CHAPTER II

REVIEW OF LITERATURE

2.1 INTRODUCTION

The housing problems in India have been the subject of extensive research and intense debate. As such a body of literature exists on various aspects of housing in India. A good number of studies have been carried out on the urban housing problems both in India and abroad. We shall discuss briefly the findings of some important studies which bear a direct relevance to the present study. However, most of the studies are concerned with rural housing and the studies focusing exclusively on the extent and nature of urban housing in India is very much limited. An attempt has been made in this chapter to present a resume of earlier studies so as to provide an adequate theoretical background for the present study. But the detailed analysis of the models, underlying assumptions, and variables included in the specific studies are not attempted in this discussion. Instead, a brief and general review of the major developments in this field has been discussed under the heads such as.
i) Studies relating to Housing Conditions

ii) Studies relating to Demand for Housing

iii) Studies relating to Housing and Rent

iv) Studies relating to Housing Finance

v) Studies relating to Urban Housing

vi) Studies relating to Urban Slum Housing

vii) Studies relating to Housing Programmes and Policy

viii) Studies relating to Housing Programmes

ix) Research Gap filled up in the study

### 2.2 STUDIES RELATING TO HOUSING CONDITIONS

Subrahmanyam\(^1\) (1938) has compared four main house types in Tamil Nadu and Andhra Pradesh. In Tamil Nadu, the houses are arranged in a linear cluster, the courtyard shrinks in size, yet has an open verandah (kudam) around which rooms are situated. The sky well allows rainwater to be collected in trough like depressions. The courtyard house in Andhra Pradesh is called manduva illu (four roomed house) built by the well to do.

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In Coastal regions of Andhra Pradesh the houses have been built with the open space at the back of living quarters and the street forming a community space. In a linear settlement pattern such as this, the size of courtyard shrinks as the street is used to a great extent by the residents.

Balasubramanian and Srivastav\textsuperscript{2} (1973) have analysed the housing conditions in the metropolitan areas of India. They made an attempt to probe and analyse the conditions of housing quantity wise and quality wise. They have analysed important aspects such as over crowding, housing structural characteristics, and housing facilities, conditions of tenure and occupancy and houseless persons in the metropolitan areas. They have used the 1961 census data for the study. The analysis revealed that the housing conditions are extremely poor, both in terms of quantity and in terms of quality in all the metropolitan areas and the intensity of the problem is acute in large cities like Bombay, Calcutta, Delhi and Madras.

It is found that the problems of housing in the metropolitan areas must be seen not as a separate need or service but as an essential living strategy. It needs to deal with accelerating urbanization, population explosion and

deepening unemployment. It is not something to be done after development; it is a part and parcel of development.

De Brunijne and Schenk\(^3\) (1990) have made an analysis of residential patterns of poor inhabitants in Indian cities in the year 1990. In their study they found that the poor tend to live near to their place of employment. They found that they are living in the servants’ quarters of rich households, on pavements, and in industrial areas. Nevertheless it is also true that poor pockets in the middle and upper class areas are small and not conspicuous. It is observed that although the rich require the services of the poor and the poor require patrons, the wealthy masters are not keen to have their servants in their vicinity.

Hence, the fine-grained pattern of urban residence consists of invisible nearness, hidden slum pockets in interior parts of residential blocks, and in the rearguards of urban estates. The dwelling of the have not within calling distance may sometimes even allow visual screening of the ugly hutment areas from the eyes of the other.

On the other hand, in industrial areas where rich do not live due to all round pollution, there is no necessity to hide these slums. The urban blight, squalor, pollution, stench and fumes are all pervasive in these areas.

Amita Sinha⁴ (1993) has studied the courtyard housing in India. He finds that the courtyard is of primary significance for the evolution and transformation of a dwelling. It marks the centre and demarcates the boundary of a house. The relationships between dwellings vary depending upon the settlement layout in different regions, but the essential idea—the centre as a void, remains constant. The functional meaning of the courtyard house consists of privacy and security that are intertwined with metaphysical connotations of significance of the void.

It is concluded that the long tradition of courtyard house in India with modernization. With colonization, a new housing type, the bungalow, was introduced in which the building has open space surrounded by it, as the tradition. The exteriosation reduces the associations of privacy and security that the open space in the courtyard can offer. Adoption of the

bungalow model, a new prototype, is symbolic of social change in Indian society.

Nayar\(^5\) (1997) has studied the impact of the housing amenities based on the health status of the population in different states in India using N.S.S. data 44\(^{th}\) round. It is believed that health-promoting factors such as housing conditions, availability of drinking water and sanitary facilities could contribute to health improvement among the population, sometimes even more significantly than health services. The main objectives are to evolve workable hypotheses in relation to housing, and other factors related to health improvement in India. He has analyzed the demographic and health factors in order to explore the possible systematic trends in the housing conditions. In order to find the broad associations, inter correlations among the variables related to housing amenities and certain health indicators were attempted.

The analysis of ten states indicates a definite contribution of housing conditions to the improvement in health status.

Abha Lakshmi Singh and Atiqur Rahman\(^6\) (1998) have analysed the housing condition and its impact on health among the low-income households at Aligarh City during 1995-96. The required data were collected from primary sources through household survey, and interviews with residents and discussions with the respondents from different mohals and government officials. It was found that in Aligarh City nearly 30 per cent of the population lives in the dwellings, which do not have bathrooms, toilets, windows and proper ventilation. The basic needs of life remain unmet for most poor households in the slum areas and shanty form of the cities. The most popular dwelling type is the single storied and double storied house, which is generally occupied by several households who share bathrooms, toilets and even kitchen. The existing housing condition places the greatest health burden on the lower income households. The study exhibits a strong correlation between the disease profile and the conditions in their houses. It is observed that if housing conditions of the lower income households improve, the disease profile is likely to change.

It is concluded that there is acute shortage of housing in Aligarh City both quantitatively and qualitatively for the poor households.

Bakul, Dholakia and Dholakia H.Ravindra\textsuperscript{7} (2000) have made a study on Impact of Investment in housing sector on GDP. It is concluded, “An increase of 10 percent in the final expenditure on construction sector has the potential of raising the growth of country’s GDP by three per cent”.

Pant B.R.\textsuperscript{8} (2003) has examined the living and sanitation conditions of the people in Himalayan villages. The study reveals that the housing conditions from the viewpoint of both quality and size have not attained desirable level. Only 73.5 percent households have pucca houses and majority of the houses were of small size. The sanitary situation was far from satisfactory. About 85.3 and 88.2 percent households have no bathroom and latrine facilities respectively.

\textsuperscript{7}Dholakia, Bakul, and Dholakia, H.Ravindra, Impact of Investment in Housing Sector on GDP and Employment I Indian Economy, (A study Sponsored by HUDCO) Indian Institute of Management, 2000, Ahmedabad.

A majority of households 84.6 percent disposed of refuse and wastewater in the open space. Here there is an urgent need for proper management of housing, water supply and sanitation in the villages.

Shirish B.Patel\textsuperscript{9}, (2005) has studied ‘Housing policies for Mumbai’. He observed that Mumbai is confounded with a host of problems pertaining to housing the poor and the not so poor. With the rising real estate prices, more and more people with perfectly respectable jobs cannot find affordable housing to buy or to rent, not to mention those who are self employed or in the lowest strata of society. It is found that more than half the population lives in slums, and the residential construction for middle and lower income groups stopped half a century ago because of rent Act, and shows no signs of revival. There is widespread of urban blight. He suggested a range of housing policies that could begin to address on Mumbai’s myriad problems.

Nutan Tyagi\textsuperscript{10} (2005) has studied the residential environment of the Gorakpur Municipal area. His study is an attempt to evaluate the problems


of residential environmental areas of Gorakpur city under some parameters with reference to population as well as residential land use. He discussed the problems of pollution, such as air, water, and noise. He has assessed the residential environment calls for due attention to various physical, social, economic and cultural aspects.

He has used Remote Sensing and Geography Information System, which proves that it is capable for urban management.

2.3 STUDIES RELATING TO DEMAND FOR HOUSING

Tong Hun Lee\textsuperscript{11} (1968) has estimated the permanent income elasticity based on the re-interview surveys of consumer finances for the years 1960, 1961, 1962 in U.S.A. His study is based on a random sample of 687 units of which 523 live in owner occupied houses and 164 in rental apartments or houses. He adopted the instrumental variable method for estimating permanent income elasticity of housing. It is found that the demand for housing is to be more responsive to changes in the long-run expected income than to changes in current income. Further it is concluded that the use of

permanent income concept is useful in studying the demand for housing, but it does not alter the traditional view of housing namely, the housing-income ratios tend to be lower for the rich than for the poor.

Thomas\textsuperscript{12} (1976) has analyzed the demand for housing by using Lancastrian approach in New Haven metropolitan region. For estimating housing components, he has estimated hedonic price equations for housing. For estimating hedonic price equation, the detailed transaction records for 1800 single-family homes sold in eight towns of New Haven Connecticut metropolitan region during 1967-70 were used. He found that the household behaviour in the housing market is not erratic but carefully considered as expected prices, total outlay, family size and plans affect the demand for housing.

Tong Hun Lee and Chang Min Kong\textsuperscript{13} (1977) have estimated the elasticity of housing demand in U.S.A. The main purpose of the study is to remove the data and methodological deficiencies and to offer new evidence.

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on the effects of permanent income and housing price on the demand for housing. They have used successive panel data from “the 1968-72 panel study of income dynamics”. The results indicate that income elasticity for home owners and for renters are around 0.56 and are highly significant. The permanent income elasticity for house owners and for renters is too high. It is extremely unlikely that the permanent income is equal to or greater than unity. Therefore there are diverse opinions in the housing literature, a few advocating that the demand for housing is inelastic with respect to changes in permanent income and housing price.

Hamilton\textsuperscript{14} (1982) has estimated the income elasticity of demand for housing in Philadelphia. He has explored the specification bias for the income elasticity of demand for owner-occupied housing. For analysis, he undertakes the owner occupied houses in Philadelphia in 1974, with 451 observations in 37 jurisdictions. Initially he has analyzed the jurisdiction of finances with its local public service provision; each household pays the government an amount equal to the per-household cost of provision of services. Further, all households consume the same amount of services. The

theoretical argument underlying in his paper is that house value represents value of dwelling unit other than the value of housing services. Thus house value is the wrong dependent variable if we are interested in studying the demand for housing. He made an attempt to remove the bias directly by redefining the dependent variable which includes taxes and expenditures leading to results very much in accordance with estimation failure to include fiscal variable biases and the income elasticity downward for single-jurisdiction regressions. On the other hand, two indirect tests indicate akin to capitalization bias exists, and is much largely quantitative that can be accounted for by local fiscal variables.

Goodman and Kawai\textsuperscript{15} (1984) have analyzed replicative evidence on the demand for owner occupied and rental housing in U.S.A. For this analysis, they have used the data drawn from Annual Housing Survey for 1977. The sample is divided into 15 small areas with 5000 observations each and 4 large areas with 15000 observations each. They attempted to remedy at least part of the problem of housing shortage and inflation by estimating housing demand for both owner occupied and rental units in over

19 metropolitan areas. With the help of the collected observations, they have applied hedonic price indices for owner occupied and rental housing.

They found that the permanent income elasticity is substantially higher than current income elasticity, usually by magnitudes of 50 per cent or more. Transitory incomes have significantly positive impacts on both owner occupied and rental housing demand. Income elasticity is higher for owner units, although much of the difference is in fact attributable to the higher owner incomes used to evaluate them. Rental price elasticity appears to be higher than owner price elasticity, but the difference between the two becomes, insignificant when adjusted for the differential income levels of owners and renters. Finally it is suggested that there is the necessity of making both tenure choice and tenure length endogenous to the housing demand model.

Parsons\textsuperscript{16} (1986) has analyzed housing attributes in U.S.A. by using the restricted version of Rosen Model in the flexible form of Deaton and Muelbanuers, Almost Ideal Demand System (AIDS). He has estimated

demand functions in the budget share form for four attributes. They are housing size; housing features, housing quality, and neighbourhood quality.

In order to estimate the AIDS equation he used the Annual Housing survey data from seven cities for the year 1974-1977 along with household interviews of house owners and hedonic price functions. Hedonic price functions are estimated with sixteen attributes as explanatory variables. Adding up, homogeneity, and symmetry are maintained.

They have estimated expenditure elasticity and price elasticity. Finally the change in economic welfare for a typical household for non-marginal, exogenous change in neighbourhood quality is measured. Conceptually, by ignoring the price effect, conventional measures underestimate the welfare change of improvements and are best used for analyzing only marginal changes. The empirical evidence presented by him suggested, that the quantity effect dominates the welfare measure and hence the conventional measure may not seriously underestimate the change in welfare.
Piyush Tiwari and Jothi Parith\textsuperscript{17} (1998) concluded that the demand for housing in India was inelastic with respect to income and elastic with respect to price. The magnitude of income elasticity for housing seemed to be lower than price elasticity, indicating the demand for housing was more responsive to changes in prices than to income. The increase in size of household by one member resulted in expenditure on housing decreasing by around 10 percent.

Misty\textsuperscript{18} (2002) listed the main reason for growing demand for housing in India. A house costs about 3 to 3.5 times an individual’s annual salary as against 15-20 times, more than a decade ago. The prices of property declined over time and became stable in recent times. In addition, interest rates on housing loan had declined. The government had been offering attractive tax incentives to buy houses.


2.4 STUDIES RELATING TO HOUSING AND RENT

Palvia and Narang\(^\text{19}\) (1969) have studied the working of rent control and its effect on creation of new housing stock. They observed that, the rent control machinery is presently operating in a chaotic way. As a result, a majority of houses are liable to escape from the provisions of rent control act, just because courts have not instituted cases. Further, even the houses for which courts have fixed the rent, they escape the implications of court awards in the event of the departure of the old tenant and the entry of a new tenant.

Moorhouse\(^\text{20}\) (1972), has studied the optimal housing maintenance under rent control in New York City. The main aim of the study is to analyze the consequences of profit maximization behaviour under rent control. For analysis, he has used the descriptive and financial data on rent-controlled apartment in New York City.


He has discussed several adjustment mechanisms, which come into play under rent control and developed a dynamic model of profit maximization. He found that during a period of inflation, rent control lowers the optimal level of maintenance. In the absence of the rent control and the given nature of housing costs (long term, high fixed costs), adjustment in dynamic equilibrium is optimally made by price changes.

2.5 STUDIES RELATING TO HOUSING FINANCE

Saibaba\(^{21}\) (1977) has analyzed the housing problem in India from the financial point of view. He has discussed the urban housing problem in the light of the inadequacy of the housing finance provided by institutional agencies.

The Central Statistical Organization data on investment in housing for the period of eleven years from 1960-61 to 1970-71 has been used for the analysis. He has discussed the role of housing finance institutions namely (i) Life Insurance Corporation, (ii) Housing and Urban Development Corporation, (iii) Housing Boards, (iv) Commercial Banks, (v) Co-

operatives, (vi) Private House Building/Finance Companies. It has been concluded that housing investment is a strong motivator for mobilizing personal savings, the pace of which can be multiplied and accelerated only when institutional finances are assured and available on a large scale. Finally, he has stressed the need for giving a new fillip in solving the challenging problem of housing and in enhancing social investment for human resources development.

Robert Albon and John Piggott\textsuperscript{22} (1983) have analyzed the deregulation of interest rates on finance for housing in Australia. It is found that deregulation of housing interest rates would, under plausible assumptions, cause substantial increase in the cost of housing finance in Australia, contrary to the impression created by the Financial Report of the Australian Financial System Inquiry (The Campbell Report, 1981). It covers the characteristics of the market for owner-occupied housing finance, on both the demand and supply sides.

The weighed average interest rate for owner occupied housing finance in December 1981 is more than three percentage points below the

\textsuperscript{22} Robert Albon and John Piggott, “Housing Interest Rate Deregulation and Campbell Report”, \textit{The Economic Record}, Vol.59, No.164, 1983 pp.80-86.
uncontrolled rate. They conclude that while this result is not an argument against deregulation, it does imply that deregulation would have a substantial distribution impact.

Nighal Bilgrami\textsuperscript{23} (1998) has analyzed the pattern of informal housing finance in Pakistan. The main aim of the study is to analyze the pattern of informal housing finance and its link to formal sources. The study is based on a primary survey undertaken in urban areas of all the four provinces of Pakistan. Two cities in each province were selected. One was the provincial capital and the other a medium sized city. He has surveyed 497 households out of which 62 per cent were owner occupants and 38 per cent were renters. The target survey population for the study was low-income communities and household, which may have potential demand for housing finance.

The study also highlights the saving pattern and the choice of assets used to cope up with the housing problem. It also compares the extent and pattern of informal housing finance among those who owned a house or those who are renters and plan to acquire a housing unit.

The study reveals that household accumulates wealth in terms of house/land jewellery, cash, deposits, prize, bonds and contribution to committee. It is established that the net worth of house owned is positively correlated with level of household income. It is also observed that owners of the house are more inclined to participate in a committee scheme than finance home improvement. However, renters are less inclined to participate in a committee for the purchase of a house.

Dangwal\textsuperscript{24} (1998) has analyzed the housing problem in India, both in rural and urban areas. He has assessed the financial measures being undertaken by the government towards the housing problem and has examined the adequacy of financial resources of the various financial institutions in the housing sector.

He has analyzed the financial share of various agencies such as LIC, Housing and Urban Development Corporation, Housing Development Finance Corporation, Can Fin Homes Limited, General Insurance Corporation and National Housing Bank. He points out that housing is a problem of the economically poor and middle class families.

Government efforts should be in this direction of providing housing finance along with allotment of plots at a low rate of interest. Interest rate may vary according to the level of income and amount of loan.

Despite the recent development on the housing front, it is not possible to arrest the increasing housing gap, leave alone reducing it. It needs to have an elastic and wide spread resource mobilization strategy that covers the ultimate resource saving in the economy namely the household sector.

Selvam\textsuperscript{25} (1999) has evaluated the financial performance of LIC Housing Finance in India during the year 1999. He has analyzed that the operational performance of Life Insurance Corporation Housing Finance Limited is progressive and the number of persons enjoying the financial assistance from LICHFL is increasing with fluctuation. The study revealed that there is a linear relationship between the amount sanctioned and the amount disbursed. He finally suggested that the LICHFL had already won the confidence and goodwill of borrowers by its service. No single institution can solve the entire problem of housing shortage of our country.

Therefore, government at national, state and local level shall have to ensure adequate supply of housing services through public sector like Life Insurance Corporation Housing Finance Limited.

Khurana\textsuperscript{26} (2002) found that various housing finance companies, commercial banks and apex co-op housing federation facilitated a large part 82 percent of housing stock. Housing board, Development Authorities, Real estate developers by contributing 16 percent of housing stock, played significant role. The key performer of housing stock was the public sector, namely state and central Organizations and state housing board.

Narenthranathan\textsuperscript{27} (2002) found that the success of housing finance companies was determined by the rock–bottom interest rates, doorstep service, reduction in processing and administrative fees and how fast the finance companies process loan applications.

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\item \textsuperscript{26}M.C.Khurana, “Housing stock in India-Assessment”, Co-operative Perspective, Vol.37, No.3, October - December 2002, pp.7-73.
\item \textsuperscript{27}Narenthranathan “Cheap and Best”, Intelligent Investor, Oct 31, 2002, pp 51-53.
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Boopathi and Ravindran\textsuperscript{28} (2002) concluded that the prevalence of adequate infrastructure facilities influenced the rent and house value significantly. The salaried class availed of institutional loans more than the non-salaried class for house construction. The proximity to workplace, low land values, religious aspects, neighbourhood friends, and relatives were observed to be the factors that influenced the location of houses. The mean age of the salaried class who constructed their own houses was found to be 39.4 while it was 45.9 for non-salaried class.

\section*{2.6 STUDIES RELATING TO URBAN HOUSING}

Payke\textsuperscript{29} (1973) has made a study on squatter housing and urban growth in India. He concentrated on the slum clearance and relocation policies. He found that slum dwellers relocate and do not change or improve the housing conditions. In most cases the problem is even made worse. Thus in Delhi 50,000 families were moved from the central locations in the late 1950’s, and given serviced plots of 25 sq. yards in the urban periphery where

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they could construct temporary houses until the authorities could provide permanent housing. He concluded that the valuable resources had been used in developing the suburban sites, which either benefited more affluent groups or were inappropriate for their intended residents, and the problem was simply recreated in the central city.

Smith\textsuperscript{30} (1976) has analyzed the problem of housing supply in urban areas of U.S.A. The main aim of the study is to estimate the long run supply elasticity of housing density and quality. For the study, he has used the data consisting of market transactions between April 1971 and June 1972 of new single-family housing acquired from Chicago office of the United States Department on Housing and Urban Development and from savings and loan institutions.

He has estimated long run supply elasticity of housing density and quality without requiring the measurement of housing quality, yet within a framework that accounts for differences in quality levels. The results indicate that the private supply of housing is highly responsive to location.

premiums and the model developed demonstrates how these premiums are reflected in urban land prices. He concluded that the impact of subsidy programmes and neighbourhood development schemes would affect local neighbourhood demand for housing.

Panda and Kar\textsuperscript{31} (1988) have analyzed the problems of urban housing in Orissa during 1988. The main aim of the study is to find out whether the housing board has been able to meet the requirement, and to examine whether the present policy of housing is adequate. Both primary and secondary data have been used for analysis. They found that over the years there had been a sharp rise in the cost of housing and the Housing Board in its efforts to bring down the price, had been forced to reduce the size and quality of the house. The financial viability of the house is more important on the infrastructural and central facilities like market, schools, dispensaries, communication facilities which the Board has seriously neglected affecting the financial viability of houses. This has put the allotters and the Board at severe financial constraint.

Shear (1983)\textsuperscript{32} has analyzed urban housing rehabilitation and decisions among the house owners in U.S.A. The main purpose of the study is to apply a model of rehabilitation investment in existing housing capital to enable examination of housing policy. He applied the model for the households of single-family owner occupied detached housing units. For the analysis, he has used the data for the years 1974, 1975, 1976 and 1977. The sample consists of 5271 households which did not move in the two years between 1974 and 1976 surveys for which data are available regarding both their rehabilitation activities in these years, and whether or not moved in one year between 1976 and 1977 surveys. Multinomial logit analysis, a procedure to analyze qualitative choice behaviour is used to empirically estimate the simultaneous relationship between rehabilitation and moving behaviour. He has applied housing rehabilitation investment in two period models.

The results illustrate how rehabilitation and move decisions are related decisions. Life cycle and other household characteristic are the best-measured data and provide the clearest results. Although measurement

problems exist with the dwelling unit, neighbourhood and location characteristics, the results do suggest that the matrix of these variables is important along the household characteristics in analyzing rehabilitation and move decisions.

It is concluded that the households who do not move value their housing services differently in their rehabilitation decisions than the households who do move and consequently face an external market price of housing services.

Tripathi\textsuperscript{33} (1991) has studied the urban housing problem in large centres of Madhya Pradesh. For analysis, he has used the 1981 census data. He found that 61 percent of the populations are houseless households and it is estimated that these households had 60.42 percent of total urban houseless population.

He has suggested that the housing problem can be solved by the integrated efforts of the government to provide low cost housing with good environment. He concluded that no scheme could be fruitfully successful

without people’s active participation. The people concerned must be encouraged to contribute physical labour on co-operative basis to ease the implementation of the schemes.

Swapna Basu\textsuperscript{34} (1992) has analyzed the urban housing problems at the Lower Damodar Valley region in West Bengal, which is a rapidly industrialized zone. He has pointed out that there had been a spectacular growth in urban units and urban population. The growths of urban units have swelled up rather unhygienic ally creating housing as well as a number of social problems. He had compared the relation between area and population by fitting the Lorenz curve, which shows a strong imbalance between the distribution of area and population. He had discussed the problems of over congestion such as dearth of space, air and water pollution, sewerage and sanitation, and the propagation of Malaria.

Finally, he suggests that it is highly necessary to find out some remedial measures to alleviate the socio economic bottleneck and to save the highly developed industrial belt from their present impasse. He has

emphasized on the decentralization of the present industrial units to newer localities with potential.

Patrick Bayer, Robert McMillan and Kim Rueban\textsuperscript{35} in their article entitled An Equilibrium Model of Sorting in an Urban Housing Market: The Causes and Consequences of Residential Suggestion analysed the new equilibrium framework for analyzing economic and policy questions related to the sorting of households within a large metropolitan area. At its heart is a model describing the residential location choices of households that makes explicit the way that individual decisions aggregate to form a housing market equilibrium. The model incorporates choice-specific unobservables, and in the presence of these, a general strategy is provided for identifying household preferences over choice characteristics, including those that depend on household sorting such as neighborhood racial composition. We estimate the model using restricted-access Census data that characterize the precise residential and employment locations of a quarter of a million households in the San Francisco Bay Area, yielding accurate measures of

preferences for a wide variety of housing and neighborhood attributes across different types of household. The main economic analysis of the paper uses these estimates in combination with the equilibrium model to explore the causes and consequences of racial segregation in the housing market. Our results indicate that, given the preference structure of households in the Bay Area, the elimination of racial differences in income and wealth would significantly increase the residential segregation of each major racial group. Given the relatively small fractions of Asian, Black, and Hispanic households in the Bay Area (each around 10 per cent), the elimination of racial differences in income/wealth (or, education or employment geography) spreads households in these racial groups much more evenly across the income distribution, allowing more racial sorting to occur at all points in the distribution – e.g., leading to the formation of wealthy, segregated Black and Hispanic neighborhoods. The partial equilibrium predictions of the model, which do not account for the fact that neighborhood sociodemographic compositions and prices adjust as part of moving to a new equilibrium, lead to the opposite conclusion, emphasizing the value of the general equilibrium approach developed in the paper. Our analysis also provides evidence that sorting on the basis of race itself
(whether driven by preferences directly or discrimination) leads to large reductions in the consumption of public safety and school quality by all Black and Hispanic households, and large reductions in the housing consumption of upper-income Black and Hispanic households.

Edward L. Glaeser, Joseph Gyourko, and Raven E. Saks\textsuperscript{36} in their paper on Urban Growth and Housing Supply analysed the cities are physical structures, but the modern literature on urban economic development rarely acknowledges that fact. The elasticity of housing supply helps determine the extent to which increases in productivity will create bigger cities or just higher paid workers and more expensive homes. In this paper, we present a simple model that provides a framework for doing empirical work that integrates the heterogeneity of housing supply into urban development. Empirical analysis yields results consistent with the implications of the model that differences in the nature of house supply across space are not only responsible for higher housing prices, but also affect how cities respond to increases in productivity.

2.7 STUDIES RELATING TO URBAN SLUM HOUSING

Abrams\textsuperscript{37} (1966) has analyzed the housing situation in slum areas in America. He revealed that the worst aspects of slum life are overcrowding and excessive shelter costs. Demolition without replacement intensifies overcrowding and increases shelter cost. It may also increase squatting and thereby quickly create slums that are more stubbornly enduring than those removed. Continued residence in slums may be a necessity for some time to come.

Turner\textsuperscript{38} (1967) has analyzed the barriers and channels of housing development in U.S.A. He observed that unattainable standards of housing have increased the cost of slum housing. The deficit estimates of indicators of housing problems have the limitation of being static estimates and as such, they are unable to assess the rate at which new housing is entering the market, and at what rate existing sound housing is deteriorating into a state, which is considered unsuitable for habitation. In short, they are unable to

\textsuperscript{37} C.Abrams, Housing in the Modern World-Man’s Struggle for Shelter in an Urbanising World, \textit{Faber and Faber} 1960 p.69.

express, the dynamic nature of shelter provision with in a situation of socio-economic change and rapid urban growth.

Oscar Lewis\(^{39}\) (1968) has studied the slum life in Latin America. He has developed what he calls the concept of ‘culture of poverty’. He did a comparative study of hundred low-income Puerto Rican families from four slums of Greater San Juan and other relatives in New York City.

He argued that poverty and its associated traits were needed to be understood as a culture or more accurately as a subculture, which has its own structure, rational, and way of life along family lines. The lack of effective participation and integration of the poor in the major institutions of larger society is considered by Oscar Lewis to be an important characteristic of culture of poverty. He further, claims that this concept transcends regional, rural-urban, and national differences and provides a high level of generalization particularly in terms of family structure, interpersonal relations, values systems and spending patterns.

Rosser\textsuperscript{40} (1971) has analyzed the housing problem for the lowest income groups in Calcutta. It is revealed that the housing and the lack of it, ranks as one of the greatest urban problems. He has argued that the lack of space in house is an important cause of environmental deterioration.

Desai and Pillai\textsuperscript{41} (1972) have conducted a study in Delhi slums to understand the health aspect of slum dwellers. It was found that slum dwellers were not aware of the real nature of illness. Slum dwellers do know neither the disease they are suffering from nor the cause of their illness. When they were asked about the causes of illness, most of the slum dwellers mentioned common answers like weakness and over-exertion. This study reveals that the slum dwellers suffered from various diseases in their day-to-day life but due to lack of education, proper knowledge, and awareness, they are not able to recognize the nature and cause of their illness.


\textsuperscript{41} Desai, A.R. and Pillai, S.D.1972, Profile of Indian slums, Bombay: University of Bombay.
Lim\textsuperscript{42} (1975) has analyzed the equity and urban environment in the third world. He has concentrated on the slum clearance policy of Singapore, which was adopted in 1975. He found that Singapore Improvement Trust had long been clearing slums as well as building some housing, but it soon comes face to face with the consequences of its slum clearance policy, when those who were displaced proceeded to squat.

He concluded that if this type of policy could not be executed successfully in the context of relative prosperity and low population growth prevailing in Singapore, it is hardly likely to be valid in situations of low per capita income, scarce resources and rapid urban growth.

Ali Khan\textsuperscript{43} (1986) has studied environmental improvement of slum policies, strategies and problems in India. He has explained the alarming shortages in housing in India before the various housing schemes under taken by the governments and their objectives concerning housing problems. He has also discussed the financial and technological implications of two


types of housing, conventional and non-conventional with a broad transitional zone of hybrid dwellings. While including squatter settlement and slums under non-conventional housing, he defines slums as legal permanent dwellings some times also grown on illegal basis which have become standard through age or neglect. He emphasized that slums are not simply housing problems but socio-economic, cultural problems. He then discusses the two schools of thought the functionalists and the disfunctionalists. He is of the view that functional theories have a major impact on the slum issues. In the end, he has pointed out the various programmes of the state government bringing clearly the difference between slum clearance, slum improvement and self-help housing.

He has also outlined some of the functional, administrative, and technological constraints faced by the state government in the implementation of various programmes for the urban poor

S.V.Srinivasa Vallaban⁴⁴ (2003) has analyzed the cost –satisfaction in housing activity. This study is conducted with the objective of identifying the problems of new house building with reference to the cost material,

quality of material and labour. For analysis, he has selected four districts in the state of Tamil Nadu such as Tiruchirappalli, Pudukottai, Madurai, and Karur and he has collected 150 samples for the study. He has used rank correlation analysis. The study revealed that the cost of construction is the highest in semi urban area compared to rural and urban area, and the correlation is high among the semi urban and rural areas with regard to availability of material and labour. It is concluded that the persons interested in providing necessary materials and labour force for construction activity can recognize single window provisions for the supply of quality materials and labour for going in for construction activity. The prevailing conditions can be well exploited by the young entrepreneurs who can mobilize materials and labour at a common place to provide better services, particularly to those persons engaged in constructing their own houses and generally to all those engaged in construction activity.

2.8 STUDIES RELATING TO HOUSING PROGRAMMES AND POLICY

Subbaramaiah\(^{45}\) (1986) has analyzed the policies and programmes of the Housing on Bhagyanagar Development at Hyderabad in Andhra Pradesh.

He pointed out that the authority had not formulated any detailed proposals concerning housing policy to solve the housing problem although it is following certain guidelines.

Mongia\textsuperscript{46} (1986) has studied the problems and policies of housing in India. He has estimated the housing gap both quantitatively as well as qualitatively with the help of census data. He has analyzed the housing programmes under various schemes, and the role of the various financial institutions in solving the housing problem. He emphasized the role of National Building Organization. The N.B.O. has been trying its utmost to develop not only new construction techniques but also to help in the utilisation of low cost material instead of cement and steel. He concluded that the N.B.O. required data on various aspects of housing like preparation of estimates by state governments and the number of actual constructions in relation to various housing schemes of the central as well as state governments in order to enable it to fulfill its assigned role of monitoring.

Ruddar Datt$^{47}$ (1998) has analyzed the National Housing and Habitat policy. The basic thrust of the National Housing policy is on creating a strong public and private sector partnership to resolve housing and habitat issues. He has discussed the problem of housing among the poor and low-income groups. He has analyzed the benefit of rent control bill on the owners and renters pertaining to the low-income groups in large and medium cities. He suggested that the rental housing scheme is a solution for the shelter problem of the low-income groups. He felt that the solution lies in developing ‘Own Your House Schemes’. He concluded that the National Housing policy is based on the housing scheme to cost-sharing or cost recovery cum subsidy scheme for rural housing and it is based on the demand driven approach. It is mainly concerned with the middle income and high-income groups but this approach may be considered acceptable for the low-income groups like landless labourers and persons living below the poverty line. This approach fails to appreciate the fact that the capacity of these vulnerable sections to build a reasonably safe pucca house without state subsidy is extremely limited. Throwing them to market forces, euphemistically referred to as demand-driven approach, will only deny

shelter to the economically weaker sections. With such an approach the goal of achieving shelter for all will continue to recede like the horizon. It is therefore, necessary that the government should change its basic approach on the National Housing policy towards the weaker sections.

2.9 STUDIES RELATING TO HOUSING PROGRAMMES

Ali Khan\textsuperscript{48} (1986) has made a study on the approaches to housing by different agencies in Karnataka, Delhi and Chandigarh. He has discussed the problems of the land acquisition, availability of construction material and the financial constraints. He found that the unique feature of Chandigarh is that in order to provide incentives to the people to settle down at Chandigarh the then Chief Minister declared that tax holiday for a period of 25 years. He opined that if housing and slum improvement schemes are to be successful there must be public awareness through proper education to lower construction cost, to remove restrictive obstacles and to tackle rehabilitation.

Pavithran\textsuperscript{49} (1986) analyzed the financial reporting system in Andhra Pradesh Housing Board. He has emphasized that the effective management


of funds, their sources and utilization is the primary focus for decision making in housing activity. In fact a periodic funds flow statement provides the basic data for top management in planning and decision making. He suggested that the slum improvement schemes must form part of the integrated housing schemes, so that the costs on services like electricity, water supply etc. can be distributed depending on the economic status of the people. In this connection, he has mentioned that Andhra Pradesh Housing Board has evolved a house design for weaker sections with a cost of Rs.3,600/- each and about 350 units nearing completion with 2 more stages remaining under progress for 1000 and 1200 units.

Kiran Wadhwa\textsuperscript{50} (1988) has analyzed housing programmes to ameliorate the housing problems, of the poor, through various policies adopted by the Government of India. He has discussed the factors which have led to this shift and also assesses whether new schemes based on demand have better chances of success than older need-based programmes. He evaluated these policies in terms of their shift from being need-based to demand based. It has been explained in terms of the failure of earlier

\textsuperscript{50}Kiran Wadwa, Housing Programmes for Urban Poor Shifting Priorities, \textit{Economic and Political Weekly}, Vol.XXIII, No.34, August 20, 1988, pp.1762-1767.
policies and the planner’s diagnosis of the causes of this failure. He has discussed the Indian experience of housing of the poor, and he has suggested that the programmes have to be designed keeping in mind the needs of the very poor. He concluded that the ultimate solution to the housing problem is to treat the causes rather than symptoms. The root cause is the level of income, which is so low that, at existing prices, even an extremely modest housing of acceptable standards, is beyond the affordability limit of the poor. Clearly efforts have to be directed both at improving the income status of the poor and at the same time working for solutions towards reducing the cost of housing.

Pandey and Sundaram\textsuperscript{51} (1997) have estimated the subsidy to Central Government employees through staff housing in India. For estimating the subsidy they adopt the methodology of the difference between economic rent and current rent plus the House Rent Allowance (HRA). He used the concept of economic rent in estimating the rental subsidy in government employees housing. For estimating the subsidies they have used the data on the type and number of units, construction prices, plinth area for residential

quarters, and the maintenance expenditure. The required data are obtained from the Central Government budget for 1992-93. They suggested that the present anarchy of rents in relation to cost of staff housing should be removed and replaced by a rational structure in which rents would be set at a realistic level with housing subsidy given only through income related allowance which would be more transparent and would also bring equity across salaried people. It is observed that the Central Government staff housing has been charged very low rents, which do not even cover the expenditure on maintenance and repair of staff housing.

The studies on housing recommend varied techniques for improving the housing conditions in the varied economic conditions in which the studies were made. Nevertheless, the results are capable of generating useful discussion on them. In the studies on housing conditions, the very norms for measurement of persons per room ratio are responsible for the discrepancies noticed in the housing assessment.

The above review of studies on housing reveals that urban housing studies in India are very much limited. Factors underlying regional and temporal variations in urban housing have not been explored. Moreover only a few studies are available on housing policies and programmes,
housing finance institutions, and housing conditions. Studies related to the characteristics of the urban housing problems are only a few. Hence, the present study on urban housing problems will fill this gap in the literature on urban housing.

2.10 RESEARCH GAP FILLED UP IN THE STUDY

The review of earliest studies on Housing has helped the researcher to identify the research gap. Studies pertaining to Housing are found inadequate. The previous studies covered mainly Housing conditions, demand for Housing, rent, Housing finance, Housing programmes and policy. The studies on urban housing problems remain not fully explored in earlier research. Therefore, an in-depth and comprehensive study on urban housing problems in terms of housing famine, space utilization, rent, occupancy pattern and housing quality has been analysed in the present work. Hence, the present study lays claims to improvement over the other studies and also fills the gap in research relating to urban housing problems at Micro level.