# Law of Diminishing Marginal Utility

The law of diminishing marginal utility is comprehensively explained by Alfred Marshall. According to his definition of the law of diminishing marginal utility, the following happens:

"During the course of consumption, as more and more units of a commodity are used, every successive unit gives utility with a diminishing rate, provided other things remaining the same; although, the total utility increases."

#### **Utils:**

'Utils' is considered as the measurable 'unit' of utility.

## **Explanation for the Law of Diminishing Marginal Utility:**

We can briefly explain Marshall's theory with the help of an example. Assume that a consumer consumes 6 apples one after another. The first apple gives him 20 utils (units for measuring utility). When he consumes the second and third apple, the marginal utility of each additional apple will be lesser. This is because with an increase in the consumption of apples, his desire to consume more apples falls.

Therefore, this example proves the point that every successive unit of a commodity used gives the utility with the diminishing rate.

We can explain this more clearly with the help of a schedule and diagram.

### **Schedule for Law of Diminishing Marginal Utility:**

Unit of Consumption	Marginal Utility	Total Utility
1	20	20
2	15	35
3	10	45
4	05	50
5	00	50
6	-05	45

In the above table, the total utility obtained from the first apple is 20 utils, which keep on increasing until we reach our saturation point at 5th apple. On the other hand, marginal utility keeps on diminishing with every additional apple consumed. When we consumed the 6th apple, we have gone over the limit. Hence, the marginal utility is negative and the total utility falls.

### With the help of the schedule, we have made the following diagram:



Saturation Point: The point where the desire to consume the same product anymore becomes zero.

### **Disutility:**

If you still consume the product after the saturation point, the total utility starts to fall. This is known as disutility.

When the first apple is consumed, the marginal utility is 20. When the second apple is consumed, the marginal utility increases by 15 utils, which is less than the marginal utility of the 1st apple – because of the diminishing rate. Therefore, we have shown that the utility of apples consumed diminishes with every increase of apple consumed.

Similarly, when we consumed the 5th apple, we are at our saturation point. If we consume another apple, i.e. 6th apple, we can see that the marginal utility curve has fallen to below X-axis, which is also known as 'disutility'.

### **Assumptions in the Law of Diminishing Marginal Utility:**

For the law of diminishing marginal utility to be true, we need to make certain assumptions. Each assumption is quite logical and understandable. If any of the assumptions are not true in the case, the law of diminishing marginal utility will not be true.

## Following are the assumptions in the law of diminishing marginal utility:

The quality of successive units of goods should remain the same. If the quality of the goods increase or decrease, the law of diminishing marginal utility may not be proven true. Consumption of goods should be continuous. If there comes a substantial break in the consumption of goods, the actual concept of diminishing marginal utility will be altered.

### **Exceptions for the Law of Diminishing Marginal Utility:**

The law of diminishing marginal utility states that with the consumption of every successive unit of commodity yields marginal utility with a diminishing rate. However, there are certain things on which the law of diminishing marginal utility does not apply.