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Real Estate Development Practice in Kathmandu Valley: Context of Planned Housing

Nistha Nakarmi a, Sushil Bajracharya b, Sangeeta Singh c

^{a, b, c} Department of Architecture, Pulchowk Campus, IOE, Tribhuvan University, Nepal Corresponding Email: ^a nistha.nkrmi@gmail.com, ^bsushil.bajracharya@hotmail.com, ^c sangeeta@ioe.edu.np

Abstract

The extensive growth of population has its toll on urbanization and haphazard growth in the morphology of cityscape in the context of Kathmandu Valley. The growth of the city is portrayed in increasing real estate development projects which is a response to the chain of demand of the growing population. This paper presents the status of Real estate development practice in Kathmandu Valley with an explanation of the process of development and the analysis of every step of the process. The identified steps in the process are acquisition, planning, site development, procurement, quantity survey, finance, marketing, and sales/ rent.

Keywords

Real estate, Housing, Real Estate Development

1. Introduction

With 4.7 percent of annual population growth in the valley, there is a need for 1 million urban houses during 2011-2012 [1]. The private real estate sector in Kathmandu valley has boomed in recent years, and the immediate driver of this boom has been an enormous rise in land prices within the valley. A growth of 300 percent from 2003 to 2008 has been widely reported[2]. The housing sector in Nepal has witnessed a series of trends both in built form and implementation practice over the last few decades, from government-subsidized housing production through the site and services programs in the 1970s to land pooling projects (i.e., consolidation. development, and redistribution) in the 1980s and private apartment construction in the 2000s. The contribution of the housing and real estate sector to the gross domestic product in Nepal is 8 percent [3].

Vision for 2030 for urban development strategy includes 50 percent of new residential area to be developed through land readjustment process and 15 percent of the total requirement of housing through organized housing (both private and public sector) and clearly mentioning Private/cooperative sector supplying housing for the poor in large towns. The strategy for which includes encouraging private sector by activities like review and developing relevant incentive and facility package like land / infrastructure

so as to provide housing to economically weaker strata [4].

If Government intends to incorporate private developers in housing supply, then there should be assessment on the practice by private developers based on which the public private partnership can be possible in attaining housing goals. The paper thus, is an effort to understand how the private real estate developers work and identify the issues faced by developers in context of Kathmandu Valley.

2. Objective

Main objective

• To explore and analyze real estate development practice in Kathmandu Valley.

Sub objective

- To identify steps of the process involved in real estate development.
- To analyze each step of the process.

3. Literature Review

Private Development is responsible for delivering the larger proportion of the global urban built

environment. When unchecked, it can be responsible for the tragic displacement of communities, unaffordability of housing, controversial addition to city typography, and the increasing inequality of society[5]. Derrington sets some property development principles as 1. Formulate detail programmatic requirements 2. Advance design quality 3. Perform cost-benefit analysis to optimize the design 4. Contribute to the community and public realm through building's interface 5. Standardize production or preparation of materials to improve efficiency and quality.

The real estate development process involves three major groups- a consumer group, a production group, and a public infrastructure group[6]. Each group benefits from cooperation and a full understanding of the values, short- and long-term objectives, and major limitations controlling the other two groups.

Wilkinson and Reed points out the following as the stages of the development process i.e., 1. Initiation 2. Evaluation 3. Acquisition 4. Design and Costing 5. Permissions 6. Commitment 7. Implementation and 8. Let/ Management but also confirms that development is not an entirely sequential activity and the stages in the process often overlap or repeat [7].

Boucher defines the development process can be thought of as a series of sequential steps that have to be undertaken. These steps are Market analysis, site selection, site acquisition, planning and engineering, financing, construction, and marketing[8].

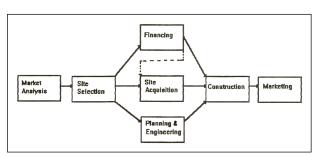


Figure 1: Boucher's process

The development process is usually modeled as a series of sequential phases, such as 'evaluation, preparation. implementation, and disposal'[9] 'evaluation, acquisition, procurement, and disposal'[10], 'inception of an idea, refinement of the feasibility, contract negotiation, formal commitment, construction, completion and formal opening, and property, asset and portfolio management [11] or 'planning and initiation,

feasibility, commitment, construction, and management and operation' [12]. Gehner explains the development process in terms of a matrix of the phase of development and steps [13] as follows

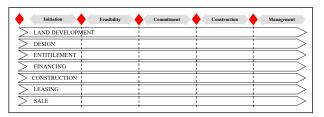


Figure 2: Development phase matrix by Gehner

Kaklauskas et al. gives the following detailed comprehensive phase of development as:

- 1. Creating the preliminary concept
- 2. Search for a plot, its valuation, and acquisition
- 3. Making the detailed plan
- 4. Preparing project management documents.
- 5. Marketing activities, lease/sales contracts
- 6. Securing project funding.
- 7. Designing
- 8. Construction
- 9. Submitting to be approved for use.
- 10. Use, lease, and/or sale of real estate
- 11. Quality assurance during the warranty term.

4. Methodology

The research is of qualitative type with the ontological claim that each step in the process of real estate development has a crucial significance in the success of the project. The epistemological reasoning is based on literature review and direct interaction with key players in the real estate development field. research is of exploratory type with inductive logic falling under the interpretivism paradigm. methodology used for research structuring is based on phenomenology and supported by a method of interviews with different players in the real estate development field for data collection. interviewees were General Manager, Legal executive, Quantitative Survey Manager, Procurement Manager, Finance Head, Project Manager, Marketing and Sales Manager of a real estate company, and planner of architecture and planning consultancy.

Table 1: List of Interviewees

Interviewed	Number of	Experience
	Interviewed	Years
General Manager	1	15
(#GM1)		
Legal executive	1	10
(#LG)		
Planner and	1	20
Designer (#PD1)		
Finance Manager	1	6
(#FM1)		
Quantity Surveyor	1	10
(#QS1)		
Project Manager	1	8
(#PM1)		
Procurement	1	7
Manager (#PR1)		
Marketing manager	1	6
(#MM1)		
Sales Manager	1	5
(#SM1)		

5. Results and Discussion

The real estate development process constitutes of amalgamation of multi-discipline working in a systematic order to attain the development goal. This is articulated by the General Manager of Real Estate developer (#GM1) as "real estate development process includes the general steps like the acquisition of land, design development for the project, gaining permit for execution, securing finance, construction on site followed by marketing and sales". Further elaboration on the enterprise was stated as "upon understanding feasibility of the project, the process of acquisition is done with the involvement of legal consultant, the project brief is prepared by the executive board determining the category0 of the project and basic specifications, the planners are called on board for site planning and project designing with all the infrastructure and services. The detailed design is studied by the Quantitative survey department for the preparation of a detailed bill of quantities. The project manager plans for the project and places a requisition for the material required. The procurement makes the purchase based on the required quantity guided by BOQ and Requisition. The quantity surveyor overlooks the quality and quantity of work and verifies the work. During the construction process itself, the marketing team identifies the target audience and comes up with different strategies, which later realizes as sales". Based on the literature review and supported by the

interview with GM1, the sequential process of real estate housing development in the context of Kathmandu is given in the figure as

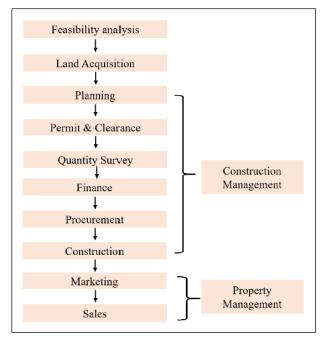


Figure 3: Process in Real estate Housing Development

- 5.1 Feasibility Analysis Feasibility of any project is an essential step which determines the conception of project. In context of Kathmandu, the feasibility analysis fore real estate development project is done with collaboration of Technical, Financial and Legal team. #GM1 elaborates the context as "for securing financing of project, feasibility analysis is a crucial step". The feasibility analysis is also carried out by consultants.
- 5.2 Acquisition Land acquisition for any urban development initiative has been Feasibility of any project is an essential step which determines the conception of project. In context of Kathmandu, the feasibility analysis fore real estate development project is done with collaboration of Technical, Financial and Legal team. #GM1 elaborates the context as "for securing financing of project, feasibility analysis is a crucial step". The feasibility analysis is also carried out by consultants. increasingly difficult. Land acquisition negotiations with the landowners often falter owing to speculative price demanded by the landowners, absentee landlords, and indecision

on the part of family members (MOUD, 2017). There is no formal land information system. The acquisition of land is the initial step in the conception of the Project. Legal consultant (#LG1) expressed the context of land acquisition in Kathmandu as a complex nature which depends on the availability of sale of land and owner's agreement. The broker either approach with availability of plot or are approached for the acquisition. The process of land acquisition is governed by Ministry of Land Reform and Management through Land Revenue Office. The developer is subjected to present the minute of Board of Meeting mentioning the detail of area and price, Company registration document and instruction document, Share holding pattern and Power of Attorney detail. The owner is subjected to present Land ownership certificate and land tax clearance. The transfer of ownership has to be supported by recommendation letter of local government as well. In terms of brokerage, the real estate market in Valley seems to be working majorly with unregistered real estate agents and brokers which have surfaced the issues like high commission and frauds. The Government of Nepal have an initiative to control this issue by recognizing some real estate agent/ agency which have been certified.

5.3 Planning The planning start with a vision, based on which the project brief is prepared and program formulation is done. The conceptual planning is done and with continuous feedback and readjustment, detail plan is prepared. In context of housing real estate development in Kathmandu, Planner and Designer (#PD1) explains that developer's language is generally saleable area square footage which governs the final output. Further elaborates as "it is difficult to convince developers to lose some saleable area for better space planning however, a design with proper justification to add value can result in better sales". In terms of design, majority of the designers use CAD. The software for designing is strong however, when it comes to multi engineering discipline integration, many problems are faced. The Building Information Modeling (BIM) is a revolutionary in terms of construction field however, the practice is rarely seen the market.

- **5.4 Permit and Clearance** Housing project permit Kathmandu Valley is governed by Kathmandu Valley Development Authority (KVDA). To apply for planning permit, the developer has to present with Report consisting Project details and Project masterplan, infrastructure plan i.e., road, sanitary system, electrical system, land use plan showing percentage of green space, road and saleable land. The required document are company registration document and instruction document, Land tax clearance and company tax clearance. The environment regulation like IEE and EIA are also required. However, the developers do find the process to be inefficient from governments side. #PM1 claims "it is a great initiative by government to impose environmental concern before conducting any construction, however, the process for EIA is hectic and would take an entire year for the process after submitting all project details and drawings. Also, sudden change in government's policy for EIA to be processed through provincial government making the prior application under process invalid as the submission of report would require translation in Nepali, further elongates the time and makes the project execution uncertain".
- **5.5 Quantity Survey** Quantity surveying is an integral part for any development project. In housing development project, quantitative survey (OS) ensures that detailed costing is done for the project based on Bill of quantity prepared. Quantity Surveyor (#QS1) explains cost projected for the project helps in understanding of project financing analysis. QS is responsible for detailed BOQ preparation, estimate material consumption, labor cost, prepare contractor agreement document, and check the quality of the work done. #QS1 explains the difficulty in practice in Nepal as "the quality tolerance is unclear as most of workmanship is semi-skilled since majority of skill workers of the nation have gone abroad".
- **5.6 Finance** The housing project in the valley are either fully developer's investment or financed partially by financial institution. Financial Manager (#FM1) of Real estate developer elaborate as "for project financing in housing sector, the financial institution contributes to 40

% loan while 60% is through equity, the loan equity ratio is guided by Nepal Rastriya Bank (NRB) based on which the financial institution is bound to follow. However, the ratio is different for different real estate project, for instance, hospitality sector receives greater percentage of loan as it is considered as productive sector". In terms of Client property loan, the financial institutions have their guidelines where the valuation is done for how much the financial institution can lend a loan.

- estate enterprise deals with purchase and store keeping. The purchase of any items is based on requisition by project manager. The procurement manager (#PR1) explains on the department as "it an essential part in organized purchase of any goods for the project. The project construction clearly depends on the procurement of materials, therefore, project management with clear time schedule and timely requisition ensures timely supply of required material on site, however, the requisition on material and its quantity if unplanned leads to obvious delay in project".
- **5.8 Construction** The construction is the step of turning the vision of project into a reality. An immense amount of planning goes for the execution from human resource management, contractor selection, material management to supervision of work. The Project Manager of Housing project (#PM1) elaborates the issues in execution as "issue standardization of material auality distributer/ manufacturers as the inconsistency is evident which affects the quality of construction."
- 5.9 Marketing and Sales Marketing for the project is important even from early-stage project execution. This helps in securing sales. The marketing is essential part of property management where interested buyers are found. Marketing Manager of housing company (#MM1) elaborates the methods of marketing like advertisement, sponsorship, digital marketing but also claims that the market is undersupplied for the housing demand. In terms of sales, the housing real estate offer different purchase scheme for buyers. Financial institutions also approach the developers to

facilitate property loan to the buyers, which attracts the buyers. Moreover, depending upon the state of development, the payment terms for the property is determined.

6. Conclusion

The real estate housing practice in context of Kathmandu valley is based on sequential step of feasibility analysis, acquisition, Planning and design, Permit and Clearance, Construction Management and Property Management.



Figure 4: Process in Real estate Development

These steps in the process gives general sequence of work. However, the activities of each steps in the process are subjected to be executed simultaneously or sequentially. The identified issues in each step gives the insight on the activities to resolve it, some of which needs government's intervention, while some of which requires organized system within the The problem in land developer's enterprise. acquisition includes no formal land information system due to which the process takes longer time. In terms of permit and clearance, the process takes longer period and with changing policy, the uncertainty impact project and its execution. The construction management highlighted two major problem i.e., inconsistence quality of material and lack of skilled human resource. The governance is required for quality of material presented in construction market, so that quality of construction is maintained. For the issue of lack of skilled human resource, where majority of skilled workforce are attracted for foreign employment, government needs to pay an attention strategy to retain the skilled manpower in the country. Also, based on interview of practitioners, the technological advancement seemed to be lagging in the field of construction. software generally used by construction manager are excel and MS project, while compared to international market, there are many advanced software to keep the construction management checked but are not available in Nepal. Similarly, in terms of design as well, the market needs to adopt BIM for better integrated design and execution. Regarding housing demand and government's vision to integrate private developers in the meeting the 2030 urban development vision, the detailed strategies and activities are required to provide platform to deliver affordable housing. In scenario of Public Private Partnership, government needs to work on how to make PPP possible, for which the assessment criteria for developer itself is required.

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