

Volume: 10 Issue: 06 | Jun 2023 www.irjet.net

# Techniques, Approaches & Comparison of Valuation- A Case Study of **Residential Property of Nashik City**

Mr. Vrushabh Kale<sup>1</sup>, Dr. Nitin Bharadiya<sup>2</sup>, Dr. P. L. Naktode<sup>3</sup>

<sup>1</sup>M.Tech. Valuation Student, Sandip University, Nashik, Maharashtra, India <sup>2</sup>Associate Professor, Department of Civil Engineering, Sandip University, Nashik, India <sup>3</sup>Professor and Head of Department, Department of Civil Engineering, Sandip University, Nashik, India

\*\*\*

**Abstract** - A Valuation is combination of arts and science which regulates the value of property. Social & legal science factors are the part of arts and technical or physical factors are the part of science. While determining the fair market value of property it is important to see the interest of person in the property. Best and highest possible use of property is must while calculating the fair market value of property. There are various approaches available to calculate the fair market value of property. Each approach has is unique direction & feature while determining the fair market value of property. It is important apply most suitable approach to given kind of property. This dissertation attempt to examine the residential property using various approaches. Approaches like Income approach, Cost approach, Market approach are examined in the given dissertation. This study is carried out under supervision of Government registered valuer.

Key Words: Market value, Approach, Residential, Income, Cost, Depreciation, Replacement cost.

#### 1.INTRODUCTION

The factors affecting value of property are Economical, Social , Legal & Technical. The intersecting relation between the Aspects of Valuation decide fair market value of the property. The Valuation of Land & Building asset is depends on the subject matter of valuation. It is a interest of a person in the property. The legal and best possible use of property can only give fair market value. In Recent time the Valuation of Land and Building required for Companies Act, Mortgage Purpose, Visa Purpose, Bank loan purpose. The Methods of Valuation are depending upon the Aspects of Property.

In Current situation the need of Appropriate approach for given Valuation is having extreme significance.

Case Study to evaluate Fair Market Value should based on nature of property and its financial behaviour.

#### 1.1 GENERAL

The research required for method to evaluate fair market value is proposed in the same research work. In India the Popular Approach for Valuation is Cost Approach which is based on the "Principle of Substitution".

Practising Valuers used single method for every kind of Land & Building. But it is important to categories the approach of valuation based on Financial Potential & Price equilibrium of asset.

e-ISSN: 2395-0056

p-ISSN: 2395-0072

The research to examine the applicability of approach of Valuation should be done.

This dissertation examines the suitability of given approach for given kind of Property.

## 1.2 Objective of Study

- To Compare Techniques of Valuation of Land & Building.
- To Compare the Approaches of Valuation of Land & ii) Building.
- iii) To Calculate the percentage difference between approaches used to calculate Fair Market Value of Land & Building.

### 2. LITERATURE REVIEW

#### i) A Andrew, M Pitt (2000)

In the given literature the Authors illustrated applicability of Depreciated Replacement Cost Method for Public Buildings. The Depreciated Replacement Cost Method is applied by Red Book for the valuation of specialized listed buildings in the private sector. The other Valuation alternative / Valuation approaches are also discussed in given research.

#### ii) O Connellan, et al (1993)

In the given literature the Authors discussed about the new classification system & Methodology for buildings that is discounted asset rents (DAR)

The Authors referred the Dawkins (VO) v Leamington spa BC & Warwickshire cc (1961) RVR 291 for explanation of contractors test.

The testing of the cost approach is based on three tests which are Starting point objective which based on opinion or judgment?

ISO 9001:2008 Certified Journal © 2023, IRJET **Impact Factor value: 8.226** Page 631



Volume: 10 Issue: 06 | Jun 2023 www.irjet.net p-ISSN: 2395-0072

### iii) Prof. Sohan R. Kolhe, et al (2016)

In the given literature the authors illustrated the factors affecting the value of property. The authors took the consideration of factors like Location, Marketability , Size , age of property .

The authors carried out the comparison of two Building.

#### iv) Nick French, Laura Gabrielli (2018)

Property Valuation revisited: The hierarchy of valuation approaches, methods and models. In the given literature the authors illustrated about the methods or approach suitable for the particular type of property.

#### v) Fauziah raji, Norhaya Kamarudin (2015)

The valuation approach in relation to the model of privatization for the land development adopted. In the given literature the authors illustrated about privatization of land property development has been carried out in Malaysia since 1980's.

#### 3. METHODOLOGY

The Valuation of residential property is based on three key factors which are utility, marketability, best possible use of property. There are various approaches which can forecast the value of property.

Before applying any approach to property it is important to make sure the marketability and enforceability. Document scrutiny is foremost thing before doing physical site inspection. In the given dissertation the documents which are examine before valuation were which was Deed, Building plan, Building commencement certificate, Building completion certificate , electricity bill, Nashik municipal house tax receipt, water bill were examined under guidance of government registered valuer.

Physical site inspection is crucial before doing valuation. It is important to do verification & identification of property by valuer itself. The property boundaries should match as per deed & building plan.

The details of the property like survey number, CTS number, final plot number, building name, wing number, flat number, premises built up area were verified under super vision of government registered valuer.

The steps involve before assigning fair market value were as flows:-

i) Collection of documents from clients.

ii) Scrutiny of documents & verification of authorized papers.

e-ISSN: 2395-0056

- iii) Physical site inspection & verification of property.
- iv) Demarcation of site.
- v) Preparation of valuation report as per purpose of valuation & banks requirement.
- vi) Adopting appropriate approach for given kind of property.
- vii) Assigning fair market value to property.
- viii) Remarks regarding violation of rules & regulations.

## 3.1 Valuation Approaches & Methods

#### **INCOME APPROACH:-**

Income approach is most suitable for investment property. This investment property consider the significance of utility, liquidity, marketability. The investment property consist the leasehold land, rented asset, cinema houses, hotel, petrol pump, marriage hall. This method is based on capitalization of net income incurred from property. It is based on the principle of anticipation of benefits.

The chronological procedure in income capitalization method, it is as under:-

- i) Obtain data from market, which is documents of property, rental status of property.
- ii) Physical site inspection of property and survey of rentals in that area.
- iii) To calculate gross rent obtaining from property.
- iv) Adopt proper rate of interest.
- v) Deduct all expense.
- vi) Capitalize net receivable income.
- vii) To reach capital value.

#### **COST APPROACH:-**

This method is used when asset having the capacity of marketability but not having any income generating feature. Cost approach is based on the principle of substitution. It is based on the idea of that the prospective purchase would not spend more money than original expenditure cost of property.

The cost approach works on the calculating the cost of acquiring the asset. By calculating value of land at prevalent time zone & cost of construction incurred. If building is old then depreciation is allowed to apply on replacement cost of property. The most popular method in cost approach is land & building method.

Value of property = prevalent land value + replacement value of building- depreciation. In cost approach the value of land is calculated by either Belting method or Hypothetical plotting scheme. The replacement cost can compute by cost index method or by detailed quantity survey method.



Volume: 10 Issue: 06 | Jun 2023 www.irjet.net p-ISSN: 2395-0072

Depreciation is deterioration of property value due to physical, economical, functional obsolescence. The amount of depreciation can calculate by straight line method.

#### MARKET APPROACH:-

This approach is very vital & widely used among the valuer while doing valuation for various purpose. The market approach is based on the economic principal of comparison & substitution.

Sales comparison method: - In sale comparison method the subject property for valuation is directly compare with sale instances of recent sale of property happen in particular area. The attributes of property have significant importance in sales comparison method.

In sales comparison method each attribute of property having certain weightage. In land valuation the attribute which play important role while valuating the property by sale comparison method are time zone, size, location, age, amenity provided. The importance of attributes are depends on the choice of local population in that area. It is important for valuer to do the physical site inspection of each sale instances involve valuation of subject property and verification of genuine documents. Study of whole economic situation in the subject property is situated. If the comparable sales of property

## 4.CASE STUDY:-

The Aim to this case study is to determine the fair market value of residential property of Nashik city using different approach of valuation. The document scrutiny, physical site inspection & Depiction of remarks and circumstance was done by "Vrushabh kale" in presence of government registered valuer.

## 4.1 Case Study 1:-

Details of property:-

- Location of property:- Flat No D-2, C-wing,
- Thatte Nagar, Gangapur Road, Nashik (M.S)
- Survey No:-715/A/8/1A
- Final plot No:- 455
- Age of Building:- 20 years
- Built up area :- 111.20 SQ.M (parking area = 40.89 SQ.M, Garden area = 92.90 SQ.M)

#### Valuation by Income approach:-

Capital value = Net Annual income \* Years Purchase Capital value =  $\{(25000-5000) *12\} * \{1/0.03\}$ Capital value = 2 80,00,000

The fair market value of property is 28000000 by income approach.

e-ISSN: 2395-0056

#### Valuation by Market Approach :-

After sales instances comparison of various property the prevalent Market rate are adopted under market approach.

S. No	Particulars	Built up area	Rate/ SQ.M	Valuation
1	Flat No D-2	111.20 SQ.M	259,180	265,80,816.00
2	Garden area	092.90 SQ.M	214,795	213,74,455.50
3	Parking area	040.89 SQ.M	223,672	209,67,948.08
			Total	289,23,219.58

#### Valuation by cost Approach:-

Valuation of land = Prevalent market rate of land \* Area of

= 234432/SQ.M \* (101.09+40.89+92.90 SQ.M)

= 280,87,388.16

Replacement cost of building = (Replacement rate \*

Built up area)

= 21520/SQ.M \* 111.20

= 23.93.024.00

Total amount of depreciation of building=

( Depreciation / year \* Age of building )

= 35895.36\*20

=7,17,907.2

Valuation of property = (Value of land + Replaceme Depreciation)

= 280,87,388.16+223,93,024-7,17,907.2

=297,62,504.96

#### 4.2 Case Study 2:-

#### **Details of Property:-**

Location of property:- Plot & Construction,

"Aashra Vrudhashram

Takli Road, Dwarka

Nashik (M.S)

Survey No:- 432/1/1B/2/4

plot No:- 4



Volume: 10 Issue: 06 | Jun 2023 www.irjet.net p-ISSN: 2395-0072

• Age of Building:- 30 years

• Plot Area :- 211.35 SQ.M

Built up area :- 195.66 SQ.M

#### Valuation by Income Approach:-

Capital value = Net Annual income \* Years purchase

Capital value =  $\{(20000-5000)*12\}*\{1/0.025\}$ 

Capital value = 2 72,00,000.00

#### Valuation by Market Approach :-

After sales instances comparison of various property the prevalent Market rate are adopted under market approach.

S. No	Particulars	Area	Rate/ SQ.M	Valuation
1	Plot	211.35 SQ.M	226,312.00	265,80,816.00
2	Construction	195.66 SQ.M	210,760.00	213,74,455.50
			Total	276,66,342.8

## Valuation by Cost Approach:-

Valuation of property = (Value of land +

Replacement cost of

Building - Depreciation)

= 256,85,315.00+42,10,603.2-18,94,771.5

=280,01,146.7

Round up Value of property by cost approach is  $\ensuremath{\mathbb{Z}}80,\!01,\!000.00$ 

#### 4.3 Case Study 3:-

## **Details of Property:-**

• Location of property:- Row House No. 02,

Sukamal Row House.

Near "Bafna Bazar", Audumber

Nagar, Amrut Dham, Panchavati,

Nashik (M.S)

Survey No:- 246/10

plot No:- 3/A (part)

• Age of Building:- 05 years

• Built up area :- 76.17 SQ.M

## Valuation by Income approach:-

Capital value = Net Annual income \* Years

purchase

e-ISSN: 2395-0056

Capital value =  $\{(14000-4000) *12\} * \{1/0.035\}$ 

Capital value = 2 34,28,571.43

#### Valuation by Market Approach:-

After sales instances comparison of various property the prevalent Market rate are adopted under market approach.

No	Particulars	Built up Area	Rate/ SQ.M	Valuation
1	Row House No 2	76.17 SQ.M	237,660.00	228,68,562.20
			Total	228,68,562.20

### Valuation by Cost Approach :-

Valuation of land= Prevalent rate \* Land Area

=22,596/SQ.M \* (69.24 SQ.M)

= 215,64,547.04

Replacement cost = Replacement rate \* Built up area of building

=21520/SQ.M \* 76.17

= 216,39,178.40

Total Depreciation = Depreciation/ year \* Age of building

= 24,587.68 \* 05

=1,22,938.40

Valuation of property = [Value of land + Replacement

Cost of building - Depreciation]

= 215,64,547.04+ 216,39,178.40-21,22,938.40

=230,80,787.04

Round up Value of property by cost approach is  $\ensuremath{\mathbb{Z}} 30.81,000.00$ 

### 3. CONCLUSIONS

Each property have its unique feature while determining fair market value. Every approach can give different fair market value based on its nature, market forces & economic potential. Market value of property can be positive or negative in nature with respect to other approach. Income approach is based on the income generating attributes of property while cost approach is based on physical nature of property. From the results it is observed that the general percentage change between approaches is about 20%.

e-ISSN: 2395-0056 Volume: 10 Issue: 06 | Jun 2023 www.irjet.net p-ISSN: 2395-0072

#### REFERENCES

- 1) P Aragones beltran , J .Aznar , J ferris-onate , M Garcia-melon "Valuation of Urban industrial land", European journal of operational research (2008).
- A Andrew, M pitt Journal of property "Investment and Finance", Journal of property investment & finance, (2000).
- 3) S Sayce, O Connellan, "Implications of valuation method for the management of the property assets", Property Management 16(4), (1998).
- 4) O Connellan , R Baldwin, " The cost approach to valuation", The Journal of property valuation and investment 11(1) 50-56, (1993).
- 5) F Tajani, P Morano, F Salvo, Manuela De Ruggiera, "Property valuation : The market approach optimized by weighted appraisal model" Journal of property investment & finance, (2020).
- 6) Fauziah Raji, Norhava kamarudin "The valuation approach in relation to the model of privatization for land development adopted", jurnal Teknologi 75(10), (2015).
- Nick French & Laura gabrielli, "Property valuation revisited: The hierarchy of valuation approach, methods and models", Journal of property investment and finance, (2018).
- Laura Gabrieli & Nick French, "pricing to market: property valuation methods - a practical review, Journal of property investment & finance 39(5), (2021).
- Sohan R.kolhe , Pankaj P.Bhangale " comparative valuation study of commercial building in Jalgaon", International Journal of Innovative Research and Advanced Studies, (2016).