BASIC PRINCIPLES OF VALUATION

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1.0 Preamble

Valuation in a broad sense means assessing the worth of something which may be tangible assets like land / building or something intangible like brand / trademark / goodwill. There are various methodologies of valuation. Any individual or a company is concerned with the value of the asset that can be expected from a buyer or seller, if the property is put to sale. Hence, conclusion drawn by the valuer in valuation report about the property needs a careful examination. In a nutshell, a valuation is well-defined as

1. The process of determining the current worth of an asset or commodity.
2. Also, it can be termed as the determination of the economic value of an asset or liability.
3. The value of an asset or commodity is related to supply and demand curve.
4. If demand goes up the value will be more and if supply goes up then the value comes down.
5. **The value is a function of time, place and purpose.**

There are many techniques that can be used to determine value. The valuer must have the basic knowledge of the principles adopted in the valuation fields. The valuers need to acquire knowledge of relevant accounting standards. Valuers need to understand the Indian and international valuation standards.

1.1. Cost is a fact; price is a policy and value are an opinion.

Cost: Cost is the amount required to create or produce the good or service. Cost becomes a historical fact as soon as its production is complete.

Price: The price paid for an asset is its cost to the buyer. Price is a term used for the amount offered, or paid for a good or service. Price is formed by the interaction of demand and supply in an economic market. When a transaction takes place, sale price becomes a historical fact.

Value: The word valuation is used to refer to the estimated value or to refer to the preparation of the estimated value. Value is therefore a hypothetical price. It is a proxy for price. **So, cost is fact, price is policy, value is opinion.**

1.2. Valuer

The valuer is a professional, who is an expert in valuation field. To value an asset, as a **technical man**, he must have adequate knowledge in estimation, costing, planning,

designing, updated knowledge in construction technology, government guidelines, rules and regulations. And also, he will be an Engineer while correlating the structural details of the buildings. He will be a **lawyer** while discussing the legal aspects arising out during the inspection of the property. He will be a **chartered accountant** while doing the estimation and costing. So, he must be a through knowledgeable professional in all the fields.

Valuer qualification Requirements: For all types of valuation assignments to carried out, the valuer must be graduate in the specific discipline with the necessary qualifications, recognised by any valuer organisation by becoming a member in that organisation. He must qualify with required qualification and experience and register himself as a registered valuer under the specific Government Act governing the recognition. For valuation under Income Tax Act, he must be a Registered Valuer under Section 34 AB of the Wealth Tax Act. For Companies Act, he must have passed the IBBI examination for qualifying as a registered Valuer. The financial institutions recognise these valuers as their panel valuers.

2.0. Kinds of Value

There are different kinds of value and at least the following types of value are frequently used

- **Market Value:** Prevailing rate at which the buyer or seller wants to buy or sell and it depends on the demand in that locality.

- **Fair market value:** The term used in normal conditions when the asset is sold or valued as if it can fetch. It signifies the Market value. It is not a speculative or distress or forced sale value.

- **Guideline value**: The minimum stamp duty value fixed by the stamp valuation authority for registration purpose.

- **Accommodation value:** The value of land lacking in shape, size, or a recessed land, lacking direct access from the road, or not independent will be having a lesser market value.

- **Book value:** Written down value (WDV) of an asset as shown in the Book of Accounts and Balance sheet as per statutory requirements

- **Breakup value:** The estimated amount, when a Concern is closed, individual assets are valued and sold separately

- **Liquidation Value:** Liquidation Value should take into account the costs of getting the assets into saleable condition as well as those of the disposal activity. Liquidation Value can be determined under two different premises of value: orderly liquidation and Forced sale.

An orderly liquidation is the value of a group of assets that could be realized in a liquidation sale, given a reasonable period of time to find a purchaser, with the seller being compelled

to sell on an as it is. This is also called **Realizable value**: The reasonable period of time to find a purchaser (or purchasers) may vary by asset type and market conditions.

⦿ **Forced Sale value:** It is the estimated amount of an asset, when sold in the open market when the asset is under liquidation. The term “forced sale” is used in circumstances where a seller is under compulsion to sell and that, as a consequence, a proper marketing period is not possible and buyers may not be able to undertake adequate due diligence.

⦿ **Distress Value:** Urgent disposal or liquidation of assets due to personal commitments, communal riots, obsolescence, labour unrest. Other social, political uncertainties will drastically reduce the market value.

⦿ **Going Concern value:** It is an estimate of the profit-making running business price, in the open market with all tangible and intangible assets with all liabilities.

⦿ **Equitable Value:** It is the estimated price for the transfer of an asset or liability between identified knowledgeable and willing parties that reflects the respective interests of those parties.

⦿ **Investment Value:** It is the value of an asset to a particular owner or prospective owner for individual investment or operational objectives.

⦿ **Intrinsic value:** The actual or true value of the asset, incurred by the owner of the assets

⦿ **Monopoly value:** It is the premium value or a fancy price of the assets due to demand, non-availability of similar assets and these types of assets demand a special value due to this peculiar advantages

⦿ **Mortgage value:** The term used in financial institutions while the asset is surrendered as security for the loans taken by the owner of the assets from financial institutions

⦿ **Salvage value:** It is the estimated amount when an asset is sold in open market, after the expiry of its life span, but still continued to be used due to its present conditions.

⦿ **Scrap value:** The scrap value is defined when the asset has served its life and no more it can be utilized for operation and it is completed in knock down status, the residual parts are valued as a scrap pretending the scrap materials of the asset is sold in open market.

⦿ **Replacement value:** This is the estimated cost of the asset to be incurred today, by replacing a similar asset at current pricing.

⦿ **Reproduction value:** This is the estimated cost of the asset to be incurred today, by replacing a similar identical asset with the same technical specifications at current pricing.

⦿ **Net present value:** It is the present-day value of the asset derived by deducting the depreciation amount from the replacement value of the asset

⦿ **Notional value:** This is an imaginary value of asset or hypothetical value as required for certain valuation process for statutory purpose

⦿ **Potential / special value:** An asset will enjoy additional value due to demand by its physical, geographic, economic or legal aspects. Due this factor the market value will be increased.

⦿ **Synergistic value**: The attributes of an asset that could be of value to a special purchaser include any element of synergistic value that would be generated by its acquisition. Synergistic value is an additional element of value created by the combination of two or more interests where the value of the combined interest is worth more than the sum of the original interests.

⦿ **Sentimental value:** Value determined by the buyer or seller due to various sentimental reasons. It is a personal value added to the market value of both buyer and seller. It may not affect the fair market value.

⦿ **Speculative value:** When a speculator invests in buying the asset with sole motive of earning profit while selling of the asset after specific time. The speculator may foresee likelihood of increase in asset value and makes investment and sells the asset on profit mode.

⦿ **Stigma value:** Estimate of price of an unwilling purchaser based on assumptions for suspicion or negative aspects of disliking the property for certain reasons, though the physical conditions are good. Example: haunted house, suicide, near a burial / cremation ground.

⦿ **Statutory value:** Property value estimated in accordance to the provisions of local acts. Example: property tax act, stamps act, wealth tax act, registration act. (**written down value**)

⦿ **Other values;** present value, insurance value, residual value, fancy value, depreciation value, commercial value, rental value, exchange value, face value, future value, capital value, rental value and etc. All the above values are generally depending on the supply and demand curve, utility value, obsolete technology, changing government acts, reproduction cost.

3.0. Acts governing property

(a) The Indian Easements Act, 1882

(b) Government Grants Act,1875

(c) Indian Limitations Act, 1963

(d) Transfer of Property Act, 1882

(e) Laws of Inheritance (Indian Succession Act, 1925, Hindu Succession Act, as amended in 2015, Muslim Personal Law (Shariat) Application Act, 1937)

(f) Trust Act

(g) Indian Majority Act, 1875 (9 of 1875)

(h) Land Acquisition Act, 1894 and The Right to Fair Compensation and Transparency in the Land Acquisition, Rehabilitation and Resettlement, Act 2013 (LARAR)

(i) Real Estate (Regulation & Development) Act, 2016 (RERA Act)

(j) Slum Areas (Improvement and Clearance) Act 1956

(k) Environment (Protection) Act 1986

(l) Forest (Conservation) Act of 1980

(m) Special Economic Zones Act, 2005

(n) Factories Act, 1978

(o) National Building Code of India (NBC) & IS code of practice

(p) Municipal Law

(q) National Highway Act

(r) Railways Act

(s) Civil Aviation Authority

(t) Indian Electricity Act.

(u) Petroleum Act, Essential Commodity Act, Consumer Protection Act, Explosive Act and restriction on land reconversion

(v) Coastal Regulation Zone

(w) Waterbodies Regulation:

(x) Hill Conservation Regulations

(y) Building bylaws

(z) SARFEASI Act 2002, Income Tax Act and Companies Act

4.0. Land Classification

A land is classified in the following manner: Virgin land and Land with building or structures. Based on locational criteria, the Directorate of Town & Country Planning term these lands classify these properties as

1. Urban land
2. Non - urban land
3. Agricultural land or farm land (wet lands & dry lands)
4. Waste land
5. Barren land

6. Forest
7. Mine
8. River
9. Channel, drain
10. Railway land

The land is further broadly classified as planning area and non-planning area. Planning area means any area declared to be a regional planning area, local planning area or a site for a new town under Town and Country Planning Act. It varies from state to state. Non-planning areas are those areas other than planning areas within the jurisdiction of DTCP, which do not have an approved master plan. The lands in Metropolitan Area are classified according to the land use, buildings of special character, etc. in the following manner:

- Primary Residential
- Mixed Residential
- Commercial
- Industrial
- Special & Hazardous Industrial
- Institutional
- Open Space & Recreational
- Future Urban able area
- Future Non -Urban able area
- Agriculture
- Areas for Buildings of Special Character - Multi-storeyed Building Areas (MSB), Continuous Building Areas (CBA), Economically Weaker Section Areas (EWS)
- Ecologically Sensitive Areas - Coastal Regulation Zone (CRZ), Aquifer Recharge Area, Catchment Area
- Development Prohibited Area - Area around Indian Air Force Station, Swamp Area, Areas around monuments notified by Govt. of India
- Areas of Special Character - MRTS Influence Area, IT Corridor, Areas around Airport /Aerodrome)
- Natural Hazard Prone Areas
- Green Belt along Bye pass & Bye pass Roads

These essentials can be examined with government revenue records like a register, chitta, adengal, topo plan survey sketch, FMB sketch and latest development plan.

The unit measurement of land will be acres for large extent of land and smaller plots referred by square foot or square metre. The terms kuzhi, cent, kaani, maa, veli, hectare, ares are some of the terms used for unit measurement locally.

5.0 Property Classification

Property Valuation is carried out based on the rights he holds in the property, which are called as Bundle of Rights. Ownership is a bundle of rights, with all special and limited rights, liberties and power.

The owner is entitled to (Bundle of Rights)

- Use of property in any manner or
- Abuse the property till it result in nuisance or
- Enjoy it by exclusive possession or
- Derive benefits or
- Income or profits from it or
- Disposing it during his lifetime by sale or
- Gift or
- Will or
- Settlement or
- Grant lease or
- Create mortgage or
- Induct license

The properties are classified as free hold property and lease hold property.

⦿ **Free hold property** – the property is occupied by the owner, Himself and has all rights to use it on his own free will. He has all the rights with him and can do any act with respect to the ownership.

⦿ **Leasehold property** – a property is under lease is called a leasehold property. A **lease** is a contractual arrangement calling for the lessee (user) to pay the lessor (owner) for use of an asset. The lease agreement can be used to describe a lease in which the asset is tangible asset. Language used is that the user rents the property let or rented out by the owner.

The term rental agreement is also sometimes used to describe a periodic lease agreement (most often a month-to-month lease).

The lease will either provide specific provisions regarding the responsibilities and rights of the lessee and lessor. In general, by paying the negotiated fee to the lessor, the lessee (also called a tenant) has possession and use (the rental) of the leased property.

The most common form of real property lease is a residential rental agreement between landlord and tenant. The lease may be for a long term or short term or perpetual.

The lease agreements can be made for a day, month, year or years, depending on the requirement of the lessee or lessor. The period stated in the lease agreement is termed as lease period and after the lease period the lessee has to surrender the asset.

Where the lease purports to be 100 years or exceeding 100 years, the lease is called perpetual lease. A long-term lease is for over 50 years and above up to 100 years. But nowadays, lease period for even 30 years and above is considered as a long-term lease.

6.0 Valuation Methods

There are five methods of valuation adopted while doing valuation. The valuers utilize these methods of valuation depending upon the nature of assets.

- **Land and building method** - value of land and building value are determined separately and added to arrive at the present value.

- **Rent capitalisation method** - the value is assessed by capitalising the net annual rental income with appropriate prevailing interest rate or rate of capitalisation.

- **Profit method** - the value is calculated at by capitalising with the Appropriate prevailing interest rate or rate of capitalisation over the net profit derived from the asset. This net profit derived from the asset must be the average net profit for the last 3 years and part of the profit is due to good will must be properly reflected in the rate of return.

- **Development method** – used where an asset will be subject to more potential for development. For example, a large extent of land converted as smaller plots or a residential old house property converted as multi storeyed commercial complex. This method is approached in a very cautious way, since we rely upon the market potential and future expectations.

- **Composite rate method** – the term composite rate is the rate per Unit area of the building in a multi dwelling unit along with a proportionate share of undivided land.

  This rate is applicable in case of multi units built in a piece of land either as residential flats or commercial or office space in a commercial complex.

7.0. Market rate of land

The market rate of land depends upon the supply and demand for land at that particular place and time. This will be referred with the actual transaction carried out in surrounding area. The market rate of land will also reflect the land use for

(i) Specific purpose

(ii) Future expectation

(iii) Development of land with the prevailing rules and regulations

(iv) Constraints due to size

(v) Constraints due to shape

(vi) Location

(vii) Value appreciation

(viii) Locational advantage or disadvantage

(ix) Infrastructural facilities

(x) Water potential

(xi) Nature of soil.

⦿ These market rates can be verified from enquiries with local residents, revenue officials, real estate agents or brokers, any auction proceedings and comparable sale instances available during that period.

⦿ The guideline rate for registration of property by the registration department for fixation of stamp duty will give a basic picture about the market rate at that place. But this will not be the exact present market rate.

⦿ The exact present market rate may fluctuate in correlation with the guideline rate, depending upon the location, shape, size, usage for a specific purpose, future expectation, development of land with the prevailing rules and regulations.

⦿ The valuer has to take all in to account with local market rate enquiries and determine the land market rate with due adjustments. The valuer must be able to convince that the rate adopted by him is reasonable and justifiable. The prevailing market rate is to be adopted while assessing the present market value.

⦿ The valuer has to take all in to account with local market rate enquiries and determine the present market value depending upon the location, shape, size, usage for a specific purpose, future expectation, development of land with the prevailing rules and regulations.

⦿ These present market values are adopted for investment purchase, selling, present value of properties, mortgaging for loans, collateral security, arbitration, auction, wealth tax purpose, insurance, court fee, partitions and settlement, visa purpose, amalgamation.

8.0. Factors affecting the value of land

a) Few Negative impacts on the market value

Classification of locality, Irregular land shape, Located in a low-lying area, Flood prone area, Narrow approach road, Presence of grave yard, cemetery, burial ground, Presence of hospitals, factories, Presence of airport, temples, marriage hall, community halls nearby, Temple facing property, Electrical HT power line, Poor soil bearing capacity lands, Height restriction, Inadvertent political or religious factors, Nearness to mines, quarries, government banned lands, Less water potential, Without infrastructure facilities, Non-availability of

transport facilities, Unapproved layouts. Heritage rules, Airport zone, waterbody regulations, CRZ, and others Legal factors

b) Few positive impacts on the market value

Rectangular plot, Nearness to commercial entities, Schools, Markets, Bus stops or railway station, Good water potential, Infrastructural facilities, Good soil bearing capacity, Approved layout, Wide roads and others Legal factors

Remarks: The locked land with no approach (25% to 50% - different court judgements), recessed lands with zero frontage (only adjacent plot owner will buy), tandem plot with optimum approach from road (approach is through the front property either with or without passage rights) have to be clearly identified by the valuer before ascertaining the market value.

A return frontage is the term used for a corner property with two side or three side roads around the property. The valuer may consider an additional increase in the market value due to the above factor.

In case a property has more depth than the frontage, belting method is adopted while determining the value. The property is split in to three or more belts, the first belt having a depth of 1.50 times the frontage, the second depth 2.25 times and third depth 3.00 times and so on. Or more familiar, 100% value is arrived for first belt, 67% for second belt and 33% for third belt. There is no hard and fast rule that these percentages are to be adopted and the valuer in his own judgement can fix the value according to the site conditions. He has the responsibility of reporting the reasonableness of the value.

9.0 Buildings

The bureau of Indian standards, New Delhi has stipulated the methods of measurements of plinth, carpet areas of buildings in the Indian standards is: 3861: 2002 and the excerpts from it furnished for the benefit of all the valuers (vide annexure). The plinth area calculation must be in accordance with the above standards.

The replacement cost of the building is the reproduction cost of a similar building as per the technical specification adopted in the building according to the present prevailing rates of materials and labour components on a particular date.

Both central government of India and the state governments prescribe a plinth area rates for particular type of construction, for a particular place and construction period. These rates are based on the data collected for actual cost of construction for place, period, type of structure and technical specifications.

10.0. Depreciation

Depreciation is fall in value of a building or structure due to functional obsolescence, economic obsolescence and physical obsolescence.

Functional obsolescence relates to the reduction of a property's usefulness or desirability because of an outdated design feature that cannot be easily changed.

Physical obsolescence means **physical** deterioration over time, .i.e. the wear and tear, decay, poor maintenance, poor quality of workmanship and materials used for construction in the building and other natural factors.

Economic obsolescence, sometimes known as social obsolescence, occurs when property values decrease because of external factors. With functional obsolescence the loss in value to a property happens because issues pop up related to age or design factors.

Legal Obsolescence. Legislation, or other directive / order, issued by an authority having jurisdiction, resulting in the prohibitive use of certain assets unless specified changes are introduced or renewal is carried out.

External Obsolescence is a form of depreciation caused by factors not on the property itself, such as environmental, social, or economic forces. (Ex: nearby garbage dump or public toilet).

Depreciation Method adopted: The depreciation value may be worked out either by straight line method or by linear method. For financial institutions, the straight-line method is adopted and in court cases the linear method is adopted.

11.0 Present Building Value

The valuer has to find out the plinth area as per site conditions. The replacement cost of the building is worked out as per plinth area rates given by government agencies.

Or a valuer can work out his own replacement cost with the prevailing market conditions and have every responsibility to justify the same. The value of amenities and services is also worked out. The depreciation value has to be adopted according to the age and deterioration of the building. The present building value is determined by adding the replacement cost with amenities and services and deducting the depreciated value.

12.0 Valuation for Banks

Valuation normally, is done by land and building method, profit method, rent capitalisation method, development method and composite rate method. But the profit method, rent capitalisation method are accounting methods and requires a chartered accountant's help.

13.0. Property verification and valuation

- ✓ The actual property identification is very much required.
- ✓ It is insisted that the land has to be inspected along with the owner, govt revenue officials.

- ✓ Verify the area by tallying the measurement on the four boundaries
- ✓ Verification of neighbours as per title document
- ✓ Checking the revenue records of the property.
- ✓ The valuer has to make survey about location of the property with respect to the neighbourhood, nature, shape, size, factors affecting the value and usage of the property.
- ✓ Legal aspects involved in the property like lease, acquisition must be obtained from the owner.
- ✓ It is further identified with the electrical service connection, property tax if a structure exists on the property.

In case if a building is constructed in the property, then it is necessary that the valuer has to Verify the approved plan, Find out the deviation in respect of floor, Plinth area, FSI, Plot coverage, Provisions like drainage facilities, Car parking, internal and external services, Rain water harvesting. Information regarding the building plan approving authority of that particular place and his power for approval and in whose name the approval has been got (in leasehold properties, the land will be owned by the lessee and the building may be owned by the lessor).

The specifications of the building have to be clearly identified for working the replacement cost of the building. Facilities provided in the property must be separately measured.

The amenities like Lift, Compound wall, Pathway or passage floor, Security room, Drainage facilities, Car parking, Other facilities provided. The internal and external electrical, sanitary and water supply services with their installation qualities are to be valued separately.

14.0. IBA & IVSC

The Indian Bankers Association in its IBA Handbook has formulated a Standard of Procedure (SOP). The Government of India had recommended that the valuation standards for India need to be in tune with international standards. With due permission from International Valuation Standards Committee (IVSC), these are being adopted to suit Indian conditions. And also, the valuers need to acquire knowledge of relevant accounting standards (Ind AS). Valuers need to understand the Indian / International valuation standards.

To simplify each financial institution has standardized their valuation format. This also make the valuer to have the same procedure for all asset valuation. It is easy for the valuer to cover all requirements of the financial institutions and safeguard the valuer to fulfill his obligation.

15.0. Valuation Methods

15.1. Comparable method - For built up properties

(a) (Flats/Shops/Offices) In Apartments and M.S. Buildings: The comparable method for valuation of properties like Flats /Shops / Offices in Apartments / Multi-storeyed buildings can be adopted. The sale instances should be noted and tabled in the same manner as that of plots.

(b) Sale Instances for Built Up Properties: For making the rates of built up properties most comparable with the property under consideration the following factors should be adjusted.

1. Location
2. Situation
3. Area (building & particular apartment)
4. Floor Difference
5. Specifications
6. Facilities / Services
7. Time-gap
8. Status (Lease or Freehold)

Suitable and proper adjustment should be made to make the rate for built up properties fully comparable with the property.

15.2. Land and Building Method:

As the name indicates, in this method the value of land is added to the value of structure to arrive at the fair market value of the property.

Land Value: The land value is to be determined by comparable sale instances which are to be identified and then factors of adjustment / influence are to be applied.

Identification of Comparable Sales: It should be genuine and should not be forced, accommodation and fancy sale.

Auction sale instances or the sales cleared by the Appropriate Authorities should be given preference. In the absence of above, the local guidelines, auction / sale prices as fixed by local development authority. Improvement Trust, reputed builder etc. may also be referred. It should be proximate from situation angle.

For land value reliance has to be given to reliable and comparable contemporary sale instances and these instances are to be analysed with reference to various factors impinging on the land rate to arrive at a figure representing the fair market rate as prevailing on the valuation date.

Factors of Adjustment: Two properties cannot be identical. They may not possess similar advantage & disadvantage. All such factors of adjustment / influence affecting land rates are to be considered. The main factors are: -

(a) Location & Situation:

(b) Time-gap:

(c) Shape:

(d) Size:

(e) FAR:

(f) Side Open:

(g) Co-ownership Undivided share, rights & Interest:

(h) Land Tenure:

(i) Encumbrance:

(j) Unearned increase:

(k) Impact of Statutory Restrictions:

(l) Other Factors:

Cost of Building: The fair market value of the building on a valuation date is its cost of reproduction on that date minus the depreciation from the date of completion of the building to the date of its valuation. When an immovable property consisting of land and building is to be valued the above method is adopted in certain circumstances viz.

i) fully owner occupied,

ii) untenanted or vacant.

Underlying concept for such valuation is the view that Fair Market Value of such property reflected in the sum of the market value of vacant land as prevailing on the valuation date regarding valuation of land,

Depreciation: With the passage of time, the value of building decreases and after economic life of the building, its value becomes equal to its salvage value.

Normally reproduction cost of building is worked out with the help of Plinth Area Rates.

After working out the cost of building as new on the situation date, a deduction termed as depreciation is allowed to arrive at the reproduction cost of the building at its present form.

To estimate the value of depreciation a valuer has to assess future life of the building (life of a building is its economic life and not physical life) and this requires expertise of a Civil Engineer or an Architect. Generally, the Straight-Line Method is followed.

$$\text{Depreciation per annum} = \frac{\text{(Cost of reproduction - Salvage value)}}{\text{Life of the building}}$$

As the salvage value is taken 10% of the cost of reproduction.

$$\text{So, depreciation per annum} = \frac{0.90 \times \text{Cost of reproduction}}{\text{Life of the building}}$$

15.3. Rent Capitalization Method:

This method is generally resorted to in the following situations: -

(a) In case the land is fully developed i.e. it has been put to full use legally permissible and economically justifiable and the income out the property is normal commercial and not a controlled return or a return depreciated on account of special circumstances.

(b) In the case of fully tenanted property and statutory control of terms and conditions of tenancy.

(c) In the case of a property small portion of which is self-occupied and balance large portion is tenanted.

(d) In the case of commercial establishment like cinemas and hotels, if the building is given on outright lease / rental basis and rent fetched is reasonable.

The rent which is foundation ingredient of rent capitalization method is net maintainable Rent which is the difference of Gross maintainable rent and out goings. The other ingredient of this method is year's purchases or rate of capitalization. Thus, to determine the fair market value of the property gross income per annum is to be determined. From this income all the outgoings which are essential to be incurred for maintenance are to be deducted to find out the net maintainable rent or annual letting value. The Annual letting value multiplied by year's purchase gives the fair market value of the property.

Gross Maintainable Rent: In case of partly self-occupied building, where rent capitalization method is resorted to, the rent for self-occupied should be equal to prevailing market rent. In case of commercial building, prevailing market rent in the locality should be adopted. In the gross annual rent the following amounts should also include:

Interest on deposits not being advance payment towards the rent.

The amount of premium divided by the number of years of lease period, if the owner received premium for leasing out the property.

The value of benefits or perquisite whether convertible into money or not, desired by the owner as consideration for leasing of the property or any modification of the terms of lease.

Out Goings: Only those outgoings which are actually paid or payable will qualify for deduction from the gross main tenable annual rent.

1. Municipal Taxes: 2. Repairs and maintenance Charges: 3. Ground Rent: 4. Insurance Cover: 5. Management & Collection charges: 6. Service Charges: 7. In case of outgoings the expenditures for common securities, maintenance charges, firefighting charges, Rain water harvesting charges, maintenance on loan etc. may should also be considered.

Rate of Capitalization: Having determined the net maintainable annual rent and years purchase the F.M.V. of the property = Net Maintainable Annual Rent X year's purchase.

15.4. Development Method:

This method of valuation of large extent of land is adopted in the following situations.

(a) When the comparable sales of large tracts are not available but sales of small plot are available.

(b) When the land is ripe for use for building purpose it possesses necessary potentialities for urban use.

The complete procedure to determine the fair market value of the large tracts of land, under this method can divided into the following steps.

1. Ascertain the demand for small plots in the area.

2. Determine the area of land required for development work as per municipal bye laws. Deduct this area from the total area of the plot so as to ascertain the area available for development of small size plots. By rough estimation it works out to 20 to 25% of the total area.

3. Determine the number of small plots which can be legally carved out from the large tract of land with necessary provisions for infrastructure facilities.

4. Determine the cost of development works such as cost in of construction of road as per municipal specifications with street lights, cost of laying parks, underground drains, water supply lines, sewer lines, electric lines & substation, earth fitting or cutting, cross drainage works and municipal taxes on open land. As the total amount of development is not paid to the contractor at the commence mend of work so defer it for half of the period of construction at certain rate of interest say to 12%. Let the deferred value be (A).

5. Ascertain the total sale price of all the small plots of scheme on the valuation date from the comparable sales of small developed plots. As all these small plots cannot be sold at one time, so estimate the time of disposal of all the plots and defer the total sale price for half of the period of the sale @ 10% to 12%. Let it be of (B).

6. From the deferred sale price (B) deduct the following.

(i) Present value of the cost of development deferred for half of the period of development (A) along with architect or engineers fee for his supervision and getting the scheme approved.

(ii) Incidental charges such as cost of stamps, registration legal cost, cost of advertisement etc. Normally it is 8% to 10% of (B). If the cost of stamp, registration and legal cost is to be borne by the purchaser then this percentage should be modifier accordingly.

(iii) Developer's profit and risk 15% of (B).

7. This amount available after above deductions from (B) will represent the fair market value of the large undeveloped plot on the date of valuation.

15.5. Profit method

In the case of Hotels, Motels, Cinemas, Public houses, Petroleum Outlets which falls under the category of the licensed premises, the Fair Market Value depends primarily on the earning capacity of the property. The Fair Market Value of such properties is determined by applying profit method.

(i) The owner runs Hotel, Cinema himself.

(ii) The owner gives Hotel or Cinema on conducting agreement to a conductor.

The F.M.V. of the property is determined by capitalizing the net profits (70% tangible + 30% intangible) at certain rate of expenses, owners' risk and other outgoings from the gross income. For example, in the case of Cinema the following steps are to be taken to determine its F.M.V.

Gross Income (Excluding entertainment tax): The gross income is estimated on the basis of full house capacity less normal vacancies multiplied by the number of shows in a year. The vacancies can be determined either from the actual sale of tickets details of which are available with the owner. As the gross income may not be consistent, so the gross income & expenses should be based on the average of last 3 preceding years.

Expenses: Operating expenses can be broadly classified: - Entertainment tax if included in gross income, Total show tax, Hire charges of new reels, Other taxes pertaining to cinema business, Octoroi, Freight charges, Publicity, Traveling expenses, Printing & stationary, Salaries & Bonus, gratuity, provident fund, Welfare fund of staff, Carbon electrodes, Telephone bills, Electricity bills, Postage & Telegrams, Insurance for building as well as plant & machinery, Repair & maintenance, Ground rent, if any, Property tax, Sinking fund for furniture, equipment and plant & machinery.

Owners risk & entrepreneurship: 15% of gross income in the case of owner runs the cinema himself or 15% of conducting charges received by the owner form the conductor less the owner's liabilities such as repairs & maintenance, ground rent, municipal taxes, collection charges etc., if any borne by the conductor.

Net Profit: The net income is worked out by deducting the expenses from the gross income.

Rate of capitalization: The net profit is required to be divided into two parts.

(a) One due to land, building, furniture, equipment etc. called as tangible profit and generally taken as 30 to 25% and is capitalized at interest rate 2% higher than the rate of interest for tangible profits.

(b) Other due to good will management, license called intangible profit and generally taken as 30 to 25% and is capitalized at an interest rate 2% higher than the rate of interest for tangible profits.

Fair Market Value: The total of capitalized values of tangible and intangible will give fair market value of cinema.

15.6. Composite Rate Method:

An apartment, or flat, is a self-contained housing unit (a type of real estate) on a single storey or multi storey that occupies a part of a larger building with several units. The term "apartment" can be generically applied to any individual portion inside a building complex. The building can be a house, large residential building, and even condominium high-rise, where multi dwelling or commercial or office space units are provided.

Composite rate is the term used for valuation of a multi dwelling or commercial or office space unit. This rate is applicable in case of multi units built in a piece of land either as residential flats or commercial or office space in a commercial complex. Composite rate is the rate per Unit of the super built up area of the building. This rate is the mixture or merger of the rate of super-built up area of an apartment and the undivided share of land pertaining to the portion of the building area. This rate depends on the land cost, building construction cost, FSI, promoter's margin.

Land cost	Rs ----------
Cost of construction for total built up area	Rs ----------
Cost of water, sanitary & electrical services	Rs ----------
Cost of amenities provided	Rs ----------
Cost of miscellaneous works	Rs ----------
Add expenses (preparation of plan approval, taxes, deposits)	Rs ----------
Final cost (total cost of the property development)	Rs ----------
Interest on capital	Rs ----------
Profit margin	Rs ----------
Promoter's sale price.	Rs ----------
Unit composite rate per square foot sale price / total built up area	Rs ----------

13.0 Conclusion: We must update our knowledge in valuation field and need to understand the Indian / International valuation standards. We must be systematic and objective, for the analysis and design techniques. We dedicate ourselves to the nation for the protection and safety of the people as we have much impact on global sustainability.

ANNEXURE- I

FORMAT OF VALUATION REPORT

1. Introduction		
a)	Name of the Property Owner (with address & phone nos.)	
b)	Purpose of Valuation	
c)	Date of Inspection of Property	
d)	Date of Valuation Report	
e)	Name of the Developer of Property (in case of developer-built properties)	
2. Physical Characteristics of the Property		
a)	Location of the Property i. Nearby landmark ii. Postal Address of the Property iii. Area of the plot/land (supported by a plan) iv. Type of Land: Solid, Rocky, Marsh land, reclaimed land, Water-logged, Land locked. v. Independent access/approach to the property etc. vi. Google Map Location of the Property with a neighbourhood layout map vii. Details of roads abutting the property viii. Description of adjoining property ix. Plot No. Survey No. x. Ward/Village/Taluka xi. Sub-Registry/Block xii. District xiii. Any other aspect	
b)	Plinth Area, Carpet Area, and saleable are to be mentioned separately and clarified	

c)	Boundaries of the Plot East West North South	As per Sale Deed/TIR	Actual
3. Town Planning parameters			
a)	i. Master Plan provisions related to property in terms of land use ii. FAR- Floor Area Rise/FSI- Floor Space Index permitted & consumed iii. Ground coverage iv. Comment on whether OC- Occupancy Certificate has been issued or not v. Comment on unauthorized constructions if any vi. Transferability of developmental rights if any, Building by-laws provision as applicable to the property viz. setbacks, height restriction etc. vi. Planning area/zone vii. viii. Developmental controls viii. ix. Zoning regulations x. Comment on the surrounding land uses and adjoining properties in terms of uses xi. Comment on demolition proceedings if any xii. Comment on compounding /regularization proceedings xiii. Any other Aspect		
4. **Document Details and Legal Aspects of Property**			
a)	Ownership Documents i. Sale Deed, Gift Deed, Lease Deed ii. TIR of the Property		
b)	Name of the Owner/s		
c)	Ordinary status of freehold or leasehold including restrictions on transfer		
d)	Agreement of easement if any		

e)	Notification of acquisition if any	
f)	Notification of road widening if any	
g)	Heritage restriction, if any	
h)	Comment on transferability of the property ownership	
i)	Comment on existing mortgages / charges / encumbrances on the property, if any	
j)	Comment on whether the owners of the property have issued any guarantee (personal or corporate) as the case may be	
k)	Building plan sanction: Authority approving the plan - Name of the office of the Authority - Any violation from the approved Building Plan -	
l)	Whether Property is Agricultural Land if yes, any conversion is contemplated	
m)	Whether the property is SARFAESI compliant	
n)	All legal documents, receipts related to electricity, Water tax, Municipal tax and other building taxes to be verified and copies as applicable to be enclosed with the report. Observation on Dispute or Dues if any in payment of bills/taxes to be reported.	
o)	Whether entire piece of land on which the unit is set up / property is situated has been mortgaged or to be mortgaged.	
p)	Qualification in TIR/mitigation suggested if any.	
q)	Any other aspect	
5. Economic Aspects of the Property		
a)	i. Reasonable letting value ii. If property is occupied by tenant - Number of tenants - Since how long (tenant- wise) Status of tenancy right	

	- Rent received per month (tenant-wise) with a comparison of existing market rent iii. Taxes and other outings iv. Property Insurance iv. Monthly maintenance charges v. Security charges vi. Any other aspect	
6. Socio-cultural Aspects of the Property		
a)	Descriptive account of the location of the property in terms of social structure of the area, population, social stratification, regional origin, economic level, location of slums, squatter settlements nearby, etc.	
b)	Whether property belongs to social infrastructure like hospital, school, old age homes etc.	
7. Functional and Utilitarian Aspects of the Property		
a)	i. Space allocation ii. ii. Storage Spaces iii. Utility spaces provided within building iv. Car Parking facility v. Balconies, etc.	
b)	Any other aspect	
8. Infrastructure Availability		
a)	Aqua infrastructure availability i. Water supply ii. Sewerage/sanitation System Underground or Open iii. Storm water drainage	
b)	Physical infrastructure facilities i. Solid waste management ii. Electricity iii. Road and public transport connectivity iv. Availability of other public utilities nearby	
c)	Social infrastructure i. School ii. Medical facilities	

	iii. Recreational facility in terms of parks and open space	
9. Marketability of the Property		
a)	Marketability of the property in terms of i. Locational attributes ii. Scarcity iii. Demand and supply of the kind of subject property iv. Comparable sale prices in the locality	
b)	Any other aspect which has relevance on the value or marketability of the property	
10. Engineering and Technology Aspects of the Property		
a)	Type of construction	
b)	Material & technology used	
c)	Specifications,	
d)	Maintenance issues	
e)	Age of the building	
f)	Total life of the building	
g)	Extent of deterioration,	
h)	Structural safety	
i)	Protection against natural disaster viz. earthquakes,	
j)	Visible damage in the building	
k)	System of air-conditioning	
l)	Provision of firefighting	
m)	Copies of the plan and elevation of the building to be included	
11. Environmental Factors		
a)	Use of environment friendly building materials, Green Building techniques if any	
b)	Provision of rain water harvesting	
c)	Use of solar heating and lightening systems, etc.,	
d)	Presence of environmental pollution in the vicinity of the property in terms of industry, heavy traffic etc.	

12. Architectural and aesthetic quality of the Property		
a)	Descriptive account on whether the building is modern, old fashioned, plain looking or decorative, heritage value, presence of landscape elements etc.	
13. Valuation		
a)	Methodology of valuation – Procedures adopted for arriving at the valuation. Valuers may consider various approaches and state explicitly the reason for adopting particular approach and assumptions made, basis adopted with supporting data, comparable sales, and reconciliation of various factors on which final value judgment is arrived at.	
b)	Prevailing Market Rate/Price trend of the Property in the locality/city from property search sites viz magickbricks.com, 99acres.com, makaan.com etc. if available	
c)	Guideline Rate obtained from Registrar's office/State Govt. Gazette/ Income Tax Notification	
d)	Summary of Valuation Land: Building: i. Guideline Value ii. Fair Market Value iii. Realizable Value iv. iv. Forced/ Distress Sale value.	
e)	i. In case of variation of 20% or more in the valuation proposed by the valuer and the Guideline value provided in the State Govt. notification or Income Tax Gazette justification on variation has to be given. ii. Details of last two transactions in the Locality /area to be provided, if available.	
14. Declaration:		

I hereby declare that:

i. The information provided is true and correct to the best of my knowledge and belief.

ii. The analysis and conclusions are limited by the reported assumptions and conditions.

iii. I have read the Handbook on Policy, Standard and Procedures for Real Estate Valuation by Banks and HFIs in India, 2011, issued by IBA and NHB, fully understood the provisions of the same and followed the provisions of the same to the best of my ability and this report is in conformity to the Standards of Reporting enshrined in the above Handbook.

iv. I have no direct or indirect interest in the above property valued.

Name and address of the Valuer

…….

\ Signature of the Valuer…… Date

Tel No……..

Mobile No……..

Email…….

15. Enclosures

a)	Layout plan sketch of the area in which the property is located with latitude and longitude	
b)	Building Plan & Floor Plan	
c)	Certified copy of the approved / sanctioned plan wherever applicable from the concerned office	
d)	Photograph of the property (including geo-stamping with date) including a “Selfie’ of the Valuer at site	
e)	Google Map location of the property	

ANNEXURE- 2

IS 3861 : 2002

Indian Standard

METHOD OF MEASUREMENT OF PLINTH, CARPET AND RENTABLE AREAS OF BUILDINGS

(Second Revision)

1 SCOPE

This standard covers method of measurement of plinth, carpet and rentable areas of old and new buildings.

2 TERMINOLOGY

2.0 For the purpose of this standard, the following definitions shall apply.

2.1 Plinth Area

Plinth area shall mean the built-up covered measured at the floor level of the basement or of any storey (*see* **4**).

2.2 Carpet Area

Carpet area shall mean the floor area of the usable rooms at any floor level (*see* **5**).

2.3 Rentable Area

Rentable area shall mean the carpet area at any floor level including areas as detained in **6**.

2.4 Balcony

A horizontal projection with a hand-rail, balustrade or a parapet, to serve as passage or sitting out place.

2.5 Mezzanine Floor

An intermediate floor in between two main floors having minimum height of 2.2 m from the floor and having a proper and permanent access to it.

NOTE — Where rules of the local bodies permit intermediate floor of minimum 1.8 m clear height, these be also considered as mezzanine floor for the purpose of measurement.

2.6 Stair Cover (Mumty)

It is a structure with a roof over a staircase and its landing, built to enclose only the stairs for the purpose of providing protection from weather and not used for human habitation.

2.7 Loft

A structure providing intermediate storage space in between two main floors without having a permanent access and at a height not less than 2.0 m from the floor below.

2.8 Porch

It is a covered structure supported on pillars or otherwise for the purpose of pedestrian or vehicular approach to a building.

3 GENERAL

3.1 Linear measurement shall be measured to nearest 0.01 m, and areas shall be worked out to the nearest 0.01 m^2.

3.2 The areas of each of the following categories shall be measured separately and shall not be clubbed together:

a) Basement;

b) Floor without cladding (stilted floor);

c) Floors including top floor which may be partly covered;

d) Mezzanine floor including additional floor for seating in assembly building/theatre, auditorium, etc;

e) Garage;

f) Accommodation for service staff;

g) Stair cover (mumty);

h) Machine room;

j) Porch; and

k) Towers, turrets, domes projecting above the terrace level at terrace.

4 MEASUREMENT OF PLINTH AREA

4.1 Plinth area shall be the built up covered areas measured for the categories mentioned in **3.2** and shall include such areas as given in **4.1.1** and exclude the areas given in **4.1.2**.

4.1.1 For the purpose of plinth area, following shall be included:

a) Area of the wall at the floor level excluding plinth offsets, if any; when the building consists of columns projecting beyond cladding, the plinth area shall be taken up to the external face of cladding (in case of

corrugated sheet cladding outer edge of corrugation shall be considered);

NOTE — In case, a common wall is owned jointly by two owners, only half the area of such walls shall be included in the plinth area of one owner.

b) Shafts for sanitary, water supply installations, garbage chute, telecommunication, electrical, fire fighting, air-conditioning and lifts;

c) Stair case;

d) In case of open verandah with parapets:

1) 100 percent areas for the portion protected by the projections above, and

2) 50 percent area for the portion unprotected from above.

e) 100 percent area of the balcony protected by projection above and 50 percent area of the unprotected balcony; and

f) In case of alcove made by cantilevering a slab beyond external wall:

1) 25 percent of the area for the alcove of height up to 1 m,

2) 50 percent of the area for the alcove of height more than 1 m and upto 2 m, and

3) 100 percent of the area for the alcove of height more than 2 m.

4.1.2 The following shall not be included in the plinth area (*see* **2.1**):

a) Area of loft;

b) Area of architectural band, cornice, etc;

c) Area of vertical sun breaker or box louver projecting out and other architectural features, for example slab projection for flower pot, etc;

d) Open platform;

e) Terrace;

f) Open spiral/service stair cases; and

g) Area of mumty, machine room, towers, turrets, domes projecting above terrace level.

5 MEASUREMENT OF CARPET AREA

5.1 From the plinth area as worked out in **4**, the area of the wall shall be deducted (*see also* **5.1.1**, **5.1.2** and **5.2**). Thickness of wall shall be inclusive of finishes.

NOTE — The various dimensions could be measured internally or externally.

5.1.1 The following shall be included in the wall area:

a) Door and other openings in the wall;

b) Pillars, intermediate pillars, supports or any other such obstruction within the plinth area irrespective of their location;

c) Pilaster along wall exceeding 300 cm^2 in area;

d) Flues which are within the wall;

e) Built-in cupboard, almirah and shelf appearing within a height of 2.2 m from floor; and

f) Fire place projecting beyond the face of the wall in living or bed room.

5.1.2 The following shall be excluded from the wall area:

a) Pilaster along wall not exceeding 300 cm^2 in area, and

b) Chullah platform projecting beyond the face of the wall.

5.2 The carpet area shall be the area worked out as in **5.1** excluding the area of the following portion:

a) Verandah;

b) Corridor and passage;

c) Entrance hall and porch;

d) Staircase and stair-cover (mumty) (*see* Note);

e) Shaft and machine room for lift;

f) Bathroom and lavatory;

g) Kitchen and pantry;

h) Store;

j) Canteen;

k) Air-conditioning duct and plant room; and

m) Shaft for sanitary/water supply installations and garbage chute, electrical and fire fighting, air-conditioning, telecommunication, lift.

NOTE — In a hall or basement, areas of portion 1 m beyond last step shall be part of the staircase.

5.2.1 The carpet areas of category mentioned in **3.2** b), e), g), h), k) and m) are not required to be calculated.

6 MEASUREMENT OF RENTABLE AREA

6.1 Residential Buildings

6.1.1 The rentable area shall be carpet area as worked out in **5** but shall further include the following:

a) The carpet area of kitchen, pantry, store, lavatory, bath room; and

b) Fifty percent of carpet area of unglazed and 100 percent of glazed verandah.

6.1.1.1 It shall, however, exclude the carpet area of the covered portion of the building specified in **5.1** such as storage space on top landings of staircase, under first landing and waist slab on floor one.

6.1.2 While accounting the rentable area for category mentioned in **3.2** b), one-fourth carpet area shall be accounted for.

6.2 Non-Residential Buildings

The rentable area shall be carpet area as worked out in **5** increased by the carpet area of the canteen including store, kitchen and pantry attached to it.

6.2.1 It shall, however, not include carpet areas of bathroom and lavatory.

6.2.2 While accounting the rentable area for the category mentioned in **3.2** b), one-fourth carpet area shall be accounted for.

Length	Area
1 mile = 1760 yards	1 sq. mile = 640 acres
1 mile = 8 furlong	1 acre = 4840 sq. yard
1 furlong = 10 chains	1 sq. yard = 9 sq. feet
1 chain = 4 rods	1 sq. foot = 144 sq. inches
1 rod = 5 1/2 yards	1 km^2 = 100 hectare
1 yard = 3 feet	1 hectare = 100 ares
1 foot = 12 inches	1 are = 100 m^2
1 mile = 1.609 km	1 sq. mile = 2.59 km^2
1 yard = 0.9144 m	1 acre = 0.4047 hectares
1 foot = 0.3048 m	1 acre = 4046.86 m^2
1 inch = 25.4 mm	1 sq. yard = 0.8361 m^2
1 km = 0.6214 miles	1 sq. foot = 0.0929 m^2
1 m = 1.0936 yards	1 sq. inch = 645.16 mm
1 m = 3.2808 feet	1 km^2 = 0.3861 $mile^2$
1 mm = 0.0394 inches	1 km^2 = 247.105 acres
	1 hectares = 2.4711 acres
	1 m^2 = 10.7639 $feet^2$
	1 mm^2 = 0.0016 $inches^2$