CHAPTER

7 IND AS 16 — PROPERTY, PLANT AND EQUIPMENT (PPE)

SYNOPSIS

A beautiful standard waiting to give lots of knowledge to you. Read it slowly to gain good knowledge. I request you to relook at "***asset***" definition explained in Chapter "Framework for preparation of financial statements"

1. OBJECTIVE

- ❖ Generally Property, Plant and Equipment (PPE) constitute a significant portion of the total assets of an entity; hence this AS is important in the presentation of financial position.
- ❖ This standard discusses whether expenditure incurred should be capitalised as PPE **or** charged to P&L statement, depreciation, retirement of PPE and disposal accounting. This has material impact on Balance Sheet as well as on P&L.

2. SCOPE

PPE are generally grouped into various categories/classes, like land, building, plant and machinery, furniture and fixtures, computers, etc.

This standard does **NOT** deal with the following: (*Reasons are given in brackets*)

(a) PPE classified as held for sale as per Ind AS-105;

(b) Biological assets (a living animal or living plant like group of animals) related to agricultural activity *other than* **bearer plants** (*See below for bearer plant definition*). This Standard applies to bearer plants but it does not apply to the produce on bearer plants *(Refer Ind AS-41 for biological assets);*

(c) Recognition and Measurement of exploration and evaluation assets *(Refer Ind AS-106);*

(d) Mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources; and (*NO Ind AS exists, Industry rules and regulations are followed*)

(e) If a PPE's recognition & measurement is covered by any other Ind AS (*like Ind AS-116 – finance lease*) to that extent one should follow the respective standard.

Note: An individual PPE acquired to **develop or maintain** the activities covered in (b) to (d) above, and these are separable from the activities, are to be accounted for as per this Standard.

Investment property under Ind AS-40 shall use the cost model under this standard for owned investment property.

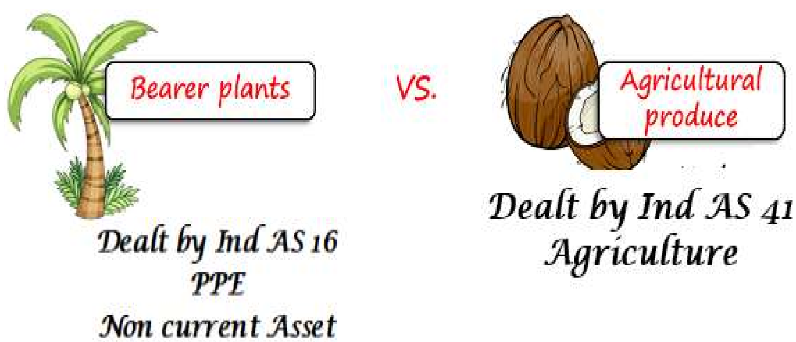
Bearer plant is a plant that:

(a) is used in the production/supply of agricultural produce;

(b) is expected to bear produce for more than a period of twelve months (*in a way the life of the plant is more than 12 months*); and

(c) has a remote likelihood of being sold **as** an **agricultural produce**, except for incidental scrap sales.

The following picture helps you to understand



3. DEFINITIONS

PPE are → Tangible items → Held for use in → Producing goods / Providing services / Rental to others / For administration purpose

& Expected to be used during more than **a period**

Note: Before classification of an item into PPE, investment or inventory, the expenditure **should satisfy the asset definition and conditions** to recognise the asset as per the framework. Once it is recognised as an asset, **considering the intention of usage** it is classified as PPE, investment or inventory.

Concept capsule 1

A public limited company whose main object as stated in its MOA is to purchase, acquire, contract, develop, cultivate and sell agricultural and urban lands, buys large plots of virgin lands, develops and cultivates them and **sells them in small plots**. Land purchased by the company and the cost of development has been consistently grouped under Fixed assets in its BS. Comment.

Suggested answer

As per Ind AS-16, PPE is a tangible asset which is **held for** (intention of usage) producing goods, providing services, rental to others or administration purpose. The main basis for classification is **intention of usage** of the asset rather than the nature of the entity.

As per Ind AS-2, inventory is an asset which is **held for** sale in the ordinary course of business and, etc.

In the given case, the entity is purchasing the land to develop and sell it in the ordinary course of business. The land does **not** satisfy the definition of a PPE as per Ind AS-16. But it satisfies the definition of inventory as per Ind AS-2. Hence classifying it as inventory and presenting under current assets would be correct. The accounting treatment of the company is NOT correct.

Carrying amount: Gross book value ***Less*** Accumulated depreciation ***Less*** Accumulated impairment loss (if any)

4. RECOGNITION AND MEASUREMENT

Recognition & Measurement

Initial Recognition & Measurement → It is the time when the entity incurred the costs.

Subsequent Recognition & measurement → Measurement of PPE as on Balance sheet date

Before learning initial and subsequent recognition, we should understand, when should we recognise (record in the books of account) PPE. PPE should be recognised in the books of account when it satisfies the following two conditions: (*same as **"ASSET" conditions***)

1. Probable future economic benefits inflows to the entity; and
2. Cost should be measured reliably.

5. INITIAL RECOGNITION

This topic explains – at what amount a PPE is to be capitalised initially i.e., at the time of acquisition.

An item of PPE that qualifies for recognition as an asset should be measured at its COST.

Costs are incurred:

(a) At the time of initial acquisition or self-construction of PPE;

(b) Subsequently to add/increase to the existing PPE, replace a part or service it.

Amount to be capitalised is based on the nature of consideration paid for the asset. PPE can be acquired in the following ways:

Initial acquisition/construction

↓

Asset is acquired by

↓

Payment of Cash/ for credit	Self-construction	Exchange of Non-monetary assets

A. IF ASSET IS PURCHASED BY PAYMENT OF CASH/FOR CREDIT

Cost of asset includes the following:

	Particulars	**Amount (₹)**
	Purchase price (Basic price)	XXX
(+)	**Non-refundable** taxes & duties	XXX
(+)	Initial delivery and handling costs	XXX
(+)	Site preparation cost (e.g., special foundation costs)	XXX
(+)	Installation costs (*after deducting net proceeds of samples produced at the time of testing*)	XXX
(+)	Professional fees (e.g., fees of architects and engineers)	XXX
(+)	Borrowing cost (If permitted by Ind AS-23)	XXX
(+)	**PRESENT VALUE of Decommissioning, restoration costs** (See ***concept capsule 7***)	
(+)	Expenditure incurred on test runs & experimental production **after deducting** the net proceeds received on sale of items produced during test runs	XXX
(+)	*Any **directly attributable cost** to bring the asset to the location & condition necessary to **operate for its intended purpose***	XXX
(+/–)	Subsequent price adjustments	XXX
(+/–)	Changes in duties and similar items	XXX
(–)	Government grant received specific to the asset as per Ind AS-20	XXX
(–)	Trade discounts and rebates (if included in above items)	(XXX)
	Cost of PPE to be capitalised	**XXXX**

The following expenses are EXCLUDED in capitalisation:

- **General** administration and other overhead expenses are usually excluded from the cost as they are **not** related to specific asset. However, any expense if ***directly attributable*** to construction of a project or acquisition of PPE or to bring it to working condition for its intended purpose, it should be included in the cost of PPE.
- Abnormal loss;
- Costs incurred after the PPE is actually used or is capable of being used even though it is operated **at less than full capacity;**
- Initial operating losses, such as those incurred while demand for the item's output builds up; and
- Costs of relocating or reorganising part or all of an entity's operations.

The cost of an item of PPE may include costs incurred relating to leases of assets that are used to construct, add to, replace part of or service an item of PPE, such as depreciation of right-of-use assets (Ind AS-116).

Note:

1. Directly attributable expense means, these expenses **would have not been incurred** if the PPE is not acquired or constructed;

2. The excess of **net proceeds** from **sale of items produced during testing** will not be credited to Profit or loss, i.e., it will be deducted from the cost of an item of PPE. (Say we incurred ₹ 1,000 for trail run and realised ₹1,200 – in this case ₹200 should be reduced from PPE); This will impact the depreciation, impairment and deferred tax as well.

   Carve out: As per IAS-16 (IFRS) – the same ₹200 will be credited to P&L (Not reduced from PPE)

Concept capsule 2

Krishna Ltd. acquired machinery for ₹50 lakh, freight cost is ₹ 1 lakh, professional fees paid is ₹ 2 lakh. General overheads incurred during the installation period are ₹ 5 lakh. The entity spent ₹ 3 lakh to remove the existing machine and to prepare proper base for the new machine. In addition to the above expenditure, it spent ₹ 2 lakh for trail run, material and labour. The products manufactured during the trail run are sold for ₹ 25,000. What is the cost of acquisition of machinery as per Ind AS-16?

Suggested answers

Cost of acquisition of machinery as per Ind AS-16 is computed as following:

Particulars	**₹ in lakh**
Purchase price	50
Freight cost	1
Professional fees paid	2
Site preparation cost (to remove old machine and to prepare site)	3
Trail run expenditure *net off* recovery from sale of products	
manufactured during trail run (₹2,00,000 – 25,000)	1.75
Amount to be capitalised	**57.75**

Note:

Allocation of general and administration overhead is not added to the cost of asset as it is **not directly related** to acquisition of the asset and it is a mere allocation of overheads.

Try Practice Questions 1, 2, 3 & 4 in Volume II of Ind AS Made easy

6. DEFERRED CREDIT PERIOD

- PPE should be recognised at **CASH PRICE equivalent on the date of recognition;**.
- Deferred credit period means excess period than the normal credit period. Generally, a credit period will be less than a year.
- In case, if the payment is deferred **beyond** normal credit period terms, the **difference** between the cash price **and** the total payment should be recognised as interest.
- In general, the interest should be charged to P&L as an expense. If the asset is a qualifying asset as per Ind AS-23, the interest should be capitalised with the PPE. (*You will understand this sentence better after reading* Ind AS-23)

Concept capsule 3

On 1-04-20X1, Rama Ltd. purchased a car for ₹ 10 lakh from Raju Honda. Even though the supplier's normal credit policy is 3 months, as per the understanding ₹ 10 lakh is payable after 2 years, i.e., on 31-03-20X3. Assume borrowing rate applicable to the entity is 10%. Record the journal entries till the date of payment of loan.

Suggested answer

As per Ind AS-16, a PPE should be recognised at cash price (Present value) as on the date of recognition. If the credit period is deferred, the difference between the cash price and the total payment should be recognised as interest.

The Cash price of Car = ₹ 10 lakh × 0.82645 (*PVF for 2 years @ 10%*) = ₹ 8,26,450

The difference of ₹ 1,73,550 (10 lakh – ₹ 8,26,450) should be treated as interest expense and will be charged to P&L over the two years time. (Car is not a qualifying asset as per Ind AS-23, hence interest should be charged to P&L as expense).

Date	**Journal entry**	**Debit ₹**	**Credit ₹**
01-04-20X1	Machine a/c (PPE) a/c ……. Dr	₹8,26,450	
	To Raju Honda (supplier)		₹8,26,450
	(Being PPE is recognised as cash price)		
31-03-20X2	Interest expense a/c (P&L)……… Dr	82,645	
	To Raju Honda		82,645
	(8,26,450 × 10% = 82,645)		
	(Being interest cost charged to P&L)		
	Raju Honda balance at Year end = ₹9,09,095		
31-03-20X3	Interest expense a/c (P&L)……… Dr	90,905	
	To Raju Honda		90,905
	(9,09,095 × 10% = ₹90,905 approx)		
	(Being interest cost charged to P&L)		
	Raju Honda account balance = ₹9,09,095 + 90,905 = ₹10 lakh		
31-03-20X3	Raju Honda …….Dr	10,00,000	
	To Cash/bank a/c		10,00,000
	(Being loan is repaid)		

I hope the above capsule helped you to understand the concept.

Are Machinery spares PPE?

- ❖ Accounting treatment of machinery spares depends on the facts and circumstances of each case. However, the machinery spares should be recognised as PPE, only when it satisfies the definition of PPE;
- ❖ If such spares do not satisfy the PPE definition, it should be classified as inventory and charged to P&L statement when it is issued for usage;
- ❖ If these are recognised as PPE, the total cost incurred should be depreciated in a systematic basis over the useful life;
- ❖ When the principal PPE is either discarded or sold, the net carrying amount of spares should be written off to P&L.

B. SELF-CONSTRUCTED PPE:

The following costs should be capitalised when the assets are constructed by the entity.

Particulars	**Amount (₹)**
All the costs which are capitalised under the "***sub-topic A***" above	XXX
Any other costs of construction that directly relate to the specific asset	XXX
Any other costs that can be attributable/allocable to the construction activity	XXX
Borrowing costs (if the PPE is a qualifying asset as per Ind AS-23)	XXX
Cost of self-constructed PPE	**XXXX**

Note:

(a) The entity should NOT include **internal profits** on any items used from its stores (one cannot sell to own). Only cost of the items should be capitalised.

(b) Abnormal loss of material, labour or any other resources used should **not** be part of self-constructed asset.

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- Bearer plants are accounted for in the same way as **self-constructed PPE** before they are in the location and condition necessary to be capable of operating in the manner intended by management.
- The word 'construction' in this Standard should be read as covering activities that are necessary to cultivate the bearer plants before they are in the location and condition necessary to be capable of operating in the manner intended by management.

C. PPE IS ACQUIRED BY EXCHANGE OF ASSETS

When a PPE is acquired in exchange or part exchange for another asset, the asset received is usually recorded at **FAIR value –**

Determination of cost of assets to be recorded is based on the following TWO conditions:

1. Does the transaction have commercial substance (explained below)? and
2. Can fair value of the asset given or taken is measured reliably?

Yes

Recognise at
- ❖ Fair value of the asset given up;(1st preference)
  OR
- ❖ Fair value of the asset received;

Whichever is clearly evident;

No

It should be measured at COST.
i.e. Carrying amount of asset given up is the Cost of asset received.

What is commercial substance? (Read carefully)

We can say that an exchange transaction has commercial substance if:

(a) **Risk, timing and amount of the cash flows** of the asset received are **significantly different** from the cash flows of the asset transferred; **or**

(b) the entity-specific value *(Explained below)* of the portion of the entity's operations affected by the transaction changes as a result of the exchange; and.

(c) the difference in (a) or (b) is significant relative to the fair value of the assets exchanged.

The management has to determine the existence of commercial substance in the exchange transaction. They need not perform a detailed calculation for this purpose.

This concept will remain same in case of Intangible assets (Ind AS-38) and Investment property (Ind AS-40);

Concept capsule 4

On March 31, 20X1, Radha Ltd. traded an old machine having a carrying amount of ₹16,800 and paid cash difference of ₹6,000 for new machine having a total cash price of ₹20,500. On March 31, 20X1, what amount of loss should the company recognize on this exchange?

Suggested answer

As per Ind AS-16, when a PPE is acquired in exchange or part exchange for another asset, the cost of the asset acquired should be recorded either at its fair market value **or** the net book value of the asset given up, adjusted for balance payment or receipt of cash or other consideration.

The difference between the FV of new machine and amount payable is treated as FV of the old machine i.e., ₹14,500 (₹20,500 – 6,000). This can be treated as sale value of old machine and the difference between the selling price of old machine and book value is recognised as loss i.e., ₹2,300 (₹16,800 – ₹14,500). As the fair value of the asset acquired is reliably measurable than the fair value of the asset given up - it is appropriate to value the asset acquired at ₹20,500.

***Concept capsule 5* (*No commercial substance*)**

Entity A exchanges car X with a book value of ₹13,000 (Fair value of ₹13,250) for cash of ₹150 and car Y which has a fair value of ₹13,100. How would you account this transaction?

Suggested answer

As per Ind AS-16, PPE is acquired in exchange of a non-monetary asset or in combination of monetary & non-monetary asset; it should be measured at its fair value. This fair value accounting should be only the transaction has commercial substance and fair value can be measured reliably. If the transaction does not have commercial substance, it should be measured at the carrying amount of the asset given up.

The transaction lacks commercial substance as the company's cash flows are not expected to change as a result of the exchange; it is in the same position as it was before the transaction. The entity recognises the assets received at the book value of car X. Therefore, it recognises cash of ₹150 and car Y as property, plant and equipment with a carrying value of ₹12,850.

Car Y a/c	Dr	12,850
Cash a/c	Dr	150
To Car X a/c		13,000

If the PPE is acquired by issuing entity shares – it will be dealt with by Ind AS-102 – Share based payments

8. EXPENDITURE INCURRED BETWEEN AFTER READY TO USE AND ACTUAL USE

- All expenses (including borrowing cost as per Ind AS-23) incurred between the date of ready to use **and** actual commencement of commercial production should be **charged to profit and loss** statement irrespective of the amount involved.
- There are NO inflows of future economic benefits from the expenditure incurred during the period;
- Hence, it does NOT satisfy the *'asset'* definition (irrespective of materiality of transaction) and it should NOT be recognised as deferred revenue expenditure.

Try Practice Questions 6, 7 in Volume II of Ind AS Made easy

9. COMPONENT ACCOUNTING

- An asset may consist of several **different and significant physical components**.
- If an item of PPE comprises two or more significant components, with **substantially different useful lives**, usage or flow of economic benefits then each component should be recognised and depreciated separately over its individual useful life.
- When a significant component is replaced or restored, the old component is derecognised (removed from the books of account, i.e., ensuring the carrying amount of that will be NIL) and the cost of new component is capitalised, if the cost is recoverable (asset).
- This accounting leads to fair presentation of financial statements.

Concept capsule 6

X Ltd. acquired an aircraft for ₹50 crore. The life of the engine is 20 years and body of aircraft should be changed in 10 years. How should the entity account for the same if the proportion of engine & body is 70:30? Record the journal entry, when the body of aircraft is replaced with new one during the 10th year at a cost of ₹20 crore.

Suggested answer

As per Ind AS-16, if an item of property, plant and equipment comprises two or more significant components, with substantially different useful lives, usage or flow of economic benefits then each component should be recognised and depreciated separately over its individual useful life.

In the given case, the useful lives of two significant parts are different hence each component should be recognised separately and depreciated over its useful life.