THE INSTITUTE OF
CHARTERED ACCOUNTANTS OF SRI LANKA

LKAS 2 Inventories

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Overview

1. Introduction – Scope & definitions
2. Recognition as an expense
3. Measurement
4. Disclosures

Objective:

Prescribe the accounting treatment for inventories

Introduction – Scope & definitions

- LKAS 2 applies to **all** inventories, **except**:

  (a) Work in progress under construction contracts
  (b) Financial instruments
  (c) Biological assets related to agricultural activity
  (d) Agricultural produce at point of harvest

LKAS 2 applies to measurement of all inventories within scope, **except** :

- Agricultural and forest products, agricultural produce after harvest and minerals & mineral products to extent measured at net realizable value
- Inventories of commodity brokers measured at fair value less costs to sell.

Introduction – Scope & definitions

Inventories are **assets**:

(3) **Held** for **sale** in the **ordinary** course of business;

(1) In the form of **materials** or **supplies** to be **consumed** in production process or in the rendering of services

(2) In the **process** of **production** for such sale

Recognition as an expense

- **Recognition**
  - When inventories are **sold**, the carrying amount of those inventories shall be recognized as an **expense** in the period in which the **related revenue is recognized**.
  - The amount of any **write-down** of inventories to net realizable value (NRV) and **all losses** of inventories shall be recognized as an **expense** in the period the **write-down or loss occurs**.
  - **Reversal** of any **write-down** of inventories, arising from an increase in NRV shall be recognized as a **reduction** in the amount of inventories recognized as an *expense* in the period in which the reversal occurs.

Measurement

Inventories shall be measured at **lower** of cost and NRV

Cost of inventories :

(i) **Purchase costs**

- *Purchase price*
- *Import duties and other taxes (other than those subsequently recoverable from taxing authorities)*
- *Transport, handling & other directly attributable costs*
- *Deductions: Trade discounts, rebates & other similar items*

(ii) **Costs of conversion**

- *Costs directly related to units of production. E.g. Direct labor, production overheads*

(iii) **Other costs**

- *Other costs directly attributable to bringing inventories to present location & condition*

Measurement

Costs of conversion	Basis
Variable production overheads	**Actual use** of production facilities
Fixed production overheads	**Normal capacity** of production facilities

- Costs **excluded** from the cost of inventories :
  - (i) abnormal amounts of wasted materials, labor or other production costs;
  - (ii) storage costs, unless those costs are necessary in the production process before a further production stage;
  - (iii) administrative overheads that do not contribute to bringing inventories to their present location and condition
  - (iv) selling costs

Measurement

Which of the above cost categories do the following costs belong to :

Cost	Cost Category
Selling costs	
Direct labour	
Design of finished goods	
Storage costs not necessary in production process	
Import duties on raw materials	
Fixed production overheads	
Purchase of raw materials	
Abnormal wastage of material, labor & other production costs	
Administrative overheads not contributive to bringing inventories to present location & condition	

Measurement

Which of the above cost categories do the following costs belong to :

Cost	Cost Category
Selling costs	**Excluded**
Direct labour	Costs of conversion
Design of finished goods	Other costs
Storage costs not necessary in production process	**Excluded**
Import duties on raw materials	Costs of purchase
Fixed production overheads	Costs of conversion
Purchase of raw materials	Costs of purchase
Abnormal wastage of material, labor & other production costs	**Excluded**
Administrative overheads not contributive to bringing inventories to present location & condition	**Excluded**

Measurement

Example - Allocation of Overheads

The following example illustrates how to allocate overhead cost to inventory at normal capacity. The following is relevant information of entity A.

Full capacity	10,000 hours in a year
Normal capacity	7,500 hours in a year
Actual labor hours for current period	6,500 hours
Total fixed production overhead	1,500 CU
Total variable production overhead	2,600 CU
Total opening inventory	2,500 units
Total units produced in a year	6,500 units
Total units sold in a year	6,700 units
Total ending inventory	2,300 units

The total cost of inventories is assigned by using FIFO cost formula. Compute overhead amounts absorbed to ending inventory and recognized as an expense during the year.

Measurement

Fixed POAR:

$$= \frac{\text{Total Fixed POH}}{\text{Normal capacity}}$$

$$= \frac{1{,}500 \text{ CU}}{7{,}500 \text{ hours in a year}}$$

= **0.20 CU per hour**

Variable POAR:

$$= \frac{\text{Total Variable POH}}{\text{Actual hours}}$$

$$= \frac{2{,}600 \text{ CU}}{6{,}500 \text{ hours in a year}}$$

= **0.40 CU per hour**

Number of hours taken to produce each unit

$$= \frac{\text{Actual hours for current period}}{\text{Total units produced in a year}}$$

$$= \frac{6{,}500 \text{ hours in a year}}{6{,}500 \text{ units}}$$

= 1.00 hours per unit

Total POH recognized absorbed per unit of inventory:

= [0.20 CU per hour x 1 hour p.u.] + [0.40 CU per hour x 1 hour p.u.]

= **0.60 CU p.u.**

Measurement

Total ending inventory		2,300 Units
Total POH recognized as part of ending inventory		**1,380 CU**
Total fixed POH		1,500 CU
Total variable POH		2,600 CU
Total POH		4,100 CU
Absorbed to ending inventory		(1,380) CU
Total POH recognized as an expense		**2,720 CU**
Reconciliation:		
Total fixed POH		1,500 CU
Absorbed fixed POH		
Fixed production OAR	0.20 CU / hour	
Actual hours for year	6,500 hours	1,300 CU
Unabsorbed fixed POH ----- (1)		200 CU
Absorbed total POH		
Total POAR	0.60 CU / unit	
Units sold from during year production	4,200 units	2,520 CU
		2,720 CU

Measurement

Cost formulas:

(i) Specific identification

Specific costs are attributed to identified items of inventory

(ii) First In First Out (FIFO)

Assumes oldest inventories are used up first, so that the cost attached to those items still held at the balance sheet date is at the most recent cost incurred.

(iii) Weighted Average Cost

Cost is based on an average price computed by dividing the total cost of units by the total number of such units.

Measurement

- The cost of inventories of items that are **not ordinarily interchangeable** and goods or services produced and segregated for **specific projects** shall be assigned by using s**pecific identification** of their individual costs.
- The cost of inventories, other than those dealt with above, shall be assigned by using the **FIFO** or **weighted average** cost formula.
- An entity shall use the same cost formula for all inventories having a similar nature and use to the entity. For inventories with a different nature or use, different cost formulas may be justified

Measurement

Scenario 1:

Pencil Company Ltd manufactures pencils and produced the following brushes in the period: three units at a cost of Rs 20/- each, then five units at Rs 30/- and a final batch of four at Rs 40/- p.u. There are six units left at balance sheet date. Calculate the cost of inventory using the following cost formula:

(i) FIFO

(ii) Weighted Average

(iii) LIFO

Measurement

Solution:

(i) FIFO : (2 units at Rs 30 p.u.) + (4 units at Rs 40 p.u.) = **Rs 220 / -**

(ii) Weighted Average Cost:

$$\frac{(3 \text{ units at Rs } 20 \text{ p.u.}) + (5 \text{ units at Rs } 30 \text{ p.u.}) + (4 \text{ units at Rs } 40 \text{ p.u.})}{12 \text{ units}} = \text{Rs } 30.83 \text{ p.u.}$$

Six pencils remain: 6 units at Rs 30.83 p.u. = **Rs 185/-**

(iii) LIFO : (3 units at Rs 20 p.u.) + (3 units at Rs 30 p.u.) = **Rs 150 / -**

Measurement

Net Realizable Value

Net realizable value is the estimated selling price in the ordinary course of business less estimated costs of completion and the estimated costs necessary to make the sale

Evaluation of net realizable vale is critical if inventories –

(1) are **damaged**,
(2) have become wholly or partially **obsolete**,
(3) **selling prices** have **declined**, or
(4) if the estimated **costs of completion** or the estimated **costs to be incurred to make the sale** have **increased**.

Measurement

- **Does NRV and fair value have the same meaning?**

No; 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. (See IFRS 13 Fair Value Measurement.)

NRV refers to the net amount that an entity expects to realize from the sale of inventory in the ordinary course of business. Therefore, **NRV** is an **entity-specific value**. NRV for inventories may not equal fair value less costs to sell.

Measurement

Scenario 2 :

Per unit details relating to item A is as follows. What would be the valuation of inventory of item A?

Cost	Rs 900 / -
Selling price	Rs 1,200/ -
Estimated modification cost to enable sale	Rs 300/-
Estimated marketing costs	Rs 200/-
Units held	150

Measurement

Solution:

Cost = Rs 900 / - p.u.

	Rs p.u.
Selling price	1,200
Less: Estimated modification costs to enable sale	(300)
Less: Estimated marketing costs	(200)
NRV	700/-

Lower of cost and NRV = NRV = Rs 700 /- p.u.

Number of units = 150 units at Rs 700 / - p.u. = **Rs 105,000/-**

Measurement

Disclosures include the following:

- Accounting policy
- Statement of Financial Position (SoFP)
  - (i) Carrying amount of inventories (on face of SoFP)
  - (ii) Analysis of inventories by classification
- Statement of Comprehensive Income
  - (i) Cost of inventories expensed in period
- Other

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THANK YOU