

Asset & Portfolio Management in Real Estate Construction Industry

Dhiraj Gursale¹, Suraj Tandale²

^{1,2}KJ's Educational Institute Trinity Academy of Engineering & Management Research center, Pune
Email address: ¹dhirajgurasale029@gmail.com

Abstract— According to the investment advisory report 2016 there are many no. of units i.e. flats which are not sold because they were worthless compared to the rate. An analysis including the land details, locality & neighborhood, area surrounding to it is taken in to consideration. Construction cost analysis, planning & estimating details are to be carried out & valuation is to be made for cost analysis. Studying of surrounding locality rate/ Square feet with amenities provided in the project for carrying out study to decide the cost of product. Once all things are planned the entries should be made in BOQ i.e. Bill of Quantities. Portfolio management includes decision making process whether to invest in the particular property/land after knowing the valuation of the same. In this project portfolio management is done by decision making, matching investments against objectives, asset allocation for individuals & institutions and balancing risk against performance i.e. by taking suitable & required decisions on time in order to avoid project delays & failure. In the project actual construction cost is worked out of the all amenities provided & analysis regarding Project inflow v/s Project Out flow is carried out. After all the result which will be shown in this project is the valuation done of asset in terms of cost using different skills, its value in terms of marketing, its execution along with portfolio management and the profitability of entire project. Use of sustainable construction theory GRIHA- Green Ratings for Integrated habitat assessment is being used to attract the clients in our project.

Keywords— Project inflow/outflow; maximum amenities with low sellable cost to attract clients.

I. INTRODUCTION

The purpose of the study is to evaluate the importance of property or product owned by a company in the form of an asset. Previously owners had a problem of determining valuation regarding any property (land in this case) or product which was available with them but was of no use. Or if they tried to bring that product in to market there was a less or no value resulting in to tremendous loss or the owner had no idea how to make that product profitable. Harry Markowitz introduced MPT in a 1952 & classifies it simply as "Portfolio Theory," because "There's nothing modern about it." MPT assumes that investors are risk adverse, meaning that given two portfolios that offer the same expected return, investors will prefer the less risky one. Thus, an investor will take on increased risk only if compensated by higher expected returns. Conversely, an investor who wants higher expected returns must accept more risk. The exact trade-off will be the same for all investors, but different investors will evaluate the trade-off differently based on individual risk aversion characteristics. The implication is that a rational investor will not invest in a portfolio if a second portfolio exists with a more favorable risk-expected return profile – i.e., if for that level of risk an alternative portfolio exists that has better expected returns. Asset & portfolio management ensure minimization of costs over the life of that asset for providing, maintaining and operating assets to support service and program delivery at specified standards. In order to prevent the hap hazard flow of money in which investors have no idea how much of still he will have to pay & up to when this study is useful.

Objective

1. The goal of asset management is to meet a required level of service in the most cost effective way through the

planning, creation, acquisition to provide the best for present and future customers/communities.

2. The life-cycle approach is central to asset management by taking account of the total cost of an asset throughout its life. A better service, not a better asset, is a key indication of successful asset management.
3. Making use of Cost effective methods to reduce failure rates & use of Green products.
4. Comparing the Cash flow cycle of inflow/outflow & comparing the amenities provided with other projects in the locality.

II. LOCALITY INVESTIGATION

Locality of Project Silver Stone Handewadi, Pune.

Project by Panama Sun Arch Developers: -
Insights into Handewadi

Handewadi is a fast growing suburb in the Eastern part of Pune. The area now stands as a prominent locality, due to the development of nearby areas like Magarpatta and Amanora Park. Handewadi is one of the fastest growing localities and lies adjacent to numerous IT and BPO companies. TCS, IBM, Patni, Accenture, Honeywell, Zensar, John Deere and Mphasis are a few among them. The area has good internal roads and is well connected with other parts of city via the PMPML buses. Handewadi is connected to central Pune through the Pune-Sholapur Highway. Sasane Nagar Railway station is the nearest railway station. The locality has many malls located in and around the area such as Seasons Mall, Celio- Amanora Mall, Amanora Town Center where residents can go and shop. In this project rate according to specifications offered is very low i.e. 3950 Rs/sqft as compared to the other projects. Amenities provided in the Project are: Rainwater Harvesting, Sewage Treatment Plant & RO Filter, ATM within the

Premises, Utility Shops, and Ramps for Handicap Friendliness, Landscape Garden, Gazebos, Swimming pool.

Some of the other projects in the locality are

- Fortune Siddhipriya a project by Fortune group located in Handewadi with very basic amenities and rate of 3900Rs/sqft.
- Godrejprana a project by Godrej Properties located in Undri chowk Pune with best amenities at rate of 5200Rs/sqft.
- INORA PARK a project by TATA VALUE HOMES Located in Undri-Pisoli with basic amenities at rate of 4200 Rs/sqft.

II. METHODOLOGY

Study was completed in following stages

1. Area Statement for Project as Tabulated in below.

TABLE I

AREA STATEMENT PROJECT Silver Stone Phase II	
Proposed area for Landscape Garden+ Swimming pool +UGWT + Pump Room+ Children's play area + RO Filter	2206.58
Area for Club House + Open space	380.23
Area proposed for STP	154
Plot Area divided in Triangles including Shade Parking	9765
Total Plot Area	12505.8 m2
	3 Acres

Area (FSI) statement for DE & FG Buildings

Building	DE	FG
Height	44.3m	44.3m
Floor	P+14	P+14
Total Built-up Area	7472.24	7472.24
BALCONY AREA		
Permissible	1120.84	1120.84
Proposed	1114.64	1114.64
Washing Area	411.12	411.12
STAIRCASE AREA		
Regular	232.96	232.96
Fire	245.56	245.56
PASSAGE AREA	1121.1	1121.1
LIFT AREA	11.97	11.97
LMR ROOM	36.3	36.3
Permissible Terrace 20%	1494.45	1494.45
Proposed Terrace	807.59	807.59
Ground Coverage	663.76	663.76
Tenement no	138	138
Total Area	12546.32	12546.32

Total built up area of both building's = 296746Sqft

In both Building's Odd & Even floors 2BHK No of flats 276.		
Carpet Area of Each flat 714.82		
Sellable = 714.82 x 1.35	965	Sqft

Total Sellable Area of Both Buildings= 266340Sqft

The inside Flat Amenities include-

Video Door Phone, Gas Detector line, all flush doors with laminate & Europa door locks, Legrand switch fitting, Pull able plumbing, Single dish cable with provision for Wifi & Easy dryer, Glass Partition in Bathrooms, Branded Sanitary-Grohe, Rocha.

2. Construction Cost Detail Analysis according to the amenities provided in Project.

TABLE II

Sr.	Structure	Rate/sqft	%
1	Excavation	29.40	2.13
2	Foundation	130.00	9.42
3	RCC	350.00	25.35
4	Brickwork & Plaster	270.00	19.56
5	Doors & Aluminum Windows	55.00	3.98
6	Flooring	80.00	5.80
7	Toilet, Dado	25.00	1.81
8	Kitchen	15.00	1.09
9	Waterproofing	26.00	1.88
10	Plumbing & Sanitary ware	80.00	5.80
11	Internal Electrical	120.00	8.69
12	Painting	35.00	2.54
13	Lift (Local make)	35.00	2.54
14	Grill & M.S. Steel work	30.00	2.17
15	Elevation cost	50.00	3.62
16	Miscellaneous	50.00	3.62
	Total	1380.40	100

	Amenities	Rate/sqft	%
1	Swimming pool	7.94	9.0
2	Club house	27.81	31.5
3	Security system	1.99	2.2
4	RO Plant	5.16	5.8
5	Video phone	6.58	7.4
6	Solar water heater	10.73	12.1
7	Park & Equipments	18.11	20.5
8	Pipeline gas	0.00	0.0
9	Any Other	10.00	11.3
	Total	88.32	100

	Developmental works	Rate/sqft	%
1	Landscaping	9.00	9.78
2	External Electrical works	18.00	19.57
3	Roads	30.00	32.61
4	Compound walls	8.00	8.70
5	Bore well	5.00	5.43
6	Storm water drain	8.00	8.70
7	STP	7.00	7.61
8	DG Sets	4.00	4.35
9	Any Other	3.00	3.26
	Total	92.00	100.00

Bar Chart V

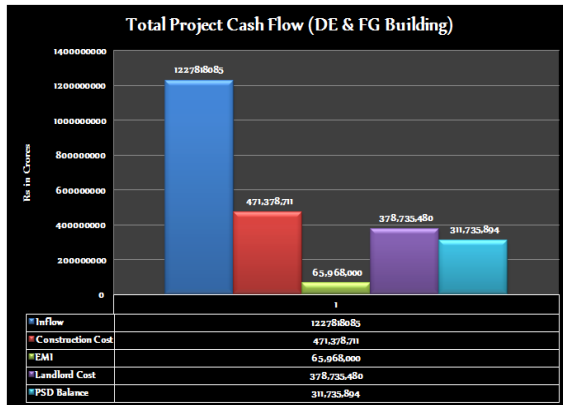


TABLE III. Concluding

Total Inflow Value after 28 Month's	1227818085
Construction Cost after 28 Month's	471378711
EMI Due after 28 Month's	65968000
Landlord Cost @36% of Inflow	378735480
Total Outgoings after 28 Month's	916082191
Balance Available with PSD after 28 Month's will be including agreement value.	311735894

TABLE. IV. Yearly cash inflow

Sr. No	Yearly Cash Inflow	Sales Target/Month = 10		
		YEAR 2016	YEAR 2017	YEAR 2018
1	Booking Amt 20%	67631336	90175114	52602150
2	Plinth Level 15%	51458625	68611500	37736325
4	2nd Slab 7%	24014025	32018700	17610285
6	4th Slab 7%	24014025	32018700	17610285
8	6th Slab 7%		56032725	17610285
10	8th Slab 7%		56032725	17610285
12	10th Slab 7%		56032725	17610285
14	12th Slab 7%		56032725	17610285
16	14th Slab 7%		56032725	17610285
17	Bricks work 5%		40023375	12578775
18	External Plaster 5%		40023375	12578775
19	Tiling 5%		40023375	12578775
20	Possession 1%		0	10520430
	Total Inflow Value / Month =	167118011	623057764	261867225
21	At the time of Agreement (Against the basic Value = 3811750)			Total Units- 276
i	Stamp duty @5%	190588		52602288
ii	Vat @1%	38118		10520568
iii	Service Tax @3.5%	133411		36821436
iv	Registration	30000		8280000
v	MSEB	100000		27600000
22	At the time of Possession or Completion			
i	Corpus fund @ 100Rs/Sqft	96500		26634000
ii	Maintenance for 2 years @50 Rs/Sqft	48250		13317000

III. CONCLUSION

1. After making analysis of Construction cost required for all Project i.e. amenities, building & development flow chart was compared as Inflow V/s Outflow & the value of the land was found to be Profitable.
2. Making use of Siporex bricks (Light weighted) reduced the % of steel by about 15 % & reduced thickness of plaster.

ACKNOWLEDGMENT

The author wish to acknowledge the support provided by the Civil Engineering Department of Trinity Academy of Engineering & Management Research Center, Pune. The author also thanks Panama Sun Arch Developers Silver-Stone Handewadi Pune for Carrying out analysis on the Project.

REFERENCES

- [1] Department of Real Estate and Construction Management Thesis no. 189 Real Estate Management; Direct and Indirect Real Estate in a Mixed-asset Portfolio.
- [2] Conceptual and operational limitations of evaluating are for engineering asset management, Dr. Abrar Haider, School of Computer and Information Science, University of South Australia.
- [3] Value management in the construction industry: what does it entail and is it a worthwhile practice? By: Catharina Elizabeth Coetzee (Quantity Surveying) In the Faculty of Engineering, Built Environment and Information Technology University of Van Pretoria
- [4] A Modern Portfolio Theory Approach to Asset Management in the listed, South African Property Market- Albertino Rodrigues
- [5] A research report submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, in fulfillment of the Requirements of the degree of Master of Science in Building.
- [6] Globalization and the Real Estate Industry: Issues, Implications, Opportunities! Ashok Bardhan and Cynthia A. Kroll Haas School of Business, UC Berkeley, Paper Prepared for the Sloan Industry Studies Annual Conference
- [7] Cambridge, April 2007.
- [8] Knight frank Investment Advisory Report 2016.