

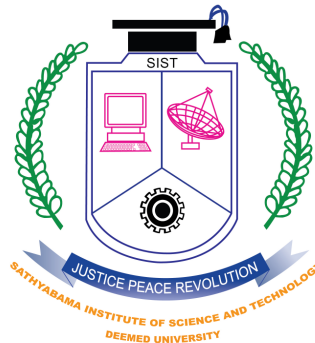
INVESTMENT RISK ASSESSMENT FOR STAKEHOLDERS IN THE CASE OF WAREHOUSING & LOGISTICS

A Thesis

Submitted in partial fulfillment of the requirements for the award of
Master of Architecture degree in Building Management

by

THARUN S (40840018)



**DEPARTMENT OF ARCHITECTURE
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SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

Accredited with Grade "A" by NAAC

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MAY 2022



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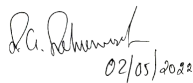
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BONAFIDE CERTIFICATE

This is to certify that this Report is the bonafide work of **THARUN S (40840018)** who carried out the THESIS entitled "**INVESTMENT RISK ASSESSMENT FOR STAKEHOLDERS IN THE CASE OF WAREHOUSING & LOGISTICS**" under our supervision from JAN 2022 to MAY 2022.



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DATE : 02-05-2022

PLACE: CHENNAI



SIGNATURE OF THE CANDIDATE

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ABSTRACT

Revenue plays a major role in every business sector especially in the warehouse and logistics sector, where more foreign investment, Risks & their profit plays a major role throughout the business, which gives more benefits to the government and local bodies.

The feasibility report includes ROI analysis, project planning, valuation methods, various tools & techniques, economical aspects, this topic argues that risk management extends into the entire crisis management Frequency; crises ignite new types of risks with their associated stakeholders.

Organizations should continually identify, manage and communicate risks to key stakeholders during the different phases of crisis management. A stakeholder orientation demands that organizations seek and involve risk stakeholders in the risk management process. The level of involvement will depend on both the identified risks and how stakeholders are expected to be affected by the proposed solutions and decision-making processes.

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1. INTRODUCTION:

The term real estate stands as land, including the air above and the ground below it and any buildings or structures on it. It is also referred to as reality. It covers residential housing, commercial offices trading spaces such as theatres, hotels and restaurants, retail outlets, industrial buildings such as factories and government buildings.

Real estate involves the purchase, sale, and development of land, both residential and non-residential buildings.

The main players in real estate market are the landlords, developers, builders, real estate agents, tenants, buyers, etc. the activities of real estate sector encompasses the housing and construction sector.

A risk can be defined as exposure to the possibility of economic and financial loss or gain, physical damages or injury, or delay as a consequence of the uncertainties associated with pursuing a particular course of action.

1.1 AIM:

* The aim of the thesis is to investigate the demand analysis, Cost benefits analysis and challenges in a Warehouse and logistics it's leads to an analysis part of risk management on the **basis of several analysis techniques, checklists, risk register, expert view etc. Qualitative & Quantitative assessment is carried out for risk involved in project.**

* This study is useful for analyzing large scale real estate projects ; also suggest mitigation steps for different categories of risks by evaluation of the risk, documentation of the risks, taking action and review.

* The purpose of this document is to facilitate potential investors in **warehousing by** providing them with a general understanding of the business with the intention of supporting potential investors in crucial investment decisions.

What is a warehouse investment?

Warehousing is **the accumulation and custodianship of bonds or loans that will become securitized through a CDO transaction.** ... This intermediate step before the transaction is finalized typically lasts three months, during which time the underwriting bank is subject to the risks involved in holding those assets.

Why are warehouses a good investment?

Warehouses tend to be **relatively low-maintenance properties**, focusing on storage and efficiency more than aesthetics. ... Warehouses are also a good bet for investors starting to dabble in real estate -- namely because they fulfil a perpetual need that's not going away anytime soon.

1.2 OBJECTIVES:

1. To identify and Evaluates risk
2. Reduce And Eliminate Harmful Threats
3. Measuring rate of return in real estate investment.
4. Understanding real estate development project cost
5. Supports Efficient Use Of Resources Better.
6. economic and property market environment (voids, rental growth, leverage and

- pricing); and
7. Illiquidity (it may not be possible to sell certain types of property quickly, except at below-valuation prices).

The term real estate stands as land, including **the air above and the ground below it and any buildings or structures on it. It is also referred to as reality.** It covers residential housing, commercial offices trading spaces such as theatres, hotels and restaurants, retail outlets, industrial buildings such as factories and government buildings.

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A risk can be defined as exposure to the possibility of economic and financial loss or gain, physical damages or injury, or delay as a consequence of the uncertainties associated with pursuing a particular course of action.

1.3 SCOPE OF THE PROJECT:

- 1) The scope of the project was demand analysis
- 2) Survey Of The Existing Infrastructure In The Sector
- 3) Identification of growth potential
- 4) Finding Out The Key Players In The Market And
- 5) Identification Of The Role Of Government Regulations.

2) List of Papers

Paper 1 : Can Space Syntax help us in understanding the intra-urban office rent pattern? accessibility and rents in downtown Stockholm.

Paper 2: The effect of accessibility on retail rents: testing integration value as a measure of geographic location

Paper 3: A study of micro-level variation in appraisal-based capitalization rates.

Paper 1 : Can Space Syntax help us in understanding the intra-urban office rent pattern? accessibility and rents in downtown Stockholm & Erratum to paper 1.

Paper 2: The effect of accessibility on retail rents: testing integration value as a measure of geographic location.

Aim: The first two papers in this research discuss a Spatial analysis in recently developed research field, Space Syntax, and how the findings in this field may be used to understand spatial economic patterns such as geographic distribution of market rents.

Tools:

- 1) Hedonic rent modelling
- 2) Integration Value

1) What Is Hedonic Pricing?

Hedonic pricing is a model that identifies price factors according to the premise that price is determined both **by internal characteristics** of the goods being sold and external factors affecting it.

- A hedonic pricing model is often used to estimate quantitative values for environmental or ecosystem services that directly affect market prices for homes. This method of valuation can require a strong degree of statistical expertise and model specification, following a period of data collection. This was originally developed for **cars (Griliches 1961)**.

Example #1

Location A: 2 bedroom house, Fully residential area, pollutants dumping yard 5 minutes away.

Location B: 2 bedroom house. full residential.

Solution

- In this case, Location B will have a preference over the location and it will be highly-priced only because customers will not want to buy a house near a dumping yard. The buyer would prefer to live in location B and pay more for the same house will similar features and characteristics since it will be a decent locality to live in without any other elements.

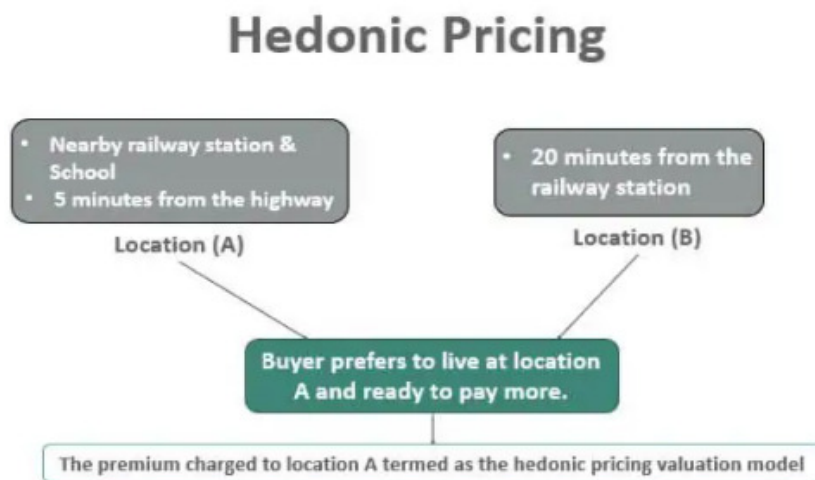


FIG 1.1 Hedonic pricing

Advantages

1. It focuses more on the consumption patterns of the customers and has the ability to price fairly.
2. It takes into account both internal and external factors that will affect the decision making of the buyer.
3. **Gives more preference to the likes and dislikes of the buyer to buy a house.**
4. **A 360-degree approach in order to price a particular product.**

Disadvantages

1. It does not take into account the information which is hidden from the buyer of the house in order to inflate the price. Eg: If there is a water problem in the locality in spite of being a good location it may face opposition from the buyers. Hence by not disclosing the fact, the builder may keep the price intact of the house.
2. It sometimes does not take into account the interest rates and other taxes that can have a massive impact on the pricing.
3. **Changing government policies can be very difficult to derive a price.**
4. **A costlier process to execute**

Conclusion

Hedonic pricing is one of the important types of pricing model that reflects the fair value of the product by taking into account many factors that will have an impact on the price of the product. **By this kind of model, it is easy to justify the increase in price due to certain elements that play an important role in this. Thus it is more common in the housing sector since the same is very much flexible in fixing the right price for the house depending upon the parameters & other factors**

2) Integration Value

All 3 papers use standard econometric methods to investigate the relationship between rents and the so called integration value developed within Space Syntax. The integration value may be understood The prime contribution of papers one and two is to analyse a fairly recently developed measure of location. **This measure, *integration value*, was developed within the research field Space Syntax.**

Integration value differs from traditional measures of location in important ways. First, it is not based on the metric distance but topological distance. In that sense it incorporates a more complex notion of distance than traditional distance measures. Secondly, the input used when calculating integration values is a map of the space under study. No information about existing economically important factors, such as the location of economic activities (anchor stores, malls) or transport hubs, is used.

Paper 3: A study of micro-level variation in appraisal-based capitalization rates.

Aim: The main purpose of paper three is to test the “rationality” of Swedish office property valuations. By rationality is meant the extent to which appraisals, and in particular appraisal cap rates, are consistent with economic theory. The study investigates how implied going-in and assumed going out (exit) capitalization (cap) rates relate to characteristics of the property, other valuer assumptions regarding the property.

Tools:

- 1) Discounted cash-flow (DCF)
- 2) Capitalisation (cap) rates.

1) Discounted cash-flow (DCF)

The starting point of paper three is Gunnelin et al. (2004) who estimate models for a number of valuer assumptions used as inputs in individual discounted cash-flow (DCF)-calculations using data from the Swedish property databank IPD/SFI. The overall conclusion of Gunnelin et al. (2004) is that the study generates confidence in the appraisal process. Paper three takes a new look at this issue, using a richer data set.

2) Capitalisation (cap) rates.

The study focuses on capitalisation (cap) rates. The cap rate is the ratio of annual rent minus operating costs to value. It thus measures how much you must pay for a given yearly net operating income.

$$\text{Capitalization rate} = \text{Net operating income} / \text{current market value}$$

The capitalization rate is a profitability metric used to **determine the return on investment of a real estate property.**

Conclusion:

In the long run one would think that a valuation methodology which is consistent with economic theory should produce the most reliable estimates of market value. This is why I in paper three think of consistency with economic theory as rationality.

It should be mentioned, however, that there is a literature which paints a more complex picture of what may constitute rational behaviour for a valuer. If valuers primary goal is to produce estimates of market value with high precision, which seems reasonable, they should thus adopt such a methodology.



FIG 2.1- Risk assesment

Various Risks associated with the project

Construction Risk

- Disputes between labour
- Changing sequences in construction activity
- Non availability of resources
- Revision of design
- Availability of camp for labours
- Change in quantities of work
- In Time work permissions for executing work
- Safety of workers
- Stoppage of work due to Medical outbreak example: Madras eyes

Management Risk

- Documents and process directed as per agreement for mitigation of risk
- Project team discussions on risk
- Use of WBS and project milestones to help identify project risks
- Time for planning
- Loosing of critical staff at crucial point of construction
- Documented process for identifying project risks.

Design Risk

- Late changes of design from client side
- Will the level of details of design delivered by the owner affect over all construction time?
- Improper specifications
- Inadequate and incomplete design Environmental Risk
- Impact of weather condition on completion of project
- Pollution by construction waste
- Procedure to facilitate construction waste cleanup or disposal

Financial Risk

- Delay from clients
- Increment for staff benefits
- Unprecedented price in raw materials
- Fluctuations in Estimated finance than expected Management Risk

Sub-Contractors Risk

- Chances of sub-contractor walk out
- Delay in work execution of sub-contractor
- Revision of price

Social & Political Risk

- Pressure from any political party
- Local bodies (political/rowdies) compelling to use their resources
- Union Issue.

Procurement Risk

- Temporary demand of increase in price of materials
- Specialized labour for fixation/Installation
- Is there a chance of procurement team to know the sales chart of client?

Technology Risk

- Knowledge on equipment's
- Service for damaged equipment's
- Loss of data or software/hardware of computer.

FIG 2.1- Risk associated with the project

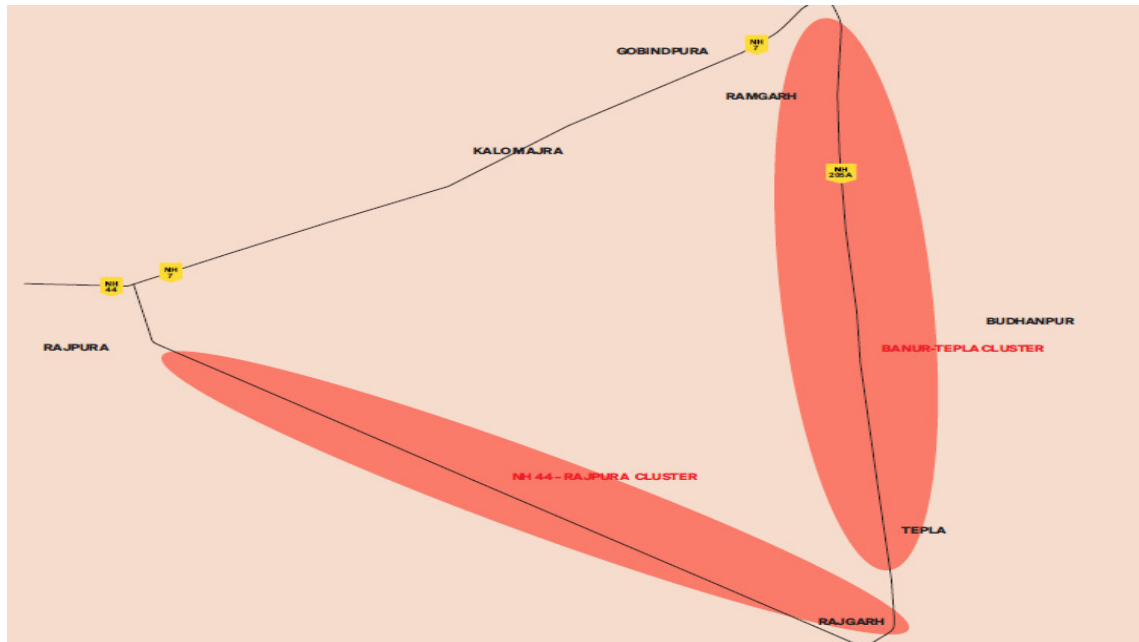


Fig 3.1 - Road cluster

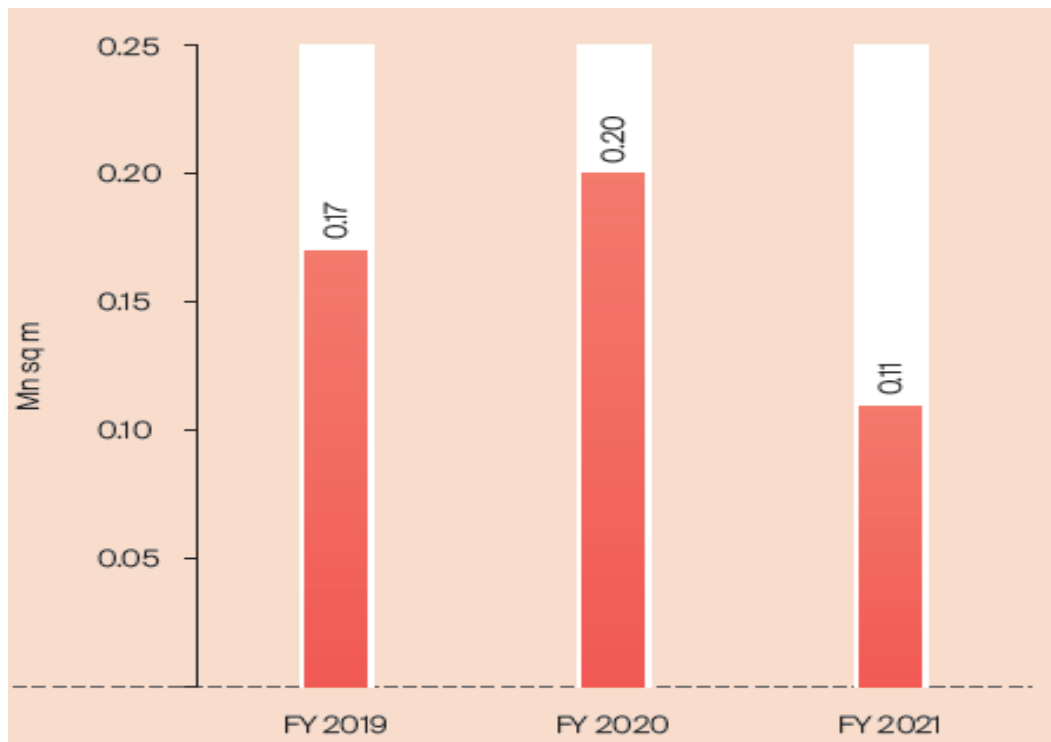


Fig 3.2 - Warehouse Transaction Volume

Warehousing market transaction volume

FMCG – Fast Moving Consumer Goods

Eg – Packaged foods, beverages , dry goods and other consumables.

FMCD – Fast Moving Consumer Durables

Eg - household goods, books, jewellery, toys, etc.

Other Sectors – These include all manufacturing sectors (automobile, electronics, pharmaceutical, etc)

excluding FMCG and FMCD.

Notes:

Warehousing transactions data includes light manufacturing/ assembling.

Miscellaneous – These include services such as telecom, real estate, document management, agricultural warehousing and publishing.

Select large occupiers		
Occupier	Occupier industry	Warehouse cluster
Godrej	FMCD	Banur-Tepla cluster
DHL	3PL	Banur-Tepla cluster
Mahindra Logistics	3PL	Banur-Tepla cluster
Havells	FMCD	Banur-Tepla cluster
Usha	FMCD	Banur-Tepla cluster

Warehouse project	Warehouse cluster
Indoswift	NH 44-Rajpura cluster
Contract Logistics	Banur-Tepla cluster

Fig 3.3 Cluster-split of transaction volume (FY 2021)

LITERATURE STUDY - 1

FEASIBILITY ANALYSIS

Types of Feasibility analysis:-

- 1) Land Rent Contract
- 2) Fixed Deposit
- 3) Profit Sharing Contract

1) Land Rent Contract

How does a land lease contract work?

A land lease, also called a ground lease, is a **lease agreement that permits the tenant to use a piece of land owned by the landlord in exchange for rent**. Land leases work very similarly to the way traditional property leases operate, and tenants can enter into both residential and commercial agreements.

3 Types of Leases Business Owners Should Understand

When a tenant and landlord enter an agreement for a commercial property, a decision for the lease needs to be established. There are three different main real estate leases that can be entered into, each with distinct advantages and disadvantages. Regardless of what agreement you have, it is important for you to carefully read the lease details so you know what is expected in any situation. The three most common types of leases are gross leases, net leases, and modified gross leases.

1. The Gross Lease

The gross lease tends to favor the tenant. The most notable characteristic of this kind of agreement is that the tenant pays one large sum. The landlord is responsible for paying insurance, utilities, janitorial services, and maintenance.

Occasionally, the tenant will be required to pay electricity, water, or gas him or herself. Because more is required of the landlord, the amount the tenant pays is usually higher to compensate. A gross lease essentially makes it as easy as possible for the tenant to make payments so she or he can focus on operating and growing the business. Gross lease rates typically rise when the expenses for maintenance and utilities rise.

2. The Net Lease

The net lease, however, tends to favor the landlord. In this agreement, the base rent tenants pays is lower, but they must also pay maintenance fees of all kinds. Which fees the tenant must pay depends on the net lease.

•**Single Net Lease** – For single net leases, or N leases, the tenant pays the base rent, as well as his or her portion of the building's property tax. For example, if the tenant is renting 1,000 square feet of a 2,000 square feet building, she or he would be responsible for 50 percent of the property tax. The landlord covers utility and maintenance costs.

•**Triple Net Lease** – Finally, triple net leases, or NNN leases, have tenants responsible for all fees, including maintenance, repairs, janitorial expenses, utilities, property tax, and, of course, rent. Note that the total amount paid may be the same as in a gross lease, but the tenant must be more responsible and keep track of where and when each payment must go out.

While the net lease favors the landlord, some tenants may prefer them because of the transparency they provide, as well as having more control over maintaining the space.

Rent will increase for this kind of lease when the landlord's costs increase.

LAND LORD'S PERSPECTIVE

SCENARIO - 1:FLOOR RENT OR LEASE					
LAND LORD'S PROFIT - 2.75 Acres					
DESCRIPTION	AREA (SQFT)	RATE/SQ FT	TOTAL	RENT/SQFT	TOTAL
LAND	120000	1000	1200,00,000	12.5	₹ 15,00,000

Table 3.1 Scenario - 1

3. The Modified Gross Lease

Finally, the modified gross lease was developed to be a middle ground between favoring the landlord and favoring the tenant. This kind of agreement still has tenants pay their amount in one large sum, but which fees they must also cover varies. The tenant and the landlord must discuss who will pay for maintenance, utilities, janitorial services, common area maintenance, and property taxes. This agreement also yields a more flexible and easier relationship between tenant and landlord.

Another unique feature of the modified gross lease is that the payment rates typically do not vary. This means if the cost of maintenance decrease, the landlord benefits and if the cost of maintenance increases, the tenant benefits.

How is ground lease rent calculated?

A reasonable price for ground rent in most markets 1 cent per square foot of land. If your parcel is 15,000 square feet, you would use a ground rent calculator equation **to multiply 0.01 by 15,000** to charge your buyer/tenant an annual ground rent of Rs15000. You will likely divide the rent into two payments of Rs7500.

What are the disadvantages of a land contract?

#1: **The title does not automatically pass to the purchaser in a land contract.**

#2: The seller could be held legally responsible for inspection issues with local or state authorities.

#3: Forfeiture of a land contract by the purchaser is a fairly common occurrence.

YEAR	MONTHLY RENT	ANNUAL RENT	IRR CALCULATION	
1	₹ 15,00,000	₹ 180,00,000	₹ 372,00,000	-₹ 408,00,000
2	₹ 16,00,000	₹ 192,00,000	₹ 576,00,000	-₹ 204,00,000
3	₹ 17,00,000	₹ 204,00,000	₹ 792,00,000	₹ 12,00,000
4	₹ 18,00,000	₹ 216,00,000	₹ 1020,00,000	₹ 240,00,000
5	₹ 19,00,000	₹ 228,00,000	₹ 1260,00,000	₹ 480,00,000
6	₹ 20,00,000	₹ 240,00,000	₹ 1512,00,000	₹ 732,00,000
7	₹ 21,00,000	₹ 252,00,000	₹ 1776,00,000	₹ 996,00,000
8	₹ 22,00,000	₹ 264,00,000	₹ 2052,00,000	₹ 1272,00,000
9	₹ 23,00,000	₹ 276,00,000	₹ 2340,00,000	₹ 1560,00,000
10	₹ 24,00,000	₹ 288,00,000	₹ 2640,00,000	₹ 1860,00,000
11	₹ 25,00,000	₹ 300,00,000	₹ 2952,00,000	₹ 2172,00,000
12	₹ 26,00,000	₹ 312,00,000	₹ 3276,00,000	₹ 2496,00,000
13	₹ 27,00,000	₹ 324,00,000	₹ 3612,00,000	₹ 2832,00,000
14	₹ 28,00,000	₹ 336,00,000	₹ 3960,00,000	₹ 3180,00,000
15	₹ 29,00,000	₹ 348,00,000	₹ 3960,00,000	₹ 3180,00,000
		₹ 3960,00,000	IRR =	54%

Table 3.2 Rental Table

CLIENT'S PERSPECTIVE

CLIENT'S PROFIT				
DESCRIPTION	AREA (SQFT)	RATE/SQ FT	TOTAL	TOTAL
CONSTRUCTION COST	₹ 60,000	₹ 800	₹ 480,00,000	₹ 1380,00,000
LAND DEVELOPMENT COST	₹ 60,000	₹ 1,500	₹ 900,00,000	

YEAR	O & M COST	NET PROFIT	IRR CALCULATION
1	₹ 40,00,000	₹ 200,00,000	-₹ 307,00,000
2	₹ 44,00,000	₹ 240,00,000	-₹ 267,00,000
3	₹ 48,40,000	₹ 288,00,000	-₹ 219,00,000
4	₹ 53,24,000	₹ 345,60,000	-₹ 161,40,000
5	₹ 58,56,400	₹ 414,72,000	-₹ 92,28,000
6	₹ 64,42,040	₹ 497,66,400	-₹ 9,33,600
7	₹ 70,86,244	₹ 597,19,680	₹ 90,19,680
8	₹ 77,94,868	₹ 716,63,616	₹ 209,63,616
9	₹ 85,74,355	₹ 859,96,339	₹ 352,96,339
10	₹ 94,31,791	₹ 1031,95,607	₹ 524,95,607
11	₹ 103,74,970	₹ 1238,34,728	₹ 731,34,728
12	₹ 114,12,467	₹ 1486,01,674	₹ 979,01,674
13	₹ 125,53,714	₹ 1783,22,009	₹ 1276,22,009

14	₹ 138,09,085	₹ 2139,86,411	₹ 1632,86,411
15	₹ 151,89,993	₹ 2567,83,693	₹ 2060,83,693
		IRR	22%

2) FIXED DEPOSITS

Pros and Cons of investing in Bank fixed deposits

Protection in the form of deposit insurance cover Fixed deposits opened with scheduled banks are covered under the deposit insurance programme of Deposit Insurance and Credit Guarantee Corporation (DICGC), a subsidiary of the Reserve Bank of India (RBI). The insurance cover is applicable on cumulative bank deposits, which includes fixed deposits, savings account, recurring deposits and current account, of up to Rs5 lakh per bank, per depositor in the event of bank failures.

Assured returns on investments The booked interest rates of bank FDs remain fixed till their maturity, irrespective of any change in the banks' FD card rates in the interim. For instance, if an individual opens a bank fixed deposit of 2 years tenure at 6% p.a., the interest rate will stay the same till the end of 2 years tenure. This provides a high degree of income certainty in FDs, even higher than those offered by most small saving schemes

. Availability of secured credit card

Secured credit cards are offered against the collateral of FD. "Secured credit cards can be helpful for those who aren't able to get regular credit cards due to no or low credit score, inadequate income, unserviceable location, company's profile or job profile. Note that the secured card users also continue to earn interest on their FDs used as collateral," said Arora.

Availability of loan against FD

Most banks offer loans against FD, usually in the form of an overdraft facility, wherein a credit limit is sanctioned to the borrower based on the FD amount submitted as collateral. The borrower continues to earn interest on the pledged FDs during the loan tenure. Borrowers can withdraw up to the sanctioned amount from their overdraft account and repay it basis their repayment capacity. The interest is levied on the amount drawn till its repayment.

Cons

Penalty on premature FD withdrawal

Most banks charge premature withdrawal fees of up to 1% for prematurely closing a fixed deposit. The penal rate is deducted from the effective rate of interest, which is lower than the original booked FD rate or FD card rate prevalent at the time of booking the FD for the period for which the FD remained in effect. Thus, make sure to consider your liquidity and the time horizon of your crucial financial goals when choosing FD tenures.

Interest from tax savings FD are not tax-free

Interest earned from bank FDs, including tax-saving FDs eligible for a tax deduction under section 80C, are taxed according to the depositor's tax slab. Thus, for the ones falling in higher-income slabs, their post-tax returns generated from most bank FDs may not exceed the average inflation rate during the FD tenure._

FIXED DEPOSIT CALCULATION

YEARS	FD RATE (4.5%)	INTEREST EVERY YEAR	INFLATION 4%	AFTER INFLATION
1	1200,00,000	5400000	5016000	1203,84,000
2	1254,00,000	5643000	5241720	1258,01,280
3	1310,43,000	5896935	5477597.4	1314,62,338
4	1369,39,935	6162297.075	5724089.283	1373,78,143
5	1431,02,232	6439600.443	5981673.301	1435,60,159
6	1495,41,833	6729382.463	6250848.599	1500,20,366
7	1562,71,215	7032204.674	6532136.786	1567,71,283
8	1633,03,420	7348653.885	6826082.942	1638,25,991
9	1706,52,074	7679343.309	7133256.674	1711,98,160
10	1783,31,417	8024913.758	7454253.224	1789,02,077
11	1863,56,331	8386034.877	7789694.619	1869,52,671
12	1947,42,365	8763406.447	8140230.877	1953,65,541
13	2035,05,772	9157759.737	8506541.267	2041,56,990
14	2126,63,532	9569858.925	8889335.624	2133,44,055
15	2222,33,391	10000502.58	9289355.727	2229,44,537
16	2322,33,893	10450525.19	9707376.735	2329,77,042
				₹ 27350,44,633

Table 3.2 Scenario – 2 – Fixed deposit calculation

3) Profit Sharing Contract

A profit sharing agreement is used when two entities work together for the same purpose, typically for a project-based time period. ... Particularly where individuals agree to split profits for the company they are working for or with, usually for a specific period of time.

What is the difference between profit-sharing and revenue sharing?

Revenue sharing is the distribution of the total amount of income generated by the sale of goods or services between the stakeholders or contributors. It should not be confused with profit shares. As with profit shares only the profit is shared, that is the revenue **left over** after costs have been removed.

How Does the Profit-Sharing Agreement Work?

The profit-sharing agreement is a legally binding contract that two businesses or parties sign when they reach a mutual agreement regarding the project in question. The agreement is used to set out the rules and duties of the parties involved. It also encompasses how the parties will distribute the profit that they make.

Here is what you should include in your profit-sharing agreement:

1. Roles and responsibilities
2. Management
3. Intellectual property
4. Dispute resolutions & Termination

Roles and Responsibilities

In the first section of your profit-sharing agreement, outline the responsibilities that each party will have. **Mention the roles for everyone and state what the parties involved will contribute.**

Cost and Profit Share Management

The profit and expenses have to be shared between the parties, and the rules should be set up in advance. **Discuss the matter with everyone involved and reach a mutual agreement on how both the profit and expenses will be managed.**

Keep in mind that you have to be crystal clear on the way that the parties will distribute the profit to avoid any inconveniences later on, so make sure to specify all the details of the profit-share arrangement.

Intellectual Property

The intellectual property that the parties created before entering the profit-sharing agreement is usually an important subject to discuss and cover in the documents.

Discuss:

1. Who will own the property while the agreement lasts
2. Whether it will be shared between the parties or not

Once you reach an agreement on this, include it in the intellectual property section.

Dispute Resolutions

Knowing what to do in case a dispute arises is a must. If there is any special procedure that needs to be followed before the dispute is taken to court, make sure to state it here so that everyone knows what to do.

Termination

What if someone wants to get out of or terminate the profit-sharing agreement? Is it possible to do it? What procedures should be followed? Specify everything about the termination of your profit-sharing agreement in the final section.

SCENARIO - 3:PROFIT SHARING CONTRACT						
LAND LORD'S PROFIT – 2.75 Acres						
DESCRIPTION	AREA (SQFT)	RATE/S Q FT	TOTAL	RENT/SQF T	TOTAL	% PROFIT
LAND	1,20,000	1000	1200,00,000	15	₹ 18,00,000	48.90%

YEAR	RENT/MONTH (30/35/40)	RENT/YEAR	PROFIT % FOR LAND LORD (48.90%)	PROFIT % FOR DEVELOPERS (51.10%)	NET PROFIT	IRR CALCULATION
1	₹ 23,40,000	₹ 280,80,000	₹ 137,59,200	₹ 143,20,800.0	₹ 561,60,000	-₹ 692,40,000
2	₹ 23,40,000	₹ 280,80,000	₹ 137,59,200	₹ 143,20,800.0	₹ 842,40,000	-₹ 411,60,000
3	₹ 23,40,000	₹ 280,80,000	₹ 137,59,200	₹ 143,20,800.0	₹ 1123,20,000	-₹ 130,80,000
4	₹ 23,40,000	₹ 280,80,000	₹ 137,59,200	₹ 143,20,800.0	₹ 1404,00,000	₹ 150,00,000
5	₹ 23,40,000	₹ 280,80,000	₹ 137,59,200	₹ 143,20,800.0	₹ 1778,40,000	₹ 524,40,000

6	₹ 31,20,000	₹ 374,40,000	₹ 183,45,600	₹ 190,94,400.0	₹ 2152,80,000	₹ 898,80,000
7	₹ 31,20,000	₹ 374,40,000	₹ 183,45,600	₹ 190,94,400.0	₹ 2527,20,000	₹ 1273,20,000
8	₹ 31,20,000	₹ 374,40,000	₹ 183,45,600	₹ 190,94,400.0	₹ 2901,60,000	₹ 1647,60,000
9	₹ 31,20,000	₹ 374,40,000	₹ 183,45,600	₹ 190,94,400.0	₹ 3276,00,000	₹ 2022,00,000
10	₹ 31,20,000	₹ 374,40,000	₹ 183,45,600	₹ 190,94,400.0	₹ 3744,00,000	₹ 2490,00,000
11	₹ 39,00,000	₹ 468,00,000	₹ 229,32,000	₹ 238,68,000.0	₹ 4212,00,000	₹ 2958,00,000
12	₹ 39,00,000	₹ 468,00,000	₹ 229,32,000	₹ 238,68,000.0	₹ 4680,00,000	₹ 3426,00,000
13	₹ 39,00,000	₹ 468,00,000	₹ 229,32,000	₹ 238,68,000.0	₹ 5148,00,000	₹ 3894,00,000
14	₹ 39,00,000	₹ 468,00,000	₹ 229,32,000	₹ 238,68,000.0	₹ 5616,00,000	₹ 4362,00,000
15	₹ 39,00,000	₹ 468,00,000	₹ 229,32,000	₹ 238,68,000.0	₹ 5616,00,000	₹ 4362,00,000
					IRR	44%

Table 3.3 Scenario – 3 Profit Sharing Contract

BREAK-EVEN ANALYSIS

1) Break-even analysis tells you how many units of a product must be sold to cover the fixed and variable costs of production.

2) The break-even point is considered a measure of the margin of safety.

3) Break-even analysis is used broadly, from stock and options trading to corporate budgeting for various projects.

Calculations for Break-Even Analysis

The calculation of break-even analysis may use two equations. In the first calculation, divide the total fixed costs by the unit contribution margin. In the example above, assume the value of the entire fixed costs is Rs2,00,000. With a contribution margin of Rs 4000, the break-even point is 500 units (Rs2,00,000 divided by Rs400). Upon the sale of 500 units, the payment of all fixed costs are complete, and the company will report a net profit or loss of Rs 0.

[Breakeven Point \(BEP\)](#) In accounting, the breakeven point is the production level at which total revenues equal total expenses. Businesses also have a breakeven point, when they aren't making or losing money.

Entry And Exit Strategies

Buying a Company. In some markets buying an existing local franchise or the company may be the most appropriate entry strategy. This may be because the company has substantial market share & the reputation, are a direct competitor to you or due to government regulations this is the only option for a firm to enter the market.

5 steps to create a winning market entry strategy

- Set clear goals. The first step is to decide on what you want to achieve with your exporting project and some basics about how you'll do so. ...
- Research your market. ...
- Choose your mode of **entry**. ...
- Consider financing and insurance needs. ...

Develop the **strategy** document.

EXIT STRATEGY

The 5 Exit strategies are:-

- **Merger:** In a merger, two businesses combine into one.
- **Acquisition:** An acquisition is when a company buys another business.
- **Sell to someone** you know. You may want to see your business live on under someone else's ownership.
- Initial public offering (IPO)
- Liquidation.
- **Tax Holiday In India:-**
 - A common form of tax incentive found in about half of developing countries is. a "tax holiday" which **permits a new company to operate for a given number. of years before paying corporate income taxes.**

Start up's tax exemption:-

Such start ups will be eligible for getting **100% tax rebate** on profit for a period of three years in a block of seven years provided that annual turnover does not exceed Rs. 25crores in any financial year.

The Start-up incorporated between April 1, 2016, till 31st March 2021 were eligible for this scheme.

Current affairs on tax holiday:-

Tax holiday extended by 1 year till **31 March 2022**. To help India's start-ups amid the COVID-19 pandemic, tax holidays for these businesses have been extended by one year till March 31, 2022, said Finance Minister Nirmala Sitharaman while presenting the Union Budget 2021-22

4. Case study –1- Proposed Warehouse at Madhavaram

About Location:

There were extreme demand on the **madhavaram** zone, So the mega project was proposed in the same location. Due to shorter access to the tirupati highways and beside warehouse sector, Polyhose is being one of the biggest Realestate investors in tamilnadu will bring huge opportunities for Logistics sector in chennai sub-urban.

Project Outline:

This casestudy outlines the required resources and critical factors that must be addressed in order to make warehousing successful. The proposed project will have an installed capacity of around 30,000 sq. ft and it can be established in north chennaii.

The logistics sector, comprising of the transportation, storage and distribution components is a key driver of a country's competitiveness in both domestic and international markets._



FIG 4.1 Live Case Study: Topography

Objectives of the Project

- To construct, provide and maintain adequate covered accommodation and infrastructure to the 3PL community and other stakeholders for the storage of E-commerce goods and supply chain.

To move the inventory in a supply chain effectively and efficiently to extend the desired level of customer service at the least cost as done parallel with waste management.

What is a warehouse investment?

Warehousing is **the accumulation and custodianship of bonds or loans that will become securitized through a CDO transaction**. ... This intermediate step before the transaction is finalized typically lasts three months, during which time the underwriting bank is subject to the risks involved in holding those assets.

Why are warehouses a good investment?

Warehouses tend to be **relatively low-maintenance properties**, focusing on storage and efficiency more than aesthetics. ... Warehouses are also a good bet for investors starting to dabble in real estate -- namely because they fulfil a perpetual need that's not going away anytime soon.

1. The Chennai warehousing market has recorded a marginal 4% year on year (YoY) improvement in absorption in Financial Year(FY) 2021.
2. A total of 0.3 million sq m (3.5 mn sq ft) of warehouse leasing activity was recorded during the year. This growth in demand during COVID induced challenging times is indicative of a strong base of the warehousing market in Chennai
3. The city is the first major halt on the east coast of India in the Bay of Bengal and has two major ports – Chennai Port (second largest container port of India) and Ennore Port. In recent times, other ports like the new Kattupalli Port are helping expand the trade base of Chennai.
4. Chennai's sea-side location is the reason for its evolution as a flourishing trade centre since the British era.

Warehousing cluster	Major warehousing locations
Sriperumbudur–Oragadam cluster	Irungattukottai, Sriperumbudur, Oragadam and other locations on the in-roads branching from Sriperumbudur Mannur–Thiruvallur Belt; Includes Mevalurkuppam, Mappedu, Mannur, Pallivakkam and Thiruvallur
NH 16 / GNT Road–Periyapalayam cluster (North Chennai)	Periyapalayam Road, Thatchoor, Gummudipoondi, NH 16 / GNT Road–Redhills Belt; Includes Madhavaram, Manali, Red Hills, Puzhal, Karanodai, Alambathi and Poochettipadu
GST Road–Maraimalai Nagar cluster	Maraimalai Nagar, in and around Mahindra World City, Sengundram Industrial area, Chengalpattu

Table 4.1: Classification of warehousing locations into major clusters

FMCG – Fast Moving Consumer Goods

Eg – Packaged foods, beverages, dry goods and other consumables.

FMCD – Fast Moving Consumer Durables

Eg – household goods, books, jewellery, toys, etc.

Other Sectors – These include all manufacturing sectors

(automobile, electronics,

pharmaceutical, etc)

excluding FMCG and FMCD.

Warehousing market transaction volume

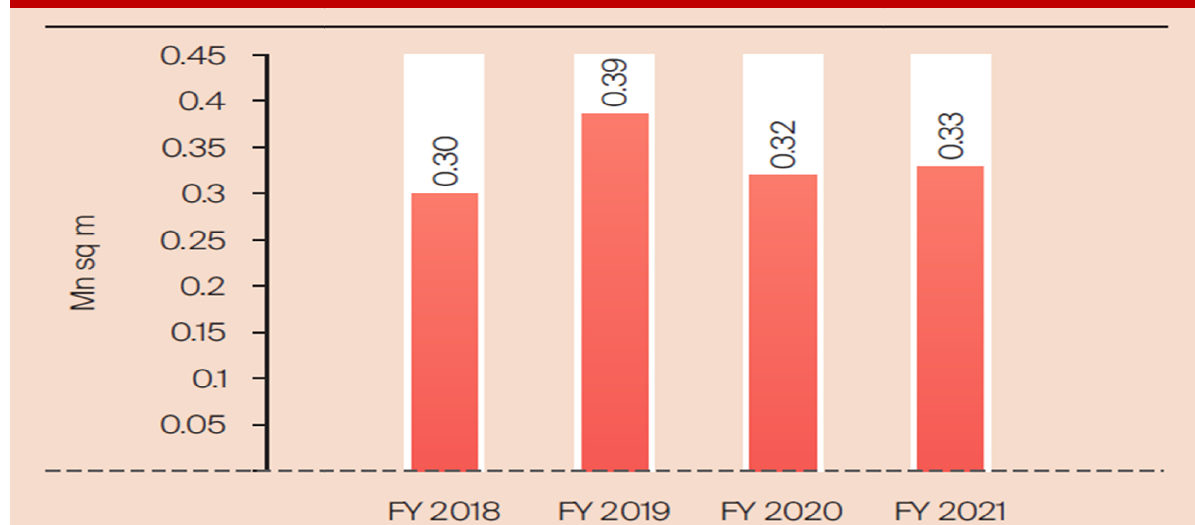


FIG 4.2 warehouse transaction volume

Occupier	Occupier industry	Warehouse cluster
Foxlink	Other Sectors	Sriperumbudur–Oragadam
Magic Woods	FMCD	Maraimalai Nagar
Amazon	E-commerce	NH 16–Pariyapalayam: Redhills Belt
Reliance Groceries	E-commerce	Sriperumbudur–Oragadam
Mahindra Logistics	3PL	Sriperumbudur–Oragadam
Flipkart	E-commerce	NH 16–Pariyapalayam: Redhills Belt
TVS Logistics	3PL	Sriperumbudur–Oragadam
Samsung	Warehousing	NH 16–Pariyapalayam
Big Basket	3PL	Sriperumbudur– Oragadam

Table 4.2: Classification of occupiers

Land rate and rents

Warehouse cluster	Location	Land rate (INR mn/acre)	Grade A Rent per month in INR/sq m (INR/sq ft)	Grade B Rent per month in INR/sq m (INR/sq ft)
Sriperumbudur- Oragadam cluster	Sriperumbudur	20 – 25	215 – 258 (20 – 24)	172 – 194 (16 – 18)
	Oragadam	20 – 30	237 – 280 (22 – 26)	215 – 237 (20 – 22)
	Mappedu	10 – 15	172 – 205 (16 – 19)	161 – 172 (15 – 16)
	Mannur	17 – 23	194 – 215 (18 – 20)	172 – 183 (16 – 17)
	Irungattukottai	40 – 45	194 – 247 (18 – 23)	194 – 205 (18 – 19)
	Pollivakkam	13 – 15	183 – 237 (17 – 20)	172 – 183 (16 – 17)
NH 16 / GNT Road- Periyapalayam cluster (North Chennai)	Cholavaram	11 – 13	161 – 194 (15 – 18)	151 – 172 (14 – 16)
	Red Hills	12 – 16	172 – 194 (16 – 18)	151 – 161 (14 – 15)
	Karanodai	15 – 22	161 – 183 (15 – 17)	140 – 151 (13 – 14)
	Madhavaram	No large lands available	215 – 258 (20 – 24)	194 – 237 (18 – 22)
	Puzhal	No large lands available	215 – 258 (20 – 24)	194 – 215 (18 – 20)
	Periyapalayam	10 – 15	172 – 194 (16 – 18)	151 – 172 (14 – 16)
GST Road-Maraimalai Nagar cluster	In and around			
	Mahindra World City	25 – 35	215 – 280 (24 – 26)	215 – 258 (20 – 24)
	Maraimalai Nagar	40 – 45	237 – 280 (22 – 26)	215 – 237 (20 – 22)

FIG 4.3 Rental pattern



FIG 4.4 Floor plan – OPTION 1

AREA DETAILS:-

SITE AREA – 7 Acres (27,500 Sq.m)

BUILTUP AREA – 12,800 SQ.M

F.S.I – 0.46

TPOLOGY – Typical warehouse

What Is scenario analysis?

Scenario analysis is used by real estate investors and investment property specialists because it provides a good way to measure risk when evaluating real estate investments.

What is scenario analysis? It involves estimating a range of variables that will have the greatest impact upon the likelihood of an investment performing according to an investor's minimum expectations. Rental income, for instance, is subjected to scenario analysis when the analyst wants to gauge investment property performance based on various rent scenarios. In other words, how well does the property perform in the event rents decline or increase?

✓ How Scenario Analysis Helps Measure Risk When Real Estate Investing

Scenario analysis typically considers three scenarios.

Worst-case – if rents decline or do not change at all

Most-likely case – the most realistic rents that can be obtained

Best-case – rents beyond our wildest dreams

Types of Scenario analysis:-

- 1) Land Rent or lease Contract
- 2) Fixed Deposit in duo scenarios
- 3) Utilising and selling or transferring the property

1) Land Rent or lease Contract

A land lease contract is a type of document that is used by the landowner and the tenant.

This contract consists of the agreements between the land owner and the tenant concerning the land. The land lease contract can go in a lot of ways but the most common way is for the land owner to rent the land to the tenant at a specific time period.

Land Lease Agreements

1. What is a Land Lease Agreement?
2. Components of a Land Lease Agreement
3. How to Write a Land Lease Agreement
4. Benefits of a Land Lease Agreement
5. What is a leasehold?
6. Aside from land development, what are the other responsibilities of the tenant?
7. Who uses ground lease agreements?

Sl.No	Activity	Duration in Months											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Project Initiation												
1	Appointment of PMC												
2	Finalization of Cost and GFC drawings												
3	Bid process management and Placing orders												
4	Land development												
5	Construction of Godown												
6	MEP Installations												
7	Internal road development												
8	Construction of Compound wall, pathway development etc.,												
9	Commercial opening												

FIG 4.5 Construction Schedule

SCENARIO - 1: FIXED TERM LEASE					
AREA - 7 Acres (land bought 10 years ago)					
DESCRIPTION	AREA (SQFT)	RATE/SQ FT	TOTAL	RENT/SQFT	TOTAL
LAND	305000	1000	3050,00,000	12.5	₹ 38,12,500

Table 4.3: Scenario - 1: Fixed Term Lease

LAND APPRECIATION - 10% EVERY YEAR	
YEARS	PRICE
1	₹ 3050,00,000
2	₹ 3355,00,000
3	₹ 3660,00,000

4	₹ 3965,00,000
5	₹ 4270,00,000
6	₹ 4575,00,000
7	₹ 4880,00,000
8	₹ 5185,00,000
9	₹ 5490,00,000
10	₹ 5795,00,000
11	₹ 6100,00,000
12	₹ 6405,00,000
13	₹ 6710,00,000
14	₹ 7015,00,000
15	₹ 7320,00,000

Table 4.4: land appreciation

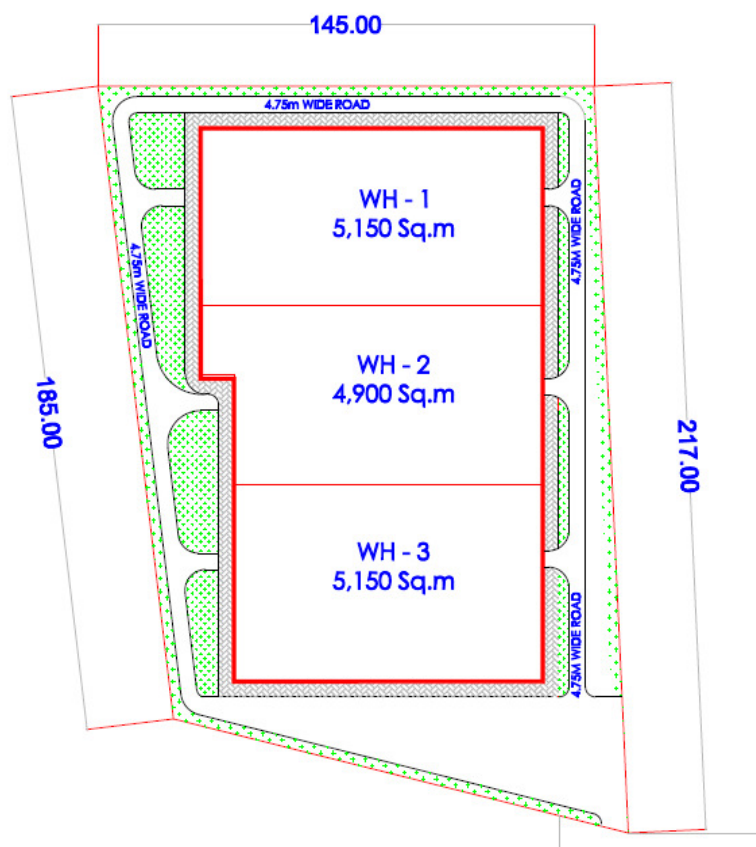


FIG 4.6 Floor plan – OPTION 2 - GRADE A

AREA DETAILS:-

SITE AREA – 7 Acres (27,500 Sq.m)

BUILTUP AREA – 15,200 SQ.M

F.S.I – 0.55

TPOLOGY

Option 1 – Typical

Option 2 – PEB

SCENARIO - 2: FIXED DEPOSIT					
AREA - 7 Acres (land bought 10 years ago)					
DESCRIPTION	AREA (SQFT)	RATE/SQ FT	TOTAL	RENT/SQFT	TOTAL
LAND	305000	1000	3050,00,000	12.5	₹ 38,12,500

Table 4.5: Scenario - 2: Fixed Deposit

S.NO	FD RATE (4.5%)	YEARS	TOTAL	INFLATION 4%	NET PROFIT
1	₹ 3050,00,000	₹ 137,25,000	₹ 3187,25,000	₹ 127,49,000	3059,76,000
2	3187,25,000	₹ 143,42,625	₹ 3330,67,625	₹ 133,22,705	3197,44,920
3	3330,67,625	₹ 149,88,043	₹ 3480,55,668	₹ 139,22,227	3341,33,441
4	3480,55,668	₹ 156,62,505	₹ 3637,18,173	₹ 145,48,727	3491,69,446
5	3637,18,173	₹ 163,67,318	₹ 3800,85,491	₹ 152,03,420	3648,82,071
6	3800,85,491	₹ 171,03,847	₹ 3971,89,338	₹ 158,87,574	3813,01,765
7	3971,89,338	₹ 178,73,520	₹ 4150,62,858	₹ 166,02,514	3984,60,344
8	4150,62,858	₹ 186,77,829	₹ 4337,40,687	₹ 173,49,627	4163,91,059
9	4337,40,687	₹ 195,18,331	₹ 4532,59,018	₹ 181,30,361	4351,28,657
10	4532,59,018	₹ 203,96,656	₹ 4736,55,674	₹ 189,46,227	4547,09,447
11	4736,55,674	₹ 213,14,505	₹ 4949,70,179	₹ 197,98,807	4751,71,372
12	4949,70,179	₹ 222,73,658	₹ 5172,43,837	₹ 206,89,753	4965,54,084
13	5172,43,837	₹ 232,75,973	₹ 5405,19,810	₹ 216,20,792	5188,99,017
14	5405,19,810	₹ 243,23,391	₹ 5648,43,201	₹ 225,93,728	5422,49,473
15	5648,43,201	₹ 254,17,944	₹ 5902,61,145	₹ 236,10,446	5666,50,699

Table 4.5: Scenario - 2: Fixed Deposit

2) FIXED DEPOSITS

Pros and Cons of investing in Bank fixed deposits

Protection in the form of deposit insurance cover Fixed deposits opened with scheduled banks are covered under the deposit insurance programme of Deposit Insurance and Credit Guarantee Corporation (DICGC), a subsidiary of the Reserve Bank of India (RBI). The insurance

cover is applicable on cumulative bank deposits, which includes fixed deposits, savings account, recurring deposits and current account, of up to Rs5 lakh per bank, per depositor in the event of bank failures.

Assured returns on investments

The booked interest rates of bank FDs remain fixed till their maturity, irrespective of any change in the banks' FD card rates in the interim. For instance, if an individual opens a bank fixed deposit of 2 years tenure at 6% p.a., the interest rate will stay the same till the end of 2 years tenure. This provides a high degree of income certainty in FDs, even higher than those offered by most small saving schemes._

Availability of secured credit card

Secured credit cards are offered against the collateral of FD. "Secured credit cards can be helpful for those who aren't able to get regular credit cards due to no or low credit score, inadequate income, unserviceable location, company's profile or job profile. Note that the secured card users also continue to earn interest on their FDs used as collateral," said Arora._

SCENARIO - 3 : Rental analysis for PEB - Part 1			
AREA - 7 Acres (land bought 10 years ago)			
DESCRIPTION	AREA (SQFT)	RATE/SQ FT	TOTAL
LAND	305000	1000	3050,00,000

YEAR	RENT/MONTH	RENT/YEAR	NET PROFIT	IRR CALCULATION
1	₹ 42,53,600	₹ 510,43,200	₹ 1020,86,400	-₹ 5134,63,600
2	₹ 42,53,600	₹ 510,43,200	₹ 1531,29,600	-₹ 3861,70,400
3	₹ 42,53,600	₹ 510,43,200	₹ 2041,72,800	-₹ 3351,27,200
4	₹ 42,53,600	₹ 510,43,200	₹ 2552,16,000	-₹ 2840,84,000
5	₹ 42,53,600	₹ 510,43,200	₹ 3062,59,200	-₹ 2330,40,800
6	₹ 42,53,600	₹ 510,43,200	₹ 3573,02,400	-₹ 1819,97,600

7	₹ 42,53,600	₹ 510,43,200	₹ 4083,45,600	-₹ 1309,54,400
8	₹ 42,53,600	₹ 510,43,200	₹ 4593,88,800	-₹ 799,11,200
9	₹ 42,53,600	₹ 510,43,200	₹ 5104,32,000	-₹ 288,68,000
10	₹ 42,53,600	₹ 510,43,200	₹ 5693,28,000	₹ 300,28,000
11	₹ 49,08,000	₹ 588,96,000	₹ 6282,24,000	₹ 6282,24,000
12	₹ 49,08,000	₹ 588,96,000	₹ 6871,20,000	₹ 6871,20,000
13	₹ 49,08,000	₹ 588,96,000	₹ 7460,16,000	₹ 7460,16,000
14	₹ 49,08,000	₹ 588,96,000	₹ 8049,12,000	₹ 8049,12,000
15	₹ 49,08,000	₹ 588,96,000	₹ 8049,12,000	₹ 8049,12,000
				6%

Table 4.6: Scenario - 3: Rental analysis for PEB

YEARS	STEEL APPRECIATION
1	₹ 1500,00,000
2	₹ 1575,00,000
3	₹ 1650,00,000
4	₹ 1725,00,000
5	₹ 1800,00,000
6	₹ 1875,00,000
7	₹ 1950,00,000
8	₹ 2025,00,000
9	₹ 2100,00,000
10	₹ 2175,00,000
11	₹ 2250,00,000

12	₹ 2325,00,000
13	₹ 2400,00,000
14	₹ 2475,00,000
15	₹ 2550,00,000

Table 4.7: Scenario - 3: Steel appreciation

LAND APPRECIATION – 10% EVERY YEAR	
YEARS	PRICE
1	₹ 3050,00,000
2	₹ 3355,00,000
3	₹ 3690,50,000
4	₹ 4059,55,000
5	₹ 4465,50,500
6	₹ 4912,05,550
7	₹ 5403,26,105
8	₹ 5943,58,716
9	₹ 6537,94,587
10	₹ 7191,74,046
11	₹ 7910,91,450
12	₹ 8702,00,595
13	₹ 9572,20,655
14	₹ 10529,42,720
15	₹ 11582,36,992

Table 4.8: Scenario - 3: Land appreciation

Availability of loan against FD

Most banks offer loans against FD, usually in the form of an overdraft facility, wherein a credit limit is sanctioned to the borrower based on the FD amount submitted as collateral. The borrower continues to earn interest on the pledged FDs during the loan tenure. Borrowers can withdraw up to the sanctioned amount from their overdraft account and repay it basis their repayment capacity. The interest is levied on the amount drawn till its repayment.

Cons

Penalty on premature FD withdrawal

Most banks charge premature withdrawal fees of up to 1% for prematurely closing a fixed deposit. The penal rate is deducted from the effective rate of interest, which is lower than the original booked FD rate or FD card rate prevalent at the time of booking the FD for the period for which the FD remained in effect. Thus, make sure to consider your liquidity and

the time horizon of your crucial financial goals when choosing FD tenures.

In most cases, the true, technical design considerations for Grade-A warehouses are fairly standardized:

- *With a minimum height at an eave of 11m,
- *The building aspect ratio of a Grade-A park would range from 1:1.5-1:3.
- *The number of docks in such a park is 1 in 10000 SF on plinth area or lesser
- *The warehouse flooring is at a level of FM with a minimum floor load (UDL) of 5T/SQM.
- *An apron length of a minimum of 25.5 m in concrete
- *Grade-A park area should support at least 40 FT trailers and all the internal roads should also support the unhindered movement of the trailers.
- *The number of lanes in total should be 2-4, depending on the size of the warehouse.
- *Amenities like fire-fighting systems, CCTV surveillance, building insulations, LED lights, security system and other crucial factors should be planned well in advance to ensure efficient operations.
- *In addition to sustainability features, an efficient Grade-A park should have an adequate number of entry/exit gates and parking spaces basis a thorough traffic study of the park as even a minute's delay could be a direct business impact.

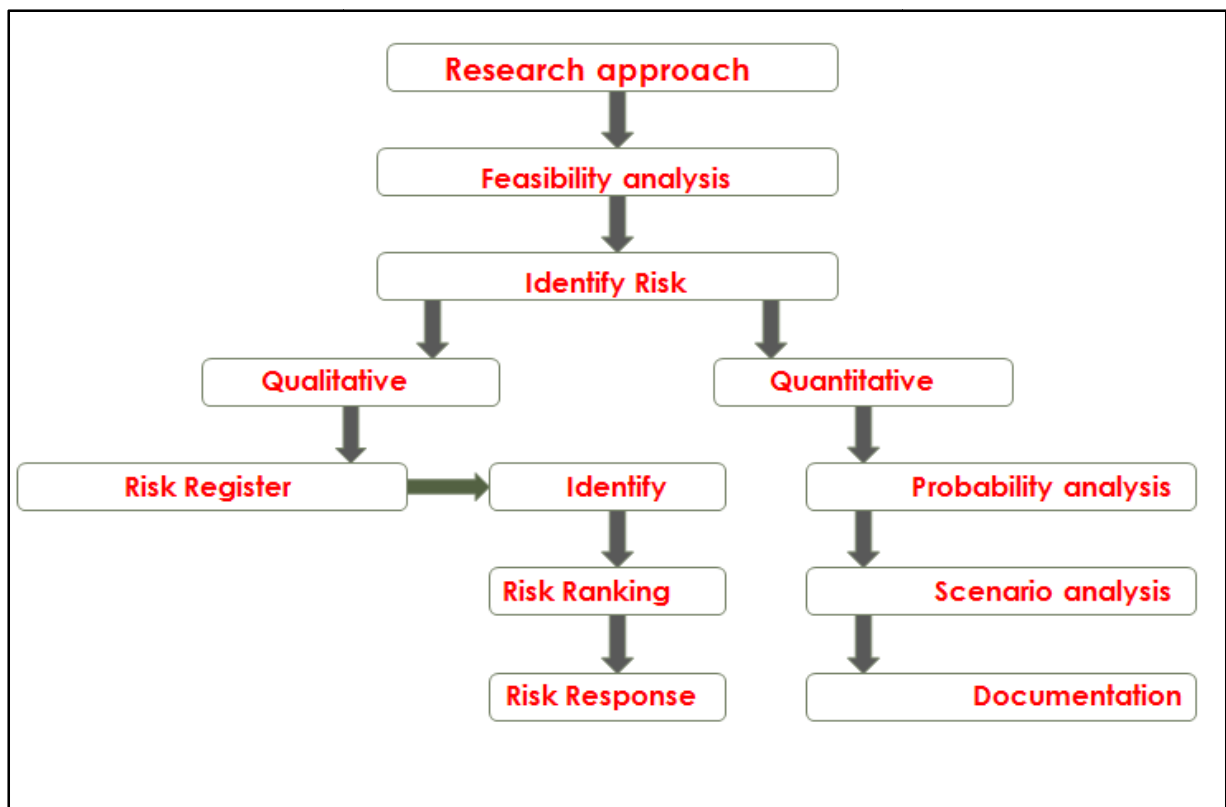


FIG 5.1 Research Approach

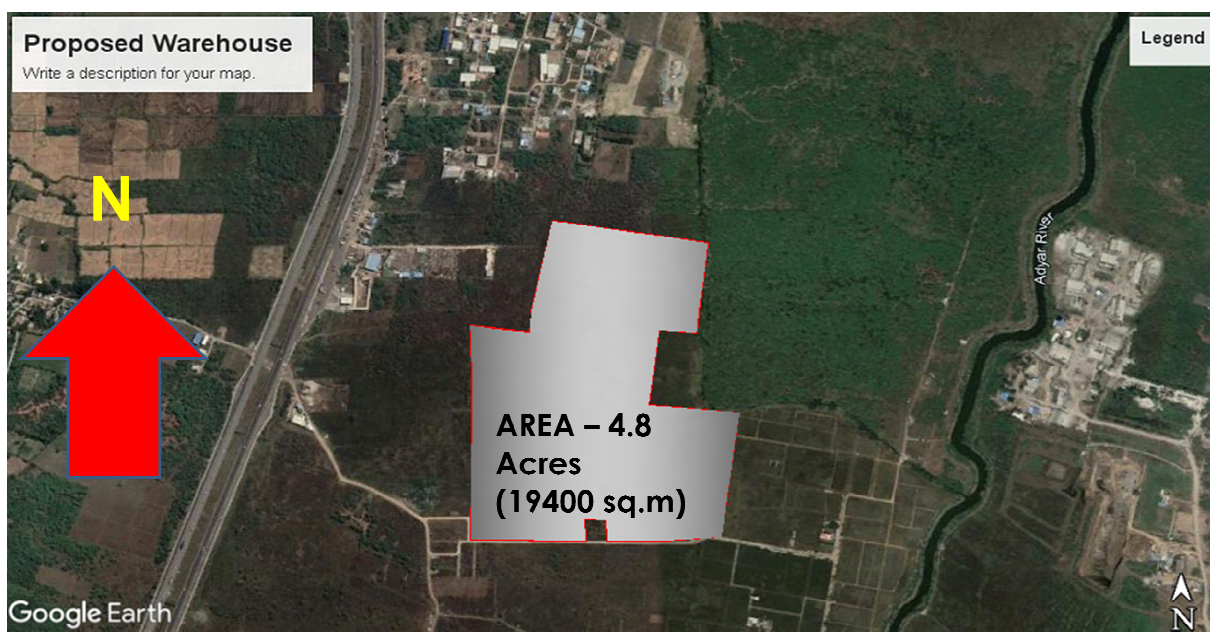
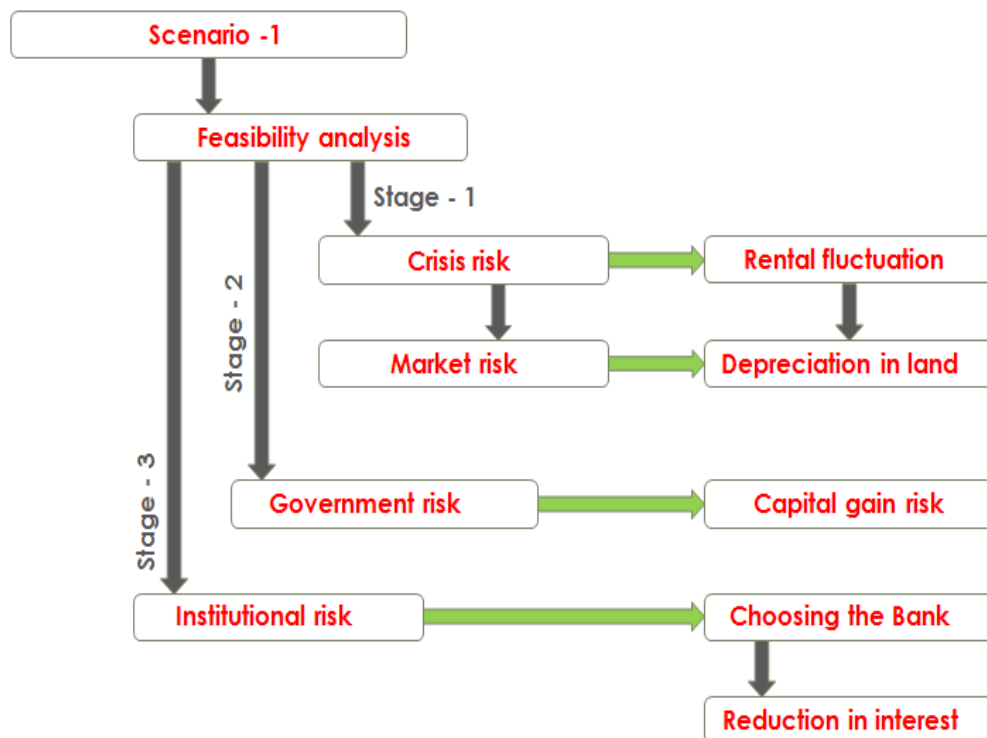
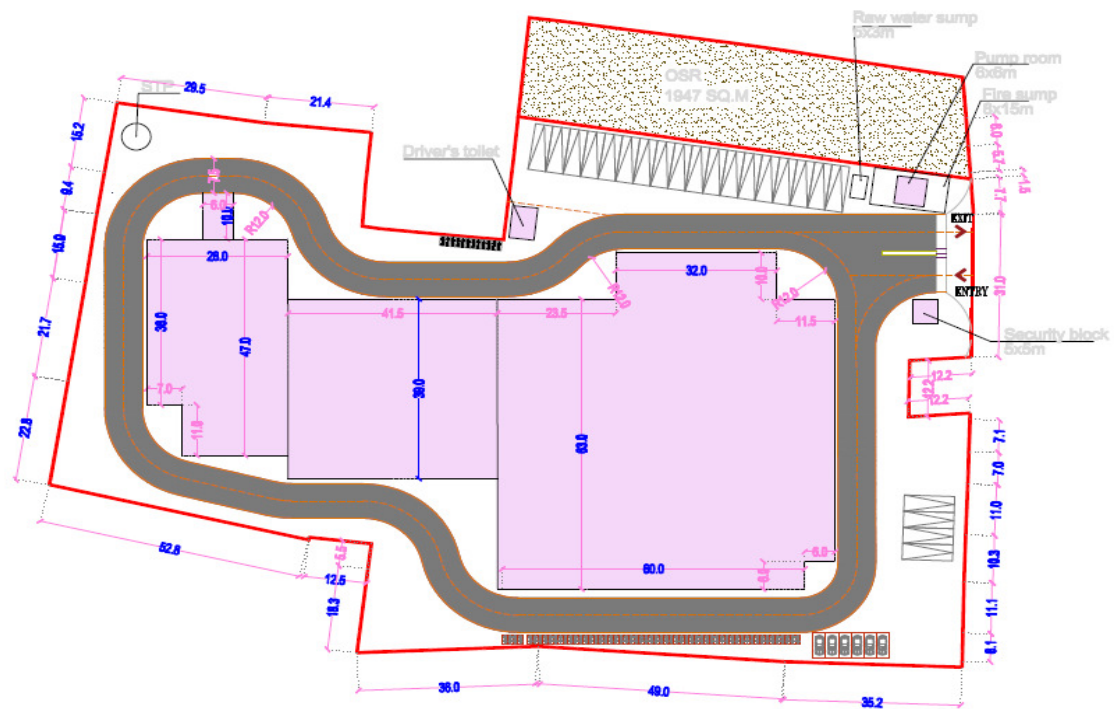


FIG 5.2 Topography

Warehousing cluster	Major warehousing locations
<u>Sriperumbudur–Oragadam cluster</u>	Irrungattukottai, Sriperumbudur, Oragadam and other locations on the in-roads branching from Sriperumbudur Mannur–Thiruvallur Belt: Includes Mevalurkuppam, Mappedu, Mannur, Pollivakkam and Thiruvallur
NH 16 / GNT Road–Periyapalayam cluster (North Chennai)	Periyapalayam Road, Thatchoor, Gummudipoondi. NH 16 / GNT Road–Redhills Belt: Includes Madhavaram, Manali, Red Hills, Puzhal, Karanodai, Alamathi and Poochettipadu
GST Road–Maraimalai Nagar cluster	Maraimalai Nagar, in and around Mahindra World City, Sengundram Industrial area, Chengalpattu

Table 4.9: Scenario - 3: Cluster occupiers



Price growth: City-wise break-up

City	Average price as on June 30, 2021 (in Rs per sq ft)	Annual growth in %
Ahmedabad	3,251	5
Bangalore	5,495	4
Chennai	5,308	3
Hyderabad	5,790	5
Kolkata	4,251	2
MMR	9,475	No change
NCR	4,337	2
Pune	5,083	3
National average	6,234	3

Source: *Real Insight: Q2-2021*

FIG 5.3 Price Growth Rate city wise

FIG 5.4 Warehouse transaction volume

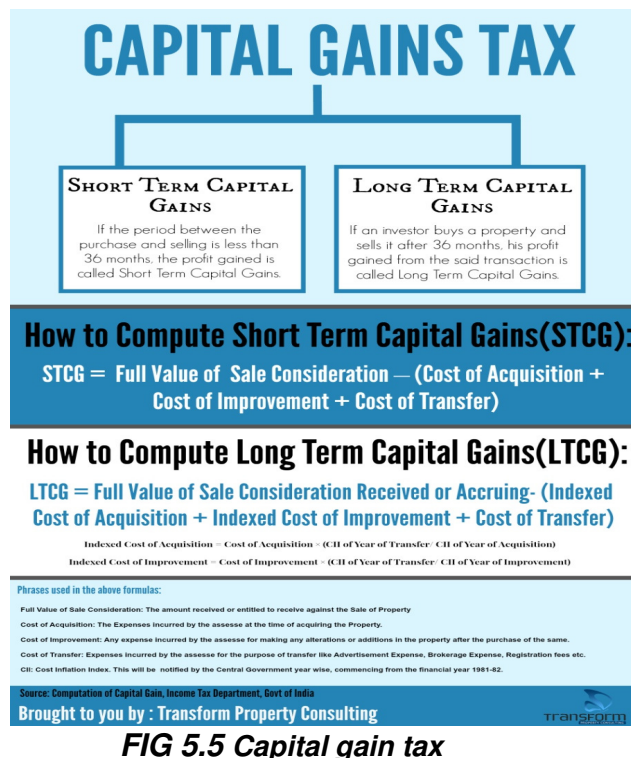


FIG 5.5 Capital gain tax

How to Save Capital Gains Tax on Property?

While selling the property the following conditions should be fulfilled:

1. You must use the capital gains to purchase or construct another house.
2. You must purchase the new house one year prior to or two years after selling the old house.
3. You must construct the new house within a holding period of 3 years after selling the old house.
4. You must purchase or construct only one additional house or property.
5. You must purchase or develop the property within the national borders of India.
6. You must not sell the new house for 3 years after taking possession.

If the price of the new property is less than the sale amount, then the exemption applies proportionately. You can use the remaining money to re-invest according to Section 54 EC within 6 months.

To calculate a short-term capital gain, you should consider the following factors –

- 1) Consideration received, or full value consideration received in exchange for the sale/transfer of property.
- 2) The cost of acquiring the respective property.

- 3) The cost of any improvements or alterations or renovations made to the respective property.
- 4) Expenses pertinent to the sale or transfer of the respective property.

These are the following factors considered to calculate long-term capital gain –

- 1) Full consideration is received upon the sale or transfer of property.
- 2) Indexed cost of acquiring the respective property.
- 3) Indexed cost of improvements or renovations or alterations made to the respective property.
- 4) Expenses in the course of executing the sale or transfer. Tax exemptions.

STCG = Full value of sale consideration –(Cost of acquisition+ Cost improvement+ Cost of Transfer)

$$= 10,00,000 - (4,00,000 + 2,00,000 + 75,000)$$

$$= 3,25,000 * 30\% (\text{STCG}) = 97,500/-$$

LTCG = Full value of sale consideration Received or accruing – (Indexed acquisition+ Indexed Cost improvement+ Cost of Transfer)

$$= 10,00,000 - (2,00,000 + 2,00,000 + 75,000)$$

$$= 5,25,000 * 20\% (\text{STCG}) = 1,05,000/-$$

Cost Inflation Index for calculating Capital Gains					
S.No.	Financial Year	Cost Inflation Index	S.No.	Financial Year	Cost Inflation Index
1	2001-02	100	11	2011-12	184
2	2002-03	105	12	2012-13	200
3	2003-04	109	13	2013-14	220
4	2004-05	113	14	2014-15	240
5	2005-06	117	15	2015-16	254
6	2006-07	122	16	2016-17	264
7	2007-08	129	17	2017-18	272
8	2008-09	137			
9	2009-10	148			
10	2010-11	167			

FIG 5.6 Cost inflation index

Tax exemption under section 54

An individual needs to meet the following criteria before availing an exemption under this section –

- 1) After Budget 2019, exemption on capital gain tax on property 2019 is allowed to individuals who have reinvested the capital gain in a maximum of two housing

properties.

2) If no such reinvestment takes place, then an exemption is not available. Before Budget 2019, an individual could only invest in a maximum of one housing property. Only the amount of capital gain is allowed for reinvestment and not the entire sales consideration amount.

3) The total return from the capital gain should not exceed Rs. 2 Crore. The investment should be made one year before the sale has taken place or two years after it.

4) This exemption is available to an individual only once. An individual can invest the capital gain in a construction project as well; however, such construction should be over within 3 years from the date of sale to avail exemption.

Any exemption will be revoked if the new property is sold within 3 years of purchasing it.

Tax exemption under Section 54F

To avail exemption on capital gain tax on property in India, these following parameters should be considered –

1) The respective capital gain must be from the sale of long-term capital assets other than a housing property.

2) The entire amount received as consideration from the sale of such assets must be reinvested in a maximum of two housing properties post Budget 2019.

3) Any investment of this nature needs to occur before 1 year of sale or after 2 years.

4) Investment can be made in a construction project as well, which needs to be completed within 3 years from the date of sale.

To avail this exemption under capital gain tax on property on the entire amount of capital gain, an individual needs to reinvest the whole amount received as consideration. In case he/she fails to achieve this, then exemption on capital gain is calculated on the basis of the amount invested. The following calculation takes place in that situation – Exempted amount = (Capital Gains * cost of new house)/ net consideration amount.

Tax exemption under Section 54EC

Exemption on capital gain tax on property is available to an individual upon meeting the following conditions –

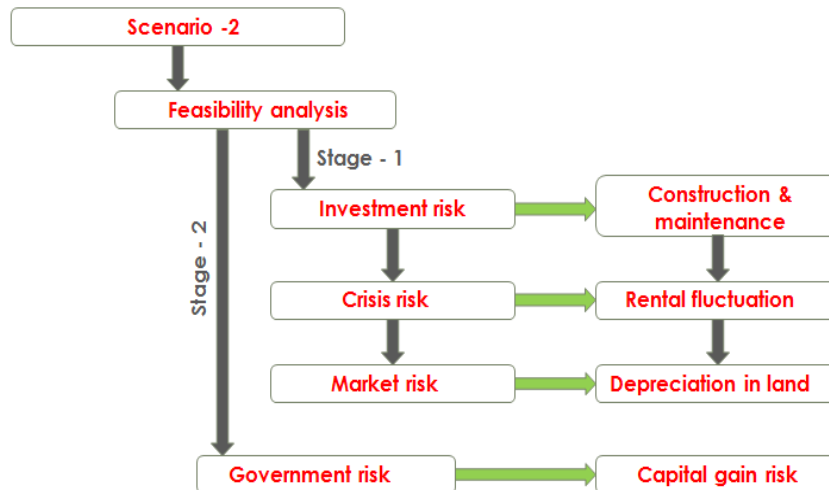
1) Capital gain generated from the sale of a housing property needs to be reinvested in specific bonds provided by the National Highway Authority of India (NHAI) or Rural Electrification Corporation (REC).

2) The amount of investment cannot exceed Rs. 50 Lakh.

3) The investment amount can be redeemed by an individual after 5 years from the date of sale. This revised time frame was introduced in the Financial Year 2018-19, before which the period was 3 years.

4) The investment needs to take place before filing tax for that respective year or within six months from the date of sale.

Risk assessment in Scenario analysis: 2



Probability	Percentage Chance	Description
Rare	$P < 5 \%$	The risk event may not occur w.r.t.past occurrence /record & in near future
Unlikely	$P = 5 \sim 10\%$	Based on the available information lesser possibility of happening in the future.
Possible	$P = 10 \sim 49\%$	The risk event may occur w.r.t. past occurrence & future possibility

Likely	P= 50 ~ 80%	The risk event is likely to occur. Has happened in the past / possibility of happening in the near future
Most Likely	P > 80 %	The risk event is almost certain w.r.t. past experience or future possibility

Table 5.1 Risk Ranking

S r N o	Identified Risk	Probability	Impact	Risk Rating	Mitigation / Response Plan
1	Insufficient time for site mobilization	Likely	Moderate	High	Deviation from tender condition, asking for additional 30 days for mobilization . Identify 40 followi n & plan out before job startup.

2	Delay in commencement of project due to commencement formalities required by client	Possible	Moderate	High	Qualifying in the bid against the client's specific requirements for commencement of work.
3	Non Availability of skilled workmen	Unlikely	Major	High	Requirement shall be met from following sites , and local hiring
4	Non Availability of Labour Camps	Likely	Moderate	High	Construction of additional camps considered in the cost. Labour will be hired from the contractors having camp facilities .

5	Non availability of Plant and Machinery	Rare	Major	Medium	Major P&M available .Tower cranes (partly owned), Mobile cranes, DG sets thru local hire
S r. N o .	Identified Risk	Probability	Impact	Risk Rating	Mitigation / Response Plan
6	Delay in finalizing Sub-contract Packages due to non availability of approved Vendor / contract or list from the client.	Possible	Moderate	High	Propose client / consultant for subcontractors / Vendor list approval . Quotations received from reputed subcontractors. Pre-bid tie up with vendors proposed.

7	Material s : Non- Availabil ity of the required quantity of material and its timely delivery	Possi ble	Mod erat e	Hig h	Seeking approval from client for vendors 43ollowi ng other than specifie d code to increase the vendor base. Vendor Tie-ups propose d.
8	Price Escalati on on Material s	Likel y	Majo r	Crit ical	Price Escalati on consider ed in the cost provisio n for Lab our, Steel , RMC.
9	Non completi on of First section in the specifie d days	Possi ble	Majo r	Crit ical	Deviation sought for mileston e LDs and the overall LD % cap.. Provisio

					n consider ed 2%
1 0	Negative Cash Flow as per the Tender commer cial terms.	Likel y	Mod erat e	Hig h	Deviation sought from tender conditio ns for Advance , Retentio n , RA Bill payment .

Table 5.2 Pre Bid-Risk Assessment

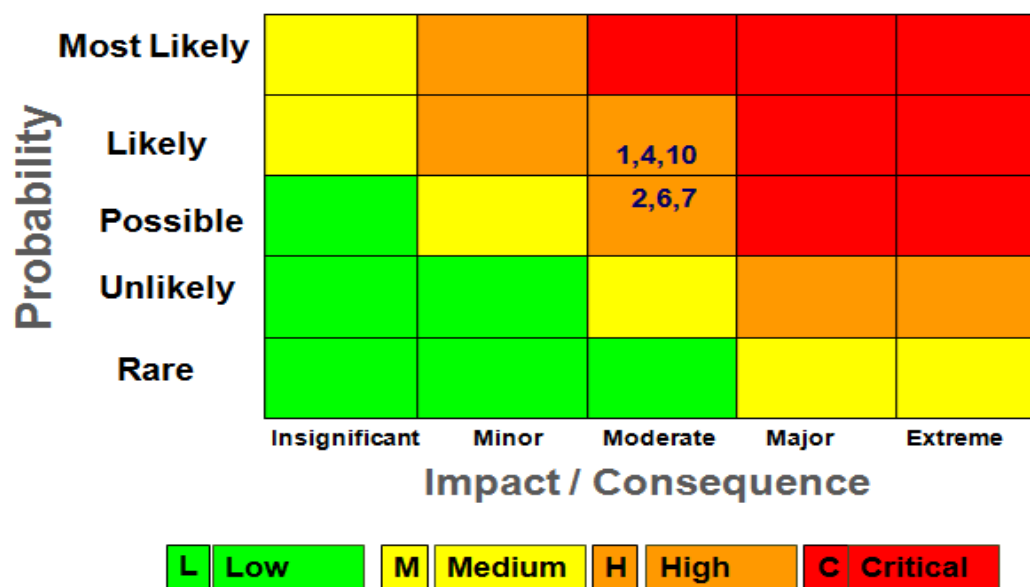


FIG 5.7 Probability matrix

5) CONCLUSION

Investment is important to achieve individual goal. Investment means we have money, and then we need to make analysis to invest the money, and expected get return in future. If the investment are run early, then we will make a lot of profit if the investment run well, if not we will lose all of the investment need to start from earlier. Apart from that, first thing first we must set an investment plan to make the investment run well. From that, we can know what we will face in future, what the risk need counter, what economy is going and many more. As we also know, there are also specific place for investment to be done. It will involve capital market, Bursa Malaysia, equity market, debt market and many more. So, we need to know where we should invest our money whether to invest in high risk market or lower risk market to gain return in future. Usually, high return will associate with high risk.