

Ind AS (IFRS) – Inventory and Depreciation

By:
CA. Kamal Garg
[FCA, DISA (ICAI), M. Com]
Insolvency Professional



Ind AS 2

Inventories

Inventories Defined

IAS 2: Inventories

- **Held for:**
 - **Resale**
 - **Consumption in production**
 - **Rendering services**
 - **Less than 1 year**

Recognition Principles

```
graph TD; A[Recognition Principles] --- B[Initial Measurement – at historical cost]; A --- C[Subsequent Measurement – at cost or NRV, whichever is less]; A --- D[The period in which inventories are sold and revenue is recognised, the carrying amount of inventories is charged to P & L in the same period];
```

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Cost of Inventories

```
graph TD; A[Cost of Inventories] --> B[Purchase Costs<br/>[which are cash price equivalents]]; A --> C[Conversion Costs]; A --> D[Other Costs]; C --> E[Directly attributable costs of production]; C --> F[Systematic allocation of overheads]; D --> G[Costs incurred to bring inventories to their present location and condition];
```

Purchase Costs
[which are cash price equivalents]

Conversion Costs

Other Costs

Directly attributable costs of production

Systematic allocation of overheads

Costs incurred to bring inventories to their present location and condition

Case Study

ABC Limited, purchased raw materials for Rs. 1,90,000 and paid Rs. 30,000 as custom duty including Rs. 15,000 towards a special duty, against which it will avail credit. It spent Rs. 5,000 on ocean freight, Rs. 4,000 on clearing agents charges, Rs. 10,000 on warehouse rent and Rs. 5,000 on security guard's wages. Calculate the cost of inventory

Particulars	Amount (Rs.)
Purchase Price	1,90,000
Customs Duty	30,000
Less: Special Duty (to be refunded)	(15,000)
Add: Ocean Freight	5,000
Add: Clearing Agent's Charges	4,000
Total	2,14,000

Warehouse rent and Security Guard's wages are not included as these are not incurred in acquiring the inventory

On 1.6.2015, X Limited purchases raw material at Rs. 60 lakhs. As per the terms of the contract, the entity would pay the amount after 2 years. The incremental borrowing rate is 11%

Purchase Price = Rs. 60 lakhs / $[1+11\%]^2$ = Rs. 48.70 lakhs

1.6.2015	Purchase A/c Dr.	48.70	
	To Trade Payables A/c		48.70
31.3.2016	Finance Costs A/c Dr.	4.46	
	To Trade Payables A/c		4.46
31.3.2017	Finance Costs A/c Dr.	5.85	
	To Trade Payables A/c		5.85
31.5.2017	Finance Costs A/c Dr.	0.99	
	To Trade Payables A/c		0.99
31.5.2017	Trade Payables A/c Dr.	60.00	
	To Bank A/c		60.00

Date	Amount Payable	Date	Finance Cost	Creditors
1.6.2015	48.70	31.3.2016	4.46	53.16
			(for 10 months)	
1.4.2016	53.16	31.3.2017	5.85	59.01
1.4.2017	59.01	31.5.2017	0.99	60.00
			(for 2 months rounded off)	

Question

- RST Limited
- Goods were in transit from Chennai to Delhi as on 23rd march, 2020
- Covid lockdown was announced and due to this the goods were not allowed entry in Delhi as on 31 March 2020
- The transporter incurred certain costs to preserve and maintain the goods at the border of the city and raised a separate invoice for such costs
- Whether such costs are part of inventory cost?

Allocation of Overheads to Inventory

```
graph TD; A[Allocation of Overheads to Inventory] --> B["Fixed Overheads – relatively fixed regardless of volume of production"]; A --> C["Variable Overheads – vary directly with the volume of production"]; B --> D["Allocation based on normal capacity"]; C --> E["Allocation based on actual production"];
```

Fixed Overheads –
relatively fixed
regardless of volume of
production

Allocation based on
normal capacity

Variable Overheads –
vary directly with the
volume of production

Allocation based on
actual production

ABC Limited has a plant with normal capacity to produce 5,00,000 units p.a. The expected fixed overhead rate is Rs. 3 per unit for the total expected fixed overheads of Rs. 15,00,000.

Particulars	Case I	Case II	Case III
Actual Production (units)	5,00,000	3,75,000	7,50,000
Fixed Overheads – constant always	15,00,000	15,00,000	15,00,000
Actual Fixed Overhead Rate now	Rs. 3	Rs. 4	Rs. 2
Allocation of F.O. the cost of Inventory	Rs. 3	Rs. 3	Rs. 2
Allocation of F.O. to expense – P & L	Rs. 0	Rs. 1	Rs. 0
Reason	Same actual production as envisaged for normal capacity	It will result in overvaluation of inventory by Rs. 1 per unit if not charged to P & L	By allocation Rs. 3 we will adding such a cost to the inventory which was never incurred



Ind AS 16

**Property,
Plant and
Equipment**

Property, plant and equipment are tangible items that:

are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and

are expected to be used during more than one period.

The cost of an item of property, plant and equipment shall be **recognised as an asset** if, and only if:

it is probable that future economic benefits associated with the item will flow to the entity; and

the cost of the item can be measured reliably.

Measurement

- ☐ The cost is the cash price equivalent at the recognition date;
- ☐ If **payment is deferred beyond normal credit terms**, the difference between the cash price equivalent and the total payment is recorded as interest over the period of credit



the initial estimate of the costs of dismantling, and removing the item, and restoring the site on which it is located

Directly attributable costs

IAS 16 says that we can capitalize any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management

Can be capitalized

1. Costs of employee benefits
2. Costs of site preparation
3. Initial delivery and handling costs
4. Installation and assembly costs
5. Costs of testing whether the asset is functioning properly
6. Professional fees

Cannot be capitalized

1. Costs of opening a new facility
2. Costs of introducing a new product or service
3. Costs of conducting a business in a new location or with a new class of customer
4. Administration and other general overhead costs

Some Posers !!

What about the developers and constructors who buy the lands with buildings and demolish them within the ordinary course of their business?

Case Study

ABC acquired a land with old building for Rs. 400000 with intention to demolish the building and build the new one;

The building's fair value is close to zero, because it is damaged and can be used only after significant investments into repairs and refurbishment;

ABC spent Rs. 20000 to demolish the building.

- Ind AS do not use the concept of “**put into use**”. The standard IAS 16, paragraph 55 states that depreciation of an asset begins when it is **available for use**, or when it is in the desired location and condition;
- **Example: “available for use” is not the same as “put into use”**
 - ABC company acquired a machine for its new production line. The machine was delivered **in February 20X1**. Before putting it into use, an installation and testing performed by certified technician is required. All the work including tests were completed **in April 20X1** and ABC launched the new production line **in July 20X1**.
 - In this example:
 - **Available-for-use** date is in April 20X1, as all the necessary works on the machine were completed.
 - **Put-into-use date** is in July 20X1 when the new production line was launched.
 - ABC starts depreciating the machine **in April 20X1**.

Spare parts, servicing equipment, stand-by equipment and similar items

- **Issue:** Spare parts = PPE or Inventory?
- IAS 16, paragraph 8 specifically says that:
 - When major spare parts and stand-by equipment are expected to be used **during more than 1 period**, then they are accounted for as PPE; and
 - If spare parts and servicing equipment can be used **only in connection with an item of PPE**, then they are accounted for as PPE

Ind AS 16 – Para 8 and Para 9

“8. Items such as spare parts, stand-by equipment and servicing equipment are recognised in accordance with this Ind AS when they meet the definition of property, plant and equipment. Otherwise, such items are classified as inventory.

9. This Standard does not prescribe the unit of measure for recognition, i.e. what constitutes an item of property, plant and equipment. Thus, judgment is required in applying the recognition criteria to an entity's specific circumstances. It may be appropriate to aggregate individually insignificant items, such as moulds, tools and dies, and to apply the criteria to the aggregate value.”

Spare Parts and Servicing Equipments

IAS 2: Inventories

- **Held for:**
 - **Resale**
 - **Consumption in production**
 - **Rendering services**
 - **Less than 1 year**

IAS 16: PPE

- **Held for:**
 - **Operation in connection with PPE**
 - **as PPE itself**
 - **More than 1 year**

Illustration: Enabling Assets

Bharat heavy Electricals Limited constructed a by pass road from ship yard to its factory located in Gujarat. This road is used not only for specific purposes of BHEL like transportation of goods, etc. but also for general purposes of public for its travelling purposes, etc. The expenditure incurred on road construction is Rs. 100 crores. BHEL has no right to deny the general public to use such road constructed by it.

Enabling Assets

Ind AS (IFRS)

As per Ind-As 16 “**property, plant & equipment**” para 6 defines that property, plant and equipment are tangible items that:

(a). are **held for use**:

- in the production or supply of goods or services,
- for rental to others, or
- for administrative purposes; and

(b). are expected to be used during more than one period.



Revaluation of PPE

Activity	Treatment
Revaluation Gain	OCI
Revaluation Loss	P & L
Revaluation Gain	<ul style="list-style-type: none"> • P & L – to the extent of revaluation loss earlier charged in P & L for <u>that asset</u> • OCI – balance left after charging in P & L
Revaluation Loss	<ul style="list-style-type: none"> • OCI – to the extent of revaluation gain earlier charged in OCI for <u>that asset</u> • P & L – balance left after charging in OCI
Note: If an item of property, plant and equipment is revalued, the entire class of property, plant and equipment to which that asset belongs shall be revalued - No selective revaluation of assets	



Depreciation of PPE

Definitions

- **Depreciable amount** is the cost of an asset, or *other amount substituted for cost = ???????*, less its residual value. = Revaluation Gain/ Loss and resulting new amount thereto
- **Depreciation** is the systematic allocation of the depreciable amount of an asset over its useful life.

How to provide for Depreciation

- **Component accounting model:** Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately;
- The **depreciation charge for each period shall be recognised in profit or loss** unless it is included in the carrying amount of another asset;
- The **residual value and the useful life of an asset shall be reviewed at least at each financial year-end** and, if expectations differ from previous estimates, the change(s) shall be accounted for as a change in an accounting estimate;
- **Depreciation is recognised even if the fair value of the asset exceeds its carrying amount**, as long as the asset's residual value does not exceed its carrying amount.
- **Repair and maintenance** of an asset do not negate the need to depreciate it.

Fair Value vs. Residual Value

- **Fair value** is the price that would be received to sell an asset or paid to transfer a liability in an **orderly transaction between market participants** at the measurement date.
- The **residual value** of an asset is the **estimated amount** that an entity would **currently obtain from disposal** of the asset, after deducting the estimated costs of disposal, if the
 - 1) asset were already of the age; and
 - 2) asset were in the condition expected at the end of its useful life.

Depreciation method

- The depreciation method used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity;
- The depreciation method applied to an asset shall be reviewed at least at each financial year-end and, if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the method shall be changed to reflect the changed pattern. Such a change shall be accounted for as a change in an accounting estimate in accordance with Ind AS 8.

Ind AS 41



Agriculture

Features

- Unlike other industries, **agriculture works with living animals and plants.**
- By definition, **living animals and plants are born, grow and die;**
- Therefore, a few problems arise when it comes to **accounting for and reporting the results of agricultural businesses.**

What is agricultural activity

- It is the **management of the biological transformation (e.g. growth) of biological assets:**
 - for sale, or
 - into agricultural produce, or
 - into additional biological assets.

IAS 41 or IAS 16

**Animal not involved
in agricultural activity**

IAS 16 on PPE

E.g.: Guard Dogs

**Animal involved in
agricultural activity**

IAS 41 on Agriculture

**E.g.: Breeding
puppies for sale**

Biological Assets

are only living
plants and
animals

Bearer plant
[IAS 16]

the harvested
products of
biological assets
are agricultural
produce [milk,
coffee beans, tea
leaves, etc.]

**IAS 41 on
Agriculture**

a living plant used
in production or
supply of
agricultural
produce that is
expected to
produce for more
than 1 period [e.g.
fruit trees]

**IAS 2 on
Inventories**

Biological Assets

Measurement

Fair Value (-) Costs to sell

Exceptions

**There is no
agricultural activity
[IAS 16]**

**Bearer Plant
[IAS 16]**

**Fair value not
available [then it is
valued at cost less
accumulated
depreciation]**

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