table shows there were 28.8 houseless persons for every thousand population in the country in 1961. In 1971, it rose to 3.62. However, houselessness rate came down to 3,52 in 1981. A noticeable observation in the given scenerio is that houselessness rate has shown an increasing as well as declining trend during the period of two decades, i.e., 1961-71 and 1971-81.

Houselessness Ratio

Houselessness ratio is another important method which explaines the general idea about the houseless households. In other words it explains the relationship between the houseless households and general households. It is generally expressed in terms of number of houseless households per thousand households (which includes houseless households also). In the calculation of houselessness ratio total houseless households is used as denominator.

As table shows there were about 56.25 houseless households per thousand households in 1971. It declined to 56.96 in 1981. This implies that there was a fall in the houselessness ratio to the tune of 3.69 during the decade of 1971-81.

Growth Rate of Houseless Population

Growth pattern of houseless population for India as a whole reveals some interesting features. As the table shows during 1961-71 houseless population increased at the average annual growth rate of 4.59%. In the following decade of 1971-81 houseless population grew at an average annual growth rate of 1.67%. A significant feature of the given scenerio is that there is a wide gap between the growth rate recorded at two different decades of 1961-71 and 1971-81. In other words the growth rate recorded during 1971-81 is 2.74 times lower than the preceding one.

Houseless Population in Major States of India: 1971 and 1981

The State level picture of houseless population shows some interesting feature of houselessness for India as a whole. Therefore it is examined here. Table - 2.0 portrays the distribution and growth pattern of houseless population among the major states in India for Census years of 1971 and 1981.

The most conspicuous feature of the distribution of India's houseless population in 1971 as well as 1981 among the major states seems to be it's uneveneness. First let us

look at the picture of 1971 for major states in India. As table reveals, unevenness is observed in 1971 through the fact that out of total houseless population of 1985 thousands, 1316 thousands accounting 66.71% is confined mainly to four states namely, Maharashtra (24.42%), Madhya Pradesh(19.68%) Gujarat(12.64%), and Andhra Pradesh (9.97%). On the other hand 669 thousands forming 33.29% is spread over ten major states, 8 other states and 9 Union Territories. It should be noticed here that among these four states, the state of Maharashtra alone contributes to nearly one fourth of the total houseless population of the country and it has the distinction of being the largest houseless populous state. It is quite surprising to observe that Uttar Pradesh shares only 2.4% (47 thousands) of the nations total houseless population. Among the remaining major states, Rajasthan has 3.31% and Tamil Nadu has got 3.67%. The state of Kerala has an exceptional case shares only 0.75% in the total houseless population of the country. It should be mentioned here that Kerala is the least houseless populous state in India in 1971.

The state-level picture of 1981 is not much different from that of 1971. Just as in 1971 the unevenness is again seen in the distribution of houseless population of the country among the major states in 1981 (see Table No. 2.0). For example, out of India's houseless population of 2342 thousands, 1434 thousands constituting 61.17% is distributed among the same

group of four states namely, Maharashtra(23.15%), Madhya Pradesh(14.18%), Gujarat(13.24%), and Andhra Pradesh(10.70%). Here again among these four states, Maharashtra contributes onefourth (542 thousands) to the nation's houseless population. Meanwhile the state of Rajasthan shares 7.11%. Karnataka and West Bengal show their proportions as a little more than 5%. Uttar Pradesh shares only 4.63%. Among the remaining states except Kerala the average contribution to the aggregate of nation is between 2 and 5%. Once again the state of Kerala enjoys the special previlege by sharing a very low percent (0.21). It should be noted that Kerala's houseless population is the lowest in the country according to 1981 Census.

The Growth Rate of Houseless Population In Major States - 1971-81

Similar to the distribution pattern, the growth pattern of houseless population at state level reveals some interesting observations and features for India as a whole. In the growth pattern of houseless population among the states there seems to be a wide disparity. For instance, among the states Rajasthan has recorded a phenomenal growth rate of 9.84% which is nearly six times greater than that of nation. It is closely followed by Uttar Pradesh whose houseless population has increased at a significant average annual growth rate of 8.66%. It needs to be noticed that U.P's growth rate is five times the growth rate of India. Besides the states of Punjab and Bihar have registered their growth rates as 5.75% and 5.24% respectively. West Bengal and Kerala have registered a growth rate of little below of 3.5%. It

3.5%. It may be remembered here that Kerala being the lowest houseless populous state in the country, has recorded an average annual growth rate of 3.41% which is quite higher than the national average.

Maharashtra has recorded a very low growth rate of 1.1%. Despite the fact that it is the most houseless-populous state in the country. The states of Haryana and Gujarat have registered a lower growth rate of below 1%. In the state of Karnataka the lowest growth rate of 0.90% has been recorded. As an exceptional case, Madhya Pradesh and Tamil Nadu have registered negative growth rates which are contrary to the observations of other twelve major states in the country. Between these two states Tamil Nadu has registered a growth rate of -2.18%. Meanwhile Madhya Pradesh has registered an annual growth rate of -1.59%. It is essential to remember here that Madhya Pradesh being the most populous state next to Maharashtra, has recorded a negative growth rate which has led down the total houseless population of Madhya Pradesh to the tune of 58 thousands between 1971 and 1981. Thus, it is obvious from the above analysis that unevenness is one of the important and outstanding features in the distribution and growth pattern of houseless population at state level during 1971 and 1981.

Houselessness Rate and Houselessness Ratio in Major States: 1971&81

The houselessness rate and houselessness ratio are two important indicators which can be used as parameters

to assess the magnitude of the problem of houselessness in a country. Table - 3.0 illustrates the houselessness rate under houselessness ratio for the major states of India for Census year 1971-81. First, we shall examine the picture of 1971.

As table shows, there were 3.62% persons as houseless for every thousand population in India. Among the states, Maharashtra has registered the highest houselessness rate in 1971. There were 9.62 houseless persons per thousand population in that state which is, of course, 3.2 times higher than that of India. This indicates that houseless problem is of high magnitude in this state. The state of Maharashtra is very closely followed by Gujarat with houselessness rate of 9.4 and Madhya Pradesh with 9.38. In the state of Andhra Pradesh it is 4.55 which is slightly greater than that of India. Meanwhile 3.98 is recorded in two states namely Karnataka and Haryana. The states of Rajasthan, Punjab, Orissa and West Bengal have houselessness rates which varied between 2 and 3. Tamil Nadu in a very peculiar manner has recorded the houselessness rate of 1.77 which is quite lower to the houselessness rate of India. The state of Uttar Pradesh has the lowest houselessness rate (0.54) in the country. Similarly Kerala has also recorded a lower houselessness rate i.e., 0.70. Now we shall investigate the houselessness rate pattern for major states of 1981 Census.

In 1981, there was a noticeable change in the houselessness rate pattern of major states but not for the country

as a whole. As the table shows there were 3.52 houseless persons per thousand population in India. Among the states Gujarat was in the forefront with the houselessness rate of 9.10. The second and third positions are occupied by Maharashtra with 8.64 and Madhya Pradesh with 6.37. In the state of Andhra Pradesh there were 4.68 persons as houseless per thousand population. The states like Bihar, Kerala and Uttar Pradeshhave houselessness rates below 1. Among these three states, in Kerala there were just 0.85 persons as houseless per thousand population which is the lowest houselessness rate in the country in 1981.

Some noticeable changes have occurred in the houselessness rate for states and the country as a whole during 1971-81. First of all, India's houselessness rate has declined from 3.61 to 3.51. The difference of 0.10 in the houselessness rate of India during 1971-81 is certainly a change of low significance. Secondly, Rajasthan's houselessness rate increased by 2.31. The state of Kerala has been observed with an increase of 0.15 in the houselessness rate. The houselessness rate of Uttar Pradesh has risen by 0.43. Whereas Maharashtra's houselessness rate increased by 0.98. Some states have shown downward trend also during 1971 and 1981. As an instance Madhya Pradesh's houselessness rate has come down from 9.30 to 6.37 and Gujarat from 9.40 to 9.10. Now let us dwell into the nitty gritty of the houselessness ratio for major states of India during the period 1971&81.

As far as houselessness ratio is concerned in 1971 there were 56.25 houseless households per thousand households in the country. Among the states, the state of Maharashtra had the highest houselessness ratio of 14.82. It is very closely followed by Madhya Pradesh with 14.14 and Gujarat with 12.59. The states of Andhra Pradesh and West Bengal have recorded their houselessness ratio's as 5.81 and 5.71 respectively. Karnataka and Haryana were having the houselessness ratios of 7.29 and 6.11. In the state of Uttar Pradesh there were 0.88 houseless households per thousand households which is the lowest in the country. The state of Kerala also had a lower houselessness ratio, i.e., 1.81.

The houselessness ratios recorded for major states for 1981 are of not much difference compared to the scenerio of 1971. In India there were 52.55 houseless households per thousand households. This implies that houselessness ratio has declined by 3.70 during 1971-81. Among the states onceagain Maharashtra established its dominant position with the houselessness ratio of 13.05. It should be noticed here that houselessness ratio has decreased by 1.77 in the particular state. In the state of Madhya Pradesh there had been a reduction in houselessness ratio to the tune of 4.55. It is followed by Gujarat whose houselessness ratio has come down from 12.59 to 11.53. In the state of Rajasthan it has increased by 5.69. Andhra Pradesh's houselessness ratio has increased by below 1. Bihar and Uttar Pradesh have recorded a relatively lower houselessness ratios of 1.18 and 1.67 respectively.

Meanwhile the state of Kerala has registered the houselessness ratio of 2.28 which is the result of increase by 0.47.

Houseless Population : Male - Female

Among the various components of population in general sex composition holds a prime place in the population studies. In our present analysis it forms an important part as to find out, mainly to what extent the problem of houselessness has affected the two major components of population such as: male population and female population. Table - 4.0 exhibits the distribution of houseless population of India between male and female populations, growth rates and sex ratio for major states for Census years of 1971 and 1981.

According to the table in 1971, out of the total houseless population of 1985 thousands, 1193 thousands, constituting 60.12% were males and 791 thousands constituting 39.88% were females. Among the states Rajasthan had the highest the male population of 85.05%. The state of West Bengal occupies second position with 70.88%. It is followed by Kerala whole male houseless population formed 67.41%. Uttar Pradesh's male houseless population accounted for 67.09%. The states like Andhra Pradesh and Madhya Pradesh were having their shares of male population in of 55.92% and 55.42% in the total houseless population. It should be noted here that Madhya Pradesh being the second most populous state had the lowest percentage in the country.

As far as the position of female population is

concerned in 1971, among the states Madhya Pradesh established its supremacy with 44.58%. Andhra Pradesh occupy's the second position with 44.08%. It is closely followed by Tamil Nadu in which female houseless population formed 43.64%. In the state of Maharashtra it constituted about 41.65%, subsequently Kerala had 32.57% as female houseless population. The state of Rajasthan had the lowest female houseless population of 14.95% in the total houseless population.

In 1981 the total houseless population of the country comprised of 58.25% as males and 41.25% as females. Uttar Pradesh leads all the other states with 68.41% male population being houseless. Along with the Uttar Pradesh, West Bengal and Bihar were having a high proportion of male in their total houseless population the percentages being 66.38 and 68.04. In the state of Maharashtra male houseless population was 57.31%. Interestingly the state of Madhya Pradesh shows the lowest male houseless population in the country with 55.51% which is also lower to that of the average of India.

On the other hand Gujarat is in the first position in the hierarchy of states with houseless females the percentage being 44.42%. It is followed by Madhya Pradesh and Tamil Nadu. The state of Andhra Pradesh had the 43.89% as houseless female. The state of Maharashtra meanwhile was having 42.69%. In the case of Kerala it was 37.36%. It needs to be noticed that Kerala has already recorded a very low female population as houseless in 1981.

Growth Rate of Male-Female Houseless

For India as a whole as table 4.0 shows male houseless population has registered an annual growth rate of 1.46% during 1971-81. In other words 183 thousands males were added to the total male houseless in the country. Among the states, Uttar Pradesh recorded the highest growth rate of 8.74% in the male houseless population which is ofcourse 5.98 times higher when compared to national average. Rajasthan occupies the second place in the hierarchy with 5.82%. It is closely followed by Punjab with 5.68%. The states like Andhra Pradesh and Kerala have recorded considerably a medium growth rate of 2.51% and 2.63%. In the case of Haryana, Karnataka and Maharashtra the low growth rate of below 1% was observed in the male houseless population during 1971-81. Orissa for the first time has recorded its lowest growth rate, i.e., in male population with 0.71%. It needs to be noted carefully that the two states namely, Madhya Pradesh and Tamil Nadu contrast to other states' performance, have recorded negative growth rate s, the percentages being -1.59% and -2.43%.

In the case of female houseless population growth pattern overall in India 1.99% has been recorded. This growth rate has brought out an addition of 175 thousands in the female total houseless population during the decade of 1971-81. Among the states Rajasthan has recorded phenomenally a very high growth rate, i.e., 22.40% in the country against 5.82% in male population during the same decade. The

state of Rajasthan has recorded the highest growth rate in general houseless population (9.84 per cent) as well in rural houseless population (22.94 per cent) but in urban houseless population a negative growth has been recorded in a peculiar manner. Uttar Pradesh has recorded considerably a high growth rate in all three i.e. general houseless population (8.66 per cent), rural houseless population (5.85 per cent) and urban houselesso population (13.97 per cent). In the case of Maharshtra relatively a very low growth rate in general houseless population and rural houseless population but but very low negative growth rate (-0.68 per cent) in urban houseless population. The state of Andhra Pradesh, however, gives a quite different picture in which general houseless population and urban houseless population recorded a low growth rate but the urban houseless population recorded relatively a high growth rate. The state of Madhya Pradesh meanwhile has registered a high growth rate of 5.5 in urban houseless population but a negative growth rate in rural houseless population (-2.53 per cent) and general houseless population (-1.59). The state of Kerala being the least houseless populous one in the country has recorded reasonable growth rate in general houseless population, rural and urban. Among the fourteen major states, in the country as an expeptional case has recorded a negative growth in all three during 1971-81.

Now let us examine the growth pattern of houseless population for urban India during 1971-81. As table 5.0 clearly shows that for India as a whole urban houseless population has grown at an annual growth rate of 2.87 per cent. At the state level, the state of Uttar Pradesh, surprisingly has recorded the highest growth rate of 13.97 per cent in the urban houseless population during 1971-81. It should be kept in mind that the growth rate of urban houseless population of the state of U.P. is 4.86 times is greater in comparison to national average. Next to Uttar Pradesh, Punjab and Bihar occupy second and third positions with 12.61 per cent and 12.04 per cent respectively. In the state of Andhra Pradesh considerable annual growth rate was registered percentage being 6.75 per cent. as against 1.04 per cent in rural areas. The state of West Bengal menawhile as observe 2.75 per cent. The state of Gujrat as gregistered 0.23 per cent which is of course the lowest average annual growth rate by a state in the country, during 1971-81.

When we assess the growth pattern of houseless population for rural as well as urban area for the decade 197181 we observe some interesting features of houseless population of India. First of all, at national level the growth rate of rural houselessp population is lower compare to general houseless houseless population, and two times lower when compare to urban houseless population. At state level the

Rajasthan seems to have created a huge gap in the growth pattern among the states and in the nation as a whole. In other words Rajasthan's growth rate is 11.25 times is higher in comparison to that of country. On the other hand Rajasthan's growth rate in female houseless population is 23.09 times higher than the that Karnataka which recorded the lowest growth rate of 0.97 during this decade. Rajasthan is followed by Uttar Pradesh is recorded the growth rate of 5.57%. It is important to remember that Uttar Pradesh has recorded already a very high growth rate in the male houseless population during & 1971-81. It is interesting to observe that in Kerala the growth rate had been 7.17% in female houseless population against 2.63% in male houseless population. The state of Andhra Pradesh in the meantime has been observed with a growth rate of 2.28% in female houseless population against 2.51% in male houseless population. Maharashtra being the most houselss populous state in the country has recorded relatively a very low annual growth rate in female houseless population as did so in male population. The percentages being 0.94 and 1.34.AsUsually, Madhya Pradesh and Tamil Nadu have recorded negative growth rates in female population also.

Houseless Population : Sex Ratio :

Now let us examine the sex-ratio as such for whole India in the houseless population as well in the major states for two census years 1971 and 1981. First we shall look at the scenerio of 1971. As Table 4.0 shows there were 663 females houseless per 1000 male houseless in the country in 1971.

Amongthe states, Madhya Pradesh had 805 females houseless per thousand male houseless, which is quite higher than that of India. Interestingly, Andhra Pradesh has occupied the second position with 790. It is followed by Tamil Nadu (756) and Gujarat (748). The state of Maharashtra has recorded the sex ratio of 716. Uttar Pradesh and Kerala have recorded a low sex-ratio in 1971. Between these two states Kerala has recorded the lowest sex-ratio in the country being 400.

In 1981, there was some change in the whole sex-ratio pattern of the country. ?For India, as a whole there were 702 female houseless per thousand male houseless. Among the states, Madhya Pradesh was in a dominant position with 798. Next to Madhya Pradesh, Gujarat dominated with 796. The state of Andhra Pradesh occupied third position in the country with 773. Maharashtra had sex-ratio of 745. Meanwhile, Rajasthan registered 701. However, the state of Uttar Pradesh has registered the lowest sex-ratio in the houseless population with 459.

During 1971-81, some nOticeable changes occurred in the structure of sex-ratio of the nation as well in the major states. First of all, India's sex-ratio of houseless population increased from 663 to 702. Secondly, A drastic change took place in the sex-ratio of Rajasthan during 1971-81.This is acknowledged by the fact that sex-ratio increased from

163 in 1971 to 701 in 1981 . It has to be mentioned that the change which took place in the structure of the sex-ratio of houseless population of Rajasthan is really an incrediable one.

Houseless Population : Rural & Urban

Rural-urban composition is an important component of population in any country. Hence, it assumes an important consideration in our present analysis because these areas with regard to houselessness may provide some interesting features of their own which merit attention separately. Table 5.0 exhibits the distribution and growth pattern of houseless population of the country between rural and urban areas in major states of India for two census years of 1971 and 1981. Let us first investigate into the scenerio of the distribution pattern of houseless population in 1971.

According to the Table 5.0, in 1971, the India's total houseless population of 1985 thousands was distributed between rural areas and urban areas by 1519 thousands (76.56 per cent) and 465 thousands (23.48 per cent). This implies that in its distribution the Indian houseless population had overwhelmingly rural bias. Amongthe states,

As far as houseless rural population is concerned among the states in 1971 Madhya Pradesh had the highest percentage i.e. 92.05. It is followed by Haryana with 89.71 per cent, Orissa with 86.38 per cent and Gujrat with 83.20 per cent. In the Andhra Pradesh, it was 80.20 per cent.

Subsequently, Maharastra, the most houseless population state, had more than three-fourth of its total houseless population in rural areas. The state of Uttar Pradesh meanwhile had 72.34 per cent rural houseless folks. Kerala's proportion was 37.14 per cent. It should be noticed that Andhra Pradesh had 3.64 per cent higher rural houseless population than that of the country. The state like Rajasthan and West Bengal had the lower percentage of rural houseless population. They were 26.15 per cent (which is lowest in the country) and 37.66 per cent respectively.

Rural houseless structure of 1981 also reveals some interesting features. As table shows, out of 2342 thousands houseless persons in 1981, 1724 thousands accounting 73.61 per cent were living in rural India. As far as the states are concern Gujrat is in the dominant position with 86.08 per cent houseless population living in rural areas. It is closely followed by Madhya Pradesh (83.90 per cent), Maharashtra (83.59 per cent). The states like Orissa and Rajasthan have also had equally high percentage of rural houseless people with percentage being 81.35 per cent and 80.56 per cent. The states like Andhra Pradesh, Kerala and Uttar Pradesh had considerably a medium percentages of houseless rural population (60.98 percent, 60.45 per cent and 55.47 per cent). It is quite interesting to observe that West Bengal state had the lowest percentage of 36.42 living in its rural areas.

Now let us look at the position of houseless population of urban India. As Table 5.0 reveals in 1971, among the state Rajasthan had the highest percentage (70.55 per cent) living in urban areas. It is followed by West Bengal whose urban houseless people constituted (63.33 per cent). The third and fourth position were held by Kerala (42.85 per cent) and Tamil Nadu (38.88 per cent). The state of Maharashtra had just 21.91 per cent of houseless people in urban areas. In the state of Andhra Pradesh 19.80 per cent which is quite lower than that of the national average. The state of Madhya Pradesh had the lowest proportion of urban houseless population.

In 1981, however, the structure of urban houseless population invariably change. For India as a whole urban houseless population formed 26.39 per cent. As table shows among the states, in the state of West Bengal the urban houseless population was relatively high, the percentage being 53.52 per cent. It should be noted that West Bengal has the lowest rural houseless population.in 1981. This state is followed by Tamil Nadu with 45.83 per cent and Uttar Pradesh with a 44.58 per cent. The state of Kerala had about 39.55 per cent of its houseless population in urban areas. Andhra Pradesh had 30.62 per cent. It is quite amazing to observe that in Maharshtra constiuting only 18.65 per cent which lower than that of the nation. In the state of Madhya Pradesh it was only 16.10 which the lowest in the country in 1981.

There had been a lo ts of change in the growth pattern of houseless population in the country is a whole and in major

states of during 1971-81. We shall now examine them in details separately.for rural areas as well as urban areas.

Growth Rate of Houseless Population : Rural & Urban

As Table illustrate for India as a whole houseless population has increase at an annual growth rate of 1.27 per cent during 1971-81 in rural areas. Among the states Rajasthan as recorded the highest growth rate of 22.94 per cent in rural houseless population. The growth rate of Rajasthan when compare to India's growth rate, is 18.06 times more. Next to Rajasthan in the state of Uttar Pradesh the highest growth rate i.e.5.85 has been recorded. Surprisingly, Kerala occupies the third position 4.95 per cent. The state of Maharshtra has recorded an annual growth rate of 1.57 per cent in rural areas which isl little higher than the National average. In the state of Andhra Pradesh also a low growth rate has been regiestered. The lowest (0.76 per cent) growth rate was observe in the state of Orissa. It is interesting to observe that during 1971-81 in some states negative growth rate has been recorded. These states are; Tamil Nadu, Madhya Pradesh, Haryana and Karnataka. Among these four states in Tamil Nadu the highest growth rate of minus -3.39 per cent was observed. Madhya Pfadesh meanwhile has recorded an annual growth rate of -2.53 per cent. The state of Haryana has recorded the lowest negative growth rate of -0.29 per cent in houseless rural population during 1971-81.

Based on the analysis of India's houselessness scenario for 1971 and 1981, which has been carried out in this chapter, four states namely, Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh have been selected for the main analysis of the work. A District level statistical analysis to explore the demographic, social and economic determinants of houselessness has been conducted in the districts of these four states for 1971, 1981 and 1971-81.

The reasons for choosing these four states are follows: According to the findings of the for going analysis, four states, namely Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh possess some special and unique characteristics of houseless population in India. For example, Kerala is the lowest houseless state in the country having only 21 thousands houseless person, sharing 0.92 per cent of the total houseless population of the country, according to 1981 census. It has recorded 3.41 per cent annual growth rate during the decade of 1971-81 which is quite higher than the national average. The state of Andhra Pradesh is the fourth largest houseless state in the nation sharing 10.70 per cent of the total houseless population of India, according to 1981 census. It has recorded an annual growth rate of 2.27 which is a bit higher than that of India. Madhya Pradesh is the second largest houseless populus state in the country having 332 thousands houseless persons and sharing 14.18 per cent of the total houseless population of the country. It has recorded a negative growth

rate of -1.59 per cent. There has been a decline in the houseless population to the tune of 58 thousands during 1971-81. The state of Uttar Pradesh being the largest populous state in the country is having only 108 thousands houseless persons according to 1981 census sharing 4.63 per cent of the total houseless population of the country. It has recorded a high annual growth rate of 8.66 per cent during 1971-81. Of these four states, two states i.e. Uttar Pradesh, and Madhya Pradesh are situated in the northern region of India representing a different socio-economic development. On the other hand, the states namely Kerala and Andhra Pradesh are located in the southern region of India representing altogether a different socio-economic development in comparison to Uttar Pradesh and Madhya Pradesh. Based on the above observations found in the study, the state, Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh have been selected as the area of study for the present analysis.

Table No. 1.0

Growth of Houseless Population in India : 1961-81

Year	Houseless Population in 000	Houselessness Ratio	Houseless-ness Ratio	Annual Growth Rate (1971-81)
1961	1265	2.88	-	4.59
1971	1985	3.62	36.25	1.67
1981	2342	3.52	52.55	

-66

Source:

1. Census of India (1961) Series-I Part-I-A(1) General Population Tables.
2. Census of India (1971) Series-I Part-IIA (i) General Population Tables.
3. Census of India (1981) Series/I Part-II-A (i) General Population Tables.

   Office of the Registrar General, Government of India, New Delhi.

Table No. 2.0

Distribution of Houseless Population and It's Growth Among the Major States of India : 1971 & 1981

Sr. No.	Name of the States	1971 Houseless Population in 000 (1)	1971 % Share in Country Houseless Population (2)	1981 Houseless Population in 000 (3)	1981 % Share in Country Houseless Population (4)	Annual Growth Rate 1971-81 (4)
1	Andhra Pradesh	150	9.97	250	10.70	2.27
2	Bihar	036	1.85	060	2.56	5.24
3	Gujarat	251	12.64	310	13.24	2.14
4	Haryana	039	2.00	043	1.86	0.97
5	Karanataka	116	5.87	127	5.45	0.90
6	Kerala	015	0.75	021	0.92	3.41
7	Madhya Pradesh	390	19.68	332	14.18	-1.59
8	Maharashtra	485	24.42	542	23.15	1.11
9	Orissa	045	2.28	050	2.16	1.03
10	Punjab	032	1.61	056	2.40	5.75
11	Rajasthan	065	3.31	166	7.11	9.84
12	Tamil Nadu	072	3.67	067	2.45	-2.18
13	Uttar Pradesh	047	2.40	108	4.63	8.66
14	West Bengal	094	4.75	132	5.66	3.44
	Other States & Union Territories	094	4.75	088	3.58	-2.02
	INDIA	1885	100	2342	100	1.67

Source:

1. Census of India (1971) Series-I Part-IIA (i) General Population Tables.
2. Census of India (1981) Series-I-Part-II-A (i) General Population Tables.

Office of the Registrar General, Government of India, New Delhi.

Table No.: 3.0

INDIA : Houselessness rate and Houselessness Ratio in Major States : 1971 & 1981

Sr. No.	Name of the State	Houselessness Rate		Houselessness Ratio	
		1971 (1)	1981 (2)	1971 (3)	1981 (4)
1	Andhra Pradesh	4.55	4.68	5.81	6.32
2	Bihar	0.65	0.86	1.66	1.08
3	Gujarat	9.40	9.10	12.59	11.53
4	Haryana	3.98	3.38	6.11	5.28
5	Karnataka	3.98	3.44	7.29	5.63
6	Kerala	0.70	0.85	1.81	2.28
7	Madhya Pradesh	9.38	6.37	14.14	9.59
8	Orissa	9.62	8.64	14.82	13.05
9	Punjab	2.06	1.92	3.34	3.39
10	Rajasthan	2.36	3.36	3.30	4.33
11	Tamil Nadu	2.55	4.86	1.05	6.74
12	Uttar Pradesh	1.97	1.18	2.46	1.67
13	West Bengal	0.54	0.97	0.88	1.49
14		2.13	2.43	5.91	4.02
	Other states & Union Territories	3.47	4.90	2.83	5.56
	INDIA	3.62	3.52	56.25	52.55

Source:

The same as in Table 2.0.

Table No. 4.0

Distribution of Male and Female Houseless Population, their Growth Rate Sex Ratio in Major States of India : 1971 & 1981

Sr. No.	Name of the State	1971 Houseless Population in 000		1981 Houseless Population in 000		1971-81 Annual Growth Rate	1971-81 Annual Growth Rate	Sex Ratio	
		Male (%)	Female (%)	Male (%)	Female (%)	Male	Female	1971	1981
1	Andhra Pradesh	110 (55.92)	87 (44.08)	141 (56.41)	109 (48.59)	2.51	2.28	790	773
2	Bihar	22 (61.75)	14 (38.25)	38 (64.04)	21 (35.96)	5.60	4.13	636	552
3	Gujarat	143 (57.00)	107 (42.00)	172 (55.58)	137 (44.42)	1.85	2.49	748	796
4	Haryana	24 (61.75)	15 (38.25)	26 (60.71)	17 (39.21)	0.78	1.25	625	653
5	Karnataka	67 (57.64)	49 (42.36)	73 (57.67)	54 (42.33)	0.85	0.97	731	739
6	Kerala	10 (67.41)	4 (32.59)	13 (62.64)	8 (37.36)	2.63	7.17	400	615
7	Madhya Pradesh	216 (55.42)	174 (44.58)	184 (55.51)	147 (44.49)	-1.59	-1.66	805	798
8	Maharashtra	282 (58.32)	202 (41.65)	310 (57.32)	231 (42.69)	0.94	1.34	716	745
9	Orissa	27 (61.75)	17 (38.28)	29 (58.16)	21 (41.84)	0.71	2.14	629	724
10	Punjab	19 (59.98)	12 (40.02)	33 (59.44)	22 (40.50)	5.68	6.24	631	666

Contd...../-

Table No. 4.0 (contd.)

Sr. No.	Name of the State	1971 Houseless Population in 000 Male (%)	1971 Houseless Population in 000 Female (%)	1981 Houseless Population in 000 Male (%)	1981 Houseless Population in 000 Female (%)	1971-81 Annual Growth Rate Male	1971-81 Annual Growth Rate Female	Sex Ratio 1971	Sex Ratio 1981
11	Rajasthan	55 (85.05)	9 (14.95)	97 (58.45)	68 (41.35)	5.92	22.40	163	701
12	Tamil Nadu	41 (56.36)	31 (43.64)	32 (55.72)	25 (44.80)	-2.43	-2.14	756	781
13	Uttar Pradesh	32 (67.09)	15 (32.90)	74 (68.41)	34 (31.59)	8.74	8.51	488	459
14	West Bengal	79 (70.88)	28 (29.12)	66 (66.38)	28 (23.62)	-1.77	-	354	424
	Other States & Union Territories	79	28 (26.17)	66 (70.21)	28 (29.78)	-1.77	-	354	424
	INDIA	1193 (60.12)	791 (39.88)	1376 (58.74)	966 (41.25)	1.46	1.99	663	702

Source:

The same as given in Table 2.0.

Table No. 5.0

Rural-Urban Distribution of Houseless Population and Their Growth Rate in Major States of India : 1971 & 1981

Sr. No.	Name of the State	Houseless Population in Rural Areas in 000		Houseless Population in Urban Areas in 000		Geomatric Annual Growth Rate 1971-81		
		1971	1981	1971	1981	Rural	Urban	General
(1)		(2) %	(3)%	(4) %	(5) %	(6)	(7)	(8)
1	Andhra Pradesh	158 (80.20)	175 (60.98)	39 (19.80)	75 (80.02)	1.04	6.75	2.27
2	Bihar	27 (77.10)	34 (57.10)	08 (22.85)	25 (42.82)	2.32	12.04	5.24
3	Gujarat	208 (83.20)	265 (86.08)	42 (16.80)	43 (13.90)	2.44	0.23	2.14
4	Haryana	35 (89.75)	34 (79.63)	04 (10.25)	08 (20.63)	-0.29	7.17	0.97
5	Karnataka	87 (75.65)	84 (63.39)	28 (24.35)	42 (33.61)	-0.34	4.13	0.90
6	Kerala	08 (57.14)	13 (60.45)	06 (42.00)	08 (29.55)	4.95	2.19	3.41
7	Madhya Pradesh	359 (92.05)	278 (83.90)	31 (7.94)	53 (16.10)	2.53	5.51	-1.59
8	Maharashtra	378 (78.04)	442 (81.59)	106 (21.91)	99 (16.66)	1.57	-0.68	1.11
9	Orissa	38 (86.36)	41 (81.35)	06 (13.63)	09 (18.65)	0.76	4.13	1.03
10	Punjab	24 (77.41)	33 (59.60)	07 (22.55)	23 (41.00)	3/22	12.61	5.75

Contd...../-

Table No. 5.0 (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
11	Rajasthan	17 (26.15)	134 (80.56)	48 (73.85)	32 (19.44)	22.94	-3.97	9.84
12	Tamil Nadu	44 (61.11)	31 (54.47)	28 (27.88)	26 (45.53)	-3.39	-0.75	-2.18
13	Uttar Pradesh	34 (72.34)	60 (55.47)	13 (27.65)	48 (44.55)	5.85	13.97	8.66
14	West Bengal	29 (37.66)	48 (36.42)	64 (62.24)	84 (63.57)	5.17	2.75	3.44
	Other States & Union Territory	73 (67.59)	52 (54.47)	35 (32.41)	43 (45.53)	-3.32	2.04	-2.02
	INDIA	1519 (76.56)	1724 (73.61)	465 (23.43)	618 (26.39)	1.27	2.57	1.67

Source:

The same as in Table 2.0.

CHAPTER - IV

Analysis of Factors Determining Houselessness in Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh (1971, 1981 & 1971-81

In this chapter, the results obtained through statistical techniques i.e. zero-order correlation coefficient, linear multiple regression are analysed, keeping the main objectives of the study in the mind, for four states namely Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh respectively for census years 1971, 1981 and the decade of 1971-81. The primary aim of this chapter is to examine whether the framed hypothesis of the present work can be accepted or rejected. This analysis is to be done in the order of (i) Mean and coefficient of variation of variables (ii) Zero-order correlation analysis (iii) Linear Multiple Regression Analysis for each of the above states separately. The list of variables (Dependent and Explanatory) which have been used in the analysis is given in Table for immediate reference.

Table No. : 6.0

List of Dependent and Independent Variables used in the study

Indicators	Name/Explanation of the Indicators
Dependent Variables	
X1	Houselessness Rate 1971
X2	Houselessness Rate 1981
X3	Houselessness Ratio 1971
X4	Houselessness Ratio 1981
X5	Annual Growth Rate of Housless Population, 1971-81

Table (contd.)

Indicators	Name/Explanation of the Indicators
Independent Variables	
X6	Percentage of urban population to the total population 1971
X7	Percentage of urban population to the total population 1981
X8	Percentage of illiterate to the total population 1971
X9	Percentage of illiterate to the total population 1981
X10	Percentage of SC & ST population to the total population 1971
X11	Percentage of SC & ST population to the total population 1981
X16	Percentage of workers in non-household industries of manufacturing, processing, services and repairs to the total main workers, 1971
X17	Percentage of workers in non-household industries of manufacturing, processing, services and repairs to the total main workers, 1981
X19	Per capita Income - 1971 (Exclusively for the state of Kerala only)
	Per capita net output from the commodity producing sectors at current prices (Exclusively for the state of Uttar Pradesh only) 1971
X20	Per capita Income- 1981 (Exclusively for the state of Kerala only)
	Per capita net output from the commodity producing sectors at current prices (Exclusively for the state of Uttar Pradesh only) 1981
X13	Annual growth rate of urban population, 1971-81
X14	Annual growth rate of Illiterate population, 1971-81
X15	Annual growth rate of SC & ST population 1971-81

Table (contd.)

Indicators	Name/Explanation of the Indicators
X18	Annual growth rate of workers in non-household manufacturing, processing, services and repairs, 1971-81
X21	Annual growth rate of per capita income/ per capita output from the commodity producing sectors, 1971-81

Andhra Pradesh :

(i) Mean and Coefficient of Variation of Variables: 1971

As Table 7.0 illustrates, among the dependent variables, the highest coefficient of variation has been observed with houselessness rate (196.10). The Appendix correspondingly shows the range of this variable from 0.47 in Medak district, and 11.66 in Krishna district. Houselessness ratio which has

Table No : 7.0

Mean and Coefficient of Variation of Variables for Andhra Pradesh, (1971)

Variables	Mean	Coefficient of Variation
Dependent Variables		
X1	07.95	196.10
X3	05.81	43.54
Independent Variables		
X6	17.24	73.37
X8	74.54	13.48
X10	17.85	38.31
X16	04.07	60.44

a low coefficient of variation (43.54) shows the range from 2.27 in the district of Vishakapatnam to 13.11 in the district of

Krishna. On the other hand, among the independent variables urban population and main workers engaged in non-household industries of manufacturing, processing, services and repairs are found with higher coefficient of variations of 73.37 and 60.44 respectively. Of these two, the former one according to the Appendix, has a range from 3.68 in the district of Prakasam to 65.87 in the district of Hyderabad and the later ranges from 1.34 in Srikulam district to 12.06 in the district of Hyderabad. The illiterate population has recorded a very low coefficient of variation (13.48), whose range is seen from 49.09 in the district of East Godavari to 92.91 un the district of Hyderabad. Let us now examine the results of zero-correlation for the year 1971.

(ii) Zero-order Correlation Analysis : 1971

In order to understand the existing relationship among the independent variables and between dependent and independent variables, zero-order correlation coefficient have been calculated. The matrix of correlation in coefficient is given in the Table 7.1 for the state of Andhra Pradesh for the year 1971.

According to the table, among the independent variables in 1971, a positive and significant correlation is observed between urban population (X6) and main workers engaged in non-houshold industries of manufacturing, processing, services and repairs (X16).

As far as inter-relationship between dependent and independent variables are concerned, houselessness rate (X1) and SC & ST population are positively correlated (0.393). Similarly, house-

lessness ratio (X3) and main workers engaged in non-household industries of manufacturing, processing, services a& repairs (X16) are positively correlated (0.196). As contrary to the above observations, urban population is negatively correlated (-0.222) with houselessness ratio (X3).

Thus is is obvious from the analysis that out of the four independent variables, only SC & ST population is having a close relationship with houselessness in the districts of Andhra Pradesh in 1971.

(iii) Linear Multiple Regression Analysis : 1971

As matrix shows (Table No. 7.2), in the case of houselessness rate, the maximum of 11 per cent variation is explained in the districts of Andhra Pradesh at 15 per cent significant level. This variation is explained by a single variable i.e. SC & ST population. From the equation given below, one can understand that SC & ST population has recorded a regression

$$X1 = -8.0248 + .89540\ X10^{***}$$

$$\bar{R}^2 = .1098 \qquad F = 3.4690$$

coefficient of .89. Thatis to say that if there is an increase by one unit in SC & ST population, there will be an increase by .89 units in houselessness rate at a 5 per cent significant level. It can also be noted from the table that other variables like urban population, illiterate population, and the main workers engaged in non-household industries of

manufacturing, processing, services & repairs explain no variation at all. in houselessness rate. In the case of houselessness ratio, none of the variables explain variation. This implies that the selected variables for houselessness ratio happened to be highly insignificant.

It is understood from the analysis that out of four variables only SC & ST population exerts a profound influence over houselessness in the districts of Andhra Pradesh in 1971. It may be recalled that correlation analysis for 1971 already revealed that there was a strong relationship between houselessness and SC & ST population. Therefore, one can safely conclude that only SC & ST population was determinant of houselessness in the districts of Andhra Pradesh in 1971. Now let us examine the results of correlation and regression for Andhra Pradesh for the year 1981.

(i) Mean and Coefficient of Variation of Variables : 1981

Table No: 7.3

Mean and Coefficient of Variation of Variables for Andhra Pradesh 1981

Variables	Mean	Coefficient of Variation
Dependent Variables		
X2	04.76	32.35
X4	06.43	32.19
Independent Variables		
X7	21.69	56.61

Table No. 7.3 (contd.)

Variables	Mean	Coefficient of Variation
X9	68.79	15.43
X11	21.74	33.41
X17	05.22	50.00

Table 7.3 depicts the inter-district variation of dependent and independent variables among the districts of Andhra Pradesh in 1981. In the case of dependent variables both houselessness rate and houselessness ratio have almost recorded the same coefficient of variations (32.55 & 31.19). From the Appendix, it can be seen that the former varies from 1.55 in the district of Srikulam to 7.88 in the district of Karnool and the later one varies from 2.46 in the district of Srikulam to 9.54 in the district of Hyderabad respectively. Among the independent variables, a high coefficient of variation is observed with urban population (56.61) and the main workers engaged in non-household industries of manufacturing, processing, services & repairs (50.00). Of these two, urban population in a parallel manner shows the range from 10.93 in the district of Mahbubnagar to 68.64 in the district of Hyderabad. The lowest coefficient variation (15.43) has been found with illiterate population. It varies from 38.37 in the district of East Godavari to 80.21 in the district of Adilabad.

(ii) Zero-order Correlation Analysis : 1981

As Table 7.4 shows among the independent variables a very high positive significant correlation (0.964) is observed between urban population and main workers engaged in non-household industries

of manufacturing, processing, services & repairs. On the contrary a high negative correlation (-0.513) is seen between illiterate population and main workers engaged in non-household industries af processing, services & repairs. Similarly, when population and illiterate population are negatively correlated (-0.478).

As far relationship between dependent variables and independent variables are concerned, houselessness rate and urban population are positively correlated (0.196). Likewise SC & ST population is positively correlated (0.199) with houselessness rate. On the other hand, urban population is positively correlated (0.468) with houselessness ratio with a high significance. Similarly, main workers engaged in non-household industries of manufacturing, processing, services & repairs is positively and highly correlated (0.423), with houselessness ratio. However, social indicator, illiterate population is negatively correlated with both dependent variables.

Hence it is quite obvious from the analysis that in 1981 two independent variables, urban population and the main workers engaged in non-household industries of manufacturing, processing, services & repairs were strongly associated with houselessness in the districts of Andhra Pradesh.

(iii) Linear Multiple Regression Analysis: 1981

By and large, the results for 1981 for Andhra Pradesh are the same of 1971. As Table 7.5 exhibits all the variables

fitted in regression test together explaining negative variation. in the houselessness rate. Looking at the results of regression for houselessness rate one can say that these independent variables are highlyi insignificant and not suitable to explain the variation in houselessness rate in the districts of Andhra Pradesh in 1981.

In the case of houselessness ratio, however, independent variables together explain the maximum variation of about 18 per cent at 5 per cent significant level in the districts of Andhra Pradesh in 1981. It should be noticed here that R^{-2} showing a declining trend corresponding to induction of every independent variables in the stepwise regression. For example, when urban population was fitted it explained 18 per cent variation in the houselessness ratio. Subsequently when main workers engaged in non-household industries of manufacturing, processing, services & repairs was fitted alongwith urban population in the regression, R^{-2} declined to 15 per cent. Similarly, when another independent variable i.e. SC & ST population was incorporated R^{-2} came down to 11 per cent. It further declined to 5 per cent regression which show the maximum variation given below for examination.

$$X4 = 4.7807 + .07896\ X_7^{**} \quad (2.310)$$

$$R^{-2} = .1782 \qquad F = 5.3377$$

The above regression, explains the maximum inter-district variation of 17 per cent in houselessness ratio

at 5 per cent significant level in Andhra Pradesh. The above variation is explained by a single variable i.e. urban population. This implies that if there is a change in urban population by one unit there will be a change by 18 per cent positively in houselessness ratio.

The regression analysis evidently shows that among the independent variables urban population being a demographic factor is having a considerable impact on houselessness in the districts of Andhra Pradesh in 1981. It may be remembered here that urban population established a strong relationship with houselessness already in correlation matrix of 1981. Hence, urban population is the only variable out of selected determines houselessness in the districts of Andhra Pradesh in 1981. We shall now examine the correlation and regression results for Andhra Pradesh for decade of 1971-1981.

(i) Mean and Coefficient of Variation of Variable : 1971-81

During 1971-81, as Table 7.6 shows the dependent variables, annual growth rate of houseless population as registered a high coefficient of variation (93.84). It varies from 0.79 in the district of East Godavari to 8.68 in the district of Vishakapatnam.

Among the independent variables, annual growth rate of illiterate population is observed with an extremely high coefficient of variation (1542.10). This high variation is from -0.90 in the district of Chittore and 8.86 in the district

Table No: 7.6

Mean and Coefficient of Variation of Variables for Andhra Pradesh (1971-81)

Variables	Mean	Coefficient of Variations
Dependent Variable		
X5	03.4	93.84
Independent Variables		
X13	03.95	67.08
X14	00.19	1542.10
X15	04.14	55.67
X18	05.76	67.01

of Adilabad has shown by the Appendix. Annual growth rate of urban population and annual growth rate of workers engaged in non-household industries of manufacturing, processing, services & repairs have recorded the same coefficient of variations. Annual growth rate of SC & ST population meanwhile has recorded the lowest coefficient variation of 55.07.

(ii) Zero-order Correlation Analysis : 1971-81

The matrix of zero-order correlation (Table 7.7) for the decade 1971-81 reveals that most of the independent variables are either related with low significance or insignificant. For example, a positive correlation (0.309) is observed between annual growth rate of illiterate population and annual growth rate of SC & ST population. Similarly, annual growth rate of urban population and SC & ST population are positively correlated (0.184).

On the other hand, between dependent and independent variables, annual growth rate of houseless population and annual growth rate of urban population are positively correlated (0.296). The other three independent variables i.e. annual growth rate of illiterate population, annual growth rate of SC & ST population and annual growth rate of main workers engaged in non-household industries of manufacturing, processeng, services & repairs are negatively correlated with the annual growth rate of houseless population. Of these three, annual growth rate of SC & ST population exerts a high negative influence (-0.323) over annual growth rate of houseless population. Therefore, it is clear from the correlation analysis that among the independent variables, urban population alone strongly associated with the houselessness in the districts of Andhra Pradesh during 1971-81.

(ii) Linear Multiple Regression Analysis : 1971-81

According to the Table 7.8, R^{-2} pattern shows an increasing trend corresponding to every step of regression. It may be noted that when annual growth rate of SC & ST population was inducted into regression, 5 per cent variation was explained. It increased to 15 per cent when annual growth rate of urban population was incorporated. Eventually when an another variable i.e. annual growth rate of illiterate population was dadded, R^{-2} rose to 19 per cent. The regression which explains the maximum variation is given here for examination.

$$X5 = 6.14049 - \underset{(-1.548)}{.47686^{**}}\ X15 + \underset{(2.416)}{.72147^{*}}\ X13 + \underset{(.729)}{.17151}\ X14$$

$$R^{-2} = .1943 \qquad F = 2.2056$$

This equation explains a variation of 19 per cent in the annual growth rate of houseless population. The variables which explain the above variation are; annual growth rate of urban population, annual growth rate of illiterate population and annual growth rate of SC & ST population. Among these variables, annual growth rate of urban population has recorded the highest regression coefficient of 0.72. This denotes that if there is an increase by one unit in annual growth rate of urban population there will be an increase by .72 units at 5 per cent significant level in the annual growth rate of houseless population. Whereas annual growth rate of illiterate population individually has recorded a very low regression coefficient i.e. (.17). This reflects the poor influence of annual growth rate illiterate population over the annual growth rate of houseless population. On the other hand, surprisingly annual growth rate of SC & ST population has exerted a negative influence (-.48) over annual growth rate of houseless population.

From the above analysis of regression, one can safely conclude that among the selected independent variables, only urban population has a significant role in determining houselessness in the districts of Andhra Pradesh during 1971-81.

From the scrutinying of statistical analysis i.e. zero-order correlation and linear multiple regression, carried out for the state of Andhra Pradesh, for 1971, 1981 and the decade of 1971-81 the following conclusions can be found.

In 1971, out of selected independent variables, only SC & ST population as a social indicator determined the houselessness in the districts of Andhra Pradesh.

In the case of 1981, urban population was the only variable (demographic indicator) which determined the houselessness in the districts of Andhra Pradesh.

During 1971-81, urban population was the only variable (demographic indicator) played a significant role in determining houselessness in the districts of Andhra Pradesh.

From the above observations, one can confidently conclude that out of selected independent variables for the present analysis for the state of Andhra Pradesh SC & ST population and urban population are two important factors which could be considered as determinants of houselessness in the districts of Andhra pradesh. In addition, one can also say that of these two variables urban population is playing a greater role in determining houselessness in the districts of Andhra Pradesh.

Table No. 7.1

Zero-order Correlation Co-efficient Matrix : Andhra Pradesh - 1971

Vari-ables	X3	X6	X8	X10	X16	Variables	X1	X6	X8	X10	X16
X3	1.000	.163	-.182	-.222	.196	X1	1.000	-.110	.393	-.088	.057
X6		1.000	.173	-.012	.825	X6		1.000	.173	-.012	.825
X8			1.000	-.282	-.052	X8			1.000	-.282	-.052
X10				1.000	.026	X10				1.000	.026
X16					1.000	X16					1.000

Table No.: 7.3

Results of Regression Analysis : Andhra Pradesh + 1971

Variables	SELECTION 1 Intercept Value	R.C.	t	R^{-2}	F	Variables	SELECTION 2 Intercept Values	R.C.	t	R^{-2}	F
Step 1											
X10	-8.0248	.89540	1.863	.10988	3.48901	X10	7.27625	-.08209	-.991	-.000088	.98241
Step 2											
X10	05.7364	.89254	1.809	.07226	1.78467	X10	12.75780	-.10979	-1.282	.01554	1.15833
X6		-.12973	-.489			X8		-.06690	-3. 148		
Step 3											
X10		.85836	1.757			X10		-.11294	-1.314		
X6	-8.58884	-.55768	-1.192	.08030	1.61375	X 8	12.816	-.07776	-1.292	.00901	1.06063
X16		-.65880	1.108			X6		.04247	.938		
Step 4											
X10		.94946	1.827			X10		-.11257	-0.270		
X6		-.1784	-1.316			X8		-.07443	-1.140		
X16	-27.8102	.21309	1.232	.04941	1.25989	X6	12.5815	.03478	.395	-.05432	.75183
X8		.23414	.613			X16		.04487	.103		

Table No. 7.4

Zero-order Correlation Coefficient Matrix : Andhra Pradesh - 1981

Variables	X2	X7	X9	X11	X17	Variables	X4	X7	X9	X11	X17
X2	1.000	.196	-.067	.199	.144	X4	1.000	.468	-.214	.069	.423
X7		1.000	-.478	-.040	.964	X7		1.000	-.478	-.040	.964
X9			1.000	.180	-.513	X9			1.000	.180	-.513
X11				1.000	-.017	X11				1.000	-.017
X17					1.000	X17					1.000

Table No : 7.5

Results of Regression Analysis : Andhra Pradesh 1981

Variables	SELECTION 1 Intercept Values	R.C.	t	R^{-2}	F	Variables	SELECTION 2 Intercept Values	R.C.	t	R^{-2}	F
Step 1											
X11	3.84922	.04206	.884	-.01102	.78192	X7	4.71807	.07896	2.310	.17823	5.3377
Step 2											
X11	3.25432	.04380	.916	-.02071	.79711	X7	4.5712	.14562	1.107	.14509	2.7051
X7		.02586	.905			X17		-.32514	-.526		
Step 3											
X11		.04706	.972			X7		.15113	1.119		
X7	3.5091	.11197	1.034	-.03905	.74947	X17	4.3753	-.34881	-.549	.10642	1.79592
X17		-.42056	-.826			X11		.0275	.457		
Step 4											
X11		.04951	.972			X7		.15317	1.096		
X7		.11438	1.022			X17		.3745	-.556		
X17	4.2129	-.45108	-.835	-.10026	.54437	X11	4.9694	.0296	.467	.05204	1.22446
X9		-.4469	-.233			X9		-.1749	-.197		

Table No. 7.7

Zero-Order Correlation Coefficient Matrix : Andhra Pradesh - 1971-81

Variables	X5	X13	X14	X15	X18
X5	1.000	.291	-.010	-.323	-.079
X13		1.000	.082	.184	.126
X14			1.000	.309	-.231
X15				1.000	-.065
X18					1.000

Table No : 7.8

Results of Regression Analysis : Andhra Pradesh - 1971-81

Variables	Intercept Values	R.C.	S.E.E.	t	R^{-2}	F
Step 1						
X15	5.29715	-.45482	.30545	-1.489	.05737	2.21720
Step 2						
X15	3.95872	-54 892	.29577	-1.856	.14622	2.71258
X13		.43775	.25390	1.725		
Step 3						
X15		-.47686	.30809	-1.548		
X13	6.14049	.72147	.39860	2.416	.12429	2.20599
X14		.23512	.23512	.729		

Kerala :

(i) Mean and Coefficient of Variation of Variables : 1971

As Table 7.9 shows, among the dependent variables, the highest coefficient of variation (47.25) is observed with houselessness ratio in 1971. This variation is seen (see the Appendix) from 0.83 in the district of Trivandrum to 3.25 in the districts of Kozhikode. Among the independent variables

Table No: 7.9

Mean and Coefficient of Variation of Variables ofor Kerala (1971)

Variation	Mean	Coefficient of Variation
Dependent Variables		
X1	00.80	42.50
X3	01.82	47.25
Independent Variables		
X6	15.85	49.40
X8	39.45	21.16
X10	10.45	25.31
X16	11.24	33.84
X19	592.30	10.55

the urban population has recorded the highest coefficient of variation (49.40). The Appendix reveals this variations range from 6.73 in the district of Malappuram to 27.66 in the district of Ernakulam. On the other hand, per capita income has a low coefficient of variation of 10.55. The range of this variable varies from Rs. 457 in the district of Malappuram to Rs. 664 in the district of Ernakulam in 1971.

(ii) Zero-order Correlation Analysis : 1971

The inter-relationship of dependent variables and independent variables in terms of zero-order correlation coefficient has been presented in the matrix form in Table 8.1 for 1971. The correlation matrix reveals that among the explanatory variables main workers engaged in non-household industries of manufacturing, processing, services & repairs and per capita income are positively correlated (0.437), with a considerable significant. It is followed by 0.347 which is between urban population and per capita income. Some independent variables are negatively and highly correlated. For instance, Illiterate population is negatively correlated (-0.737) with the variable i.e. per capita income and Main workers engaged in non-household manufacturing, processing, services & repairs is negatively correlated (-0.537) with illiterate population.

As far as inter-relationship between dependent and independent variables are concerned, there is a positive and highly significant correlation (0.610) between houselessness rate (X1) and per capita income (X19). Similarly, houselessness rate and main workers engaged in non-household industries of manufacturing processing, services & repairs are positively correlated (0.371). Surprisingly other independent variables namely urban population, illiterate population, and SC & ST population are negatively correlated with houselessness rate. With regard to houselessness ratio, independent variable like per capita income is positively correlated (0.331), Urban population similarly correlated (0.266) with houselessness ratio. Illiterate population is also positively

correlated (0.225) with houselessness ratio. As contrary to above observations, SC & ST population and the main workers engaged in non-household industries of manufacturing, processing, services & repairs are negatively correlated with houselessness ratio. Out of these two variables, SC & ST population is exerting a very high negative influence (-0.403) were houselessness ratio.

It is understood from the above anlaysis that per capita income as an economic indicator is highly and significantly associa ted with both independent variables i.e. houselessness rate and houselessness ratio in 1971. Therefore, it is obvious that among the independent variables selected for the study per capita income is an important variable. In addition, it may be also concluded that main workers engaged in non-household industries of manufacturing, processing, services & repairs is also associated with houselessness in the districts of Kerala with a moderate significant in 1971.

(iii) Linear Multiple Regression Analysis : 1971

The results of regression analysis for Kerala state for 1971 are better than the results of regression analysis for Andhra Pradesh. As Table 8.2 reveals that independent variables together explain the variation between 29 per cent and 86 per cent in the houselessness rate and 05 per cent to 55 per centi in the houselessness ratio in 1971. The regression which

explains the maximum variation is given below for discussion. First let us examine the regression test for houselessness rate.

$$X1 = 4.6635 + \underset{(6.895)}{.852\ X19} + \underset{(4.871)}{.0376\ X8} - \underset{(-4.206)}{.02580\ X6}$$

$$+ \underset{(3.275)}{.436\ X16} \underset{(-2.368)}{-.02865}$$

$$R^{-2} = .8674 \qquad f = 12.7813$$

The above regression explains the maximum inter-district variation of 87 per cent (R) in the houselessness rate at one per cent significant level. The F value of the regression is quite high i.e. 12.7813. The variables which explain the above variation are: urban population (X6); Illiterate population (X8); SC & ST population (X10); main workers engaged in non-household industries of manufacturing, processing, services & repairs (X16) and per capita income (X19). Among these variables, per capita income individually has registered the highest regression coefficient of (.85) in the houselessness rate. This implies that if there is any increase in per capita income by one unit there will be an increase by .85 units in the houselessness rate. Besides this the main workers engaged in non-household industries of manufacturing, processing, services & repairs has recorded the regression coefficient of .43. Other three independent variables have been observed with a negative regression coefficient in the regression. Thus, it is quite clear that per capita income has profound influence over houselessness rate in the districts of Andhra Pradesh. The main

workers engaged in non-household industries of manufacturing, processing, services & repairs has also got a substantial control over houselessness rate. Now let us examine the regression which explains the maximum inter-district variation in houselessness ratio.

$$X2 = -9.7419 - \underset{(-1.738)}{.0880}\ X10 + \underset{(3.304)}{.61448}\ X19^{*} \quad \underset{(3.085)}{.09912}\ X8^{*}$$

$$R^{-2} = .5482 \qquad F = 5.11260$$

This regression explains the maximum inter-district variation of about 55 per cent with F value of 5.1126. The variables namely SC & ST population (X10), illiterate population (X8) and per capita income altogether explain the above variation at a 5 per cent significant level. It should be noted that among the independent variables fitted in the above regression per capita income has has registered high significant regression coefficient of .61. This means that if there is a positive change by one unit in per capita income there will be a positive change by .61 units in houselessness ratio. This indicates clearly that houselessness ratio and per capita income are having very cross relationship and they have control over each other in the district of Kerala. The other variables have proved themselves to be insignificant in the case of houselessness ratio.

So it is understood from the above analysis that among the independent variables selected for the regression test for the state of Kerala only per capita income could be regarded as determinant of houselessness in the district of Kerala in 1971.

(i) Mean and Coefficient of Variation of Variables : 1981

The below Table 8.3 shows the mean an and coefficient of variation of dependent variables as well as independent variables for the state of Kerala for 1981. There seems to be not much different in the coefficient of variations between two dependent variables i.e. houselessness rate (35.36) and houselessness ratio (34.64). Houselessness rate varies from 0.37 in the district of Trivandrum to 1.29 in the district of Kozhikod.

Table No: 8.3

Mean and Coefficient of Variation of Variables for Kerala (1981)

	Mean	Coefficient of Variation
Dependent Variables		
X2	0.82	35.36
X4	2.28	34.64
Explanating Variables		
X7	18.53	53.31
X9	28.19	30.82
X11	10.92	32.78
X17	52.08	246.40
X20	617.40	16.11

Among the independent variables, main workers engaged in non-household manufacturing, processing, services & repairs (X17) has been found with a very high coefficient of variation i.e. 246.40. This variation is observed in the range from 6.32 in

the district of Kottayam to 18.58 in the district of Kannanore as shown in the Appendix. The lowest coefficient of variation (16.11) has been observed with per capita income. The range of this variable is from Rs. 420 in the district of Malappuram to Rs. 812 in the district of Ernakulam.

(ii) Zero-order Correlation Analysis : 1981

The scrutiny of the correlation matrix (Table 8.4) shows that among the independent variables, urban populations is positively and highly correlated (0.761 with main workers engaged in non-household industries of manufacturing, processing, services & repairs. Similarly, urban population is also positively correlated with a shigh significant (0.614) with per capita income. Meanwhile per capita income and main workers engaged in non-household industries of manufacturing, processing, services, & repairs are positively correlated (0.686).

Regarding the inter-relationship between dependent and independent variables, illiteracy is positively correlated (0.448) with houselessness rate. In a similar manner it is also correlated positively (0.404). with houselessness ratio. It should be noted here that the correlation between illiteracy and dependent variables is highly significant. Other independent variables have either a very poor positive correlation or a negative correlations with the dependent variables.

From the analysis one can understand that there is a close and strong relationship between illiteracy and houselessness in the districts of Kerala in 1981. Hence, it may be concluded

that among the selected variables only illiteracy exerts a positive and significant influence over houselessness in the district of Kerala in 1981.

(iii) Linear Multiple Regression Analysis : 1981

As Table 8.5 illustrates independent variables together explaine the maximum variation between 10 and 31 per cent in the independent variables. In the case of houselessness rate the maximum of 10 per cent variation is explained by two independent variables namely Illiteracy and per capita income. While looking at these two variables individually, per capita income has registereda higher regression coefficient of .13. The equation of this vregression is given below for examination. In the case

$$X2 = -.50568 + \underset{(1.747)}{.0223\ X9} + \underset{(1.016)}{.13407\ (X20)}$$

$$R^{-2} = .10489 \qquad F = 1.52730$$

of houselessness ratio the maximum inter-district variation of about 31 per cent is explained (see the below equation). The variables which explain the variation are; illiterate population, SC & ST population, main workers engaged in non-household industries of manufacturing, processing, services & repairs and

$$X4 = 4.1914 + \underset{(2.683)}{.10450\ X9}^{**} - \underset{(-2.187)}{.18307\ X11}^{***} + \underset{(1.960)}{.3139\ X20}^{***} - \underset{(1.355)}{.2370\ X17}$$

$$R^{-2} = .31259 \qquad F = 2.023$$

per capita income. Of these four variables, per capita income

has registered a regression coefficient of .31. In other words, it means that if there is any increase by one unit in per capita income, there will be an increase by .31 in houselessness ratio. Whereas illiterate population has also recorded a regression coefficient of .10. But the other two variables namely SC &ST population and main workers engaged in non-household industries of manufacturing, processing, services & repairs have recorded a negative regression coefficient.

Therefore, it is quite clear from the above analysis that among the selected independent variables for the regression analysis for Kerala in 1981 only two variables that is illiterate population and per capita income are having a greater impact on houselessness in the districts of Kerala. Hence these two variables could be considered as important determinants of houselessness in Kerala, in 1981.

(i) Mean and Coefficient of Variation of Variables : 1971-81

The table 8.6 presents the mean and coefficient of variation of dependent and independent variables for the state of Kerala for the decade 1971-81. According to the table, the only dependent variable for 1971-81 namely Annual growth rate of houseless population has registered a coefficient variation of 85.25. The variable shows the range from -1.26 in the districts Trivandrum to 9.94 in the district of Malappuram. in the Appendix.

Table No. 8.6

Mean and coefficient of Variation of Variables for Kerala, (1971-81)

Variables	Mean	Coefficient of Variation
Dependent variables		
X5	04.00	87.25
Independent variables		
X13	05.34	167.60
X14	-03.34	130.00
X15	03.20	50.31
X18	01.66	59.60
X20	00.32	101 00

On the other hand, among the independent variables a high coefficient of variation has been found with annual growth rate of urban population. The variation (167.60) of this variable ranges from -0.35 in the district of Palghat to 29-52 in the district of Ernakulam. Annual growth rate of SC/ST population has been observed with a lower coefficient variation of 50.31. This varies from -0.18 in the district of Malappuram to4.4.2 in the district of Trivandum.

(ii) Zero-order Correlation Analysis : 1971-81

As the table No. 8.7 reveals the urban population is positively correlated (0.596) with a significant level with annual growth rate of per capita income.

rate of urban population is negatively correlated (-0.658) with SC & ST population with high sifnificant.

Between the dependent and independent variables, a positive correlation (0.165) is observed between annual growth rate of houseless population and SC & ST population. The other variables are all negatively correlated with the dependent variables. Among the independent variables of this annual growth rate illiterate population is negatively with high significant correlated (-0.517). Similarly annual growth rate of per capita income is negatively with extremely high significant correlated with annual growth rate of houseless population. The correlation of negative nature between annual growth rate of houseless population and per capita income is (-0.778).

It is clear from the analysis that among the independent variables only the annual growth rate of SC/ST population is strongly associated with dependent variables. In the districts of Kerala during 1971-81.

(iii) Linear Multiple Regression Analysis : 1971-81

The results of regression test for the state of Kerala for the decade of 1971-81 are given in the Table 8.8. The independent variables altogether explain the inter-district variation between 55 per cent and 67 per cent in the dependent variations. This variation is explained by a set of four variables i.e. annual growth rate of illiterate population, annual growth rate of SC/ST population, annual growth rate of main workers engaged in non-household industries of manufacturing,

processing, services & repairs. It is important to observe that R^{-2} pattern is showing upward and downward trend in the regression. In otherwords, when annual growth rate of per capita income alone was inducted into the regression test 55 per cent was explained. It increased to 64 per cent when annual growth rate of illiterate population was added. The induction of one more variable i.e. annual growth rate of SC/ST population increased the R^{-2} value to 66 per cent. Subsequently, when an other variable (annual growth rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs, was incorporated R^{-2} moved to 67 per cent. However, when annual growth rate of urban population was indicated further into regression test R^{-2} came down to 60 per cent. The regression which shows the maximum variation is given below for examination:-

$$X5 = 8.70501 - \underset{(-3.844)}{.3146\ X21}^{*} + \underset{(2.346)}{.4366\ X14}^{**} - \underset{(-1.628)}{.9193\ X15} + \underset{(1.0621)}{.46894\ X18}$$

$$R^{-2} = .67140 \qquad F = 5.9386$$

In the above regression, a combination of four independent variables viz. Annual growth rate of Illiterate population; annual growth rate of SC & ST population, annual growth rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs and annual growth per capita income explained altbgether the variation of about 67 per cent in the annual growth rate of houseless

population at a five per cent significant level. While looking at these variables individually, annual growth rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs has recorded a regression coefficient of .46. Meanwhile annual growth rate of illiterate populationhas reccrded a regression coefficient of .43. As contrast to this observation, annual growth rate of SC/ST population has recorded a very high coefficient variation of -.91. Similarly, annual growth rate of per capita income has recorded a negative regression coefficient of -.31 which is of course is very low compare to the former one.

The analysis of linear multiple regression for the decade 1971-81 for the state of Kerala reveals very clearly that among the selected independent variables only annual growth rate of illiterate population and mannual growth rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs are significant to explain the variation in the annual growth rate of houseless population. Hence it may be concluded that only these two variables are determinants of houselessness in the districts of Kerla during 1971-81.

From the results of zero-order correlation, linear multiple regression , and the discussions followed, for the periods 1971, 1981 and the decade of 1971-81 for the state of Kerala the following conclusions can be made:-

In 1971, per capita income alone was a major determinant of houselessness in the districts of Kerala. with a high significance. Main workers engaged in non-household industries of manufacturing, processing, services & repairs was also a determinant of houselessness but partially.

In 1981, Illiterate population and per capita income were major determinants of houselessness in the districts of Kerala.

During the decade of 1971-81 Illiterate population and and main workers engaged in non-household industries of manufacturing, processing, services & repairs were major determinants of houselessness in the districts of the Kerala.

Looking at the analysis for 1971, 1981 and 1971-81, one can confidently conclude that illiterate population, per capita income, and the main workers engaged in non-household industries of manufacturing, processing, services & repairs are the major determinants of houselessness in the state of Kerala.

Table No. 8.1

Zero-Order Correlation Coefficient Matrix : Kerala - 1971

Variables	X1	X6	X8	X10	X16	X19	Vari-ables	X3	X6	X8	X10	X16	X19
X	1.000	-.119	-.135	-1.09	.371	.610	X3	1.000	.263	.225	-.403	-.163	.331
X6		1.000	-.206	-.307	.251	.347	X6		1.000	-.206	-.307	.251	.347
X8			1.000	-.032	-.537	-.731	X8			1.000	-.032	-.537	-.731
X10				1.000	.86	.005	X10				1.000	.086	.005
X16					1.000	.437	X16					1.000	.437
X19						1.000	X19						1.000

Table No. : 8.2

Results of Regressuon Analysis : Kerala -1971

SELECTION 1						SELECTION 2					
Vari-ables	Inter-cept Value	R.C.	t	R^{-2}	F	Vari-ables	Inter-cept Value	R.C.	t	R^{-2}	F
Step 1											
X19	-1.18871	.3591	2.176	.23319	4.7332	X10	2.81182	-.0341	-2.244	.05731	1.5474
Step 2											
X19	-3.8498	.0438	3.054	.45873	4.8138	X10	.09083	-.09448	-1.254	.06510	1.3153
X8		.0228	1.857			X19		.60070	1.033		
Step 3											
X19		.0438	3.054			X10		-.08801	-1.738		
X8	-4.15889	.02862	2.272	.58367	5.3831	X19	-3.7418	.61048	3.304	.50821	5.11260
X6		-.01822	-1.823			X8		.09912	3.085		
Step 4											
X19		.91320	4.866			X10		-.06651	-1.570		
X8		.0370	3.455			X9		.61461	3.064		
X8	-4.8636	-.0208	-2.605	.76539	7.5869	X8	-9.4330	.09488	2.549*	.50425	3.29961
X16		.0391	2.139			X16		-.02056	-.324		
Step 5											
X19		.8052	6.895								
X8		.0376	4.871								
X6	-4.6635	-.0258	-4.206	.86747	12.7813						
X16		.04367	3.275								
X10		-.02865	-2.368								

Table No. 8.4

Zero-order Correlation Coefficient Matrix : Kerala - 1981

Variables	X2	X7	X9	X11	X17	X20	Variables	X4	X7	X9	X11	X17	X20
X2	1.000	.036	.448	-.053	.078	.017	X4	1.000	.057	.404	-.257	.121	.024
X7		1.000	-.417	-.405	.761	.614	X7		1.000	-.407	-.405	.761	.614
X9			1.000	.279	-.206	-.556	X9			1.000	.279	-.206	-.556
X11				1.000	-.291	.044	X11				1.000	-.291	.044
X17					1.000	.686	X17					1.000	.686
X20						1.000	X20						1.000

Table No: 8.5

Results of Regression Analysis : Kerala - 1981

Variables	SELECTION 1 Intercept Value	R.C.	S.E.E.	t	R^{-2}	F	Variables	SELECTION 2 Intercept Value	R.C.	S.E.S.	t	R^{-2}	F
Step 1													
X9	.39830	.01510	.01064	1.419	.10120	2.0134	X9	1.2932	.03698	.02962	1.248	.05845	1.5586
Step 2													
X9	-.50588	.02232	.01278	1.747	.10489	1.5273	X9	1.9253	.04720	.02991	1.578	.11413	1.5797
X20		.13402	.11586	1.016					-.08886	.07248	-1.226		
Step 3													
X9		.02668	.01400	1.906			X9		.07587	.03492	2.172		
X20	-.52024	.3840	1.1754	1.178	.06860	1.2294	X11	1.1243	-.11316	.07038	-1.608	.21684	1.8306
X11		-.0260	.0282	-.853			X20		.0600	2.9316	1.385		
Step 4													
X9		.03530	.01682	2.099			X9		.10450	.03895	2.683		
X20		.96565	2.05210	1.445			X11		-.18307	.08372	-2.187		
X11	-1.4435	-.04511	.03615	-1.248	.05153	1.12223	X20	4.1914	.3139	4.7518	1.960	.31259	2.0231
X17		-.4435	1.3504	- .944			X17		-.2370	3.1271	-1.355		
Step 5													
X9		-.0363	.01899	1.913									
X20		-.9025	2.28394	1.271									
X11	-1.5462	-.0424	.04121	-1.029	.16322	.74742							
X17		-.5068	1.71239	-.880									
X7		.1434	.01854	.277									

Table No. 8.7

Zero-Order Correlation Coefficient Matrix : Kerala - 1971-1981

Variables	X5	X13	X14	X15	X18	X21
X5	1.000	-.280	-.517	.165	-.118	-.778
X13		1.000	-.148	-.658	-.135	.596
X14			1.000	.413	-.315	-.243
X15				1.000	.333	-.333
X18					1.000	.064
X21						1.000

Table No.: 8.8

Results of Regression Analysis of Kerala : 1971-81

Variables	Intercept Value	R.C.	S.E.E.	t	R^{-2}	F
Step 1						
X21	5.06393	-.24594	.92661	-3.503	.55602	12.2711
Step 2						
X21	5.8257	-.8927	.86133	-3.358	.33909	8.96841
X14		.2622	.1555	1.686		
Step 3						
X21		-.17216	.86083	-3.685		
X14	8.04092	.3345	.16102	2.098	.66438	6.9386
X 5		-.5883	.47604	-1.236		
Step 4						
X21		-.3146	.86227	-3.844		
X14		.4366	.18609	2.346		
X15	8.70506	-.91930	.56477	-1.628	.67140	5.9384
Step 5						
X21		1.4888	1.14583	-3.545		
X14		.4125	.2202	1.885		
X15	8.06715	- .7736	.81937	-. 944	.59688	3.6652
X18		.4405	.4997	.881		
X13		.0381	.13864	.275		

Madhya Pradesh :

(i) Mean and Coefficient of Variation of Variables : 1971

The Table 9.0 presents the mean and coefficient of variation variables for the state of Madhya Pradesh for 1971. The houselessness rate and houselessness ratio have recorded the coefficient of variations of 127.96 and 115.87 respectively. The coefficient of variations of both these dependent variables are observed in the districts of Jhabha and Vidisha. As the appendix

Table No.: 9.0

Mean and Coefficient of Variations of Variables for Madhya Pradesh (1971)

Variables	Mean	Coefficient of Variations
Dependent Variables		
X1	10.62	127.96
X2	14.55	115.57
Independent Variables		
X6	15.71	82.86
X8	77.71	12.01
X10	30.03	60.37
X16	03.20	117.00

shows, the houselessness rate varies from 1.12 in the district of Jhabua 74.77 in the district of Vidisha and the houselessness ratio varies from 2.27 in the district of Jhabua to 107.17 in the district of Vidisha.

Among the independent variables, the highest coefficient of variation (117.00) has been observed with the main workers

engaged in non-household industries of manufacturing, processing, service & repairs. This variation is noticed in the range from 0.28 in the district of Seoni to 18.55 in the district of Indore. The lowest coefficient of variation has been found with the illiterate population which according to the Appendix, varies from 48.10 in the district of Betus to 90.37 in the district of Bastar.

(ii) Zero-order Correlation Analysis : 1971

The matrix (Table No. 9.1) reveals that among the independent variables, urban population and main workers engaged in non-household industries of manfacturing, processing, services & repairs are positively correlated (0.879) with a high significant. Likewise a high positive corelation (0.504) is observed between illiterate population and SC/ST population. A negative correlation is also observed among some independent variables. For instance, illiterate population and main workers engaged in non-household industries of manufacturing, processing, services & repairs are negatively correlated (-0.608) with a high significance.

As far as inter-relationship between dependent and independent variables are concerned, all the independent variablves except urban population are negatively correlated with both the dependent variables. Urban population alone is positively correlated with houselessness rate and houselessness ratio but with no significance.

Thus it is obvious from the analysis of correlation done for the state of Madhya Pradesh in 1971, none of the variables selected is associated with houselessness in the districts of Madhya Pradesh.

(iii) Linear Multiple Regression Analysis : 1971

The results of regression coefficient for the state of Madhya Pradesh are poor compare to other states like Andhra Pradesh and Kerala. As Table No. 9.2, independent variables together explain inter-district variation of only 05 per cent in dependent variables. The regression which explain the above variation is given below for examination :-

$$X1 = 17.4595 - .18345\ X10 - 2.2580\ X16 + .6231\ X6$$
$$(-1.199) \quad (-1.582) \quad (1.449)$$

$$R^{-2} = .05139 \qquad F = 1.7584$$

From the given equation one can understand that three variables namely, urban population, SC/ST population and main workers engaged in non-household industries of manufacturing, processing, services & repairs, explain the above variations. Looking at the variables individually, urban population has recorded a regression coefficient of .62. But the two other variables have recorded negative regression coefficients. The above analysis clearly indicate that none of the variable have influence over dependent variables. This may be due to the multicollinearity created among the independent variables in the correlation test. Therefore, the results for 1971 regression are subject to the limitations. We, however, have not been able to look into this problem.

(i) Mean and Coefficient of Variation of Variables: 1981

Table 9.3 illustrate the mean and coefficient of variation of variables for the state of Madhya Pradesh for 1981. Among the dependent variables houselessness rate has been observed with a high coefficient of variation (82.44). This variable as shown in the Appendix waries from 0.89 in the district of Bhind to 31.16 in the district of Raisen.

On the other hand, amongthe independent variables the main workers engaged in non-household manufacturing, processing, services & repairs has registered a highest coefficient of variation i.e. 98.75. This varies from 0.32 in the district of Shajapur to 19.55 in the district of Indore. Illiterate

Table No.: 9.3

Mean and Coefficient of Variation of Variables for Madhya Pradesh (1981)

Variables	Mean	Coefficient of Variation
Dependent Variables		
X2	07.12	82.44
X4	11.16	77.03
Independent Variables		
X7	18.55	30.78
X9	69.06	21.24
X11	35.45	47.50
X17	04.00	98.75

population has been found with the lowest coefficient of

variation i.e. 21.24. This varies from 16.13 in the district of Sehore to 88.85 in the district of Jhabua.

(ii) Zero-order Correlation Analysis : 1981

As Table 9.4 exhibits among the independent variables a high and positive correlation (0.784) is observed between urban population and main workers engaged in non-household industries of manufacturing, processing, services & repairs Besides this urban population is highly and negatively correlated (-0.588) with illiterate population. Similarly, illiterate population is negatively correlated (-0.584) with the main workers engaged in non-household industries of manufacturing, processing, services, & repairs.

With regard to inter-relationship between dependent and independent variables, two variables viz., urban population and main workers engaged in non-household industries of manfacturing, processing, services & repairs are positively correlated with the dependent variables (houselessness rate and houselessness ratio). Of these two variables, the latter one seems to be having relatively a higher influence over the dependent variables. Particularly its relationship with houselessness ratio could be considered important (0.208). The other two variables i.e. illiterate population and SC/ST population is negatively correlated with both the dependent variables.

One can understand from the aforedone analysis that out of selected four independent variables only main workers

engaged in non-household industries of manufacturing, processing, services & repairs is strongly correlated with houselessness at a considerable significance.

(iii) Linear Multiple Regression Analysis : 1981

The results of regression analysis for the state of Madhya Pradesh for 1981 is in no way different from that of 1971 and it is infact unsatisfactory. It is clear from the Table No. 9.5 that independent variables together explain only 3 per cent inter-district variation in the dependent variables. The regression which explains the above variation is given here for investigation. From the given equation, one can understand that

$$X4 = 2.93425 + \underset{(1.317)}{.74140}\,X17 + \underset{(.979)}{.09212}\,X9 - \underset{(-2.42)}{.04101}\,X7^{**} - \underset{(-1.43)}{.01263}$$

$$R^{-2} = .03579 \qquad F = .63719$$

a set of four independent variables, namely urban population, illiterate population, SC/ST population and the main workers engaged in non-household industries of manufacturing, processing, services & repairs, altogether explain 03 per cent inter-district variation in houselessness ratio, While looking at the variables individually the main workers engaged in non-household industries of manufacturing, processing, services & repairs has recorded a regression coefficient of .74. But the other indicators have recorded negative regression coefficient

From the analysis of regression one can understand that none of the variables explain the variation is of any considerable significante. If we look at the results of regression for the state of Madhya Pradesh for 1981 as a whole we find that they are not to the expectation. This may be because of high multicollinearity problem observe in the correlation among the independent variables. However, we have not been able to look into this problem. Therefore, the results for 1981 as in the case of 1971 are subject to the limitations.

(i) Mean and Coefficient of Variation of Variables : 1971-81

The below Table No. 9.6 depicts the mean and coefficient of variations of variables for Madhya Pradesh for the decade of 1971-81. According to the Table, the only dependent variables, annual growth rate of houseless population has

Table No. 9.6

Mean and Coefficient of Variation of Variables for Madhya Pradesh (1971-81)

Variables	Mean	Coefficient of Variation
Dependent Variable		
X5	00.70	13.32
Independent Variables		
X13	04.95	99.39
X14	00.97	436.08
X15	05.32	94.73
X18	07.41	60.05

recorded a lower coefficient of variation i.e. 13.28. Correspondingly this variation is seen in the Appendix with a range from -0.78 in the district of Bilaspur to 32.10 in the district of Mandsaur. In the case of independent variables, the highest coefficient of variation has been found with annual growth rate of SC & ST population. The coefficient variation (436.08) of this variable ranges from 9.35 in the district of Datia to 86.74 in the district of Jhabua. The annual growth rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs has recorded the lowest coefficient of variation i.e. 6.05. This varies from -10.20 in the district of Shajapur to 21.14 in the district of Panna.

(ii) Zero-order Correlation Analysis : 1971-81

As Table No. 9.7 reveals, in the case of independent variations, annual growth rate of urban population and annual growth rate of main workers engaged in non-household industries of manufacturing, processing, services and repairs are positively correlated (0.430) with a considerable importance. As far as inter-relationship between dependent and independent variables, annual growth rate of SC & ST population and annual growth rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs are positively correlated but with no significance. Mean while annual growth rate of urban population and annual growth rate of illiterate population are found to be highly insignificant.

It is obvious from the analysis that only two variables namely annual growth rate of SC & ST population and annual growth

rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs or closely associated with the dependent variables. in the districts of Madhya Pradesh duruing 1971-81.

(iii) Linear Multiple Regression Analysis : 1971-81

The results of regression analysis for the state of Madhya Pradesh for the decade 1971-81 are not upto the mark. As Table 9.8 clearly shows only 3 per cent inter-district variation in the annual growth rate of houseless population is explained. This variation is explained by independent variables is of no significant at all. Looking at the overall results of regression test for Madhya Pradesh for the decade 1971-81 one can safely conclude that none of the variables selected are determinants of houselessness in the districts of Madhya Pradesh.

From the results of correlation and regression and the discussion carried out the following conclusions can be framed:-

In 1971, urban population seemed to be playing a partial role in determining houselessness in the state of Madhya Pradesh.

In 1981, urban population and the main workers engaged in non-household industries of manufacturing, processing, services & repairs were playing a moderate role in determining houselessness in the districts of Madhya Pradesh.

During the decade of 1971-81, none of variables played important role in determining houselessness in the districts of Madhya Pradesh.

Looking at the overall results of correlation and regression tests for 1971, 1981 and 1971-81 for Madhya Pradesh one can confidently say that the variables like urban population, main workers engaged in non-household industries of manufacturing, processing, services & repairs and SC & ST population are playing a partial role in determining houselessness in the districts of Madhya Pradesh. Hence, it may be also added that none of the variables selected for the state of the Madhya Pradesh can be consider determinants of houselessness with any significance. of consideration.

Table No. 9.1

Zero-Order Correlation Coefficient Matrix : Madhya Pradesh - 1971

Variables	X1	X6	X8	X10	X16	Variables	X3	X6	X8	X10	X16
X1	1.000	-.036	-.112	-.224	-.084	X3	1.000	.113	-.177	-.249	-.031
X6		1.000	-.608	-.375	.879	X6		1.000	-.608	-.375	.879
X8			1.000	.504	-.459	X8			1.000	.504	-.459
X10				1.000	-.255	X10				1.000	-.255
X16					1.000	X16					1.000

Table No.: 9.2

Results of Regression Analysis : Madhya Pradesh - 1971

SELECTION 1						SELECTION 2					
Variables	Intercept Value	R.C.	t	R^{-2}	F	Variables	Intercept Values	R.C	t	R^{-2}	F
Step 1											
X10	15.69225	-.16814	-1.474	.02715	2.17199	X10	21.51533	-.23193	-1.649	.03930	2.7179
Step 2											
X10	18.28883	-.19741	-1.669	.02533	1.54582	X10	23.68119	-.2559	-1.746	.02529	1.5749
X16		-.54562	- .961			X16		-.4516	- .641		
Step 3											
X10		-.15885	-1.269								
X16	15.00234	-.49982	-1.285	.02229	1.31917	X10		-.18345	-1.199		
X 6		.32917	.936			X16	17.4995	- 2.2580	-1.592	.05129	1.7584
						X6		.6231	1.449		
						Step 4					
						X10		-.17508	-1.057		
						X16		-2.2272	-1.524		
						X6	21.23084	.5962	4.257		
						X8		-.0540	- .142		

Table No. 9.4

Zero-order Correlation Coefficient Matrix : Madhya Pradesh - 1981

Vari-ables	X2	X7	X9	X11	X17	Vari-ables	X4	X7	X9	X11	X17
X2	1.000	.057	-.014	-.051	.133	X4	1.000	.121	-.013	-.048	.208
X4		1.000	-.588	-.404	.784	X7		1.000	-.588	-.404	.784
X9			1.000	.368	-.584	X9			1.000	.368	-.584
X11				1.000	-.313	X11				1.000	-.313
X17					1.000	X17					1.000

Table No : 9.5

Results of Regression Analysis : Madhya Pradesh - 1981

Variables	SELECTION 1 Intercept Value	R.C.	t	R^{-2}	F	Variables	SELECTION 2 Intercept Value	R.C.	t	R^{-2}	F
Step 1											
X17	6.32907	.19824	.861	-.00619	.74170	X17	9.26013	.44889	1.363	.02003	1.25833
Step 2											
X17	3.32955	.28183	.861	-.02492	.48943	X17	1.83400	.65585	1.613	.01426	1.30393
X9		.03858	.501			X 9		.09551	.872		
Step 3											
X17		.37917	.972			X17		.73719	1.328		
X 9	4.2683	.03080	.382	.04748	.36538	X 9	2.6185	.8901	.776	-.0097	.81499
X 7		-.042287	-.372			X 7		-.03566	-.218		
Step 4											
X17		.3817	.973			X17		.74140	1.317		
X 9		.0349	.421			X 9		.09812	.779		
X7	4.6886	-.0498	-.418	.07297	.28588	X7	2.94425	-.04101	-.242	.03579	.63719
X11		-.01682	.271			X11		-.01263	-.143		

Table No. 9.7

Zero-Order Correlation Coefficient Matrix : Madhya Pradesh - 1971-81

Variables	X5	X13	X14	X15	X18
X5	1.000	.083	-.064	.163	.127
X13		1.000	.024	-.129	.430
X14			1.000	.074	-.003
X15				1.000	-.004
X18					1.000

Uttar Pradesh :

(i) Mean and Coefficient of Variations of Variables : 1971

The mean and coefficient of variation of variables are given in Table No. 10.0 for the state of Uttar Pradesh for 1971. As table shows, houselessness rate and houselessness ratio as dependent variables have recorded the coefficient of variations of 97.22 and 94.23. The Appendix shows the range of houselessness rate from 0.16 in the districts of Sultanpur & Pratapgarh to 3.90 in the district of Mirzapur. In the case of

Table No. 10.0

Mean and Coefficient of Variation of Variables for Uttar Pradesh (1971)

Variables	Mean	Coefficient of Variations
Dependent Variables		
X1	00.72	97.22
X3	01.04	94.23
Independent Variables		
X6	12.74	89.24
X8	76.55	10.97
X10	20.85	30.35
X16	02.98	92.95
X19	361.16	32.13

independent variables the main workers engaged in non-household industries of manufacturing, processing, services & repairs has been observed with a higher coefficient of variation of 92.95.

While illiterate population has been found with a lower coefficient of variation i.e. 10.97. In the Appendix, the main workers engaged in non-houshold industries of manufacturing, processing, services & repairs varies from 0.13 in the district of Barabangi to 14.12 in the district of Kanpur. In the case of illiterate population, it varies from 49.39 in the district of Hamirpur to 88.95 in the district of Gonda.

(ii) Zero-order Correlation Analysis : 1971

The Table No. 10.1 shows the matrix of zero-order correlation for within the independent variables and between dependent and independent variables in 1971. According to the table, urban population and main workers engaged in non-household industries of manufacturing, processing, services & repairs are positively correlated (0.857) which is highly significant. On the other hand, urban population and illiterate population are negatively correlated (-0.525) with a high significant. Similarly a negative correlation is also observe between illiterate population, and main workers engaged in non-household industries of manufacturing, processing, services & repairs. with no significance.

In the case of inter-relationship between dependent and independent variables, houselessness rat being a dependent variable is positively correlated (0.306) with urban population with a moderate significante. It is also positively

correlated with per capita income (0.272) and SC & ST population (0.212). As far as the position of houselessness ratio is concerned it is positively correlated (0.482) with urban population. This relationship is certainly of high significance. Besides this houselessness ratio is also correlated (0.329) with the main workers engaged in non-household industries of manufacturing, processing, services & repairs. It is also positively correlated with per capita income (0.222). As contrary to these observations, illiterate population is found to be have in a negative correlation (-.0404) with houselessness rate and houselessness ratio (-0.545).

From the above observations, one can conclude that urban population is very strongly associated with both independent variables. The relationship between urban population and two dependent variables is undoubtedly of high significance. Meanwhile main workers engaged in non-household industries of manufacturing, processing, services & repairs and per capita income could be considered as associates of houselessness but with relatively low significance. in the districts of Uttar Pradesh in 1971.

(iii) Linear Multiple Regression Analysis : 1971

The scrutiny of regression matrix (see Table No. 10.2) for Uttar Pradesh for 1971 reveals that independent variables together explaining the inter-district variation between 22 per cent and36 per cent in the dependent variables. Now let us examine the regression which explain the maximum variation in

the dependent variables. From the below given equation, one

$$X1 = 1.6013 - \underset{(-2.119)}{.02571\ X8^{**}} + \underset{(1.710)}{.02315\ X10^{***}} + \underset{(1.827)}{.36505\ X19^{***}}$$

$$+ \underset{(.994)}{.84109\ X6}$$

$$R^{-2} = .21834 \qquad F = 4.63620$$

can see that a set of four variables like illiterate population SC & ST population, urban population and per capita income together explaining the maximum variation of 21 per cent in houselessness rate at 1 per cent significant level. While looking at these four variables individually urban population has recorded a regression coefficient of .84. This obviously means that if there is an increase by unit in urban population there will be an increase in houselessness rate by .84 units. Besides this the main workers engaged in non-household industries of manufacturing, processing, services & repairs has recorded a regression coefficient of .36. It should be noted that illiterate population has recorded a negative regression coefficient. Now let us examine the regression which explains a high variation in the houselessness ratio.

$$X3 = 3.4070 - \underset{(-2.723)}{.04208\ X8^{*}} + \underset{(2.366)}{.4673\ X6^{*}} + \underset{(1.622)}{.5446\ X19^{**}}$$

$$- \underset{(-1.304)}{.09903\ X16^{**}}$$

$$R^{-2} = .35509 \qquad F = 8.39558$$

The above regression explains the maximum inter-district variation of about 35 per cent in houselessness ratio at one per cent significant level. A set of four variables such

such as illiterate population, urban population, main workers engaged in non-household industries of manufacturing, processing, services & repairs and per capita income have explained this variation. While looking at these variables indivudually per capita incomehas recorded a regression coefficient of .54. This means that if there is an increase by one unit in per capita income there will be an increase by .54 units in houselessness ratio. Whereas urban population has registered a regression coefficient 0.46. On the other hand, variables like illiterate population and main workers engaged in non-household industries of manufacturing, processing, services & repairs have recorded a negative regression coefficient. Looking at the nature of this equation one can see that the per capita income and urban population exerting a positive influence over houselessness ratio. Thereofore, these two variables could be considered the determinants of houselessness in the districts of Uttar Pradesh in 1971. Now Let us look at correlation and regression test which have been conducted for the state of Uttar Pradesh for the year 1981.

I. Mean and Coefficient of Variation of Variables : 1981

The mean and coefficient of variation of dependent and independent variables are given in Table No. 10.3. As table shows among the dependent variables houselessness rate as recorded a high coefficient of variation.( ). The appendix shows the range of this variable from 0.01 in the district of Hamirpur to 31.16 in the district of Raisen. Houselessness ratio meanwhile has been observed with a lower coefficient

variation (130.85) relatively. This varies from 0.10 in the districts of Sitapur to 43.16 in the districts of Raisen.

Table No.: 10.3

Mean and Coefficient of Variation of Variables for Uttar Pradesh (1981)

Variables	Mean	Coefficient of Variations
Dependent Variables		
x2	2.60	320.11
X4	1.75	130.78
Independent Variables		
X7	17.12	70.41
X9	70.44	790.39
X11	20.57	29.46
X17	4.60	76.73
X20	832.38	47.03

In the case of independent variables main workers engaged in non-household manufacturing, processing, services & repairs has recorded a high coefficient of variation of 76.73. This range is from 1.06 in the district of Chamoli to 15.54 in the district of Agra. The lowest coefficient of variation has been observed with illiterate population. The range of this variables is from 43 in the districts of Hamirpur to 88.85 in the district Jhabua.

(ii) Zero-order Correlation Analysis : 1981

The inter-relationship which exists within the independent variables and between dependent and independent variables are presented in the Table No. 10.4. As table shows within the independent variables urban population and main workers

engaged in non-household industries of manufacturing, processing, services & repairs are positively correlated (0.809) with a phenomenon significance. Urban population and per capita income are also positively correlated (0.226) but with a moderate significance. Some independent varibles are negatively correlated. For example, urban population is negatively correlated (-0.374) with illiterate population. Illiterate population is negatively correlated with two variables i.e. main workers engaged in non-household industries of manufacturing, processing, services & repairs (-0.326) and per capita income (-0.255).

Let us now look at the correlation between independent variables and dependent variables. In the case of houselessness rate urban population, illiterate population, main workers engaged in non-household industries of manufacturing, processing, services & repairs and per capita income all are negatively correlated with it. SC & ST population as an exceptional case is positively correlated with houselessness rate but with absolutely no significance at all. This indicates that all the independent variables are not having any strong association with houselessness rate in the districts of Uttar Pradesh.

In the case of houselessness ratio SC & ST population is positively correlated (0.166). It is also positively correlated (0.12) with per capita income. However, this correlation does not seems to be having a considerable significance. On the other hand, illiterate population is negatively correlated (-0.407) with houselessness ratio. It should be

noticed that the interrelationship between houselessness ratio and illiterate population is negative but of high significance. From this analysis one can understand that out of the selected variables, only two variables i.e. SC/ST population, and per capita income are positively associated with the houselessness in the districts of Uttar Pradesh in 1981.

(iii) Linear Multiple Regression Analysis : 1981

The results of regression for 1981 for the state of Uttar Pradesh (Table No. 10.5) reveals that variables such as urban population, illiterate population, SC/ST population and main workers engaged in non-household industries of manufacturing, processing, services & repairs together explaining no variation in houselessness rate. This implies that entire variables fitted in the regression test in 1981 were in significant. Even though the results of regression for the state of Uttar Pradesh for 1981 have not come satisfactorily, they are presented in the table for understanding.

However, the regression results for Uttar Pradesh for 1981 for houselessness ratio are relatively better compare to houselessness rate. The regression which explains the high variation in the houselessness ratio is given below for investigation.

$$X4 = 10.3625 \underset{(-3.381)}{-.1167\ X9^{*}} \underset{(-1.055)}{-.0914\ X17}$$

$$R^{-2} = .15100 \qquad F = 5.71672$$

As the above equation shows, the independent variables altogether explained the maximum inter-districts variation of about 15 per

cent in houselessness ratio at 1 per cent significant level. The variables which explained the above variation are; illiterate population, and main workers engaged in non-household industries of manufacturing, processing, services & repairs. It should be noted that these two variables have recorded negative regression coefficient. It can be say, looking at the above equation that other unknown factors might be contributing to explain this variation. However, it has not been possible to explore these residual factors. It is clear from the analysis that the SC/ST population is moderately associated with houselessness as other variables are not show. It is also clear that SC/ST population is having some amount of control over houselessness. Therefore, it could be say that SC/ST population plays a partial role in determining houselessness in the districts of Uttar Pradesh in 1981.

(i) Mean and Coefficient of Variation of Variables : 1971-81

As Table No. 10.6, the dependent variables annual growth rate of houselessness population had registered a coefficient of variation of 202.03. The Appendix shows the range of this variable from -0.48 in the districts of Muradabad to 32.69 in the districts of Chamoli. On the other hand, among the independent variable a high coefficient of variation (182.28) has been observed with annual growth rate of SC/ST population. This varies from 0.4 in the district of Gonda to 28.00 in the districts Etawah. Meanwhile a low coefficient of variation has been observed by annual growth of rate of per capita income. This

Table No. 10.6

Mean and Coefficient of Variation of Variables for Uttar Pradesh: (1971-81)

Variables	Mean	Coefficient of Variations
Dependent Variables		
X5	5.90	202.03
Independent Variables		
X13	6.17	53.47
X14	1.11	264.52
X15	2.71	729.15
X18	6.19	48.39
X21	7.95	32.46

variable ranges from 4.70 in the districts of Rampur to 9.75 in the district of Deoria.

(ii) Zero-order Correlation Analysis : 1971-81

According to the Table No. 10.7, among the independent variables annual growth rate of illiterate population is positively correlated (0.215) with annual growth rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs. In a similar manners, annual growth rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs and annual growth rate of per capita income are positively correlated(0.224). It should be noted that inter-

relationship between the above mentioned independent variables are of low significance.

With regard to correlation between dependent and independent, variables, annual growth rate of houseless population is positively correlated (0.204) with annual growth rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs. Surprisingly, annual growth rate of SC/ST population is negatively correlated (-0.358) with annual growth rate of houseless population. Thus, it is understandable for the analysis that annual growth rate of houseless population and annual growth rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs are relatively strongly correlated in the given scenario .

(iii) Linear Multiple Analysis : 1971-81

The results of regression analysis for 1971-81 for Uttar Pradesh are poor compare to the results of 1971 and 1981. As Table 10.8 reveals independent variables together explain only 10 per cent as the maximum variation in the independent variable. at 10 per cent significant level. The variables which explain this variation are annual growth rate of SC/ST population and growth rate of main workers engaged in non-household industries of manufacturing, processing, services & repairs. Individually looking at the independent variables the main workers engaged in non-household industries of manufacturing, processing, services & repairs has recorded substantally a high regression coefficient i.e. .58.

However, the annual growth rate of SC/ST population has recorded a negative regression coefficient i.e. -.80. Besides this when looking at the annual growth rate of SC/ST population in different steps of regression test it is found having recording a high regression coefficient. All these explains that out of the selected variables for the regression test for Uttar Pradesh for the decade 1971-81 only annual growth rate of SC/ST population is having control of a considerable significance over houselessness in the districts of Uttar Pradesh.

From the results of zero-order correlation and linear multiple regression conducted for the state of Uttar Pradesh for 1971, 1981 and 1971-81 the following conclusions can be formed :

In 1971, out of selected variables only two variables i.e. per capita income, and main workers engaged in non-household industries of manufacturing, processing, iservices & repairs played a significant role in determining houselessness in the districts of Uttar Pradesh.

In the 1981, SC/ST population alone was strongly associated with houselessness in the districts of Uttar Pradesh.

During 1971-81, main workers engaged in non-household industries of manufacturing, processing, services & repairs could be considered the determinant of houselessness in the districts of Uttar Pradesh.

Looking at the over all results of the regression and correlation for 1971, 1981 and the decade of 1971-81 out of selected variables per capita income, SC/ST population, and the main workers engaged in non-household industries of manufacturing, processing, services & repairs are playing a significant role in determining the houselessness in the districts of Uttar Pradesh.

Table No. 10.1

Zero-order Correlation Coefficient Matrix : Uttar Pradesh - 1971

Variables	X1	X6	X8	X10	X16	X19	Variables	X3	X6	X8	X10	X16	X19
X1	1.000	.306	-.404	.212	.181	.272	X3	1.000	-.545	.021	.021	.329	.222
X6		1.000	-.525	-.037	.575	-.030	X6		1.000	-.525	.037	.857	-.030
X8			1.000	.045	-.428	-.130	X8			1.000	.045	-.428	-.130
X10				1.000	-.003	.049	X10				1.000	-.003	.049
X16					1.000	-.035	X16					1.000	-.035
X19						1.000	X19						1.000

Table No.: 10.2

Results of Regression Analysis : Uttar Pradesh - 1971

Variables	SELECTION 1 Inter-Cept Value	R.C.	t	R^2	F	Variables	SELECTION 2 Inter-cept Values	R.C.	t	R^2	F
Step 1											
Y8	3.8976	-.03265	-3.184	.14703	10.1355	X8	5.94409	-.06402	-4.692	.28397	22.01897
Step 2											
X8	2.8325	-.03365	-3.184	.18541	7.03118	X8	4.36958	-.04736	-3.044	.32507	13.76357
X10		.02650	1.858			X6		.02348	2.041		
Step 3											
X8		.034219	-3.144			X8		-.04303	-2.761		
X10	2.21968	.0242	1.795	.21551	5.85330	X6	3.44789	.02563	2.244	.34607	10.34940
X19		.2751	1.789			X19		.5572	1.624		
Step 4											
X8		-.02591	2.219			X8		-.04208	-2.723		
X10	1.60131	.02315	1.714	.21634	4.63620	X6		.00673	2.366		
X19		.36575	1.827			X19	3.4070	.5026	1.622	.25509	8.29958
X6		.64109	.994			X16		-.09903	-1.304		
Step 5											
X8		-.02574	-2.063			X8		-.0421	-2.691		
X10		.02233	1.633			X6		.0465	2.322		
X19	1.5887	.3607	1.823	.21674	3.93906	X19	3.3911	.5403	1.598	.34172	6.50268
X6		.02215	1.426			X16		.0986	1.282		
X16		-.06223	-1.045			X10		.2346	.071		

Table No. 10.4

Zero-order Correlation Coefficient Matrix : Uttar Pradesh - 1981

Variables	X2	X7	X9	X11	X17	X20	Variables	X4	X7	X9	X11	X17	X20
X2	1.000	-.128	-.029	.014	-.022	-.070	X4	1.000	.030	-.407	.156	.006	.152
X7		1.000	-.374	-.069	.809	.226	X7		1.000	-.374	-.069	.809	.226
X9			1.000	-.128	-.326	-.255	X9			1.000	-.128	-.326	-.255
X11				1.000	-.218	.144	X11				1.000	-.216	.144
X17					1.000	.171	X17					1.000	.171
X20						1.000	X20						1.000

Table No.: 10.5

Results of Regression Analysis : Uttar Pradesh - 1981

Variables	SELECTION 1 Intercept Value	R.C.	t	R^{-2}	F	Variables	SELECTION 2 Intercept Value	R.C.	T	R^{-2}	F
Step 1											
X7	4.1190	-.08842	-.929	-.0025	.86372	X9	9.10921	-.10446	-3.209	.14962	10.29865
Step 2											
X7	3.8134	-.2217	-1.345	-.0021	.94457	X9	10.3625	-.1162	-3.381	.15110	5.71672
X17		.5593	1.012			X17		-.0914	-1.055		
Step 3											
X7		-.23687	-1.422			X9		-.1120	-3.161		
X17	8.8204	.54183	.984	-.01754	.69554	X17	9.4253	-.0776	-.855	.13942	3.8612
X9		-.0665	-.476			X11		.0280	.555		
Step 4											
X7		-.2295	-1.357			X9		-.1146	-3.162		
X17	10.4308	.5416	.963	-.0358	.5485	X17	9.6219	-.0281	-.190	.12509	2.89436
X9		-.0768	-.535			X11		.03127	.608		
X20		.1780	-.378			X7		-.0182	-.425		
Step 5											
X7		-.2362	-.1.371			X9		-.1118	-3.019		
X17		.5904	.997			X17		-.0287	-.193		
X9	8.7069	-.0700	-.477	-.0549	.4474	X11	9.2255	.02808	.533	.11069	2.31930
X20		-.30191	-.411			X7		-.02011	-.436		
X11		.06034	.291			X20		.63347	.454		

Table No. 10.7

Zero-Order Correlation Coefficient Matrix : MUttar Pradesh · 1971-81

Variables	X5	X13	X14	X15	X18	X21
X5	1.000	.059	.037	-.358	.204	-.019
X13		1.000	-.048	.073	.147	-.130
X14			1.000	.115	.215	.103
X15				1.000	-.116	.071
X18					1.000	.224
X21						1.000

Table No.: 10.8

Results of Regression Analysis : Uttar Pradesh : 1971-81

Variables	Intercept value	R.C.	S.E.E.	t	R^{-2}	F
Step 1						
X15	8.21868	-.85143	.31279	-2.722	.10789	7.40972
Step 2						
X15	4.0103	-.80514	.31302	-2.573	.11854	4.56379
X18		.58879	.46141	1.276		
Step 3						
X15		-.81859	.21679	-2.584		
X18	2.92058	.55447	.47086	1.178	.10676	3.06743
X13		.22094	.47632	.464		
Step 4						
X15		-.88633	.32331	-2.586		
X18	2.94841	.51162	.58976	1.054	.08889	2.29277
X13		.23772	.48278	.492		
X14		.19188	.53411	.359		
Step 5						
X15		-.82880	.33190	-2.497		
X18		.57943	.53929	1.073		
X17	4.40171	.25958	.51430	.495	.05235	1.48801
X21		.14747	.66227	- .238		

CHAPTER - V

Summary and Conclusion

Summary:

This study has made an attempt to understand the problem of houselessness in India, coverning four states viz Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh with reference to 1971 and 1981. The ultimate aim of this study was to explore demographic, social and economic factors determining houselessness at district level. In order to gain a clear perspective about the nature and magnitude of the problem ofhouselessness, a state level discriptive analysis covering in major states of India based on the census data for 1971 and 1981, has been carried out as past of the present work. To find out the demographic, social and economic factors determining houselessness in the districts of Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh, a statistical analysis has been conducted by using zero-order correlation and linear Multiple Regression for the periods of 1971, 1981 and 1971-81.

The state-level descriptive analysis has revealed the following important characteristic features of houseless population in India for 1971 and 1981. Houseless population for India as a whole has increased at an annual growth rate of 167 per cent and 357 thousand to the total houseless population during 1971-81. There was a slight fall in the houselessness rate (3.62 in 1971 and 3.52 in 1980) and houselessness ratio (from 5.62 to 5.25).

Houseless population in India is unevenly distributed among the states according to 1971 and 1981 census. Nearly, two-third of the total houseless population of the country is concentrated in a group of four states i.e. Maharashtra, Madhya Pradesh, Gujarat and Andhra Pradesh. The state of Maharashtra is the most houseless populous in the country as one fourth of the India's houseless population lives in this state. It is followed by Madhya Pradesh, Gujrat and Andhra Pradesh. Among the major states, Kerala is the lowest houseless population state in the country (15 thousands in 1971 and 21 thousands in 1981). Amongthe states, Rajasthan has recorded the highest rural growth rate of 9.84 per cent during 1971-81. The state of Uttar Pradesh has recorded an annual growth rate of 8.66 in houseless population. Madhya Pradesh and Tamil Nadu have registered a negative growth rate of -1.59 and -2.15. There was a phenomenal decline in the houseless population of Madhya Pradesh i.e. to the tune of 58 thousands during 1971-81. The state of Maharashtra has recorded a very low annual growth of 1.1 per cent Gujarat and Andhra Pradesh have also recorded relatively low growth rates. The state of Kerala has registered an annual growth rate 8.41.

The highest houselessnessrate is registered in Maharashtra Uttar Pradesh has the highest houselessness ratio (14.82 in 1971 and 13.05 in 1981) in the country. One of India's houseless population more than 68 per cent all amles. The state of Rajasthan had 85 per cent of total houseless were males in 1971

and it came to 58.40 per cent in 1981. According to 1981 census, Uttar Pradesh highest has got the highest male houseless population in the country. India's 35-40 per cent total houseless houseless population are females. The state of Madhya Pradesh has the highest female houseless population (44.58 per cent in 1971 and 44.45 per cent in 1981. Uttar Pradesh has the lowest female houseless from population, the percentage being 31.59. Male houseless population has recorded an annual growth rate of 1.46 for India as a whole during 1971-81. The state of Uttar Pradesh has recorded the highest annual growth rate of 8.74 per cent. Orissa has recorded the lowest annual growth rate of 0.71. The states like Madhya Pradesh, Tamil Nadu and West Bengal have recorded negative growth rates in their male houseless population. In the case of female houseless population, an annual growth rate of 1.99 has been recorded for India as a whole during 1971-81. Rajasthan has recorded a phenomonal annual growth rate of 22.14 per cent in female houseless population.

India's three fourth of total houseless population lives in rural areas (76.58 per cent in 1971 & 73.06 per centin 1981). The rural houseless population of the country has recorded an annual growth rate of 1.27 per cent. Among the states, the state of Madhya Pradesh has the highest rural houseless population (92.50 per cent in 1971 and 83.90 per cent in 1981). It has

registered an annual growth rate of 22-90 per cent, West Bengal is the lowest rural houseless population state in the country i.e. 37.66 per cent in 1971 and 36.42 per cent in 1971). Nearly one fourth of the total houseless population is living urban areas in the country. The state West Bengal has the highest urban houseless population. Madhya Pradesh has the lowest proportion of urban in its total houseless population. The state of Uttar Pradesh has recorded the highest annual growth rate of 13.47 in its urban houseless population. Gujarat has recorded the lowest annual growth rate of 0.23 in urban houseless population.

The district-level statistical analysis for Andhra Pradesh, Kerala, Madhya Pradesh and Uttar Pradesh conducted for 1971, 1981 and 1971-81 has revealed the following findings. The demographic social and economic variables related for the present work, overall have explained a considerable variation in the districts of all four states. In the state of Andhra Pradesh, out of selected variables, urban population, SC&ST population are found to be playing important role in determining houselessness with statistical significance. Of these two variables, urban population seems to be having a strong hold or influence over houselessness. In the case of Kerala, three variables i.e. illiterate population, per capita income and the main workers engaged in non-household industries of manufacturing, processing, services & repairs are playing dominant

role in determing houselessness with a high statistical significance. However, of these three, per capita income is found to be a highly significant and hence determinant of houselessness in districts.

In Madhya Pradesh, the variables like urban population, main workers engaged in non-household industries of manufacturing, processing, services & repairs are found to be playing extremely poor roles in determining houselessness. In otherwords, selected variables, none of them was significant to explain houselessness with statistical significance. In the state of Uttar Pradesh, variables like urban population, SC & ST population and main workers engaged in non-household industries of manufacturing, processing, services & repairs are found to be playing a considerable role in determining houselessness with moderate statistical significance. While looking at the variables, individually the, the variable, lilliterate population is found to determining houselessness in the districts of Kerala. The influence of this variable is not felt on the houselessness at all. In other three states, the variables, urban population's impact is observed in the districts of Andhra Pradesh and Uttar Pradesh with adequate statistical significance. SC & ST population meanwhile proved to be significant in the districts of Andhra Pradesh and Uttar Pradesh. Main workers engaged in non-household industries of manufacturing, processing, services & repairs is on the ether exerts its influence on houselessness in the district of Kerala, Madhya Pradesh and Uttar Pradesh.

Conclusions

In the light of findings of present work, the validity of hypothesis can be examined. In the case of Andhra Pradesh, the hypotheses i.e. higher the urbanization, higher will be the houselessness and higher the SC&ST population, higher will be the houselessness have been supported by the findings. In Kerala, hypothesis like higher illiteracy, higher will be houselessness, higher the per capita income lower will be the houselessness and higher the main workers engaged in non-household industries of manufacturing, processing, services & repairs, higher will be the houselessness have been supported by the findings. In the state Madhya Pradesh, the findings have not supported any of the hypothesis found for the study with statistical significance. In the state of Uttar Pradesh finally, higher the urban population, higher will be houselessness, higher the SC&ST population, higher will be the houselessness and higher the workers engaged in non-household industries of manufacturing, processing, services & repairs have been approved by the findings of the study.

To sum up, from the findings of the present study, one can understand that houselessness in India is the result of a number of factors which are of demographed, social and economic. The factors are urban population, SC/ST population, per capita income, illiterate population and main workers engaged in non-household industries of manufacturing, processing, services & repairs.

The growth of homelessness in one of the most serious deficiencies in the living standard of the people. Indeed it has a cost and consequence on people particularly in terms of physical, psychological, health, social and economic aspects of human life. The problem of houselessness if not dealt may pose a great threat both immediate and long term for the welfare of the people and the development of the country. Therefore, the problem of houselessness being an endemic calls for an immediate attention and action.

The denial of providing or giving basic needs particularly shelter is a great social injustice and it is against the will and wish of the Constitution of India. The right to housing is not a fundamental right but it is a whole caste and tenore of the constitution for their provision. Article 38, 41, 46, 47 caste on the states that the duty to promot e social order with economic justice as its core, to secure the right to work and education of all the people to take care of cases of undeserved want to undertake "with special case" to promote the economic interests of the weaker sections in the people, to raise the standard of the living of people is a primary duty. The government has however an important role to play in providing shelter to houseless in India. The fo llowing measures can be suggested with regard to tackling the problem of houseless in India.

First, there is a need for a well defined and workable housing policy to provide shelter to houseless in the country. There have been hardly any national housing policy

or special housing schemes to cater the housing needs of houseless since independence. A large number of housing programmes and schemes have been introduced during the last four decades, but most of them dealt with the problem of houselessness as such in the country. This could be considered as one of the major constraints in finding the solution to houselessness. Unlike in India in the developed countries USA, UK, France etc., national housing policies and programmes are there to deal with the problem of houselessness. Hence, there is a need for well defined and workable national housing policy for India with clearcut objectives and methodology on how to achieve the goals and priorities in favour of the houseless who are poor and disadvantaged cross-section of the society, whether from the urban or rural backgrounds.

Secondly, in order to help the houseless people government may encourage low cost housing schemes on higher-purchase base or self-financing bases or long equated easily payable instalments with an element of loan on lower interest or no interest at all. The banks can also provide loans for the construction of the houses for the houseless people. In addition government may also provide appropriate and low cost technology in terms of designing housing and use management of locally available materials. The government official machinery may have to play a vital role in preparing and equiping the houseless people to reap the benefits in terms of finance, subsidised and materials, so that these

benefits do not find their way to go to people other than houseless.

Thirdly, as an effective strategy government shall encourage housing cooperatives and community ventures because this approach may reduce the role of the state as the principal provider of dwellings and increases the contribution of the householders to invest in the housing cooperatives. In most of the developed and welfare countries like Germany, Poland and Czechoslovakia, are given extensive aid and use incentives in terms of long term loan or no interest loan to cooperative services in housing. Since already the ideal of cooperation is sown and grown in our land the housing cooperatives undoubtedly may yield positive results to enable the houseless people to acquire shelter for themselves.

A special scheme or programme may also be introduced for the provision of shelter to the identified disadvantaged section of the rural population such as Scheduled Castes, Scheduled Tribes and Landless Agricultural labourers.

The data base for houseless population is very poor in India. The data are available only for total houseless population, total houseless house holds, male and female classification and rural-urban classification. It is a matter of serious concern from the research point of view that no other background data, i.e., demography, socio-economic re garding houseless population are available. The poor data base

perhaps may be a major reason for poor research activities in the past in the field of houselessness. In order to understand the problem of houselessness in its totality the background data are indispensable. This obviously indicates that there is an imperative need to strengthen the present data base of the houseless population to carry out wide research activities in this field in India. Therefore, it could be suggested that information or data regarding demographic, social, economic and other background of the houseless population be collected through census for the whole nation, so that the avenues for further innovative research activities in the field may be opened. Hence, the data-base for houseless population needs to be strengthened.

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APPENDIX

Houselessness Indicators and Explanatory Variables pertaining to the Districts of Andhra Prade (1971, 1981 & 1971-81)

Sr. No.	Districts	Houselessness Indicators					Demographic Variables		
		House-lessness Rate 1971	House-lessness Rate 1981	House-lessness Ratio 1971	House-lessness Ratio 1981	Annual Growth Rate of House-less Popula-tion 1971-81	Urban Popula-tion 1971	Urban Popula-tion 1981	Annual Growt Rate of Urban Popula tion, 1971-81
1	Srikakulam	1.68	1.55	2.61	2.46	2.18	10.64	13.30	6.50
2	Vishakapatnam	1.83	4.58	2.27	7.10	8.68	22.29	31.28	-2.56
3	East-Goda-wari	3.79 6.74	3.42 7.04	5.25 8.85	5.43 8.70	0.79 2.42	19.22 17.70	22.21	3.31
4	West-Godawari	6.74	7.07	8.85	8.70	2.42	17.70	20.76	3.56
5	Krishan	11.66	6.09	13.11	9.48	-4.38	27.25	32.54	3.85
6	Guntur	6.19	3.65	7.51	5.40	-3.34	24.98	27.53	2.89
7	Prakasam	3.47	4.10	4.31	5.75	5.50	5.68	14.99	5.08
8	Mellore	2.28	3.29	3.80	4.09	6.09	15.76	26.76	5.12
9	Chittoor	2.73	3.10	3.92	4.57	3.11	18.45	15.78	4.55
10	Cuddapah	0.18	4.39	4.21	5.67	5.48	14.17	19.37	5.29
11	Anantapur	3.51	3.22	4.48	4.57	1.00	17.76	20.80	3.52
12	Kurnool	5.35	7.88	7.34	9.38	5.98	20.30	24.49	3.89
13	Mahboobnagar	5.39	6.00	5.81	7.92	1.60	8.97	10.93	4.42
14	Hyderbad	3.80	5.41	6.10	9.54	6.44	65.87	99.64	3.67
15	Medak	0.47	4.46	5.36	5.75	1.41	8.51	11.97	5.65
16	Nizamabad	4.52	5.03	5.90	8.14	3.60	15.94	19.20	4.41
17	Adilabad	3.62	5.16	4.61	6.23	6.13	15.91	19.33	4.45
18	Karimnagar	4.08	6.38	4.60	7.31	6.75	10.61	15.79	6.22
19	Warangal	4.41	4.16	4.41	4.01	3.85	13.42	17.23	4.66
20	Khammam	8.07	6.65	8.07	3.81	8.96	8.96	16.97	4.79
21	Nalgonada	9.42	4.25	9.42	4.65	3.78	6.68	11.38	7.86

Contd...../-

(contd.)

Sr. No.	Districts	Social Variables						Economic Variables		
		Illiterate Population		SC & ST Population		Annual Growth Rate of Illi. Population 1971-81	Annual Growth Rate of SC & ST Population	Main workers engaged in Non-Household Industries of Manufacturing, processing, & repairs		Services Annual Growth rat 1971-81
		1971	1981	1971	1981			1971	1981	
1	Srikakulam	81.48	77.79	17.41	16.55	-3.32	3.27	1.34	3.61	14.83
2	Vishakapatnam	98.09	72.00	18.60	7.85	-2.56	-3.26	0.27	3.61	4.88
3	East-Godawari	60.09	38.32	20.60	20.66	3.31	-3.98	1.84	6.62	4.93
4	West-Godawari	69.82	62.38	16.51	18.46	3.50	0.41	3.07	6.41	3.94
5	Krishan	69.27	58.29	12.08	16.14	-3.85	0.95	5.62	5.64	4.00
6	Guntur	76.84	63.94	08.50	13.29	2.89	1.09	6.50	6.83	4.73
7	Prakasham	76.84	70.60	12.13	19.34	5.08	1.09	6.82	6.49	1.77
8	Mellore	73.17	67.89	27.82	29.60	5.12	1.58	-1.28	4.24	2.87
9	Chittoor	74.50	68.14	20.36	19.55	4.35	-0.90	1.85	4.60	4.32
10	Guddapah	75.90	68.89	13.44	20.37	5.29	-1.07	3.92	4.00	6.00
11	Anantapur	76.16	70.91	11.22	14.72	8.52	-0.11	2.30	5.17	7.90
12	Kurnool	74.91	71.27	12.87	17.59	3.89	-1.45	5.00	3.70	8.20
13	Mahboobnagar	84.40	80.59	17.12	23.60	4.42	-1.90	5.75	4.80	7.59
14	Hyderabad	90.91	53.57	20.57	27.90	3.67	2.14	4.40	2.55	14.27
15	Medak	86.16	78.17	08.33	20.94	5.05	1.42	4.98	15.29	5.26
16	Nizamabad	68.72	78.27	13.36	20.98	4.41	1.91	5.56	4.33	10.00
17	Adilabad	64.24	80.20	30117	30.97	4.45	8.86	3.76	5.52	1.23
18	Karimnagar	72.27	57.63	29.96	21.34	6.22	-4.76	3.02	5.83	4.29
19	Warangal	81.88	76.45	18.18	29.41	4.66	1.38	7.11	4.05	1.52
20	Khammam	70.92	74.40	29.94	38.93	4.79	2.41	6.31	4.16	1.71
21	Nalgonada	82.90	77.56	15.42	24.91	7.86	1.59	6.96	3.24	9.00

APPENDIX

Houselessness Indicators and Explanatory Variables Pertaining to the Districts of Kerala (1971, 1981 & 1971-81)

Sr. No.	Districts	Houselessness Indicators					Demographic Variables		
		House-lessness Rate 1971	House-lessness Rate 1981	House-lessness Ratio 1971	House-lessness Ratio 1981	Annual Growth Rate of House-less Population 1971-81	Urban Population 1971	Urban Population 1981	Annual Growth Rate of Urban Population 1971-81
1	Camanore	2.00	1.05	2.68	2.89	2.27	12.73	23.39	7.27
2	Kozhikode	0.94	1.29	3.25	3.71	5.87	25.92	21.79	0.83
3	Malappuram	0.38	0.76	1.09	2.24	9.94	6.73	7.39	3.60
4	Palghat	1.02	0.89	2.32	2.01	0.41	12.07	10.11	-0.35
5	Trichur	0.47	0.84	1.08	2.20	7.43	11.74	21.10	4.33
6	Ernakulam	0.90	0.89	2.32	2.56	0.46	27.36	39.55	29.52
7	Kottayam	0.96	1.09	2.43	3.01	3.86	10.22	7.63	-0.45
8	Allepey	0.41	0.67	0.97	0.92	6.03	16.92	15.39	0.37
9	Quilon	0.43	0.39	1.30	1.64	4.88	7.87	13.15	6.90
10	Trivandrum	0.50	0.32	0.87	0.94	-1.26	25.99	25.25	1.38

(contd.)

Sr. No.	Dist-ricts	Social Variables						Economic Variables					
		Illiterate Population		SC&ST Population		Annual Growth Rate		Main Workers in Non-household Industries in Manf.,Proc,Ser &Repairs			Per Capita Income in Rs.		
		1971	1981	1971	1981	Illi-terate Popula-tion 1971-81	SC & ST Popula-tion 1971-81	1971	1881	Annual Growth Rate 1971-81	1971	1981	Annual Growth Rate 1971-81
1	-do-	45.16	34.26	16.26	66.54	-18.82	2.15	19.48	18.38	4.63	557	557	-
2	-do-	41.58	32.20	07.44	10.00	0.02	5.75	10.44	11.71	2.54	626	610	-0.25
3	-do-	52.09	39.50	8.60	8.98	-0.18	3.73	6.87	7.44	1.22	457	420	-0.84
4	do-	53.33	42.00	14.02	19.82	-1.39	5.53	7.02	8.42	2.89	576	619	0.72
5	-do-	38.38	26.41	15.89	12.51	-2.39	3.20	12.92	14.48	1.87	562	589	0.47
6	-do-	39.17	28.17	8.58	08.07	-3.36	0.72	15.64	17.28	1.32	664	812	2.03
7	-do-	32.27	23.19	9.84	1.48	-0.69	4.09	6.39	6.32	2.44	663	686	0.34
8	-do-	29.55	21.47	9.46	10.15	-2.16	1.92	10.54	11.50	1.36	594	587	-0.11
9	-do-	30.03	25.89	11.78	10.10	-1.47	2.24	18.03	13.64	-2.70	655	633	-0.34
10	-do-	37.46	13.90	10.22	11.49	4.42	2.87	11.90	11.41	0.71	585	681	1.23

APPENDIX

Houselessness Indicators and Explanatory Variables Pertaining to the Districts of Madhya Pradesh (1971, 1981, 1971-81)

Sr. No.	Districts	Houselessness Indicators: Houselessness Rate		Houselessness Indicators: Houselessness Ratio		Houselessness Indicators: Annual Growth Rate of Houseless Population	Demographic Variables: Urban Population		Demographic Variables: Annual Growth Rate of Urban Population
		1971	1981	1971	1981	1971-81	1971	1981	1971-81
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Morena	4.74	3.01	8.87	5.20	- 1.71	10.65	13.67	5.43
2	BHind	4.99	0.89	11.56	1.61	-14.00	9.24	17.06	8.57
3	Gwalior	5.20	4.29	9.43	7.45	0.45	31.62	55.00	3.24
4	Datia	28.77	1.62	3.73	2.77	-21.10	14.66	10.55	5.00
5	Shivpuri	3.78	3.08	5.50	5.02	0 .41	10.50	12.85	4.54
6	Guna	22.26	4.61	32.63	6.71	-12.45	12.78	14.13	13.52
7	Tikamgarh	6.23	1.58	11.26	2.66	-10.83	4.90	12.13	12.36
8	Chhatarpur	5.46	9.81	8.65	14.45	14.48	11.23	7.78	-6.23
9	Panna	9.06	1.88	3.98	3.89	- 4.35	7.09	27.85	28.31
10	Sagar	27.35	15.49	38.80	22.42	- 9.10	24.49	14.41	-8.70
11	Demoth	15.52	5.15	21.58	7.23	-10.81	10.46	14.41	2.79
12	Satna	2.44	4.51	5.25	8.67	8.81	19.36	16.19	7.02
13	Rewa	1.24	5.05	3.62	7.59	17.46	7.67	13.05	8.58
14	Shanbol	2.74	4.59	4.32	7.95	8.21	11.83	17.81	6.49
15	Sidhi	1.51	4.66	4.32	7.79	14.87	1.20	1.98	7.69
16	Mandsauk	1.24	15.29	16.17	19.71	32.10	20.23	20.25	2.78
17	Ratlam	3.10	9.10	8.74	13.21	2.10	28.92	20.92	2.87
18	Ujjan	9.92	8.37	14.07	26.81	1.32	37.09	37.48	3.66
19	Shajapur	10.51	5.01	16.97	6.95	- 5.10	11.46	14.84	4.84
20	Dewas	13.31	18.66	19.53	26.51	6.49	15.46	18.70	4.60
21	Jhabua	1.12	2.16	2.27	3.53	8.60	7.31	8.33	3.10
22	Dhar	15.61	11.72	24.43	17.27	- 0.59	10.16	12.57	4.49
23	Indore	8.49	8 .57	14.45	13.13	3.32	62.71	65.94	3.75
24	West Nimar	5.23	5.02	8.38	9.12	2.38	14.22	14.78	2.81
25	East Nimar	11.45	12.07	17.44	17.50	3.29	23.48	26.80	4.31

contd.

Appendix (contd.)

Sr. No.	(1)	Houselessness Indicators (2)	(3)	(4)	(5)	(6)	Demographic Variables (7)	(8)	(9)
26	Rajgarh	6.13	2.74	8.97	4.01	-5.71	9.58	13.09	5.43
27	Vidisha	74.77	12.82	107.17	17.69	-14.89	14.10	16.97	3.64
28	Sehore	13.06	7.16	19.49	9.91	- 2.39	41.10	49.56	5.52
29	Raisen	49.83	34.16	13.19	43.16	- 2.16	5.56	9.95	8.60
30	Betul	3.35	4.03	6.03	6.41	4.21	9.19	13.31	7.68
31	Hausinbad	23.41	12.91	39.95	20.15	- 3.68	21.76	25.10	3.69
32	Jabalpur	9.17	6.39	13.81	11.17	- 0.95	40.54	45.04	3.77
33	Narsimhpur	10.71	17.61	28.29	27.39	2.69	12.96	13.54	2.73
34	Mandla	3.86	4.97	8.37	7.73	4.32	5.52	7.05	4.15
35	Chhindwara	3.41	4.37	6.01	6.85	4.78	16.71	21.17	4.67
36	Seoni	2.59	7.73	5.11	12.03	13.70	6.51	7.74	3.70
37	Balaghat	4.42	5.94	6.00	8.47	4.66	6.85	8.69	3.91
38	Surguja	2.78	2.09	5.52	4.52	- 0.78	6.71	8.69	4.77
39	Bilaspur	4.23	5.76	7.37	8.41	5.11	10.82	19.84	4.46
40	Raigarh	3.33	2.19	5.03	3.29	-2.95	5.93	6.31	4.78
41	Durg	3.91	3.05	5.58	4.61	0.29	16.12	24.37	6.49
42	Raipur	8.61	3.91	9.55	5.91	-6.74	12.43	17.18	4.99
43	Bastar	6.70	5.09	10.53	8.32	-0.88	3.73	6.06	7.02

(Contd.)

Sr. No.	Districts	Social Variables: Illiterate Population		SC & ST Population		Annual Growth Rate Illiterate Population	Annual Growth Rate SC & ST Population	Economic Variables: Main workers engaged in Non-Household Industries of Manufacturing, processing, Services & repairs		Annual Growth rate, 1971-81	
		1971	1981	1971	1981	1971-1981		1971	1981		
1	Morena	80.44	74.79	25.72	41.65	2.03		2.70	1.91	2.92	4.79
2	Bhind	96.45	68.64	20.66	21.31	0.91		2.40	2.53	0.80	3.56
3	Gwalior	66/11	60.36	21.25	23.23	1.65		3.53	13.88	13.85	2.58
4	Datia	78.05	72.30	19.91	9.35	1.16		4.76	1.57	3.60	10.00
5	Shivpuri	83.13	79.49	23.01	29.18	2.04		3.88	1.29	2.03	16.42
6	Guna	82.12	78.40	25.52	27.16	1.99		3.86	1.64	1.92	3.75
7	Tikamgarh	85.96	80.84	24.56	25.96	1.99		3.15	0.77	1.20	7.02
8	Chatarpur	84.93	76.94	23.74	42.57	1.56		3.98	1.08	1.99	8.14
9	Panna	84.93	32.84	3.60	14.01	1.73		3.55	0.62	8.48	21.14
10	Sagar	72.00	65.01	20.81	54.04	1.28		5.83	3.31	4.34	5.00
11	Demoth	58.13	70.00	25.56	32.48	1.44		7.13	1.65	2.39	9.79
12	Satna	62.75	93.16	26.56	30.06	1.54		3.53	3.36	4.94	2.68
13	Rewa	80.73	74.79	24.98	25.97	-1.35		2.44	1.71	1.63	5.54
14	Shanbon	85.40	80.55	59.29	53.00	2.10		2.46	1.52	1.87	3.30
15	Sidhi	89.35	85.03	42.50	42.09	3.95		2.35	0.92	1.03	12.51
16	Mandsauk	79.52	68.73	14.68	20.78	2.22		6.40	2.98	3.50	4.97
17	Ratlam	74.52	70.49	25.38	35.51	1.68		5.75	4.78	5.24	3.28
18	Ujjan	74.62	66.92	24.41	26.02	1.94		3.70	9.72	10.92	9.63
19	Shajapur	81.02	76.26	22.24	20.25	1.15		3.00	1.36	0.32	-10.20
20	Dewas	78.41	76.84	17.57	32.09	2.28		9.31	2.60	5.99	12.25
21	Jhabua	91.77	88.85	87.94	86.94	1.68		8.96	1.21	1.45	6.62
22	Dhar	83.37	78.99	10.86	59.02	1.18		21.20	18.55	19.55	4.78
23	Indore	57.60	29.71	14.38	20.37	2.18		8.89	1.64	2.42	7.49
24	West Nimar	82.04	77.00	49.87	53.45	1.17		3.13	5.36	8.30	8.30
25	East Nimar	72.00	89.28	10.95	36.38	2.36		11.11	1.37	1.46	7.89

Contd...../-

(Contd.)

Sr. No.	Districts	Social Variables: Illiterate Population		SC & ST Population		Annual Growth Rate SC & ST Population	Annual Growth Rate Illiterate Population	Economic Variables: Main workers engaged in Non-household Industries of Manufacturing, processing, service & repairs		Annual Growth Rate, 1971-81
		1971	1981	1971	1981	1971-81		1971	1981	
26	Rajgarh	85.33	84.82	19.50	20.87	3.44	01.54	1.37	1.46	7.89
27	Vidisha	81.03	74.56	26.21	20.75	1.16	00.85	1.64	3.22	7.85
28	Sehore	90.53	16.13	30.00	21.07	4.18	4.06	3.71	11.61	6.01
29	Raisen	81.76	78.98	80.61	32.15	3.04	1.92	1.31	2.89	10.34
30	Betual	98.10	72.00	46.17	41.70	8.04	6.53	7.51	11.83	11.45
31	Hausinbad	59.89	69.64	18.20	21.60	3.66	4.57	2.70	4.26	6.77
32	Jabalpur	62.79	59.00	11.77	29.63	12.66	2.05	9.75	14.43	0.79
33	Narsimhpur	71.20	66.77	26.85	28.50	19.68	1.62	2.06	2.57	5.56
34	Mandle	81.66	77.08	65.30	65.53	17.70	1.15	0.41	0.66	7.99
35	Chhindwara	73.96	71.81	45.63	45.13	2.14	1.39	7.98	2.27	9.34
36	Seoni	78.69	72.89	44.23	49.61	6.52	1.17	0.28	1.48	10.46
37	Bâlaghat	74.82	66.00	17.91	29.00	6.63	0.37	1.11	2.59	10.65
38	Surguja	89.22	23.59	60.73	60.03	1.98	1.67	0.66	0.93	6.25
39	Bilaspur	77.00	37.54	84.40	40.64	3.64	-24.60	1.33	2.57	9.38
40	Raigarh	79.87	73.81	57.67	49.74	-0.26	0.42	1.28	1.91	6.21
41	Durg	75.26	66.37	21.03	9.55	3.64	00.91	4.88	7.31	6.50
42	Raipur	76.23	69.19	29.22	13.74	-6.97	2.00	2.08	3.79	9.90
43	Bastar	90.37	63.65	7.40	68.22	2.27	1.44	0.58	1.20	11.60

APPENDIX

Houselessness Indicators and Explanatory Variables Pertaining to the Districts of Uttar Pradesh (1971, 1981 & 1971-81)

Sr. No.	Districts	Houselessness Indicators					Demographic Variables		
		Houselessness Rate		Houselessness Ratio		Annual Growth Rate of Houseless Population	Urban Population		Annual Growth Rate, 1971-
		1971	1981	1971	1981	1971 - 1981	1971	1981	
1	Utterkashi	0.85	5.99	5.19	4.79	-1.34	4.07	6.95	8.22
2	Chamoli	0.51	6.92	0.88	5.19	32.69	4.78	8.00	9.10
3	Tetehri-Garhwal	0.87	3.92	1.78	3.89	18.81	2.64	4.12	6.92
4	Garwal	1.54	6.79	1.75	3.02	11.40	6.30	9.82	6.04
5	Pithoragarh	1.17	0.79	1.69	0.91	0.61	3.80	5.52	8.50
6	Almora	0.92	2.27	0.74	1.99	9.62	5.21	6.28	14.82
7	Nainital	2.46	4.37	1.91	6.03	9.86	22.13	27.49	5.97
8	Bijnor	0.21	0.31	0.35	0.36	6.52	18.09	24.96	5.95
9	Moradabad	0.57	0.35	0.47	0.46	-0.46	23.76	26.74	3.92
10	Budaun	0.32	0.35	0.40	0.63	2.78	9.34	16.13	1.53
11	Rampur	0.83	0.59	1.24	0.62	2.62	19.86	26.73	5.99
12	Barely	0.37	0.37	0.47	0.68	-2.11	22.27	28.99	5.21
13	Pilibhat	0.37	0.22	0.52	0.21	11.22	5.57	16.22	4.75
14	Shajahanpur	0.33	0.75	0.64	0.88	9.22	15.24	19.38	5.00
15	Dhera Dun	2.85	5.21	3.57	8.27	10.17	47.07	48.85	3.19
16	Sharanpur	0.45	0.91	0.73	1.37	0.96	23.49	27.19	4.13
17	Muzzafarnagar	0.59	0.52	0.71	0.53	16.56	13.41	21.78	7.00
18	Meerat	0.44	1.48	0.76	1.80	11.12	24.26	32.38	6.21
19	Bulandhahr	0.25	0.39	0.23	1.20	- 5.96	13.33	19.33	5.13
20	Aligarh	0.24	0.64	0.55	0.42	4.95	17.85	22.90	4.61
21	Mathura	0.19	0.51	1.54	1.00	7.92	16.49	21.06	4.44
22	Agra	0.49	0.49	1.49	0.53	6.10	36.64	38.09	2.54
23	Etah	0.28	0.69	0.44	0.77	0.42	9.68	15.49	6.44
24	Manpuri	0.33	0.18	0.52	0.69	-10.94	1.76	9.92	4.39
25	Farrukabad	0.83	3.06	1.11	0.23	14.24	10.91	16.15	8.36
26	Etawah	0.71	0.02	1.02	7.69	-25.07	9.76	14.78	6.16
27	Kanpur	1.27	0.89	3.60	0.27	13.01	42.79	46.32	3.05
28	Fatehpur	0.48	0.80	0.92	1.20	13.01	5.62	8.98	6.98
27	Allahabad	0.34	0.16	0.79	1.70	10.41	18.45	20.37	3.62
28	Jhansi	1.73	0.45	3.04	0.19	-14.38	24.38	44.70	4.69
29	Jhalaun	0.94	1.30	1.33	0.49	0 9.43	13.74	19.91	5.80

(contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
30	Hamirpur	1.47	0.01	1.98	3.81	15.38	9.91	16.55	7.31
31	Banda	0.40	0.12	0.59	0.05	-27.10	8.28	11.80	6.33
32	Kheri	0.57	0.06	0.50	0.15	-16.96	6.21	9.59	7.33
33	Sitapur	0.50	0.30	0.72	0.10	-14.21	7.53	10.29	5.40
34	Hardoi	0.50	4.17	0.49	0.36	- 7.95	7.90	11.04	5.57
35	Unnao	0.39	2.28	1.12	8.29	14.27	2.57	11.86	18.93
36	Lukhnow	0.84	2.71	3.31	2.20	23.25	50.89	52.60	2.25
37	Rae Bareli	1.17	0.17	0.39	0.31	8.02	3.40	7.36	10.98
38	Bahraic	0.35	0.56	0.23	0.29	- 8.11	5.93	7.04	4.30
39	Gonda	0.16	0.86	0.76	0.82	3.45	5.65	7.32	4.77
40	Barbangi	0.49	0.70	0.57	1.06	21.21	5.76	8.93	6.36
41	Faizabad	0.49	0.31	0.41	0.98	18.49	9.55	10.96	3.55
42	Sultanpur	0.16	0.64	0.24	0.26	18.91	1.96	3.29	9.61
45	Pratapgarh	0.16	0.77	0.70	0.95	13.02	1.96	5.04	12.54
46	Basti	0.69	0.86	0.36	1.20	13.30	2.52	4.80	8.60
47	Gorakhpur	0.23	0.59	0.46	1.35	6.34	7.90	10.58	5.29
48	Deoria	0.58	0.95	0.85	0.93	4.34	2.95	6.64	10.81
49	Azamgarh	0.19	0.42	0.35	1.68	14.22	6.46	9.20	8.17
50	Jaunpur	0.26	0.95	0.41	0.42	16.39	6.21	6.66	3.09
51	Ballia	0.25	0.42	0.30	0.85	7.55	4.57	9.04	9.29
52	Gazipur	0.39	9.16	0.84	9.16	11.55	4.50	7.93	8.38
53	Varanasi	0.32	0.95	0.56	0.95	14.34	21.12	26.87	3.33
54	Mirazapur	3 .90	1.03	0.73	1.03	12.93	12.02	13.12	-2.14

APPENDIX

Houselessness Indicators and Explanatory Variables Pertaining the Districts of Uttar Pradesh (1971, 1981 & 1971-81)

Sr. No.	Districts	Social Variables: Illiterate Population		SC & ST Population		Annual Growth Rate: Illiterate Population	Annual Growth Rate: SC & ST Population	Economic Variables: Main Workers in Non-Household Industries in Manf., Proc., Ser., & repairs		Annual Growth Rate	Per Capita Income in Rs.		Annual Growth Rate
		1971	1981	1971	1981	1971-81		1971	1981	1971-81	1971	1981	1971-81
1	-do-	77.99	71.02	23.32	22.38	1.64	23.40	1.09	1.56	4.35	6.20	19.51	10.98
2	"	71.28	62.54	19.56	19.78	0.88	2.32	0.33	1.03	11.00	6.45	14.59	7.70
3	"	60.71	72.10	13.23	12.78	1.92	1.92	0.51	1.10	8.83	3.68	8.67	8.10
4	"	69.99	58.93	10.64	11.98	2.30	2.58	0.65	1.89	10.23	334	881	8.59
5	"	68.13	60.52	18.76	22.99	-1.33	0.76	0.77	2.32	17.00	406	1332	10.68
6	"	71.92	62.24	19.49	20.84	3.38	3.21	0.77	2.23	9.03	530	916	5.09
7	"	69.05	62.19	20.52	22.98	2.77	3.02	5.44	6.40	5.39	539	1409	7.36
8	"	79.82	73.28	38.61	20.50	1.79	2.68	5.59	6.82	6.82	443	903	6.46
9	"	82.87	80.50	15.88	17.10	2.29	2.29	5.56	2.56	6.86	349	703	6.57
10	"	87.31	83.90	16.08	16.81	1.41	2.28	1.70	2.52	5.92	3.89	721	6.27
11	"	87.09	83.66	11.66	13.06	2.30	3.88	4.91	7.07	4.01	360	597	4.70
12	"	82.18	77.95	11.55	12.49	1.93	3.27	5.69	7.08	5.09	358	804	7.63
13	"	83.26	79.55	14.83	17.13	2.50	4.46	3.16	3.53	3.49	474	995	6.77
14	"	82.90	78.55	16.49	17.87	1.95	3.37	3.61	3.90	3.43	392	720	8.43
15	"	56.25	47.41	22.33	21.92	1.06	2.61	6.75	13.40	9.89	253	741	10.26
16	"	76.90	70.46	23.41	22.04	1.81	2.95	6 30	8.56	5.71	434	1053	5.40
17	"	74.48	85.83	6.08	14.81	0.71	1.17	4.64	7.07	6.66	4,68	965	6.80
18	"	71.86	04 68	17.86	17.94	2.11	3.00	4.24	12.91	15.02	4.74	2628	16.84
19	"	77.76	71.03	20.58	21.40	0.34	1.71	3.69	6.62	7.08	399	859	17.16
20	"	75.11	68.55	21.35	23.50	1.09	2.59	0.63	7.06	8.14	314	875	7.03
21	"	75.99	69.36	19.27	19.65	1.18	2.11	2.80	6.17	10.28	415	615	3.62
22	"	72.03	66.55	20.85	22.15	1.33	2.75	11.97	15.54	4.98	276	623	7.68
23	"	78.31	68.18	16.86	17.08	0.97	1.94	2.45	3.39	4.68	390	704	6.08
24	"	75.96	66.70	17.28	18.39	0.50	2.16	4.15	3.96	7.94	328	605	5.71
25	"	74.85	67.97	16.48	17.41	1.29	2.83	3.65	5.67	6.48	338	538	5.48
26	"	71.14	62.17	02.47	25.41	0.59	28.00	2.52	3.74	5.53	351	675	6.11
27	"	50.94	56.23	19.77	19.79	1.05	2.25	14.12	15.46	2.71	321	804	8.10
28	"	71.91	74.02	23.41	23.73	1.41	2.14	1.51	2.83	7.63	314	725	7.90
29	"	58.88	72.00	24.71	24.53	2.03	2.52	3.71	5.76	6.23	276	690	8.60

Appendix (contd.)

Sr. No.	Dist-ricts	Social Variables						Economic Variables					
		1971	1981	1971	1981	1971-81		1971	1981	1981-81	1971	1981	1971-81
30	-do-	75.03	68.23	25.73	27.22	1.78	3.33	2.73	4.03	4.69	338	1756	16.00
31	"	72.63	64.05	29.61	27.10	0.67	0.17	2.15	3.13	6.33	321	737	7.84
32	"	49.39	43.00	21.14	24.56	6.06	1.50	1.01	1.89	7.57	414	961	7.95
33	"	81.60	57.10	23.10	23.62	-0.95	2.87	0.90	1.41	6.22	422	816	6.17
34	"	85.37	83.90	28.02	26.93	2.38	2.26	2.22	2.36	2.58	446	863	6.18
35	"	83.54	80.00	32.21	30.99	1.80	1.78	1.56	2.26	5.68	325	794	8.41
36	"	80.74	71.81	30.81	22.96	1.71	1.49	1.18	2.18	8.26	332	633	6.04
37	"	80.37	67.50	29.98	30.19	0.58	2.14	2.16	3.16	5.67	3.23	660	6.71
38	"	66.02	59.67	24.17	23.86	1.18	2.08	8.56	8.63	2.09	227	661	10.20
39	"	81.67	65.39	30.45	29.56	1.63	1.94	0.83	2.99	15.83	297	677	7.77
40	"	89.81	84.43	17.63	16.82	2.12	2.04	1.04	1.52	5.52	284	571	6.85
41	"	85.95	83.68	16.88	15.81	1.83	-0.41	1.20	1.73	4.92	275	556	6.74
42	"	85.00	81.00	27.92	27.69	1.48.	1.90	0.13	1.91	5.46	306	709	7.93
43	"	80.65	74.39	24.15	25.18	1.31	2.29	2.02	3.05	5.34	345	548	7.59
44	"	81.14	77.55	15.22	23.32	1.61	1.84	0.53	2.04	15.89	295	511	5.10
45	"	81.49	76.18	21.22	21.56	1.69	2.20	0.93	1.18	8.29	284	652	7.84
46	"	84.38	79.75	20.30	20.91	1.26	1.64	1.14	1.75	4.70	275	4.86	5.31
47	"	80.23	76.68	21.39	21.56	-19.20	1.90	2.67	2.82	1.42	260	513	6.37
48	"	97.02	76.79	15.61	17.34	1.99	3.29	1.55	3.12	9.04	247	585	8.15
49	"	80.81	74.89	24.40	24.82	1.39	2.35	1.78	3.27	7.82	223	620	9.73
50	"	79.27	73.69	16.60	21.49	1.61	-13.68	2.13	4.42	9.38	224	470	7.08
51	"	78.33	71.83	18.71	15.45	1.16	0.10	1.59	2.54	5.91	221	466	7.01
52	"	79.85	72.37	19.71	20.59	0.75	3.04	1.69	3.19	7.56	248	610	8.52
53	"	72.73	68.15	17.45	18.12	1.97	3.01	6.18	10.25	7.50	255	659	9.01
54	"	80.21	16.14	33.69	39.56	2.29	2.48	3.88	6.36	8.03	413	1143	9.71
	"												