

Ind AS 2- Inventories

1. Objective:

- a) Deals with the **determination of cost**,
- b) Subsequent **recognition as an expense**, including any **write-down to NRV**,
- c) Guidance on the **cost formulas** that are used to assign costs to inventories.

2. Scope:

This Standard applies to **all** inventories, **except:**

- × **Financial instruments** (Ind AS 32, Financial Instruments: Presentation and Ind AS 109, Financial Instruments and); and
- × **Biological assets** (i.e. living animals or plants) related to agricultural activity and agricultural produce at the point of harvest (See Ind AS 41, Agriculture).

This Standard **does not apply** to the **measurement of inventories** held by:

- a) Producers of agricultural and forest products, agricultural produce after harvest, and minerals and mineral products.

Explanation: These inventories are **measured at NRV** at certain stages of production. This occurs, for example, when agricultural crops have been harvested or minerals have been extracted and sale is assured under a forward contract or a government guarantee, or when an active market exists and there is a negligible risk of failure to sell. These inventories **are excluded from only the measurement requirements of this Standard**.

- b) Commodity broker-traders who measure their inventories at fair value less costs to sell.

Explanation: Broker-traders are those who buy or sell commodities for others or on their own account. These inventories are principally acquired with the purpose of selling in the near future and generating a profit from fluctuations in price or broker-traders' margin. When these inventories are **measured at fair value less costs to sell**, they **are excluded from only the measurement requirements of this Standard**.

3. Definitions :

- a) **Inventories means asset :**

- i. **Held for sale** in the ordinary course of business,
- ii. In the **process of production** for such sale; or
- iii. In the **form of materials or supplies** to be consumed in the production process or in the rendering of services.

Note:

- Inventories encompass goods purchased and **held for resale** including, for example, **merchandise purchased** by a retailer and held for resale, or **land and other property** held for resale.
- Inventories also encompass finished goods produced, or work in progress being produced, by the entity and include materials and supplies awaiting use in the production process.)

- Costs incurred to fulfill a contract with a customer **that do not give rise to inventories** (or assets within the scope of another Standard) are **accounted for** in accordance with Ind AS 115, **Revenue from Contracts with Customers**.
- b) **NRV** : Net amount that an entity expects to realize from the sale of inventory in the ordinary course of business.

In other words: Selling Price

(-) Estimated costs of completion

(-) Estimated **costs** necessary to make the sale

= NRV

- c) **Fair value**: Reflects the price at which an orderly transaction to sell the same inventory in the principal (or most advantageous) market for that inventory would take place between market participants at the measurement date. (See Ind AS 113, Fair Value Measurement.)

4. **Measurement of inventories :**

Lower of Cost and NRV

- Cost =
Costs of purchase + *(Note i)*
Costs of conversion + *(Note ii)*
Other costs incurred in bringing the inventories to their present location and condition.
- NRV =
Selling Price
(-) Estimated costs of completion
(-) Estimated **costs** necessary to make the sale.

Notes:

i. Costs of purchase: Purchase price

- (+) Import duties and other taxes (Irrecoverable from TA), and
- (+) Transport, handling and other costs directly attributable to the acquisition of finished goods, materials and services
- (-) Trade discounts, rebates and other similar items.

ii. Costs of conversion:

- ✗ Cost directly related to the units of production, such as direct labour.
- ✗ Systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods. (Fixed production overheads are those indirect costs of production that remain relatively constant regardless of the volume of production such as depreciation and maintenance of factory buildings and equipment, and the cost of factory management and administration.)

(Variable production overheads are those indirect costs of production that vary directly, or nearly directly, with the volume of production, such as indirect materials and indirect labour.)

Note: A production process may result in more than one product i.e. when joint products are produced or when there is a main product and a by-product. When the costs of conversion of each product are not separately identifiable, they are allocated between the products on a rational and consistent basis. The allocation may be based, for example, on the relative sales value of each product either at the stage in the production process when the products become separately identifiable, or at the completion of production. Most by-products, by their nature, are immaterial. When this is the case, they are often measured at NRV and this value is deducted from the cost of the main product. As a result, the carrying amount of the main product is not materially different from its cost.

iii. Other costs :

- ✓ Example_non-production overheads or the costs of designing products for specific customers in the cost of inventories.
- ✓ costs excluded from the cost of inventories and recognized as expenses :
 - ✗ Abnormal amounts of wasted materials, labour or other production costs,
 - ✗ storage costs, unless those costs are necessary in the production process before a further production stage,
 - ✗ administrative overheads that do not contribute to bringing inventories to their present location and condition; and
 - ✗ **Selling costs.**
- Borrowing Costs- limited circumstances where borrowing costs are included in the cost of inventories. (Ind AS 23)
- An entity may purchase inventories on deferred settlement terms. When the arrangement effectively contains a financing element, that element, for example a difference between the purchase prices for normal credit terms and the amount paid, is **recognized as interest expense** over the period of the financing.

iv. Cost of agricultural produce harvested from biological assets:

Fair value

(-) less costs to sell (at the point of harvest).

This is the cost of the inventories at that date for application of this Standard.

5. Techniques for the measurement of cost :-

- a) standard cost method or
- b) Retail method,
(**May be** used for convenience if the results approximate cost)

Note:

- Standard costs take into account normal levels of materials and supplies, labour, efficiency and capacity utilization. *They are regularly reviewed* and, if necessary, revised in the light of current conditions.
- The retail method is often used in the retail industry for measuring inventories of large numbers of rapidly changing items with similar margins for which it is impracticable to use other costing methods.

Sale Value

(-)Appropriate percentage gross margin.

(An average percentage for each retail department is often used.)

6. Cost of Inventory of Service Provider :-

They measure them at the **costs of their production**. These costs consist primarily of the **labour** and **other costs of personnel** directly engaged in providing the service, **including supervisory personnel**, and **attributable overheads**. Labour and other costs relating to sales and general administrative personnel are not included but are recognized as expenses in the period in which they are incurred. The cost of inventories of a service provider **does not include profit margins or non-attributable overheads** that are often factored into prices charged by service providers

7. Cost Formulas: -

- a) *Assigned by using specific identification of their individual costs.*
 - (i) Inventories that are not ordinarily interchangeable and,
 - (ii) Goods or services produced and segregated for specific projects.
- b) *Assigned by using the first-in, first-out (FIFO) or weighted average cost formula*
 - (i) Cost of inventories, other than (a)

8. Important Notes :-

- a) When it is of view that assets should not be carried in excess of amounts expected to be realized from their sale or use, write inventories down below cost **to NRV**.

Circumstances:

- ✓ Inventories are damaged,
 - ✓ if they have become wholly or partially obsolete, or
 - ✓ If their selling prices have declined.
 - ✓ If the estimated costs of completion or the estimated costs to be incurred to make the sale have increased.
- b) Inventories are usually written down to NRV **item by item**.
 - c) Inventories may also be written down to NRV to **group similar or related items** in following circumstances :
 - ✓ Items of inventory relating to the same product line that have *similar purposes or end uses*, are produced and marketed *in the same geographical area*, and *cannot be practicably evaluated separately* from other items in that product line.
 - d) It is not appropriate to write inventories down on the basis of a classification of inventory.
For example: finished goods, or all the inventories in a particular operating segment.

- e) Estimates of NRV are based on the most reliable evidence available at the time the estimates are made, of the amount the inventories are expected to realize.
- f) These estimates take into consideration **fluctuations of price or cost** directly relating to **events occurring after the end** of the period to the extent that such **events confirm conditions existing at the end of the period**.
- g) Estimates of NRV also take into consideration the purpose for which the inventory is held.
For Example: NRV of the quantity of inventory held to satisfy firm sales or service contracts is **based on the contract price**.
 Remaining Quantity held after Sales contract, $NRV = \text{General selling prices}$.
- h) Materials and other supplies **held for use in the production** of inventories are **not** written down below cost **if** the finished products in which they will be incorporated are expected to be sold at or above cost.
- i) **Situation:** Price of materials indicates that the cost of the finished products > NRV . What to do ?
Answer:
 The materials are written down to NRV . In such circumstances, **the replacement cost of the materials** may be the best available measure of their NRV .
- j) **Situation :**
 When an item of inventory that is carried at NRV , because its selling price has declined, is still on hand in a subsequent period and its selling price has increased. What to do?
Answer:
 When the circumstances that previously caused inventories to be written down below cost no longer exist or when there is clear evidence of an increase in NRV because of changed economic circumstances, **the amount of the write-down is reversed** (i.e. the reversal is limited to the amount of the original write-down) so that the new carrying amount is the lower of the cost and the revised NRV.

9. **Recognition as an expense :-**

Event	Amount	Period
Inventories are sold	Carrying amount	Period in which the related revenue is recognized.
Write-down of inventories to net realizable or losses of inventories.	Such amount	Period the write-down or loss occurs.
Reversal of any write-down of inventories, i.e. increase in NRV.	Reduction in the amount of inventories recognized as an expense.	Period in which the reversal occurs.
Inventories may be allocated to other asset accounts.	Such Amount	Recognized as an expense during the useful life of that asset.

10. **Disclosure :-**

- a. The accounting policies adopted in **measuring inventories**, including the **cost formula** used.
- b. The **total carrying amount** of inventories and the carrying amount in classifications appropriate to the entity.
- c. The carrying amount of inventories carried at **fair value less costs to sell**.
- d. The amount of inventories **recognized as an expense** during the period.
- e. The amount of any write-down of inventories recognized as an expense **in the period** in accordance with table above.
- f. The amount of any **reversal of any write-down** that is recognized as a reduction in the amount of inventories recognized as expense in the period in accordance with table above.
- g. The **circumstances or events that led to the reversal** of a write-down of inventories in accordance with table above.
- h. The carrying amount of inventories **pledged as security for liabilities**.

11. Major difference Between Ind As & Account Standard :

S.No.	Ind As 2	AS 2
	Inventories	Valuation of Inventories
1.	Deals with the subsequent recognition of cost/carrying amount of inventories as an expense.	No such provision.
2.	Provides explanation with regard to inventories of service providers.	AS 2 does not contain such an Explanation.
3.	Provides detailed guidance in case of subsequent assessment of net realizable value. Also deals with the reversal of the write-down of inventories to net realizable value to the extent of the amount of original write-down, and the recognition and disclosure thereof in the financial statements	Does not deal with such reversal.
4.	Excludes from its scope only the measurement of inventories held by producers of agricultural and forest products, agricultural produce after harvest, and minerals and mineral products though it provides guidance on measurement of such inventories.	Excludes from its scope such types of inventories.
5.	Does not specifically state so and requires the use of consistent cost formulas for all inventories having a similar nature and use to the entity.	Specifically provides that the formula used in determining the cost of an item of inventory should reflect the fairest possible approximation to the cost incurred in bringing the items of inventory to their present location and condition.