# TECHNO-FINANCIAL FEASIBILITY FOR THE DEVELOPMENT OF COMMERCIAL COMPLEX IN PANVEL ON FINANCE, BUILT, TRANSFER (FBT) BASIS

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**ABSTRACT:** A feasibility study is an investigative tool that can be used to estimate investments from various perceptions, e.g. technical, financial, market, social, legal, and organizational. The ensuing Paper is an assessment of the extent of feasibility and cost-benefit of the proposed site in Panvel City and its ability to attract private sector investment to develop the Project on Commercial basis.

In view of commercial potential and from the point of optimizing the value proposal to Panvel City Municipal Corporation, it is proposed to develop the project on Finance Built Transfer (FBT) basis. Market research has been performed for the location assessment and results have been analyzed. With this feasibility study viable and successful project structure/concept that would attract/enable private developers/investors to participate in the project can be adopted and project can be implemented in partnership with private investors by creating an appropriate enabling environment and mechanism. Also this study will be beneficial to ensure that positive economic and employment value is added to the city in general.

Keywords: Commercial Complex, Feasibility study, Market Assessment, FBT, Panvel, financial analysis

## 1. INTRODUCTION

For the success of any construction project it is very much important to take into consideration its viability in terms of technical, financial, economic, social, etc. parameters. Various risks are associated with these factors and if not properly analyzed can affect the smooth functioning of the project. Feasibility study is the base for success of the project and helps the construction participants to make appropriate investment and planning decisions.

#### **1.1** Background of the Project:

Panvel is a city located in Raigad district of Navi Mumbai known as the gateway of Konkan region. Panvel City Municipal Corporation (PCMC) is the nodal agency for managing the city administration and infrastructure development of the city and as part of its development strategy proposes to develop various commercial/economic infrastructures through Private Sector Participation (PSP) or Public Private Partnership (PPP) Basis. After detailed assessment PCMC has identified a parcel of land that is amenable for commercial exploitation/leveraging through PSP/PPP basis. PCMC wants to develop the open land admeasuring 2,707.23 sq. mt. available near "Shri Vilasrao Deshmukh Market" as "Extension of Shri Vilasrao Deshmukh Market" as a Commercial Shopping Complex with Parking facility along with generation of revenue.

PCMC proposes the development to be done by attracting Private Sector Participation which will allow the private developer to explore the commercial potential of the project site to develop the infrastructure facilities in the area. The land to be allotted to the developer where in the developer will be responsible for developing the land on viable PPP model

## 1.2 Need of the Study

PCMC wants to develop a state-of-the-art Modern Commercial Space on the existing open plot. The open plot lies in the core area of the city which has a high commercial and retail value in Panvel region. This core area of the city has

a high potential for mixed customer base. Parking of private vehicles is a major issue in the heart of the city which can be catered to using this particular open plot.

The land can be optimally utilized by proper planning of various infrastructure components on the project site to serve PCMC objective and also generate revenue in term of kind and cash. The project site being located at the heart of the city can be used for the development of an organized shopping arcade.

A combination of these factors appeals for the development of an integrated Commercial Complex.

# 1.3 Objective of the study

The study involves fulfilling the following objectives:

- To assess/evaluate the viability of commercially developing a plot in the Municipal Corporation Area, and to utilize the valuable land in the heart of City
- To perform comprehensive study of real estate and commercial scenario in Project site and to carry out Market assessment of the project area in details
- To evaluate the technical assessment based on the market research results.
- To evaluate the project for its financial viability and identify development options and evolve a financing strategy to the benefit of Authority.

## 2. METHODOLOGY

Methodology adopted for the project work is described as below.

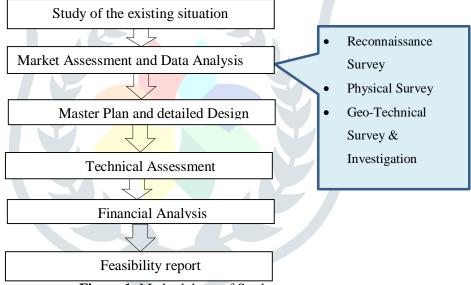


Figure 1. Methodology of Study

#### 3. THE PROJECT SITE

The site is strategically located in the heart of the city which can be easily accessed from other parts of the city. The site by its virtue has a frontage on one side facing towards 18 m wide road. It is located next to the Shivaji Chowk which is a prime location of the city. The total area of the plot is 3,284 m². There already exists a G+2 Shopping Centre on 50% of the total plot area.

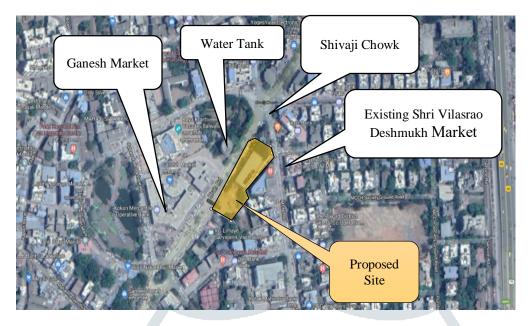
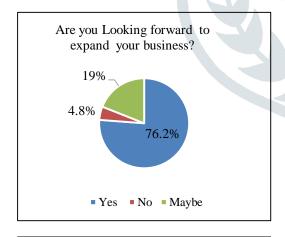


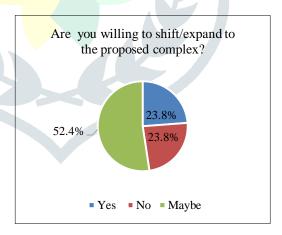
Figure 2. The Project Site

# 3.1 Market Assessment and Analysis of Results

The market assessment for the project has been undertaken in the city of Panvel and also in some developing regions in the vicinity. The current market dynamics of the Panvel Real Estate sector and the understanding of the key factors influencing them are the main focus of this study. The study also includes conducting one-to-one interaction with the realty industry players operating in Panvel as well as outside. Responses are sought from prominent national business houses about their inputs on the proposed development and their willingness to invest in the project. The interviewed participants have provided accurate responses which are helpful in designing of the development model for the project.

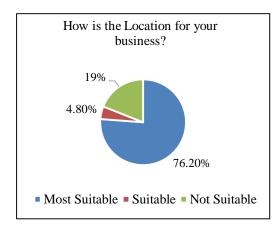
The responses are collected and information is summarized in the google forms. A detailed analysis has been carried out from the responses of the survey as follows:



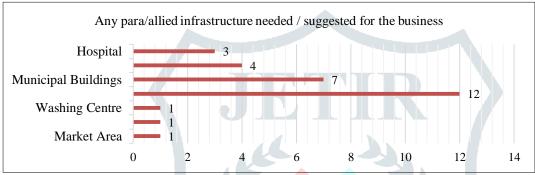


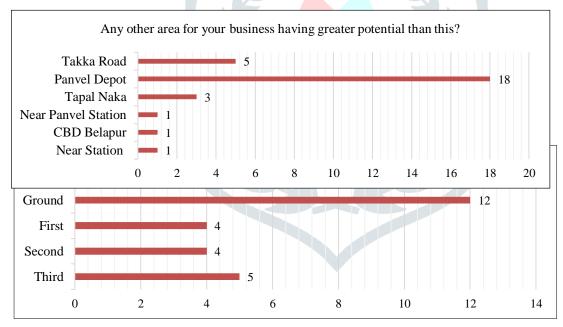












From the above analysis, it can be stated that

- The location for the proposed commercial complex is of prime importance and is centrally located
- The area has a huge potential for development as a Commercial Complex and Parking Structure
- 75% positive responses were received for shifting / expanding to the new complex
- 95% of the responders found the area suitable for their type of businesses
- The customer attractiveness for the region was found to be 100% since it is based in the core area of the city
- 60% responders found that parking was essential for them and 80% find road frontage as an important aspect for their business
- Facilities such as Water, HVAC, etc. are found to be of importance to the business
- 60% prefer the ground floor best for their business while 20% and 25% responders find 2nd and 3rd floor preferential

### 4. PROJECT CONDITIONS & FINANCIALS

Based on the location analysis & market assessment, project concept is proposed. The project components have been derived keeping in mind the commercial potential and parking requirements of region.

# 4.1 Project Components

The proposed Basement + G+2 Commercial Complex has retail shops on the ground floor, parking spaces on the basement and offices on the first, second floors. The Commercial Development will include shops with varying sizes on the ground floor. A wide corridor is proposed to facilitate easy movement. It will also include 2 separate toilet blocks. Offices are proposed on the above 2 floors which can be designed as per the requirements of the prospective space occupants. The parking space will be able to accommodate LMVs and 2-wheelers.

# 4.2 Development option- Finance-Build-Transfer (FBT) – An overview

- All investment to be made by the private sector developer. The developer is expected to construct the property and market the same to the eventual occupants/users. Total Construction period of 12 months.
- The property would be marketed on a long-term lease (say 29 years) in consideration for an upfront payment/advance to the developer and nominal lease rentals thereafter to PCMC.
- Since the property would be given on a leasehold basis the upfront payment would be at a discount to the market price for an outright sale.
- Any property remaining unoccupied after the concession period would be to the account of the private developer and he shall pay lease rentals on the same to PCMC.
- After the concession period, the maintenance and safety of the property would be the responsibility of the occupants/users and PCMC would not need to incur any cost.
- PCMC would receive the development premium in lieu of the development rights and the same could be in equal instalments over the construction period or as per a schedule of instalments that could be agreed upon between PCMC and the developer.

## 4.3 Land Valuation

Ready Reckoner Rate / Circle Rate of Land  Value of land as per ready reckoner rate	21,300.00 Rs. / per Sq. M 3,69,76,800.00 Rs.
	Rs. 3.7 crore

Table 1. Land valuation details

## **4.4 Proposed Development Details**

- Total Plot Area (as per PCMC): 3,284.14 sq.mt.
- Plot Area as per Topographical Survey: 3,284.14 sq.mt.
- Floor Space Index: 1.40 (1.10 FSI + 0.30 Premium)
- Existing Floor Area: 1,890.57 sq.mt.
- Remaining Allowed BUP: 2,707.23 sq.mt.

# 4.5 Project Cost

Particulars	Amount (Rs. Cr.)	
Civil Construction Cost	12.89	
Contingencies / QC Cost	0.64	
IC / Pre-operative Expenses, Financing Charges	0.28	
Cost of Development of the Project	13.81	
Upfront Land Premium to be paid to PCMC	23.50	
Total Project Cost to Developer	37.31	

Table 2. Project Cost

# 4.6 Financial Assumptions

Total Concession Period	3 years	Financing Charges	2.00% on debt funding
Construction Period	1 years	Interest Rate	12.00%
Average Rate of the region for Ground Floor	Rs. 18,000	Principal Repayment Period	3 years
Loading factor	40.00%	MAT Rate	18.50%
Contingencies	5.00%	Tax Rate	27.50%
IC / pre-operative expenses	1.00%	Marketing Cost	4.00%
Debt: Equity	50:50	Admin Cost	5.00%

**Table 3.** Assumptions for Financial Modeling

# **4.7 Revenue Calculations**

Floor	Sellable Area after 40% loading (sq.ft.)	Selling Rate (Rs. / sq.ft.)	Total (Rs. Cr.)
Ground	11,614.34	18,000.00	20.91
First	12,475.50	14,400.00	17.96
Second	4,904.23	11,520.00	5.65
	44.52		

Table 4. Revenue Details

# 4.8 Benefits to Developer

- Total Revenue: 44.52 crores
- Total Project Cost to Developer: 37.31 crores
- Surplus / Deficit (+ / -): +8.13 crores
- Project IRR- 15.37%
- Equity IRR -16.40%

# 4.9 Sensitivity Analysis

Sensitivity Analysis gives the insight of the impact that is being created from the increase in cost and decrease in the selling rate with respect to the premium amount that developer has to pay upfront.

Premium (crores)		Cost (Increase)		
		0%	+5%	+10%
Avg. Selling Rate (Decrease)	0%	23.50	22.60	21.80
	-5%	21.50	20.60	19.80
	-10%	19.50	18.60	17.80

**Table 5.** Sensitivity Analysis

## **4.10** Benefits of the Project Development

- Constructed property will cater Commercial demand of the area and solve the Parking problem
- Upfront premium to the Authority by the Developer which can be used for development of other infrastructure facilities in the city
- Revenue from the lease rentals from the entire commercial complex
- Revenue from property tax from the occupants of the commercial complex
- Proposed development can generate the revenue from the 2-wheeler and LMV parking space also.
- Development of common infrastructure facilities including site development, internal roads, water supply, sewerage, sanitation, electrical works, security and disaster, essential commercial shops
- Project development and marketing risk will shift to developer
- According to the ready reckoner rates, the value of land is found to be Rs. 3.7 crores. If the Proposed Commercial Complex and Parking Facility is built on the land, the Municipal Corporation gets an upfront premium of Rs. 23.50 crores

# 5. CONCLUSION, SUGGESTION AND RECCOMENDATION

## 5.1 Conclusions

From the above feasibility study, we can conclude that,

- The city center lacks quality commercial and parking space and the project site is very much suitable for development as an integrated commercial complex
- With 100% customer attractiveness and inherent location dynamics, the area has huge potential for development as a Commercial Complex and Parking Structure
- The project could be viably developed with private participation through the Finance Build Transfer (FBT) method on 29-year lease basis and with utilization of FSI of 1.4
- Using Public Private Partnership, PCMC gets an upfront premium of Rs. 23.50 crores. Also, the proposed development will generate revenue from lease rentals at the rate of Rs.1/- per sq.ft./month for the saleable area
- This study will be beneficial to ensure that, the positive economic and employment value is added to the city in general

# **5.2 Suggestions and Recommendations**

Present trends indicate that PCMC could receive a development premium in cash in line with the developer's assessment of the potential of the project. It must be noted that the cost incurred by the developer in constructing the free property for PCMC must be treated as a development premium in kind. Also the reservation of the land is

fulfilled, the issues related to parking are solved and an asset is created for the Corporation itself which can generate more cash after the lease period.

So, in view of the overall viability of the project as well as the value proposition it offers to the PCMC and the developer, it is recommended that the project be taken up for development on Finance Build Transfer FBT route

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