

Opportunity Cost Concept :

Query :

Sometimes in the answer we consider opportunity cost and sometimes not. Why it is so?

Solution :

The opportunity cost concept is relevant only when we lose the opportunity to earn, by making an alternative use of the **same resources**. This concept works only when the resources are in short supply **i.e. key factor**.

For Example :

Our company at present is producing and selling 10,000 units in the market @ ₹ 100 per unit. The variable cost of these units is ₹ 60 per unit. Hence, contribution is ₹ 40 per unit.

While producing these 10,000 good units, we also produce 500 defective units, which are scrapped and cannot be sold to the customers. Our total production in this situation is 10,500 units (good + bad) together.

The question is, what should be the relevant cost of these 500 defective units?

Situation 1 :

If our sales is restricted to 10,000 units only i.e. we cannot sell more than 10,000 units in the market, then the relevant cost of defective units is :

Variable cost of production = 500 units x ₹ 60 per unit = ₹ 30,000.

Because, we have spent this money without getting anything out of it.

If we further assume that the scrap value of these defective units is ₹ 5,000 then -
the **net** relevant cost shall be = 30,000 - 5,000 = ₹ 25,000.

Situation 2 :

If we assume that our product has a further sales potential, and we could have sold these 500 units also in the market, if they were not defective -

then the relevant cost of defective units shall be :

Variable cost of production = 500 units x ₹ 60 per unit = ₹ 30,000.

Opportunity cost (i.e. loss of contribution) = 500 units x ₹ 40 per unit = ₹ 20,000

The total relevant cost shall be = Variable cost + Opportunity cost
= 30,000 + 20,000 = ₹ 50,000

If we further assume that the scrap value of these defective units is ₹ 5,000 then -
the net relevant cost shall be = 50,000 - 5,000 = ₹ 45,000.

Alternatively,

Either we can sell these 500 units as good units @ ₹ 100 and earn ₹ 50,000 revenue OR
sell these 500 units as scrap and earn a revenue of ₹ 5,000.

Using differential approach, the net relevant cost shall be = 50,000 - 5,000 = ₹ 45,000.

Note : This alternative calculation is for Situation 2 only.