FIFO, LIFO, OR AVERAGE COST?

In the scenario below we demonstrate how using different valuation methods impacts the cost of sales in the financial statements.

Scenario Setup

A manufacturer in Durban purchases steel at different prices within a month and then sells part of this steel inventory.

The following purchases were made

- 1st July: 300 kg @ R30 per kg
- 15th July: 200 kg @ R35 per kg

The manufacturer sold 400 kg of inventory on the 20th of July.

What is the cost of sales recorded in the books?

1. FIFO (FIRST-IN, FIRST-OUT) METHOD

Under FIFO, the oldest costs are assigned to the cost of goods sold first.

Calculation:

- The first 300kg sold are from the 1st of July batch.
- The next 100kg are from the 15th of July batch.

Cost of Goods Sold (COGS):

- 300kg×R30+100kg×R35=R9,000+R3,500=R12,500300 kg×*ZAR*30+100 kg×*ZAR*35=*ZAR*9,000+*ZAR*3,500=*ZAR*12,500

2. LIFO (LAST-IN, FIRST-OUT) METHOD

Under LIFO, the most recent costs are assigned to the cost of goods sold first.

Calculation:

- The first 200 kg sold are from the 15th July batch.
- The next 200 kg are from the 1st July batch.

Cost of Sales:

- 200kg×R35+200kg×R30=R7,000+R6,000=R13,000

3. WEIGHTED AVERAGE COST METHOD

Under the weighted average cost method, the average cost of all units available before each sale is calculated and used for the cost of sales.

Calculation:

1. Total Cost = (300kg×R30)+(200kg×R35)=R9,000+R7,000=R16,000(300kg×R30)+(200kg×R35)=R9,000+R7,000=R16,000
2. Total Units = 300 kg + 200 kg = 500 kg
3. Average Cost Per Unit = R16,000 / 500 kg=R32 per kg

Cost of Sales for 400 kg sold:

- 400 kg×R32=R12,800400 kg×*ZAR*32=*ZAR*12,800

Summary

Each valuation method yields a different Cost of sales, reflecting how the timing of inventory costs impacts financial reporting:

- **FIFO Cost of Sales**: R12,500
- **LIFO Cost of Sales**: R13,000 (typically results in higher COGS during periods of rising prices)
- **Weighted Average Cost of Sales**: R12,800