



Chapter 16

Depreciation

MEANING OF DEPRECIATION

In every business there are certain assets of a fixed nature that are needed for the conduct of business operations. These assets have a definite span of life after the expiry of which the assets will lose their usefulness for the business operations. Fall in the value and utility of such assets due to their constant use and expiry of time is termed as depreciation.

DEFINITIONS OF DEPRECIATION

1. "Depreciation is the gradual and permanent decrease in the value of an asset from any cause."

- R.N. Carter

SPECIAL FEATURES OR CHARACTERISTICS OF DEPRECIATION

1. Depreciation is decline in the value of fixed assets (except land).
2. Such fall is of a permanent nature.
3. Depreciation is a continuing process.
4. Depreciation is a process of allocation of the cost of an asset to its effective span of life.
5. It decreases only the book value of the asset.
6. The term depreciation is used only in respect of tangible fixed assets.

7. It is a non-cash expense. It does not involve any cash outflow.

DEPRECIATION AND OTHER SIMILAR TERMS

There are some terms like 'depletion' and 'amortisation,' which are also used in connection with depreciation.

Depletion

The term depletion is used in the context of extraction of natural resources like mines, quarries, etc. that reduces the availability of the quantity of the material or asset. The main difference between depletion and depreciation is that the former is concerned with the exhaustion of economic resources, but the latter relates to the usage of an asset.

Amortisation

Amortisation refers to writing-off the cost of intangible assets like patents, copyright, trademarks, franchises, goodwill which have utility for a specified period of time.

CAUSES OF DEPRECIATION

Main causes of depreciation are as follows: -

(1) By Constant Use: Due to the constant use of fixed assets in business operations wear and tear arise in them which results in the reduction of their values.

(2) By Expiry of Time: The value of majority of assets decreases with the passage of time even if they are not being put to use in the business.

(3) By Expiry of Legal Rights: There are certain assets which have a definite span of life such as Lease.

(4) By Obsolescence: Due to new inventions and improved techniques the old assets become obsolete and may have to be discarded even if they can be use physically.

(5) By Accident: Sometimes a machine may be destroyed due to fire, earthquake, flood etc, or a vehicle may be damaged due to accident.

(6) By Depletion: Depletion is the decrease in the value of wasting assets such as mines, oil-wells etc. due to their constant working.

(7) By Permanent fall in Market Price: Fall in the value of certain fixed assets is treated as depreciation.

NEED, IMPORTANCE OR OBJECTS OF PROVIDING DEPRECIATION

(1) For ascertaining the true profit or loss: As the Assets are used in earning revenues, the depreciation in the value of an asset is as much an expense as any other, such as wages, salary, rent etc.

(2) For showing the 'true and fair view' of the financial position: - If the depreciation is not charged, the assets will be shown in the Balance Sheet at an amount which is in excess of their true values.

(3) To ascertain the accurate cost of item of expense, the production: As depreciation is also an item of expense, the correct cost of production cannot be calculated unless it is also taken into account.

(4) To provide funds for replacement of assets: Depreciation though debited to Profit & Loss Account, is not paid

in cash like other expenses. Hence, the amount of depreciation is retained in the business and is used for the replacement of fixed assets after the expiry of their estimated span of life.

(5) To prevent the distribution of profits out of capital: If the depreciation is not charged, the profit shown by the Profit and Loss Account will be in excess of the actual profits. Such an excess profit may be wholly withdrawn by the proprietor or may be distributed among the shareholders as dividend.

(6) For avoiding over payment of Income Tax: Depreciation is a deductible expense for tax purposes. If depreciation is not debited to Profit and Loss Account, the net profit shown by it will be in excess of actual profits. Hence, we will also have to pay more income tax.

FACTORS DETERMINING THE AMOUNT OF DEPRECIATION

This impossible to calculate the actual and true amount of depreciation. It can only be estimated by keeping the following factors into consideration:-

(1) Total Cost of the Asset: The cost of a fixed asset is determined after adding expenses incurred for bringing the asset to usable condition, such as freight, transit, insurance and installation costs etc.

(2) Estimated Useful Life of Asset: Useful life of an asset is estimated in terms of number of years, it can be effectively used for business operations.

(3) Estimated Scrap Value: It is the estimated sale value of the asset at the end of its useful life. It is also known as residual

value or break-up value.

METHODS OF PROVIDING OR ALLOCATING DEPRECIATION

Different methods are suitable for different assets depending upon the nature and type of the asset. These methods are enumerated as under:

1. Straight Line Method
2. Written Down Value Method
3. Annuity Method
4. Depreciation Fund Method
5. Insurance Policy Method
6. Revaluation Method
7. Depletion Method
8. Machine Hour Rate Method

The selection of an appropriate method depends upon the following:

- Type of the asset;
- Nature of the use of such asset;
- Circumstances prevailing in the business;

As per Accounting Standard-6, the selected depreciation method should be applied consistently from period to period.

The first two methods are discussed below:-

(1) STRAIGHT LINE METHOD

This method is also termed as 'Original Cost Method' because under this method depreciation is charged at a fixed percentage

on the original cost of the asset. The amount of depreciation remains equal from year to year and as such the method is also known as 'Equal Instalment Method' or 'Fixed Instalment Method'. Under this method, the amount of depreciation is calculated by deducting the scrap value from the original cost of the asset and then by dividing the remaining balance by the number of years of its estimated life. The depreciation so calculated and charged annually will reduce the original cost of the asset to zero, or its scrap value, as the case may be, at the end of its estimated life. Under this method, the amount of depreciation is calculated by the following formula: -

$$\text{Yearly Depreciation} = \frac{\text{Original Cost of assets} - \text{Estimated Scrap Value}}{\text{Estimated Life of}}$$

Merits of Straight Line Method

(1) Simplicity: Calculation of depreciation under this method is very simple and widely popular.

(2) Equality of Depreciation Burden: Under this method, equal amount of depreciation is debited to the Profit and Loss Account of each year. Hence, the burden depreciation on each year's net profit is equal.

(3) Assets can be completely written off: Under this method, the book value of an asset can be reduced to net scrap value or zero value, which is not possible under some other methods.

(4) Knowledge of Original Cost and Up-to-date depreciation: Under this method, the information of Original Cost of the asset and its up-to-date depreciation is available at any time.

Demerits of Straight Line Method

(1) Difficulty in Computation: The computation of depreciation becomes complicated because the depreciation on each machine will have to be calculated separately.

(2) Unequal charge against Income: With the passage of time, work efficiency of the asset decreases and repair and maintenance expense increases. Hence, under this method, the total amount charged against profit on account of depreciation and repair taken together, will not be uniform throughout the life of the asset, rather it will keep on increasing from year to year.

(3) Undue pressure in later years: The efficiency and usefulness of a machine is more in the earlier years in comparison to later years. As such, more depreciation should be charged in earlier years in comparison to the later years, whereas, depreciation remains constant from year to year under this method.

(4) Unrealistic to write off the Value of asset to Zero: Sometimes, even after the value of an asset is reduced to zero in the books, it continues to be used in the business in actual practice.

(6) Difficulty in the determination of scrap value: It is quite difficult to assess the true scrap value of the asset after a long period.

Suitability: This method is suitable for those assets whose useful life can be estimated accurately and which do not require much expenses on repairs and renewals.

(2) WRITTEN DOWN VALUE METHOD

Under this method, as the value of asset goes on diminishing year after year, the amount of depreciation charged every year also goes on declining.

Each year's depreciation is calculated on the book value of the asset at the beginning of that year, rather than on the original cost. As the value of the asset and also the depreciation charged on it goes on reducing year after year, the method is also known as 'Reducing Instalment Method' or "Diminishing Balance Method'.

Merits of written down value Method

(1) Easy Calculation - It is easy to calculate the depreciation under this method.

(2) Equal charge against income - In this method, the total burden on Profit & Loss Account in respect of depreciation and repairs put together remains almost equal year after year. This is so because in the initial years depreciation is more in comparison to repair charges whereas, in the later years, as the asset gets older, the amount of depreciation goes on decreasing while the expenses on repairs go on increasing.

(3) No undue pressure in later years: The efficiency and usefulness of a machine is more in the earlier years than in later years. Hence, the depreciation in first few years should be more in comparison to the later years.

(4) Balance of asset is never written off to zero: This method ensures that the asset is never reduced to zero so that some depreciation, however small, is debited to Profit & Loss Account so long as the asset remains in use.

(5) Approved method by Income Tax Authorities: This method of providing depreciation is permissible under Income Tax regulations.

Demerits :-

(1) Asset cannot be completely written off :- Under this method, the value of an asset, even if it becomes obsolete and useless, cannot be reduced to zero and some balance, however small, would continue on Asset Account.

(2) Difficulty in determining the rate of

depreciation: The rate is generally kept higher because it takes a very long time to write an asset down to its scrap value. If the rate of depreciation is kept lower, the asset may become obsolete earlier.

(3) Difficulty in ascertainment: It is difficult to ascertain a suitable rate of depreciation.

Suitability: This method is very suitable in case of assets having a comparatively long life and which require considerable repairs in the later years when they become older, such as building, plant etc.

METHODS OF RECORDING DEPRECIATION

In the books of account, there are two types of arrangements for recording depreciation on fixed assets:

- Charging depreciation to asset account or
- Creating Provision for depreciation/Accumulated depreciation account.

Charging Depreciation to Asset account

1. For recording purchase of asset (only in the year of purchase)

1. Asset A/c Dr.

To Bank/Vendor A/c

(With the cost of asset including installation, freight, etc.)

2. Following two entries are recorded at the end of every year.

(a) For deducting depreciation amount from the cost of the asset.

Depreciation A/c Dr.

To Asset A/c

(With the amount of depreciation)

(b) For charging depreciation to profit and loss account.

**Profit & Loss A/c Dr.
To Depreciation A/c
(With the amount of depreciation)**

3. Balance Sheet Treatment

When this method is used, the fixed asset appears at its net book value (i.e. cost less depreciation charged till date) on the asset side of the balance sheet and not at its original cost (also known as historical cost).

learnkwniy