ROLE OF PRIVATE SECTOR IN URBAN HOUSING
-CASE STUDY OF AHMEDABAD

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PREFACE

Private sector plays a very important role in the provision of housing in the country. In the Seventh Five Year Plan, it is slated to invest Rs 29,000 crores in housing as compared to Rs 2,458 crores by the public sector. The share of commercial private sector in this investment is not known. Nor is much known about the functioning and behaviour pattern of this sector. This study is an attempt to assess the role of commercial organised private sector in one metropolitan city of the country, viz., Ahmedabad. The study was initiated in September 1986 and completed in May 1987.

The important issues which the study attempts to answer relate to quantification of the contribution made by the organised private sector in housing the population of Ahmedabad; the groups of population for whom it has provided housing; the efficiency with which its production has been organised, and the prices at which it has sold it product. Although the private sector in Ahmedabad, in quantitative terms has contributed between 59 to 67 per cent of total housing produced in the city over the period 1971-86, its record on other counts has not been very creditable.

The private sector, on its part had faced various problems and constraints in its operation. The severest of all the problems, in recent times, has been the decline in demand for housing in the city. The urban housing market of Ahmedabad, since 1982, has been in the throes of a recession caused by various endogenous and exogenous forces. The period during which the study was being carried out coincided with the beginning of a recovery in some segments of the market. The recovery, however was very slow and the market as a whole, remained quite `dull'. The suppliers, used for long to a suppliers market found adjustment to recession rather difficult. This was alsoa period of transition from an almost `laissezfaire' regime to a much greater intervention by the government in the urban housing market. The private sector as yet has not reconciled itself to this intervention and has reacted by adopting means, to overcome these `constraints' on its freedom to operate, whichcannot be termedas strictly legal.

A C K N O W L E D G E M E N T S

In relatively unexplored area of this kind where availability of existing studies and secondary information is limited, one has to rely heavily on the 'first hand information' acquired from knowledgeable people in the field. My greatest debt of gratitude is to the various developers in the city who have ungrudgingly given of their time and patiently explained the intricacies of house building operation in Ahmedabad. I would specifically like to mention Anil Bakeri, Arun Chaturvedi, Avneedra Vyas and N.A. Patel. My special thanks to Jyanti Bhai Patel of Parshawnath Corporation who made all the required data regarding the operation of their corporation available to me.

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C O N T E N T S

CHAPTER 1

INTRODUCTION

1.0.1 The private sector has been a major contributor to total investment in housing in the country. During the period 1950-80, the private sector's investment in housing has been more than four times that of public sector's investment.[1] The difference has increased over time. During the Sixth Plan Period (1980-85), the private sector's expenditure on housing was estimated to be Rs 18,000 crore compared to Rs 2114 crore of expenditure by public sector.[2] Thus, the share of private sector in total investment expenditure on housing was as high as 89.4 per cent. For the Seventh Plan Period (1985-90) whereas the planned public outlay on housing stands at Rs 2458.21 crores, the private sector is expected to invest an amount of Rs 29,000 crores on housing.

1.0.2 It is evident from various statement made in successive five year plans that the government expects the private sector to shoulder the major responsibility of providing housing in the country.[3] These expectations however are not based on any realistic evaluation of the capacity and/or willingness of the private sector to invest in housing. Nor is any significant effort made at the policy level to encourage the private sector to invest in housing. From time to time various policy measures are adopted, on an ad hoc basis, to regulate the working of the private sector. These policies are based on an insufficient knowledge about the behaviour and expected response pattern of the private sector. Such a knowledge is a pre-requisite for designing any public policy which would have some chances of success in achieving its objectives.

1.0.3 The knowledge about the working of private sector in housing markets is very limited. This is an area which has been relatively unresearched in India. Even the estimates about its share in total housing investment in the country are based on some crude estimates made by the Central Statistical Organisation (CSO) The quantification of this role at the disaggregate level - for different income groups and for different states/cities in the country - has not even been attempted. Part of the reason for neglect of this field is the difficulty in obtaining data relating to this sector. Another reason could be the lack of any strong motivating factors. Housing research in India has generally been motivated

by some pressing problems. Thus, housing for the urban poor and in that context, public sector housing, has received much greater attention of the researchers.

1.0.4 In view of the greater role envisaged for the private sector in future housing program of the country, it becomes imperative that we acquire greater knowledge about the functioning of this sector, the factors which determine allocation of its resources between different income groups and the problems and constraints faced by the private sector in providing housing to various sections of population. The knowledge of these factors would not only help in defining the capabilities of the private sector but also help in designing policies for regulating and channelising its resources towards desired goals.

1.0.5 We believe that constructing a house at individual level is becoming more and more cumbersome overtime. The individual owner builder who enters the market probably once in his life time cannot be an efficient provider of housing. The plethora of rules and regulations and permissions required - most of which he is ignorant about - makes getting a house built a very tedious job. More and more households in future may opt for already built up homes rather than getting them `custom built'. The rush for houses provided by state Housing Boards and by developers and organised cooperative societies is an indicator of this trend. The private sector seems to be responding to this increased demand for houses produced by it. New firms - among them some top industrialists of the country - are entering the field. The old firms are expanding their activities - as is evident from their entry in capital markets. Organisational structure of the firm is undergoing a change (shifting from private ownership to public limited companies) to accommodate the new developments. New concepts and designs are being introduced in the colonies being developed. These are marketed through high powered advertisements in magazines and other communication media. The private firm in house building is finally coming of age. Our study is confined to this segment of the private sector.

1.0.6 The phenomena described above is neither very pronounced nor very widespread as yet. It is confined to a few pockets in large metropolitan cities of the country viz., Delhi, Bombay, Calcutta, Madras, Ahmedabad, Bangalore, Lucknow, Hyderabad, etc. The organised private sector in fact, is more a feature of these cities rather than of small and medium towns. Even among the large cities, the organisation and operation of private sector would vary from city to city depending upon the

socio-economic-political-legal environment. Institutional factors too play a very important role in this respect. We have taken up the case study of one metropolitan city in the country to analyse the functioning of organised private sector. We recognise that it will not be possible to generalise fully about the behaviour of the private sector in the various cities of the country from this case study. The study would however help in highlighting the issues involved. It will also develop a methodology for undertaking such studies. This study could be a forerunner of similar studies for other cities in the country. Generalisation about the performance of and public policy towards organised private sector house building could be made only after case studies of several large cities are available.

1.0.7 We have selected Ahmedabad as the city for our case study. The major reason for selection of Ahmedabad was the familiarity of the researcher with the city's land and housing markets and to some extent with the operators in the market. The land and housing markets have developed such overtones of illegality in recent past (due to plethora of rules and regulations and the widespread violation of one or more of these) that the consumers and producers alike are quite reluctant to part with any information. We have been fortunate enough in eliciting some vital information about the functioning of private sector in the market from the developers and policy makers. This information has helped us in gaining some fruitful insights into the functioning of the private sector in the house building market in Ahmedabad.

1. Objectives, Scope and Methodology

a. Objectives

1.1.1 The study has been carried out with the following objectives:

(i) to define and evaluate the role of private sector in provision of housing in Ahmedabad;

(ii) to analyse various constraints which restrict it from fulfilling the role efficiently and

(iii) to suggest a set of policy measures so that the private sector can be induced to fulfill its rightful role in provision of housing in the city.

b. Scope of the study

1.1.2 The scope of the study is limited to the analysis of functioning of private sector as suppliers of housing within the city of Ahmedabad. In the following paragraphs, we clarify some definitional issues relating to the study area, the study period, the supply of housing and the private sector.

c. The study area.

1.1.3 The study area could be defined alternatively as (a) the area incorporated in the jurisdiction of Ahmedabad Municipal Corporation (AMC); (b) the area lying under the jurisdiction of Urban Land Ceiling Act. This includes AMC area and areas lying within 5 kilometers of AMC limits (the Ceiling Area); or (c) or even larger area incorporating both (a) and (b) and areas lying even beyond (b). This is the area included under the jurisdiction of Ahmedabad Urban Development Authority (AUDA). We denote it as the Agglomeration Area.

1.1.4 In the past few years, residential development in Ahmedabad had spread much beyond the AMC area. The imposition of Urban Land Ceiling Act pushed the development even further out in the fringes beyond the jurisdiction of the Act. The area of operation of the private sector thus has expanded beyond the city area. The relevant area in our study would be the AUDA area. Constraints on availability of data may force us to confine ourselves to smaller areas viz., the AMC or the ceiling area. In fact, the type of data required by us is not easily available even for the AMC area.[4] For areas beyond AMC, the task will be even tougher. The time and financial constraints would make it difficult to obtain all the relevant data for the study.

1.1.5 Thus we have a flexible approach towards our study area. For empirical analysis based on secondary data we confine ourselves to the AMC area. If data on other areas is available we include it. At the conceptual and analytical levels we would be taking account of the developments in areas beyond AMC limits.

d. The study period

1.1.6 We take the post-1970 years as our study period. The private sector has been quite active in the land market for a long time prior to

1970. Until around 1970 the regulations on private sector activity in land and housing markets were not very constraining. It was in later years that regulations became very restrictive. Paradoxically it was in post-1970 years that organised private sector entered the field of supply of fully constructed houses in a big way. Prior to that the role of private sector was confined to supplying the subdivided plots in newly developed areas and/or construction of houses. The institution of cooperative housing had dominated the housing scene in Ahmedabad till around 1970. It was around 1970-72 that this institution started crumbling. The conflicts between members of a society, distrust created by these and increasing problems in organising these societies led to the emergence of promoter - developer as the dominant type of supplier of housing in the city in the post-1970 period.

e. Measurement and supply of housing.

1.1.7 Ideally one would like to measure housing in terms of its various components, viz., shelter structure, space, location, tenure and on site and off-site infrastructure facilities. This would not only enable one to measure the role of private sector in supply of housing more precisely, but also bring out the heterogenieties caused by varying degrees of these elements to the fore.[5] In practice, however, It is not easy to measure housing in terms of its various components unless a primary survey is undertaken. In our study we resort to the conventional measure of housing in terms of only one component viz., shelter structure. Heterogeniety in the housing stock is taken care of by grouping the houses according to size, location typology and age (data permitting). The categorisation will lead to slightly more homogeneous sub-groups and solve some problems created by heterogenieties in measurement and aggregation of housing stock.

1.1.8 At this stage we would like to clarify the distinction between stock of housing, supply of housing and production of housing. Stock of housing is defined as the number of housing units in an area. Supply of housing is taken as the number of units available in the market for sale. Quite often stock is taken as synonymous with supply of housing. We however believe that at a point of time, only some part of stock of housing will be in the market. In India, due to the high rate of growth of prices, high transaction costs and lack of information, the mobility in the housing market is quite restricted. Even at very high prices supply from the old stock may be only marginal, since institutional factors (apart from economic factors) play a very important role in determining the supply from

stock of old houses. The supply at a point of time may bear a much higher proportion to the new stock.

1.1.9 The durable nature of the product also makes it feasible for (new) production and supply to diverge from each other. Not all that is produced may be brought in the market for sale. Unremunerative prices or prices below the reservation price may force the supplier to hold back part or total of the new production and increase his inventory and release it only when prices increase.

1.1.10 Measurement of supply of housing thus is not an easy task. Whereas data on total stock of housing and new production is available, it will be difficult to figure out as to how much of this is being supplied in the market at different points of time.

1.1.11 Our analysis will be mainly concerned with the supply of housing out of the newly produced/proposed to be produced stock of houses. Assuming a zero level of inventory we measure the supply of new housing in terms of new housing produced or proposed to be produced.

f. Private sector

1.1.12 Our study, as noted above, is confined to organised corporate private sector which builds houses as a commercial activity. The scope of the study includes builders and developers involved in one or more of the following activities - land subdivision, land development and construction of houses. The developer may or may not provide off-site services and/or maintenance services. Operators exclusively involved in provision of such services are excluded from the scope of the study. The role of private sector in provision of housing as an employer is also excluded. The sector which provides houses outside the legal framework - known as informal or popular sector - is outside the scope of our study. Also excluded from the scope of the study is the household sector. Thus, the activities of the owner - builder who builds houses for himself with the professional help of architects, supervisors contractors and of contractor - builders who operate on account of others are excluded from the purview of the study. The Private Contractors who take up execution of public sector housing projects are excluded too.

1.1.13 The private developer in Ahmedabad normally involves himself in the whole range of activities from land sub-division to construction of houses. Most of the private developers operate under the cooperative

umbrella. The role of promoter in cooperative housing society - in which role the private sector enters to provide cooperative housing is illegal under the Cooperative Societies Act, 1961.[6] The cooperative housing, strictly speaking, is a venture promoted by a group of people to provide housing for itself. The group or society may employ engineers, architects and other technical personnel to help in building the housing. The government has provided concessional finance and other incentives to encourage this type of housing. It is primarily to take advantage of this credit facility that the private developer organises its housing activity in the form of a cooperative society. For purposes of our analysis these are included within the scope of our study. The genuine cooperative sector is not included.

g. Methodology

1.1.14 In pursuance of the objectives of the study, criteria for evaluation of role of private sector were formulated and contribution of private sector evaluated in the specific context of Ahmedabad. Performance was measured in terms of ability of the private sector to supply housing in response to the needs of the city, maintenance of price stability and innovativeness. A precise measurement of the degree to which these goals have been achieved was rather difficult. We tried to achieve operational approximity in this matter. Measurement has been attempted in terms of variables like number of units of houses supplied, composition of this supply in terms of size, cost-price margins, rate of growth of prices and use of new materials and technology in production of housing. Wherever quantitative data was not available, a qualitative assessment has been made.

1.1.15 The performance of private sector is further explained in terms of market environment (demand and supply conditions including price elasticity, degree of substitution, availability of credit, availability of inputs, organisation of production and public policies), market structure (number of buyers and sellers, product differentiation, barriers to entry, cost structure etc.) and conduct of the builder (pricing behaviour, marketing strategy and research and innovation). Greater attention has been focussed on the supply aspect - even though role of demand has not been neglected.

1.1.16 As mentioned before, the information about the operation of private sector is extremely meagere. There is very little secondary data available pertaining to its activities. Nor are there any studies available on their behaviour pattern. Information will thus have to be obtained directly from the operators. The methodology for the study was thus formulated to consist of a primary survey, a few indepth case studies relating to some important areas of focus in the study,

interviews/discussions with private developers and policy makers in the city and analysis based on secondary data.

1.1.17 Even though a primary survey of a sample of developers in the city was contemplated, it was feared that this survey would not elicit very significant and/or reliable information relating to various aspects of the working of the private sector (viz., prices, costs and quantity of housing being produced etc.). It was therefore anticipated that the study will not have a very strong quantitative base. The fears came true when despite the overt support of Real Estate Developers Association of Ahmedabad and some prominent developers of the city, most of the small operators refused to respond to the interviews. A second attempt was made with substantially truncated questionnaire with greater success. It was decided to supplement the survey with a few case studies to fill some gaps in our understanding of the operation of the market. Approximately ten case studies were conducted. In both surveys and case studies it was observed that while the developers were quite voiceferous about the problems and constraints faced by them and even in explaining the process of their operation, they were not readily forthcoming with much quantitative data asked for. In view of the fact that this was a relatively unknown and unexplored area of research it was felt that even a qualitative assessment of the role of private sector and its behaviour pattern would add to a greater understanding of its functioning.

2. Selection of Sample

1.2.1 As noted above, the group of private developers is not a homogeneous group and varies according to size, type of housing being provided, area of operation, date of entry etc. Whereas due account was taken of all these variables in the analysis, a priori, size of operation was selected for segmenting the market.[7]

1.2.2 The unit of production was taken as the firm rather than individual operator. Two or more developers may organise themselves into a partnership firm. Again, a permutation and combination of different developers may form themselves into differently named firms. The identity of the firm changes more frequently than that of the developer at the helm. We would be using the term firm and developer interchangeably. The word in each case would connote firm.

1.2.3 For our primary survey, we decided to take a ten per cent stratified sample of the builder firms in the city (stratified according to size of operation). Two problems arose - one was in relation to finding an appropriate sample frame and second that of definition of 'size of operation'. The issue relating to sample frame has been discussed in Annexure to this chapter.

1.2.4 The size of the firm could either be defined in terms of turnover, number of houses built or number of persons employed. All three may not always lead to same categorisation. A firm specialising in production of luxury housing may be large in terms of turnover whereas might be small when classified according to number of housing units built. Since secondary data on none of these variables was available for most of the firms in the city, we had to rely on the categorisation provided by Real Estate Developers Association in this regard. In this stratification, both the criteria of turnover and number of units were taken into account by the Association.

1.2.5 Two sets of questionnaires were designed one aimed at few prominent developers of the city to obtain general information about the activity in the land market, environment in which the developers operate and the problems they face. The second questionnaire was aimed at the individual developers to obtain information about market structure, type of houses being produced; costs at which they are produced; and the prices at which they are offered to the people.

1.2.6 The two questionnaires are attached to the report. The sampling procedure is explained in the Appendix to this chapter.

1.2.7 The case studies were directed towards obtaining indepth information on some aspects of our study which would not be available from primary survey. The focus was on gathering information on cost-profit margins, impact of government policies on the speed of production and price of housing in Ahmedabad. Another area of operational interest in this context was the role of private sector in housing the low-income-group.

3. Sources of Data

1.3.1 Apart from the primary sources (survey and case studies) other secondary sources of information utilised by us were the records of Ahmedabad Municipal Corporation, National Building Organisation, Housing and Urban Development Corporation, Gujarat Housing Board, Ahmedabad Urban Development Authority, Gujarat Slum Clearance Board and Competent Authority (Urban Land Ceiling and Regulation Act).

1.3.2 This report is divided into seven chapters. Chapter 2 is devoted to the evaluation of role of private sector in Urban Housing Market of Ahmedabad. Chapter 3 focusses on a critical problem of private sector housing, viz., its price. The increasing prices of private sector houses have been explained in terms of various demand and supply forces. The role of government intervention in this respect is not insignificant. The various problems and constraints faced by developers in the process of building houses are discussed in Chapter 4. Chapter 5 examines the question of the role of private sector in providing houses to the urban poor. Various alternatives have been examined. Chapter 6 attempts to suggest a set of policy measures for efficient operation of private sector in Ahmedabad. Chapter 7 gives summary and conclusions.

NOTES

1. Government of India, Sixth Five Year Plan, p. 390.

2. Government of India, Seventh Five Year Plan, p. 293.

3. The Plan documents assign a much more significant role to the private than to public sector in housing. Thus, "given the overall resources constraint and more competing claims on public resources, the vast majority of additional housing in urban areas will have to be met from private resources" (Sixth Five Year Plan, p. 392). The same view is reiterated in the Seventh Five Year Plan.

4. The AMC area has recently been expanded to incorporate the eastern fringes of Ahmedabad and has expanded from 98.15 square kilometers to 190 square kilometers in 1986. Due to the recent inclusion the AMC still does not have data for the newly incorporated areas.

5. Housing as defined above is a commodity produced jointly by the private and public sectors. In public sector projects, contracts are normally executed by the private sector while in most of the private sector projects some of the on-site and most of the off-site infrastructure is provided by the public sector. A component wise breakup could give more precise contribution on supply of housing by various sectors.

6. In 1985 the government issued a notification permitting the landowner to take the help of private developer in building houses under the aegies of cooperative housing society. This was done in post ULCER period when most of the land-owners were farmers with little or no knowledge of building houses.

7. It was discovered that strict segmentation according to four variables mentioned above was not feasible since large developers operated in all areas and built all types of houses. These variables were so to speak, related to the size of operation. Further, it was not possible to obtain data on date of entry prior to survey. It was therefore decided to stratify sample only according to size of operation.

ANNEXURE TO CHAPTER 1

1. Selection of Sample Frame

1.1.1 In selecting a sample the major problem faced was that of a sample frame since none existed. Even the total number of operators in the market was not known. The possible sources which were explored to find the total number of firms operating in the city and their listing were the following:

(1) Real Estate Developers Association. This Association was established in 1980 and at last count the number of member firms was 450. A close scrutiny of the list disclosed the actual builders members to be only 100 in number. Some firms were listed more than once. The others belonged to categories like architects, contractors, members of a cooperative housing society, solicitors etc. Most of sample firms and the new entrants were not represented. This therefore was not a good sample frame.

(2) The second source which was explored was A to Z series - a directory of services brought out by a private entrepreneur which gave the list of private builders. The number of builders lists in this directory - taking account of double counting - was 219. According to knowledgeable developers of the city, the list excluded quite a few large, medium and small developers. This list too was not very reliable - though representation was higher than that in the Association.

1.1.2 The `A to Z´ was a private profit making venture and the publisher approached the developers of the city for funding its publication. In lieu of this a copy of the publication was to be given. Not all responded positively. The names of these builders were not reported.

(3) The third source of information could have been the Ahmedabad Municipal Corporation. Under the Shops and Establishment Act, each builder has to take a license from the AMC. This is to be renewed every year. The department issues thousands of licenses to various shops and establishments. The AMC does not maintain a classified list of these professionals.

Finding out the number and listing of the builders from the files of Shops and Establishment department is not an impossible job but can be very time consuming.

The town development department of AMC has a list of professionals associated with building trade. These include engineers, structural designers, architects, surveyors and clerk of works. As is clear not all of them fall in the category of builders. The number of these registered professionals in the AMC is 1984-85 was 514. It is difficult to state categorically as to how many of these would be builders. Even if one could figure that out, it would still exclude the builders who do not belong to any of the professions.

(4) Another source of list of developers could be income tax department. Each year a builder is supposed to file a return with income tax as to the value of construction work executed. This provision is applicable not only to builders but also to other professionals. To find out the list of builders would be quite tedious.

1.1.3 Thus, due to the non-availability of any comprehensive list of all developers in the city there was some problem in selecting a sample frame. Discussions with various prominent and established developers in the city led to the conclusion that there are around 500 developers in the city. A rough estimate of the size distribution of these was also worked out in consultation with these developers in the city. Almost all the large and medium developers are listed as members of category of small operators. A sample of 50 developers was selected on the basis of this list. Whereas it was possible to identify the sample of large and medium developers from the list, the identity of the sample of small developers was not known. Only the estimated number was known. The sample of small developers was picked up randomly. The team of investigators visited the sites where building was in progress and interviewed developers. Care was taken that the project selected was a small scale project and the builder did not belong to the large and medium category. The sample was picked up from all parts of city. This probably will not give us an unbiased sample. We had no other alternative.

CHAPTER 2

THE ROLE OF PRIVATE SECTOR IN SUPPLY OF HOUSING IN AHMEDABAD: AN EVALUATION

2.0.1 The contribution made by various sectors - public, private or corporate - in provision of housing in an area is generally measured either in terms of number of housing units provided or investment made in housing. Thus, at the national level the role of private sector in housing has been quantified in terms of share in total housing investment in the country. In the earlier plans, the contribution in terms of number of housing units was also noted. We believe that evaluating the role in terms of number of housing units provided or investment made is necessary but not a sufficient criterion for evaluating the role of any sector. The other important aspects are composition of this investment and correspondence of this investment with the objectives of National Housing Policy[1], the role assigned to the private sector and the needs of society. We recognise that the private sector is not in the business of building houses to fulfill the objectives of governments housing policy or needs of society but to fulfill its own objective of profit maximisation. We would however like to know if in the course of conducting its business and maximising its profit, has it (the private sector)succeeded in fulfilling the other objective too. Below, we discuss these issues in the context of Ahmedabad and attempt to evolve a set of criteria for evaluation of role of private sector in the city.

2.1. Private Sector and Housing Policy of the Government

2.1.1 Even though housing is a state subject and each state is free to pursue its own housing policy, these policies have to be within the broad parameters specified by the Central Government and National Five Year Plans. The role or expected role of private sector has never been explicitly stated in the Plans. It was however realised very early in the planning period that the private sector will not provide housing for the poorer sections of population and therefore the government will have to provide for these sections[2]. The division of roles between public and

private sectors was thus implicitly understood - the private sector was to provide the middle and upper income groups and public sector for the poorer sections[3].

2.2. Private Sector and Needs of Society

2.2.1 Needs of society in the context of housing here are viewed in terms of the type of housing problems faced by it. The housing problem in most of the urban areas is looked at in terms of shortages of housing units in relation to number of households. The shortages lead to escalation in prices of housing, overcrowding and lower space standards[4]. Other dimensions of housing problem could relate to age of housing stock, high costs of repair and maintenance, low returns from such repairs and dilapidated housing.

2.2.2 We evaluate the housing needs of the city of Ahmedabad both in terms of quantity and quality of housing in the city over the period 1971-81. The indicators used for this evaluation are number of housing units in relation to number of households, the quality of structure, size of the house, areas/groups suffering from greater deficiencies of housing than others. The data sources for this information are Census of India, Statistical Outline of Ahmedabad City (published by Ahmedabad Municipal Corporation), Handbook of Housing Statistics (NBO) as well as primary data collected from records of AMC, AUDA and from our survey and case studies. In addition the data obtained from a household survey conducted by School of Planning has also been a rich source of information[5].

2.3. Housing Conditions in Ahmedabad

2.3.1 We begin the analysis of housing conditions in Ahmedabad by calculating the shortage of housing units - if any - in terms of a very crude indicator, viz., excess of households over number of housing units. Table 2.1 gives the number of housing units and number of households for the AMC, Ahmedabad City (including AMC and some outgrowths) and Agglomeration for the years 1971 and 1981.

2.3.2 As can be seen from the Table, the number of housing units is lower than the number of households. The deficit, however, is not only very small but has declined over time. Further, if account is taken of vacancies (vacancy ratio of 7.33 in 1971 and 8.15 in 1981) the deficit vanishes and gives way to a surplus in housing stock of 18,678 and 30,770 units in 1971

and 1981 respectively for AMC area. A certain percentage of vacancy is expected at any point of time, the vacancy rate is however a bit on the high side. The deficiency could thus partly be frictional or due to imbalances in occupancy pattern of households.

2.3.3 Thus there was no serious housing shortage in the city or agglomeration area. A look at the disaggregated data according to type of housing however gives us a different story. Table 2.2 gives the stock of housing according to different physical typologies. The Table reveals that in 1981, 55.2 per cent of the housing stock consisted of Pols, Gamthal housing, Chawls and Hutments - housing typologies which suffer from acute deficiencies of various types. Pols and Chawls have a large stock of older buildings whose structural conditions have been deteriorating in the absence of proper maintenance (Table A.2.1). 46 per cent of the huts have undurable wall and roof. Around one fourth of the Pol and Chawl housing have undurable roof material (Table A.2.2). Further, three-fourths of the huts and two-thirds of Chawl housing in Ahmedabad have a built up area of 25 square meters or less (Table A.2.3).[6]

2.3.4 The percentage of substandard housing has shown a continuous decline from a high of 77.74 per cent in 1961 to 67.15 per cent in 1971 to 55.2 per cent in 1981. The absolute number of housing units under this category however has not declined. (See Table A.2.4 in the Appendix). Thus, both in 1971 and 1981 a significant proportion of housing stock in Ahmedabad needed to be renewed, upgraded or replaced. If this fact is taken into account, there was a serious shortage of housing in the city both in 1971 and 1981. We do not expect the situation to be much different in 1987 either.

2.3.5 Pols, Chawls and huts house the poorer sections of population. According to the Ahmedabad Housing Survey of 1985, approximately 66 per cent of the sample households earning less than Rs 300 lived in huts or Chawls. The higher income groups resided in tenaments, apartments and bunglows (Table A.2.5).

2.3.6 The problem of housing when viewed in this light is one of disparities in standard of housing available to different sections of population rather than one of shortages in the aggregate sense. Further, the deficient housing is concentrated in some areas of the city. Pols and Chawls are a dominant feature of old city and slums are concentrated near Eastern Ahmedabad (See Table A.2.6).

2.3.7 The Ahmedabad housing survey also brought out various other imbalances in quality of housing available to different sections of population. The indicators taken are per capita space, crowding, age of housing, building materials used, tenure etc. (See Table A.2.1 to A.2.11 on Housing Conditions in Ahmedabad in Appendix)[7]

2.3.8 The housing situation in 1971 and 1981 warranted not only an increase in supply of housing but also a greater part of this increase to be diverted to poorer sections of population. On the basis of analysis of housing conditions of Ahmedabad, the following criteria for evaluating the role of organised private sector in provision of housing in the city are being suggested:

(i) contribution of private sector in terms of number of housing units supplied;

(ii) prices at which these houses were being supplied and

(iii) groups for which these houses were being provided.

2.4. Contribution of Private Sector in Total Supply of Housing

2.4.1 The share of private sector housing in total housing stock of Ahmedabad has varied between 66 and 69 per cent (Table 2.2) during the period 1971-81. In 1961 this share was higher at 77 per cent. The share has been declining with improvement in performance of public sector and increasing importance of informal sector in total housing. Most of this stock however consists of old housing which had been constructed years ago viz., Pols and Chawls. If this housing is excluded, the share of modern private sector in total stock of housing shows an increase from 16.39 per cent in 1961 to 34.76 per cent in 1981. This sector recorded the highest decadal rate of growth of 43.3 per cent and 58.1 per cent for 1961-71 and 1971-81 respectively (Tables A.2.4 and A.2.6 in the Appendix).

2.4.2 As noted above there has not been much addition to Pol and Chawl housing since 1961. Most of the increments in the supply of housing have occurred in other typologies. The share of private sector in this incremental supply seems to have been even higher. The share in non-traditional housing stock comes out to be 50.6 per cent in 1981 (an increase of seven per cent points from 1971). The share in modern housing stock (formal sector) was higher at 77.7 per cent in 1981. This share too

showed an increase from 73.87 per cent in 1971. Thus, almost three fourths of the modern conventional housing in the formal sector was being produced by the private sector.

2.4.3 The modern private sector as defined in Table 2.2 includes the individual owner, cooperative sector as well as the commercial builder. The data on contribution of each is not available separately., We have attempted to estimate the contribution made by organised private sector in AMC Area from data on building permissions (BP) available in the files of AMC. (The estimation procedure is given in Annexure).

2.4.4 According to these estimates the share of (commercial) private sector in total supply of housing in the agglomeration area has increased from 59.1 per cent in 1971 to 67.52 per cent in 1981. With declining importance of cooperative housing and owner-built housing (See Annexure), the share would probably be still higher in 1986-87.

5. The Price of Housing and the Beneficiary Group

2.5.1 The evaluation criteria raising questions relating to groups for whom housing is being provided and the prices at which it is being provided are interrelated. Private sector builds for profit and the houses are available to those who can afford them. Before even taking up the production, the developer does have the potential client group at the back of his mind. Decisions regarding the selection of location, the type of housing to be built, the quality of materials to be used are determined by expected preference function of the potential client group. In any city, at any point of time, a wide variety of housing encompassing various permutations and combinations of above mentioned characteristics is available. Prices vary accordingly. We are not interested in relating the prices to various characteristics of housing or normalising the prices according to one or more of these characteristics. Our objective is to find out the range of prices at which houses were being offered in Ahmedabad during the period 1970-85 by the private developers and to relate it to the affordability levels of different income groups in the city.

2.5.2 Table 2.3 gives the range of prices at which houses were being sold by developers in the city.[8] Defining the affordability range as 2 ½ times the average annual income of the household, columns 3-5 define the income group which could have afforded these houses.[9]

2.5.3 During the period 1970-80, the easy availability of cooperative credit had brought houses within the affordability range of low middle and middle class clients. The full cost of the house was payable over a period of 20 years. Thus, a house costing Rs 24,000 under these circumstances would imply a down payment of Rs 9600 and a monthly instalment of Rs. 60. A person earning a monthly income of Rs 200-300 could easily afford such a house. In post-1984 period the cooperative credit became increasingly difficult to obtain. No alternative system of credit was developed.[10] The developers depended upon the private market for their credit needs. The client was expected to make all the payments by the time the house was completed. The possession was given only after that. The client could obtain long term finance from his employers or from HDFC. This avenue was available mainly to persons working in organised sector. The non-availability of credit reduced the affordability levels. If the person is to make all the payments over a period of 2-3 years for a house costing Rs 24000 his income will have to be as high as Rs 2500 to 3000. Further, the prices of houses have increased and there are not many houses available for Rs 24000. The price is more likely to be in the vicinity of 1 lakh or more, than that of 20,000 - 50,000.[11]

2.5.4 As the land values and cost of construction increased the private developers have continuously reduced the size of the house as well as shifted the activity to fringe areas. This has been done to keep the houses within affordability limits of the potential clients. The potential clients even for the minimum costing houses have successively come from higher and higher income groups. In 1970 a person/household earning an income of Rs 400 could have afforded a small house (Table 2.3). In 1980 this limit increased to more than Rs 800. In 1985-86 so called low cost houses were not available for less than Rs 40 - 50,000. Even if we take the most lenient definition of affordability at four times the level of annual income, monthly income of the household would have to be a minimum of Rs 1050 (approx.) to be able to afford these houses. In 1985 around fifty per cent of the household earned an income less than this amount (see Table A.2.14). Thus half of the population could not have afforded even the minimum costing house.[12] It was not as if even these minimum costing houses were available in abundance. The demand exceeded the meager supply. This was true for all classes of houses. The consequence was an increase in prices.

2.5.5 The rate of growth of house prices was much higher than that of consumer prices or of per capita household income. Table 2.4 gives the

compound rate of growth (CGR) of prices of houses based on actual data collected by us from the developers. The developers provided the data for years when their projects were completed. It had not therefore been possible to keep uniform periods.

2.5.6 As can be seen from the table the rate of growth of house prices in almost all the locations have been higher than those of consumer price. Further, prices of all types of housing - low costing as well as high costing (better quality) have shown an increase. The phenomenon of across - the - board price increases with non-commensurate increase in incomes led to three types of effects on housing decisions of various income groups:

(i) decision to maintain status quo

(ii) decision to go for a smaller and for inferior house than planned for earlier. We call this the phenomenon of filtering up, or

(iii) the decision to cut down on some other essential or non-essential expenses and divert these funds towards financing the higher cost of the houses.

2.5.7 Whether the market took account of this change in pattern of demand is a moot point. The composition of supply does not seem to hav changed in the desired direction.

2.6. Composition of Supply of Housing in the City

2.6.1 We have no direct evidence of the composition of supply in terms of different valued houses in the city. An indirect indicator can be the size of the house. A smaller sized house, other things remaining the same, would indicate a lower valued house and vice-versa. We have some data available on the composition of houses according to built up area.[13] This information is presented in Table 2.6.

2.6.2 The increasing prices of houses would, other things remaining the same, lead to a decline in built up area. The impact of prices on built up area however would be seen after a lag of 3-4 years.[14] In post-1976-77 period most of the houses (80-90 per cent) have measured less than 100 sq. meter and around 70 per cent of the houses less than 60 sq. meter. The percentage of smallest houses (less than 30 sq.m.) has increased from 3.46

in 1976-77 to 30.33 in 1986. Surprisingly, the average built up area, except for 1979-80, has not shown much decline. In fact, both 1980-81 and 1986 show an increase in this parameter. This indicates an increase in disparities as is borne out by increasing standard deviation.

2.6.3 Based on data on land value and cost of construction per square yard, cost of different sized houses in selected localities were calculated. This information is provided in Table A.2.15. Juxtaposing information from Table 2.5 and A.2.15, one can say that broadly in 1981, 10 per cent of the houses would have cost between 27000 and 32000 and the cost of 26 per cent would have ranged between 45000 and 52000 etc. On the other hand, the pattern of demand in 1981, would have been heavily concentrated (approx. 60 per cent of total demand) in favour of houses costing between 6000-27000 (taking criteria I and II) and another 28 per cent of demand would have been directed towards houses costing between Rs 18000-54000 (See Table A.2.16). If we take a more lenient view of affordability (criterion III), around 36 per cent of the demand would have been for houses costing less than Rs 24000 and another 23 per cent for houses ranging in cost between Rs 24000 to Rs 36000.[15] The demand-supply imbalances would have become much worse in 1986 with the prices of houses continuing to increase with incomes not keeping pace with these prices and credit becoming increasingly scarce. In 1986, the increasing proportion of houses with a built up area between 201-300 indicates that private sector had been increasingly building for upper income groups. In 1986, the percentages of houses of less than 100 sq. meter fell to 80 per cent from a high of 94.41 per cent in 1979-80 and 87.28 per cent in 1980-81. The significant decline was seen in proportion of houses ranging in area from 31-100. Meanwhile, as noted before there was a significant increase in per cent of houses with built up area of less than 30 sq. meter and estimated to be costing between 46000 and 84000. This could be an evidence of market's response to demand of smaller houses from the middle income groups. The demand for houses ranging between 31-100 sq. meter might have been mainly from MIGs who, as a reaction to increase in prices lowered the size of house demanded. The upper income groups continued to demand and get fairly well sized houses.

2.6.4 The builders thus have continued to build mainly for middle and upper middle income groups. Even when land was supplied to them with the specific proviso of building for the EWS (under Section 21 of ULCER) they had circumvented the provisions of the Act and provided houses which only a person belonging to middle income group could afford.[16]

2.7. Private Sector: Role in Urban Renewal

2.7.1 Our analysis of role of private sector in Ahmedabad has uptill now been confined to supply of new housing. The housing supply in the city can be augmented not only through supply of new housing but also through improving and upgrading the old stock of housing. Thus the role of private sector should also be evaluated in terms of maintenance and improvement of old housing like huts, Chawls and Pols. In this respect, whereas private sector has been instrumental in 'improving' or densifying posh housing (old bunglows etc.), the inferior type of housing (Chawls,huts and Pols) has been left untouched The old large mansions (in various stages of economic and physical obsolescence) on Ashram Road, Ambawadi and other prime locations have either been renovated or structures with much higher densities like apartment houses or commercial buildings have been substituted for the old palatial houses. The densification process had gathered momentum after the enactment of ULCER.[17] This activity too is not very widespread for two reasons. Firstly, the number of such buildings is not very large and secondly the owners of existing buildings may not be agreeable to selling them for fear of high incidence of capital gains taxation. Whatever building has come up as a consequence of this improvement or densification has either gone for commercial use or has mostly catered to the needs of upper income groups.

2.7.2 Similar processes of improvement were absent inc case of Pol, Chawls or huts in the city. Legal complications relating to proprietory rights of land were one reason for non-interest of private sector in this type of investment. Another reason could be the investment in infra-structure which was required to improve this housing. The private sector normally has not made such investment in public goods. This falls in the realm of public sector. The private sector, even in posh locations has confined itself to improvement in shelter structure.

2.7.3 On another count also the private sector has shown its bias towards housing of the upper income groups. We here refer to innovations in design of housing and use of new techniques and materials for production of housing. As the land values and cost of building materials increased, one would have expected the private sector to come out with cheaper and more efficient designs as also to substitute cheaper materials etc. The private sector in case of materials, and techniques did not have to expend on experiments. Central Building Research Institute (Roorkee) and Regional Research Laboratories of SERC (Structural Engineering Research Centre) have

experimented with numerous materials and processes, and introduced these in the market. The private sector in Ahmedabad had failed to adapt these innovations. The reason given is low market acceptability of the new varieties. Private sector cannot risk its profits. As to the design of housing the major response to higher cost of land and construction has been a reduction in size of housing. In 1967 a change in building by-laws opened the way to introduction of flats/apartments which typology has become increasingly popular in the city (Table A.18). Introduction of row houses was another innovation. This experiment was carried out for high-income group housing and was very successful. Apart from lower cost of construction due to common walls and saving of space, the common facilities like lawn etc. saved on costs too.

2.7.4 Similar innovations in design have been introduced even for LIG housing by some developers. Some developers have also substituted cheaper materials like lime for cement and EZ steel angles for wood in doors and windows. The number of such developers however is very small. Most of the developers continue to use conventional materials and techniques and build conventional type of housing. Further the innovations have not succeeded in bringing the price of housing within the affordability limits of majority of population in the city.

2.8. Conclusion

2.8.1 Thus, evaluated in terms of the criteria established in the beginning of this section the private sector does not seem to have performed very well. Its share in total supply of housing seems to have been quite high, but in absolute terms the amount of housing supplied has not been sufficient to fulfill the requirements of the city for housing. The efforts/activities of the private sector have not been directed towards the areas where the need was the greatest. Its contribution in providing housing to the poor has been the minimal. True there was not much demand (at existing prices) for housing from these sections. There was however a need. This need could have been converted into demand by making housing available at prices affordable to these sections of population. Here lay the importance of innovation in housing technology. Not only has the private sector not provided for the poor, the houses they have provided for the middle and upper income groups have been very expensive. In the past few years, the increasing prices have led to further erosion in demand as more and more groups find housing at existing prices unaffordable. The expensiveness of housing - all types of housing - comes out to be the single most important problem. In the next Chapter, we explore this issue at some length. Providing housing for the poor has dimensions other than price, that issue will be taken up in Chapter 5.

TABLE 2.1

Housing Shortage in Ahmedabad, 1971, 1981

	1971			1981		
	No. of occupied residential houses	No. of households	Deficit	No. of occupied residential houses	No. of households	Deficit
Ahmedabad city	290952	294492	3540 (1.22)	390581	393019	2438 (.62)
Ahmedabad (MC)	289382	292921	3535 (1.22)	369920	371973	2053 (.55)
Ahmedabad urban agglomeration	320369	323541	3172 (.99)	469188	471677	2489 (.53)

Note: Figures in paranthesis denote per cent deficit in relation to occupied units.

Source: Census 1971, Series 5 Gujarat District Census Handbook, Ahmedabad District, Part X-c-1, Census of India, 1981, Series 5, Gujarat, Part II-A, General Population Tables.

TABLE 2.2

Structure of Housing Stock in Ahmedabad, 1971, 1981

(In per cent terms)

	Formal				Informal	Total
	Public sector	Private sector				
		Traditional (Pol and Gamthal)	Chawls	Modern		
1971	8.58	26.82	17.51	24.27	22.82	100.00
1981	10.05	19.22	12.07	34.76	23.91	100.00

Source: Ahmedabad Housing Survey.

TABLE 2.3

Range of Prices at which Houses were Sold by Developers in Ahmedabad

Year	Price range	Affordability Range		
		Criterion I (2 times annual income)	Criterion II (3 times annual income)	Criterion III (4 times annual income)
		Income per Month		
1969-70	18000-50000	750-2100	500-1400	375-1050
1977-78	23000-70000	960-2900	640-1945	480-1460
1980	39000-76000	1625-3200	1083-2000	812-1583
1985	50000-2.53 lakhs*	2083-10417/ 12500	1388-6944/ 8000	1042-5208/ 6250

Note: * There are houses/apartments being sold at as high a price as Rs 10 lakh (and above). The proportion of such houses is probably very small. These, therefore, have been excluded from the sample.

Source: See detailed Table (Table A.2.14) in the Appendix.

TABLE 2.4

Compound Rate of Growth of House Prices* (1970-87) for Selected Locations in Ahmedabad

Within AMC Area	CRG of total price	CRG of price per sq. meter	Period
Shahibag	19	17	1978-80
Navrangpura	25	11	1970-78
Vasna	19	19	1970-74
Vasna	6	6	1974-81
Outside AMC			
Ghodasar	16	12	1978-83
Chandkheda	7	5	1975-84
Vastrapur	21	8	1981-87

Source : Derived from Table 2.3.

TABLE 2.5

CRG of House Prices* in Selected Locations of Ahmedabad

Location/year	1970-75	1975-80	1980-85
With AMC Area			
Navrangpura	17.08/12.16	13.78/14.29	
Ambawadi	13.80/9.51	111.38/25.99	10.75/1.92
Ellisbridge	17.84/12.78	9.85/13.90	17.08/21.45
Maninagar	-	-	16.26/17.1
Paldi	18.70/14.38	9.52/10.03	2.90/5.92
Outside AMC			
Thaltej-Bodakde	13.58/9.09	8.72/9.9	5.92/11.27
Vastrapur		10.55/13.6	
Vejalpur	13.7/8.8	7.55/12.00	13.8/16.1
Memnagar		10.95/14.28	
Consumer Price Index Number for Industrial Workers (Ahmedabad)	11.46	4.10	11.36 (1980-84
HH Income		-	7.7 (1981-86)

Note: * The first figure relates to the CRG of minimum and second to that of maximum costing house in different locations.

Source: Calculated from Tables A-11, A-12, A-15 and Statistical Outline of Ahmedabad AMC, 1984-85.

TABLE 2.6

Built up Area of Additional Housing Supply in Ahmedabad: 1976-86

(in per cent terms)

Built up area (in sq.m.)	1976-77	1977-78	1978-79	1979-80	1980-81	1986
1-30	3.46	11.30	5.77	23.55	9.73	30.30
31-35	43.14	27.18	30.98	26.13	25.85	16.75
51-60	23.79	28.75	33.16	27.67 }	51.70	21.39
61-100	18.55	19.13	20.76	17.06 }		11.56
100-200	9.20	12.14	7.68	4.42	10.99	5.34
201-300	1.4	1.18	1.16	0.69	0.95	13.22
301 & above	0.46	0.32	0.49	0.48	0.77	1.43
Total numbtal of units	7218 (100.00)	4992 (100.00)	4312 (100.00)	5793 (100.00)	3884 (100.00)	3277 (100.00)
Average Built up area	65.05	66.40	64.68	53.37	68.71	78.80
Standard deviation	34.94	46.07	42.69	40.19	47.09	82.47
Covariance	53.71	69.38	66.00	75.30	68.53	104.65

Source: Calculated from data in AMC records.

NOTES

1. There is no comprehensive housing policy document published by the Government. The Government however has certain programs related to housing. These combined with the pronouncements in National Five Year Plans add up to some sort of a policy package.

2. First Five Year Plan, p. 209. In the various Plans it was never very clear as to which private sector the government was referring to. The reference to private sector's penchant for 'providing only luxury housing' (Five Year Plan) would indicate that private sector in question is the organised or commercial one. The individual owner who builds for himself - in the formal or informal sector - certainly does not build only luxury housing. In the Seventh Five Year Plan, there is explicit reference to the household private sector.

3. There was however no ban on private sector to provide housing for the poor - only there was no such expectation from this sector.

4. High prices however need not be due to shortages but may co-exist with excess supply in situations of disequilibrium.

5. This survey has been conducted as part of the study Metropolitan Housing Market carried out by School of Planning, Ahmedabad. The survey was conducted during the period 1984-85. Throughout the period we refer to the survey as Ahmedabad Housing Survey.

6. Meera Mehta, Dinesh Mehta, "Metropolitan Housing Market", School of Planning, 1986, pp, 68-69.

7. An inter-temporal comparison of housing situation on many counts is not possible due to non-availability of data. The latest year for which data is available is 1971.

8. The prices taken are not for a standard house but are actual prices prevailing at that time. The houses were located in different areas, were of different sizes and typology. They are in that sense not comparable. Further, we do not mean that there were no houses available below or above this price. Most of the houses available however would be falling in this range.

9. We realise that income is just one of the variables determining the affordability levels. More important is permanent income, wealth and availability of credit from various sources. Gathering of data on wealth or expenditure which can be taken as a proxy variable for permanent income would require a household survey which was beyond the scope of this study. Hence, the dependence on variable income. As for credit, the private mortgage market in Ahmedabad is non-existent. Banks do not give loans to individuals for purchase of houses. HDFC caters mainly to the upper income groups.

The criteria for defining the affordability range as 2-4 times the average annual income presupposes the availability of credit - cooperative or otherwise or of accumulated wealth. In the absence of that, the affordability range - the income groups which can afford houses - would shift further upwards.

10. HDFC could not fully substitute for cooperative credit.

11. In 1985, houses in some parts of the city were advertised for sale for as low a price as Rs 12,000. Apart from the fact that this advertised amount might not have included the black money component or might have meant only a down payment, the location of the house discouraged buyers. The houses were located in or near labour areas. The labour due to its truncated income no longer could afford these houses. The middle classes would not like to locate in such areas. Another kind of imbalance between demand and supply has developed in Ahmedabad.

12. No all the households earning less than Rs 1000 would be in the market for purchase of a house since some of them would already be owners of houses. In the housing survey conducted by School of Planning, Ahmedabad, it was found that percentage of ownership was much higher among the upper income groups (see Table A.2.11) signifying that a higher proportion of lower income groups would be looking for ownership housing as compared to upper income groups.

13. This data relates to all the houses produced by private, public or cooperative sector. We assume that the composition of housing produced by organised private sector will not be too different from that of the total housing sector.

14. The reaction will not be co-terminus with increase in prices. The data reported in AMC records refers to the built up area of houses completed during that year. The building permission for these might have been taken 3-4 years before. The planned built up area would thus be related to prices prevailing at the time when building permission was sought rather than to the year when building was completed.

15. Conversion of these percentages into absolute numbers would give a better idea about the imbalance between demand and supply. The exercise conducted here is only illustrative.

16. Kiran Wadhwa, An Evaluation of Urban Land Ceiling Legislation - A case of Ahmedabad, Nagarlok, Vol. 15(2), pp. 76-86.

17. The scarcity of land in the market as a consequence of the enactment of the Act, led the developers to look for legal supply of land in other directions. They found one under old housing for details please see Kiran Wadhwa, (1986) and (1987).

ANNEXURE TO CHAPTER 2

ESTIMATION PROCEDURE FOR QUANTIFYING THE ROLE OF PRIVATE SECTOR IN SUPPLY OF HOUSING IN AHMEDABAD

1.0.1 The objective of the exercise was to estimate the share of private sector housing in the total new housing being produced by the formal sector. For estimating the share of private sector, in the supply of housing, we required data on total supply of housing in the city provided by the formal sector. From that point of view the census data was found to be inappropriate for our purpose, for three reasons - (i) the data includes formal as well as informal housing; (ii) the census gives information on stock rather than yearly increments in this stock of housing over time. One could deduce the decadal increase in supply of housing in the city from this data. The data however would still relate to housing supply at two points of time viz. 1971 and 1981; and (iii) the last year for which this data would be available will be 1981.

1.0.2 For the AMC area, record of Building Permissions (BP) granted could be a good source of data on supply of housing by the formal sector. Before any building can come up in the formal sector, a building permission has to be obtained. The number of BPs granted could be a good proxy variable for supply of housing in the city. This data too suffers from some limitations. Firstly, the data in fact refers not to actual but to proposed supply of housing in the city. Granting of BP is no guarantee that the building will come up in the area. The year in which these houses may come up is not known. The period between granting of BP and completing the house can vary anywhere from 10 months to 4-5 years. (See Table A.2.12 in Appendix). Thus, using BP granting as a proxy variable for supply of housing may not give us the correct picture about yearly supply of housing in the city.

1.0.3 The preference for BP granted as a proxy variable for supply of housing was based on its easy availability. AMC records do have information on the number of housing projects completed each year. After the completion of the house, it is mandatory for the builder to take a completion certificate (also known as Building Use Permission (BUP)) from the AMC. The number of completion certificates given each year is recorded in AMC. The

information on both BPs granted and Building Use Permission granted is given in Table A.2.13.

1.0.4 The data on building use permissions still does not give the total supply of residential units in the city. This is due to the fact that a high proportion of housing in the city is developed as group housing. For a group housing project - which might compose of 8-800 housing units - only one BP and BUP is granted. The records of AMC provide details about number of units, number of rooms, total built up area, total plot area etc. Due to constraints of time, it was not possible to 'calculate' the total supply of housing from these records for all the years of our study period. We selected three years viz., 1976, 1981 and 1986 for this purpose. Prior to 1976 such detailed data was not available in any organised fashion.

1.0.5 The same set of data was used for calculating the share of private sector. The supply of housing by public sector was excluded from total supply. We have used the number of residential units in each project as the criterion for allocating the unit built to individual owner or otherwise. An individual owner would normally build only one residential unit. Wherever the residential unit is 1, it is assumed to have been 'supplied' by the individual owner. The rest (two or more) are assigned to the organised private sector. The estimates were carried out for three points of time - 1976, 1981 and 1986. In assigning all the units built under Plans proposing more than one residential unit, an additional assumption relates to the insignificance of genuine cooperative sector in housing activity. As mentioned earlier in the paper, the role of genuine cooperative sector in the post-1970 period has been quite minimal. According to some developers the share of this sector in total housing in the city could not have been higher than 10-15 per cent in the seventies and is almost nil now. Table A.2.1 gives the share of organised private sector in incremental supply of housing in the city for three points of time.

1.0.6 The estimates obtained give an indication of the increasingly overwhelming importance of the organised private sector in the total non-public sector supply of housing in the city. The situation cannot be very different in Agglomeration area. Even if allowance of say 10 per cent is made for the genuine cooperative sector, organised private sector still holds a very important position in the supply graph of housing in the city.

1.0.7 If these ratios are superimposed on earlier estimates of share of total private sector in total supply of housing the share of organised

private sector in total formal sector housing in Ahmedabad Urban Area ranges from 59.1 per cent (in 1971) to 67.52 per cent (in 1981). These ratios have been calculated on following assumptions:

(iii) the ratios calculated for AMC area hold equally for the Agglomeration area.

(ii) for 1971 we assumed the share of the genuine cooperative sector to be 15 per cent, which was reduced to 10 per cent in 1987

(i) the estimated share of organised private sector in total private sector housing in 1971 was taken as 94 per cent - the share estimate for 1976. For 1981 the relevant ratio was the 1986 estimate of 96.5 per cent.

TABLE A.2.1

Share of Organised Private Sector in Supply (non-public sector) of Housing in Ahmedabad (AMC Area)

	Total No. of units completed	Units completed by owner builder	Units completed by organised private sector
1976	4063	233 (5.73)	3830 (94.26)
1981	1945	69 (3.54)	1876 (96.45)
1986	3793	130 (3.42)	3663 (96.57)

Source: Calculated from data available with AMC.

CHAPTER 3

PRICE OF HOUSING: A MARKET EXPLANATION

3.0.1 A continuously high and increasing price level is a symptom of pressure on demand which the supply of housing is not adequate enough to relieve. A decline in demand and/or increase in supply can bring down the price to more affordable levels for large sections of population.[1] This is true not only for the housing market as a whole but for various submarkets as well. In this chapter, we focus on the submarket for new housing (produced) by the private sector in Ahmedabad. The submarket for private sector housing is not a closed market and demand and supply of this housing get influenced not only by factors which affect the total housing market but also by situation prevailing in other housing submarkets.

3.0.2 The demand for housing comes mainly from new migrants, newly formed households and households who want to shift from old congested and/or dilapidated housing or from housing of one type to another. All this demand is not directed towards new housing or new housing which is being produced by the private sector. In general, higher the total demand, higher will be the demand for this type of housing also. The demand for new housing in private sector, among other things, would depend upon its own price and the price and availability of housing in other submarkets.[2]. A relatively higher price of housing supplied by other sectors will divert the demand to private sector and vice-versa. The non-availability of supply (which is not reflected in high prices - as in case of public sector housing) in other sectors would have similar impact.

3.0.3 Given a particular demand curve, the level of prices of housing, consists of (i) old housing; (ii) new fully constructed houses and (iii) houses in different stages of construction. It is sometimes argued that the new supply of housing cannot have a significant impact on price of housing in the market.[3] This is due to the fact that new housing is a very small component of total housing in any urban area. It is therefore believed that it is the existing stock of housing which exercises a dominant influence on the price of (old as well as new) housing in the market. In Ahmedabad

however, where 61 per cent of the existing stock of housing is dilapidated, the probability of old housing exerting a significant influence on price of housing - especially of new housing is rather remote. Further, the current housing supply in the market will probably predominantly consist of new housing. Even a very high price may not be able to draw much supply out of the existing stock since non-economic factors play a very important role in determination of supply from old housing stock. In fact, the supply from old stock (of housing) can augment the supply of private sector housing only if the current house-owners move out of the city or to housing provided by public or other non-private sectors. Intra-submarket shifts do not lead to any net increase in supply of housing. These shifts do involve release of some old stock of housing. They however, also lead to an increase in demand for housing - albiet of a different type - by the same people. What these shifts may result is some shift in pressures on demand from one type of housing to another rather than any net improvement or deterioration in supply situation as a whole.

3.0.4 Not all the new housing produced however joins the supply stream in the market. The divergence between production and supply is possible due to the durability of the product which makes it possible for the producer to hold back certain supplies. The volume of inventories will be a function of the divergence between actual and expected prices. In the case of housing the chances of this divergence being there are rather high. A house takes a long time to produce and the suppliers take a decision relating to amount to be produced on the basis of expected prices - prices which they expect would be prevelent at the time of sale. Due to various reasons, the actual prices may be lower or higher than the expected prices. Under the circumstances when prices are lower, the producers may hold back part of the supply and increase their inventory.[4] Supply at a point of time will therefore depend upon the total production of houses and price prevailing at that point of time as well as expected price in future. The total production of houses in turn is arithmetically determined by the number of producers and volume of output produced by each. The number can vary from one (monopoly) to myriads of small suppliers.[5] The output produced by each would be determined by interaction of price with cost of production. Under any market condition the optimal output is produced at the point where MC intersects MR from below. The shape of MR and MC curves will depend upon various factors among those the market structure and the variables affecting cost of production. A high cost of production under any market condition would push up the supply curve. The cost of production may be high either due to high prices of inputs (which is taken as an exogenous

variable by the producer) or inefficient organisation of the production process. At times government policies may also have such an impact. Other things remaining the same, the aggregate industry supply will be higher under perfectly competitive conditions than under monopoly or other market conditions.

3.0.5 The supply side explanation of the price of housing in the city thus hinges mainly upon the market structure and cost (organistion) of production in the housing market. We propose to analyse the price situation in Ahmedabad's housing market in terms of these variables. Various government policies have advertently or inadvertently affected the working of housing market in Ahmedabad. We plan to incorporate the analysis of these policies in our study. The emphasis will be on understanding the behaviour pattern and decision making process of the suppliers at the firm level. Apart from referring to the demand aspect in general, we do not propose to delve deeper into that aspect.

3.1 Demand for Housing in Ahmedabad: Some General Observations

3.1.1 We do not have any quantitative evidence as to the demand for private sector housing in Ahmedabad. There is no single point registration by buyers for private sector housing. As noted above, the variables which affect this demand can be classified into two categories; (i) variables affecting aggregate demand for housing like economic health of the area, population and household formation; and (ii) variables which affect specifically the demand for new housing by private sector. The important ones being relative price of housing and availability of supply in other submarkets.

3.2 The Demand for Housing: An aggregative View

3.2.1 The most important variable which will affect the demand for housing in any urban area would be the general level of economic activity. The city of Ahmedabad has had a very strong economic base. Textile industry has been the mainstay of the city from 1860 when the first textile mill was set up. The selection of Ahmedabad as the capital of Gujarat gave a fillip to the already active economy of the city. The increased economic activity was reflected in increasing population and further physical expansion of the city in response to the increased population.

3.2.2 The strong economic base of the city supported a healthy demand for residential houses. The indirect evidence of this is the continuously

upward moving graph of prices of housing as well as the evidence (gathered from various developers) of time lag between announcement of the scheme and complete booking. The time lag could be as short as a few hours and seldom exceeded few weeks. The term - unsold units - was not known to developers before the year 1979-80.[6]

3.2.3 Part of the reason for continuously high demand could have been the inflationary expectations. These expectations were supported by continuously high and increasing prices in the housing markets. The inflationary expectations not only led to higher (current) demand[7] for housing for consumption purposes but gave rise to an Investment demand for housing in the city. The speculative element in total demand for housing in the period 1970-80 was as high as 25-33 per cent. The Rent Control Act, the Capital Gains Tax Act and the Stamp Duty Act did not make this investment very lucrative either for renting out or for reselling. The Investors overcame these obstacles by carrying out the transaction - partially or fully - outside the legal framework. These practices gave rise to a very active black market in housing. The proportion of black money in total transactions increased from approximately 20 per cent in 60s to 40-50 per cent in 70s to 60-80 per cent in 80s.[8] The Income Tax Amendment 269 AB has led to a decline in this component somewhat since 198 .

3.2.4 The downturn in economic activity and decline in demand for housing began almost simultaneously in 1984. The factors responsible for this were the following:

(i) Closure of textile mills in the city. Since 1984 the textile industry has suffered from various set backs including textile strike and subsequent closure of 14 (more than 21 per cent of existing) textile mills in the city in 1984-85.

(ii) Anti Reservation Riots (Feb. 1985 - Aug. 1985) which disrupted the city's economy. According to an estimate the loss to the city economy would be around Rs 1000 crores.

3.2.5 In addition, there were factors which affected the demand for housing market directly.

The consumption demand for housing was affected by the sudden decline in flow of cooperative credit. In Ahmedabad, most of the housing activity was organised under cooperative housing societies and depended on (Gujarat Cooperative Housing Finance Corporation) GCHFC for credit. GCHFC has been suffering from a severe financial crisis since 1982-83. The investment or speculative demand for housing was negatively affected by (a) emergence of attractive investment opportunities in the share market, (b) decline in expected capital gains from investment in residential property and (c) legislative enactments (like amendment 269 AB to the Income Tax Act), which made benami deals and investment of black money in

3.2.6 The slack in the housing market is not uniformly distributed over different submarkets. The areas to the west of river Sabarmati and posh housing are least affected. Similarly decline in demand is the least in case of flats and for built up houses. Due to increasing gestation gap between initiation of houses and their completion the consumers prefer to purchase house from the shelf. The worst affected was the housing catering to lower income groups and located in labour areas. These were the groups which were most affected by the textile strike and closure of mills and riots. The fixed income salaried groups and income groups were not affected much.

3.3. Demand for Private Sector Housing

3.3.1 Within these areas and types of housing, the demand for housing produced by private sector was influenced by its own prices and by availability and price of substitutes produced by other sectors, viz., the public sector, the cooperative sector and the individual owner builders. Despite the high price of private sector housing the inflationary expectations relating to housing continue to support its demand. The lack of credit availability however, has affected this market more than any other market.

3.3.2 Of all the public sector agencies providing housing to populace of Ahmedabad, Gujarat Housing Board (GHB) is not only the most significant (see Table A.3.1) but also the only agency whose houses can be considered as substitutes for houses provided by organised private sector. GHB provides housing to low and middle income groups in Ahmedabad on no profit - no loss basis. Prices of its houses are normally lower than those of similar houses produced by private sector. Table A.3.2 gives the prices of GHB houses and of similarly located houses produced by private sector. The supply of GHB housing however has not been commensurate with the demand for it. Table A.3.3 gives the data on number of applications received and the number of houses available in various schemes in Ahmedabad for some schemes for the period 1976-80. The excess demand during this period has ranged between -5.62 per cent (the negative excess demand was seen in the case of only 2 schemes) and 1674.48 per cent (see Table A.3.3).

3.3.3 The number of houses supplied by GHB however has been increasing on the margin since 1961 (see Table A.3.1). The lower prices and increasing

availability might have had some adverse impact on the demand for housing produced by the private sector in Ahmedabad.

3.3.4 We suspect that increasing rules and regulations and procedures imposed by government have made housing by individual owners less popular than before. (See Annexure to Chapter 2) This demand would have been added on to either the demand for public sector housing or to housing produced by the organised private sector. The cooperative sector in Ahmedabad had been very active in 1960s. It was slowly taken over by the organised private sector. The genuine cooperative sector dwindled. In fact, this sector faced similar problems as the individual owner. None of the members had time enough to move from office to office to get various sanctions, permission, loan as well as to collect the building materials and other inputs, contact the architect/contractor and get the houses built. The lower supply of housing by these sectors would have had some salutary effect on demand for private sector housing.

3.3.5 With the diverse preference pattern of people the exact impact of these various variabls on relative demand for public/private sector housing is difficult to judge. We would however state that, on the margin the high rate of increase in prices of private sector housing would have diverted some demand away from housing produced by this sector.[10] The impression gathered from extensive discussions with various developers and property brokers in the city however leads to a definite conclusion that there is a recession in the market. Despite this, the price of houses in the market have shown no signs of declining. The downward regidity of prices in the face of declining demand leads one to believe that the pressure on prices in recent years seem to have originated mainly on the supply side.[11]

3.4. Price of Housing: The Supply Side Explanation

3.4.1 On supply side, the two most important variables which determine the price of housing are cost of production and profit margins. The cost of production is a function of both exogenous and endogenous variables. Among the exogenous variables are the prices of inputs and factors influencing these. The endogenous variables relate to the efficiency with which different inputs are put together and production is organised. Profit margins, on the other hand, depend to a large extent upon the market structure and conduct of the supplier. A perfectly competitive market due to its large number of small suppliers and free entry keeps the profit margins (in the long run) at levels which are just sufficient to retain the

firm in the market. Abnormal or supernormal profits are a feature of imperfect markets. Under these market systems, the supplier exercises some control over price - determination and can peg it at levels much higher than justified by the cost of production.

3.4.2 In the following paragraphs we attempt to understand the role of these factors in determination of price of housing in the context of Ahmedabad. In the analysis which follows, apart from describing the market structure, special attention will be paid to the process by which price and output are determined in the market and the way production is organised.

3.5. Private Sector in Urban Housing: Its Market Structure

a. Number of suppliers and their size distribution.

3.5.1 The private sector in housing in Ahmedabad has always been characterised by large number of operators - both buyers and sellers. Whereas most of the buyers have been small buyers and are in the market for purchase of one or two houses, same cannot be said of the suppliers. Further, whereas the identify of buyers keeps on changing, most of the sellers have been in the market for a long time. Consequently, they have a better knowledge of the market and greater bargaining power.

3.5.2 The exact number of suppliers is not known. The issue has been discussed at some length elsewhere in the report. There seems to be a general agreement among the developes (with whom we discussed) about the total number of developers to be around 500. On the basis of estimated number of different sized developers in the city, the total number seems to be between 200-300. Guestimates about the size distribution tended to very (see Table A.3.4). One could doubt the exactness of different estimates of size distribution. There however does not seem to be much doubt that this distribution is heavily biased in favour of small operators. The identity of small operators may keep on changing. At times, they execute one or two projects and exit from the market, at other times, they continue to grow and join the ranks of medium sized operators.

b. Degree of concentration

3.5.3 The large and medium sized operators hold a significant share of housing in the market.[12] It has been estimated that the top four developers account for 10 per cent of the total housing units produced each year. The

top ten are estimated to be accounting for around 20 per cent of the total housing production. The degree of concentration is said to have increased in recent years. Partly it has been the after effects of ULCER due to which really large operators producing 500-100 houses came into being. Before ULCER such large scale operation was not known in Ahmedabad.

3.5.4 Another factor which has increased the monopolistic element in the market is the handling by developers of various other activities which were earlier carried out by other category of professionals. From mere construction, the developers have extended their operation to include (speculative) purchase and development of agricultural land. Earlier this function was carried out by speculators. Some of the developers have also started producing various inputs like bricks, tiles, doors/windows for use in their own housing projects.

3.5.5 The large producers in each submarket act as market leaders in a notional sense. They influence the price of housing as also are forerunners in introducing new trends in designs, which if successful, are followed up by others.

c. Entry

3.5.6 The preponderance of small firms in the market would signify free entry. There have never been any formal barriers to entry - no requirement of a minimum qualification or fee etc. The entry of course is not costless. The costs however have not been high enough to deter entry.

3.5.7 Among the barriers to entry one could include initial investment required, accessibility to various inputs like land, building materials and credit. In 1960's and 1970's the entry was relatively easy. The requisite initial investment could be as low as Rs 5000 - Rs 10000. Inputs were easily available.[13] The situation has changed drastically since the enactment of Urban Land Ceiling Act. The crucial input required for housing viz. land has become almost inaccessible. Whatever land is available is priced very highly. Further in 1970's the developer had access to credit from the landowner. The situation has changed since 1977-80.

3.5.8 The general slack in the market for housing 'under construction' has restricted access to credit from final consumer also. The builder has to supply fully built house and find his own finance for that. If to that is added the difficulties of attracting customers till goodwill is

established, entry has not remained a low cost operation. The initial investment now runs into lakhs than thousands. The non-availability of credit from the traditional source of Gujarat Cooperative Housing Finance Corporation and inaccessibility to other sources of credit (due to low credibility of the new entrant) has made the situation even more tough. Another barrier has been introduced in the shape of cumbersome procedures and permissions required. The new entrants suffer from both lack of information and expertise in this respect.

3.5.9 The above mentioned `barriers to entry' do not seem to have barred entry altogether. The high expected profit has continued to attract new entrants. At times these entrants have joined as partners with some old established developer - in which case we cannot term this as new entry at the firm level. Quite often, the new entrants (firms) have been working as supervisors etc. with some developers or as contractors. These do not suffer from as many disadvantages as a completely new person would. They not only have knowledge of all the processes of operation including permission required and how to obtain them, but also have contacts formed with the potential creditors, landowners, material suppliers and customers during their period of employment with the developer. Quite often their old employers also comes to their help.

3.5.10 The rate of entry however seems to have declined. There are not many who can be in the previleged position of mustering enough capital to initiate a project as well as have all the other favourable pre-conditions of entry. The requirement of black money has also deterred entry.[14]

3.5.11 After March, 1979 when the data for submission of application for getting exemption under ULCER expired, it was not possible for new entrants to enter and operate on a large scale. The only access they had was to plots of land less than or equal to 1000 sq. meters. We suspect, therefore, that most of the new entrants in post-1979 year would have been small-sized.[15]

d. Exit

3.5.12 The exit from the industry for the small operator is almost costless. For the large operators who have well established offices, staff, and incur sizeable fixed costs, dismantling of the operation can be a costly affair. Most of the small operators do not have this type of establishments. They operate mostly from their own residence, hire staff on

piece wages,and do their own supervision. Folding up business for them is not costly. There have not been any significant exits from the industry. Some large developers have retired. Only 2-3 had to leave due to financial problems created in the aftermath of ULCER.

3.5.13 The exit and entry in the industry is in response to the (expected) rate of profit. The exit/entry act as balancing agent bringing supply in line with demand and ensuring only normal profits. In Ahmedabad, whereas the entry has been induced by high rates of profit, it is doubtful if it has succeeded in decreasing this abnormal rate of profit. In the absence of entry, the supply would have been even lower, and profit rates probably even higher. The new entrants do supply their houses at slightly lower prices (in order to sell them) but have not had any impact on prices of old established developers. The major reason for this limited impact (of entry on existing prices/profit margins) in the industry could be the heterogeneity of the product. The new entrants do not give the old suppliers any competition since the product produced/supplied by the old developers is not the same.

e. The product

3.5.14 The product in question i.e. housing is an extremely heteogenous product. The characteristics which make one product differ from others i.e. location,, type of structure, size have already been pointed out in Chapter 1. Apart from physical differences and differences artificially created by publicity another differentiating characteristic is introduced by consumers preference for housing produced by some producers than by others. The old developers have an edge over the new ones. The differentiation is not normally created by advertisement or other marketing strategies. Word of mouth of satisfied customers creates the differentiation in terms of image of a developer.

3.5.14 The degree of substitutability between different varieties of product (between various submarkets and within each submarket) depends upon the relative prices. As the price differential increases, the clients will be inclined to substitute an inferior product for a superior one. In the post-ULCER period of hyper inflation in housing prices, the consumers have frequently substituted houses produced by new develops who operate on the fringe of the legal housing market.[16] Relative price is becoming an increasingly important variable in the consumer's choice function. There is thus increasing competition between products of different producers.

f. Area of operation and mobility of producers.

3.5.15 The product i.e. house is immobile. That does not mean that producing organisation has to be immobile also. Increasing mobility of producers between different locations would strengthen the competitive forces. In Ahmedabad housing market, most of the producers operate within a very small radius of 2-3 kilometers - in areas/locality in which they have been building for years. Even when they shift to building beyond the city corporation limits, these have been adjacent to the existing areas of operation.

3.5.16 When a developer decides to enter a new locality, he normally partners with someone who has been operating in that area for a long time. A known developer has an advantage over the others in terms of attracting customers. From that point of view, the large operators who are well known all over the city have an advantage and their area of operation is much larger than that of medium or small developers. Some of the small developers also, who operate on the price variable, are quite mobile. The recent recession in the market has forced most of the developers to look for new areas of operation and they have been shifting to these not only within the city and periphery but to some other cities, in Gujarat and Maharashtra.

g. Information.

3.5.17 The developers normally know about the activities (price and size/location of planned projects) of other developers operating in different parts of the city. The information is conveyed through word of mouth. The buyers do not have such complete knowledge except for some projects in the vicinity of their own area of residence or for areas where they are planning to purchase.

h. Government intervention in the market.

3.5.18 Apart from imperfections inherent in the market, distortions have been created by government interventions. Until 1972, government intervention in the housing market was limited to imposition of Town Planning Act (including building bye laws) and the Rent Control Act. The Town Planning Act had more of a regulatory role to play. The Rent Control Act had a much more distortionary affect. Due to this Act, private sector housing - especially the one produced by the organised commercial

sector - was offered in the market only for direct sale.[17] Production of rental housing was discontinued.[18] Other acts/policies which had some impact on the housing market were Capital Gains Tax Act, Stamp Duty Act, Gujarat Cooperative Societies Act and Bombay Flat Owners Act. All of these led to some increase in cost of (production of) final commodity by imposing transfer costs. The price elasticity of demand for housing being quite low the developers could easily pass on the increased cost to the consumer.[19] Upto 1972, there were no controls on transfer of land or on price charged for land/houses. In 1972 came such control in the shape of Vacant Land (Prohibition of Alienation) Act. The Act was a precursor to the much more stringent Act - The Urban Land Ceiling (and Regulation) Act which was imposed in February 1976.[20] The most important effect of this Act on urban housing market was the introduction of discretionary (rather than market) forces in allocation of supply of land to various builders. Through its artificial control of supply of land and its price - which was quite out of line with reality - it encouraged lot of underhand activities. The use of discretionary powers led to increased corruption and multiplicity of procedures resulted in increased uncertainties, risks and delays in production of housing. The artificial scarcity of land took the price of land to new heights. This coupled with the control on price of transacted land led to emergence of a much larger component of black money in total land transaction than ever before. The cost of production of housing (actual as well as opportunity cost) increased and market became even more imperfect.

3.5.19 Another outcome of the Act was greater collaboration between the various developers. Until the enactment of ULCER the developers had operated independently. The problems with procedures, with obtaining land etc. brought them together. The Real Estate Developers Association was established during this period (1980) with the explicit objective of having a forum through which the developers could conduct a dialogue with the government. Its main function uptill today continues to prepare and present memoranda to state and Central governments. To the extent the Act ncouraged collective action it increased inter-dependence and introduced another element of imperfection in the market.

i. Degree of Interdependence Between Different Developers

3.5.20 As noted before the market is characterised by large number of operators. Interdependence between all of them is rather difficult to achieve. There are however groups of operators in segments of market who

are more interdependent than others. The market can loosely be described as an oligopoly with a large competitive fringe. The competitive fringe consisting mainly of small operators, by its very existence keeps a check on the activities of large and medium operators. Even though there is no overt collusion between the oligopolists, while making decisions relating to price and output each does take the activities of others into account.[21] The oligopolists also take into account the activities of the competitive fringe if project of any of its members lies in locations adjacent to their own projects.

3.5.21 The oligopolist despite close contact with each other do not have any compunction in initiating projects next to each other. In fact each has its own client group and if price differential does not exceed the `tolerance limit' the respective producers will be able to retain their market. Whatever competition there is, is quite healthy and above broad.

3.5.22 The small operators on the other hand, recognise the role of oligopolists as market leaders (in the barometric sense) and take account of projects (location, price and design) floated by these leaders. The prices offered are normally slightly lower than those put forward by the large operators.[22] The degree of interdependence is higher between the small operators. In the buyers' perception the houses produced by various small developers are rather close substitute and location and price will be the major determinants of his choice.

j. Marketing Strategy

3.5.23 The developers do not use any aggressive marketing technique to sell their product. Advertising is a feature which is relatively conspicuous by its absence in Ahmedabad's housing market. Whatever takes place is more informational than promotional. At the time of initiation of the project an advertisement is placed in local newspaper informing the buyers. A publicity brochure is taken out. If a new design is being introduced, a sample house may also be exhibited. Till about 1984, there had been enough demand for all types of houses and there was no need for any aggressive advertising. Even in the post 1984 period when there is a recession in the market, the developers have not resorted to any tactics to entice customers away from competitors. The only marketing device the developers have resorted to is putting another advertisement in the newspaper or contact a broker.

3.6 Determination of Price

3.6.1 Each of the operators face a downward sloping demand curve implying that a price reduction will lead to an increase in quantity demanded of the houses produced by an individual producer. The elasticity of demand will vary for different producers depending upon availability and price of close substitutes in the market. The price which the developer `fixed' for his housing depends upon the (i) cost of production; (ii) his perception of the demand curve for his product (a developer described the latter factor as `how much the market can take'.); and (iii) prices being charged by other developers for similar housing.

3.6.2 In Ahmedabad, houses come into the market and prices fixed for them even before construction is begun. The price is fixed by the developer on the basis of his estimate of cost of production and his expectation of demand for his product Vs. that for the product of his competitors. The cost is estimated on the basis of prices prevailing in the market at the time of initiation of the project. Since a house can take 1-3 years to complete, a price-escalation clause is included in the contract with the buyer to take account of increase in costs (inflation) if any. To this estimated cost the developer adds his minimum profit margin. This is his reservation price. The actual price fixed would also depend upon the prices being charged by other developers for similar housing in the vicinity of his project. Even after a price is fixed the developer retains some flexibility to change the price in line with change in market environment. This flexibility is made possible by the time lag between fixation of initial price at which the client/buyer registers to purchase the house and the time when the actually takes possession of the house. The final price which the consumer ends up paying may be much higher than fixed in the initial stages.

3.7 Cost of Production

3.7.1 The cost of production of a house relate to the cost of inputs like land, building materials and finance; wags paid to the labour and other supervisory and managerial staff. To these conventional costs another cost has been added viz., the cost of obtaining various sanctions and permissions. These include not only legitimate and `above the table fees imposed by AMC and AUDA for sanctioning the Plan and granting NA permission but also a significant amount of `under the table' deals. These costs or `speed money' as they are popularly known are a product of the

post-ULCER period when land became a scarce product and granting of permission to develop it (NOC permission) under sections 20/21 a prerogative of the Competent Authority (CA). The increase in cost due to these non-official fees can be as high as 10 per cent of the total cost of production.

3.7.2 In the following paragraphs we analyse the trends in cost of production in Ahmedabad for the period 1970-85. Tables A-3.4 - A-3.5 give prices of various inputs and Tables A-3.6 - A-3.7, the CRG of these prices. As can be seen, the costs of all the inputs have shown a positive rate of growth the highest rate of growth being recorded by land. Due to the increased price of land the cost component of this input in total cost has increased by around 15-20 per cent (depending on location). In early 70's the component had ranged between 5 to 10 per cent. The cost of building materials also show an increase - though not as spectacular as that of land. The index of prices of bricks stood at 307 in 1980 (1973-100), declining to 264 next year. The index for timber and cement was 317 and 222 respectively for the year 1981 (1973=100). For steel this figure was 286. Between the period 1973-81, all building materials (barring sand) showed a compound rate of growth, between 10.5 per cent and 15.5 per cent (Table A-3.6). These materials together account for 50 per cent of the total cost of the house.[23] The wage rate of labour which accounts for approximately 33 per cent of the total cost also showed an increase between 6-8 per cent (Table A-3.6).

3.7.3 The increased costs of inputs would have led to an increase between 10-15 per cent in cost of production of houses. Indices of cost of production of LIG houses show an average annual rate of growth of 9.5 per cent over the period 1970-81 (Table A.3.6).

3.7.4 To these costs are added the corruption costs or costs of getting various permissions which have increased from 1-2 per cent (of the lower cost of production in 1970) to approximately 10 per cent (of the higher cost of production in 1985). Thus the increased cost of production would explain a significant part of the increase in house prices. This however need not have been the necessary outcome. Even if the prices of inputs were increasing the builders could have contained the cost of production by (i) substituting cheaper inputs for more expensive one (ii) by organising production more efficiently and (iii) by other technological innovations which would lead to reduction in cost of production.

3.7.5 This type of innovativeness has been absent amongst the builders of Ahmedabad. More often than not they have continued to produce houses in the conventional manner duplicating the conventional design. A few had substituted cheaper materials (like lime for cement and steel frames for wooden ones for doors and window) and succeeded in reducing the costs somewhat. Over time, the high land prices have also led to reduced size and change in design. The shift from bunglows to tenaments and flats was a response to the increased land prices. Later on, row houses combining the elements of bunglows and tenaments were also successfully experimented with. For past 10 years however no new ideas have floated in. The builders seemed to have reached the limits of substitutability between land and other inputs.

3.7.6 The substitutability between building materials like cement and steel and other cheaper materials seems to be even more limited. Apart from technological factors which may limit the substitutability between different inputs, it is the fear of rejection of these materials by the clients which makes the builders hesitate to use non-conventional materials into their houses. The builders on their own, have not made any investment in research and development of acceptable cheaper materials.

3.7.7 In fact, so long as the producers have been able to sell off whatever they produce at prices fixed by them and earn same or increasing (volume of) profits, there has not been any incentive for them to introduce any change - in technique of production or organisation of production or whatever else. The increased costs due to high prices of inputs or inefficiencies have been passed on to the consumer. The way production is organised in Ahmedabad makes it possible for the producer to do so at various stages of house production. Besides, the organisation of production is also very inefficient.

3.8 Organisation of Production

3.8.1 The question of efficiency of organisation of production relates both to the scale at which production is undertaken and the way this production is organised.

3.8.2 A firm is deemed to be efficient if it produces on the lowest point of its AC/MC curve i.e., reaps economies of scale. It had not been possible for us to get any concrete evidence about the economies of scale and optimal scale of production of housing in Ahmedabad. The discussions

with various developers however indicate that there are no appreciable economies (of scale) to be reaped from large scale production. The AC and MC are rather flat curves. This is mainly due to the lack of indivisibilities in inputs. There is very little of mechanised inputs used whose AFC will decline as the scale increases. Most of the work is done with the help of hired labour which can be hired and paid in proportion to the amount of work. It is also possible to hire architects, accountants and other professionals by the hour. For a small operator the fixed costs are very low or nil. These costs are positive for the medium and large operators.

3.8.3 In Ahmedabad a large number of firms produce 6-12 houses a year.[24] Very few operate on a large scale producing between 100-500 houses a year. As has been mentioned earlier, the firms differ from each other in many respects, and face different cost curves. Each firm, faces a different kind of market environment. The constraints of price and availability of land and finance act as binding and restrain the firm from operating at the theoretically most efficient scale under no constraints. A higher scale may either be physically impossible or lead to sudden spurts in costs (costs of finance or of obtaining extra land), or a decline in prices at which increased production can be sold.[25] Further, each firm has its own limitations regarding managerial capabilities. The producer is therefore wary of increasing production.

3.8.4 Thus, limit to the scale of production is put both by factors on supply and demand side. This limit is different for different producers.

3.8.5 Quite as important is the speed at which houses are built. In Ahmedabad house building is a slow and long drawn out process and is very finely tuned to the forces of demand. We explain this process in the following paragraphs.

3.9 Process of Development

3.9.1 The process of development starts with the builder planning a housing project. The organisational form adopted by the builder is either single proprietorship or partnership. Partners in most of the cases will either be closely related or well known to each other for a long time. Rarely is the firm organised as Private or Public Limited company.[26] Each time a new project is launched, the partners may change and a new firm floated. This is mainly to avoid income tax. Thus one may find the same set of operators working with 2-3 or more firms.

3.9 .2 The first step after having formed the company or corporation is to decide on the location, type of housing to be built and income groups for whom to build. All these three factors are interrelated. As mentioned before, each developer is in a sense a specialist. He operates in a localised market, builds certain types of houses and caters to a particular income group. Constraint to his mobility to other submarkets are put by lack of finances or uncertainties and risk involved in treading in unknown territories. Even within his own locality, he may not have unfettered freedom to locate wherever he wants to. In the post-ULCER period the availability of developable land has been the predominant variable determining the location.

3. 9.3 After having decided the location of development the developer has to go about acquiring or purchasing that piece of land. If the land is agricultural, he has to procure a non-agricultural use (NA) status.[27] This is followed by attempts to get NOC (No objection Certificate for building on the land) permission from the Competent Authority (CA). The developer then prepares the Plan of development and submits it to the CA which sends the Plan to Superintendent Engineer. If it crosses this stage, the Plan is submitted to the AMC or to AUDA (depending on whosoever jurisdiction it lies in) for checking whether it compiles with the building bye laws and zoning regulations. The Plan then travels back to the Superintendent Engineer and thereafter to CA. The CA then writes to all government bodies to check if anyone is interested in that plot of land. Only after getting negative reply from all of them, the Plan is finally approved and an NOC is granted to the builder. The Plan then has to be resubmitted to the sanctioning authority (AMC or AUDA). During the period elapsing between the initial submission of the Plan and granting of different permissions, various changes might have taken place in the town planning schemes or general economic conditions necessitating change in the Plan. The change may consist of a smaller size of the house or a different type of the house. If the Plan is changed, it has to be resubmitted and the whole process has to be gone through again.[28]

3.9 .4 Even after all the permissions have been granted the Competent Authority (CA) reserves the right to review the decision any time in future. There is no time limit mentioned for this review. The developer however more often than not decides to initiate production.

3.9 .5 The time consumed for getting NOC, according to the developers we interviewed, can range from 2-5 years and for getting the final sanction

from 10 to 12 months.[29] During the initial periods of submission of Plan the developer has to go to the office of CA almost everyday. The process is not only costly in terms of time consumed but also requires payment of official and unofficial dues at every stage.

3.9 .6 The lengthy and tedious process is a creation of ULCER. Prior to enactment of ULCER the process was much simpler. The only permission required was NA which was given as a matter of course rather than a special favour. The Plan had to be submitted to the relevant authority which again was cleared if it fulfilled all the requirement. Plan could be passed in as little as 15 days and producer could initiate the project even before obtaining NA.

3.9 .7 The next step in the process of development after the Plan is finally approved is a formation of a Cooperative Housing Society and application to Gujarat Housing Finance Corporation (GCHFC) for loan. At this stage most of the members in the society would be fictitious names or names of the developer's friends and relatives who will let their names be used at the instance of the developer and will withdraw at a later stage. A minimum of ten members is required to form a Cooperative Housing Society. Once the loan is granted, the developer invites members from the public. The response of the public helps the developer to gauge the demand for his product. This is the first stage at which he can change the price to bring it in line with demand. Seldom will the price be set below his reservation price. The builder will not initiate the project unless a minimum number of members register.

3.9 .8 Apart from using cooperative housing as a medium of organising housing activity, some of the developers organise some of their projects under the form of NTC (Non-Trading Corporation).[30] The reason for preference of cooperative form lies in the availability of finance on soft terms from GGHFC. In cases where such finances are not available it is the members who finances the houses. Rarely does a developer finance a housing project from his own resources. Even if some bridge loan has to be arranged for, the additional costs of finance are passed on to the client. The situation has changed somewhat in the post-1984 period. With declining demand and non-availability of finances, and the client's preference for fully-built houses, the builders have had to make substantial investment himself.

3.9 .9 After land and finance have been arranged for somehow and various permissions obtained, the builder can start construction. Till around 1982, there was great scarcity of construction materials in the market. Builders normally kept an inventory of these materials to take care of the uncertainty. The cost of warehousing and risk of its loss through theft or inclement weather (rains etc.) increased the costs over and above the price paid for these materials. The client anyway was charged at the scarcity prices rather than at the actual costs incurred. This was another avenue for speculative profit for the developer. The availability of materials has improved substantially in the past 3 years. The cost has however increased significantly.

3. 9.10 The construction could be held up in the middle just as much for non-availability of materials as for non-availability of labour or more important finance.[31]

3. 9.11 In the post-1984 period the scarcity of finance has led to innumerable delays in completion of projects.

3. 9.12 Once the shelter structure is complete and obligatory roads and other facilities provided by the developer the next step is to obtain drainage sewerage and water connections if the area lies within the jurisdiction of the AMC.[32]

3. 9.13 The procedure for this is very well laid down and according to developers, requires neither much `leg work' nor excessive expenditure of money. Ahmedabad Electricity Company provides electric connection. AMC is then approached for giving the completion certificate. The developer hands over the completed houses to members and the project is complete.[33]

3. 9.14 In the post-ULCER stage the obtaining of permissions has become a more significant part of the development process. Construction has become a secondary activity. Obtaining the various permissions can take as much as 2-5 years (and in some cases as much as 10 years)[34] whereas any efficient developer can finish the project (of 50 or 1500 houses) in as little a time as 11 months. An analysis of elapsing time taken by AMC for grant of building permission and the time taken by the developer to complete the house and obtain building use certificate, in the post-1976 period gave the following information (see Table 3.1).

3.9.15 The lengthening of period between initiation of project and its completion adds to the cost of the house. The major cost is that of finance. Over time the prices of other inputs too keep on increasing and house which might have cost Rs 50,000 when the client registered for it may cost more than a lakh by the time it gets completed. Part of this increase goes in to cover increased costs - major part is absorbed by the developer as his excess profit margin. In fact, this is another element which leads to high prices of houses in Ahmedabad.

3.10 Profit Margin

3.10.1 There is a general impression that profit margins have escalated in the aftermath of ULCER. Major part of these profits is supposed to be generated from speculative profits in land. Prior to ULCER the builder's main activity was construction and his profits originated mainly from this activity.[35]

3.10.2 The developers put their profit margins in pre-ULCER period at 15-20 per cent of the total cost. They hold that the rate of profit continues to be the same, though the absolute amount of profit has increased due to increase in prices. We suspect that in this percentage the speculative profits from land and other inputs have not been included. Not for that matter do we have faith in their pronouncement of the rate of profit at a mere 15 or 20 per cent. From our calculations based on data provided by a few developers, we found the profit margins to be much above the 15-20 per cent rate professed by them. In 1970 from the date on one project we obtained a profit rate of 22.45 per cent which increased to almost 40 per cent in 1974. There was great variability between the profit margins earned by different developers and by same developer in different projects.[36] There however is no strong evidence of any increase in profit margins over time. (for details see Table A-3.10). The profit margins continue to be very high. The range in 1980 was 40 and 125.

3.10.3 As pointed out earlier, the builder's own investment (equity) in the project is very limited. In 1970s it could be as low as ten per cent of the cost of land. If one calculates the rate of return on builder's estimated investment the figures one arrives at are staggering (see Tables A.3.10 to A.3.12).

3.10.4 The profit margins, calculated in anyway, are excessive. Compared to the risk, uncertainty for which profit is a return - the rewards are on

TABLE 3.1

	Average time elapsing between submission of Plan and grant of building permission	Average time elapsing between grant of building permision and grant of building use permission
1976	700.85 days	97.07 days
1981	561.06 days	275.54 days
1986	915.81 days	183.90 days

Source: Calculated from AMC Records.

NOTES

1. Whereas a decline in demand by itself will lead to a decline in prices, the new equilibrium `output´ would be lower than the initial `output´ unless the decline in demand is accompanied by an increase in supply also.

2. Under normal circumstances scarcity of housing in other submarkets will reflect itself in high prices. This however will not be true of new housing being produced the public sector - the price of which does not get determined by market forces.

3. See Ray Robinson, Housing Economics and Public Policy, The Macmillan Press Ltd., London, 1979.

4. The producers will continue to hold this inventory till the cost of holding is lower than the expected returns. If there is no expectation of price to increase in future, the producer may accept lower profits or even incur losses and dispose off the house. If the actual price is higher than expected price the producer cannot increase the supply immediately apart from off loading his inventory. It will however affect the future planned production.

5. This simple deduction of industry supply from individual supply is possible only under perfectly competitive conditions. Under non-perfectly competitive market it is not possible to talk of an industry supply curve because of the heterogenity of the product. However, one can talk about the total supply in a rough sort of way.

6. There might be exceptions but these would be few and far between.

7. Even though each increase in price might have led to a decline in demand in the short period, the consumers soon adjusted to the new price and demand curve shifted up again. In the post-1984 period this did not happen. Currently, the market is in disequilibrium and prices continue to be high. The demand curve did shift up but not enough to take all the increased supply at prices put up by suppliers. There were other factors pulling down the demand curve.

8. Based on discussions with the developers in the city.

9. See Kiran Wadhwa,"Private Sector and Urban Housing Markets: A Case Study of Ahmedabad", Nagarlok, Vol. XVIII(3), July-September, 1986.

10. Discussions with a cross section of developers gave us the impression that an average consumer's demand for housing is much more a function of price than of any other variable. Quality of housing is not as important. Consumers go for whatever type of housing they find affordable. Thus, GHB housing despite its bad quality falls with the affordability limits of the consumer.

11. As noted above the decline in demand was not an 'across the board' phenomenon. Some housing continued to enjoy strong demand. Its prices did not decline. When we refer to downward rigidity of prices, what we imply is average price rather than all the prices.

12. Based on discussions with some prominent developers of the city.

13. There was scarcity of building materials in the 70s and the new entrant might have faced greater difficulty, on the margin, in obtaining these than the old established ones. The non-availability of materials led to delays in completion which worked more in favour of developers than against. See Kiran Wadhwa (1986) op. cit. This factor thus was not a negative factor in the calculation of new entrants.

14. See Kiran Wadhwa, 1986, op. cit.

15. In 1985-86 AMC, to overcome its financial crisis, sold off lands belonging to it. These were large chunks of land and most of these were purchased by developers from Bombay. The development on these lands however has mainly been of commercial nature.

16. See Kiran Wadhwa, 1986.

17. We refer here only to the transaction made by organised private sector. Once the property was purchased by the household, it could be/was offered for rental purposes.

18. Since rentals were regulated and not house values, production shifted to 'non-controlled' market.

19. The price elasticity of demand faced by different developers varied. The old established developers operating in the upper and upper middle income group housing faced a relatively inelastic demand. For the new and small developers, demand was more elastic.

20. For details of the Act and its implementation in Ahmedabad, See Kiran Wadhwa, (1983, 1986 and 1987).

21. There is a continuous exchange of information/views about the market amongst the large and medium operators. This takes place at social gatherings. They also have an official forum `The Real Estate Developers Association´ where they gather, exchange views and formulate policies. The cohesion in the group has increased since the enactment of ULCER which affected almost all the producers adversely. The competitive fringe does not make part of this group. It, however, does get the advantage of policy changes which take place at the government level in response to the Association's representations to the government.

22. In Ahmedabad the small operators are not at a disadvantage vis-a-vis the large producers. The small producers also have been operating in the area for a long time and have amassed goodwill. It is the new entrant who is at a disadvantage vis-a-vis the old established firm.

23. See Mulkh Raj, "Housing Construction - Research Efforts and the Need", (mimeo).

24. The lower limit to the scale of projects is put by the minimal number of members required to form a cooperative housing society or NTC. For the cooperative society this number is 10 and for NTC seven. For Group Housing the AMC insists on some type of `association´ before permission can be granted. This is to ensure that some `body´ takes up the responsibility of maintaining common areas.

25. Under imperfect market conditions, the equilibrium of the firm anyway obtains on the downward sloping side of the cost curve.

26. There is case of just one firm who recently organised itself as Public Limited Company.

27. NA permission is required even for all the lands lying in urban areas. After the enactment of ULCER acquiring a piece of land or getting NA has not remained a very easy job. Later in the report we discuss the various problems faced by the developer in purchasing land. N.A. permission is granted according to provisions of the Bombay Land Revenue Code 1879 (Section 65) by the Collector. The applicant is charged a penalty for converting land to NA use. A special NA assessment is also levied under Section 48 of the Land Revenue Code. Further, a once for all, conversion tax of Re 1 per sm. is also charged.

28. The developer himself has also been instrumental in delays by asking for extensions. Delay increased the price at which he could sell the house.

29. There is an element of exaggeration in this claim. Even though some projects might have taken that long to be cleared, one cannot generalise from their experience.

30. Both the forms are incidentally illegal. Under the Cooperative Society Act, 1967, the promoter - the role in which the developer enters the society is illegal. NTC as an organisational form was banned in 1985 for blatant misuse of its intent and provisions. See Chapter 4 for details.

31. The labour may simultaneously take up jobs in two to three projects (to ward off uncertainty regarding employment) and may choose any one project on a particular day. Significant number of absentees can hold up the work.

32. In the areas where such facilities are not made available by public authorities these are provided by developers at the community level in the form of septic tanks and tubewells.

33. Most of the developers do not hand over the houses to members till they pay the last instalment. Since the developer has no legal standing, he cannot take the members to court if they do not pay. He therefore holds back some facility (like water connection) till the last payment is made. This is also used at the last stage to extract some more money out of the consumers and handing over delayed till he pays.

34. Many of the projects submitted to CA for exemption under Section 21 of ULCER still await decision of CA. See, Kiran Wadhwa (1987).

35. Some builders did speculate in land or stocked inventory of land for future use. The enactment of ULCER on the one hand increased uncertainties relating to future availability of land and on the other led to unprecedented increases in land prices increasing the volume of profit from the input land.

36. Giving allowance for the limitations of data. For details see Note on Tables on Profit Margin in the Appendix.

c. calculating the cost of construction on the basis of imputed market price of land and other inputs prevailing at the time of registration or giving possession rather than the actual costs incurred in their purchase. The consumer pays all the extra amount asked for since he has already invested approximately 80-90 per cent of the price of the house. The actual cost is lower than th imputed cost.

eralisation on this count are not possible. The cost curves faced by nt developers for different projects will vary a great deal. So do ctices in relation to total investment made, extras charged etc.

CHAPTER 4

PROBLEMS AND CONSTRAINTS

4.0.1 The scarcity and high prices of inputs have been the major problem faced by the developers in the housing market of Ahmedabad. In 1970s it was the scarcity of building materials and in 1980s it is the land and finance which have created major problems in this respect. The scarcity of building materials did not cause insurmountable problems except that a black market in building materials emerged and led to increase in costs of inputs and of prices paid by the consumers. Scarcity of land and finance have created serious supply bottlenecks in the market. The biggest problem, currently faced by most of the developers however, is lack of demand. The non-availability of credit to the consumer had led to some decline in demand. It is, however, the high prices of houses which are mainly responsible for this state of affairs. Part of the blame for increase in prices can be squarely laid at the doors of one Act - the Urban Land Ceiling and Regulation Act, 1976. In fact, in our discussions with developers, this Act was singled out as the piece of legislation which had created maximum problems on all sides. Of the three problems cited - availability of land and finance and procedural complexities - at least for two of them the Act was held directly responsible. This Act has been 'blamed' for making land inaccessible to developers, making procedures unintelligible to them and increasing the involvement of black money in the business[1]. Due to the last factor, the entry of qualified and educated people in the industry has been restricted. In the past few years, the new entrants have mainly consisted of people with access to black money.

4.0.2 Below, we discuss the various problems the developers have faced in last few years in the process of building houses in the city. The analysis is based primarily on the discussion we have had with developers and policy makers in the city. We have selected three problems viz., availability of land, scarcity of credit and procedural complexities for analysis in this chapter.

4.1 Availability of Land

4.1.1 A developer in Ahmedabad can plan to purchase land in (i) the city area; (ii) the suburbs; (iii) areas lying outside AMC limits but within the jurisdiction of ULCER; (iv) areas lying outside both AMC and ULCER limits; (v) in Gamthal. Prior to 1976, price of land and locational preferences of the potential clients were the only considerations determining location of the purchase. As the prices in inner areas increased developers moved out to fringe areas where less expensive land was available in abundance. The price of land in most of the near peripheries varied between Rs 8 to Rs 25 in 1970-72. Most of this land was agricultural for which NA permission had to be obtained. This did not create much problem during that period.

4.1.2 In 1976, ULCER was imposed. Of the five locations listed above (i) to (iii) lay under the jurisdiction of ULCER. The availability of land within the ULCER limit is extremely restricted.

4.1.3 In the following paragraphs we describe the mechanism through which lands were acquired by the developer in the post ULCER period and problems faced in the process.

4.2 The Urban Land Ceiling Act

4.2.1 The Urban Land Ceiling (and Regulation) Act came into force in Gujarat on 17th February 1976. Its area of jurisdiction included areas lying within 5 kilometers of Ahmedabad periphery. Under the Act, no person was permitted to hold and/or transfer more than 1000 sq. meter of land. The excess land was to be declared as surplus and liable to be acquired by the government. The acquired land was to be offered to public bodies like GHB, GSCB, AMC, AUDA or others for their use. Exemptions were granted under sections 19,20 and 21 if such lands were to be used for group housing for EWS (Sec. 21) or in case of hardship (Section 20). The scheme were to be submitted to the Competent Authority before March, 1979. The CA was to take action in the form of exempting land or acquiring it itself. The scheme could be submitted only by the landlord himself. Transfer of land was also permitted if the landlord had executed a sales deed in favour of a cooperative society before 28th January, 1976 (the date the bill was submitted to the Parliament) or a banakhata was executed before this date (28th January, 1976).

4.2.2 It was clear from the terms of the enactment that the government did not recognise the existence of private sector as a commercial organiser of housing which required large chunks of land for its operation. The only land which was freely available was in plots of less than 1000 sq. meter plots which are suitable for small projects of 8-10 flats. A group of tenaments/bunglows is unthinkable on such small plots. The exemptions under sections 20 and 21 were granted to the landowner. The role of developer even as a promoter was illegal. Only in 1985 this role was recognised. The developer therefore made land available to himself through ways which were not entirely legal. The first of these was the `benami' transaction under which the developer operated in the name of the farmer and obtained exemption in his (farmer's) name. Another was backdating of `banakhata' deals.

4.2.3 The developers entered into `banakhata' deals with farmer - landlords in the name of different cooperative housing societies and succeeded in cornering huge areas of land all around the city of Ahmedabad[2]. Hastily schemes for these areas were prepared and submitted to the CA. The developer also submitted schemes (for EWS housing) in the name of the farmer since the same was exempted under section 21 of ULCER.

4.2.4 Apart from the lands, which continued to trickle in the market as and when the various schemes were sanctioned the developers could acquire land within ULCER limits in three other ways:

(i) The developer could purchase plots of land admeasuring less than or equal to 1000 sq. meter. It is possible to organise a cooperative housing society (the usual mode, the developers adopt to organise housing activity in the city) on plots of land much smaller than 1000 sq. meter.

(ii) A larger society could also be developed if the developer could find a couple of contiguous plots, each admeasuring less than or equal to 1000 sq. meter[3].

(iii) Under the Act, there was no ban on transfer of built up property and land acuperant to it. The maximum area permitted was approximately 2000 sq. meter. The loophole here was in the definition of `built up' property. The area was loosely considered to be `built up' even if the building was only upto plinth level. In some cases, even if only excavation was done, the property was considered to have been built up and was exempted under the Act.

4.2.5 The number of plots measuring less than or equal to 1000 sq.meter in the city could not have been very large[4]. The plots of this size will be even fewer in peripheral areas[5]. So would be the supply of such plots contiguous to each other. Same would be the case for built up properties with areas less than or equal to 2000 sq. meter. The areas lying outside the jurisdiction of ULCER were too far and demand for housing in these areas was rather limited. Even for these areas getting NA permission was not easy[6]. Some cooperative societies did come up in these areas but the residents shifted back to the city after paying one or two instalments. Quite a few farm houses were developed in these areas serving as second houses for the rich of the city[7].

4.2.6 There is much less problem in obtaining permission for building in `Gamthal'. The vacant land however is available in very small plots and only small developers build in these areas. Further, the supply of such land too is extremely limited.

4.2.7 Thus, on the whole, the supply of land in the city for housing was and continues to be extremely limited. Most of the developable chunks of land lie unused and are unsaleable. According to developers, 70 per cent of the vacant plots in the city area are unsaleable.

4.2.8 The developers made use of various loopholes in the Act to overcome the constraint of supply of land and created legal supply of land where there was none[8]. Needless to say this would not have been possible without the help of very `capable' lawyers of the city (and helpful bureaucrats). This incidentally was another `tribe' of professionals which benefitted a great deal from the enactment of ULCER - as it does from passing of any restrictive Act.

4.2.9 The developers blame the ULCER due to which most of their energies had to be channelised towards acquiring one input - albiet the most important one - of their trade namely, land. If the housing activity in the city did not screech to a halt due to ULCER, most of the `credit' goes to the developers who had acquired an inventory of land to last them a few years. This stock is now nearing exhaustion. According to the Real Estate Developers Association, the land with individual developers will not last for more than 2-5 years. Thus, if the private sector activity in the field of housing is to continue, the government will have to make land available to it.

4.3 Non-availability of Finance

4.3.1 One of the reasons the developers organise the housing activity in the form of cooperative housing society is the availability of finance on easy terms from Gujarat Cooperative Housing Finance Corporation. If finances were not available from this agency, the members would arrange finance from their employers, HDFC or other sources[9].

4.3.2 We have not compared the terms at which these different agencies make finance available for housing but seeing the popularity of finance provided by GCHFC it would seem that the terms offered by this agency were more attractive than those of the others.

4.3.3 Till 70's the supply of cooperative credit has been quite adequate in relation to its demand. In 1980's all of a sudden there was a spurt in demand for this credit in the wake of ULCER when several housing societies were floated. There was a bunching effect in terms of initiation of housing societies as also in terms of demand for credit. The supply was insufficient to meet this demand. Life Insurance Corporation which had been the major source of GCHF's finds has not increased its grant adequately to fulfil the increased demand for funds.

4.3.4 The housing activity in Ahmedabad has been greatly dependent on the credit made available by GCHFC. If it were not for the credit facilities provided by GCHFC the demand for housing would be even lower. This explains the keen interest the developers have evinced in the financial health of GCHFC. For the past five years, this agency (GCHFC) whose only source of funding is LIC has been woefully sort of funds. According to one estimate, GCHFC had sanctioned Rs 171 crore of loans for Gujarat which have not been disbursed. Due to this 1.5 lakh of houses in Gujarat are lying incomplete. More than 50 per cent of these are estimated to be located in Ahmedabad. The developers have been exploring alternative sources of finance for the corporation. They have been pressurising the state government to permit GCHFC to accept a loan of Rs 100 crores from a private trust in USA. They seem to have finally convinced the government to let GCHFC to float debentures worth Rs 60 crores to augment its finances[10]. HUDCO also has agreed to come to the aid of GCHFC[11].

4.3.5 The aid has not been as helpful as was expected. In Chapter 3 we had explained the process by which the developers enroll members. In fact while advertising for inviting members to enroll, one attractive term

refers to the fact that loan is available. This cooperative loan, in effect cannot be made available till the members are registered. To overcome this circularity, the developers in the first instance, register some minimum required number of fictitious members and obtain loan from the GCHFC on the basis of this list. GCHFC is aware of this practice. The current problem in the market was as much lack of credit as it was lack of demand. Availability of credit has not been able to solve the problem fully. Whereas it might have attracted some genuine customers, a significant part of housing stock still lies unsold. The developers now have been caught in their own trap. The interest on loan which has been made available by GCHFC piles up. If they add this interest to the cost of the house the demand will decline still further.

4.3.6 What is required is making available direct finance to the private developer. One cannot overstress the importance of finance in an industry where the minimum gestation lay between investment and accrual of returns is as high as one year. HUDCO had one such scheme. Due to non use, it had become defunct. It should be activated.

4.3.7 Of late many new agencies and groups have come up to fill the gap left by the failure of GCHFC. The rate of interest charged by these is much higher. The private sector charges as high a rate as 18 per cent per annum and HDFC's rates vary from 13.5 to 15.5 per cent. HDFC like GCHFC makes loans directly available to individual members than to developers. One of the developers in the city had raised finances worth Rs 2 crores from the market through floating shares. These shares were fully subscribed. The builder firm had assured its shareholders a minimum dividend of 15 per cent and also promised that the dividend will be exempt from income tax as is the case of dividends on shares of all new companies. The Government of India however has refused to grant this exemption to the corporation despite various presentations. This development has had negative impact on the morale of other builders who were considering to follow suit. Evenfor this corporation raising of finance from the market will become even more difficult since the investors will neither trust nor find their shares as attractive.

4.3.8 In fact, only a few large developers could have raised finances in this manner since a minimum turnover, financial stability and good reputation are two major prerequisites for success in this venture which the small developers do not possess. Thus the small developers still have to rely mainly on black money for financing their activity. The builders

would like government to declare housing as `priority' industry and direct banks to reserve approximately 10 per cent of their loanable funds to them.

4.4 Procedural Problems

4.4.1 The most irksome of the problems faced by the developers has been the labrynth of procedures at each step. We have discussed this in detail in Chapter 3. Consequently, the developers have spent more time visiting the various offices rather than their construction sites. The major function of developer had evolved over time from being a contractor to an organiser of housing to (now) mainly a liason officer[12]. The main task of construction supervision etc., is handled by others. The sheer opportunity cost in terms of loss and misallocation of skilled manpower must be staggering. Added to that is the monetary cost of getting through the jungle of the various procedures. The social cost of this `unproductive' activity is enormous.

4.4.2 We can pinpoint three categories of procedures which have created the maximum problems for the developers: (i) building bye-laws; (ii) procedures relating to Urban Land Ceiling Act in obtaining NA and NOC and (iii) procedures relating to getting cooperative housing society registered and getting cooperative finance.

4.4.3 The procedures according to developers, are so complex and open to so many interpretations that they are neither clear to the developer nor (seemingly) to the official functionary responsible for enforcing these regulations.

4.4.4 The complexity and unclarity adds to the discretionary powers of the CA and leads to delays. Quite a few of CA`s decisions, thus, seem to be quite arbitrary to the developer. Even after a scheme (for exemption under Sec 20/21 of ULCER) has been sanctioned and NOC granted, the law is so framed that the sanction can be revoked - for any reason and after any length of time[13].

4.4.5 The developers have been known to receive show cause notice after the project has been completed, and people have come to live in those houses. The government should specify some period during which the case can be reopened. Also the rules for granting exemptions should be clearly specified so that the developer is aware of them and the Plan does not have to go back and forth. If the developers do not abide by the rules strict

penalties amounting to greater than the expected profits from breaking the rules should be imposed. The complexity of procedures lead to unnecessary delays and increases in cost. The increase in cost is not only in relation to expenditure incurred directly for obtaining the various permissions but also to increases in project costs as costs of materials and other inputs increase.

4.4.6 The developers' own role in creating delays cannot be minimised. They have contributed in the process in two ways - one is through obtaining extension of NOC which has been granted to them and secondly through changing the Plan deliberately so that delays are caused. Intervention of High Court (normally in response to developer's petition) increases the delays still further.

4.4.7 The developer has resorted to these delaying tactics to spread his projects over a long period. In case of exemptions granted under section 20/21 of ULCR, the developer had to complete the projects within 2-5 years of granting of NOC - 2 years in case exemptions granted under section 20 and 5 years for schemes cleared under section 21. Both constraints on demand and supply side made it a difficult proposition for the developer to confine himself to this time schedule. Since last date for seeking exemption was 31st March, 1979 and there was great deal of uncertainty relating to acceptance of application, the developer had, under different names, submitted many projects. As and when the project was sanctioned the developer was not always ready to start it. ULC could not be blamed for delays in all the cases.

4.5 Conclusion

4.5.1 Most of the problems which the developers face seem to have originated (as per developer's account) from the government's intervention in the urban housing market. The government intervention, on its part, was a response to the problems created by free functioning of the market and misuse of certain institutions by the private sector. Prior to 1972, government intervention in the housing market was minimal, demand for housing was high, land was inexpensive and finance was easily available. Whatever intervention was there was utilised by the developer to its own advantage. In this category we have the institution of cooperative housing societies and the concessions provided by the government to these in terms of credit on soft terms, concessional rates on stamp duty etc. As the government became aware of misuse of the concessions, laws were enacted to

change the situation. Also the free functioning of the market had created problems of speculation and sprawl. To counteract all these, in 1972 Vacant Land Act and in 1976 ULCER was imposed. Then concessions to cooperatives on stamp duty were abolished. The alternative form of organising housing viz., Non-trading Corporation was banned[14].

4.5.2 The reaction of the private sector to these restrictions was true to its character. The same logic which had induced it to misuse the institutional set-up graded it to circumvent the law. The logic of the private developer is very straight forward. He believes that whatever rules/regulations there are, infringe on his profit. So he evades the rules in pursuance of his objective of profit maximisation. The cost of evasion is smaller than the expected loss in profit in case of non-evasion. This leads to developer's attitude of treating all of most of the regulations as stumbling blocks in his operation. It is high time the developer realises that its profit maximisation exercise has to be carried out within the constraints imposed by legal framework of the society in which it operates. Government, on its part would do well to recognise the genuine problems faced by the private sector and try to solve them. In fact, a dialogue between the government and the private sector in Ahmedabad has already been established and the government, wherever possible has been bringing about amendments in the Acts.

NOTES

1. Black money has always played an important role in real estate activity. The Urban Land Ceiling Act, by fixing the price of land at abnormally low levels, (much lower than the prevailing market price) inflated the role to a great extent. The non-availability of institutional finance made the trade even more dependent on this source of funds. For a detailed analysis of impact of Urban Land Ceiling Act on the housing market of Ahmedabad, see Kiran Wadhwa (1983, 1986).

2. Most of the vacant land over which now housingcanbe developed is agricultural and lies outside AMC limits. Within the city there are very few vacant plots. Further, land lying outside the city is cheaper than the one within AMC limits.

3. The Vacant Land (Prohibition of Alienation) Act which was a precursor to ULCER was much haushier in this respect. Under the Act, the owner could not sell land if his plot made part of a `block' measuring greater than or equal to 1000 sm.

4. There are not that many vacant plots in the city anyway.

5. The fringe areas would be the major future source of supply of land to urban areas. It would be very difficult to find plots of less than 1000 sm. in these areas. Smaller parcels may be available only in already developed villages. An analysis of distribution of land holdings by size in some peripheral villages brings out the fact that only about 25 per cent of the plots are less than 1000 sm. in size. If the developed villages are excluded this ratio comes down to 10-15 per cent. Of these too the parcels held by owners with more than one parcel will come under the purview of the Act. See Meera Mehta, Dinesh Dinesh Mehta and H. Shivanand Swamy, "Residential Land Management in the fringe Areas of Ahmedabad - Towards a Policy Perspective". Paper presented at the workshop on Urban Land Management, School of Planning, Ahmedabad Feb. 12-15, 1986.

6. In some of these areas Gandhinagar Periphery Act was in force under which non-agricultural use of land was not permitted.

7. See Kiran Wadhwa "Fringes of Ahmedabad - A Case Study in Urban Development, NICMAR - Journal of Construction Management, Vol.1, No. IV, January 1987.

8. Thus, under the provision of ULCER, if a building is demolished, the vacant land is deemed as falling within the ULCER purview. The developers found a way out by demolishing only part of the building and putting up a block of houses then demolishing the rest and developing it in the second phase. Also, at times permission from the authority was taken under the head of Improvements and requisite development carried out under that guise.

Even here the supply was limited since the existing property holder would not like to sell, in most of the cases, due to heavy incidence of capital gain tax.

9. The efficacy, of cooperative credit has been declining due to the maximum limit imposed which is equivalent to 60 per cent of the total cost of house or Rs 30,000 whichever is less. In 60s and 70s when houses could be purchased for Rs 30-40,000 this was an adequate amount. In 1980's, with houses costing not less than 1-1.5 lakhs, the quantum of finance is too meager to make much difference to the purchaser. Still even this amount of credit will be quite useful in low costing housing

10. Nobody, least of all CGHFC, seemed to be questioning the developer's interest in augmentation of CGHFC's finances. This blatant show of interest in face of the illegality of their status and acceptance of this `interest' by various government agencies brings to fore the contradictions inherent in the system. It is the same government machinery which declares these developers' activities as illegal which expedites the development organised by them while the genuine cooperative organiser has to face interminable delays in crossing each stage.

11. HUDCO has sanctioned approximately 5-6 crores of rupees for salvaging operation of CGHFC. This is apart of a new policy package of HUDCO towards all Apex Cooperative Housing Societies, under which HUDCO will support these agencies in their lending operations for EWS and LIG housing.

12. In this kind of environment it is the 'smart-operator' who is prospering and the gentleman developer despite being a capable builder languishes without any jobs in his hands.

13. Quite a few developers have gone and built without NOC or built after their NOC has been revoked. They normally do not lose since by the time AUDA wakes up to this `unauthorised construction' the developer has built the houses, sold them, made his profit and left. It is the helpless consumer who has to pay the penalty. More often than not, the houses are not demolished once they have been constructed.

14. The Bombay Non-Trading Association Act (1959) under which the developers had been organising building activity in Ahmedabad, was intended for carrying out some common activity. There were two advantages in organising under NTC vis-a-vis cooperative system. First one relates to the minimum required number of members which is seven for NTC as compared to ten for that of coopratives. The second advantage is pecuniary. The members of NTC do not have to pay any stamp duty on flats owned by NTC (and transferred to members). This organisational form became even more popular after 1981 when the cooperatives started facing problems. In 1985 NTC as an organisational form was banned for blatant misuse of its intent and provisions.

CHAPTER 5

PRIVATE SECTOR AND HOUSING THE URBAN POOR

5.0.1 The organised private sector has not built any significant quantity of houses for the poorer income groups. The low rate of profitability on such housing makes it an unattractive proposition. The rate of profits is the highest in building luxury apartments for the high income groups. However, every developer cannot build luxury housing. The initial investment required is heavy. Further, unless the developer succeeds in selling all or most of the units at the time of announcement of scheme (in which case the members arrange for finance themselves) he has to arrange for finance fully. With the high rate of interest in the market and/or inability of the developer to arrange funds, the proposition finally may not remain as lucrative. Also, as noted earlier in Chapter 3, the developers normally do not step out of their markets. If there is no demand for `posh' housing in their area, they would not build such housing. Thus, due to various reasons, the builders have built houses for low and low middle income groups. However, by no stretch of imagination, can this housing be called affordable by the bottom 30 per cent of the population.

5.0.2 This segment of the population is largely housed by the informal private sector. It is not as if the informal private sector does not make any profit out of supplying houses for the poor. It does. The profits are made by keeping costs at a very low level. Cost of land is normally nil, shelter structure is provided by the inhabitant himself and very little, if any, infrastructure is provided. The major cost is keeping the demolition squads away. The organised private sector which is bound by the building bye laws cannot compete with the informal sector. The minimal `legal' house according to developers, cannot cost less than Rs 30,000. The poor cannot afford to pay this kind of money. The AMC has been considering lowering of standards for the poorer sections of population. There is a proposal to reduce the minimum plot size to 25 sm, remove restrictions on use of type of building material. Even if this were to be done, it is doubtful if the private sector can reduce the cost of housing to such an

extent that its lower supply curve can interact the demand curve for housing of the poor. The private sector puts across two reasons for its inability to reduce cost. Firstly, its ignorance of the low cost technology which makes use of non-conventional building materials. Secondly, it is argued, that such housing will not be acceptable to the poor. In the experience of the private sector, when a person - rich or poor - buys a house the demand is for a pucca house, using conventional materials like cement and steel. A smaller size however is acceptable. Whereas one can understand the first argument, the second is not very convincing. The poor not only live in kuchha houses but they pay for them too. The confusion arises because one is talking of different classes of poor. Poor are not a homogeneous group.Even going by the conventional definition of urban poor in terms of income, the income could range from nil to Rs 700[1] per month. It is the richer among the poor who would not like to purchase a non-pucca house. The poorest of the poor would probably not be concerned about this attribute of housing. If housing is to be offered to this section of population, on commercial principles, one has to understand their preference structure.

5.0.3 The poor view housing as a bundle of attributes rather than as a single valued commodity. The developers normally provide housing composing of all attributes like tenure, shelter structure, on and off-site infrastructure etc. The cost of each of these adds up and raise the price of the house. The poor cannot pay for all of these. They however, are quite willing to pay for some of the attributes. If a developer can gauge this preference function exactly, providing housing for some of these groups can be quite profitable. In fact, providing house to the poor on commercial principles is only one of the alternatives. In the course of discussions quite a few developers offered to build for the poor on no loss no profit basis. In the following paragraphs, we discuss three alternative set of circumstances under which the private sector can be induced to take up housing for the poor, (a) by-itself, as a commercially viable activity; (b) In cooperation with the public sector and (c) as a social responsibility - individually or collectively.

5.0.4 Increased access of the poorer sections to private sector housing market depends upon lower housing prices through reduced costs, reduced profit margins and Improved credit facilities. Providing housing to the lower income groups can be made commercially viable either within the existing framework if the private sector can somehow reduce the costs and its profits (Alternative I) or through government intervention in the form

of subsidies and other incentive (Alternative II). Some form of government intervention and control would be required even under Alternative I if the benefits of cost reduction are to be passed on to the poor. Considering the theme of our study greater attention will be focussed on Alternative I.

Alternative I: Commercial Basis

5.0.5 The price of a house compose of land cost, cost of construction (building materials, labour costs administration costs and costs of finance) and profit margins. The cost of land in the city area is very high and most of the EWS and LIGs cannot afford even the smallest legally permissible plot of land. The land in peripheral locations however is cheaper and wherever possible, if these locations are not too far from the work centres, these should be utilised for building houses for the poorer sections of population. Ahmedabad is a relatively small and compact city. There is still plenty of land available in the peripheral areas. Further, economies in cost of construction can be achieved through lowering of specifications and standards and infrastructure to be provided. Improved design may lead to further reduction in costs. If the production of such housing is organised on a large scale, economies of scale can accrue in purchase of materials and administration of the project. Production of such housing on a large scale may also vitiate the need for high profit margins per unit. Lower prices of houses may increase the demand for such housing and this may more than offset the reduction in per unit profit.

5.0.6 There is not a single example of a private sector firm providing for the lowest income groups in Ahmedabad. A few firms however do provide for households with incomes between Rs 300-500. One of the largest firms in Ahmedabad viz., Parshawnath Housing Corporation has specialised in providing housing to LIGs. The prices at which it has been selling these house, have been relatively more affordable than the rest. Table A.5.1 gives the average prices of the houses sold by this corporation since 1967. We do not have data on prices of all houses produced by different developers in the city. We therefore cannot say that these are the lowest prices. The indirect evidence of the rate at which these houses get sold off proves the point. The lower prices have been made possible by various cost reduction measures. Almost all, barring one or two, projects of the Corporation have been located outside the city periphery. The developers have always had an inventory of such land in the fringe areas. Due to their long-term contract with the supplier who is normally a farmer, they have been able to obtain land at prices slightly lower than the market.[2] The

other operative factor is the economics in large scale purchase of land. The farmer gains too by disposing off all his land in one go. The `Banakhat' for the purchase of land is made by the developers much before the ripining of land for urban use. For projects carried out between 1970-80, the cost land has ranged between Rs 5-10 per sq. meter. During this period prices in the market had been as high as Rs 50-700 in the city area.

5.0.7 Most of the projects carried out by Parshawnaths have been large in size. The recent projects have composed of as many as 900-1500 house. By offering a variety of housing typologies like flats, tenements and row houses in each project they have catered to different preference groups thus ensuring that all units get sold.

Reduction in cost of construction has been achieved through

(i) reaping of economies of scale;

(ii) substitution of conventional material by cheaper ones;

(iii) vertical integration;

(iv) efficient design;

(v) missing on some attributes/items in and outside the house.

5.0.8 Economies of scale have been obtained mainly in purchase of materials and in hiring of labour. For hiring of labour a saving of 17-35 per cent and for purchase of materials that of 10-15 per cent was reported.[3] The builders have substituted lime mortar for cement (resulting in a saving of Rs 130 per sq. meter), CP Teak wood for Balsadi sag (leading to a saving of Rs 20 per cubic feet equivalent to a saving of Rs 150 per door) EZ sections for angular sections in door and window frames (saving of Rs 10 per window and Rs 10-11 per door) and use of IPS stone in place of mosaic tiles for flooring (leading to a minimum saving of Rs 200 per 100 sq. feet). Further, for the common roads within the society, no pucca road are provided. The land is levelled and red brick powder (which is a waste from brick kilns and is saved from their own projects) is used for surfacing the roads.

5.0.9 To ensure regular supply and to cut down on intermediary profit, the builders started manufacture of some of the items required in their projects. These are flooring tiles, standardised doors, windows and RCC pipes. The economies in producing these items on a large scale also accrued to the project.

5.0.10 The costs were lower because the builders avoided paying of sales tax on the items produced in their own factory. The exchange was recorded as an inter-departmental transfer. The corporation has recently lost this advantage due to government bringing such transfers into the sales tax net.

5.0.11 Most of the housing provided has been of tenament variety. Since the builder has planned for ground plus one (the first floor can be added by the consumer as and when desired) the foundation need not be very strong. The builder has saved around 20 per cent on that count. Further, by keeping common walls not only one saves in construction cost but also on land by saving on margins around the house. A saving of Rs 1200-1500 per tenament was reported.

5.0.12 The builders have seldom provided the following facilities - plastering of walls, street lights, compound wall, wash basins, doors for kitchen, slabs, cupboards or staircase. Demand for these houses however show that LICs do not attach much importance to the missing attributes.[4]

5.0.13 The leakage of materials and wastes have been minimised by employing their own supervisors. For a project of 834 housing units lasting 1 1/2 years a contingent of 18 supervisors was employed. Further they have completed most of their projects between 1-1 1/2 years.

5.0.14 Even though most of their projects have been organised as cooperative housing societies, they have also offered houses on hire purchase basis (on same lines as GHB). Unlike GHB however, the recovery rate has been quite high. The group has also floated Parshawnath Housing Finance Corporation to provide finance for its housing activities. The credit they have been able to extend to the consumer (on their hire purchase schemes) has been another attractive feature. The housing has also been made more affordable by designing the houses in such a way that a room can be rented out and its income used for paying off the instalments.

5.0.15 The profit margin also seem to have been lower than is the case for other developers. For a few projects for which we have the relevant

data, the profit margins varied between 15.9 to 139.5 per cent. Profit per unit has ranged between Rs 3705 and Rs 37,000 (See Table A.5.2). Even though profit per unit has been much lower than that for developers of MIG/HIG housing (see Tables A.3.10 and A.5.2), profits per project compare very well with the MIG projects.

5.0.16 It is difficult to say if the case of Parshawnath Housing can be duplicated by any other developer. The most important factor in their operation seems to have been the managerial capability. Discussions with other developers revealed that not everyone could handle such large projects. Further, each developer has his own style of operation. Individual attention to each unit is not possible in such projects which some developers profess to be paying in their small or medium sized projects. The Parshawnaths have not been unduly bothered about the quality of their project. They have judged their market and judged it right. The LIGs want a pucca structure of a reasonable size and room for future expansion. They have satisfied this demand.

5.0.17 As had been pointed out earlier in Chapter 3, the mobility of developers between submarkets is quite limited. This holds true not only for geographical areas but also for housing submarkets for different income groups. Efforts of some of the developers to move into different submarkets have not succeeded. Some failed at the first stage when there was no demand registered for projects floated by them.[5] Others had to face rude behaviour, dharna and slogan shouting. These developers are not likely to get into the market for housing for low-income groups again. Further, with GCHFC loans becoming highly uncertain the developers would go for providing houses to income groups who can either manage or purchase house out of their own resources or organise finances themselves. The low income groups do not fall in this category.

5.0.18 Two factors have affected the operations of suppliers of LIG housing. One is the imposition of ULCER and second that of tax on sales contract. As mentioned earlier it is the operation on a large scale which makes this housing profitable. The developers therefore require land on a large scale. Prior to enactment of ULCER vast tracts of land were available in the fringe areas. Whereas other developers catering to the needs of MIGs could operate on plots of less than 1000 sq. meter (which were exempt from the fold of ULCER) the large scale producer could not. Nor could he take

advantage of the loophole relating to exemption of built up properties, since that area would be too small also. Further these houses (measuring 2000 sq. meter or so) would be located in posh areas where cost of land would be very high and would not be able to support housing for LIGs. Areas in `Gamthal´ are also too small and unsuitable. Getting exemption under section 21 was the only route. As the supply of exempted land with the private developers nears exhaustion, they have doubled their efforts to get exemptions in cases still lying with the Competent Authority. This has affected work on other fronts. Their non-inconsiderable managerial energies have been directed towards finding loopholes in the Act and visiting Gandhinagar. According to one developer he has not visited the site of his project for last six months whereas earlier he used to visit it everyday. This kind of diversion will affect not only the efficiency but also the quality of the houses.

5.0.19 Another cost saving device namely vertical integration, has also received a set back in the form of imposition of tax on Sales Contract referred to earlier. The increased costs would normally be passed on to the consumer. Thus, the government intervention would have had some negative impact on this submarket also.

5.0.20 As must be clear, provision of housing under Alternative I, can benefit only the richer of the poorer sections of population. If the very poor are to be provided, some form of government intervention (which would lead to substantial decline in cost of production) or subsidy is a must.

Alternative II : The Joint Sector Approach

5.0.21 Scope for cost reduction under the existing framework is constrained by the building by laws which stipulate the minimum standards/specifications, the type of building material to be used and minimum plot size. Lowering down of these prescribed minima will go a long way in making further cost reductions possible. There has been some progress made in development of cheaper building materials and technologies. These have not been widely used. There is need to publicise and popularise these.

5.0.22 The developers had expressed their desire to produce housing for the EWS if the government can provide inputs to them at subsidised rates. Thus land, building materials and finance could be made available at cheaper rates. It is pretty clear from this proposal that uppermost thought

in the mind of the private sector is its profit. Though these developers had professed that profit maximisation is not the only objective. Among other objectives mentioned was to do something for the poor. They however would `do something for the poor' if it is made profitable for them to do so. Apart from cheaper inputs the developers would like the government to give incentives in the form of income tax exemption, waiver of stamp duty, sales tax and any other fees. EWS or LIG housing could be treated on the same lines as investment in industrially backward areas. A special cell could be provided for the purpose of handling LIG projects. This cell could also be instrumental in granting various permissions and clearing the projects at a fast rate.

5.0.23 Even if all the incentives/subsidies are provided there is no guarantee that the private sector will provide houses for the poor. Since the objective of the private sector is to maximise its profit it may manipulate the incentives for its own benefit. The subsidised resources may be diverted to providing housing for the upper income groups - housing in which profit margins are higher. Or the benefits of lower costs may not be passed on to the target group but lead to inflating the profit margins of the builders. The creation of a cell may lead to greater corruption rather than achievement of desired objectives. If the scheme of incentives and subsidies is adopted, the government will have to be continuously vigilant against misuse of these support programmes. Under these circumstances, a joint sector approach may be much more appropriate. Joint Sector in housing could combine the advantages of the public and private sector - accountability and fair pricing of the public sector and efficient production and marketing of the private sector. The joint sector could be organised in the form of a corporation with 49 per cent equity of the private sector and 51 per cent of the State government. The Board of Directors could consist of representatives from both the sectors with casting vote with the government. The public sector could direct the activities of this corporation in line with the proclaimed objectives of housing policy. The corporation would be entrusted with the job of conceiving the LIG projects, building them and allocating it to the target group. The government could make subsidised inputs available to the corporation, while keeping a control over the type of housing to be provided, locations at which it will be provided, prices at which it will be sold and the groups to whom it will be sold.

Alternative III: Social Responsibility

5.0.24 The private sector in Ahmedabad has often come forward during periods of calamity to provide housing and other aid to the poor. In Gujarat, in the Post Morvi flood period, the builders had, as part of the Sitaram Sevaram Trust, providing housing to the flood affected people. The funds for this purpose were collected from the public. The builders donated too since the donation were exempt from income tax.

5.0.25 The builders also contributed their time and skills in getting houses built in 60 villages in the interior part of Gujarat. Such activities can be taken up even in normal times. The developers themselves could form a Trust or some agency or movement. The members could be drawn from not only professionals like architects, builders but also from producers of building materials. The professionals could contribute their services to the Trust, government could help with land and infrastructure and big business with the building materials. Donations to the Trust could be exempted from tax. Such activities could also be made part of activities of Rotary Club or Lions Club or organised in association with local chambers of commerce.

5.0.26 One could also think of a Producer's cooperative which would provide cheap and subsidised (by itself) housing for the poor. The governments role will be that of a mere facilitator. The private sector In housing can think of providing for the poor as a social responsibility and make efforts to fulfill it.

5.1 Conclusion

5.1.1 The basic motive for private sector operation in housing like in any other product is profit. It will enter into areas where it expects to earn the highest profit under the given circumstances. In Ahmedabad's urban housing market, concentration of producers in the market for MIG housing signifies that rate of return is higher in this segment of the market. There are very few developers who provide for the poorer sections of population. The poor however are not a homogeneous group. There are relatively less indigent among the poor, providing for whom may not be an unprofitable activity. We have explored three alternative solutions under which private sector might provide housing for the poor. The first refers to providing for the poor on purely commercial principles and relies manly

on private sector's capability of reducing cost of production. This approach is more relevant for the 'upper income groups' amongst the poor. For the second group (so to speak the 'middle income groups' among the poor) the private sector could be induced to provide if the government offered incentives and subsidies. Provision of housing for the poorest of the poor by the private sector can be taken up as a social responsibility. The government could help through provision of infrastructure and the private sector through its professional expertise as well as through making building materials available. In view of the private sector's inexperience in providing housing to these sections and its ignorance about the nature of their housing problem, chances of success of Alternative III seem to be quite low.

NOTES

1. This is the upper limit of income prescribed in the Government housing programmes for the poorer sections of population

2. There is an element of exploitation of the farmer in purchase of land at lower than market prices.

3. The building material suppliers not only give concessions on bulk purchase but also extend the credit for a few months. it is not only the fact of large scale purchase but also expectation of future custom from the same source which induces the supplier to offer his `wares´ at lower than market price as well as offer credit.

4. The major question however is of affordability. The LIGs cannot afford these attributes.

5. By the same token (problems in inter-submarket mobility) even the developers specialising in LIG housing might find it difficult to move to housing for elite groups.

CHAPTER 6

PUBLIC POLICY TOWARDS THE PPIVATE SECTOR

6.0.1 Our analysis in Chapter 5 shows that under the conditions prevailing in the housing market in Ahmedabad, private sector will not provide houses for the poorer sections. As noted before, private sector would provide housing for sections who can afford houses at the prevailing prices. If the government through its credit policies or subsidisation programmes could help converting the needs for housing of these sections into demand, we could expect the private sector to fulfill this demand. The government might find it much more simple to help these sections directly rather than go through the whole rigmrole of subsidies, incentives and still not be sure whom these subsidies etc. will benefit. Private sector, at most, can play only a marginal role in housing the urban poor. Under existing circumstances, its comparative advantage lies in producing houses for the middle (low, middle and upper) income groups on ownership basis.[1] The major problems this group suffers from relates to the high price of housing. We believe that a policy towards private sector should have as its basic objective a reduction in theprice of houses produced by this sector.

6.0.2 The government could attempt to tackle the problem of high prices either by imposing direct control on prices or through influencing the factors which determine prices. If past is any indicator, the probability of success of direct price control policy is rather low. Apart from the problem of setting the price at an appropriate level in line with the cost of production and/or rate of return, control over the price would lead to creation of a black market in controlled housing and/or a drastic reduction in supply of housing after a lag. The policy may prove to be counter productive. The alternative approach of influencing the prices through operating on variables which affect the prices might prove to be much more effective. The high prices of houses are attributable, as discussed in Chapter 3 to high costs of inputs, inefficient organisation of production and excessive profit margins. A policy of keeping the prices at affordable levels will have to function through one or more of these variables.

Public Policy Towards the Private Sector

6.1 High Costs of Inputs: Policy Perspective

6.1.1 The prices of almost all the inputs have increased at a very fast pace In last ten years. Increases in prices of some of the inputs like those of steel, cement are determined outside the housing market and are more a function of factors at the macro level. At most the government can make available these inputs to the housing industry at subsidised rates. The mechanism to stop its leakage to other sectors however cannot be foolproof. We take these prices as given. The prices which are endogenously determined are the cost of labour and of land.[2]

a. Cost of Labour

6.1.2 Attempts to reduce cost of labour have to be directed towards reducing middleman's commission rather than wages paid to the labour.[3] Substitution of labour by mechanical equipment may not prove to be cost-saving in totality though it might reduce the amount spent on labour.[4] Efforts can also be made towards imparting greater level of skills to labour and increasing their productivity. As of now there is no institute for training construction labour. Skills are acquired by labourers on the job. This leaves the labourers at the mercy of the contractor or other skilled labourers. Further, training is acquired only in the traditional methods of construction. There is a definite need to train labour not only in traditional techniques of building but also introduce them to newer and cheaper methods and materials. This will help the developers also in adopting new technology. The labour could be hired directly from the Institute thus reducing the role of middlemen. Assurance of a regular supply of labour would also eliminate at least one element of uncertainty in housing operation.

6.1.3 Another area where the scarcity of skilled labour is felt even more acutely is that of maintenance. Specialised training could be imparted in this field as also in repair/improvement of old dilapidated housing. If skills of this type were available, the private sector firms might be induced to set up separate department for these jobs. Private sector until now has not shown much interest in this activity. Organised properly, this can not only slow down the rate of deterioration of housing stock in the city but also prove to be a very lucrative activity for the private sector.

b. **Cost of Land**

6.1.4 The cost of land in the cost of production can be reduced if either (i) the quantum of land used in the house is reduced by shifting to a house typology which uses less and less of land compared to the prevailing housing typology and/or (ii) the price at which land is available in the market can be reduced.

6.1.5 In Ahmedabad the shift from bunglow to tenament to flats typifies the first approach. Whereas considerable investment has been made by the government in developing new/cheaper materials and methods of house production (though this should have been supplemented with equal efforts to popularise these, but that apart) not much effort has been expended in innovating efficient and cost-saving designs.[5] HUDCO holds regular competitions in low cost designs. These are then implemented in their projects. These competitions are directed mainly towards the EWS and LIG housing. The need is to introduce cost saving designs even in middle income housing. The earlier shifts in designs for MIG housing have come about at the initiative of the private developers. The role of the government however was not nil. The shift has been facilitated by making appropriate changes in building bye laws. The builders find the existing building bye laws too restrictive to leave any room for innovation. The AMC can fix the broad parametes in terms of Floor Space Index and coverage of the area in line with the objectives of these laws - the details can be left out to the architect. In fact it is high time that the building bye laws are changed in response to the changing times. The minimum plot size (for that of an independent house) still continues to be 200 sq. meter.[6] With increasing urban pressure, high prices and scarcity of land, the size can be still further reduced. Apart from reducing the minimum plot size the need is also to reduce the maximum permissible size. The ULCER has, for all practical purposes, fixed the maximum limit at 1000 sq. meters. Prior to 1976 there was no maximum limit on plot size. The limit was put by the price of land in the market. The function of limiting the individual plot size should be handled by AMC in their Town Planning Acts. One senior official of AMC with long experience in Town Planning Department recommended the minimum and maximum plot size to be 20 and 200-300 sq. meters respectively.

6.1.6 We recommend that a dialogue should be established by the corporation (AMC) with the developers and architects on appropriate changes in building bye laws. The developers are the practitioners in the field and would be in a position to put forward some concrete cost-saving proposals. These could be considered by the AMC.

6.1.7 With regard to question of land or maximum plot size it is important to recognise the distinction between the needs of the individual who builds for himself and the commercial organiser who builds housing on a medium or large scale for the public at large. The latter's requirements of land per projects are naturally higher. ULCER seems to have ignored this fact and applied the same exemption limit for both. Nor was any provision made for making land available to the private developer. The government has to explicitly recognise the private sector in house-building. The government instead of ensuring regular supply of essential inputs to this important industry has been instrumental in creating supply bottlenecks. We do not recommend scrapping of ULCER. That is beyond the scope of this study. We, however, do recomend that government should start releasing lands held under ULCER not only for use by public sector bodies but also for others. The government should ensure regular and continuous supply of land in the market. Ultimate control on quantum of supply and its use could still vest in the government and releases made on the basis of housing proposals by the private sector. The projects in such cases should not be limited to EWS housing alone.

6.1.8 A balanced view of the housing problem should be taken and need for land for housing allocated thereafter. Further, the land should be made available at the prevailing market price. The flexible approach toward release of land will lower the prices automatically. It should also be ensured that the benefits of this lower price are passed on to the consumer. We will deal with this issue a little later in this chapter.

c. Cost of Finance

6.1.9 The organised private sector has been almost entirely dependent on cooperative credit for its finance needs. The cooperative credit was extended to the members of the society who in turn extended it to the private developer. The developer however had access to this source directly rather than through its members. In fact the credit has quite often been obtained even before a single member had registered. The CGHFC, and all concerned authorities are aware of the misuse of cooperative funds. If cooperative funds have dried up, so is probably the need for them. The cooperative sector has almost died down. The need is now to develop an alternative system of financing for the private sector.

6.1.10 Until now, except for private credit market, there has been no source of finance for the private sector as such. The cooperative credit system extended credit to consumers. So does HDFC. The private sector could make use of this system because the client enters into the contract with the builder for the `purchase' of the house even before the construction of the house starts. As and when expenditure on construction is incurred the customer keeps on making the payment. This system had minimised the need for credit for the builder. If however, houses were to be sold as finished products the organised private sector would definitely require credit. The investment required even in a medium sized project is too heavy to be borne by the developer himself. We emphasise again, the issue of credit for private sector is quite different from that of housing finance for the consumer and has to be treated separately.

6.1.11 If housing is declared an industry, then builders will become eligible to draw loans from all the institutions which finance industry. These include ICICI and commercial banks. Government could think in terms of a specialised bank for housing in this respect. The current thinking on the proposed National Housing Bank has not been finalised as yet. The government could include private sector as one of the proposed beneficiaries. Needless to add, there should be strict regulations regarding the use of these funds and checks made to ensure that these regulations are being adhered to.

6.1.12 Another alternative could be for the private sector to raise finance from the market. At the scale at which most of the firms operate in Ahmedabad, it is not possible for them to raise finance in the markets through floating of shares. Few of thee could join together as a Conglomerate and form themselves into a Public Limited Company. The issue needs to be probed at greater length.

d. **The Extras**

6.1.13 The latest addition to the cost of production of house viz., `corruption costs' need to be cut down also. While the question of high administrative costs due to involvement of speed money is part of a much wider issue, these costs can surely be reduced by streamlining procedures and making the regulations simple and intelligible to everyone. The role of dissemination of information regarding the rules/regulations, their implications, exact requirements etc. cannot be overstressed. Further it will be advisable to reduce the points of contact between the builders and bureaucracy to a minimum.

e. **Excess Profit Margins**

6.1.14 Even if the cost of production is somehow reduced, it is doubtful whether the reduced costs will be passed on to the consumer or absorbed in the already high profit margins of the developers. The only factor limiting the profit margin of the developer seems to be the competition in the market. An increased level of competition from within the private sector or from outside may induce it to reduce prices.

6.1.15 Despite the fact that there are around 300-500 developers operating in the city, there is not much of a competition in the housing market. The number of housing units produced by public sector are too few to give any competition. Within the private sector, the heterogeniety (true or fictitious) of the product `protects' each developer from competition. So does lack of information. Entry has been made more difficult by high costs of entry partly due to government policies like ULCER etc. Conditions should be created to make this market more competitive. This would lead to improvement in efficiency of production as well as reduction in prices of houses. As we have seen earlier, neither the fact of free entry nor the existence of a large member of firms in the market is any guarantee of greater competition. Even if the new entrants offer their product at lower prices they are neither going to attract much custom for their product nor take away buyers from the old established firms. Their influence on the market price, if any, will be extremely insignificant. The hold of the old established firms is based on the `goodwill' they have created over years as also on the importance of `trust' in real estate deals. The identity of the producer thus becomes a very important variable differentiating the product. This kind of imperfection not only nullifies the importance of large numbers but also leads to a small scale of operation by the new entrant. Even if the government were to facilitate the availability of inputs like land and finance to the new entrants, so long as there is uncertainty relating to quantum of demand, he will not produce more. Nor would the old firms. To quote, "in housing market uncertainty appears to have a pervasive effect on allocation decisions. Uncertainty regarding future returns has probably the deepest effect because of extreme durability and ireversibility of housing investment. If we assume that housing agents especially suppliers are risk averse and there is no complete set of insurance markets mediating the risk of investment, then an inefficiently small quantity of housing is supplied by the market. By the same token, too little is invested into housing varieties that are not in

mainstream demand. Hence the housing market is in tendence a `suppliers market characterised by either excess demand or excessively high market prices'[7].

6.1.16 The uncertainty in the urban housing market of Ahmedabad is not only related to factors on the demand side but also to that on the supply side. These have been discussed in detail in Chapter 3 of this study.

6.1.17 Thus the major problem in creating a competitive environment is the lack of competition from other sectors (public, cooperative or individual owner builder) producing houses as well as from the new entrants. Further, the uncertainties and imperfections in the market have created a seller's market.

6.1.18 The increased competition from outside the private sector could originate not only from the public sector but also from the cooperative and non-commercial private sectors. In case of public sector, the financial constraint and priority of providing housing for the poor put a restraint on its capacity to compete with private sector for the type of housing (MIG, HIG) provided by the private sector. The government however can try to revive the corporate sector as well as encourage the growth of individual owner-builder sector.

6.1.19 The factors which have led to the near-extinction of cooperative sector in Ahmedabad are well known. Apart from the inner conflicts, the time and expense required for getting the various permissions discourage the members. The easier alternative under the circumstances is either to register for a house with GHB or with a private developer. If the procedures could be simplified and getting a house built does not remain as lengthy and confusing a process as it is today, the owners individually or collectively may be encouraged to take it up. We do not say that any special concessions should be given to these sectors - these can always be misappropriated as were the cooperative loans. Apart from simplifying procedures, land and finance could be made available at `market' prices. This should be done for all the sectors in a non-discriminate manner. If the organied private sector, through its efficient organisation of production can provide houses at a cheaper rate, the MIGs will go for that housing. We believe that the middle and upper income groups need not be provided subsidy in any form. If cost of housing is increasing, the adjustment is to be made in terms of smaller sized houses or whatever. If prices are high despite low cost of production, due to imperfections in the market, the government has to try to remove these, as far as possible.

6.1.20 One type of imperfection mentioned a little earlier, is the discrimination, on the part of the buyer, against new entrants. The lack of competitiveness on the part of thew new supplier is not due to ineffectiveness in production but due to non-economic factors. These factors, we repeat, relate mainly to lack of trust in the new entrant (i) since his product has not been tested and tried and (ii) involvement of black money in real estate deals for which no receipt is given by the developer. In the past few years the consumers of housing in Ahmedabad have been doped by many new entrants who collected the initial down payment and disappeared. This has strengthened the hold of old developers still more.

6.1.21 This situation had arisen because there is no regulation/control on the typs of builders in the city. Almost anyone can enter, defraud the public and go scoot free. The government should initiate a proper system of licensing the developers. Only professionals with capacity of organising a construction programme be recognised as developers. Minimum qualification should be specified and the builder should be kept on probation till he completes one or two projects. If possible, till the end of first project, the consumer's deposits should be guaranteed and/or supervision kept on the builder so that he does not decamp with the client's money. True, this procedure will make entry more difficult. It is however required to protect the interests of the consumers. Also, this might help putting the new entrant at a less disadvantage vis-a-vis the old developers.

6.1.22 The AMC/AUDA should initiate a campaign appraising the people of the approved developers.[8] The list of such developers should either be published in newspapers or be made available at various easily reachable offices of the local government.

6.1.23 Improving access to information abut the the type of housing being produced in different part of the city and prices at which offered will help in integrating the market and increasing the competition. The position of new entrants can be improved if information about the type of materials being used, finishing and other details is made available to the consumer. If a system of 'certifying' the product in quality categories could be developed and such certificates could be given at the time of granting of building use permission, the non-quality based differentiation in product could be taken care of. Since in Ahmedabad, houses are 'purchased' much before their completion, the consumer could also be informed of the likely cost on the basis of the Plan submitted by the developers. This information should be made available at the office of AMC or AUDA. The role of consumer

in this respect to protect his own rights cannot be overstressed. Any overpricing should be reported so that corrective action can be taken by the competent authority.

6.1.24 The measures suggested above will not imply much addition in administrative cost. The only addition will be in making the information available to the public. Other function of valuing the property etc., are already performed by the relevant authorities.

6.1.25 An alternative solution to regulate the profit margins and remove discrimination against new entrants could be to entrust government with a much more active - though only administrative - role in the process. The government could act as a mediator between the public and the private sector. The public could register its demand with the government department and make the deposit. The private sector could be made to route its supplies through government and allotments to public could be made out of this stock. The people make the payment to government. The function of price fixation may not be entrusted to the government. If, however, the money is routed through the government, the consumer can be assured of not losing it.

6.1.26 The private sector might not like the above scheme since it will have to reveal the prices at which it sells houses. This could have income tax implications for the private sector developer, as well as for buyers and stamp duty implications for the consumers. From the social point of view, however, it becomes an even more welcome step. The private developer still would succeed in avoiding tax by overstating the cost. But that can be checked to some extent by other methods.

6.1.27 If we go by past experience, greater involvement of government sector has implied delays, red tapism and corruption. Much better idea would be to entrust such a job to a body of people (of known integrity) representing both the interests of private sector and the general public. The `body´ could also include some representative from the government. The question of corruption in public life is a much wider issue and relates to the basic value system of a nation. No scheme can be successful unless the government has the political will and the desire to achieve certain objectives.

6.2 Organisation of Production

6.2.1 The underlying assumption, in all the analysis above has been that a competitive solution is superior to that of monopoly/or an oligipoly. That is the traditional view also. This however need not hold in all the cases.[9] In the following paragraphs we examine the opposite view in relation to the question of efficiency of organisation of production. The organisation of production is partly a function of scale of production and partly of the speed at which the whole process of housing production is completed.

6.2.2 We have discussed in Chapter 3 the process of development and the unintended role of various government policies in increasing the delays and creating additional uncertainties, imperfections and inefficiencies in the system. ULCER has played a prominent role in this respect not only by restricting supply of land and making it available to a few but also by creating a superstructure of rules and procedures. Enacted to correct some inefficiencies of the free market economy, it has added some of its own. Since in the past ten years of its implementations, the loopholes and deficiencies of the Act have been recognised, efforts should be made to remove these. From the view of efficiency of the private sector the ones that are most important are simplification of procedures, reduction in delays in giving various permissions and a more flexible and realistic approach towards release of land.

6.2.3 The speed of production could further be increased if newer technologies of production could be adopted. The technology of prefabricated housing, for a country like India is probably too expensive[10]. We could however go for partial prefabrication or partial industrialisation of the building process. Some of the components of a house could be produced in the factory making use of economies of scale and be assembled at the site. The components in which economies of scale are possible are roofs, walls doors, windows, frames, kitchen cabinets, bathroom cupboards and such like[11]. On the spot carpentry is very inefficient and expensive. Carrying out these jobs in the factory with the help of mechanical equipment will not only increase speed but also reduce costs. To be able to reap the economies of scale it is important that there is some standardisation of the product. Even more basic pre-requisite is that production is carried out on a large scale.

6.3 The Question of Scale of Operation

6.3.1 The question of scale of operation thus becomes quite important. With this question is linked not only the question of efficiency but also that of organisational form of the firm, of private sector finance and government regulation of this sector. Operation on a large scale also has implications for the structure of the urban housing market.

6.3.2 Operation on a large scale, with traditional or modern technology may not only lead to reduction in average and marginal cost of production but may also solve the problem of project finance for the private sector. The builder firms could organise themselves as Public Limited Companies and raise finance from the market through floating of shares etc. This will also make them eligible for borrowing from the banks, within the existing framework. In terms of market structure it might imply that housing activity in the city will be dominated by a few large firms. If each firm on an average provides between 500-1000 houses per year, the yearly requirement of the city (including the periphery) will be fulfilled by a mere 5-10 firms. Concentration of production in the hands of a few suppliers may worsen the situation in regard to price of housing as well as total supplies. It is believed (conventionally) that a monopolistic system leads to outcome in terms of higher prices and lower supplies relating to prices and output under perfectly competitive situation. This outcome however need not be always true. If operation on a large scale leads to lowering of cost of production, the monopolist may not only produce more units of output but may also offer them at lower prices.

6.3.3 The large scale firm may also be able to finance research and development in the field of innovating new designs, techniques and materials for house building. It can bear the risk and costs of innovation which increase productivity (reduce costs) and/or enhance product quality.

6.3.4 The competitive situation in Ahmedabad housing markets had not succeeded in producing optimal solutions[12]. The prices have continued to be much higher than average cost (inclusive of normal profit) of producing houses. They have normally followed the lead set by large firms in price fixation, who have virtually acted as market leaders in this respect. Even these market leaders were not large enough to reap the economies of scale[13]. Thus, even their reservation price (based on high costs of production) was on the high side.

6.3.5 We would like to clarify at this point that what is being discussed is not a monopoly situation but rather an oligopoly. We believe that a few large firms can provide a better competitive environment than the present market structure where small firms stand no chance in front of the medium and large operators. The competition can lead to a increased efficiency and output.

6.3.6 Another advantage of large scale firm is its accountability. If the firm is organised as a Public Limited Company, it will be accountable to its shareholders. At present the firms are not accountable to anyone. They keep no records of their projects, their cost and its structure, the prices asked, money invested, borrowed etc. Regulation of such firms becomes quite an impossibility. In fact, the government will find it much more manageable to keep an eye on the few large firms than to regulate a myriad of small developers.

6.3.7 A large scale firm will conduct its business on a more scientific basis. It can also have separate department for taking care of old housing in terms of their maintenance, renewal or diversification.

6.3.8 Of the various case studies of few small, medium and large scale firms conducted by us we found only the records of one large scale firm to be available. The others kept no records. This particular firm had an efficient office which not only managed its day-to-day affairs quite efficiently but also devoted time to devising cost saving designs and materials. In 1986, this firm had provided houses at the unbelievable cost of Rs 11,914.85 (excluding land cost)[14] on a plinth area of 28.80 sq. meter giving the cost per sq.meter of built up area of Rs 413.70.

6.3.9 The question of large scale production of housing should be given serious attention. "What housing needs is a General Motors" had been a popular slogan in America. In as early as 1932, the Hoover Conference on House Building and Home Ownership noted, "The present methods of small scale housing have failed to meet the present needs both in quality and in cost. Large scale housing, by eliminating wasteful practices, thus cutting costs, and by creating a home environment in which all of the functions provided by the old fashioned home can be presented under new conditions, offers a technique and promise of improvement ..... Only a corporation organised for large scale operations ..... can produce adequate results[15].

6.3.10 In view of the burgeoning housing shortages and inability of the present institutions to take care of these shortages probably that is what

we require in India. the large scale firms can at least be entrusted with the job of providing housing to LIG and MIGs. Under the present circumstances the country cannot afford the luxury of custom built houses. The (households) who can may continue to do so. The existence of large scale firm does not imply extinction of the non-commercial private sector or the cooperative sector. What it proposes is to substitute the large number of small inefficient firms. One must however recognise that a large scale firm in housing has to bear much greater risks. A small scale firm can move out of the market in times of recession costlessly, the large firm due to its significant amount of fixed costs cannot. If from the society's point of view operation on a large scale is found to be more efficient, the government will have to create the right environment for its operations.

6.4 Conclusion

6.4.1 The public policy towards the private sector in housing hasto be motivated by the objective of making housing available to the consumer at reasonable prices. The current high price of housing is partly a function of factors inherent in the operation of urban housing market of Ahmedabad and partly of various government policies which have created supply bottlenecks. Governrnment's efforts to correct the market forces may again introduce more distortions. Remedies like direct price controls were thus ruled out. We suggest that the government should attempt to achieve its objectives through the market by operating on forces which determine prices. In this context, policies which lead to lowering of costs of inputs, increasing the productivity of Inputs, may have better chances of success. It will also have to be ensured that the benefits of lower costs are passed on to the consumer. The important issue in this respect is making adequate information available to the consumer. The government could take this up itself or direct the Real Estate Developers Association in Ahmedabad to publish the relevant information regularly in newspapers or other media.

6.4.2 Efforts have also to be directed towards making the hosing market more competitive. The question of scale of operation acquires great significance in this respect. A large scale operation has certain advantages in terms of lower costs, ability to generate its own finances and accountability. The large scale may, however, encourage monopolistic tendencies in the market. To that extent the government will have to be vigilant and regulate the activities of private sector.

6.4.3 In Ahmedabad, the commercial private sector has been activity involved in supply of modern housing since 1970 (prior to that the cooperative sector dominated). The framework within which it is supposed to operate is not very clear. There is no clear cut policy towards this sector. The relationship between the private sector and the government is one of hostility - each eying the other with suspicion. The ad hoc policy measure enacted to achieve some other objectives of economic policy affect the functioning of private sector. It is high time the government explicitly recognises the existence of the commercial private sector in housing and try to make the market environment conducive for their operation. Meanwhile, the activities of this sector should be so regulated that the consumer's interest is protected.

NOTES

1. Here we will not go into the relative costs/benefits to the producers of providing ownership Vs. rental housing but would only state that under the present rules and regulations the private sector cannot be induced to provide housing on rental basis.

2. The cost of labour i.e., wage rate is supposedly determined by the Government under Minimum Wage Legislation. The labour contractors seldom adhere to these wages and wages are determined by the force of demand and supply. The fixed wage however does have some impact on the market wage.

3. The middlemen's commission and contractors' profit inflate the labour costs. For a case study on Hyderabad, see M. Sgroi Dufresue, Housing prices and Construction Costs in Hyderabad, (mimeo).

4. The decision of developer to opt for labour rather than labour saving mechanical equipment confirms this.

5. The design of a middle class urban house in Ahmedabad as elsewhere in urban india follows the popular western concept of house composing of a drawing room, 1-2 bedrooms etc., - all rooms being single purpose and each being used for a limited period each day.

6. The minimum plot size has been successively reduced. In 1920 this size was 1 acre in Kankria (Maninager) and Ellis Bridge. (Based on information received from AMC).

7. Konrad Stahl, Microeconomic Models of Housing Markets, Springer Verlag, New York.

8. Recently AUDA had been advertising in newspapers warning and instructing the prospective investors (in houses) about the `do's and don`ts' before making the investment. This campaign has proved to be quite successful.

9. See Donald A. Hay and Derek J. Morris, Industrial Economics: Theory and Evidence,, Oxford University Press, 1979, Chapter 16 and F.M. Scherer, Industrial Market Structure and Economic Performance, Chicago 1971, Chapter 2.

10. For details see, W.P. Strassman, "Economic Aspects of Better Housing Technology for Developing Countries", Asian Institute of Technology, "Proceedings of the International Conference on Low Income Housing, Vol.II, Bangkok, 1977.

11. These are only illustrative. One could extend the list of feasible and acceptable prefabricated components.

12. Some part of the blame for that state of affairs lies with the government. But even prior to 1972, when government intervention in the land market was minimal, the situation was not very satisfactory.

13. The statements of the developers regarding the absence of any economies of scale is not based on proper technical data. Further in their perception large scale probably implies constructing 60-75 houses instead of the 12-20 they are building at present. The financial constraint does limit the size, but large scale operator can take care of that.

14. Land was exempted under section 21 of Urban Land Ceiling Act.

15. As cited in Leo Grebler, "Large Scale Housing and Real Estate Firms", Prseger Publishers, New York, 1973.

CHAPTER 7

SUMMARY AND CONCLUSIONS

7.0.1 Private sector has played an increasingly important role in provision of housing in the country. At the national level its contribution in total housing sector has increased from 45 per cent (number of housing units provided) in the Second Five Year Plan to approximately 89.4 per cent (measured in terms of investment made in housing) in the Sixth Five Year Plan. The contribution of organised (commercial) private sector in this investment is not known. For Ahmedabad, we have estimated it to be ranging between 59 to 67 per cent over the period 1971-86. The absolute quantum of supply however has not been sufficient to fulfill the needs of housing in the city. Even though, the deficiency of housing unit in relation to number of households was only around 0.55 per cent, 55 per cent of the housing stock of Ahmedabad in 1981 was composed of housing which was old, dilapidated and substandard. This included the housing typologies like Pols, Chawls and Hutments - the typologies which suffer from acute deficiencies of various types. If these typologies are excluded from the stock of housing, deficit in supply of housing turn out to be quite serious.

7.0.2 The deficit in housing is not evenly distributed either over different parts of the city or over different income groups. It is the poor who suffer from greater deficiency in this respect. The problem of housing, when viewed in this light, is one of disparities in standard of housing available to different sections of population rather than one of shortages in the aggregate sense.

7.0.3 The contribution of the organised private sector in providing housing to the poor in the city has been minimal. Most of the housing activity has been directed towards the middle (including the lower middle income groups) and upper income groups. The poor have found the housing produced by the private sector unaffordable. In fact, an increasing proportion of middle income groups too are finding the houses quite unaffordable. The prices of different type of houses have increased at an

annual compound rates of growth ranging from 5 to 25 per cent over the period 1970-86. We have estimated that at the existing prices and given income distribution more than fifty per cent of the population of Ahmedabad would find it difficult to afford even a minimal costing house out of their current income.

7.0.4 The situation has been made even more difficult by the scarcity of traditional form of housing credit in Ahmedabad. Gujarat Cooperative Housing Finance Corporation has been in the throes of a financial crisis for the last three years. It has found it difficult to finance the cooperative housing societies which extend long terms loan to its members for purchase of a house. This has adversely affected the demand for housing in the city in past 2-3 years. Other factors which have had negative impact on the demand for housing in Ahmedabad in past few years have been - anti reservation riots (February 1985 - August 1985), the textile strike and the closure of serveral textile mills (1984). The impact of these events on the economic activity in Ahmedabad has been very severe. The impact of anti-reservation riots alone had been estimated at Rs 1,000 crores. The impact was felt much more by the labour class and the unorganised sector.

7.0.5 During the period 1970-82 the economy had been very active and the housing market had been booming. The continuous increase in the prices of land and housing had led to formation of inflationary expectations on the part of the consumers regarding prices of houses. This factor strengthened the current demand for housing. The consumer's resistance to higher prices seems to have finally developed in the post-1982 period. This is reflected in lower demand for houses. The impact of this development on prices however seem to be very insignificant. the explanation for the continuously high prices of housing in the city seems to lie more on the supply than on the demand side.

7.0.6 On the supply side, the high price of housing can be explained in terms of inefficient organisation of production, high cost of production and exessive profit margins. Housing production in Ahmedabad is still carried out using the traditional methods of construction. The cost of inputs including that of land, labour, and building materials have shown an increase over the period 1970-85; the index of cost of construction had increased to 271 by 1981 (1970=100). The government's role in the increase in price of inputs was not insignificant. Apart from the prices of cement and steel which are fixed by the government, a significant part of the increase in the price of another input viz., land can be ascribed to the enactment of Urban Land Ceiling (and Regulation) Act in 1976.

7.0.7 This Act apart from creating major supply bottlenecks in the process of production has also accentuated the monopolistic elements in the urban housing market of ahmedabad. The market, despite the large number of suppliers and free entry has been quite imperfect. The major causes of imperfection have been consumer's low access to information and differentiated nature of the product. It is these imperfections which have made sustenance of excess profits possible in the market. Despite the large number of firms there is hardly any competition in the market. Nor is there any incentive to improve organisational efficiency or lower the cost of production through innovative use of new materials and technology or introduction of more efficient designs. Attempts on these scores have not been entirely lacking in the past. The shift from bunglows to flats, tenements and row houses was a move towards economising on the use of land. For the past 10-15 years, however, when the price of land and other inputs have shown striking increases, the only response has been reduction in the size of houses, use of inferior fixtures or cutting down of some on and off site infrastructural facilities. The rigid, restrictive and unimaginative building bye laws have made the use of major changes in design or materials difficult.

7.0.8 One enactment which has had an over-pervasive effect on the urban housing market has been the Urban Land Ceiling Act. This has not only made physical availability of land difficult but has also imposed a superstructure of procedures and regulations. This nas led to greater uncertainty and increased delays in the process of production. This has also given rise to a new class of entrepreneurs whose major skills lie in obtaining various permissions. Another affect has been a sudden increase in the proportion of unauthorised construction in the city.

7.0.9 The urban housing market of Ahmedabad at present, is characterised by an excess supply of housing coupled with downwardly rigid prices. The producers are unwilling to reduce the prices lest they give rise to deflationary expectation and depress current demand still further. Slowly however the prices have started declining and demand too has picked up somewhat. Most of the developers however are still resisting reducing prices of houses. Further decline in price is possible only if producers accept lower profit margins on the existing houses. Further efforts should also be directed towards improving the efficiency of production and reducing the costs.

7.0.10 We rule out the policy of direct price control to keep a check on prices of houses in the market. Given the past record, the chances of success of such a policy are extremely limited. Efforts to reduce prices should be made through operating on variables which determine the prices viz., cost of production and profit margins.

7.0.11 There are three important issues relating to private sector housing which need attention of the government. First of all, the government should recognise the existence of organised private sector in the field of housing production. At present, neither is anything done to explicitly regulate the activities of this sector nor such environment created whereby the private sector can produce houses more efficiently.

7.0.12 The second issue relates to the organisational form. At present, by virtue of a rule in AMC which stipulates that permission for a group housing scheme is contingent upon the formation of an association of members by the consumers, the builder is constrained to organise its housing activity either in the form of a cooperative housing society or NTC (Non-Trading Corporation) or a Vikas Mandal. The regulation is imposed with the intention of having some `body' responsible for maintenance of common areas. This stipulation has imposed an organisational form on the builder which is not very efficient. Such a `body' can technically be formed after the members occupy houses. Most of the `early' members are anyway fictitious.

7.0.13 The third issue relates to finance. In an industry where the gestation lag between initiation of production and its completion at its minimum is as long as 10-11 months, the importance of finance cannot be overstressed. In Ahmedabad, the buyer gets into a contract with the seller even before the construction starts and finances the producer at each stage of construction. The private sector has no other source from which it can raise finance for its activity. The issue of finance for the producer of housing has to be looked at separately from that of financing the consumer of housing.

7.0.14 Another issue which runs through all three of the above mentioned issues is that of scale of operation. The above mentioned issues is that of scale of operation. The existing market structure (composing of large number of small scale operators) has neither been able to attain the advantages of a perfectly competitive system nor those of economies of scale of production. A large scale of operation may not only be able to produce houses at lower cost but will also be self-reliant in terms of

finance, (through floating shares), be accountable to its share holders and can be regulated more easily than a myriad of small scale operators.

7.0.15 It is extremly important that the activities of the developers are properly regulated. In the absence of any preconditions on entry almost anyone has been able to start operation as a developer. These have included, among others, `fly by night' operators who have initiated a scheme, collected money from the buyers and disappeared. Others have built houses violating one or more rules, sold these houses to the unwary consumers. The penalty for violations has to be ultimately paid by the consumer. This has been made possible by two features of the market. Firstly, the consumer has no way of knowing whether the `developer' is a genuine builder and has all the requisite permissions for carrying out building of a house. Secondly, the way market operates, the consumer makes 80-90 per cent of the payment to the builder before he obtains possession of the house. These payments are made in instalment over the duration of construction of the house. This mode of payment imparts greater degree of control in the hands of the developer. He gets a captive buyer who invests his money in the expectation of getting a house at some future date. The producer can substantially delay the process of completion for various reasons.

7.0.16 These practices have increased the premium on houses produced by known and trusted developers. The higher price is not for a better product but for the assurance that the consumer will obtain the possession of a house within a reasonable amount of time. The government can remove some of the imperfections in the system by making more information available to the consumer.

7.0.17 The government has to intervene in the market both to ensure that inputs are made available to the producer of housing and to protect the interests of the consumer. The government cannot provide houses to all sections of population. We believe, that under the given circumstances of financial constraint and priority to providing housing to the very poor, the government should restrain itself from active participation in the market for MIG and HIG housing. We also do not believe in the efficacy of direct price controls. The government can however act as a mediator between the private sector and the potential buyers at least for LIG and MIG housing. Projects for such housing should be submitted to the government. It should be the responsibility of the government to make inputs available to the builders. The building materials and labour are easily available in the market. We believe that control of land should rest with the government

though procedures for its allocation should be simple and well defined. As and when the project is submitted with preferred locations stated therein, the government should make land available at appropriate locations in line with its own planning objectives. Finance should be made available too. The potential buyers can register their demand with the government. The builder can execute the job and built up houses can either be turned in to the govenment and the government can allocate houses to the buyers. Price can be fixed by the developer. This should however be intimated to the government so that this information can be made available to the consumer. In this scheme of things, the builder confines himself to the task of constructing houses which used to be his main activity in the period before land speculation became such a profitable activity.

7.0.18 The private sector has been performing a very important function in providing housing to the various sections of population in the city. There have been certain problems in its functioning. The objective of public policy should be to regulate its operations so that consumer's interests are protected rather than create obstructions in its functioning. The latter path is hardly likely to reform the situation as one can discern from past experience.

TABLE A.2.1

Distribution of Housing Stock by Age and House Type

Age of	House type					
	Hut	Chart	Pol	Apart-ment	Row	Total housing stock
10 <	22.7	12.1	5.4	38.6	6.5	20.4
11 - 25	42.9	15.7	2.7	41.6	25.3	22.5
26 - 55	23.5	37.9	34.8	18.8	40.9	30.4
56 - 75	4.2	19.0	33.0	0.0	21.4	13.2
75 & Above	6.7	14.5	24.1	0.0	5.2	21.7
Unspecific	0.0	0.8	0.0	1.0	0.7	8.5
Total	119	248	112	298	154	

Source: Ahmedabad Housing Survey, 1985-86

TABLE A.2.2

Building Material for Different House Types

House	Undurable roof and wall	Brick wall in undurable roof	Pucca wall undurable roof	Durable wall and roof
Hut	46.2	32.0	15.1	2.53
Chawl	8.8	49.6	27.8	13.7
Pol	1.8	19.6	24.1	54.4
Apts/Flats/ Tenks	-	-	0.6	99.4
Row House	-	-	7.1	92.9

Source: Ahmedabad Housing Survey, 1985-86

TABLE A.2.3

Built up Area by Type of Houses

Type of House	< 25	26-45	46-65	65-100	100 & above	Total
Huts	74.79	13.44	2.52	4.20	5.04	
Chawls	67.34	27.98	2.42	0.40	6.85	
Pol	34.82	21.43	14.28	10.07	13.39	
HPT/Tenant	21.14	17.11	29.19	14.09	7.04	
Row House	22.72	15.58	13.64	4.93	33.12	
Total	41.37	21.65	15.64	9.50	11.79	

Source: Ahmedabad Housing Survey, 1985-86

TABLE A.2.4

Growth of Different Types of Housing in Ahmedabad

	Public sector	Private Sector				Total
		Formal			Informal	
		Tradi-tional	Chawl	Modern		
1971	29153 (15.2)	91085 (4.8)	59456 (0.00)	82406 (43.4)	77502 (36.5)	339602
1981	49427 (13.2)	94706 ( )	59456 (0.00)	171264 (58.1)	117776 (26.3)	492629

Note: Figures in parentheses show decadal rate of growth

Source: Ahmedabad Housing Survey, 1985-86

The stock of housing as summation of different typologies of housing does not equal the figure given in census reported in Table A.2.1 in the text. Discripancy is caused by different sources of data. Data for this table has been collected from diverse sources.

TABLE A.2.5

Income Distribution by Typology of Housing

Income	Housing Typology			
	Hut	Chawl	Pol	Flat/Apart/Tenament/Row house/Bunglow
< 300	35.09	31.08	3.51	29.82
300-700	40.87	5.77	7.21	19.7
700-1000	14.81	34.92	13.23	37.03
1000-1500	6.63	18.67	12.65	62.05
1500-2000	2.83	19.81	13.21	64.15
2000-2500	1.61	25.81	14.52	58.06
> 2500	0.71	6.43	19.29	73.57

Source: Ahmedabad Housing Survey, 1985-86

TABLE A.2.6

Structure of Housing in Ahmedabad Urban Area

	Formal				Informal	Total
	Public	Private		Modern		
		Pols and Gauthal	Chawls			
1961						
Old city	0.2	90.1	6.9	0	2.1	78517
East AMC	11.5	0.0	45.3	20.4	22.8	114110
West AMC	2.0	0.0	9.2	62.4	26.5	26079
East Peri	16.1	1.9	0.0	0	36.9	15603
West Peri	0.0	83.5	0.0	0	16.5	6504
Total	14133	86349	59456	39479	41376	240813
1971	(5.87)	(35.86)	(24.69)	(16.39)	(17.19)	(100.00)
1971						
Old city	0.7	89.6	6.7	0	3.1	80697
East AMC	14.7	0	31.7	23.7	29.9	163015
West AMC	4.7	0	4.8	65.1	25.4	46670
East Peri	6.5	31.9	0	28.2	33.4	35923
West Peri	0	71.2	0	13.2	15.7	10297
Total	29153	91085	59456	82406	77502	339602
	(8.58)	(26.82)	(71.51)	(24.27)	(22.82)	(100.00)
1981						
Old city	0.7	88.0	4.4	0	6.9	78257
East AMC	16.5	0	24.7	24.3	34.4	208974
West AMC	7.8	0	2.9	67.1	22.2	82689
East Peri	7.3	20.6	0	44.7	27.4	77168
West Peri	4.9	21.7	0	67.0	6.4	45541
Total	49427	94706	59456	171264	117776	492692
	(10.03)	(19.22)	(12.07)	(34.76)	(28.97)	(100.00)

Source: Ahmedabad Housing Survey, 1985-86

TABLE A.2.7

Built up Area by Zones

	Old City	AMC (East)	AMC (West)	East Peri-phery	West Peri-phery	Total
< 25	36.00	47.92	22.00	51.70	24.07	41.37
26-35	11.20	19.20	12.00	16.33	1.85	15.54
35-45	8.00	2.84	0.67	12.24	27.78	6.11
46-58	7.20	9.41	9.33	14.28	14.81	9.32
59-75	10.40	5.69	18.00	4.08	22.22	9.64
76-100	7.20	4.16	15.33	1.38	7.40	6.21
100 and above		10.72	22.67	0.68	1.85	11.79
Total	125	457	150	147	54	933

Source: Ahmedabad Housing Survey, 1985-86

TABLE A.2.8

Per Capita Built up Area of Houses in Various Zones

	Old City	AMC (East)	AMC (West)	East Peri-phery	West Peri-phery	% of total
< 2	24.00	27.13	13.33	35.37	9.47	24.99
3-6	27.20	34.57	12.69	33.33	22.64	29.18
7-10	12.80	9.19	10.00	16.32	16.98	11.38
11-20	14.40	10.72	19.33	6.80	20.76	12.56
21-30	10.40	4.38	12.00	4.08	7.55	6.55
30 and above	11.20	12.15	31.33	3.40	22.64	14.38
Total	125	457	150	147	54	933

Source: Ahmedabad Housing Survey, 1985-86

TABLE A.2.9

Persons Per Room

Household	Number of persons per room		
	1961	1971	1981
One roomed	4.35	5.14	NA
Two roomed	2.87	2.84	NA
Three roomed	2.05	2.04	NA
Four roomed	1.73	1.65	NA
Five roomed & above	1.31	1.28	NA
Total	3.11	3.22	NA

Source: Statistical Outline of Ahmedabad City, AMC 1984-85.

TABLE A.2.10

Per cent of Owned Houses

Year	AMC	Fort Walls	East Areas	West Areas
1961	12.6	28.9	NA	NA
1971	23.7	NA	NA	NA
1981	36.3	36.3	27.6	57.6

Source: As for Table A.2.1

TABLE A.2.11

Tenure States of Households Categoriesed According to Income Groups

(in per cent terms)

Income group	Rental	Ownership
< 300	43.86	56.14
300 - 700	45.67	54.33
700 - 1000	49.74	50.26
1000 - 1500	43.17	57.83
1500 - 2000	33.02	66.98
2000 - 2500	35.48	64.52
> 2500	13.57	86.43

Source: Ahmedabad Housing Survey, 1985-86.

TABLE A.2.12

Period Elapsing between Granting of Building Permission and Building Use Permission

Time taken (in months)	Number of Plans		
	1976	1981	1986
< 3	278	126	197
3 - 6	46	33	48
6 - 9	12	17	23
9 - 12	5	12	17
12 - 18	9	37	12
18 - 24	2	14	3
24 - 30	2	17	7
30 - 36	1	17	5
36 - 42		4	
42 - 48	3	2	3
> 48	2	8	4
Total	360	287	319

Source: Calculated from AMC records.

TABLE A.2.13

Number of Building Permission and Building-use Permissions Granted 1970-85/86

1970-71	Number of building permissions granted	Number of building permission granted
1970-71	-	3370
1976-77	-	9005
1977-78	-	5089
1978-79	-	4688
1979-80	-	5323
1980-81	1698	4135
1981-82	1718	2714
1982-83	1037	2765
1983-84	-	8457
1984-85	-	5714
1985-86	-	5267

Source: AMC records.

TABLE A.2.14

Household Income Distribution in Ahmedabad Agglomeration Area: 1965

(In per cent terms)

Income	Households
< - 300	6.11
300 - 700	22.29
700 - 1000	20.26
1000 - 1500	17.79
1500 - 2000	11.36
2000 - 2500	6.65
> - 2500	15.01

Source: Ahmedabad Housing Survey.

TABLE A.2.15

Computed* Value of Houses in Selected Locations of Ahmedabad 1981,1986

(in Rs.)

Built-up area (in Sm.)	Navrangpura	Ambawadi	Maninagar	Vastrapur
		1981		
30	31500	29250	33000	27000
50	52500	48750	55000	45000
65	68250	63375	77500	58500
100	105000	97500	110000	90000
200	210000	195000	220000	180000
300	315000	292500	330000	270000
		1986		
30	84000	70500	63000	46000
50	140000	117500	105000	120000
65	182000	152750	136500	100750
100	280000	235000	110000	155000
200	560000	470000	420000	310000
300	840000	1030000	630000	465000

Note: * The cost has been computed from available data on cost of land and cost of construction an assuming an F.S.I. equal to 1. The cost of construction data provided by developers includes their profit margin.

TABLE A.2.16

Composition of Demand for Houses in City of Ahmedabad 1981, 1986

Income	Per cent of HHs living in rental housing	Affordability*		
		Criterion I	Criterion II	Criterion III
		1981		
0- 250	11.7	- 6000	- 9000	- 12000
250- 500	24.5	6000-12000	9000- 18000	12000- 24000
500- 750	23.1	12000-18000	18000- 27000	24000- 36000
750-1500	28	18000-36000	27000- 54000	36000- 72000
1500-2500	6.2	36000-60000	54000- 90000	72000-120000
2500-3500	5.4	60000-84000	90000-126000	120000-168000
> 3500	1.1	84000-	126000-	168000-
		1986		
< 300	6.91	- 7200	-10800	- 14400
300- 700	26.26	7200-16800	10800-25200	14400- 33600
700-1000	25.98	16800-24000	25200-36000	33600- 48000
1000-1500	19.8	24000-36000	36000-54000	48000- 72000
1500-2000	9.67	36000-48000	54000-72000	72000- 96000
2000-2500	6.1	48000-60000	72000-90000	96000-120000
> 2500	5.26	60000-	90000-	120000-

Note: Composition of demand was worked out on the basis of income distribution pattern in the city. Recognising that not all households would be demanding ownership housing, we made an assumption that demand for ownership housing is from households living in rental housing. The tenure pattern for differnt income groups was assued to be the one derived from Ahmedabad Housing Survey.

* Affordability has been calculated by a very simple rule of thumb in terms of two, three or four times of annual income of a household.

TABLE A.2.17

Break-up of Building Permissions Granted According to Type of Houses 1976-77 - 1980-81

Year	Flat	Bunglow	Others	Total
1976-77	3917 (54.27)	3168 (43.9)	143 (1.98)	7218 (100.00)
1977-78	1999 (40.04)	2762 (55.33)	238 (4.77)	4992 (100.00)
1978-79	1643 (65.98)	2375 (29.24)	294 (4.78)	4312 (100.00)
1979-80	3822 (65.98)	1694 (29.24)	277 (4.48)	5793 (100.00)
1980-81	2538 (65.35)	1120 (28.84)	226 (5.82)	3884 (100.00)

Note: Figures in parentheses denote per cent of each typology to total number of proposed houses. The per cent of flats would probably be even higher than represented by this data. The data used relates to building permision which does not take account of number of units in each project for which building permission is granted. The assumption that a significant part of the group housing would compose of flats cannot be too off the mark. Bunglows would probably be proposed by the owner-builder. There is no underestimation of the number of units in non-group housing category.

Source: AMC Records

TABLE A.3.1

Role of Different Agencies in Public Sector Housing Supply

(in per cent terms)

Year	GHB	CSCB	AMC	State govt.	AUDA	Total
Till 1961	63.9 (24.69)	-	10.2 (11.1)	25.86 (47.57)	-	100.00
1961-71	46.4 (19.1)	-	35.6 (41.25)	17.98 (35.16)	-	100.00
1971-81	68.2 (37.8)	1.21 (3.3)	24.05 (37.63)	6.55 (17.27)		100.00
1981-84	40.5 (18.4)	42.9 (96.7)	7.78 (10.00)	-	8.78 (100.00)	100.00
Total	55.35 (100.00)	11.2 (100.00)	19.61 (100.00)	11.63 (100.00)	2.21 (100.00)	100.00

Note: Figures in parenthesis denote column percentage.

Source: Ahmedabad Housing Survey.

TABLE A.3.2

Comparative Statement of Prices of GHB and Equivalent Private Sector Housing*

(In Rupees)

	EWS	LIG	MIG	HIG
1970				
GHB Houses	-	13,930	26,150	-
Private Sector Houses	-	23,000	42,000	-
1975				
GHB	11,700	18,500	43,900	-
Private Sector	17,000	26,700	-	-
1980				
GHB	11,100	18,000	45,000	-
Private Sector	-	39,500	55,000	-
1985-86				
GHB	-	37,000	67,000	1,71,200
Private Sector	-	50,000	60,000	-

Note: * The two type of housing is not exactly comparable. The figures should therefore not be taken to explain differences in prices due to supplier, ther factors like location and specifiations may not be exactly equivalent. Care has been taken to see that they are broadly similar.

TABLE A.3.3

Estimate Excess Demand for GHB Houses in Some Selected Schemes in Ahmedabad; 1976-84

(in per cent terms)

Year	Excess demand	Average excess demand	Location and type of scheme
1976	903		Ramp (EWS)
1976	275	409.17	Saijpur Boga (LIG)
1976	49.52		Nava Vadaj (MIG)
1977	363.54		Chandkheda (LIG)
1977	91.40	418.87	Chandkheda (LIG)
1977	657.45		Nava Vadaj (MIG)
1977	563.09		Vastrapur (MIG)
1978	-5.62		Chandkheda (MIG)
1978	264.28		Kadi (LIG)
1978	2.12	140.54	Chandkheda (LIG)
1978	102.92		Chandkheda (LIG)
1978	3.68		Chandkheda (LIG)
1977-78	476		Khokhra Mehmdabad (EWS)
1978-79	264.71	562.36	Naranpura (LIG)
1978-79	860		Naranpura (MIG)
1979-80	1294.80		Sola (MIG)
1979-80	630.76		Vastrapur(HIG)
1979-80	529.16		Vastrapur (MIG for ST/SC)
1979-80	682.77		Vastrapur (LIG)
1979-80	43.45	629.97	Sola (Lower LIG)
1979-80	902.08		Bage-Jirdaus (MIG)
1979-80	132.14		Khokra (LIG)
1979-80	1674.48		Bapunagar (LIG)
1979-80	24.41		Vadaj (MIG)
1979-80	385.70		Vadaj (LIG)

Note: The excess demand has been calculated on the basis of information on demand survey provided by GHB and is taken as the difference between the number of registration and actual number of houses to be provided in the scheme.

Source: Calculated from data provided by GHB.

TABLE A.3.4

Estimated Size Distribution of House Building Firms in Ahmedabad

	Large	Medium	Small	Total
Estimate I				
Pre-1970	10	25	150	185
1985-86	20	100	200	320
Estimate II				
1975-82	40	100	150	290
Post-1982	10	25	200	235
Estimate III				
1970-76	6	100	100	206
1976-81	25	100	150-200	275-325
1981-85	10	50	150	210
Estimate IV				
1986	50	100-150	250	400-480
Estimate V				
1986	35	100	150	285
Estimate VI	33	93	80	206

Source: Based on 'guestimates' by various developers.

Estimate VI are based on information available in A to Z series. Since the reporting was mainly dependent on making a payment to the publishers, quite a few small developers would have gone unreported.

TABLE A.3.5

Prices of Selected Building Materials in Ahmedabad

Year	Bricks (1000)	Sand (cu.mt)	Timber (cu.mt)	Salwood (cu.mt)	Cement (M.ton)	Steel (M.ton)	Mason I Class	Carpenter	Unskilled male
1973	93.75 (100)	14.25 (100)	1337.50 (100)	-	253 (100)	1654.87 (100)	12.37 (100)	13.25 (100)	5.50 (100)
1975	150 (160)	15.75 (111)	2100.00 (157)	700 (100)	372.55 (147)	2077.90 (126)	14.50 (117)	15.75 (119)	7.00 (127)
1977	155 (165)	15.00 (105)	2025 (151)	700 (100)	391.00 (155)	2135.40 (129)	20.00 (162)	22.00 (166)	8.00 (145)
1979	175 (187)	15.75 (111)	3552.50 (266)	700 (100)	484.00 (192)	3545.42 (214)	21.75 (176)	24.25 (183)	7.75 (141)
1980	287.50 (307)	20.00 (140)	3900.00 (292)	1050 (150)	541.00 (214)	3586.25 (217)	25.00 (202)	25.00 (189)	10.00 (182)
1981	247.25 (264)	18.69 (131)	4233.33 (317)	2028.75 (290)	560.75 (222)	4739.38 (286)	22.31 (1180	22.31 (168)	10.31 (187)

Note: Figures in parentheses show indices of cost of inputs

Source: NBO, Handbook of Housing Statistics (1982-83) Wage Rates for Building Construction Labour in Ahmedabad.

TABLE A.3.6

Price of Land in Selected Locations of Ahmedabad

Inside AMC	1970	1975	1980	1985
Walled City Area	160	500	700	1000
Ambawadi	75	150	500	900
Ellisbridge	75	350	600	1500
Naranpura	50	80	275	800
Navrangpura	75	250	425	1500
Paldi	150	450	800	800
Sabarmati	25	50	200	350
Shahibag	120	150	500	800
Amraiwadi	100	135	-	620
Maninagar	90	100	300	1000
Outside AMC				
Chatlodiya	15	35	100	250
Memnagar	20	75	250	750
Thaltey	9	35	125	250
Vastrapur	10	40	120	500
Vejalpur	10	40	200	550
Kali	15	-	-	150
Ghodasar	-	-	30	250

Source: Collected from various developers in the city.

TABLE A.3.7

Compound Rate of Growth in Prices of Selected Building Materials in Ahmedabad, 1973-81

	1973-77	1977-81	1973-81
Bricks	13.39	12.38	12.89
Land	1.29	5.65	3.45
Timber	10.93	20.24	15.49
Salwood	-	30.47	-
Camal	11.50	9.43	10.46
Steel	6.58	22.05	14.50
Class	12.76	2.77	7.65
Corperly	13.51	0.35	6.72
Unskilled male	9.82	6.55	8.24

Source: Calculated from Table A.3.4.

TABLE A.3.8

Compound Rate of Growth of Land Values in Selected Locations in City of Ahmedabad 1970-85

	1970-75	1975-80	1980-85	1975-85	1980-85
Inside AMC					
Walled City Area	25.59	6.96	7.39	7.18	12.99
Ambawadi	31.59	27.23	12.47	19.62	18.01
Ellisbridge	36.08	11.38	20.11	15.67	22.10
Naranpura	16.23	28.01	23.81	25.89	20.30
Navrangpura	27.23	11.20	28.69	19.62	22.10
Paldi	24.57	12.19	0	5.92	11.80
Sabarmati	14.87	31.95	11.84	21.48	19.24
Shahibag	4.56	-	9.86	18.22	13.48
Amraiwadi	6.19	27.23	-	16.46	12.93
Maninagar	2.13	24.57	27.23	27.23	17.41
Outside AMC					
Ghatlodiya	18.47	23.36	20.11	21.73	20.63
Memnagar	30.26	27.23	24.57	25.89	27.33
Thaltey	31.20	28.99	14.87	21.73	24.81
Vastrapur	31.95	24.57	33.03	28.73	29.80
Vejelpur	31.95	37.97	22.42	29.97	30.62
Kali	-	-	52.00	-	16.59
Ghodasar	-	-	52.81	-	-

Source: Calculated from Table A.3.5.

TABLE A.3.9

Building Cost Index Number in Respect of Government Construction for LIG House for Ahmedabad

Year	Index number
1970	100
1972	108
1973	117
1974	155
1975	169
1976	169
1977	178
1979	224
1980	266
1981	271
1982	263

Source: National Building Organisation, Handbook of Housing Statistics, 1978-79, 1982-83.

TABLE A.3.10

Estimated Profit Margin* in Housing Production in Ahmedabad in Some Selected Projects 1970-1984

Year	Vasna	Naranpura	Navrang-pura	Shahibag	Ghodasar	Vastarpur	Memnagar
1970	22.45						
1972							34.00
1974	19.4/38.75						
1976		67.27					
1978			20.00		34.9/35.78		
1980				39.44/13.87		125	
1981		28.2/34.15				194.7	
1982						173.47	
1983					49.3/18		
1984						101.2	

Note: * Profit margin calculated as a per cent of total cost of the project.

Source: Calculated from data collected from various developers.

TABLE A.3.11

Estimated Rate of Return on private Sector's Investment* in Housing Building for Some Selected Projects in Ahmedabad

Year	Vasna	Naranpura	Navrang-pura	Shahibag	Ghodasar	Vastarpur	Memnagar
1970	44.9						
1972							66.09
1974	38.80/77.5						
1976		164.4					
1978			40.31		69.72/71.56		
1980		56.41		78.89		250	
1981		68.29				389.39	
1982						346.95	
1983				27.75	98.52/38.54/22.28		
1984						202.5	

Note: * Based on an assumption that the firms investment is limited to 25 per cent of total cost of production of houses.

Source: Calculated from information collected from various developers.

TABLE A.3.12

Estimated Rate of Return* on Private Sector's Investment in House Building for Some Selected Projects in Ahmedabad

Year	Vasna	Naranpura	Navrang-pura	Shahibag	Ghodasar	Vastarpur	Memnagar
1970	78.57						
1972							149
1974	52/103						
1976		246.7					
1978			59.09		1473/1527		
1980				532.5		25	
1981		194.12/233				601.6	
1982						536	
1983				111	332/118/78		
1984						273	

Note: * Estimated on an assumption that private sector's investment is limited to total cost of land alone.
developers.

Source: Calculated from data collected from various developers.

TABLE A.3.13

Estimated Rate of Return* on Private Sector's Investment in House Building for Some Selected Projects in Ahmedabad

Year	Vasna	Naranpura	Navrang-pura	Shahibag	Ghodasar	Vastarpur	Memnagar
1970	157.14						
1972							297.8
1974	104/206						
1976		4933					
1978			118		2946/3053		
1980				1065		2500	
1981		388.24/466.7				1209.84	
1982						1072.13	
1983				222	664/236/156		
1984						546.6	

Note: * Based on an assumption that the producer's investment is limited to 50 per cent of cost of land.

Source: Calculated from data collected from various developers.

TABLE A.5.1

Comparative Picture of Price of Houses Produced by Parshawnath Vis-a-Vis Other Developers in Ahmedabad

(In Rupees)

Year	Flat	Tenament	Row houses	Tena-ment	Flats	Row houses
1967		272.06				
1969	261.15	403.97		-	771	-
1970		403.50		-	350	-
1971	343.86	542.30		-	667	336
1972		343.75		-	540	
1974	445.30	715.62		-	554	
1975		549.92		-	607	
1977			469.20	-	917	
1978	-	-	-	630	553	-
1979	-	-	599.55	-	-	-
1980	-	718.78		-	723.40	-
1981	725.72	846.47		-	805.97	
1982		1013.21	935.46	-	1191	
1983			737.70	-	1508	
1984	561.53	918.92		-		
1985		1167.74		-		
1986		929.20	1012.96	-		
1987			1114.02	-		

Source: Parshwnath Housing Finance Corporation and Various other developer of the city.

TABLE A.5.2

Estimated Profit* Margins on Houses Produced by a Leading Producer of LIG Housing in Ahmedabad

	Profit margin (as % of cost)	Total profit (in Rs lakhs)	Profit per unit (in Rs)
1977	26.19	30.9	3705
1978	22.73	30.9	6399
1979	15.90	3.72	4180
1980	75.30	220.62	19455
1980	86	30.58	23523
1981	53	165.14	11319
1981	108.14	23.79	30500
1982	31.22	10.77	11219
1982	33.94	6.11	37257

Note: The profit margins have been estimated on the basis of certain assumptions relating to purchase price of land. The calculations also suffer from the limitations mentioned in calculation of profit margins for other projects in Table A.3.

Source: Calculated from data collected from the firm

APPENDIX II

INFORMATION TO BE OBTAINED FROM AHMEDABAD ABOUT HOUSING MARKET: SIZE STRUCTURE AND OPERATION

1. General Information about Housing Market Activity*

1.1 Riots and communal tension have continued to beset Ahmedabad whole of last year. How have these events affected activity in land and housing markets in different parts of the city of Ahmedabad?

1.2 Submarkets which are doing well and others which are depressed.

1.3 Impact of inclusion of Eastern fringes of Ahmedabad in AMC area on housing market activity.

a. on supply of land in the city

b. on price of land -

(i) in Eastern Ahmedabad
(ii) other parts of the city

c. development in newly incorporated areas and new fringe on that side.

1.4 Does the input (land, finance) situation regarding housing continue to remain as critical as before or has it eased out a bit? Has HUDCO loan to CGHFC materialised? How much was the loan amount? Impact of this? Specially,

1.4.1 Has demand for housing picked up? Evidence thereof. (Sales volume, unsold units,_____)

1.4.2 Have the housing units which were lying incomplete due to financial constraints, been completed? Situation at present? Quantitative evidence.

1.4.3 Why is supply of housing so dependent on CGHFC finance? Is'nt supplying houses profitable otherwise?

1.4.4 In your opinion what would be the impact on demand and supply of housing of non availability of CGHEFCs loans ?

1.5 Other changes in legal-economic environment? For better or worse.

1.5.1 Change in rules regulations relating to housing including procedures relating to ULCER. Any more exemptions under ULCER

1.5.2 Is the land on which building activity - being carried out currently the one exempted under ULCER? If strictly adhered to, all housing on the exempted lands should have been completed by now and activity would be nil?

1.5.3 In that case what would have been the impact of this bunching on house prices. ?

1.5.4 Is no provision made by Government to make some land available to

1. organised private sector

2. genuine cooperative housing societies

3. individual owner-builder.

1.5.5 Textile mills situation? Impact on demand for housing?

1.5.6 Impact of lower income tax rates and concessions for investment in housing on real estate activity in the city.

1.5.7 Impact of new income tax rules for partnership firms?

1.6 Any significant change in government attitudes towards organised private sector in housing specifically and housing in general ?

1.6.1 Concrete action in this regard:

a. fewer permissions required
b. procedures are less time consuming
c. bureaucracy is more cooperative and there is less red tapism.

1.6.2 Government's main grouse against the organised private sector has been that it operates in an illegal manner. Cannot private sector involve itself in building activity legitimately? Hostility in those circumstances may be less.

1.6.3 What are the legitimate ways of organising building activity?

1.7 Do you think increase in supply of housing as the solution to housing problems of the city?

1.7.1 Can the supply of housing be increased by densifying existing areas, renovating dilapidated housing _____?

1.8 Do you think that filtering process operates in the city. For what type of houses? For which income-groups?

1.9 There are rumors of declaring housing as an industry. What would be the implications of such a step for the organised private sector? Your views?

2. Market Structure

2.1 Number of Operators and their Size Distribution

Year	Large		Medium		Small	
	Number	Share in output	Number	Share in output	Number	Share in output
		Investment		Investment		Investment
1960						
1965						
1970						
1975						
1980						
1985						
1986						

2.2 Share of top 4 developers in total housing supply in the city

a. housing units _____ (%)
b. Investment in housing _____(%)

2.3 Share of top 10 developers in terms of

a. housing units _____(%)
b. investment in housing _____(%)

2.4 How has the present structure come about? Through growth of small units mergers or new entry?

2..4.1 The preponderance of small sized firms is due to lot of new entrants or the fact that old firms have continued to operate on a small scale?

2.4.2 If so does it prove that there are no economies of scale or operation or small scale is due to some other factors?

2.5 How have the different sized firms fared over time (in terms of growth)

2.5.1 Small sized firms

a. have continued to operate on a small scale
b. have grown to be medium sized/large firms

2.5.2 Large sized firms

a. have declined
b. maintained their scale or operation
c. become even larger.

2.5.3 Medium sized firms

a. declined
b. grown larger
c. same as before

2.6 Which type of firms have tended to survive and/or grown over time?

2.6.1 Size-wise: large/medium/small

2.6.2 Mix of activity wise" land development/ construction/land development and construction.

2.6.3 Other features (of survivors)

2.7 Exit from the Industry

2.7.1 How many firms/developers have left the industry?

a. over past 20 years _____
b. past 10 years _____
c. past 5 years _____

2.7.2 What would be the exit rate per year? _____

2.7.3 Maximum operators left in the period 19 -19

2.7.4 Any significant exists in past 5 years?

2.7.5 Reasons for leaving the industry?

a. cutting down losses
b. changed business WHY ?
c. retired
d. the leavers were in the market for a quick kill.

2.7.6 Characteristics of leavers.

a. size wise
b. new entrants/old established ones
c. _____

2.8 Entry in the Industry

2.8.1 Entry in the market is free and easy and profits are high. This leads one to the conclusion that there will be a large number of new entrants in the industry every year? Is that so?

2.8.2 Are there any barriers to entry?

a. financial
b. legal
c. initial investment
d. goodwill
e. lack of knowledge of operation
f. required skills, (including those for obtaining various permissions).

2.8.3 What is the average entry rate per year?

2.8.4 What is the survival rate of new entrants (survivals as per cent of total new entrants).

2.8.5 Any minimal `probation´ period after which they get entrenched in the industry?

2.8.6 Has the situation changed significantly" with respect to number of entrants, ease of entry etc.

a. in past 5 years

b. in post ULCER period.

2.8.7 How does the record (number of new entrants etc.) compare with the pre-ULCER period?

2.8.8 Salient features of new entrants:

a. area of operation - Core/Suburb/Periphery
b. size (at the time of entry) _____
   investment
c. type of activity

   i. complete housing
   ii. dealing in sale of plots only in the initial stages

d. degree of inter and intra-city mobility

e. income group catered to
f. type of housing built and degree of `development´ provided.

g. degree of legality in projects undertaken.

2.8.9 Costs to New Entrants

2.8.9 1. Do the new entrants: have same access to and terms of finance as the old ones:

a. from seller of land
b. from cooperative banks
c. from final purchaser
d. from other lenders in the market

2.8.9 2. Greater problems dealing with bureaucratic procedures.

2.8.9 3. Same access to land and other inputs. (specially land)?

2.8.9 4. To spend more on marketing their product or do they attract clients as easily as the old ones.

2.8.9 Estimate of cost of entry _____

2.9 Mix of Activities

2.9.1 Earlier most of the builders used to concentrate mainly on construction of houses. At present they handle processes from purchase of land to building of houses and providing some infrastructure. Where, how and why has this transformation taken place?

2.9.2 Are there still any pure construction firms in the business?

a. How many?
b. of what size?

2.9.3 Apart from degree of development what are the other factors differentiating product produced by different developers in the city?

a. brand (product excellence)
b. better credit terms

2.10 Economies of Scale

2.10.1 Are there any appreciable economies of scale in this business in:

a. land purchase
b. finance
c. supervision (managerial)
d. material purchase
e. in getting permision
f. administration
g. overheads
h. marketing.

2.10.2 Apart from lower (?) costs, what are the advantages which large/small scale firms have?

a. access to finance (apart from cost of finance)
b. greater spatial mobility
c. greater flexibility to move from one type of `product' submarket) to another

d. better marketing strategies.

2.10.3 , Are there any significant difference between technology of construction adopted by large and small firms:

a. use of more mechanised equipment (specify processes)
b. quality of materials used (Which ones?)
c. use of newly developed materials and techniques of construction
d. experimentation in their projects of innovative designs.

3. Organisational Form

3.1 Organisational forms adopted by different developers.

3.1.1 As business entity

a. individual
b. proprietorship
c. partnership

3.1.2 For organising specific projects.

a. cooperative
b. NTA
c.
d.

3.2 Relationship (if any) between size and organisational form.

3.3 Relationship between organisational form (both 3.1.1 & 3.1.2) and cost of production.

4. Evidence of Interdependence, Collusion

4.1 Is it true that the operators normally do not enter areas of operation of other developers? Is it an unwritten code of conduct or an outcome dictated by market factors?

4.2 What is the nature of interdependence in price and output determination process between

a. different operators in the same submarket
b. different operators in adjacent submarkets
b. different operators in submarkets which are far apart from each other.

4.3 Is any form of collusion (for price and share of output determination) practiced in the market?

4.4 Are there any market leaders -

a. in each submarket (defined in all ways)
b. for the total housing market

4.4.1 If yes, of what type

a. barometric
b. dominant

4.4.2 How or in which ways is the `leadership´ exercised in the market?

a. through price fixation
b. through output fixation
c. through determination of share of each operator
d. others

4.5 What is the nature of social interaction between

a. all developers
b. developers belonging to same class.

Are they a closely knit community who come together on many (social) occasions under congenial circumstances in which informal arrangements regarding price/output etc. are worked out.

Or are there smaller homogeneous groups and decisions of each group are independent of one another.

Basis of groupings and sub-groupings.

5. Legal Economic Environment

5.1 Which are the legislative and fiscal measures affecting business of organised firms?

a.
b.
c.
d.

5.2 What was the situation like in pre-1972 period in this regard.

5.3 The developers blame the current plethora of rules and regulations for the temptation to avoid them. In pre-1972 period when there were fewer restrictions, did the developers abide by all the rules and work within the legal framework?

5.4 How have the different Acts affected the structure of industry

a. number of firms
b. relative sizes
c. concentration
d. differentiation of product.

5.5 How have the Acts affected cost of production of housing in the city?

5.6 What is the minimal infrastructure a developer is legally bound to provide under the existing Town Planning Acts? Extent of evasion?

5.6.1 Average unit cost of providing different types of infrastructure

1. Inner Roads 2. Sewerage 3. Drainage

5.7 Concrete suggestions for simplifying the procedures keeping in mind the consumers' interests.

6. Input Availability

6.1 Estimated amount of vacant land (in physical not legal sense) available in the

a. AMC area

(i) excluding newly incorporated Eastern Ahmedabad fringe

(ii) including it

b. Agglomeration area

6.2 The amount of land to which the developers have access.

6.3 Land is the most important input in housing activity. Operation of ULCER has made this input extremely scarce in the city. Suggestions about release of land taking into account the fact that the situation prevailing in the pre-ULCER period may be recreated. How can the negative effects of defreezing land be taken care of?

6.4 Due to uncertainty in supply of land, developers keep an inventory of this input. What is the ratio of this inventory to total estimated yearly requirement?

6.5 Apart from lands lying vacant in different parts of the city, how much more space can be made available in the city through conversion of land from low to high density development?

6.6 What legislative action should be taken by the government to make it easier to densify the properties?

7. Demand for New Housing

7.1 In view of the declining economic activity and current slack in housing market activity, what are the prospects for future for different type of housing in the area?

7.2 Is demand faced by all developers taken together price elastic or inelastic?

7.2.1 Elasticity of demand curve faced by individual developers

a. old/new
b. large/small ?

7.3 What is the nature of demand for housing in the city? Is it elastic w.r.t. -

(i) income
(ii) price;
(iii) credit availability

7.4 Is demand directed towards certain market segments.

7.5 What percentage of housing demand is speculative? Or investment demand ?

7.6 Despite slack in demand the prices of houses have not declined (or have they?), What explains downward rigidity of prices?

7.7 Changes in demand for housing in different segments of market and price responses to them?

8. What is industry's response to increasing costs of construction in terms of:

a. cheaper/more efficient designs
b. use of cost saving techniques
c. use of low cost materials
d. changing composition of inputs - substitution prices
e. other innovations.

Miscellaneous

9. Preconditions for going Public ?

10. Have there been any innovations in housing production in past 10 years? If yes which type of firms have been instrumental in

a. devising these
b. introducing the innovations in the market
c. in popularising it.

11. How does the industry view cooperation with the government in providing housing at reasonable cost. Would the industry be amendable to

regulation of prices of its housing, identification of target clients and type of development to be carried out?

12. Illustration of `Joint Sector' Approach to the problem of housing in Gurgaon and Lucknow.

13. Chances of success of such experiments in Ahmedabad?

14. Different stages at which private sector gets affected by public sector activities.

Queries Relating to the data on Cost of Housing

1. The data on housing cost (per sq. meter) provided by you does not indicate the cost differential between flats, bunglows, tenements and other types of housing. Extent of cost differentials. Quantitative data.

2. The costs have increased partly due to increase in input costs and partly due to other factors? But the `inputs' (even building materials) used in the `house' have not remained the same. How much of the increase in cost is due to use of better quality inputs. ?

3. Does the cost of construction per sq. meter vary for different sized, same quality?

4. Relationship between size and quality of housing.

INTERVIEW WITH DEVELOPERS: GUIDELINES

1. The Firm: Organisation, Activity Mix and Area of Operation

1.0 Name and address of the firm:

1.1 Year of Establishment:

1.2 Organisational form of the firm:

1.2.1 as a business entry

- 1.2.1.1 individual proprietorship
- 1.2.1.2 partnership
- 1.2.1.3 private limited company
- 1.2.1.4 public limited company
- 1.2.1.5 other

1.2 Organisational form at the point of entry:

1.2.2 Organisational form for handling specific projects of housing

- 1.2.2.1 Cooperative
- 1.2.2.2 NTA
- 1.2.2.3 Other (specify)

1.2.3 Reasons for preferring this organisational form vis-a-vis others

1.3 Educational and professional background of the owner developer:

- 1.3.1 Below metric
- 1.3.2 Below graduation
- 1.3.3 Graduate
- 1.3.4 B.E./B.Arch.
- 1.3.5 Other qualification (specify)

1.4 Activity Mix

	Activity involved in	% of Total Investment		
		at present	5-6 years ago	As a new entrant
1.4.1	Residential development			
	1.4.1.1 new housing			
	1.4.1.2 improvement, re-building or reno-vation of old dilapidated housing			
	1.4.1.3 more intensive development of existing resi-dential develop-ment			
	1.4.1.4 Other (specify)			
1.4.2	Commercial development			
1.4.3	any other activity connect-ed with building			
1.4.4	other business activity (specify)			

1.4.A Reasons for shift (if any) in Activity Mix:

1.5

	Area of operation*	% of Total Investment** in		
		at present	5-6 years ago	As a new entrant
1.5.1	Within city of Ahmedabad			
1.5.2	Outside city, but within agglomeration			
1.5.3	Beyond agglomeration but within Ahmedabad district			
1.5.4	Beyond Ahmedabad district			

1.5A Reasons for shift in area of operation

* Please specify the exact locations in which you have been/are operating.

** Refers to total investment in residential development alone.

1.6 Operation in land/housing markets the firm is involved in:

		at present	5 years ago	10 years ago	As a new entrant
1.6.1	Provision of raw land				
1.6.2	Provision of developed land and infrastructure*				
1.6.3	Completed house with all usual fittings				
1.6.4	only construction				

* Specify infrastructure normally provided:

1.6A Reasons for shift in type of operations firm was involved in:

Problems faced

1.7 Type of housing being provided

1.7.1

Type	% of investment in			
	at present	5 years ago	10 years ago	As a new entrant
1.7.1 Single family dwellings				
i. Bunglows				
ii. tenaments				
iii.				
1.7.1.1 Multiple family dwellings				
i. flats/ apartments				
ii.				
iii.				
1.7.2 Ownership Housing				
Rental Housing				
1.7.3 High Income Group*				
Middle Income Group				
Low Income Group				

* Please specify the income range.

1.8 Problems faced in shifting to a different submarket:

Projects the Firm is Currently Involved in:

S. No.	Type of project	Location	No. of units planned	Area per unit (Sq.m.)	Value per unit (Range)	Expected date of completion	Income range of potential buyers	% of units sold
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

1.10 What are the factor which determine the amount of housing provided by you

1.10.1 price in the market/profit margin

1.10.2

1.10.3

1.10.4

1.11 Constraints on increasing the supply of housing at the micro level:

1.11.1 fear of price decline

1.11.2 demand constraints

1.11.3 diseconomies of scale

1.11.4 limited capacity

1.11.5 constraints relating to organisation form

1.11.6 other supply bottlenecks (specify)

1.12 Problems in increasing the supply of housing for special groups (LIGs)

1.13 Favourable conditions and institutional (including organisation form) factors under which you would produce more housing.

2. Size of Firm:

2.1 Number of persons employed* by the organisation

	Part time		Full time	
	Tempo-rary	Perman-ent	Tempo-rary	Perman-ent
Skilled				
Semi-skilled				
Unskilled				

2.2 Number of projects handled by the firm:

2.2.1 In past one year

2.2.2 In past five year

2.3 Approximate value per project

2.4 Number of housing units produced by your firm

2.4.1 In past one year

2.4.2 In past five year

2.5 Approximate (annual) average value of this housing

2.5.1 for past one year

2.5.2 for past five years

2.6 Has your scale of operations changed over time:

2.6.1 shift in terms of number of projects

2.6.2 in terms of total turnover

2.6.3 in terms of persons employed

2.7 Problems faced in expansion of 'scale of operation'

2.8 What, as per your estimation, is your share of the market at present:

2.8.1 in terms of number of housing units

2.8.2 in terms of investment in housing.

3. Market Conditions/Environment

3.1 Entry

3.1.1 Why did you enter this business

3.1.2 Did you face any barriers to entry_____

3.1.2.1 heavy Initial capital investment

3.1.2.2 input availability (land, finance)

3.1.2.3 problems in getting permissions (NA, NOC, etc.)

3.1.2.4 problems in getting labour,

3.1.2.5 problems in attracting clients for your product

3.1.3 Amount of initial investment (your own and borrowed capital) you made?

3.1.4 Other costs of entry?

3.1.5 At the entry stage, did you start

3.1.5.1 business on your own

3.1.5.2 or collaborated with some established person as a partner

3.1.6 As a new entrant what was the nature of your activities with respect to: (refer to qs. 1.2 to 1.7 except 1.3) [not to be asked]

3.1.7 How did (as a new entrant) you attract client etc., for your product_____

3.1.7.1 by offering better/different product. Diiferentiated characteristics of your product

(i) new design
(ii) more affordable (lower price)
(iii)

3.1.7.2 by offering better terms of credit

3.1.7.3 by greater marketing effort.

3.2 Product Differentiation

3.2.1 In what respects is your product different from the products (houses) sold by other developers in your sub-market:

3.2.1.1 design

3.2.1.2 credit terms

3.2.1.3 only brand

3.2.1.4 Other

3.2.2 Do you emphasise the different (true or fictitious) character of your product through advertisement etc.

3.3 Information

3.3.1 Do you have information regarding

3.3.1.1 number and activities of developers in your submarkets/other submarkets

3.3.1.2 developments in other parts of your submarket/other submarkets

3.3.1.3 prices prevailing in other parts of your submarket/other submarkets

3.4 Demand Conditions

3.4.1 If you increase your prices by x per cent how many (%) customers are lost by you?_____Time lag involved_____.

3.4.2 If you decrease your prices by x per cent what is the per cent gain in your client etc., - Time lag? _____

3.4.3 If your competitors (in your submarket) increase or decrease their prices what is the impact on demand for your product?

3.4.4 Do you find it easy to sell your houses or do you have to make considerable marketing effort to sell them?

3.4.5 What is the (normal) production (%) of unsold units in your projects (give range)_____

3.4.5.1 at the initial stage of announcement

3.4.5.2 at the time of beginning of construction

3.4.5.3 after completion of construction.

3.4.6 Reasons for non-sale

3.4.6.1 lack of information to the buyer

3.4.6.2 over supply of housing in the market

3.4.6.3 high price

3.4.6.4 lack of essential facilities e.g. water, sewerage, etc.

3.4.6.5 location

3.4.7 Per cent of speculative demand in total demand for housing produced by you.

3.5 Evidence of Competition, Interdependence, Market Leadership and Collusion in the market

3.5.1 Do you face any type of competition from other firms in the industry:

3.5.1.1 operating in your submarket

3.5.1.2 Operating in other submarkets but also could enter your area of operation in response to some action on your part or excess profit in your submarket

3.5.1.3 new entrants - actual or potential

3.5.1.4 public sector.

3.5.2 What steps do you take to avoid this competition as also to discourage new entrants

3.5.3 Do you try to attract clients away from your competitors? Mechanism by which you do this?

3.5.4 While making decisions relating to your activities do you take account of actions and expected reactions of

3.5.4.1 other firms (larger, smaller or same size)

3.5.4.2 public sector in housing

3.5.4.3 public sector in general.

3.5.5 Do you eve enter into formal or informal agreements with your competitors about the price of the houses to be charged or area of operation.

3.5.6 Do you follow any prominent developer of the market/submarkets in price fixation?

3.5.7 Do you, in your submarket and/or adjacent submarkets set the lead for price determination?

3.5.8 Do you follow the innovations in design etc., introduced by other developers in your submarket or other sub-markets?

3.5.9 Do you or have you ever led the market in this respect?

3.5.10 Do you follow/lead in opening new areas for development in Ahmedabad?

3.6 Legal Environment and other Controls

3.6.1 legislative and <u>fiscal</u> measures affecting business of organised firms?

3.6.1.1
3.6.1.2
3.6.1.3
3.6.1.4

3.6.2 How have the different Acts (ULCA, Income Tax Act amendments, building bye laws under Town Planning Act) affected: (specify the Acts in each case)

3.6.2.1 scale of your operation

3.6.2.2 cost of production

3.6.2.3 price of housing

3.6.3 Do you find getting permission easy/tedious job?

3.6.4 Impact of public sector projects on your activity. Specifically of:

3.6.4.1 Town Plans

3.6.4.2 GHB schemes

3.6.4.3 Infrastructure provision

3.6.5 Infrastructure (off-site) you are required to provide under the Law (which Act)?

3.6.6 Do you think that existing laws lead to restriction of supply of housing in the market?

4. Objective Function of the Firm

4.1 When you take up any project, what is the objective function:

4.1.1 profit maximisation

4.1.2 fulfilling some social need

4.1.3 being on the right side of the government

4.1.4 improving your social status

4.1.5 other considerations (like nearness to area of operation) provided a minimum profit is earned.

4.2 How do you define `maximisation of profit´? In terms of

4.2.1 volume of profit or rate of profit

4.2.2 over each project or all projects combined

4.2.3 over short term or long term

4.2.4 rate of return on your `equity´ or total investment in the project.

4.3 What is the `prime´ instrument you use to maximise your profit?

4.3.1 volume of sale

4.3.2 price

4.3.3 cost of production

4.4 In your experience what type of housing do you find more profitable:

4.4.1 High Income Group/Middle Income Group/Low middle Income Group/Low Income Group

4.4.2 Ownership housing/rental housing

4.4.3 Tenaments/row houses/flats/bunglows.

4.5 Approximate rate of profit in different type of housing?

4.6 What is the average approximate rate of return on your investment?

4.7 Shift over time:

4.7.1 rate of return in 1985 _____

4.7.2 during the period 1980-84 _____

4.7.3 during the period 1976-80 _____

4.7.4 during the period 1970-75 _____

4.7.5 prior to 1970 _____

5.3 Land Availability

5.3.1 How do you acquire land for your operations?

5.3.2 Source of your supply of land

5.3.2.1 exempted land under ULCER

5.3.2.2 old building sites

5.3.2.3

5.3.3 Has operation of ULCER restricted the supply of land for your projects or you have been able to get land for your projects?

5.3.4 For your land purchases do you:

5.3.4.1 pay full cash to the seller immediately,

5.3.4.2 enter into banakhata and pay gradually.

5.3.5 Do you keep an inventory of land for use in your future projects?

If yes, what is the proportions of this inventory to your total yearly requirements?

5.3.6 How have you handled the land scarcity situation in the ULCER area:

5.3.6.1 by reducing the area of your project/size of houses

5.3.6.2 by building high rise

5.3.6.3 by shifting outside the ceiling limit

5.4 Availability of building materials

5.4.1 Any problems in this regard?

5.4.2 If you organise your housing projects as cooperative, do you get any concessions in prices for various building materials? The amount or per cent of concession?

5.4.3 Do you keep an inventory of building materials?

If yes, the proportion of this to your yearly requirement?_____

5.4.4 costs of this warehousing_____

5.5 Finance

5.5.1 For your current projects how are your raising finances?

Source of finance	% of total investment	Cost of finance
5.5.1.1 GCHFC		
5.5.1.2 Market Borrowings		
5.5.1.3 Clients		
5.5.1.4 Own funds		
5.5.1.5 Cooperative banks		
5.5.1.6 HDFC		
5.5.1.7 Share, etc.		
5.5.1.8 others		

5.5.2 What are the constraints in raising money from the market through floating of shares etc.

5.5.3 Problems in raising finances? Do you believe that larger/smaller firm have fewer problems? How?

5.6 Cost of Production

5.6.1 Costs which continue to be incurred irrespective of the existence/non-existence or size of the project? (fixed costs) specify.

5.6.2 Costs which vary with the scale of operations

5.6.3 Costs which vary:

5.6.3.1 in the same proportion as the scale of operation

5.6.3.2 which vary in less than proportion

5.6.3.3 which vary in greater proportion.

5.6.4 Breakdown of total cost of production (in per cent terms) in your current projects

S. No.	Value of land per s.m.	Cost of Other inputs				Profit margin	Speed money
		Materials	labour	Finance	over-heads		

5.6.5 Has the composition of cost changed over time

	Land	Materials	Labour	Finance	Over-heads	Profit margin	Speed money
1970							
1980							
at present							

5.6.6 Is the change in composition due to:

5.6.6.1 some technological improvement/change

5.6.6.2 change in quality of materials used

5.6.6.3 differential rate of growth of prices, physical composition remaining the same

5.6.7 Has the increase in cost of production induced you to experiment with:

5.6.7.1 new design

5.6.7.2 cheaper building materials

5.6.7.3 different technology

5.6.7.4 different ways of financing housing

5.6.7.5 smaller size.

5.6.8 How much of the increase in (total) cost of housing due to:

5.6.8.1 use of new, improved and more expensive materials;

5.6.8.2 improvement in quality of housing provided by you.

5.6.9 What steps do you take to reduce costs in your projects?

5.7 Average time taken to complete a unit?

5.7.1.1 non-availability of inputs

5.7.1.2 non-availability of finance

5.7.1.3 government procedure

5.7.1.4 others.

5.8 Can your 'firm' handle production of more housing without increasing the number of persons (except of course labour) employed?

5.8.1 How many more units can you provide?

5.9 Pricing Strategies

5.9.1.1 cost of production

5.9.1.2 rule of thumb. Elaborate

5.9.1.3 price set by others in the market or expected price of others.

5.9.1.4 fixed rate of return on your investment

5.9.1.5 any other.

5.9.2 Are the prices charged by you same/higher/lower than the prices charged by other developers for similar housing in your submarket?

5.9.3 Is price determination the focal point of your activity or other process take precedence over price determination.

5.9.4 Is your price strategy attuned to stopping entry of others in the market?

5.10 Marketing Strategies

5.10.1 What marketing strategies do you adopt to seal your product?

5.10.1.1 advertising in newspaper? which ones?

5.10.1.2 model houses

5.10.1.3 distributing pamphlets

5.10.1.4 putting up posters or bill boards

5.10.1.5 informal channels

5.10.1.6 others.

5.10.2 At the time of registration do you accept bookings for 100 per cent of your houses or less? Practice in past?

6. Adjustment to Changed Environment

6.1 How do you handle slack in the market

6.1.1 in the short period

6.1.1.1 by reducing your price

6.1.1.2 by increasing your inventory

6.1.1.3 by trying to increase the demand for your 'product' through marketing and other strategies

6.1.1.4 any other (specify)

6.1.2 in the long period

6.1.2.1 by shifting to some other submarket

6.1.2.2 by reducing your scale of operation

6.1.2.3 by moving out of market altogether till slack lasts.

6.2 How fast and with what ease can you shift:

6.2.1 your area (location) of operation

6.2.2 type of housing being provided

6.2.3 income group being catered to

6.2.4 out of the market altogether (problems in closing shop)

6.3 How do you react to excess demand in your submarket

6.3.1 by increasing the prices

6.3.2 by increasing the supply (announcing new schemes)

6.4 Reaction to excess demand in some other submarket:

6.4.1 shifting your operation to that submarket

6.4.2 attracting the demand to your submarket

6.5 Problems faced in shifting to other submarkets and changing scale of operations.

7. Innovative Behaviour

7.1 Have you made any improvement in projects being implemented by you:

7.1.1 in design of houses

7.1.2 in materials used

7.1.3 in general layout to improve the efficiency and reduce the cost

7.1.4 in construction methods.

7.2 How did the improvement come about

7.2.1 was it introduced by you?

7.2.2 or you followed the lead given by someone else in the market

7.2.3 through modification of design of your houses marginally/substantially to suit your client group and to increase the efficiency.

7.3 Have these innovations led to increase or decrease in the cost of your product.

7.4 In either case, have they been passed on to the consumer.

7.5 What are the conditions under which you can provide housing for the poor in the price range of Rs 5000-10000.

7.6 What do you think of Industrial housing and pre-fabricated housing in this context? As solution to our problems of housing.

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