

**DETAIL FEASIBILITY STUDY REPORT
FOR
THE ESTABLISHMENT OF COMMERCIAL COMPLEX
OF
LUMBINI ZONAL HOSPITAL
AT
PUSHPALAL PARK, BUTWAL**

(A THRESHOLD APPROACH ON TECHNICAL AND FINANCIAL FEASIBILITY STUDY)

Submitted and Prepared BY:



ENGINEERS FOR TECHNICAL CONSULTATION (Pvt.) Ltd.

Anamnagar, Kathmandu

PO BOX 10387

Tel: 4252094/ Fax: 4252094

URL: www.etcconsultation.com

Regd No: 12651

E-mail: info@etcconsultation.com

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Nepal, a mountainous country with a surface area of 147,181 sq.km is bordered in the north by the Chinese Autonomous Territory of Tibet and in the east, south and west by the India. About 86 per cent of the population lives in the rural areas, and remote mountain regions are sparsely populated. The country which was struggling hard to ensure equitable access to development efforts to all districts due to combination of factors including rugged topography is further experiencing severe difficulties.

Limited natural resources, a landlocked location, difficult topography, poor infrastructure, a weak human capital base and a long history of public intervention in the economy are some of the impediments to economic growth.

1.1 Background

Urban population is growing very rapidly in recent years mainly in Major cities of Nepal. Urban housing deserves especial attention because of the larger contribution that urban areas make to the Gross Domestic Product of the country when compared to its rural counterpart. In Nepal we find more than sixty per cent contribution of the urban areas to the country's gross domestic product despite lesser investment made to it. In fact more investment needs to be made to the urban areas due to its potential to contribute to the country's economy.

The need of the urban housing is increasing with the passage of time with faster pace of urbanization underway in the country. The new millennium is an era of urbanization and we cannot wish it out of existence. In fact, urbanization should be considered as an asset more than liability. It should be made use of for bolstering the economy of the country.

Increasing urban residence, need of urban commercial center having all ultra modern facilities also increased. A decade ago Bishal Bazar was the only commercial centre stood in Kathmandu. Now more than thirty commercial centers are providing their facilities to the people of Kathmandu under single roof.

Similarly Butwal is also the city having population 300,000 as arising the center hub for Western Region which connect Terai to the different mountainous districts.

This study report deals with the technical and financial viability of the commercial center to be established in the heart of Butwal city center as Commercial complex.

1.2 Objectives of the Study

The objectives of the study are two-fold, viz.-

- To analysis the role of commercial center as a new market hub at Butwal Center
- To find out the financial and technical feasibility scope of the project

1.3 Rationale behind the Study

It needs proper study and detail technical and financial analysis to develop such a commercial junction as it will serve more than 100 thousands people per day in the heavy flow.

Increasing the residence in Butwal, modern commercial centers and business hubs are needed to serve the need of increasing population. Considering these facts a quality centre is felt to be established at Butwal at around 6100 sqm. land.

1.4 Scope of the Study

The study is carried out to analyze the facts to establish such big center with the investment more than 12 million US dollar.

The scope also covers the detail impact study of the center as it is close to the Main Hub

1.5 Limitations

The study is focused on the issues and cases confined within the Commercial Center. A comprehensive and comparative analysis on the other commercial centers is also prepared to enhance the wider aspects of the commercial centers in Butwal.

1.6 Methodology

The methodology adopted for the preparation of the study is as follows-

- Desk study of the study reports and publications on urban commercial center development issues, and collection of secondary data from those sources.
- Comparative Case Study of urban commercial centers is carried out.
- Financial Analysis of some of the commercial centers

2.1 BACKGROUND:

The demand of commercial center in Butwal is increasing due to increase of population density. Proper study is still to be done but anyone can feel that the purchasing power of individuals is increasing due to increment in their earnings. Many business houses have studied the demanding needs of the individuals and creating the new scope of business except their traditional one. Different car manufacturers are opening their showrooms at Butwal.

These examples show that the concept of business has been changed from traditional to modern due to the change in living standard of the people and their concept to choose the latest technology.

From the past ten years of the study in Kathmandu, we find establishment of Commercial Center are increasing in geometric ratio due to the high demand. In five months time United WTC at Tripureswor get 90% occupancy which was opened in the last May compared to Kathmandu Mall established in 2004 which gain its 90% occupancy in 1 year and Kathmandu Plaza at Kamaladi get filled only after 3 years which was started eight years before.

From the above data needs of commercial center in core urban area is increasing which not only change the business concept but also beautify the city. The concept of these centers is to provide all the necessary things required for the consumer.

Concerning to the project which we are going to establish, it is close to the main market of Butwal.

The project is designed keeping in mind that it will serve probably the business hub for both the outsider and for people living in Butwal. Before ten years people from middle class do their shopping in the individual shops located at BP Chwok, Sunauli and Bhairahawa. This trend has been changed by shopping centers arises in the city. Time has been changed and the concept of people also changes.

2.2 Needs of Commercial centers and The Project:

The Project will be established in 6100 sqm of land at the Puspupal Chwok. This project will be designed as per the common current international market requirement.

In Nepal, during the last ten years period, municipalities have increased from 33 to 99 municipalities. Among them, one is metropolitan city, four are sub-metropolitan cities and rest is municipalities. Out of 99 cities, many cities are facing migration of people from nearby rural as well as hilly areas. Besides this, due to the natural growth too, population of urban areas is increasing. Hence shortage of commercial centers has been emerging very rapidly. In Butwal day by day, the population is increasing rapidly.

Housing and commercial center needs in the urban sectors can be explained as an outcome of the inter-relationship among three factors (Fig. 2.1)-

- i. Rapid population growth in urban areas
- ii. Increased income and improved living standard
- iii. High demand of building site with pleasant environment

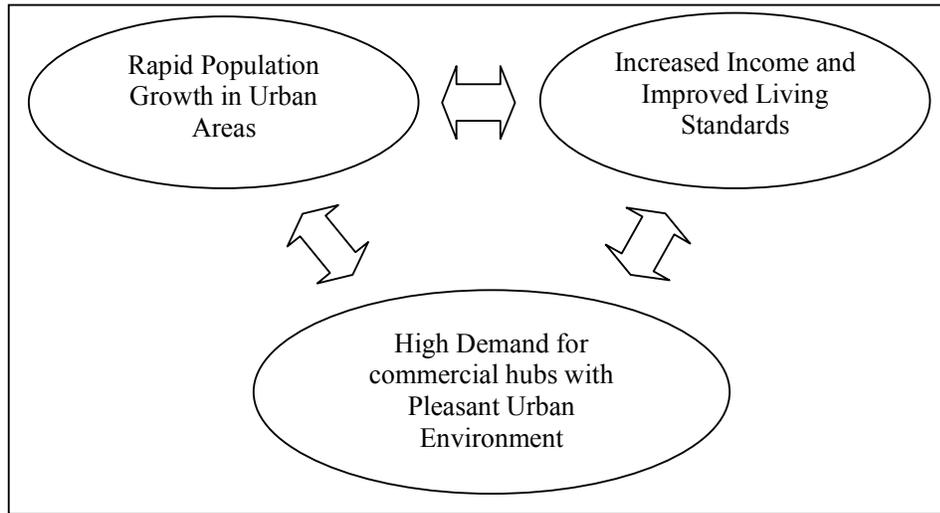


Fig. 2.1 Influencing Factors on Housing Needs

i. Rapid population growth in Urban Areas

The rate increase of urban population in Nepal is 6% per annum. It is directly related to the rural urban migration. The reasons behind the fatal attraction towards cities are the economic opportunities as well as services the lack of different types of facilities in the rural areas, for instance shopping centre, health centre, communication and other related facilities. The increase in population induces different needs.

ii. Increased income and improved living standard

When there is increase in the income of people, their life style also changes. People want to live in better environment with the all types facilities in the proximity and for this, they are willing to bear the cost of better housing lots, need improved offices, commercial centers and other facilities

iii. High demand of site with pleasant environment

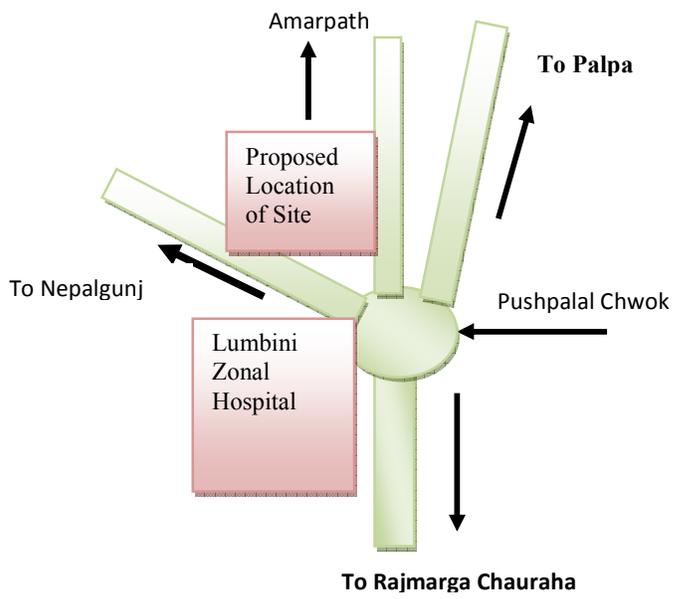
When economic growth appears then need of pleasant centers for their offices, shopping malls and other needs.

Looking for these needs and the location of the site we found the project to run the commercial center is suitable from any angle.

2.3 The Project Component:

2.3.1 Project Location:

The Project location is close to the BP Chowk and in the crossings of Nepalgunj Road, Palpa Road and Amarpath which is located in the drawing.



Location Plan



The proposed Site



Proposed Site

2.3.2 Project Design and Space Analysis:

The project will be designed considering all the elements required for the commercial center. The contemporary building materials and techniques such as reinforced concrete, steel, glass, aluminum etc. will be extensively utilized and major design factors for earthquake consideration shall also be incorporated. Eco-friendly and bio-diverse elements will be introduced in every conceivable areas for self-sufficiency in the fields of energy utilization and conservations. However, all these elements shall be infused subtly into the various area designs keeping in mind the ultimate aim as to maintain the existing local architectural ethos in its entire splendor. This shall be carried out by the overall cladding systems and utility of the traditional materials in the right places.

The exterior landscaping shall be designed to enable the structures in incorporate within an ambiance of the beautiful surroundings, as they exist. No foreign elements shall be introduced to disturb the scenic beauty of the surroundings.

Two Storied basement will be designed to have 37,250 sft Basement I and 37,250 sft Basement II to meet the requirement of parking for more than 260 vehicles and service area.

Basement II have an area of 37,250 sft and will be used for parking, disco or other resturant at present and later it will be used as Parking space where sufficient components of passage way is provided for the parking.

Ground and First Floor having an area of 74,650 sft will be used as prime commercial hub for shopping, where more than 483 individual shops or two medium size departmental store will be run. Shopping mall will be extended upto fourth/Fifth and Sixth floor in the future depending upon the demand.

At present Second, third, fourth, Fifth, Sixth floor having area 236,250 sft will be used for shops, bank, finance company and airline offices. These floors are suitable for these institution.

A Space of 24,899.00 sft on seventh Floor will be used for two Cinema Halls and restaurant.

Outside Elevation shall be designed such nicely that the building shall add beauty to the entire environment.

Table1: Space Distribution Analysis

Floor Description	Total Area (Sft)	Rentable Space (Sft)	Usage Pattern
Basement	37,250.00	37,250.00	Parking for 131 vehicles
Basement I	37,250.00	37,250.00	Parking for 131 vehicles
Ground Floor	37,250.00	19,294.00	Super market
First floor	37,250.00	21,096.00	Super market
Second Floor	38,376.00	21,512.00	Finance Company/ Bank
Third Floor	38,916.00	21,659.00	Bank/Offices/Shops
Fourth Floor	38,916.00	21,659.00	Bank/Offices/Shops
Fifth Floor	38,780.00	21,244.00	Bank/Offices/Shops
Sixth Floor Plan	38,780.00	21,244.00	Bank/Offices/Shops
Seventh Floor	38,780.00	21,244.00	Bank/Offices/Shops
Eighth Floor	24,899.00	13,961.00	Cinema Hall/Restaurant
Total Area	406,447.00	257,413.00	

Note:

Total Construction Area(Built Up Area)	406,447.00
Total Rentable Area	257,413.00
Percentage of Area to be Rent Out	63.33 %

Available land Area: 65,610.00 sft (0-18-0-0 B)

2.3.3 Construction Management

The experienced project management team having close coordination with the engineer will look after the construction of the building. The team shall be made responsible for coordinating with the client, contractor and the engineer while ensuring quality and working schedule. Works like regular construction supervision, preparation of detail construction drawings other than provided by the engineer, checking of bill of quantities and invoices, preparation of project report etc. shall be undertaken by the Project Management Team.

2.3.4 Project Schedule

A detailed project schedule is given as follows. Major project activities are envisaged taking place by following dates:

a)	Preliminary Project Proposal	November, 2011
b)	Proposal to be published for PPP	December 2011
c)	Detail Engineering Design	March 2012
d)	Final Approval of the Project	August 2012
e)	Construction Started	December 2012

2.3.5 Landscaping and the aesthetic View of the Project

Provision is made to beautify the location by designing the perfect landscape to suit the environment and the building.

2.4 Environmental Impact Analysis:

As the area is very close to the Center Market area, Initial Environmental Impact analysis shall be executed prior to design the building.

IEE report shall be carried out all the feasible approach and constraints due to environment .

But in our feasibility report we have not found out the major constraints from environmental aspects.

During Design phase an IEE Report shall be prepared.

2.5 Financial Analysis:

Most important parameter to execute the project is its project cost and its return period. Without having in depth financial analysis no any Engineering projects can be implemented.

So separate Financial Analysis report is carried out by the professional Chartered Accountants but we have carried out comparative project cost and its analysis below:

Table 2: Construction Cost Analysis

Total Floor Area	406,447 sft
Rate of Construction of building	NRS 3,000.00 per sft
Total cost of construction	NRs 1,21,93,41,000.00
Total rentable space (63.33 % of the total area)	257,413.00 sft
Projected Period for space to be rented 100%	4 years
Period of Construction	2 years

Table 3: Preliminary Rent structure

Floor Description	Rentable Space (Sft)	Initial Annual Rent Rate per sft	Initial Annual
Basement	37,250.00	600.00	Parking for 131 vehicles
Basement I	37,250.00	600.00	Parking for 131 vehicles
Ground Floor	19,294.00	1400	Super market
First floor	21,096.00	1200	Super market
Second Floor	21,512.00	800	Finance Company/ Bank
Third Floor	21,659.00	600	Bank/Offices/Shops
Fourth Floor	21,659.00	600	Bank/Offices/Shops
Fifth Floor	21,244.00	500	Bank/Offices/Shops
Sixth Floor Plan	21,244.00	400	Bank/Offices/Shops
Seventh Floor	21,244.00	300	Bank/Offices/Shops
Eighth Floor	13,961.00	300	Cinema Hall/Restaurant
Total Area	257,413.00	257,413.00	

2.6 Cost Benefit Analysis:

Floor Description	Rentable Space (Sft)	Initial Annual Rent Rate per sft	Rate of Rent after 10 Years	Total Initial Rent Amount	Total Final Rent Amount after 10 Years
Basement	37,250.00	600.00	900.00	22,350,000.00	33,525,000.00
Basement I	37,250.00	600.00	900.00	22,350,000.00	33,525,000.00
Ground Floor	19,294.00	1,400.00	2,100.00	27,011,600.00	40,517,400.00
First floor	21,096.00	1,200.00	1,800.00	25,315,200.00	37,972,800.00
Second Floor	21,512.00	1,000.00	1,500.00	21,512,000.00	32,268,000.00
Third Floor	21,659.00	800.00	1,200.00	17,327,200.00	25,990,800.00
Fourth Floor	21,659.00	600.00	900.00	12,995,400.00	19,493,100.00
Fifth Floor	21,244.00	500.00	750.00	10,622,000.00	15,933,000.00
Sixth Floor Plan	21,244.00	400.00	600.00	8,497,600.00	12,746,400.00

Seventh Floor	21,244.00	300.00	450.00	6,373,200.00	9,559,800.00
Eighth Floor	13,961.00	300.00	450.00	4,188,300.00	6,282,450.00
Total	257,413.00			178,542,500.00	267,813,750.00
Average Monthly Income from Rent				14,878,541.67	22,317,812.50
Average Annual Income				178,542,500.00	267,813,750.00
Average Monthly Income for total rent out period				18,598,177.08	

Investment / Interest Calculation

Total Initial Investment				1,219,341,000.00
If 100% Loan applied for the project @ 13%per anum for 20 Years,schedule monthly payment				14,285,000.00
Total Final Investment				3,428,400,000.00
If the project awarded for 30 years excluding construction period, total income				6,695,343,750.00
Cost/ Benefit Ratio including interest				95.29

Pricing formulas are determined by the availability of similar construction and rental charge, the level of demand for the product in the Nepalese market, and total costs required bringing the construction. Before selecting a pricing strategy, we should obtain as much information as possible from local agents, market research, potential customers, and competitors.

Pricing structures in Nepal are erratic. No any fixed cost is here for the rental charge, so we have gathered the information from other similar projects.

Rental charge for the Down Floors is comparatively higher than the upper floors. We have considered the average charge of top and bottom floors.

Experiences from many developing countries have proved that increasing with the economy of the people and increasing living standard of the people small shops and small markets are replaced by single building unit which not only give the facilities to the people but also became the good public place where hundreds thousands of people gather and work in a single roof. In Nepalese context also, many commercial buildings projects has proved it as successful business for both the users and investors. Kathmandu Plaza, Kantipur Mall, Kathmandu Mall, United WTC are the examples of good and profitable commercial complexes.

In our context also Commercial Center may prove as the good investment for the business house and better for the users also.

Hence, the project is very much feasible from both technical as well as financial purpose in Butwal center.

3.2 Recommendation

Many responsible private sector investors are hesitating to come in this sector due to various constraints such as restrictive land ceiling, not beneficiary by laws for the investors, less public awareness, different laws and restriction by Municipalities and very narrow road condition. These problems should be addressed and appropriate amendments should be made in related rules and regulations to increase the efficiency and effectiveness of private sectors in commercial center development.

Time has come for the government to realize that its limited intervention in land market is not going to address the growing housing problems in urban areas, so it should work towards creating better environment for the functioning of private sector.

In our context also we should make the building to serve for more than two hundred thousands people by increasing height upto 10th floor.