

CHAPTER-I

INTRODUCTION

1.1 Background

Housing is primarily a settling of people in a safe place and location. It is a continuous process of an activity through which human being provide themselves shelter and services. Since the origin, the human being continuously attempted to look for a safe and best shelter to him. In this long span of time, best and safe housing became a long term permanent campaign. This usual long term campaign passed away through different stages (housing pattern, housing practice, housing culture). It is the landmark of all human civilization and development.

“Housing is one of the most basic needs after food and cloth and is indispensable requirement of human beings for comfortable living in society. It is not only a physical cell but it consist of all the necessary services, facilities, equipments and services needed for the good physical health and well being of human being. Housing with healthy and hygienic environment reflects the level of economic condition, standard of living and life style along with moral and productive capacity of man. Thus, better housing environment consists of good ventilation, electrification, water supply, sanitary facility, access to road etc so that man can fulfill his basic needs and requirement with a comfortable living ” (WHO, 1961: quoted in Tiwari 2003)

Housing is the most valuable asset for majority of people in the world and assumed that people invest about 15 to 20 percent of their total incomes for shelter. The importance can be gauged from the fact that people after being able to fulfill their basic necessities, their first priority will be to invest or save money to own a shelter. Housing is an important indicator of a nation’s economic level, developmental stage and general well being. An inadequate dwelling, absence of water and sewerage facilities contributes to poor health and shows poor economic level of the country. Large proportion of urban population in developing countries today is still facing enormous problems like an inadequate housing with inadequate infrastructures and services, Nepal being one of the least developed nations is not an exception as well.

Urban population is growing rapidly and the housing demand is high in major cities. Due to limited resources and inadequate controlling measures, cities are facing problem of haphazard and unplanned growth. Most common housing development process in Nepal is owner controlled type in which land is received by owner from ancestors or by purchasing. Building construction permit is needed in municipalities but not compulsory in VDC’s to build a house. Housing units are also constructed haphazardly on the basis of owner’s interest. But recent days housing pattern has smoothly been changing with times. Private sector is also supplying of readymade housing unit to the people with all necessary amenities in which houses are constructed in planned land plots, adequate infrastructure and services are provided and more than

one housing units are in the large area of land. People who have no proper time, idea and knowledge to build the houses to settle themselves, and have a good income sources settle buying such type of readymade houses.

The new housing system is taking ground in rapid pace especially in Kathmandu valley. Such type of housing system is known as housing colony. It is also called community or Group housing. Housing colony is a residential place in a larger area with dozens of readymade dwelling units developed by the private housing companies where people from different strata, culture, society and sectors come together to settle in a group in one place buying the readymade houses. The people living in housing colony are also known as Gated communities. The housing colony has been encircled with a tall compound of wall and gate around the compound area. People from inside colony area and neighboring areas in most of time are not in touch. Wall and gate around the periphery gives feeling of gated community.

A national housing survey conducted in 1992 revealed that the yearly demand for housing was growing by over 5.3 percent in the Kathmandu valley and 24 percent of the population residing in the valley didn't have their own house. (IUCN, 1998, Nepal) This shows the needs of more realistic and forward looking housing policies and regulation that facilitate local housing income and protect the social well being of the urban residents. The uncontrolled growth of many areas in the valley town needs the urgent proper monitoring. These types of problems are due to limited resources and inadequate controlling measures resulting into haphazard and unplanned growth.

Traditionally, housing has been regarded as unproductive sector for investment, so involvement of private sector was discouraged. However, this thinking is gradually changing over the years. Initially private sectors in this field were brokers and real state owners, but now private sectors have emerged strongly as housing developers. Today, the private housing companies/developers are enthusiastically working in this field. As a result there are about 3 dozens of small and big private housing companies and number of other are involving independently whereas some companies are multinational company from the abroad with a large amount of investment.

1.2 Problem Statement

Kathmandu valley is the capital city of the country. So most of the central offices of executive, legislature and judiciary as well as various administrative and civil service departments, diplomatic missions, donor agencies, NGOs, INGOs and private organizations are intensively concentrated here. Moreover, large volumes of economic activities and at the same intensity of all types of opportunities/facilities are existed here in the valley. The valley is the hub of all types of administrative, official, industrial, business and other major human activities such as academic, health etc. As a result, the city is facing excessive inflow of people from the all over country. There is a high pressure of land demand for shelter. The past one decade and the present security

situation of country further helped to heat the population of Kathmandu valley as well. So the place is excessively going towards the overcrowding.

The overcrowding population is pushing the place forcefully to highly urbanization. And this type of urbanization has resulted haphazard urban growth. On the other hand, the housing supply is lagging behind the housing demand. Moreover, housing has become more and more unaffordable due to the sharp raise in the land price and building materials. Government alone cannot fulfill the housing demand. In this scenario, private investors initiated the organized group housing development. The private sector seeing the opportunities and after encouragement by the government through ownership act has introduced itself in this field.

The intense inflow of people is continuously pressuring the valley towards rapidly urbanization. The rapid urbanization process makes the economy more dynamic, too. So, economic activities of the valley have been heated by the intensified urbanization. The government and non-government service mechanisms, all types of economic, social cultural and academic agency and services are concentrating here everyday. The valley is being the first choice of any kinds of investment from all over the country including abroad Nepalese remittance group or NRNs. The increasing economic activities is definitely raising the economic level and earning capacity of the people. As a result, there is increasing number of up state people/new elite group in Kathmandu everyday. It is changing the life style of people here. The people are busier in their scheduled work and professional life. They have relatively a high income level but are always busy in their business and professional work. They have no enough time to share for their proper settlement/housing. Moreover they have no proper idea about it. On the other hand, they don't want to handle the troublous work of constructing and all about of other management for their proper house. Similarly, the people living for a long time in abroad (NRNs) who have already experienced of living at community and group housing system have the same problem. So, both types of people from valley and NRNs need the readymade housing unit near the city and ring road surrounding suburbs area. So there is necessary to develop more housing colony /group housing colony with more readymade houses and apartments for highly professional, new upstate, businessman and remittance group/NRNs.

The fertile land of the Kathmandu valley is converting towards concrete buildings and roads. So, the land is being congested everyday. 64% of the total land area was covered by agriculture in 2041B.S. (1983BC). It was reduced to 52.1% in 2051BS (1993BC) and reduced continuously to 41.4% in 2057B.S. (1999BC) On the other hand, the non-agriculture land consisting urban area continuously increased to 5.6% in 2042 B.S., to 15.2% in 2051 B.S. (1993 BC) and to 27.6% in 2057 B.S. (1999BC) (KVUDP, 2000).

Due to the increasing scarcity of land, there should immediately make a proper plan to accommodate to a large number of people in a small part of land. For this, only the horizontal expansion (independent house) is not appropriate. So, vertical expansion

(apartment/flatted) has also been initiated in a big way. As land is getting scarcer, concepts like high density housing and apartment can maintain the rapidly urbanization of Kathmandu valley.

On the contrary of the decreasing of land area of the Kathmandu valley, the land value/price is increasing rapidly. All the general people are not able to afford in land for their shelter so there is necessary of minimization of land cost for the housing as possible. The housing colony is being seen as one of those proper solutions for it.

The condition of road, water supply, sewerage, solid waste management and other infrastructure development aspects also exist in poor state along the haphazard urban growth. So, the proper and planned program of urban development like housing colony system can meet and sustain for the present burgeoning urbanization of the valley.

1.3 objectives of the study

With the increase in the number of urban dwellers of all classes, the demand for well planned residential bungalows and apartment in the housing colony is witnessing and in increasing trend. The study is conducted to gain in depth knowledge regarding the volume of organized group housing colony and to familiar with the present position of different housing companies and its working mechanism.

The general objectives of this work is to study the growth trend, and state of organized housing development initiated by private sector and to analyze its role and significance in planned urban growth.

The specific objectives are:

1. To analyze the existing situation of private housing colony.
2. To examine the spatial patterns of different housing colony.
3. To analyze the impact of organized private housing colony on urban development.
4. To identify private organization involvement to strengthen planed urban development.

1.4 Significance of the study

The housing demand is increasing everyday exponentially due to the excessive inflow of the population either in the search for better future or facilities. It is creating extreme pressure on the limited resources of the cities which is causing haphazard urbanization. The current political situation of the country, on the other hand, too, has further helped to this condition of the valley. The first responsibility to cater the supply of housing demand is of government sector but it is in small fraction and not so effective. So, the private sector seeing the opportunities and after encouragement by the government

through apartment ownership act 2054 has introduced itself in the field of housing development. It is gaining ground in Kathmandu valley and drawing more public attention. As the valley runs out of land, only horizontal expansion is not appropriate. So the future of housing in Kathmandu valley is in new self contained high-rise apartment blocks. Housing developers have already stepped up with their project viz. sunrise tower, TCH Tower, and Parkview horizon. As land is getting scarce, only the concepts like high density housing and apartment can maintain to burgeoning urbanization of the Kathmandu valley. And the housing colony system here is in increasing every year. There is increasing public concern about it. So, it is proper time to study on the growth trend of housing colony system and analyze its role and significance towards the planned and organized urbanization.

“The open area in the Kathmandu valley has fallen from 63 percent to 41 percent within the last 20 years. We will barely be able to find an open area in the Kathmandu valley within another 20 to 50 years, if these trends continue.” [http; englesh.ohmynews.com/articleview/articleview.asp?](http://englesh.ohmynews.com/articleview/articleview.asp?)). Due to the increasing scarcity condition of land space, there is an ultimate option to us that the limited land space must be used with its maximum economy. Highly inflow of population and rapidly urbanization should be maintained with the same constant limited land spaces of Kathmandu valley. On the other hand, in the absence of a comprehensive land use plan for the valley, these types of housing development system will create a huge impact on the city infrastructure. The sudden accumulation of a large dense development can make pressure on the infrastructure, drainages system, water supply, traffic management and social conflict in the city. Even after involving about two dozens private group housing company, there is no more such study has done concerning to these sectors. This thesis work will be the initial step towards understanding the current scenario/trend and role of housing colony system. Understanding the issues of such housing development is also relevant in understanding the future of housing colony system (organized housing development) in Nepal that may be initiated by government, private or public.

1.5 Scope and Limitation:

Scope of the study:

First of all, the study has been prepared as a partial fulfillment of the course of thesis for the requirement of the graduate level degree of M.A. in geography (T.U).

The study has mainly attempted to fulfill its objectives. Different plans, programs, acts and policy were scanned as possible and existing literatures, studies and research were also reviewed.

The study shall be useful in gaining the understanding of the tentative position and volume of different private housing colony promoted by private housing companies. It

attempts to identify that how and what types of housing system (Appartment, Duplex and Independent housing) is proceeding forward through by private groups. And the study attempt to highlight how organized housing development can be encouraged as well as regulated through proper policies and implementation of measures.

Limitations:

-) The study is focused on only private organized housing colony located in Kathmandu valley.
-) Due to the lack of enough materials concerning on organized housing colony and least of the research on this sector, most of the literature review part have been performed in urbanization sector
-) All the information about the housing companies which are operating their housing colony project are not completely available at the related agencies departments such as(KVTDC, TDC, LTDC, BTDC, DUHB) due to the lack of up to date information.
-) Housing companies were also reluctant to answer the queries.
-) With the limited time and unavailability of full data of housing company, all the housing company could not be included in study.

1.6 Organization of the Study

The study has been organized into nine chapters. The first chapter introduces the background and research problems of organized private housing colony in the Kathmandu valley. It includes the objectives of the study, significance, limitation and organization of the study.

The second chapter deals with research methodology and methods including the rational for the selection of the study area, research design, source of data collection (primary and secondary data) sampling procedures, data collection tools and techniques, data analysis and presentation with field experience.

The third chapter discusses concepts in order to broader research ideas through the review of related literature. This chapter focuses on the theoretical aspects of related housing colony approach and discusses the previous studies concerning organized housing colony, urbanization and real estate

The fourth chapter is concern with the housing scenario, situation and urbanization of the country and the Kathmandu valley. Similarly the chapter deals with the demand and

supply of housing, housing process, housing finance mechanism and Institutional and legislative framework in housing.

The fifth chapter is devoted to the overview of organized private housing colony, its historical aspect, procedure of organize private housing colony.

The sixth chapter deals with the growth trend of organized private housing colony system in Kathmandu valley. It includes position/status, growth pattern, execution pattern and state, distribution pattern, volume pattern, size pattern of housing colony and housing unit and pricing pattern of housing units in housing colony.

The seventh chapter analyzes the financial and managerial aspects of housing colony. It includes financing pattern of housing colony project and housing unit, payment system of housing unit, ownership transformation system, booking pattern, post management of colony, execution pattern of colony project, problems in developing the colony and infrastructures, services and facilities available in housing colony.

The eighth chapter has attempted to deal social, cultural, and functional aspects of private housing colonies to some extent.

Finally the last chapter (chapter nine) deals with the findings fact of organized private housing colony in Kathmandu valley under the headings summary, conclusion and recommendation.

CHAPTER-II

RESEARCH METHODOLOGY

2.1 Introduction

Research methodology is the description, explanation and justification of various methods of conducting research. Methodology is defined as the study of methods by which we gain knowledge: it deals with the cognitive process imposed on research by problems arising from the nature of its subject matter. It is the procedure which researcher can go about their work of describing, explaining and predicting phenomena. The term 'research' describes a process of systematic investigation leading to an increase in the sum of knowledge. In other words, method refers to a systematic approach to data collection and technique refers to the act of asking, listening and interpreting.

Both qualitative and quantitative methods are used in this research. This integrated research method is the considerations of both methods revolve around describing, understanding and explaining social phenomena while quantitative methods are more explaining, predicting and verifying. In geographical research, it is to our advantage that we combine qualitative and quantitative methods in order to get a comprehensive understanding of the issues under study.

It is known as the main guideline for the research work. Therefore the following procedures are followed to meet required objectives of this study. The following section deals with the research methodology that adopted to complete this study. It incorporates a background on research experience, the nature of data that was collected along with the study approach that was used. It also includes the types of research that was conducted. Primarily and secondary data will be used for research. Primary data is based on field survey through different interviews, investigation, and direct observation method.

2.2 Study Area

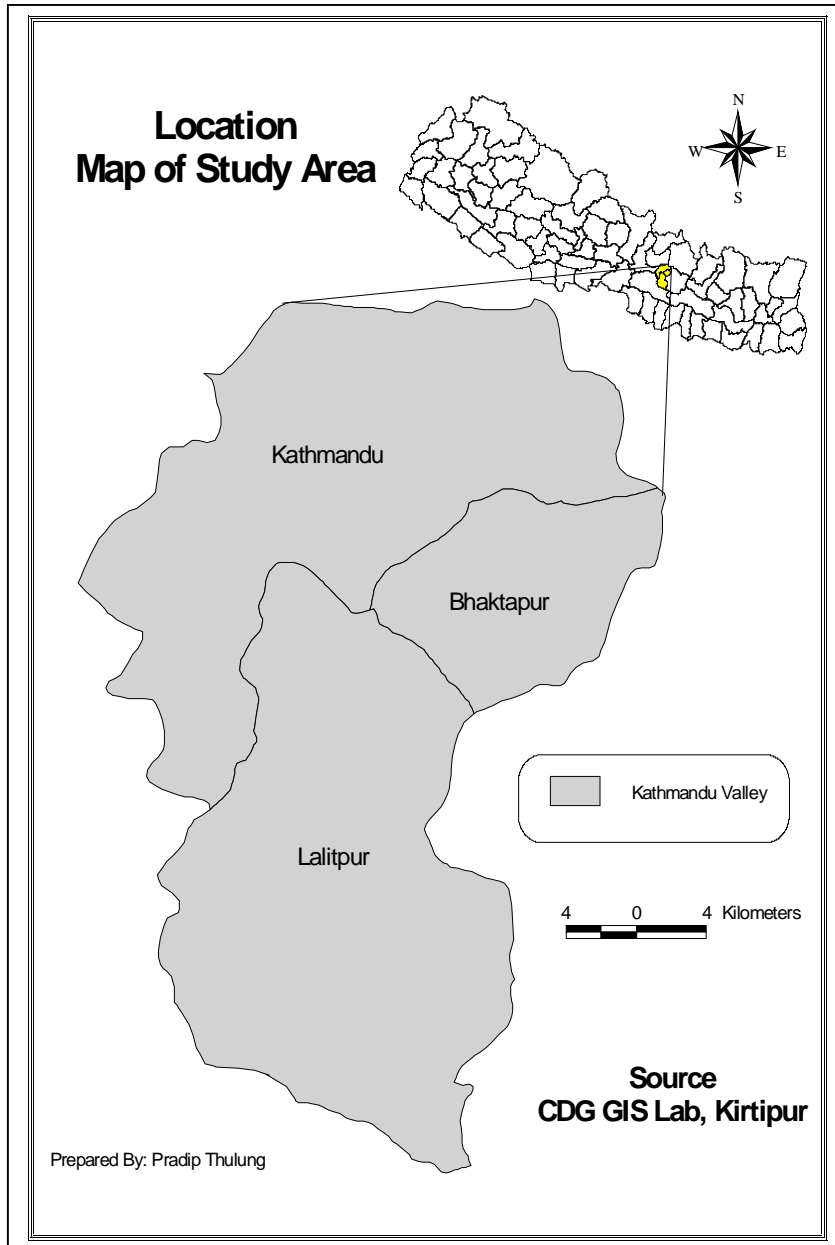
The Kathmandu valley is located in the central hill region of the country with an exotic setting surrounded by the green mountains. The valley is the political, cultural, economic and financial core of Nepal and it is located at the lesser Himalayas of central Nepal. It is located between $28^{\circ} 32' 13''$ to $28^{\circ} 49' 0''$ N latitude and $83^{\circ} 11' 31''$ to $85^{\circ} 31' 38''$ E longitude. The valley comprises three administrative districts namely Kathmandu, Bhaktapur and Lalitpur. However, it does not take the entire area of the three districts. In Kathmandu districts, out of 57 VDCs, Nanglebhare VDC falls outside the valley. Similarly in Lalitpur, out of a 41 VDCs, sixteen lie outside the valley. However, the entire 16 VDCs of Bhaktapur district are within the boundary of

Kathmandu valley. Kathmandu valley therefore includes 97 of the 114 VDCs of the three districts and five municipalities.

Kathmandu district has two municipalities: Kathmandu and Kiritipur. Lalitpur has one and Bhaktapur district has two municipalities: Madhyapur Thimi and Bhaktapur.

Excluding the area of 17 VDCs mentioned above, the total area of Kathmandu valley is 701.8 sq. km. it is 26 km. in east west direction and 20 km. wide north south direction.

Kathmandu valley is a 'Bowl-Shaped' tectonic basin surrounded on all sides by the mountains which have the height of more than 2000 meters. The central part has an altitude of around 1300m and rises toward the peripheral region. The valley is surrounded by



Shivapuri, Nagarkot, Phulchoki, Nagarjuna, Chandragiri ranges including various passes viz. Bhimdhunga, Sanga, Chandragiri and others.

2.3 Study Approach:

A research work depends on a certain study approach at least. It establishes a specialization to the study or research work towards a certain path/limitation. It is applied from the inception to the conclusion of the study and research. What types of research are going to be is depend on its study approach applied by the researcher. For

this study, mixed approach has been performed. The approaches applied in the study are as follows:

-) Observation study
-) Exploratory study
-) Descriptive study
-) Casual study

The different approaches have been applied respectively and together in this study. Observation has been performed in the initial phase of the study. Exploratory approach has been used during the questionnaire filling and literature review part. Similarly descriptive approach has widely been applied in the analysis part of the study. And some casual approach has been performed in the study as well.

2.4 Research Design

A research design or model indicates a plan of action to be carried out in connection with a proposed research work. It provides a guideline for the researcher to enable him to keep track of his action and to know that he is moving in the right direction in order to achieve his goal. It is a plan for the collection and analysis of data. The design may be a specific presentation of the various steps in the process of research that includes the selection of research problem, formulation of the hypothesis, conceptual clarity, methodology, review of literature and documentation, data collection, interpretation, presentation and report writing.

This is a macro analytical study of growth trend of organized housing colony in Kathmandu valley. Necessary data has been collected using questionnaire, interview, participation observation and other secondary data collection tools. The study has attempted to highlight the existing scenario and trends of organized housing colony system in Kathmandu valley. It is hoped that this research design may fulfill the specific objectives of this study.

2.5 Nature of Data and Data sources

The data collection is the heart of the research. In the field, researchers try to get reality from the respondent and emphasis to collect the accurate data. Qualitative and quantitative data are used in the research.

Both the primary and the secondary data were collected in the course of the study. Primary data were collected from the observation and detailed field survey: direct observation, interview, questionnaire survey, field note, checklist, focus group discussion and photography etc. And secondary data were collected from the different

sources like dissertations, articles, magazine, books, research reports, policy papers, publication, year books and internet websites.

Table No. 2.1: Nature of data and data sources

Sources	Primary sources	Secondary sources
Internal sources	<ul style="list-style-type: none">) Both structured and unstructured interview with the promoter and personnel of housing colony) Field observation) Focus group discussion) Key informant survey) Field notes 	<ul style="list-style-type: none">) Brochures/ prospectus) Newsletters) Bulletins
External sources	<ul style="list-style-type: none">) Unstructured interview to the surrounding resident of housing colony) Discussion to the local resident of surrounding housing colony) Photography) Unstructured interview and discussion to concerned authorities and employee 	<ul style="list-style-type: none">) Thesis and dissertations) Research reports, books and publications) Articles from magazines and websites) Statistical year book/ pop. Monograph by CBS) National housing policy) Publication of Kathmandu valley town development committee) Internet website searching

2.6 Sample Size and Procedure

Sampling may be defined as the selection part of an aggregate or totality on the basis of which a judgment or inference about the aggregate or totality is made. A single member of population is referred to as a population element when some of the elements are selected with the intension of finding out something about the population from which they are taken that group of elements are referred as a sample and the process of selection is called sampling.

There is still lack of up to date and full information and data about the housing companies. This is due to mainly the overlapping of organizational role and lack of keeping of systematic data of housing companies in related offices. TDC, KVTDC and DUDBC are the concerning department but the role and responsibilities are almost overlapped. Though more than 3 dozen of organized housing companies has been

estimated which are operating their housing colony construction under the norms and regulation of the government. Numbers of other small and individual are operating their private housing colony project independently.

At first I had aimed to include all the private housing companies which are conducting the construction and promotion of housing colony in Kathmandu valley and followed the ways as I can as. Unfortunately some companies were reluctant to me in filing my questionnaire form even if I repeatedly request them (I went up to 5/6 times in some private housing companies). So the study includes 27 private housing companies. Moreover I have included other 5 random sample of the resident of surrounding colony. In this way there is 32 sample altogether.

Table No. 2.2: Sample Size

Cluster	Sample size
) Housing colony/company	27
) Surrounding local resident of the colony	5
Total	32

2.7 Collection of Primary Data

The finding of this study is primarily based on the information collected from the field survey. This study utilized field observation questionnaire survey in depth interview, focus group discussion to obtain required information. All the primary data is collected by using various techniques and methods during the field survey. Open and closed questionnaire are used to collect the information from individuals (companies) from the study area. Besides this other methods such as field observation, photography, rapport building, key informant interview and Field note are used to collect the primary data.

2.8 Collection of Secondary Data

Secondary data and information were collected from several published and unpublished documents. To collect the secondary information, related books, reports, research papers journals, newspapers, internet websites, thesis and dissertation, brochures/ prospectus newsletters and bulletins of housing companies were the major sources which were obtained from government, non-governmental offices and libraries like TU central library, CBS, KVTDC, and DUDBC etc. Beside these the information were obtained from the related authorities.

2.9 Data Collection Tools and Techniques

Tools and techniques are the heart of data collection of any research. Most of the information of this study is based on primary information and data collected during the field survey in the study area. During the research work, more emphasis was given to collect the accurate information and an effort was made to get the reality of the phenomena. Both qualitative and quantitative data were collected for fulfilling the objectives of the study using the various techniques such as field observation, rapport building unstructured interview, in-depth interview, key informant interview focus group discussion and field notes taking.

2.9.1 Field Observation

Observation is systematic viewing of visible phenomena and object with the consideration of some kinds of especial purpose. Observation of people and surrounding is also an integral part. It is a fundamental tool of data collection in social research. From this method the various aspects of organized housing colonies of the Kathmandu valley were observed. Moreover direct field observation as a major weapon of geographer in collecting the real information for the study which helps to minimize the possible fallacy in accuracy in information collection. Researcher collected the data by direct observation without permission of respondents (company) and sometimes taking the permission from the respondents and concerned agencies.

2.9.2 Rapport Building

It is the first stage to familiar with people of the study area. The researcher can not take qualitative data without rapport building. It is necessary and difficult part at the beginning stage of data collection. It helps the researcher to get real information from the respondents. Almost all the respondent of field survey of this research was private housing companies. So I have to reach at every colony project site where colonies were developing. All the colony projects are encircled with high wall and fence. So I had to request to security guards at main gate to access to concerned authorities. Some companies did not allow to their authorities/employee preventing me from the main gate. Though most of them gave me access to them but it was hard to get their time for filing my questionnaire due to their busy and professional work. I convinced them saying the academic purpose of the study and will support this study to people and concerned authorities and stakeholder who are involved and eager to get some more information about the present private housing colony system in Kathmandu valley. Besides it I adopted same methods of rapport building to the surrounding people and other concerned authorities and agencies such as TDC, KVTDC, and DUDHC etc.

2.9.3 Scheduled Questionnaire

Scheduled (individual) questionnaire survey is one of the important techniques in research field which helps to gather both quantitative and qualitative data and information. The researcher used open and close questionnaire in this study which structured form questionnaire or schedules in funnel shape (general to specific).

2.9.4 Unstructured Interview

It is an idea and informal way of collecting information. I used this technique to government authorities at TDC, KVTDC, DUDBC and some surrounding resident of the colony.

2.9.5 In-depth Interview

Many researches have taken the in-depth interview for more qualitative information of respondent at micro level. The in-depth interview helps the researcher to grasp the view of people's perspectives, their meaning and their entire life events. The total sample of the research was 32: surrounding resident of colony 5 and housing colony 27. I found that much information was repeated that I prepared for the housing companies. It was something lengthier and bored both of us. So I got 3 in-depth interviews to the different housing company's authorities/employees.

2.9.6 Key Informant Interview

Key informant interview is one of the major method of data collection as well as a checklist of data which takes a research on a qualitative path. I had selected 3 respondents as key informants to see the trend and growth of whole organized housing colony in Kathmandu valley. The key informants for this interview were selected on the basis of the strength of housing companies and their well dealing with researcher.

2.9.7 Focus Group Discussion

A focus group discussion is the use of group interaction to produce data and insights that would be less accessible without the interaction in the group. It is an effective tool. The focus group discussion method is a finally an expensive and effective way to get the real information from a small group of people. It can be defined as a research technique that collects data through group interaction on a topic determined by the researcher. The main purpose of focus group discussion was to obtain more detailed information about the impact and relationship of housing colony at the surrounding area of the colony project

area. I had taken one focus group discussion in the gathering of 8/9 local people of the colony project area.

2.9.8 Field Note

Field notes were recorded during the field survey. It was most unsystematic way of recording the information. Field note can be defined as in gradients of study which helps to form better final product.

2.9.9 Case Study

Case study is a rather complex types, in which a person, group, part, plan community, process or policy is considered as a unit while undertaking the study of its entire dimension (Achrya, 2001). It is a reliable method of data collection for driving sufficient information. A case study is a research strategy which focuses on a single or generation, institution, event decision, policy or group. A case study is not the study of an individual. Instead it is the study of all the dimension of the individual or the event. In this kind of study the title of the study is supposed to be the individual unit. Then all the aspects affiliated to this unit are investigated. The study has undertaken to explore and identify the existing scenario and growth trend pattern of organized private housing colony within the Kathmandu valley. The needed information were collected and obtained through the different private housing companies and their housing colonies.

2.10 Data Processing Tools and Analysis

Once the relevant data/information has been collected through different sources the next step is to arrange it for processing and analyzing the data so that inference can be made. The study has applied both qualitative and quantitative procedure/method to analysis the data. Qualitative method provides depth and detail understanding about the subject matter while using the statistical tools the quantitative methods gives the completeness.

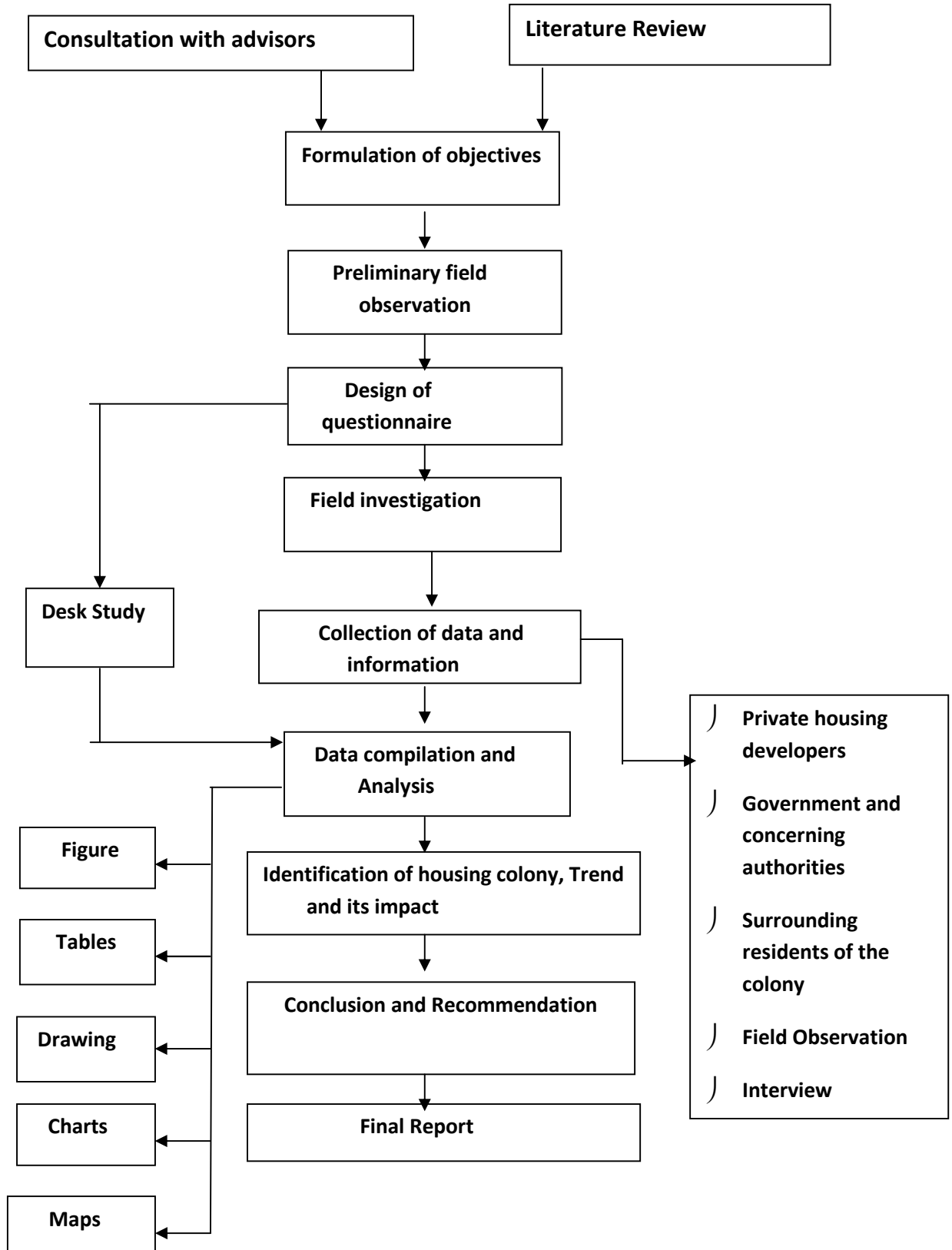
Qualitative data were described and explained in the study and quantitative data were processed by using statistical tools such as frequency table, graphs, bar diagrams, charts and map in detail and a comprehensive form. MS excel and Arc view (GIS) software was applied for proper data analysis.

Table no. 2.3: Data processing/analysis tools

Software	Statistical tools
MS Excel) Frequency analysis) Diagrams, Charts and Graphs
Arc view) Map

The figure of the methodology is given below.

Figure No. 2.1: Research methodology



CHAPTER III

LITERATURE REVIEW

For any kind of research work, the previous literatures related to the concerned topic on which the researcher is working should be reviewed as to get an idea of what the previous researcher have done. It helps a lot to the researcher to follow the right path.

Review of literature is important aspect of academic research. The relevant studies give ideas, which help researcher to address the research issue systematically. In the standard research formats the placement of literature after discussion of many other components is for the convenience of the researcher themselves.

3.1 Literature review related to housing and urbanization

Joshi (1999), in his book 'Housing and Urban Development in Nepal', has described the different aspects of a good housing. They are: Good location, Land, Building materials, Finance, Technology, Amenities and Securities. He has explained two types of housing: government housing and popular housing. He argues that housing and urban development is not priority sector of government in Nepal till date now but private sector itself doing best in this field. The role of private sector in land development and planned housing is noteworthy. Over 1500 hectares of land were developed through private initiative over the past decades only with Kathmandu and Lalitpur. There has been a considerable re-orientation of the government policy in Nepal pertaining to the private sector's participation in urban development.

Buchanan (1976), on 'The World of Man' has studied in historical development of world urbanization. In the ancient age the fertile lands used to develop as small urban centers due to the concentration of people for the intensive agriculture activities and permanent and sustainable opportunities of livelihood: development of settlement in Nile, Indus, Peru, Mexico and China. In the medieval age (ninth century) the world trade route centers appeared as major urban places like Venice, Geneva, Florence, Milan and London. During the nineteenth century the pattern of urbanization again changed. The large manufacturing centers with metals, textiles, leathers and coalfield industry grow gradually larger in their size. It had been mainly due to the high demand and absorption of people in such large industries. Later the new trading system, banking, insurance and advanced transportation system based on the railway and steamship imposed the effect in contemporary urbanization system. Along the rapidly urbanization many 'Shanty Towns' developed in the large cities due to inability of poor people to afford even the cheapest accommodations. As a result there emerged such types of towns by the rural immigrants in inner and outer parts/suburbs area of the city mostly in underdeveloped countries.

Migdani (1992) has attempted to study on 'Urban Housing in Developing Economy' where he has assumed housing as an important constituent of the development effort of economy both in terms of economic and welfare aspects. The role of housing to generate income and employment is also well known.

Jayaram et. al. (1988), has studied about housing development and pattern on 'Housing in India'. The systematic attempts at planned growth in housing began in India only after independence (1947). In the view of the scarcity of land, high development cost, expensive low density development, poverty of masses ever expanding cities, increasing distances etc a shift from 'plotted' to flatted development is being observed in many cities. Though these kind of a shift is presently confined to large and metropolitan cities.

The World Bank (1995) in the paper 'Housing Enabling Markets to Work' has mentioned the housing sector as a key component of urban economy. A good housing improves the productivity of urban economy. According to World Bank, housing productions is one of the most important economic activities in the urbanization process. Housing investment typically comprises 2 to 8 percent of GNP and from 10 to 30 percent gross capital information in developed countries. Thus the housing sector must be seen and managed as a key part of the over all economy. The paper presents the five different perspectives in housing, they are: consumers, housing producers, housing finance, institutions, local government and central government. During the 1970 and 1980, it became increasingly clear that government could not maintain a role as direct producer of housing and this role must necessarily be performed by the formal and informal private sectors.

Basyal (2000) has studied on 'Urbanization in Nepal'. The study holds the urbanization process as a means of development. It can help to change in demographic and socio-economic characteristics of the people. Urbanization avails to diffuse information for its hinterland and people can exchange goods and services. Urban areas can provide more facilities to rural people. In this respect, a planned urbanization, more especially in hills/mountain areas should be developed as market centre; it will promote the level of development of the region. So, each municipality or urban areas should be developed as a service centre for its geographic zone of influence, not only as a settlement unit. Regional approach may be relevant for sustainable development of the urbanization in Nepal; the priority should be given to medium sized or small towns rather than large towns or cities. Because in a country, like Nepal, a large number of medium and small sized towns will be more desirable than a small number of very large cities.

Budherdt (1971) have elucidated the gateway model of settlement and town development in cases as diverse as the growth of towns in the Canadian prairies and prehistoric Mexican highlands. The gateway hypothesis explains the growth of market centers, towns and cities. The consequence of the growth of settlement in strategic

locations is 'gateways' or entrance to a large hinterland. Locational, functional and hinterland characteristics differentiate a gateway settlement from the transitional central place. Functionally gateway settlements initially develop in response to trade or the setting on sparsely populated frontier areas. Gateway towns tend to develop in the contact zones between areas of differing intensities or type of production along or near economic shear lines.

Bajracharya (1969), in his book 'Kathmandu: Architecture and Environment' has emphasized a good housing with the growth and expansion of every city. He argues our residential community and the environment around which we live and grow reflect our social institutions and economic expansion; we must find and create the new radiant environment of houses which shall satisfy the most profound needs of human nature and aspirations. He further argues that a house is not just four walls. It is a social monument and economic expression of the city. So Kathmandu city has to promise to fulfill its commitments of the good housing for its citizens.

Mohan (1994) in his book 'Understanding the Developing Metropolis' has explained about the urbanization process based on the South America being specific in Bogota and Cali of Columbia. He assumes that urbanization process takes place when the predominant economic activity in a region shifts from primary production (agriculture, mining, logging) to secondary and tertiary production (processing and servicing activities). Urbanization has been the most pervasive development phenomena in countries whose per capita income has grown from low to high levels.

The UN (2004) has highlighted the present scenario of world urbanization on its publication 'World Urbanization Prospects'. It reveals that the world's urbanization population continuous to grow faster than the total population of the world. As a consequence, about 3 billion people or 48 percent of human kind is now living in urban settlement and it has projected to cross the 50 percent in 2007 and 5 billion by 2030. The majority of all urban dwellers are living in smaller urban settlements, while less than 5 percent of the world populations are living in mega cities. Population growth will be particularly rapid in the urban areas of less developed regions averaging 2.3 percent per year during 200 to 2030. By 2017, the number of urban dweller will equal the number of rural dweller in the less developed regions. In contrast, the urban population of the more developed regions is expected to increase very slowly, from 0.9 billion in 2003 to 1 billion in 2030 averaging 0.5 percent annual growth.

Dahal (2007) in his book 'Urban Studies: Concepts and Theories of Urban Planning and Management' has attempted to describe the rapidly urbanization of Kathmandu valley, its causes and impact. He has explained about the most of the challenges faced by Kathmandu valley today as the result of huge influx of people from the rural area hauling expectation of better employment, opportunity and social security. He has pointed out that the huge influx of people has put greater pressure in the socio-economic and environmental conditions and lack of clear cut planning policies,

increasing poor and squatter settlement and lack of affordable housing are root causes of increasing socio-economic and environment concern of Kathmandu valley. He concludes that urban planning and management should be a main political agenda of both national and local level for well planned urban growth and development of the city.

Joshi (2003), in his book 'Regional Planning and Development', supports on well urbanization of different urban centers for the development of country. He has presented urbanization as a long term and systematic process. Urbanization means more than the location of central location and central activities. It is delineated to areas in a particular time. It is a natural and spiraling process. Any model that explains the process should be continuous over time and space. Its economic aspects are the rate and direction of economic expansion and agglomeration in cities and change in technology. He has pointed out the causes of rapidly urbanization in developing countries, they are: rural to urban migration, change from agriculture activities to non-agricultural activities, change in occupational structure from agriculture to industry and service; change from sparse rural pattern to a relatively dense urban pattern; increased interactions and linkages among dense urban centers; change in behavior; values and institutional structure;; change in physical environment; increase in modern amenities and services.

A report of UNDP/Nepal (1992) titled 'Environmental problems of Urbanization and Industrialization' has studied the existing situation and future direction of continuous environmental deterioration due to rapidly urbanization and its industrialization. According to this report, there is a growing realization among decision makers within the government and the external agencies alike that urbanization could play an important role in Nepal's social and economic development. However, deteriorating urban environment and massive resources required to correct it are often cited as the reasons for not pursuing a policy of deliberate urbanization. This is due to the urban expansion process is occurring without corresponding expansion of basic services, resulting a rapidly deteriorating urban environment. And the report supports of enhancing of environment quality are: water, drainage, sanitation, traffic circulation, transportation, communication, open space, energy and shelter.

KC et. al. (1992) in their journal 'Nepal Population Journal' has made an effort to describe urban future with migration. They have shown their concern on the enormous pressure for shelter and services which has rapidly frayed the fabric, especially in the Kathmandu valley. Today the Kathmandu valley is facing several challenges to maintain their infrastructure, employment and sanitation properly. Proliferation of slums is rapid outside and inside the ring road, public transport is overcrowded and oversized such as roads, buses, public spots. And water supply system is allowing fragile sewerage to leak into drinking water and spread infections disease. They reveal that around 60 percent of the water distributed in Kathmandu is lost through leakages.

Ranjitkar (2000), in his article 'Urban Structure and its Modern Transformation in Kathmandu' published in 'The Himalayan Review' have attempted to describe the continuous changing pattern of urban structure of Kathmandu especially in three different periods: historical periods, modern periods and recent periods with the change in way of life, standard of living, social and economic condition. According to him the urban structures are transforming gradually due to the people's perception. Although the structural transformation started in Rana rule with the development pursuing western style palaces, the heavy change in structural design of building and their layout came only after democracy due to the use of new technology and building materials. The road connections outside the valley with the terai region and Indian border greatly facilitated the import of new building materials and have caused the considerable changes in the city structures. As the physical structure of the city undergoes transformation, the traditional disappears.

UN (1998) in its publication 'Housing Finance: Key Concepts' deals human settlement and housing as an important sector of national economy, sustainable development and the quality of life. Housing and urban infrastructure constitute a major investment in all countries and it is also the major financial assets of most households. Housing represents a vast source of potential economic growth and requires a heavy investment. In industrialized countries the housing stock typically accounts for more than one quarter of tangible capital wealth, the share of new housing construction is between 3 to 8 percent of GDP, excluding housing related infrastructure and household services, and private households typically spend between 20 percent and 25 percent of their net income on housing.

Gottdiener (1994) in his book 'The New Urban Sociology' have mentioned that after the World War II the scale of urban life and urbanization changed forever especially in developed country. The mass movement to the suburbs from the central manufacturing city/core city inspired to transform the city toward a new system of urbanization. The way to home, work and neighborhoods were knit together. Automobile, commutation or complex mass transportation lines of rail roads, subways and buses became the threads that helped to weave a new regional urban fabric. People's homes were located miles from their jobs, while the place where they lived took on new importance as a community with the mass introduction of home ownership. Gottdiener has attempted to explain these types of out urbanization as a new changing form of urbanization.

Ghosh (1998) in her book "Introduction to Settlement Geography" have also attempted to analyze the changing morphology of a city. She argues cities in all in all parts of the world are subject to physical as well demographic change. The change has been remarkable in the last hundred years when there has been a fast increase in the aerial extent as well as the vertical growth of the city. This increase allows more and more people to live in cities leading to rapid changes in the urban morphology. These changes have been possible primarily due to technological factors. The term urbanization in the context of transformation from ruralism to urbanism is concerned

with a three-fold change: a. behavioral b. economic c. demographic. All these affect the spatial organization of human settlement, and thereby the design of the city landscapes itself.

Information related to the rapidly urbanization and its effects on land use in the Kathmandu valley is available on (http://www.nepalnews.com.np/contents/weekly/spotlight/2003/aug/01/cover_story). With the growing pressure of population and construction of new buildings, the Kathmandu valley has already turned into a concrete jungle at the first phase of urbanization in 1980s, the fertile lands along the major river belts were destroyed to make way for private buildings. Now this process threatens to eat up all the remaining open space, far and wide of the valley. Although the government has introduced new planning to systematize the urban settlement under a land management system, it is too little too late compared with the extent of population growth rate in the valley. The past experiences have shown that is not lack of planning but the commitment for execution that hampered the scientific urbanization.

Pokharel on an online article, 'Growing Urbanization in Kathmandu Valley' available at (http://www.ohmynews.com/articleview/articl_esp) has dealt the interrelationship between rapidly urbanization growth and urbanization. She writes that the open area in the Kathmandu valley has fallen from 63 percent to 41 percent within the last 20 years. We will barely be able to find an open area in the valley within another 20 to 50 year if this trend continues. She further argues the government can not stop people from coming to Kathmandu, but it can provide options. The government should not make Kathmandu the centre of every service. Half of the problem could be solved if government offices were shifted from the capital to elsewhere. Services, facilities and opportunities provided in the Kathmandu valley should to other cities as well.

Sherma (2060), in his article published in 'Himal' a fortnightly magazine dated 1-15, jetha, has described urbanization as a key procedure of development. He presents his argues that although Nepal is a country with village future (development) is in the urban. Urban plays an important role to enhance the both qualitative and quantitative production and productivity. So, country should attempt to urbanize the village as possible. But he further argues that the urbanization should now be more decentralized, planned and organized.

3.2 Literature Review Related to Housing Colony and Real Estate

Tamang (2005) has shared his views in 'The Kathmandu Post' a national daily magazine dated 17 January, about major challenges of organized private housing colony in valley. He comments that the government's planning permit rules are not up to date and conducive for the growth of this sector. The housing colony act has still to be formulated, while existing laws forbid for land pooling and acquisition to private

sectors. And frequent blockades and strikes too have been causing problems in procurement and delivery of goods and services.

Nepal Shelter Sector Background Report (1992) has dealt with the urbanization and residential situation of Kathmandu valley. The report presents that the current residential land prices are much higher in the Kathmandu valley than other Nepali towns. Average residential land prices per meter square in valley are five times higher than those in Biratnagar. Being the largest city and capital of Nepal, helps Kathmandu's high residential land prices. Land in Kathmandu has become an object of speculative investment, a place where any Nepali can enjoy a secure and profitable long term investment. And the report presents the most important assumption that the people's ability to pay for housing is directly related to their current incomes.

Trolley (1998) in his paper 'Urban Housing Reform in China' has studied on the latest housing situation and the policy of china government in whole housing sectors. According to the paper privatization of housing had been announced as one of the most important of Chinese economic reforms. The step is particularly dramatic in a socialist country where for decades ownership of property was considered as an anathema. The main concern of Chinese housing reform was with urban housing. The major goal was concerned with the appropriateness of the amount and quality of housing space, and the extent to which housing was occupied by those who value it most highly relative to other goods.

Bhandari (2062) in 'Annapurna Post' a national daily magazine dated 29 Chaitra has shared his view about the community housing/ housing colony practice in Nepal. He has attributed the globalization effect after the reestablishment of democracy as the main cause for such types of housing culture in Nepal. Similarly there was slowly changed in people's behavior towards consuming habits of varieties of modern and aesthetic products available at market during the late decades. Such types of changing life style of people diverted towards the housing sector as well. As a result, rapid changing lifestyle of people with their economic growth helped to grow the community/group housing culture in Nepal.

Similarly he has written an article titled 'Housing Colony: What is the Next Destination' on a national weekly magazine 'Aarthik Abhiyan' dated 10-16, December, 2007. He advises to the housing companies who develop different types of housing colonies to promote their project targeting both high and low economic class and to extend their project outside the Kathmandu. Because the companies mostly working within valley targeting only median economic class people. He supposes that government should play a vital co-coordinating role for this. And he shows his satisfaction with the breakthrough of organized community housing colony culture of country in this short span of time because it has been about one decades only started the housing business in Nepal whereas there is 100 years of history in Europe and America and about 50 years of history in East Asia of this types of housing culture.

Jamir (2007) has written an article titled 'Socializing in a New Society of Housing' in 'The Kathmandu Post' a national daily English paper dated April 27, describing the increasing trend of living in a housing colony in Kathmandu valley. She writes most of the housing colonies provide modern amenities like clinics, health clubs, beauty parlors and department stores within the housing premises. Sizeable land, private parking areas, playground for children, gardens, good location, peace, sound comfortable accessible and full of all infrastructure environments which make life even more convenient are inspiring people to live in housing colonies. She argues that the city would have been set up in more orderly manner if such kinds of planned schemes had been developed decades ago in the Kathmandu valley.

Chhetri (2007) has written an article titled 'Islands of Peace, Luxury' in 'The Himalayan Times' a national English daily paper on 20 June date, dealing with the experience of people living different housing colonies of Kathmandu valley and services and facilities provided by the housing developers. The feel-good, eco-friendly environment with tastefully designed surroundings, open spaces and privacy, plus facilities at down to earth prices are attracting middle and upper-middle class people, while service providers are trying to meet client's every need and demand with various amenities inside the colonies which are essential for a peaceful, homely living. He claims that life inside housing colonies posses the additional qualities of an organized neighborhood. Well-planned and organized, the housing colonies stand in stark contrast to haphazard construction going on across the nation.

Panthi (2008), a well-known Nepalese architect and urban expert in 'New Business Age' a monthly business magazine of May issue, shares his views regarding the urbanization and urban structures. He describes the present organized private housing colony system as a post-modernism culture in architecture and urbanization means environment-friendly structures, use of processed building raw materials, high-rise building(vertical structures leaving more land open), light look and low maintenance cost. He emphasizes on the zoning of the land for especial residential, industrial, conservation and commercial zone. Due to the lack of zoning by the government, the private housing colonies are proving a new concentration as well. He suggest for the satellite township near the main city like NOIDA of India. For this they have to develop area like Sankhu, Lele, Godawari or Dahachowk which could reduce the congestion of the main city of the valley.

3.3 Review of Existing Acts and Policies

A. Apartment Act, 2054

It is the first and only one act related to organized private housing colony so far. It is dedicated only to apartment housing. The acts deal with:

-) Provision relating to permission of apartment housing

-) Provision relating to sale, ownership and handover of the apartment
-) Provision relating to agreement
-) Common benefit and liabilities
-) Management of joint apartment housing

B. Building By-Laws 1992

Building Bye-laws for Kathmandu and Lalitpur municipality area have been developed by KVTDC in 1992. This building by-law deals mainly regarding the common open spaces in planned residential areas.

C. Kathmandu valley municipality Building Measuring Rod, 2064

This building measuring rod – 2064 has been formulated to handle, monitor and legalize the different infrastructural and building construction work within the municipalities of Kathmandu valley and municipality oriented VDCs.

D. Other Housing Legislation

-) Public land acquisition
-) Planning and zoning
-) Land taxation
-) Land act

E. National Shelter Policy – 1996

National shelter policy 1996 was prepared with the concept of making proper arrangement to fulfill the basic housing need of all people of the nation. The main policies are:

-) Housing production and maintenance
-) Effective mobilization and allocation of financial resources
-) Organizational improvements

F. Development plan 2020

The development plan 2020 was proposed to handle and manage the declination of agricultural land, haphazard urban growth, environmental deterioration and declining of infrastructures properly.

The main objective of development plan 2020 is to prepare a broad regional framework plan (strategic plan) of Kathmandu valley integrating both land use and transportation network

G. Review of Five years plan

The regional development policy of the fourth plan (1970 -1975) has implicitly urbanization policy with the objective of developing regional development centers and the nodal points of transport network as urban centre.

The seventh plan (1986 -91) is so far the only plan in which a separate chapter is devoted to housing and urban development. It is the first attempt to put urbanization and housing policy in the national development context and to initiate urban development on the basis of co-coordinated initiatives of various sectors and different levels of government.

H. Kathmandu Valley urban Development Plans and Program Strategy Plan for Kathmandu Valley 1991, Vol-1

This plan gives different approach to determine for urban development in the Kathmandu valley.

*All the details about the above existing act and policies have been presented in annex.

CHAPTER-IV

HOUSING SCENARIO

4.1 Concepts and Definitions:

The word 'House' is typically a permanent place for human being living. A house is shelter for the rest, safety, comfort and for protection form enemies and adversity of climate. It includes space for rest, sleeping, cooking and bathing etc.

On the other hand, housing is process, an activity through which people provide themselves with shelter and services. It is primarily settling of people in a safe place and location. Housing includes those qualities of comfort, convenience and amenities which are essential for emotional and social well being of family. Safety and comfort are the basic essential for housing. Housing includes in addition to dwelling, various utilities, facilities, and services.

Housing is a continuing development process. Besides it physical aspect, it is also viewed upon its economic and socio cultural aspects. It is a landmark of whole human civilization. Housing is an element of urban growth. Hence proper planning and management of housing is important for assuring all people's access to shelter as well as planned urban growth. Housing has multi faceted physical, social, cultural and economic characteristics.

4.2 National housing situation

It is extremely variation in the characteristics of housing in various ecological and locational parts of Nepal. This is due to wide variation in topological and climatic condition. On the other hand, housing system is extremely affected in recent days by the availability of space (land), development and infrastructure aspects and increasing changing pattern in life style of societies etc.

Due to remoteness, a large number of settlements developed under isolated conditions the settlement pattern found today are linear, scattered or small isolated clusters. Geographically, mountain and hill settlements are dispersed as compared to terai settlement. Settlement patterns differ due to geographical, cultural or religious differences.

According to the 1991, NNHS survey, the total housing stock is estimated at 3 million dwelling units. The distribution of housing stock in Nepal is mainly categorized as follows:

Table No. 4.1: Existing Housing Conditions in Nepal

(Households by Percentage Unless Mentioned Otherwise)

SN	Particulars	National	Urban	Rural
1.	Stock By Housing Type			
	Squatter	7.81	9.09	7.64
	Traditional(urban)	0.53	4.28	0
	Kachcha	42.18	8.25	46.94
	Semi-pucca	41.18	37.09	41.76
	Pucca	8.3	40.27	3.67
2.	Stock By Tenure			
	Squatter	7.21	8.61	7.02
	Renters	6.70	24.46	4.28
	Owner Based			
	Owner-Builder	18.33	12.87	19.07
	Owner- Purchaser	2.79	3.47	2.7
	Owner-Occupier	64.97	50.97	66.93
3.	Over-Crowding Indices			
	Total Dwelling Unit (DU) Size (Sq. ft.)	867.5	780.8	879.3
	Per Capita Space (Sq.Ft./Person)	155.3	134.7	158.2
	Number of Persons Per Room	2.2	2	2.2
4.	Level of Services			
	Indoor Toilet	5.58	37.23	1.27
	Outdoor Toilet	17.85	33.66	15.70
	Open Space	58.98	22.57	63.93
5.	Condition of House			
	Good	20.60	26.34	19.82
	Average	67.61	61.98	68.37
	Bad	11.80	11.68	11.81
6.	Household(Characteristics)			
	Family Size (in No. of Person)	6.30	6.30	6.40
	Family Members Literacy(in No. of Person)	3.40	2.10	3.60
	No. of Income(in No. of Person)	2.50	1.90	2.60
7.	Satisfaction Level of Present House			
	Very Satisfied	3.97	10.91	3.02
	Satisfied	63.3 7	66.37	62.97
	Dissatisfied	32.67	22.72	34.02

Source: National Shelter Policy1991

In overall, there is national average of two persons per room. In urban areas, the density is significantly higher in lower income households than in higher income groups. 25% of urban households are in rental accommodation. Rental households are smaller than the national average. These have 4.7 persons per household compared to 6.3 for the total national population.

In urban areas, majority of the urban households find it difficult to manage even the minimum housing. Various land readjustment projects have helped to increase the land supply. These projects have succeeded to accommodate tenants as well. But the housing situation of the urban poor is the worst. They are vulnerable to eviction, natural disasters and calamities. In urban areas, the locations of low income settlements on steep slopes and food plains also make settlements vulnerable.

4.3 The Context of Kathmandu Valley

4.3.1 Background

Due to the high population pressure, there is high demand of housing in the valley but housing is being unaffordable to low and medium class people. Conventional way of owner-built house is predominant which is constructed individually. Housing becomes long process due to limited self-resources which follows following steps:

-) Owing of land by purchasing or from ancestors
-) Building by own resources, due to limited resources, housing process under-goes in phases.
-) Infrastructure and utilities services are provided later.

Such informal growth of settlement creates urban sprawl. Linear dense settlement is found around good access roads and low dense occupancy in other areas. As and effort of organized and planned urban growth, land development schemes such as land pooling, GLD (guided land development) have been implementing for a 2 decades ago. But the housing plots supply rate is only a fraction of total demand which also found vacant for long duration after being developed.

4.3.2 Demographic Profile

The Kathmandu valley, the capital city of the country, due to the existence of all government and non-government mechanism, opportunity of all types of services and facilities is rapidly increasing everyday. The political instability of the country is also maintaining with 5.3% annual growth the situation whereas the average annual growth rate was 3.8% in 1991 census. The population of valley is 1618159 according to 2001 census.

Table No. 4.2: Demographic situation of Kathmandu Valley

Item/Year	2001
Population of Valley	1645000
Household Number	318636
Average persons per household	4.1
Population growth	5.3

Source: Census, 2001

4.3.3 Urbanization of Kathmandu Valley

Today urbanization has spilled over beyond the city limits, which makes it even more difficult to regulate the growth of the city. According to World Bank Report, population in the capital city as urban population of Nepal in 1990 was found to be 20%. The population growth rate of Kathmandu, Lalitpur and Bhaktapur municipalities is much higher than national average growth- 2.08% between 1981-1991 censuses, which are being clearly marked by migration to Kathmandu valley from other districts of Nepal. The urban growth rate of Kathmandu valley is 5.3 percent which is highest of all other urban centers. This is due to massive urbanization and also due to large agglomeration of economic activities.

Table No. 4.3: Urbanization trend and projection of urban population of the Kathmandu valley.

		Urban population of Kathmandu valley		
Year	Total pop. of the valley	Kathmandu	Lalitpur	Bhaktapur
1981 CY	740619	259185	79875	74548
1991CY	1078909	452597	115865	93375
2001CY	1645000	1065000	229852	133328
2011PY	2020404	1057582	319655	209921
2021PY	2597238	1439328	340000	240000
2031PY	3338760	1937756	440882	283062

Source: Census 2001

4.4 Housing Demand and Supply

Housing demand is simply housing need which is backed up by ability and willingness to pay. In the national scenario, most of the families live in their own houses. But in urban area, about 24% families live in rental accommodation and about 7.3% live as squatters (source: National Housing Policy)

According to (NHS, 1991), our country will require another 2.5 million housing units by the year 2006. In urban areas alone 43, 0000(17%) of new units will be required from 1992 to 2006.

Table No. 4.4: Estimation of Demand of housing units in Nepal

(Household by percentage unless mentioned otherwise)

Particulars	National	Urban	Rural
Existing units	3000000	300000	2700000
Additional required up to 1996	5.5	2.1	6.2
Additional from 1997 to 2001	5.3	2.0	6.1
Additional from 2002 to 2006	5.0	1.9	6.0
New units required from 1992 to 2006	2500000	17%	83%

Source: National housing policy, data of year, 1991

Note: The additional required housing unit is in percentage for each consecutive year.

4.4.1 Housing Demand in Kathmandu Valley

The housing demand in the valley is at very high due to rapidly population growth. Due to the increase in population, the valley needs more houses to maintain the extra population every year. The urban population is growing at a rate of 6.4% relative to the national population growth rate of 2.4% (CBS, 2001). Whereas, in urban Kathmandu valley, more than 25% of the households live in rented housing units. Surveys conducted by the central department of population, T.U. Kathmandu, found 39.65% of the population residing in Kathmandu were migrants.

Current deficit of housing units is caused by the population inflow. Renter families are staying in insufficient housing spaces and hence a portion of them are in immediate need of housing units. People in squatter are in need of livable housing stocks. Small portion of existing houses are in wretched state demanding for new houses.

The immediate housing deficit is hence assumed to be demanded for the 15% of population of the valley. The future demand of the housing units will be due to increase in population (National housing policy, 1991). The demands of dwelling units are thus calculated in the following table.

Table No. 4.5: Dwelling units demand in Kathmandu valley

	Extra Pop.n	Per/HH	Need of dwelling units
Housing deficit till 2001	242724	5	48545
Extra deficit need from 2001 to 2011	739153	5	147831
Extra deficit need from 2011 to 2021	1076788	4.5	239286
Total housing need till 2021			435662

Source: National Housing Policy, 1991

Thus in coming 20 years, 435662 new houses will be demanded. That means 21783 units per year will be demanded in Kathmandu valley.

4.4.2 Land Demand in Kathmandu Valley

According to the proposal of development plan 2020 of the Kathmandu valley, the minimum average gross residential density in the valley is proposed to be 300 person/hectares. Based on that proposed gross density of 300 persons per hectare, the land demand for predicted in the following table.

Table No. 4.6: Land Demand in Kathmandu Valley

S.N	Year	Projected population increase	Proposed gross residential density(per hectare)	Gross Land required (hectare)
1.	2000-2011	739153	300	2464
2.	2011-2021	1076788	300	3589
3.	2031	1815941	300	6053

Source: National Housing Policy, 1991

It suggests requirement of 6053 hectares of developed plots to meet the demand of housing 2021 that is about 300 hectares of gross land per year has to be developed in Kathmandu valley.

4.5 Housing Process

The owner-building system is predominant in Nepal. First step is the owning of a housing plot from ancestors or purchasing. The traditional practice is to own the raw housing plot. Such land plot have insufficient and unplanned road network. The construction of building is started with personal loans. It goes with phase-wise. The owners come to stay there. Then utilities and amenities are provided gradually.

The traditional practice leads to the haphazard urban growth. Hence scientific methods are being adapted in which housing land is developed by readjustment of the raw land and provided with all the necessary infrastructures and services before handing ones to owner. The most common type of land readjustment is land pooling. And the site and services is normally acted by the government mechanisms. Recently the land is also being developed by private groups usually informal though the land development by private efforts is aimed at supply of planned housing land having efficiently planned circulatory system of access, these plots have insufficient width of roads, lack the infrastructure and services.

These types of housing process are depicted in following figure

Figure No. 4.1 Housing process

Types	Process	Remarks
Traditional housing process	People → Building and infrastructure → Utilities and services	Process is faster and results are unplanned settlement growth with insufficient circulation, infrastructure and services
Housing on formal and readjustment (land pooling GLD)	Land → Infrastructure, utilities and services → People → Building	Process is slower but results are planned settlement growth with sufficient circulation, infrastructure and services.
Housing by the housing developers (organized housing companies)	Land → People → Infrastructure, utilities and services → Building	Process is little faster but results is well planned settlement growth with modern and sufficient circulation, infrastructure and services

4.6 Land for Housing

Land is scarce resource in the valley. The rapidly increasing land price is making the housing cost unaffordable. There are two methods of land owning.

A. Land owned from ancestors:

Indigenous families have their land from ancestors which they own legally. But as the population of family increases with new generation, sub division of land occurs and come to the stage at which land cannot be further sub divided.

B. Land owned by purchasing

Land is purchased from three forms:

- I. From the land owners, final bookers.
- II. Government Efforts: Guided Land Development and Land Pooling
- III. Private big land developing agents: property developers and Real Estate Company.

4.7 Housing Finance Mechanism

Housing in Nepal, as well as in the valley, is predominantly owner-financed type. Housing finance are hence mostly based on sources of family saving in the forms of Cash or Convertible assets. And people had to rely on borrowing from relatives and personal Close Contact person. But the source for housing building has been changing slowly. One of the most common forms of housing finance mechanism is the loan from bank and the other financial intuitions. In the early days, Banks and other financial intuitions were used to land to their employees only in housing sectors in limited amount. This was prevalent in both government as well as private Banks. Employee provident fund was also one of the major sources of housing finance for regular government employees. Similarly, Nepal Bank Limited, Rastriya Banijya Bank and Agricultural Bank were the leading Banks to provide the loan on the housing finance to their employee.

Nepal Housing Development Finance Company, a semi-private financial institution established in BS 2046 was a potential institution for providing housing credits for owner-builders and housing producers. Similarly, Nepal Housing and Merchant Finance Company Limited was founded in 2051 BS, the only private Company dealing in a housing Sector, was the financial institution providing wider range of loan amounts in long term payments providing for all income groups. But the loans are only accessible to middle and higher income level of people in the Kathmandu Valley.

But the present situation has been dramatically changed. In the context of current political situation, Housing development has become the safest investment for the investors. Similarly, the commercial bank and other financial institution are also seeing the safest investment sectors. They are providing loan in a large volume of amount in housing sectors within consumer lending title. Billions of rupees annually have been invested by banks and other financial institution in this sector. There is throat cutting competition among these financial institutions to attract the client for housing loans. Today, lending rates for home loans have come down to as low as 6.5 percentages from a high of 18 percentages in 1995, as per Nepal Rastra bank statistics. The rate of the drop has been sharp.

With all these initiatives, home loans today have fast grown into one of the biggest segments of retail banking/consumer lending in Nepal. Home loan make up one third of the total consumers loans for RBB. In case of Everest bank limited, this sub sectors holds 48% share. Banks are happily extending loans for innovation and extension of existing houses and even for purchasing of land. Hence in the recent years, private companies are also focusing its investment in housing sector with different special lucrative housing schemes. This has been a great opportunity to the people to choose the right bank and finance for housing loan at right time. Including Standard chartered bank, Everest bank, almost all the Commercial banks, Development bank and Finance Companies are providing loans for people in the lowest interest rate.

CHAPTER – V

ORGANIZED PRIVATE HOUSING COLONY

5.1 Definition:

In this study, the organized private housing colony is defined as a well-designed housing unit in a planned layouts schemed with the view of overall aesthetic environment rather than individual focus. It includes well planned and organized apartment buildings, duplex, attached or detached houses developed by housing developers. It is known as a community/group housing colony as well. Organized private group/community housing colony is defined as the multi-storied building or number of houses built on the planned landscape having dwelling units with the provision of sharing same building and common spaces, facilities or services within a boundary of one large spaces. The people from different social, cultural and professional communities come to settle in the housing colony. So it is called community housing colony as well. Organized private housing colony can be classified into three major types:

A. Independent Housing:

It includes separate dwelling units but sharing common non-built up area such as road, parking and other various.

- i. Separate houses
- ii. Twins/Row houses

B. Duplex Housing:

It includes two floor building having two different housing units to settle. The two families settling in a building uses their respective floor but they share other common space and services together.

C. Flat Apartment Housing:

It includes the number of dwelling units in the same building and sharing all other non-built up area.

An organized group housing colony is called ‘Gated Community’ as well. In its modern form, a gated community is a form of residential community containing controlled entrance for pedestrians, bicycles and automobiles and sometimes characterized by a closed perimeter of walls and fences. It usually consists of small residential streets and includes various amenities.

Amenities available depend on many factors including location, demographic composition and community structure. If there are sub-associations that belong to master associations, the master association may provide many of the amenities. In general, the larger the association the more amenities than can be provided. Amenities

depend on the type of housing. For example, single family-house communities may not have a common-area pool, whereas a condominium/apartment may offer a pool, since the individual units generally can not have their own pools.

The main benefits of private organized group and community housing is the equal financial sharing in infrastructure development, housing management and security management among the resident living within a colony project. It definitely minimizes per housing unit cost. Besides it living in a city with access to all about the services and facilities (offices, colleges, schools, hospital, market...) required infrastructure, reliable security system, living with the intellectual, professional and high profile people in a scenic and luxurious place, opportunity of exchanging of different social, cultural and religious aspects and no hassle of all about the making of the new house for the settling are the strong factors of organized private housing colony.

5.2 Historical Background

Housing in Nepal is dominated by the owner builders who are directly involved in the entire housing process. Housing process involves purchasing of land, building home and then providing the infrastructure. Increasing urbanization in the country is putting pressure on the existing housing stock in the cities. Slow delivery of adequate and affordable dwelling units has been a major issue in the urban areas. Decent house is a dream of middle and lower income people. Due to the absence of proper physical planning, there was a problem to work together for both private and public sectors.

In the mean time, government formulated the legislation called Apartment-Act-2054. Sensing the opportunity created by this act, private companies started investing and made sustainable to the real estate industry. In this study, real estate development means housing development as well by the organized housing companies and doesn't include land development. Private group housing consists of a large number of units in grouped together in a variety of way paths and open space. These may vary according standard of construction, size, number of inhabitants, types of units and facilities. Housing units is transferred to buyers over a period of two to three years after paying the cost of unit in an installment basis or full payment basis which is governed by the act. This is actually an attractive scheme to buyers as well as means to generate resources for builders to construct units within a construction period of two to three years. People's preferences have also changed over period of time. This can be proved by the geared housing companies involving in this sectors and the success can also be gauged from the fact that most of the builders has started new phase or construction at different places. This is due to complete selling, full booked or more than 75% of the unit booked at initial phase itself.

Housing was not such a big issue in the past days, but rapidly urbanization due to the high population growth this has been a major issue of Kathmandu valley. The government had at first moved forward its hands for planned and managed housing

during 5th plan (2028 BS)/1970BC. Government had first proposed the housing planning named physical development planning for Kathmandu valley in 2028 B.S. And the valley land-use planning was made in 2033 BS/1976BC. based on the same physical development planning. The first housing project from government sector in valley was 'Kuleshower land Housing Project' in 2033 B.S. The project was completed in 2046 BS/1988BC covering the land 26.75 hector (KTVC). Similarly other two land housing project (Dallu and Galphutar) was started at the same year. About two dozens land housing projects have been operated and operating by the government sector. The Khusibu-Nayabazar land housing project has been assumed as the most successful project so far.

The seventh plan is so far the only one plan in which a separate chapter was devoted to housing and urban development. It is the first attempt putting of urbanization and housing policy in the national development context and to initiate urban development on the basis of co-ordinated initiatives of various sectors and different levels of government. The ninth plan recognized that the country wide urbanization process is very much influenced by the development of Kathmandu valley. One of the major objectives of 9th plan was to increase involvement of private sector in housing and improve in the quality and quantity of housing stock through the level of development, physical infrastructure and services, to increase the access of finance for housing sector development. The government had introduced different act, policies and strategies to address and handle properly the housing sectors.

Ansal Chaudhary group is the first established private organization to enter in the private housing colony project as developer in Kathmandu valley. The joint venture company consists of Chaudhary group of Nepal and Ansal Bud bell construction, a multinational company of India. And the Kathmandu residency is the first housing project of Ansal Chaudhary, which was started in 2054 BS/1996BC and completed in 2057BC/1999. It is the pioneer private housing colony project in Nepal which holds 180 apartments in 15-5-3 ropani. Today more than 3 dozens of big and small private housing companies are involving in this sector. Park View Horizon is the new housing project of Barun Developers in collaboration with Pepsi Company of India owned by RKJ group, India. The project covering about 26 ropani, 16 multi-storied high rise apartment is the biggest investment in Nepal so far. The project has planned to invest about 3 billion within three years. The most luxurious condominium in Kathmandu, the project has the most expensive housing units so far ranges minimum Rs. 1 crore to Rs. 3 crore.

5.3 Organized Housing Colony – An Overview

Due to the increase in the living standard of middle class urban dwellers, there is increasing a demand of modern dwelling units in selected locations of cities with proper services everyday. People almost prefer living near their work places but the combined cost of buying land and build a house is very high due to high cost of land in

the surrounding core area of Kathmandu valley. Conventional housing practices will consume lot of land if housing need of the people in valley is to be met. At the same time it will be virtually impossible for lower middle income and lower income group to buy costly resources like land for building. Hence to provide housing at an affordable price to the city dweller two basic components has to be reduced. First is building cost and second is land cost. Building cost can be deduced by adopting new technology whereas land cost can be reduced by adopting the principle of high density settlement, which can be achieved only by organized housing colony projects. It is also known as group housing or community housing where multi storied buildings, independent building and number of attached or detached housing unit have been built up on a planned landscape.

5.3.1 Factors of Growth of Organized Private Housing Colony

The concept of private organized group housing had emerged from the industrial countries where large number of industrial workers had to accommodate in residential quarters very near to working places of the industrial location. Common facilities like open spaces, parking area, play ground, road were shared among occupants of the dwelling units. In our country, the concept is recently introduced in Kathmandu valley due to rising demands for readymade housing. First of all, the apartment act 2052BS had been brought to promote and regulate this sector. Along the time the organized private housing colony is being popular in Kathmandu valley and has become a major economic phenomenon of the country. Interest and living at the colony is increasing and numbers of housing colony are rapidly developing. So there is a huge boom situation of it. Various factors have directly and indirectly affected it.

Some general factors are discussed below:

Rapid urbanization due to the migration is the main input of the growth of organized private housing colony in Kathmandu valley. The people from all over the country come here seeking the opportunities and services which is lacking outside valley. The increasing coming of the people (migration) into the valley is making the rapid growth of population. The rapid population growth is resulting to rapid urbanization. Rapid urbanization is being haphazard and unplanned urban growth. Similarly there is necessary to accommodate properly to those extra huge mass of the people. And the organized housing colony is becoming one of the appropriate solutions of these situations.

There are an intense economic activities and opportunities in the Kathmandu valley. It is due to the capital city of the country. Almost all the financial, commercial and industrial sectors are running there services and activities. So it is only one the commercial and financial hub of the country. The rapid urbanization is further helping to grow it as well. The intense economic activities have increased the income level, improved the living standard and changed the life style of the people. The life style of

the people changes with increase in income level and improve in general living standard. They prefer living in a better environment with all types of facilities in the proximity. The housing colonies are becoming an option for it.

Decreasing size of land is also one of those causes in the growth of organized housing colony. Land sub-division is the main issue of Kathmandu valley. Then there is an excessive land sub-division in the valley against the rapidly population growth. Small plots cause inconvenience construct the house and to live. Besides it rapid urbanization and sub-division of land is helping to increase the land value/price which we experienced in last one and half decades in the valley. This has also maintained to grow the colony system in the valley. The ratio of man to land (land scarcity) is increasing so there is necessary to develop the high density settlements. The ultimate solution for this is high rise apartment housing unit.

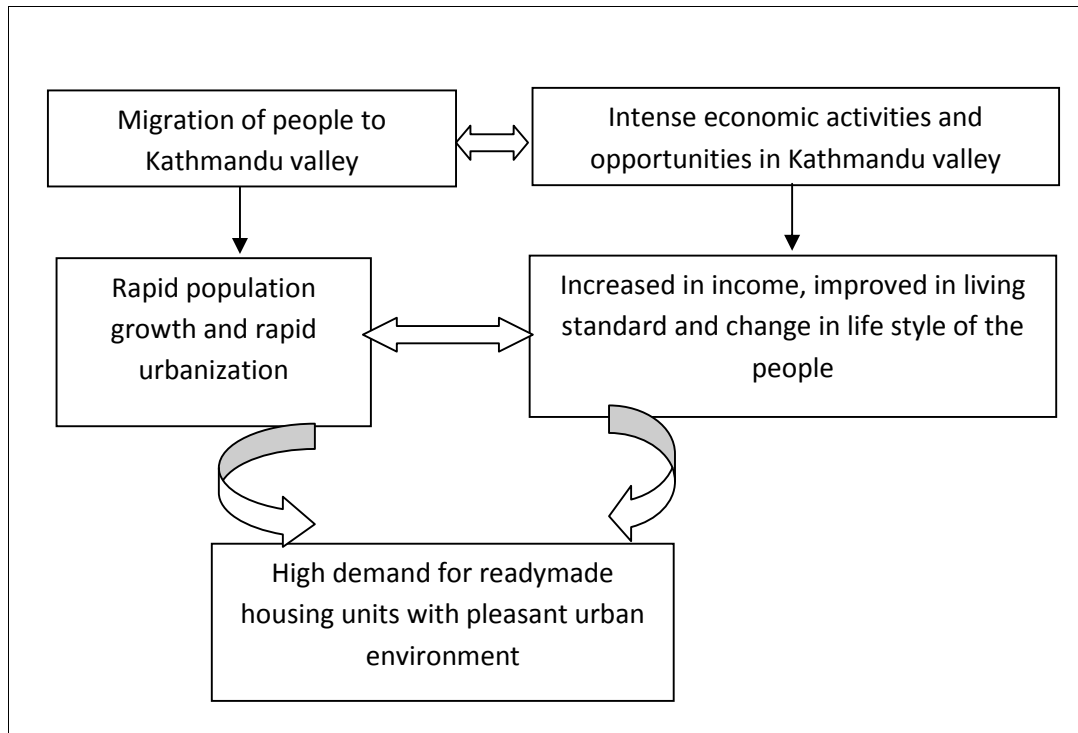
Similarly the globalization effect is significantly playing the role to enhance the community/group housing colony system in the Kathmandu valley. People who have returned home after living for a long time in the developed countries or those who are working out of the country (NRNs) have a well and long experienced of living in such housing colony. They almost prefer to live in such colony in Nepal as well when they came back to country.

Moreover there are some specific factors for the growth of housing colony which is discussed below briefly.

-) People who don't have enough time or willingness to build their own house are increasing in the urban cities. So the demand of ready-made with all necessary amenities is increasing.
-) Consumers have facility to view and select among ready-made houses and utilities before purchasing.
-) Provision of utilities, services and security along with ready-made houses is also major attraction to people who are suffering from shortage of drinking water, insufficient drainage and inconvenient roads.
-) Provision of large common spaces is preferable and more useful for multiple purposes rather than individual limited spaces within plot of conventional housing.
-) Apartment houses are preferable for its low costing and all facilities.
-) Investors found the new field of investment in the period of business crisis.
-) Large commercial banks and other financial organization are investing on such field as a safe investment sectors.

“The demand of readymade houses is increasing and such houses are being booked before construction which is encouraging more housing developer to come. Today more than 3 dozens of small and big housing developers are implementing their housing schemes where about 1600 families are living in around 60 different housing estates” (The Himalayan Times, June, 30, 2007).

Figure No. 5.1: factors influencing group housing colony necessity



5.3.2 Legal Procedure for Organized Housing Colony:

Different private housing companies are involved in the development of organized housing colony projects. Private housing companies need to comply with certain legal procedures before they start the construction of building in the plot of land that is in the name of the housing company, housing companies then go through some legal procedure to make sure that whatever they are doing as per the law of the country.

Colony project plan and proposal have to be approved by TDC. Proposal should include financial and technical documentation. Technical documentation includes master plan of the project, building plans and details. Planning permit and construction permit are two different permits which are given through two different departments. For the individual housing colony project, first planning permit is required and only after receiving of planning permit, construction permit is given by TDC. Planning permit is given through KVTDC if the norms and standard is followed. But in case of apartment housing only after construction permit, planning permit is issued by DUDBC. Construction permit of apartment housing is provided by the TDC as well and colony project is executed. Monitoring and confirmation is jointly done by both

agencies KVTDC, TDC and DUDBC. Planning permit is required for all the housing colony projects whether that colony project is located in municipality or VDC.

As in any housing process, land owing is the first step in such housing, too. The companies look for the raw land among the suitable sites. Land is purchased from one or more land owners. In some companies, big land owners are also among the partners of the company. Normally land parcels in low price and few land parcels important for connecting the land with main roads are purchased in high price. The land is then accumulated and suitable group housing colony master plan is designed. Roads are laid according to the master plan and landscaping is done accordingly. Infrastructure is developed. Simultaneously houses are constructed. Utilities and services are provided and finally ready-made houses with the provision of specified infrastructure and services are sold.

The housing process may be depicted by the following flow diagrams.

Land → Building and infrastructure → Utilities and services → People

The legal procedure that the housing companies go through before and after the completion of the buildings can be summarized as follows.

-) First of all the housing company selects the land for their proposed housing colony project.
-) After the selection of land they buy the land in the name of company from the existing owner.
-) At the time of buying the land they acquire the land ownership certificate.
-) After acquiring the land ownership certificate in the name of the company, the company prepares a proposal which includes:
 - Tariff Lists
 - Leaflet
 - Brochures
-) The proposal that the housing company prepares is then submitted to the various government authorities that are responsible for the development of the housing colonies.
-) The government authorities that are involved in the process for apartment construction are:
 1. Town Development Committee (TDC): this government authority is responsible for issuing the construction permission.

2. Department of Urban Development and Building Construction (DUDBC): it is a head approving authority. It approves the map prepared by the housing colonies. And also approves on the planning permit issued by TDC.
3. Kathmandu Valley Town Development committee (KVTDC): it is a monitoring body. No specific documents are sanctioned here. It sits for signing authority for joint approval for issuing the planning permit.

) The government authorities that are involved in the process for individual houses

1. Town development committee (TDC): this government authority is responsible for issuing the construction permit.
2. Kathmandu valley Town Development Committee (KVTDC): It provides the planning permission for a project. It approves the map prepared by the housing colony companies.

) The housing company submits the following drawing to the KVTDC for their approval.

- Structural
- Engineering
- Architectural

After submitting the above mentioned drawing to the authorities, they make a site visit at the proposed site for construction. They also assess if the housing colony project is feasible in that particular. After which they approve the plan. The four mentioned authorities follow the procedure mentioned as follows:

- At first people from all the departments make site visits on separate days.
- After which they have a joint meeting to discuss the project.
- Then Town Development Committee issues planning permit.

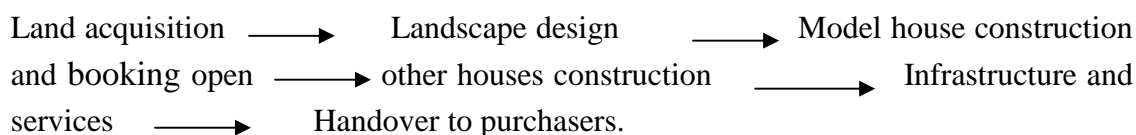
) After acquiring the planning permit they present the drawing of the house to KVTDC.

) After the approval of the drawing from KVTDC, then the housing company can start the construction of the buildings.

) All four bodies again come together after the completion of the buildings or apartments to inspect if work is done according to the planning permit and drawing or not. After which they issue a construction completion certificate to the housing colony.

-) Once the construction completion certificate is obtained, they get the building ownership certificate from 'Malpot' once all the tax and due payment are cleared.
-) Then the housing company starts selling the houses.
-) In case of individual house 'Lalpurja' is issued to the person buying the house at the time of purchase.
-) In case of apartment, the person buying an apartment gets the 'Lalpuja' of the apartment he/she buys. The 'Lalpurja' of the land where the apartment is constructed is in the name of the people buying the individual apartments. This means that everyone living in the apartments has the ownership of the land where the apartments is constructed. The common land like occupied by road, common park etc is in the name of the committee formed by the people residing in the apartment.

Similarly project execution process can be depicted by the following flow charts:



But in actual practice, housing projects have not strictly followed these steps. Most of them have only received building permit from local authorities. To get permission from VDC is even easier due to lack of technical experts. And there is no proper monitoring system.

5.3.3 Documents Required to Acquired the Planning Permit

-) Land ownership certificate (Lalpurja) and latest land revenue receipt.
-) Blue print of the land (Napi Naksha)
-) Map of the proposed plan and overlay of the proposed plan.
-) Brief description with the map showing all the physical facilities road, home pipe lines, open area, length, breadth, area etc of the land.
-) Formats followed by the consultants or engineers/technicians. Legal documents stating the required procedures and format and followed.
-) Application to be submitted to TDC by the concerned authority for acquiring permission for the proposed plan.
-) Map clearly showing where the home pipes of the area will lead to. The map should also clearly state from where the electricity and drinking water pipe will be taken, how the wastage and waste water will be managed.
-) Certificate from Nepal Engineering Council showing that the procedure followed in the construction of 'Group Housing' met the standard quoted.

-) If the technology and techniques are registered in ‘registration firm’ then the certificate must be obtained from there itself. Otherwise, if approved by other person then photocopy of the citizenship of such person must be submitted.
-) Map showing the dimension of the plot of the land.

5.4 Institutional Involvement in Organized Private Housing Colony

The current institutional framework of land and housing development in Kathmandu valley is fragmented and uncoordinated. There are various government organizations and agencies involving in this sector. So there is almost the overlapping of role and responsibilities due to improper co-ordination between government, institution, private organization and other agencies which had made more troublous at work. The apartment act 2052BS has provided private sector for investment in prevailing housing. The act enhanced to flourish the organized private housing colony system in valley.

The urban development department of KMC is a sole authority to plan the land and housing development projects in Kathmandu valley. Though, execution and implementation process goes through various order and level among the different agencies. Institutional roles and involvement of central and local level of government devoted to organized private housing colony of Kathmandu valley are given in the table below.

Table No. 4.7: Institutional Involvement in Organized Housing Colony

Levels	Institutions	Roles and Responsibilities
Central Level	<ul style="list-style-type: none">) Ministry of Physical planning and works) DHUD and DUDBC) Department of Land Survey and Land Registration) Line Agencies 	<ul style="list-style-type: none">) Policy guidelines, Action plan.) Transfer of Land titles, registration, cadastral maps, and land holding records.) Provision of services.
Local Level	<ul style="list-style-type: none">) Municipalities) KVTDC) Private Investors/Promoter) Financial Institution) NGO/ NGOs 	<ul style="list-style-type: none">) Implement land development program, building permits, regulations, framing bye laws.) Implement land development programs, building regulations, by laws.) Land and housing development program) Short term loans with mortgage.) Lobbying for housing

) Local People	rights/improvement of physical environment of slums and squatters.) Raising awareness among local people.) Lobbying and co-ordination for the local infrastructure development and environment.
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Source: city diagnostic report 2001

CHAPTER-VI

GROWTH TREND OF HOUSING COLONY IN KATHMANDU VALLEY

6.1 Position/status/state of Housing Colony in Kathmandu Valley

The apartment act – 2054 is the fundamental aspect to develop the organized private housing in Nepal. The act availed to those housing company for easier entry to this sectors. Ansal chaudhary group is pioneer private organized company to step in developing of housing colonies projects in Nepal. Along the apartment act -2054, the company started the first housing colony project named ‘Kathmandu Residency’ at Bagdol of Lalitpur in 2056 BS. It was the first such kind of housing colony project covering about 15 ropani had completed in 2058 BS.

With the first such kinds of housing colony project operation, many other private housing companies also gradually started developing the other housing colony projects and made settle hundreds of people at the well infrastructured colony area of the Kathmandu valley. The private housing companies/developers are enthusiastically working in this field recent days. They are developing a well-designed, furnished, and decorated and infrastructures housing colony with all utilities and services at a beautiful, accessible and safe location of valley. Today, there are about 3 dozens of small and big private housing companies whereas some companies are multinational company from the abroad with a large amount of investment. “The companies from India and China have already established with number of their housing colony project while the investment(FDI) from some European countries like UK and Spain have also proposed for their housing colony project during the 2064/65 fiscal year” (Shravan 22, 2065, Kantipur). The companies have developed more than 5 dozens of private housing colony projects (residential areas) in the Kathmandu valley. More than 4300 housing units have been developed and about 70% of the total housing units have been already sold or booked so far. These private housing colony projects have absorbed billion rupees of investment. The big business houses of the country such as Chaudhary group, Kedia group, MS group, Continental group and Civil group etc are already established their foot into this sector while some other big corporate houses like Khaetan group and Golcha group are trying to get their foot into this sectors.

There are 27 different private housing companies in the study which holds 55 different residential housing colonies. The housing colonies have occupied 1382 ropani (700670 Sq.Mtr.) of land area of the valley. The colonies hold total 4324 housing units where 2956 units have been already sold or booked (Table no. 1, Annex III).

*** The detail Position/status/state of Housing Colony in Kathmandu Valley has been shown in table no. 1. of Annex III**

6.2 Trends of Housing Colony in Kathmandu Valley

The private housing companies emerged as a pool to fulfill the gap among the various situation viz. rapidly population growth, rapidly urbanization, economic expansion, increase in income of people, growth of purchasing power, globalization effect and changing trend of society and people of Kathmandu valley regarding on housing. As a result, number of housing companies entered into the development of housing colony project. Living at housing colony developed by private companies continuously attracted to the people. The Ansal chauthary, a joint venture private company was the first housing company to operate the organized group/community housing colony in the history of Nepal. It has been estimated that about 4 dozens of big and small housing companies are involving this sector till date. Some number of foreign companies is also working here in this field. Along the time there is increasing number of housing colony projects by different private housing companies every year. The growth of housing colony projects is shown in the following table in different year.

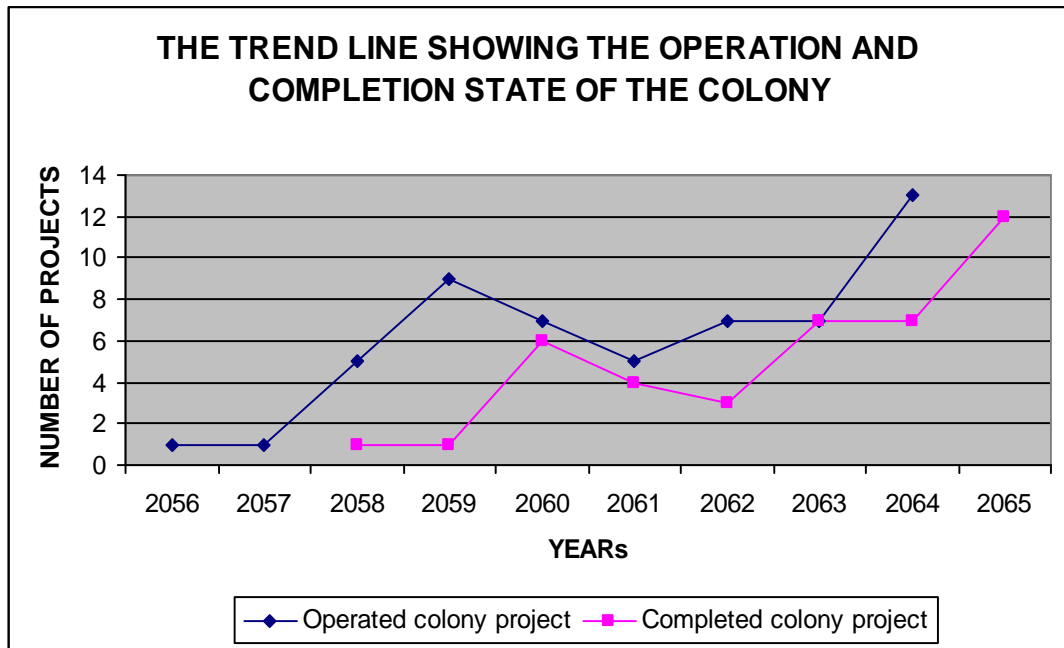
Table No. 6.1: Trends of housing colony by year

Year in BS	Operated colony project	Percentage	Completed colony project	Percentage
2056	1	1.8	0	0
2057	1	1.8	0	0
2058	5	9.1	1	2.8
2059	9	16.4	1	2.8
2060	7	12.7	6	16.7
2061	5	9.1	4	11.1
2062	7	12.7	3	8.3
2063	7	12.7	7	19.4
2064	13	23.6	7	19.4
2065	0	0	12	33.3
Total	55	100	36	100

Source: field survey, Source: Field Survey: 2064/65 B.S. (2007/08 B.C.)

*Note: the colony project completing within 2065BS has been included and only the colony project operated up to 2064BS has been included.

Figure No. 6.1 Trend line showing the volume of operated and completed private housing colony by year.



Source: Field Survey: 2064/65 B.S. (2007/08 B.C.)

The above table and map shows the volume of housing colony in Kathmandu valley in different years with the project state. The table shows that only one project operated in 2056 BS. The year 2058 BS is the year to complete the first organized private housing colony project and it was the Kathmandu residency at Bagdol of Lalitpur. And the project is the same project that is Kathmandu residency. The political situation of the country is also reflected the development of this sector. The early days of development of this sector had been along the extreme political situation of the country. So least of the project has been operated and completed in the beginning period. There is increasing number of projects in later periods with political settlement of country. The year 2059BS is the enthusiastic year with 9 new colony projects and 6 different colony projects have been completed in 2060BS. It is also a great achievement for the development of housing colony. The highest operation volume of colony project is 2064BS year where 13 different projects have begun. Similarly the highest completion volume of colony projects is 2065BS where 12 different colony projects have been successfully completed by the private housing companies.

6.3 Execution State of Housing Colony

The research has studied about the growth trend and position of private housing colony in Kathmandu valley. And the study has included 27 different housing companies which hold 55 housing colonies at different location of Kathmandu valley. There is not a long history of development of housing colony system in Nepal. The early development stages of private housing colony in Kathmandu valley had been along with the extreme political situation of the country. So the past early days of housing

colonies had passed away with very miserable condition. But in the late years, this sector has been getting an enthusiastic achievement. The different big and small or new housing companies are developing many projects every year. Some of them have already completed successfully and handed over to community group living at the same colony as well.

Table No.6.2: Execution status of housing colony

S.N.	State of colony	Number of colonies	percentage
1.	Completed colonies	36	65.4
2.	Under construction	19	34.6
	Total	55	100

Sources: Field Study, 2064/65 B.S. (2007/08 B.C.)

Note: the colony project completing within 2065BS has been included and only the colony project operated up to 2064BS has been included

The above table shows the execution status of total housing colony in Kathmandu valley. Out of total 55 housing colony, 36(65.4%) colony projects have successfully completed. And rests of 19 are under construction.

6.4 Pattern of Execution Period of Housing colony

The development of housing colonies is a constructional works with various sequential responsibilities. The project consists of various sequential works and responsibilities viz. land acquisition, planning and designing of master plan, infrastructure development, material supply, and construction works of building/housing units, legal and practical procedure, settling people at colony, management and full hand over process of colony to community etc. So it takes comparatively more time to complete any types of colony project to more extent.

The execution time period of any colony is depend on what types and volume of housing units is being constructed by the housing companies. The colonies covering large land space with large volume of housing units or big colony projects completes comparatively within longer time of period. Similarly the housing unit pattern also affects the duration of colony projects. The apartment types of housing unit are comparatively lengthier than those independent and duplex housing colony. Besides legal procedure, availability of construction materials, selling condition of housing unit, relation between labor and company, management team and many other factors play a role directly and indirectly in the execution period of housing colony.

Table No. 6.3: Execution time period and number of colonies

S.N.	Time duration	Number of colonies	Percentage%
1	2 Years	7	19.4
2	3 Years	13	36

3	4 Years	9	25
4	5 Years	6	16.7
5	6 Years	1	2.8
	Total	36	100%

Source: field survey: 2064/65 B.S. (2007/08 B.C.)

Note: : the colony project completing within 2065BS has been included and only the colony project operated up to 2064BS has been included

The execution time period of colony varies among the different private companies. The table shows that the execution time period of colony is from minimum 2 years to 6 years in maximum. The 36 percent colonies have been completed within 3 years of time period. The second colony project of civil homes at Tinthana, Kalanki is the ever longest completing colony in the Kathmandu valley. It was completed within 6 years of time period. The maximum colonies have been completed within 3 to 4 years of time period and only 19% out of 36 have been executed within 2 years of time period.

6.5 Multi-colony Housing Companies

There are about four dozens of big and small private housing companies involving in the developing of housing colonies in the Kathmandu valley. But the companies are not at the equal strength to develop the colonies. Some companies are just pacing their step to this sector with only one project while some other are established in their field promoting the housing colony. This is due to their long practice and experience in housing sectors. The company with long background and early entry has almost more than one housing colonies. The investment capacity and the strength of management even play an important role in the operation of various housing colonies.

Table No. 6.4: The housing companies with multi- housing colonies

S.N.	Housing Companies	No. of colonies
1.	The Comfort Housing/CE Construction	10
2.	Road show Real Estate	4
3.	Civil Homes	3
4.	Sunrise Developers	3
5.	Oriental Builders and Developers	3
6.	Ansal Chaudhary Developers	3
7.	Continental Developers	2
8.	Star Homes	2
9.	Stupa Housing	2
10.	Housing and Prudential	2
11.	Guna Builders and Developers	2
12.	Amarawati Housing	2
13.	Dreamz Homes	2
14.	Paradise Housing	2

Source: field survey, 2064/65 B.S. (2007/08 B.C.)

The table no. 6.3 shows the list of companies with multi-housing colonies. According to the study, 14 companies are holding more than two colonies. The comfort housing company or CE Construction Company is the largest company holding 10 colony alone in the Kathmandu valley. The company has already completed 5 colonies and other 5 colonies are under construction. The company has expanded its hands to Pokhara and Dharan as well. There are four companies holding 3 colony projects and Road show housing company is holding four different colonies in the Kathmandu valley.

6.6 Pattern of Private Housing Colony

It has been already stated that there are mainly three types of housing units in private colonies. So, the colonies have also been developed with its housing types. It is universal truth that there may never be the same interest and choice of people. Various factors viz: income level, family size, habits, personal job, individual interest etc, affects it directly and indirectly. Some people prefer to settle at independent housing colonies. Similarly some of them prefer to live at apartment colonies whereas some other chooses duplex housing for their settlement. So there seems the mixture situation in the development of housing colonies. Some colonies have developed with unitary housing unit whereas some projects have also developed consisting two or all types of housing units.

Table No.6.5: Pattern of housing colony

S. N.	Types of housing colony	Total no. of colonies	percentage
1.	Independent housing colony	33	60
2.	Appartment housing colony	16	29.1
3.	Duplex housing colony	0	0
4.	Independent and appartment	1	1.8
5.	Independent and duplex	4	7.3
6.	Appartment and duplex	1	1.8
	Total	55	100% ^s

Source: Field Survey: 2064/65 B.S. (2007/08 B.C.)

The above table number 6.5 shows the developing pattern of housing colony in the Kathmandu valley. It has been found that 33 colony out of 55 total (60%) housing colonies have developed as independent housing colony. It is followed by appartment housing colonies with 29%. Similarly, the housing colony consisting independent and duplex housing unit holds 7.3 % share. Similarly the housing colony consisting independent + appartment and appartment + duplex unit holds 1.8 percent share.

The analysis indicates that independent housing colony is the most popular among the housing developer and people who seek housing unit for their settlement at private

housing colonies. Independent housing colonies have mainly developed outside and periphery of ring road. Similarly the apartment housing colony is the second choice of developer and people. This types of colony has intensively developed within ring road especially core area of valley.

6.7 Volume Pattern of Housing Unit

Though independent housing is popular, the study found the apartment housing unit among the sold unit is more popular for settling at a colony among the three different housing units. It is mainly due to the economic cost of unit where more families can live in a single apartment building. It is the appropriate solution to enhance the housing density within the limited area. And it can be the ultimate solution of Kathmandu valley.

Table No. 6.6: Volume pattern of housing unit at housing colony

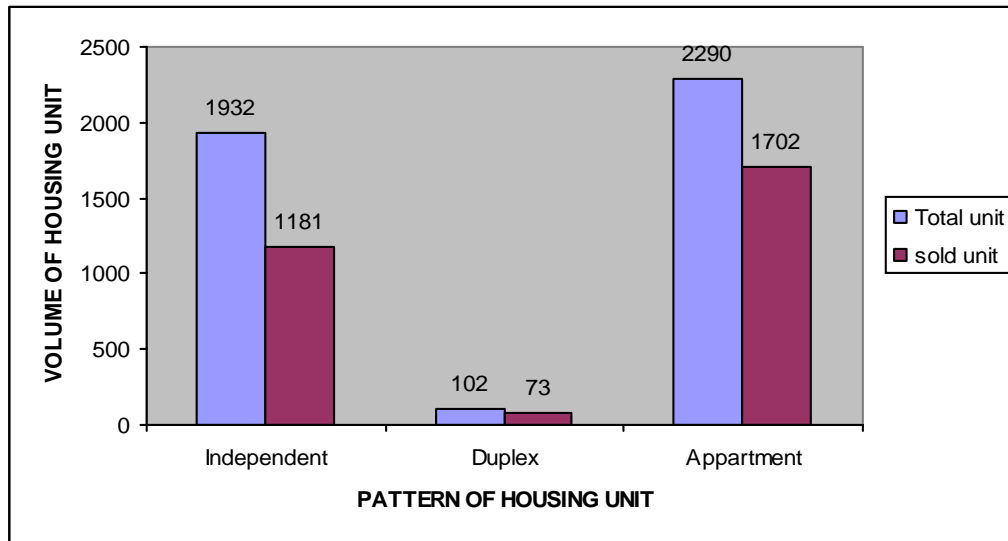
S.N.	Types of housing unit	Number of housing unit			
		Total unit	Percentage	sold unit	Percentage
1.	Independent	1932	44.7	1181	39.9
2.	Duplex	102	2.4	73	2.5
3.	Appartment	2290	52.9	1702	57.6
	Total	4324	100	2956	100

Source: Field Survey: 2064/65 B.S. (2007/08 B.C.)

The study has found that there are 4324 total housing units including all three types housing units. Of them, the maximum number of housing unit that is 52.9 percentages is appartment housing units. It has followed by independent housing unit with its 44.7% portion whereas the duplex housing unit has only 2.4 portions.

Similarly, the total number of sold housing units is 2956. Appartment housing units has also lead in sold units with its 57.6% portion and independent housing unit shares about 40% portion while duplex housing units covers 2.5% only.

Figure No. 6.2: Volume pattern of housing unit at housing colony



Source: Field Survey: 2064/65 B.S. (2007/08 B.C.)

6.8 Determining Factors in Choosing the Housing Unit

The people from different nature, society, culture, level and class comes to settle at colony. So there is a wide variation among the people while choosing/selecting an appropriate housing unit for their settlement at an organized private housing colony project. Some people selects apartment housing units, some of them select independent housing unit while some other choose duplex unit as an appropriate for their settlement. Selection of a housing unit by people for their proper settlement at housing colony is depending on various factors.

Income level of the purchaser/family is the fundamental determining factor in choosing of housing units. Since the independent housing unit is comparatively expensive to other, the people with more income level/source almost choose these types of housing unit for their settlement in colony project while some lower income group selects apartment and duplex housing units accordingly.

Even the personal/individual interest and habitual significantly determines in the selection process of housing units. Most of the people prefer to live in peaceful and separate environment where they get their perfect family environment only. The people with such kinds of nature purchase independent housing units whereas some people are already experienced of living at apartment housing unit and they prefer living grouping; sharing the public space and common living space. The NRNs, diplomats at foreign missionaries, foreigners working INGOs and long time staying tourists prefer to choose apartment housing unit for their settlement.

Besides family size, services and facilities available at colony, housing unit price, internal and external designing and architecture also play an important role while selecting the housing units.

6.9 Spatial Distribution Pattern of Housing Colony

Number of housing colony is concentrated at some specific area of location whereas none of the colony has been developed at Bhaktapur district. There are various factors which play a vital role in the establishing or developing of a colony. The infrastructure facilities (access of road, electricity line, telephone line, drainage channels..), availability of land space, environmental and cultural aspects etc are the dominant controlling factor in establishing of the housing colony in a certain location. Besides the people's choice of location who is the possible clients to settle at colony is also the important factor to determine the location of housing colony.

6.9.1 Distribution Pattern of Housing Colony by District

Kathmandu is the largest and capital city of the country among three valley districts with the largest mass of people and all kinds of socio-economic services, facilities, benefits and infrastructure development. But it is Lalitpur district where the first private housing colony project had ever developed in the history of Nepal. The Kathmandu Residency, the first private housing colony project is located at the Bagadole of Lalitpur.

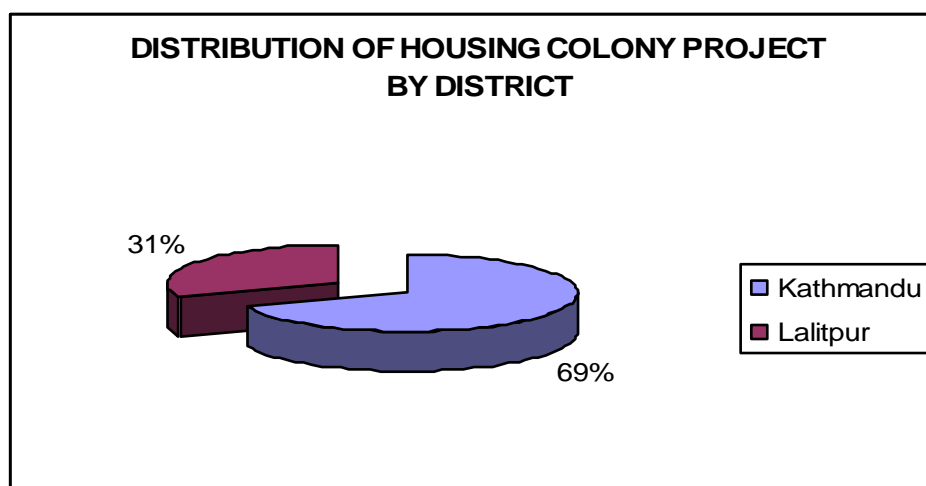
Table No. 6.7: Distribution of housing colony by district

S.N.	District	Colonies	Percentage
1.	Kathmandu	38	69
2.	Lalitpur	17	31
Total		55	100

Source: field study: 2064/65 B.S. (2007/08 B.C.)

The above table provides a glance of the distribution of colony within three district of Kathmandu valley. Kathmandu districts have the largest colonies where 38 colonies covering 69 percentage out of 55 has been developed. 17 colonies are located at Lalitpur district.

Figure No. 6.3: Distribution of housing colony by district



Source: field study: 2064/65 B.S. (2007/08 B.C.)

6.9.2 Distribution Pattern of Housing Colony by Ring Road Base

The development of ring road in Kathmandu valley had been about two decades ago and almost all the parts of urban area of valley is located within this ring road. With the development of ring road in valley the construction of new houses and building rapidly started to expand towards the suburb area. It also played an important role in the development of private housing colony project. Even the first housing colony project is located at the edge of the ring road. Most of the colonies have been developed surrounding the ring road area. Numbers of other private housing colony projects are being developed within ring road periphery even now. Some private housing colonies have been developed along the river coast of Bagmati and some other is located at something deeper places and steep location. Shubha housing colony, Oriental colony, Kusunti housing, Sunrise homes at Nakhu and Lifestyle apartment are situated along the river bank and Amarawati housing colony is located at a steep land surface in the western valley of Kathmandu. Moreover, most of them are in a uniform/fatted and something higher with scenic view places. The distribution of private housing colony measured especially in road access (ring road) base is as follows:

Table No. 6.8: Distribution of housing colony by ring road

S.N.	Location	Number of projects	percentage
1.	Inside ring road	18	32.7
2.	Outside ring road	38	67.3
	Total	55	100

Source: field study: 2064/65 B.S. (2007/08 B.C.)

The table shows the distribution pattern of housing colony in Kathmandu valley. Out of 55 total housing colonies, 38(67.3%) are located at outside ring road. Rest of 18 colonies is located within the ring road.

6.9.3 Clusters of Housing Colonies

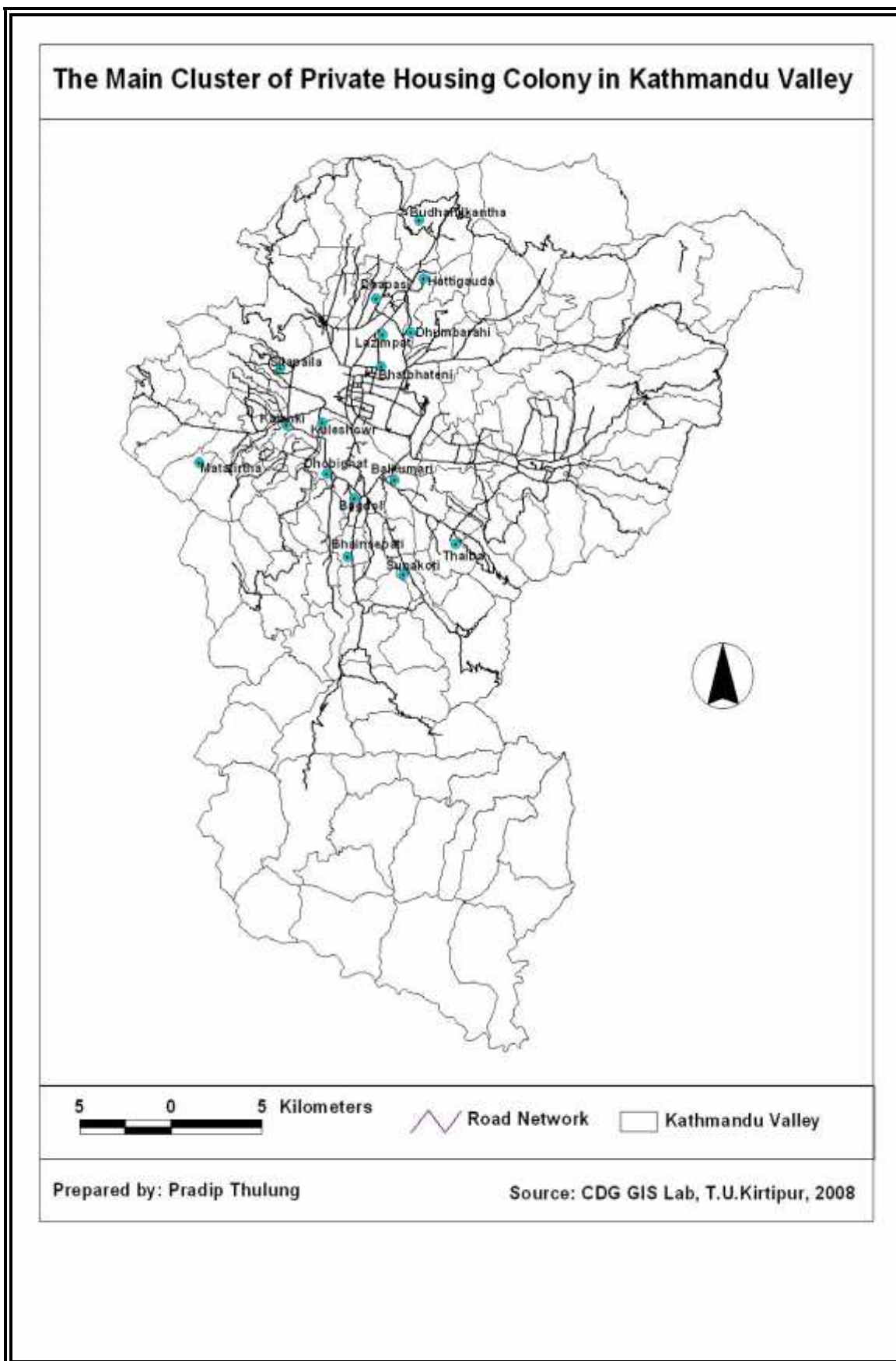
All the portion of Kathmandu valley is not uniformly developed. The intensity of infrastructure development, population distribution and urbanization pattern varies within the valley. Even the landform is not uniform. The core area is highly urbanized with its high density of population. Almost all the infrastructure development is concentrated in this area. Due to the high density with all kinds of things there is lack of plenty of land space for the developing of a proper housing colony project. On the other hand, the development/the expansion of road towards suburb area helped to grow urbanization to this side. There is also more development of infrastructure along the expansion of ring road. It enhanced in building process of houses outside and surrounding the ring road.

Settling and living trend of the people of the valley is continuously changing as well. No proper and plenty of land area for housing is available within core area. The people mostly prefer to live at the peaceful, beautiful, open and accessible locations. Besides the community environment such as free space, open environment, peaceful area, beautiful sight and scene which are the most favorable aspects to live for present modern people of valley has inspired to housing companies to develop more colonies surrounding these site.

Table No. 6.9: The main clusters of housing colonies

S.N.	Name of the main cluster	No. of colonies
1.	Budhanilkantha/Hattigauda clusters	7
2.	Bhainsepati Cluster	6
3.	Dhapasi Cluster	5
4.	Sitapaila/Ichangu Cluster	5
5.	Thaiba/Harrisiddhi Cluster	4
6.	Kalanki/Matatirtha Cluster	4
7.	Nakhu/Bagdol Cluster	3
8.	Naxal/Bhatbhateni Cluster	3
9.	Lazimpat/Maharajgunj Cluster	3
10.	Sunakoti Cluster	2
11.	Dhobhighat/Kuleshower Cluster	2
12.	Balkumari/Imadole Cluster	2
13.	Dhumbarahi Cluster	2

Source: field study: 2064/65 B.S. (2007/08 B.C.)



The above table shows the main clusters of private housing colony project within the Kathmandu valley. It reveals that the suburb and surrounding area of ring road are the most attractive places for the housing colony where almost all the major colony clusters are located. On the contrary least of the colonies are located at the core area of the city.

Budhanilkantha/Hattigauda area is the largest clusters consisting of 7 colonies. It is followed by Bhainsepati cluster with 6 colonies similarly Dhapasi and Sitapaila/Ichangu cluster has 5 colonies each. All the mentioned big clusters are located at suburb and surrounding area of the ring road while the core area clusters Naxal/Bhatbhateni and Lazimpat/Maharajgunj clusters account only 3 colonies each.

6.9.4 The Distance Pattern of Housing Colony

Since housing is a kind of infrastructure works it needs always a good access. A good access from housing colony to main city and other major places makes people easier for their daily works. It is impossible to develop a housing colony without a good road access because all the construction material supply, logistic support, monitoring and supervision works is impossible to transport in the absence of road access. There is also restriction from the government side to develop any kinds of colony project without road access. So, all the private housing colonies have been developed surrounding or along the main road or ring road.

The distance of housing colonies from the ring road ranges up to 5 km in maximum. The colony by Amarawati housing at Matatirtha is located at the highest distance as compared to all other colony. It is 5 km far away from Kalanki Chowk. Most of the colonies in core area are within 150 m distance from main road while some colonies are along the main road. Similarly numbers of colonies have been developed within the 300 m surrounding distance of Ring road area.

*** The detail Distance pattern of Housing Colony in Kathmandu Valley has been shown in table no. 2. of Annex III**

6.10 The Size Pattern of Housing Colony

Size of housing colony is an important aspect. It is mainly depend on the availability of land space, level of investment and types of housing colonies. The core area of the valley is intensely populated and urbanized so there is not plenty of land space as compared to surrounding or outside ring road. So, there is smaller size of housing colony in the core area of Kathmandu valley. It is due to the lack of land space.

On the other hand the level of investment volume is also the affecting factor in the size pattern. The established and big housing companies are able to promote a larger size of colony projects while new and small companies don't dare to develop a larger project due to the lack of experience and level of investment capacity in their early days. All

the colonies covering larger area are almost belong to the comparatively big and established housing companies.

Similarly the pattern of housing unit is also another important factor to affect in the size of project. An apartment provides number of housing units in a single building. It is the most economic as view of land covering. So, the entire housing colony projects with apartment units have covered small size as compared to other independent and duplex housing unit.

Civil homes III and Binayak Colony of the Comfort housing located outside ring road are the largest housing colony so far. Both are independent housing colony located outside ring road covering 125 ropani each. Besides the smallest colony ‘The Sankhamul cluster’ of comfort housing covering 1.5 ropani land area and Reknown regency another independent colony at Hattigauda covering 3 ropani area, all the smaller colony i.e. Stupa housing colony with 2 ropani located at Budanagar, Life style housing with 3 ropani located at Teku, the Land mark apartment at Kamaladi with 3 ropani, the project of Comfort housing at Lazimpat with 3.5 ropani are all apartment types of housing colony and they are all located within the core area of the Kathmandu valley.

Table No. 6.10: Size of housing colony

S.N.	Size of Lands(in ropani)	No. of colony	percentage
1.	0-10	22	40
2.	11-20	8	14.5
3.	21-30	9	16.4
4.	31-40	7	12.7
5.	41-50	3	5.5
6.	51-60	2	3.6
7.	61-70	1	1.8
8.	71-80	1	1.8
9.	Above 80	2	3.6
	Total	55	100

Source: field study: 2064/65 B.S. (2007/08 B.C.)

The above table shows the size pattern of housing colony. As the table we conclude that the private housing colony system/culture is still in the primary stage in the country/Kathmandu valley because almost all the project are in small size covering 10 ropani. Colonies covering up to 10 ropani are 22 which account 40% of the 55 total colonies. Similarly small medium sized are about distributed equally. The colonies covering 11 to 20 ropani accounts 14.5%, 21 to 30 ropani accounts 16.4% and 12.7% colonies have developed in 31 to 40 ropani land area. The colonies covering more than 80 ropani are only 2. The colonies cover 125 ropani each.

6.11 The Size Pattern of Per Housing Unit Area

The private housing company develops mainly three types of housing unit. The size of housing unit varies according to its types of housing unit. Though there is also variation in the size of single types of housing unit at a single housing colony. Project especially in independent housing unit, the size of housing unit almost varies within every housing colony projects. The size of land directly affects to the price of the housing unit. So, the choice of the people/clients is an important factor in determining the size of housing unit as well. The person with high capacity to expense for their housing unit selects normally the larger size of housing unit as compared to low income or capacity group. Similarly the land space is also another most important factor to determine it. The housing units at the colony located outside ring road are larger size as a compared to the land size of housing units located at the colony of the urban area of the Kathmandu valley. The size of independent and duplex housing unit is mostly measured in per ana while the apartment housing unit is measured in per square feet.

Table No. 6.11: Size of housing units

S.N.	Name of Housing Company	Size of Lands (In Anna)	
		Minimum	Maximum
Independent Housing Units			
1.	Comfort Housing	4	19
2.	Civil Homes	4	10
3.	Road Show Real State	6	14
4.	Amarawati Housing	4	8
5.	Housing and Prudential	6	10
6.	Southern Heights	3	10
7.	Star Homes	3	12
8.	Guna Builders	6	9
9.	Seng Yoan Housing	3	4
10.	Cozy Homes	3	10
11.	Reknown Regency	4	7
12.	Royal Homes Nepal	3	7
13.	Shubha Housing	3	9
14.	Paradise Housing	5	7
15.	Pacific Crown Developer	12	14
16.	Euro Housing	3	4
Appartment Housing Unit (in square feet)			
17.	Parkview Horizon	1486	4200
18.	Land mark Appartment	800	1700

19.	Shubha Kamana Housing	900	1800
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Source: field study: 2064/65 B.S. (2007/08 B.C.)

Note: Some companies were unable to provide this information due to the some practical, technical problems and their internal policy.

According to the table the minimum size of housing unit is 3 Anna which is belongs to almost all the housing companies. And the maximum size of housing unit 19 Ana which is located at the colony developed by the comfort housing company. The comfort housing company has even the highest variation in the size of per housing unit that is 4 Ana to 19 Ana. Similarly the minimum variation in size in a single company is 3 Ana to 4 Ana. The Seng Yoan housing Company and the Euro housing company has the minimum variation in the size of per housing unit.

On the other hand, the Park view Horizon, a private appartment colony, has the minimum size from 1486 square feet to 4200 square feet in maximum. Similarly the Land mark appartment has the minimum size from 800 square feet to 1700 square feet in maximum and Indreni appartment has the minimum size from 900 to1800 square feet.

CHAPTER VII

FINANCIAL AND MANAGERIAL ASPECTS OF HOUSING COLONY

7.1 The Pricing Pattern of Housing Units

The private housing companies have developed their housing colonies as the business view of point. So they sell the housing units in a proper cost taking a certain margin from every housing unit. The price of a housing unit is mainly determined by the size of per housing unit. The housing unit at a housing colony covering larger size is more expensive. Besides its architecture or interior designing of housing unit, location of colony, site of housing unit, time and constructional material cost are the affecting factors in determining of a housing unit.

There is the variation in the price according to the types of housing unit. The apartment housing units and duplex housing unit are comparatively cheaper than independent housing units. It is because of the land area covered by the housing unit. Numbers of housing units have been developed in a single apartment building. Though various factor works together in determining the housing unit price. The most expensive housing unit is apartment housing unit so far which is located at the Park view horizon of Dhapasi.

The price of housing unit is almost fixed. The companies have already determined the price before the booking. Though, sometimes it is determined by the mutual understanding between company and customer/buyers.

Table No. 7.1: Price range of per housing unit by housing unit

S.N.	Types of housing types	Name of the companies	Project location	Price (in Nrs.) figure in 000.	
				Minimum	Maximum
1.	INDEPENDENT HOUSING UNIT	Comfort housing	Sitapaila	3200	5800
			Budhanilkantha	3900	9000
			Ichangu	3500	9000
			Sankhamul	5200	6500
			Dhapasi	6500	17500
		Civil homes	Bhainsepati	2800	3300
			Tinthana	5900	7800
			Sunakoti	5000	12000
		Road show real estate	Maharajgunj	4500	7500
			Dhumbarahi	4800	8500
			Budhanilkantha	7000	8500
		Southern height	Thaiba	4200	7800
			Jorpati	4000	6500
		Star homes	Chauni	2900	10000
Sitapaila	7800		12500		

		Housing and prudential	Kusunti	2600	2700
			Kiritipur	7000	9000
		Sunrise homes	Balkumari	4000	6500
		Cozy homes	Imadole	4200	9500
		Amarawati housing	Matatirtha	2800	6500
		Euro housing	Tahachal	5500	5500
		Pacific crown developer	Budhanilkantha	6000	6000
		Royal homes	Dhapasi	6200	8500
		Reliable colony	Bhasepati	5000	6300
		Reknown regency	Hattigauda	7200	9900
		Paradise housing	Ichangu	2500	2700
2.	DUPLEX HOUSING UNIT	Amarawati housing	Matatirtha	2500	5800
		Housing and prudential	Kiritipur	7000	9400
3.	APPARTMENT HOUSING UNIT	Comfort housing	Lazimpat	4900	8900
			Panipokhari	6300	9000
		Oriental developers	Kuleshower	1000	1600
			Dhumbarahi	1500	2200
		Sunrise developers	Dhobhighat	2400	3600
			Balkumari	1700	4000
		Stupa housing	Budanagar	600	700
			Sinamangal	3200	3700
		Grace apartment	Naxal	3500	5200
		Road show housing	Bhatbhateni	5700	7200
		Indreni apartment	Bhatbhateni	8000	10000
		Life style housing	Teku	6000	12000
Land mark apartment	Kamaladi	6500	12500		
Park view horizon	Dhapasi	9800	29800		

Source: field study: 2064/65 B.S. (2007/08 B.C.)

Note: Some companies were unable to disclose the price due to their internal policy.

The above table presents the pattern of price range of different housing colony based on the housing unit. As the table the lowest independent housing units are located at the Kusunti housing of housing and prudential company. The price ranges from minimum 26 lakh to 27 lakh. The highest priced independent housing units are located at Dhapasi project developed by comfort housing. The price ranges minimum 65 lakh

to 175 lakh. It is also the most variation price range in independent housing unit. Similarly the lowest duplex housing unit is located at Matatirtha developed by Amarawati housing company. The price is 25 lakh. The colony greenwood villa developed by housing and prudential has the highest price of duplex housing unit ranges up to Rs. 94 lakh. Whereas the highest price ranges of apartment housing unit is 2.98 crore it is located at Dhapasi of park view horizon. The lowest per housing price range is 6 lakh it is the apartment housing unit located at Sankhamul and the colony was developed by the stupa housing.

7.2 Factors Affecting in the Housing Unit Cost/Price

There is utter variation in the price/cost of the housing units among the private housing colony. The price of housing unit ranges maximum up to 3 core rupee in the private housing colony of Kathmandu valley. The cost of the housing unit is depend upon many factors such as housing unit size and model, location, land occupied by per housing unit, quality of house, finishing other infrastructure and service, company margins etc.

The land space occupied by per housing unit is the fundamental factor to determine the cost and price of housing unit. The independent housing unit covered larger area of land is comparatively expensive than the smaller size.

The location is another most important factor. The price of land is more expensive in core area/city of the valley. And the housing unit at the colony project located at suburb and outside ring road is comparatively cheaper than the housing units at the colony project located in core area. Due to the lack of enough land space in the core area of the city, land cost for the per housing unit is very high as compared to the ring road and suburb area of the Kathmandu valley and it affects directly in the price of per housing unit at a housing colony project.

Similarly even the size, model and designing of house helps to fixes the price of housing units. The increasing demand of modern and new stylish house is making more expensive of dwelling units at private housing colony. The construction material cost and labor cost also play a vital role in determining the price. The present increasing price trend of material cost especially cement and rods is making more expensive cost of housing units. The total finishing, colony project execution period, the interior designing, quality of house, company margin, services and infrastructures are dominant control factors in the determining of the housing unit. The quality level of infrastructure and services viz: open spaces, parking area, garden, play ground, security system, sewerage system, water supply etc definitely supports in determining of the price of the housing unit at private housing colony.

On the other hand, the sites of housing unit at a colony strongly play a vital role in determining the price of a housing unit. Normally as a 'Bastusastra' the east and southern direction is the most appropriate/favorable to live. So the housing unit built

this site is comparatively more expensive. Similarly the housing unit built in the front site of the colony, the site with all the time sun rise and sun down and beautiful sight view are comparatively more expensive. The pattern/types of housing unit are also one of the most important factors. The apartment housing unit is found relatively cheaper among the different types of housing unit. The apartment housing colony occupies a small portion of land space but numbers of floor builds in a single apartment building. The minimum cost for land results the minimum price/cost of the housing unit. Though, the most expensive of housing unit is park view horizon, an apartment colony. It is due to its internal and external modern designing, luxurious and deluxe facilities and utilities.

7.3 Financing of Colony/Financial Source on Mobilization

The developing of a housing colony is an extensive infrastructural works. The different fundamental works or infrastructure development work such as road construction, sewerage management, water supply, electricity transmission line, telephone line etc are associated with the promotion of private housing colony. It provides the working opportunity/job to number of people or hundred of skilled on non skilled man power. The colony is executed associating with various levels of government and non government agencies. A colony project completes minimum 2 years to 6 years in maximum. The present private housing colony ranges from 10 crore in minimum to billions rupees investment. The colony in the past days could be developed in the crore amounts while some recent projects have crossed the billion Nepalese rupees. The park view horizon, a colony developed by Barun developer private company, a subsidiary company of Indian multinational company of RKJ group, has been estimated of 3 billion of investment. So it needs a heavy level of investment.

The past political uncertainty and economic stagnant, investor were considering investment on the housing development as the safest sector. Even the present days it has been the most lucrative and profitable investment sectors. The commercial bank and finance companies have made a large volume of investment. There has been mainly found two types of financing mechanism in developing of private housing colony project.

7.3.1 Banking Financing

Bank and other financial institutions are the main sources of financing the housing colony projects. There are increasing the financial institution everyday. Due to the long political instability and number of other causes the Kathmandu valley has been the most important and main investment area for all commercial banks and other financial institutions.

Today most of all the housing companies have been running their housing colony with the help of banks and other financial institution. Commercial banks and financial institutions provide loans to private housing companies/developers after keeping the

land with building or the whole running project as a pledge/collateral. The housing companies present their proposal at first with all documents consisting master plan and other detail designing documents. The bank examines all the documents submitted by the company. Then the bank flow loan to company after convincing completely with the proposal. The banks provides the loan on the bases of phase wise that is depend upon the constructional work of colony.

7.3.2 Self Financing

Self financing is a mechanism of developing a colony. Some big and small companies have developed the colony with their own sources. The company have their own sister financial institutions such as Co-operatives and finance companies. they mobilize the financial resources in developing such housing colony. The Civil Homes have mobilized the financial resources form its own company: Civil saving and Credit Company. Similarly, Ace apartment by Ace development bank, Oriental colony by Oriental Co-operatives and Reliable colony by the Guna Co-operatives are the other main colony developed by their own financial resources. Besides, the private housing companies develop the colony projects raising the money from their own share holders to some extent. Though the private housing companies mobilize the banking financing and self financing together.

7.4 Financing of Housing Units

The price of a housing unit at housing colony ranges from 60 lakh to 3 crore in maximum in recent days. It is a huge amount in the context of Nepal. Least of the people buy the housng unit for their selected housing unit in down payment with their own money. So, most of the people or clients living at colony project buy their housing unit in banking finance. The housing company itself plays a role of coordination while buying the housing unit by the people. Besides the people who buy the housing unit at the colony project attempt themselves to get loan and the commercial banks and other financial institutions provides the loan them on the consumer lending titles.

The housing companies are directly and indirectly associated to the commercial banks and other financial institutions regarding the financing of housing units that the resident bought. The company plays a role as a bridge or co-coordinator if a buyer attempts to get the loan from the financial institutions that he choosed. The financial institution flow its loan to its customer keeping the land and the housing unit as collateral. There is repatriate agreement among the buyers, housing company developer and financing institutions while giving the loan. The bank requires various types of documents, process and reliable source from the buyer. Income source of the buyer is the most important for the banking financing. The financial institutions provide the loan up to 70% of the total cost or valuation of housing unit. Similarly the loan duration of full payment is scheduled minimum 5 years to 25 years. Though, the buyer

can pay the amount of loan and its interest amount before the maximum limit of loan duration.

7.5 Consumer Schemes

Though the private housing colony culture and practice doesn't have so long history it has already established an important landmark. Seeing a reliable and safest it has been becoming a main investment sector of economy. A large volume of investment has been from the financial institutions in this sector. Similarly the people's perspective regarding the housing has been slowly changing through the time. The volume of demand of well furnished and designed readymade housing unit with all facilities and services at a peaceful and beautiful place is increasing everyday. On the other hand seeing this opportunity number of big and small and even foreign housing companies are entering into this field. With all about the sector is ultimately becoming more competition among the whole small and big, new and established, indigenous and foreign private housing companies. As a result most of the companies comes to their customer with some kinds of especial schemes at least which may establish the companies in the market. Each company tries to make different identity in contemporary market. Similarly the people also try to get maximum satisfaction along the selection of a proper housing unit for their living.

There are various types of schemes provided by the housing companies. A payment scheme is one of the common schemes which apply every housing company. But it may vary among the companies. It is mainly depend upon the construction stage and time. Similarly the companies present different types of bumper prizes to attract the customer. The Civil homes had presented 'A Car' as a bumper prize to one person/customer/buyer among the every 25 person who book the independent housing unit at the colony. According to the company it was one of the most successful market campaigns to catch the customer mind. Similarly reliable colony and Kumari bank had jointly presented a bumper prize of an independent housing unit at reliable colony located at Bhasepati to people who open a fixed saving account worth 50,000 at Kumari bank. Such types of schemes have also been becoming popular to sustain and make different image in the market.

7.5.1 Mode of Payment

The housing companies basically offer three different types of payment mechanism for the customers which are as follows:

a. Down payment:

This is a simple and straight forward payment mode. The lump sum amount is paid within a certain period of booking. Cash down payment constitutes a certain amount of rebate to its buyer. The schemes may vary according to every housing company. Though the tentative pattern of schemes is shown below:

Payment time	payment amount in percentage
At the time of booking (advance)	10%
Within 30 days of booking	90%
Total	100

*up to 5% rebate

Though, the rebate is different among the pattern of housing units.

b. Construction linked payment:

Under this method, as the construction works proceeds, the customer has to make the payments accordingly. Even the scheme may be different every company accordingly. The tentative pattern of the payment has been shown below:

Payment time/title	Payment amount in%
At the time of booking (advance)	10%
Within 30 days of booking	20%
On the commencement of construction	15%
On DPC work	15%
On ground floor roof slab	10%
On first floor roof slab	5%
On laying of conduits pipe	5%
On the plastering period	5%
On doors and windows shuttering	5%
On wiring, switch and plate	10%
Total	100%

c. Time linked payment:

Under this payment, customer makes certain percentage of payment at the time of booking and the remaining amount is paid on installment basis.

Payment time	payment amount
At the time of booking	10%
In another 15 days	5%

6 month time after booking	20%
On completion of house	65%
Total	100%

7.6 Transfer of Ownership

A customer's prime concern is to acquire the Lal Purja (certificate of the ownership) of the housing unit he purchased. Normally the handing over process of ownership of the housing unit at private housing colony to its owner/buyers completes in two phases. The customer receives a temporary certificate from the company in the booking period. It is just as an agreement paper between two sides: purchaser and company. The company provides an original certificate 'Lal purja' only after the full payment and completion of the housing unit/project.

The 'Lal Purja' for the land is in the name of the housing company at the time of construction. In the case of completed housing unit, the housing company transfers of ownership of the house and the land (Lal Purja) in the name of the customer if he purchased in lump sum payment. When the customer purchase the house through bank financing, the housing company deposits the Lal Purja in the name of the customer to the bank and after the full payment from the purchaser the bank gives back the Lal Purja to its owner. Similarly in the case of under construction of the housing unit/colony project, the customer receives the Lal Purja only after the completion of the colony project. If the housing companies are making arrangement for the financial needs of the customer through the financial institutions, then the housing company enters into an agreement with the banks as well as the customer called a tri-party agreement. This agreement serves as the collateral which ceases with the due payment and the Lal Purja is issued to its owner. In the case of apartments, the customers acquire the Lal Purja of the flat he/she buys from the housing company along with the ownership of certain portion of the land on which the apartment is built.

The transfer of ownership and mode of payment is closely associated to each other. The transfer of ownership 'Lal Purja' is different according to the different mode of payment and installment.

7.6.1 Transfer of Ownership on Down Payment:

In case of the down payment, customers make payment equivalent to about 10% of the value of the house at the time of booking and the remaining amount is paid within the time prescribed by the housing company in a lump sum. In this payment modality, the housing company also offers certain percentage of rebate to the customers.

When the customer completes the payment to the housing company, the housing company transfers the ownership of the housing unit and land in the name of the customer.

7.6.2 Installment Payment

A. completed house:

In case of installment payment, the customer buying the house pays equivalent to 10% percent of the value of the house at the time of booking. Then 20% of the amount has to be paid within the prescribed days of booking.

In such cases, the ownership of the house is transferred to the customers the day the housing company gets the money from the bank. The ownership certificate of the customer is then kept at mortgage the bank. The act of acquiring funds from the bank by the housing company and deposit of Lal Purja with the bank takes place simultaneously.

B. Under Construction:

When the house/apartment is still under construction, no Lal Purja is issued; however, the customers require finance to purchase the house/apartment. The banks generally keep certain assets as collateral before lending to the customers. In the case of houses/apartment under construction the bank lends to the customers on the recommendation of the housing company even without keeping Lal Purja as mortgage as the house is still under construction and no Lal Purja is issued at which stage. Under such circumstances, the three parties (Housing Company, Bank and the Customer) sign a tri-party agreement which serves as the collateral unit.

On the basis of this agreement the bank issues loans to the buyers once the building is constructed, the housing companies acquires the 'Lal Purja'. This Lal Purja is then taken; the tri-party agreement is ceased. Then Lal Purja becomes effective and serves as the collateral to the bank. In such case the housing companies make the necessary arrangement the customers to take loan from the bank even when the construction is not complete and the buyers haven't acquired the Lal Purja of the house. The housing company permanently issues the Lal Purja to the purchaser after the company receives the full payment from the bank. But the Lal Purja still exist as collateral at the bank when the owner paid all the amount of the loans to the bank then it gives back the Lal Purja to the owner.

In case of apartment, the customers acquire the Lal Purja of the flat he/she buys from the housing company along with the ownership of certain portion of land (kitta No.) on which the apartment is built.

7.7 Booking System of Housing Unit:

The main objective to develop any kinds of housing colony by a housing company is to make profit. So the company sells the housing unit to people in a reasonable price. For this the company provides various options to the people who need the readymade

housing units. There are mainly three options or types of booking pattern or selling pattern:

-) Before construction
-) Along with the construction
-) After the completion of construction works

The booking pattern is also changing through the time. The companies used to sell the housing unit only after the full completion of housing colony project in the past days. But in the current days the companies open the booking of housing unit even before the operation of the project. They open the booking after the colony project approved by the concerned government authorities. The booking pattern/selling is closely related with the payment mode.

7.8 Re-selling Provision Pattern of Housing Unit:

The owner of a housing unit at housing colony after he bought once, he is real owner. He is completely responsible to his assets. The owner can easily and independently sell it to some others at any time he wished. The committee of user group living at colony can help him if he asks them. It is rather easier selling in case of independent housing unit as compare to apartment and duplex housing unit. They can directly deal as seller and buyer. The original owner of housing units can transfer his ownership 'Lal Purja' to new buyer fulfilling all provision and rule and regulation. Similarly the owners can sell the even the apartment and duplex housing unit independently fulfilling all procedure. But they can only sell the floor space that they owned not the land area that house/apartment building occupied. The land has been jointly named to the users group or all the people living at the building.

7.9 Post Management Process of the Housing Unit

In apartment act-2054 it is clearly stated regarding the responsibility of the maintenance and operation of the housing project. All group housing colony projects have common public spaces and facilities. Continuous maintenance and operations of these common services is necessary such as:

-) Clearing and maintenance of parks garden, parking area, streets, other common spaces outside and inside buildings.
-) Maintenance of street lights
-) Maintenance and operation of deep bore wells.
-) Maintenance and operation of generator back up.
-) Repairing of common spaces, internal or externals

This requires management team. This team has also other responsibilities such as security management of the area, management of social and cultural activities.

Most companies are ready to take the above responsibilities till complete handover or up to further one year with their own investment. After that users committee will be formed with or without the involvement of the company. The committee then will have to take all the responsibility of the colony project. All the consumers must share the cost of management equally. Normally the cost is proportional as the housing unit or the floor occupied the spaces.

Though there are still other infrastructure services and facilities such as community hall, health club, swimming pool, sports court and grocery etc owned by the company. The housing company has the direct responsible in monitoring of such thing within the colony. And the company can take a help from the local committee of colony in monitoring and operating the above mentioned services and facilities.

7.10 Problems and Hindrances during the Construction Period

Since the development of the housing colony is a construction and infrastructure works, it has to work in different phases while executing the project. A housing colony project starts with the land consolidation and land acquisition and ends only after the full handing over of the project to the users group. The company has to face many practical, technical and legal difficulties in the course of work.

There are two types of private housing companies as a view of its execution pattern of a colony project. Some companies completely handle themselves all the works from beginning to ending of whole projects. Whereas some other companies impose the construction works to the recognized 'A' class private construction consultancy. The company who operates their project with other private firm and consultancy should not face more trouble as compared to the companies who operate whole project themselves. The Southern height, the Land mark apartment company makes all the construction works from the other 'A' class construction company. Though, most of the companies handle the whole project themselves.

Land consolidation is the major problem faced by private housing companies of the Kathmandu valley. The private housing companies don't have the access of land consolidation. So they have to rely on other private real estate companies to acquire the land for the colony project. The land acquisition act empowers only the government and private real estate companies to acquire the land. And it is really very difficult to acquire a large chunk of land inside the city area of the Kathmandu valley. Similarly the boundary problems come with land consolidation together. The issue of boundary takes a long time to settle.

Lack of accessible road linkage, lack of water supply and lack of proper power supply (Electricity) are also the problems facing the private housing companies which make

the hindrances in the work smoothly. Similarly pressure of political parties and local people for donation and charity repeatedly make them harassment. Some political parties make pressure to give the job for their cadre. There is not clear-cut government policy to address this housing sector. The housing companies should pay land tax two times at Malpot; in the process of land acquisition from the private real estate companies at first and in the process of land plotting for housing unit at the second time. There is still lack of simplified rules and regulation and qualified man power at government authorities who regulates the companies.

Continuous instability of political situation of the country like bandha and chakajam which is extremely affecting in the material supply and other execution works of the projects. Similarly the sharp increase in the material cost have extremely affected in the whole project. Lack of cement, rode, and lack of skill man power and stealing of materials from the site are the common problem facing all the private housing companies. Besides the company have to face the problem of soil sampling and geological sampling. Sometimes the early sampling of soil and geology doesn't meet later. The problem eruption in sampling creates redesigning of the colony project.

Similarly the government's planning permit rules are not up to date and conducive to grow this sector. The housing colony act has still to be formulated while existing laws forbid to the housing companies from land pooling and acquisition. There are also additional legal hurdles which have been leading to an unnecessary rise in the cost of project. Moreover frequent blockade and bandha has been causing problems in procurement and delivery of goods and services.

7.11 Execution System of Colony Project

The promotion and development of a private housing colony project is an extensive infrastructure and construction works. It passes through various execution phases. It includes the works of designing of whole project with its master plan, land acquisition to a well finishing of project and full handing over of the colony to its user committee living at the colony. Similarly it includes most of the fundamental infrastructural works such as road construction, provision of electricity/ extension of transmission line, sewerage management, water supply, extension of telephone service etc. the project provides the job opportunities to dozens of skill and non-skilled man power. A colony project completes in two years at least. It needs ten millions to billions rupees of investment. Since all about the above mentioned factors, the execution works of whole project has been well managed and controlled.

Most of the housing companies adopt similar project execution process. First mock up construction and landscape is designed. Then booking is open for interested people. Other buildings, apartment are then constructed and infrastructure is constructed simultaneously. After providing services to the dwelling units handing over process starts.

There are two forms of project execution among the private housing companies. Most of housing companies precedes all of the works and responsibilities of the project themselves. They acquire the land for the colony project from another real estate company. It is due to prohibition in land acquisition and consolidation that the land acquisition act prohibits to private housing company in acquiring and consolidating of land directly. They prepare the designing of master plan of the project with their own technical expert team (Engineers and Architecture). Similarly all other construction and management works such as detail designing, the whole construction works, provision and selection of man power, material supply, monitoring and supervision, marketing and advertisement, dealing with customers etc... are handled by company self. In this course the company has appointed many qualified and promising man power to operate the project smoothly. The management and executive team have been regularly and repeatedly supervising and monitoring about the construction and all other works of the project. The companies like Civil homes, Comfort housing, Oriental developers handle all kinds of works of he project themselves.

On the other hand some company precedes their works through the recognized construction companies. Some of them make the whole construction works of the project from the private consultancy while some other company operates the works partially through these companies and some portion of works of the project deal the company itself. In this course, the company deals with an 'A' class national private consultancy or firm for the construction works of the project. The promoter/developer company needn't bear much trouble in such type of execution pattern. The private housing company allocates the different types of project works through the other private firm or consultancies. They acquire the land from the other private real estate company or land broker. They prepare the whole designing and master plan of the colony project through some other recognized engineering consultancy and architectures. While some of the private housing companies have prepared their project design through the recognized Indian architectures and consultancies. The project design of Sun rise tower has been prepared by an Indian company. Similarly the architectural designing of the largest private housing colony project in term of the investment in Nepal so far, the Park View Horizon has been prepared by the Mani Chawfla, an Indian architects. The Chopra Associate of India had prepared the detail design of the Land Mark Apartment at Kamaladi. And the 'A' class contractor company, Chitwan Co. E. Limited and United Builders are the leading private companies to handle the construction works of such housing colony projects. Though, all the project planning, monitoring, advertising, marketing, legal and practical responsibilities and the handing over of the project of the project to the community group is maintained by the related housing companies.

7.12 Level of Changing Pattern of Designing/Master Plan

The private housing company submits a proposal consisting of all the detail designing and master plan of the colony project at first. And the colony project should operate

completely as its master plan and designing. The company can't change anything on its master plan designing. The company must follow completely the rules, regulations, law, by-laws and policy regarding the private housing and apartment act. The various government agencies and authorities (TDC, KVTDC, DUHBC....) continuously monitor and supervise the construction works and other management aspects of the project that whether the work are being done as rule and regulations or not. The company can't upgrade/add the floor against the earlier master plan. So the private housing companies can't change the fundamental aspects of master plan.

Though, the company can change the interior parts of the housing units according to the client's choice. The company can only change the small parts of the house such as toilet site and size, bathroom size, position of doors and windows, corridor size, interior decorations, designing of gardens and parking. There is no change in the main structural designing of the buildings.

7.13 Infrastructures, Services and Facilities

The main objective of the buyer/people who purchase the house at a colony is to come to settle with the most of the well equipped services available at colony. Even the main attraction of the private housing colony is the ready-made house and the available physical infrastructures, services and facilities. And the private housing companies are also doing their best in making maximum satisfied and benefited to their potential customers.

A. Road:

There is the provision of 7m wide approach road to get planning permit for planned residential area. But it doesn't seem followed by the most of the private housing companies. Though they have constructed at least the road connection from the project to main road whether it is pitched or gravel.

B. Water Supply:

Safe and sufficient drinking water is the critical issue in the Kathmandu valley. But almost all the housing companies have promised for that. Every company realized the pipeline water supply of Drinking Water Corporation is insufficient and unreliable. As alternative source, they have planned to use the ground water. Most projects have planned for deep boring water supply and provision of treatment plants. The life style housing companies claims the company made a very deep boring of water supply that the deep bored water can be drunk directly without treatment. But some projects like stupa colony has provision of water supply from well while some private housing colony projects like reliable colony located Bhasepati has only the provision of water from the pipeline of the drinking water corporation of the Kathmandu valley.

C. Sewerage Disposal:

Untreated sewerage disposal is already major environment threat in the valley polluting the rivers flowing through. As per planning regulation every housing project should provide treatment plant with in the project area. Though the housing companies are making commitment of providing planned housing with all amenities, little is cared about management waste products. Though many of these companies are maintaining about provided septic tank and soak pit before connecting to sewerage line whereas some of the companies like Civil Homes III project have provision of reservoirs of septic tanks for the 4/5 years of the period, after completely filled up it is cleared with the help of sewerage disposal tanker. The doubt arises about the implementation as monitoring system is not adequate.

D. Solid Waste Disposal:

Every house of a colony project is responsible to manage the solid waste produced in the each housing unit. Though, the companies have provided the garbage point. Normally the users committee of the colony plays a co-coordinative role to manage it. People of some colony project give it in lease to private companies while people of some companies rely on municipality for the collection of the solid wastes are collected which creates nuisance.

E. Environment and Greenery:

People live together in community in amiable environment. The users committee formed for sale, maintenance and operation of common facilities will be platform for the people to get closer to each other. The sharing open space if properly managed is obviously spacious and convenient for multiple activities.

All independent housing colonies promise for provision of sufficient soft cover and greenery in the form of parks, garden, individual lawn. Flat apartment housing projects are also providing the amiable environment of greenery and garden to some extent.

F. Security System:

All the housing colonies have provision of company wall and fencing, 24-hours guards, street lighting and surveillance cameras in public spaces. Operation and maintenance is shared by all users of the project dwelling units. This ensures a safe homely environment around the colony site, free of drug addicts and street hawkers and minimum risk of theft. Generally the apartment housing project has the extra safety tools such as emergency exit stair case, generator back up system. The Park View Horizon has the provision of 100% power back up of lift, latest fire fighting system and 24 hours high tech security system. The housing companies have the EPABX system and they have installed the underground Electricity, Cable and Telephone Line. Besides the private housing companies has constructed the housing buildings in Earthquake resistance standards.

G. Parking:

Parking area depends upon the types of housing colony. Mostly in case of independent housing unit, one car parking is at least facilitated within its individual area. Bigger projects have even got spacious and sufficient road width for visitors' car parking.

Sufficiency of parking provides for apartment houses depends upon the projects. The latest apartment colony has mostly basement parking provision. Park View Horizon has provided the multiple basement parking facilities and the company have tried for maximum common open spaces.

Besides the private housing companies have provided various services and facilities such as community Hall, Barbecue, department store/Grocery, health club, swimming pool, and jogging plus walking tracks, children's play ground, and tennis court etc... . The Park View Horizon has provided the world class interiors, centrally heated and air conditioned provision and world class club with Jacuzzi, gym and sauna....

CHAPTER: VIII

SOCIAL CULTURAL AND FUNCTIONAL PATTERN OF PRIVATE HOUSING COLONY.

8.1 The Target Groups/Customers of Housing Colony

The targeted people for the housing colonies can be summarized as follows:

- A. **Highly professional:** This class includes doctors, pilots, engineers, managers, lawyers, professionals etc. the living style and the ambience offered by those colonies are acceptable by those professional groups.
- B. **Higher middle class businessman:** The group includes businessman and new rich people who almost select independent bungalows with various amenities at a colony.
- C. **Highly profile/Senior employees:** This class constitutes the government officials as well as private, NGOs and INGOs with a unique distinction of making aristocratic living affordable, senior employees prefer housing colonies to a great extent.
- D. **Remittance group:** This class includes people who are working in foreign countries (NRNs and British Army) and investing in the country in the form of bungalows and flats. Their main motive is not to reside in the house, but to make a good investment for future benefits.
- E. **Others:** This group includes people involving in overseas employment services (Man power agencies), real estate business man, educational consultants and free-lancers.

8.2 Early Place/Origin Place of the People of the Colony

Living at the private housing is the beginning of a new family and community establishment again. Private housing colony system is a new and modern perspective on the changing life style of the people living within a larger compound of area. The private housing colony provides the opportunity to settle within an area of the compound to hundreds of people from different society and cultures. Due to the many reasons the people from the different parts of the country and the Kathmandu valley come to live and settle at the colony that they choosed.

The most of the people/resident living at the private housing colony are from the Kathmandu valley itself. Similarly the main industrial and commercial city of the country such as Pokhara, Biratnagar and Birgunj has comparatively more inflow of the people settling at the colony. Besides the people of other main cities of the country like

Dharan, Itahari, Damak, Birtamode, Hetauda, Bharatpur, Nepalgunj, Butwal, Bhairahawa, Dhangadi and Mahendranagar are coming everyday seeking a proper housing unit for their settlement at the private housing colony. The people from terai region have more inflow as compared to other region of the country. Similarly there is a high intensity of inflow of people from the eastern region.

Due to the high density of people, narrowing road, daily traffic jam the people from core area/city of the Kathmandu valley are moving to other open, peaceful and isolated private housing colonies. The people from the crowded and ancient place of the valley like Ason, New road, Indra chowk, Makhan, Nardevi, Khichapokhari, Mahabauda, Ganabahal, Mangal bazaar and Thimi are also moving to settle at the private colony. Besides even the people of early high class residential areas (VIP areas) like Pulchowk, Sanepa, Maharajgunj, Baluwatar and New Baneshower are moving to settle at colony.

8.3 Socio-Demographic and Cultural Pattern

The private housing colony system is the perspective of an organized living style of the people. The perspective of an organized living is inspired by the collectivity to more extent. So there is always seen a feeling of collective responsibility among the resident living at the colony premise. It is the place of multi-culture, society, ethnicity and different class of people where the people from different level of social and economic class, ethnic group and cultural group come together to live at the place. Similarly the people from the different administrative region and the ecological division come there for living. So there exists a well mixture of culture, ethnicity and other different aspects of the society. This forms a homogenous community of the people from the different area and strata. In spite of the heterogeneous community, the people live in a pleasing environment which makes the place most of the time a pleasing colony.

The private housing colony project has been developed as a 'Gated Community'. The company provides a tall compound of wall around the project area. As a result of this people inside colony area and neighboring area most of the time is not in touch. Wall and gate around the periphery gives feeling of gated community. People from neighboring area usually find difficulty in communicating with people. This may give rise to conflict in the locality in and outside the gated community.

Since the resident living at the colony is mostly from the Kathmandu valley and other main cities they have almost the modern social, cultural, demographic practices and experiences. There is almost the nuclear family structure in the colony. The family size includes 4 to 6 person. The people of 40 to 50 years are the main buyer group of the housing unit. It is mainly due to the maximum earning capacity of their age group. There are almost married people with children in a family. Some of them are new married couple who selects the housing units at the colony for their best and especial beginning of the life. Beside some aged people even come to live after the retirement

from the job because other family member are living in abroad for a long time and they feel happy and secured at the private housing colony.

Since both of sons are living in USA, A well-known literary and writer Hiranya Bhojpure is living with his wife at the Civil Homes located at the Sunakoti of Lalitpur district.

8.4 Impact of Private Housing Colony at Local Area and People/Public Relation and Responsibilities of Housing Colony

The development and promotion of a private housing colony by the companies in a particular area comes both positive and negative impact to that place. It is completely a business job. The companies are usually concentrated on their maximum benefits. Though, they have to work along with various organized and non-organized institutions together. It is compulsory to housing companies to follow the rule and regulation of the country. So they regularly co-ordinate with the concerned authorities and agencies in their work from the beginning to the ending of the colony project. The department and authorities includes the VDC located the project, TDC, KVTDC, DDC, Malpot, Survey Department, DHUDP, DUDB, department of road, NEA, NTC, Sewerage department etc. all above agencies are linked to the project work at least any reason.

Similarly the companies keep a close contact and relation to the local people and institutions so that the work could be operated smoothly and continuously in future. In this course the private housing companies play many public responsibilities involving directly and indirectly in various programs. It is also called as a Corporate Social Responsibilities (CSR). They supports the local people, communities and club technically and financially. They make an environmental impact Assessment (EIA) before the project operation. It helps to save the cultural heritage, natural resource and virginity and other possible problems erupted due to the project operation. The companies usually supports in the road construction and maintenance of the local area of the project. Generally all the companies construct the road themselves to the project location from the main road. The Green Wood Villa, a colony located at Tyanglaphat, Kiritipur has a significant role to make the Tyanglaphat as a microbus route from Kiritipur to Ratna Park. They help to construct and upgrade the temple, sports ground, colleges and school, local drainage system, water supply system technically and financially. The Shubha Housing located at the edge of the river of Dhapasi always initiate to clean the river bank. Sometimes they provide the construction materials like sand, cement, rode, painting materials to local public institutions. Charity and donation to the local club, musical band and political parties is a common practice among the companies.

There is not equal level of public responsibility to maintain by the private housing companies according to its project location. The core city area of the Kathmandu valley is already infrastructured. There is an advanced and developed society as compared to the outer parts of the valley. This has also affected the level of public responsibilities among the companies. The housing colony located at outside ring road have to bear more public responsibility as compared to the colony based located at the core city of the Kathmandu valley.

The most important thing is a sharp increase in the land value/price. The prices of land increases 1/2 times along the housing companies begin their housing colony project. The place becomes an area of concentration. Even the other people start constructing of houses around the housing colony. It needs many skilled and non-skilled labors and the local people dwelling around the colony or other peoples get a chance for employment. Some hotels are opened near the colony as view of the breakfast and lunch/meal servicing for the colony authorities, employees and labors. It definitely helps to grow in the economic activities and intensity. Similarly it the local people sometimes faces the boundary problem and tussle on road access to colony. Similarly the people have to face the different types of pollution like air, sound, sand and solid waste due to the excessive construction.

Besides it the development of such housing colony promotes and enhances a well planned urbanization. It becomes as a role model settlement/urban growth around the place.

CHAPTER IX

SUMMARY, CONCLUSION AND RECOMMENDATION

9.1 Summary

Due to the high concentration of all government, non-government, other administrative offices and comparatively the great opportunities related to all the economic, academic, social, political and financial services and political instability of the country for the last one and half decade, the Kathmandu valley, the capital city of the country faced a high inflow of the population from all over the country and it is still on at the same ratio. The overcrowding population in Kathmandu valley is causing the high demand of housing and creating extreme pressure on the limited resources of the cities. It is leading the valley towards disorganized and haphazard urbanization. Conventional housing practices consume lots of land if housing need of the people in the valley is to be met. This is also causing haphazard urban growth creating various problems like traffic congestion, lack of infrastructural facilities, poor living environment etc. supply of developed serviced land by government efforts is just a small fraction of the entire demand and involvement of private sector have also not been satisfactory both in terms of quality and quantity in the past. But the scenario is changing as private sector is introducing itself into organized housing developer. It is encouraging to other more private companies to involve in the planned urban growth.

The private housing companies/developers are enthusiastically working in this field. They are developing a well-designed, furnished, decorated and infrastructured housing colony with all utilities and services at a beautiful, accessible and safe location of valley. Today, there are about 3 dozens of small and big private housing companies and number of other are involving indirectly and independently whereas some companies are multinational company from the abroad with a large amount of investment. The companies from India and China have already established with number of their housing colony project while the investment(FDI) from some European countries like UK and Spain have also proposed to establish for their housing colony project. The companies have developed more than 5 dozens of private housing colonies (residential areas) in the Kathmandu valley. More than 4300 housing units have been developed and about 70% of the total housing units have been already sold or booked so far. The colony has been developed in 1382 ropani of land area. These private housing colonies have absorbed billion rupees of investment. The big business houses of the country such as Chaudhary group, Kedia group, MS group, Continental group and Civil group have already established their foot into this sector while some other big corporate houses like Khaetan group and Golcha group are trying to get their foot into this sector.

The study is basically focused on the growth trend of such private organized housing colonies. Though, it is just gaining ground in Kathmandu valley. Sufficient attention should still be given timely to make such private housing sustainable. The interviews and questionnaire survey were conducted with almost all the housing developer located at Kathmandu valley and other concerned stakeholders such as government authorities. The visual assessment and observation were conducted as well. On the basis of existing situation of private organized housing development, different aspects and issues of these sectors were indentified. The fundamental aspects of existing growth scenario of private housing such as volume, distribution, pattern and types have been analyzed. Similarly the different management mechanisms, financing pattern of colony project and housing units, execution pattern and some existing problems and hindrances were also analyzed to some extent. And finally certain recommendations have been made in terms of housing strategies to promote as well as to regulate the private organized housing development towards planned urbanization.

The study has included 27 private housing companies of Kathmandu valley. These companies holds 55 different organized private housing colonies and these colony colonies have occupied 1383 ropani of land area (700670 Sq. Mtr.). Out of 55 different colonies, 36 colonies have been successfully completed while rests of other are under construction. The colony projects are taking minimum 2 years to 6 years of time duration to execute the work completely. 33 colonies have been developed as independent housing colony which accounts 60 percent of total and 16 other is apartment pattern of housing colony. Even though there is greater number of apartment housing units than independent units. Apartment housing units occupies about 53 percent while independent holds only about 45 percent of total housing unit. Kathmandu district holds 38 colony and Lalitpur holds 17 while none of the colonies are in Bhaktapur. Similarly 67 percent projects are located at outside the ring road and rests of them (33 Percent) are located within the ring road. Budhanilkantha, Bhainsepati, Sitapaila and Thaiba/Hattiban are the most popular for the developing such colony project. The colony project by Amarawati housing company at Matatirtha is located at the highest distance as compared to all other colony. It is 5 km far away from Kalanki chowk. The size of private housing colony ranges from minimum 1.5 ropani to 125 ropani. Similarly the size occupied by per housing unit is from 3 to 19 ana. The price of housing units ranges from Rs. 600000 to Rs. 29800000 in maximum. The Park View Horizon with 16th floor developed by the Indian multinational company of RJ group is the tallest apartment building and the most expensive housing unit among the organized private housing colony in the Kathmandu valley so far.

This thesis work will be the initial step toward understanding the current state and role of organized housing through private efforts. There is rapidly increasing trend of living at such housing colony and developing the colony projects in an appropriate location of the Kathmandu valley. People's responses and reactions towards living in such community housing are still to be observed and assessed. Moreover quality and

standard level of housing developed by such companies and its role and importance is still to be observed and assessed clearly. So, continuous study on various aspects of private organized group housing has to be studied.

9.2 Conclusion

Living at the beautiful housing colony once a hypothetical and fantasy, now has been a familiar thing to the people of the Kathmandu valley to more extent. Along with the changing life style of the people of the Kathmandu valley, the more attraction and inflow of the people into these private housing colonies is increasing every day. Today there are about three dozens of big and small private housing companies. They are working in the organized form while numbers of other small companies are working independently. The private companies have developed more than 4300 housing units while about 3000 housing units have already sold or booked with 12000 people are living at such private housing colonies in Kathmandu valley.

The growth of population has been creating extreme pressure on the limited resources in the Kathmandu valley. Despite the efforts from the government and non-government agencies for the planned urban growth, city is growing more and more haphazardly. And there is lagging of housing supply much behind the housing demand. On the other hand, with the change of time and demand, housing development has been considering as productive and safe area for the investment from the private sector, too. They have already established their work and involvement and many more are trying their best to come in these sectors. Though new trend of housing has experienced a good start the future scope is still unpredictable.

The government has put the private organized housing in the priority sector with the view of its potentiality to contribute in the significant housing supply, planned growth and national economic growth. The planned landscape design, satisfactory land use pattern, aesthetic looking, uniform housing, provision of basic infrastructure and services, comfortable living environment are the specialties of group housing colony projects. Living in community and sharing the common facilities is new dimension of such housing development which will hopefully create social integrity. Till now nothing much has been done from government to promote this trend except of preparing apartment act. The act includes only the multistoried apartment building. It is insufficient to address all forms and all issues of organized group housing process. So there is immediately need of reviewing the act and formulation of proper regulating accordingly in order to provide legal provision and guideline to all forms of private organized group housing. For the sustainable development of private organized housing colony projects, there is necessary of supportive policies, sufficient infrastructures, services and proper regulation which help to develop a standard and quality housing colony projects. Hence effective monitoring mechanism should be developed.

The current trend of organized private housing company is increasing the housing supply but not contributing much towards the affordable supply. In the urban areas, 24% of the total urban population live in rental accommodation majority of which live in the insufficient spaces and over 7% in the squatter settlement and they are in need of affordable housing. But the housing cost in the Kathmandu valley and urban areas is rising and it is being unaffordable to general people. The developed housing units are very expensive and targeted to high and higher middle class people only. Policy should be formulated such as to encourage private organized housing development targeting for low income groups in order to fulfill the objectives of national housing policy. Major problem faced by developers is consolidation of land. Companies are facing difficulties in land acquisition and development of group housing. The land acquisition act empowers only government to acquire properties for public purposes. There is lengthier and troublous of planning permit/process and lack of required infrastructures and utilities around the valley where the private organized housing colony project can be developed. So the government can avail to the companies by making a good and far sighted rule and regulation and developing the infrastructure at the possible colony project areas which help to make the low cost of housing units.

Sever land scarcity and diverse needs of industrial, commercial, institutional set ups especially housing has made access to land very difficult. The rapidly population growth is enhancing the rapidly urbanization and it is reducing the open space especially the agriculture land of the Kathmandu valley. The open area in the Kathmandu valley has fallen from 64% to 41% within about the last 20 years. The valley is turning into a concrete jungle we will barely be able to find an open area in the valley within another 20 to 50 years if these trends continue. The government is needed to take an immediate action to handle this situation implementing the policy of zoning the land area (declaring one particular area as commercial zone and the others as residential or conservation zone). Such would go a long way in developing locality in a planned manner. Even the housing colonies being developed in Kathmandu valley are not helping much in proper development of the city. Due to the lack of zoning by the government, the housing colonies are also providing a new concentration. The new satellite towns should be developed far away from the core city of the valley like at Sankhu, Lele, Godawari and Dahachok places which could reduce the congestion of the city centers. NOIDA, near the Delhi which had been developed in this way and has now become a new tourist centre. Along with the growth and expansion of the urbanization process towards the suburbs location has relatively reduced the overcrowding pressure in the core city of the valley to some extent.

The rapid population growth and urbanization is jointly working in the maximum exploitation of the landspace of the Kathmandu valley. Both of them goes on together in geometrical way but land will always remain stable. So the existing limited landspace of the Kathmandu valley will have to maintain/sustain the future's additional mass of population and urbanization. It seems to develop a high density of residential

area in near future to maintain the situation. The high-rise multi-storey apartment housing system/vertical housing system is being as an ultimate solution for this where hundreds of family can settle at a single apartment building. The core area (within ring road) of the valley is already saturated with all houses, buildings and some private housing colony project. So there should develop proper physical infrastructures in outside of the ring road for further well and planned housing pattern which would help to promote and develop other organized private housing colonies in future.

The government can't stop people from coming to Kathmandu valley but it can provide options. The government should not make Kathmandu the centre of every service. Half of the problem could be solved if government offices were shifted from the capital to elsewhere. Services, facilities and opportunities provided in the Kathmandu valley should apportioned to other cities as well.

9.3 Recommendations

With the view of above conclusion and the analysis the following recommendation are made:

A. Improvement of plans and programs

-) The government should give the access in land development and land pooling to the private housing companies too.
-) Some of the companies are doing their work without the legal permission from the concerned authority. It must be strictly monitored. Plans and program should be reviewed with the changing technology, demand and process.
-) The government should develop and promote other cities as alternative of Kathmandu valley to prevent its recent rapid population growth and urbanization.

B. Improvement of act/Review of legislation

-) There should be clear legal provision for all kinds/pattern of housing colony projects. The newly enacted apartment act 2054 is insufficient. The organized group housing colony act is still to be formulated. So it should be reviewed to make it cover all forms and address all issues of organized group housing. And proper regulation should be formulated.
-) Overcrowding or missing responsibilities of various agencies eg. KVTDC, TDC, DUDBC etc in the respective legislation should be reviewed and avoided.

C. Encouragement in the supply of affordable dwelling units:

-) Policy should be formulated to encourage private group housing development targeting all income level to fulfill the objectives of national housing policy.
-) The current state of two times of tax burdening to housing developer at Malpot should be reviewed. It could help to minimize the housing unit cost.

D. Improvement of organization role

Role of different organizational level:

Centre level:	MPPW, DHUD and DUDBC
Regional level:	KVTDC
Local level:	TDC VDCs

Should be clear cut.

-) The role and rights of the concerned authority and agencies should be clearly defined. It should not be overlapped and gaped.
-) The monitoring and supervision mechanism should be strengthened and up to date.

9.4 Recommendation for Further Study

The private organized group/community housing is the new concept in the context of Nepal. But it has experienced sufficient popularity. Most of the colony projects are successfully completed. The quantity of booking and the increasing volume of project can not alone prove the success of the projects. Only after people start accepting the new concept of living in group housing and their social living go smoothly and comfortably, the group housing phenomena can be considered as successful which is still to be observed in future. Hence further continuous study and research in this field is desired/required for its development, prospects and as well as effectiveness.

Few topics have been suggested for further study:

-) Prospects and problem of organized group housing colonies
-) Role of private group housing colony in planned and organized urban growth.
-) Possible appropriate locations/places for the organized group housing colonies in the Kathmandu valley.
-) Affordability of low income group into group housing colony.
-) Review of policies, norms and regularity.

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