

INDIAN SCHOOL MUSCAT DEPARTMENT OF COMMERCE AND HUMANITIES ECONOMICS

CLASS - XI

UNIT- II: CONSUMER'S BEHAVIOUR AND DEMAND THEORY OF DEMAND

Demand is defined as the quantity of a commodity or service that a consumer is able and willing to buy at a given price at a given price at a given point of time. The essential elements of demand for a commodity as follows:-

- 1. Desire for a commodity
- 2. Availability of money income to fulfil that desire
- 3. Willingness to spend money to fulfil the desire

CONCEPTS OF DEMAND

- 1. **Price Demand**: It refers to the different quantities of a commodity which will be bought per unit of time in a market at different prices.
- 2. **Income Demand**: It refers to the different quantities of a commodity which will be bought at different levels of income.
- 3. **Derived Demand**: When the demand for a commodity depends on the demand for its parent product or final product, it is known as derived demand.
- 4. **Joint Demand**: When several things are needed to make a commodity it is called joint demand.

LAW OF DEMAND

The law of demand states, 'Other things remaining the same, demand for a commodity decreases with increase in price and demand for a commodity increases with decrease in price.'

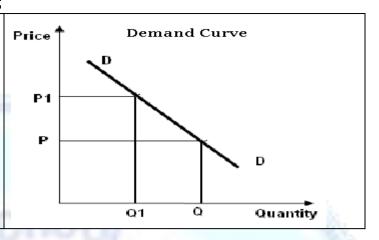
According to the law of demand, there is an inverse (negative) relationship between demand for a commodity and its price. The inverse relationship between demand for a commodity and its price is due to the following reasons:

- Demand is based on the concept of utility. Total utility is the total satisfaction derived from the consumption of different units of a commodity. Marginal utility is the utility derived from the consumption of an additional unit of a commodity. Law of Diminishing Marginal Utility' states that as a consumer goes on consuming additional units of a commodity his marginal utility diminishes or demands for commodity decreases.
- 2. The second approach the two effects of Income and Substitution. Income Effect is based on the concept of real income. A change in the price of the commodity results in a change in the real income of the consumer. A fall in the price implies that with the same money income, a consumer is able to purchase more units of the commodity. Similarly at a higher price, a consumer's ability to purchase falls. Substitution Effect is based on the concept of relative prices. When the price of a commodity rises, the relative price of its substitutes automatically diminishes, or in other words become cheaper. A household therefore will purchase more of a commodity which has become cheaper.

The law can be explained with the help of Demand schedule and demand curve. A Demand schedule is a tabular statement showing the inverse relationship between price and quantity demanded. A Demand curve is a graphical representation of the inverse relationship between price and quantity demanded. The slope of the demand curve whether individual or market is always negative.

AN INDIVIDUAL DEMAND SCHEDULE

Price (`)	Quantity Demanded
8.00	30
10.00	25
12.00	15
14.00	10



CHANGE IN QUANTITY DEMANDED/MOVEMENT ALONG DEMAND CURVE AND CHANGE IN DEMAND/SHIFT IN DEMAND

Change in quantity demanded means more or less units of a commodity are demanded due to increase or decrease in price of the commodity. A rise in demand with a fall in the price of the commodity is known as **Expansion in Demand**. A fall in demand with a rise in the price of a commodity is known as **Contraction of Demand**.

Shift in demand means more or less units of a commodity are demanded at the same price.

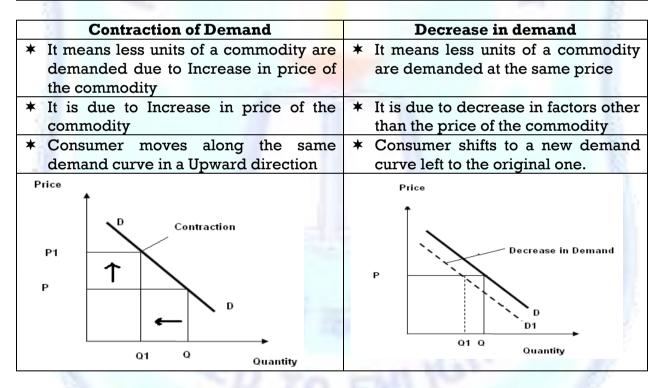
A Leftward Shift in the demand curve illustrates a Decrease in Demand.

A Rightward Shift in the demand curve represents an Increase in Demand.

DISTINCTION BETWEEN

Movement along the same demand	Shift in demand
curve	(Change in demand)
(Change in quantity demanded)	
* It means more or less units of a commodity are demanded due to increase or decrease in price of the	It means more or less units of a commodity are demanded at the same price
commodity	
* It is due to change in price of the commodity	 It is due to change to factors other than the price of the commodity
* Consumer moves along the same demand curve in upwards or a downward direction	* Consumer shifts to a new demand curve right or left to the original one.
* It is the case of expansion or contraction of demand	★ It is the case of increase or decrease in demand
Price Contraction P Expansion D Q1 Quantity	Price Increase in Demand Decrease in Demand D2 D1 Q1 Q Q2 Quantity

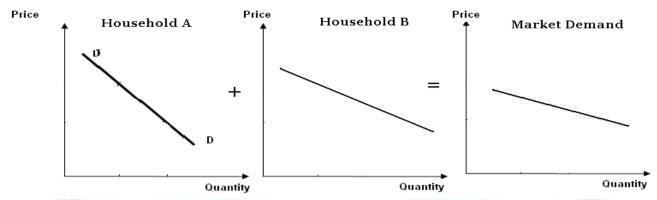
Expansion of Demand	Increase in demand
* It means more units of a commodity	★ It means more units of a commodity
are demanded due to decrease in	are demanded at the same price
price of the commodity	
* It is due to decrease in price of the	★ It is due to increase in factors other
commodity	than the price of the commodity
* Consumer moves along the same	★ Consumer shifts to a new demand
demand curve in a downward	curve right to the original one.
direction	78.75
Price	Price
P1 P Expansion D Q1 Q Quantity	P Increase in Demand D2 Q Q2 Quantity



INDIVIDUAL DEMAND AND MARKET DEMAND

Individual Demand for a commodity refers to the amount of it bought by a person or a household at different prices.

Market Demand for a commodity refers to the total amount of the commodity bought by all consumers aggregated together at different prices. Market for a good at a particular price is the total demand of all consumers taken together. The market demand for a good can be derived from the individual demand curves. Market demand curve of a good can also be derived from the individual demand curves graphically by adding up the individual demand curves horizontally.



Suppose there are only two households in the market for a good. Suppose at price P1, the demand of household 1 q1 and that of household 2 is q2. Then, the market demand of the good at P1 is q1 + q2.

DETERMINANTS OF DEMAND

Demand for a commodity is influenced by a number of factors. These factors put together are called Demand Function. A **demand function** illustrates the relationship between the demand for a commodity and the various determinants.

A market demand function is represented as:-

$$Dn = f(Pn, Pr, Y, T, U)$$

Where

Dn = Demand for a commodity, say N

Pn = Price of Commodity N

Pr = Price of Related Goods

Y = Income of the household

T = Tastes and Preferences of the household

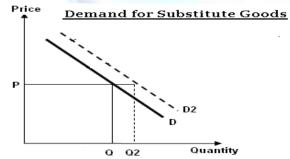
U = Other factors

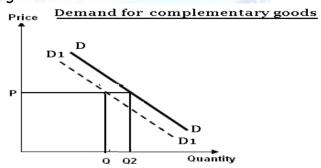
RELATIONSHIP BETWEEN DEMAND FOR A COMMODITY AND ITS VARIOUS DETERMINANTS

- Price of Related Goods: Demand for a commodity is also influenced by the prices of other related goods. The other related goods are generally of two types
 - (i) Substitute Goods
 - (ii) complementary goods, and

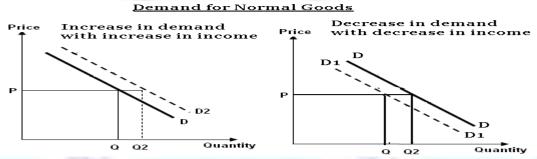
Substitute goods are those goods where each of them can be used in place of another without discomfort. Example: Tea and Coffee. There is a direct relation between the two goods. If the price of Tea rises then demand for coffee rises because consumer will substitute Tea with Coffee as Coffee would relatively cheaper. Demand curve for coffee shifts rightwards.

Complementary goods are those where the utility of a good depend upon the availability of another good, e.g., car and petrol. **Demand for good N** is affected by the **price of good R**. There is an **inverse relation** between the two goods.





- 2. **Level of income of household(s).** Change in income of consumer has affect on demand for the following two types of goods
 - (a) Normal Goods: Normal goods are those goods which are demanded more at a higher income and less at a lower income. Demand is directly related to the change in the level of income of the consumer. Demand for normal goods increases with increase in income and decreases with decrease in income of consumer. E.g.: Car, refrigerator, etc.

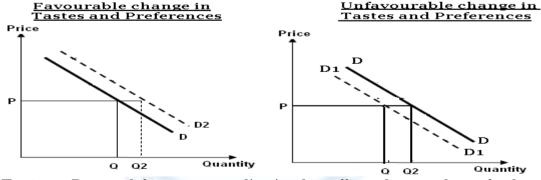


(b) Inferior Goods: Inferior goods are those goods, which are, demand more at a lower income and less at a higher income. Demand is inversely related to change in income of the consumer. Demand for inferior goods decrease with increase in income and increases with decrease in income. E.g.: Bajra, coarse grains, etc.



We can also distinguish between three types of commodities:

- a) **Necessities:** Demand for **necessities** initially increases with an increase in the income level but after reached a level it is not further affected by income levels
- b) Comforts and luxuries: Demand for comforts and luxuries keeps on increasing with an increase in income levels
- Taste and Preferences of consumers: It means a liking for a product or a service in relation to other products and services. A favourable change in tastes and preferences will increase the demand, whereas an unfavourable change will decrease the demand for the commodity.



- 4. **Other Factors**: Demand for a commodity is also affected a number of other factors. These factors are situational and demand for a commodity changes according to the nature of these factors. Some of these other factors are:
 - a) Larger the **size of population**, more shall be the demand for a commodity and vice versa

- b) **Composition of population**. eg. if there are more women in a region there will be larger demand for goods of use to women.
- c) The more evenly distributed the income is the larger the number of consumers of the commodity would be.
- d) Sociological factors: (a) class groups (b) education level (c) marital status (d) age and place of residence (e) religious factors, etc.
- e) Weather conditions also lead to a seasonal change in demand for a commodity.

EXCEPTIONS TO THE LAW OF DEMAND

The law of demand has universal application. However there are a few exceptions to the law. The important exceptions to the law are:-

- 1. Status Symbol commodities or 'prestige value commodities'.
- 2. Giffen Goods. (Inferior goods) Sir Robert Giffen gave this concept that a rise in the price of inferior goods leads to an increase in demand for these goods and vice versa.
- 3. Conspicuous necessities
- 4. Conspicuous consumption.
- 5. Future change in prices.
- 6. Emergencies
- 7. Change in fashion
- 8. Ignorance.

ELASTICITY OF DEMAND

Elasticity of Demand is defined as the responsiveness of demand to change in any of its determinants. Price elasticity of demand is defined as the responsiveness of demand for a commodity to a change in its price. Price Elasticity of demand can be measured with the help of any of the following THREE methods.

- 1. Percentage change method (Proportionate)
- 2. Total Outlay method (Expenditure)
- 3. Point method. (Geometrical)

PERCENTAGE CHANGE METHOD/PROPORTIONATE CHANGE METHOD

Price elasticity of demand is a measure of the responsiveness of the demand for a good to changes in its price. Price-elasticity of demand for a good is defined as the percentage change in demand for the good divided by the percentage change in its price.

Price Elasticity (Ep) =
$$\frac{\% \text{ change in quantity demanded}}{\% \text{ change in price of commodity}}$$

Where Ep=Price elasticity coefficient.

This expression can also be expanded as follows:-

$$Ep = \frac{\frac{\text{New qunatity - original quantity}}{\text{Original quantity}}}{\frac{\text{New price - Original price}}{\text{Original Price}}} \times 100$$

OR
$$\mathbf{E}\mathbf{n} = \frac{\Delta \mathbf{Q}}{\mathbf{X}} \mathbf{X} = \frac{\mathbf{I}}{\mathbf{I}}$$

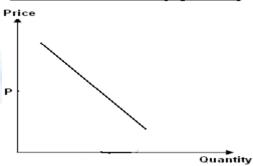
Based on their values, elasticity co-efficient can be classified in five groups as follows:-

1. **Perfectly Inelastic Demand (Ep=0)**: This will occur when percentage change in quantity demanded is ZERO to percentage change in price. Demand does not respond to a change in price of the commodity. Demand is said to be perfectly inelastic.

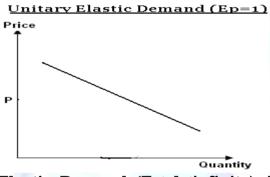


2. **Inelastic Demand (Ep>0< 1):** When percentage change in quantity demanded is **less** than the percentage change in price. Demand is said to be less than elastic.

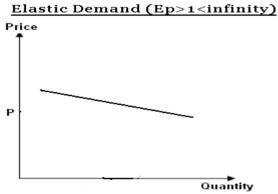
Inelastic Demand (Ep>0< 1)



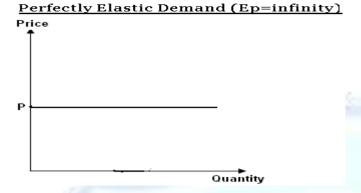
3. **Unitary Elastic Demand (**Ep=1): When percentage change in quantity demanded is equal to percentage change in price. Demand is said to be unit elastic.



4. Elastic Demand (Ep>1<infinity): When percentage change in quantity demanded is more than percentage change in price. Demand is said to be more than unit elastic.



5. **Perfectly Elastic Demand** (Ep=∞ infinity): When percentage change in quantity demanded is infinite to no percentage change in change price. Demand is said to be perfectly elastic.



FACTORS INFLUENCING ELASTICITY OF DEMAND

- Nature of the good: If the good under consideration is a necessity, then its demand would be inelastic i.e. its demand would be affected only a little whatever be the change in price. In the case of luxuries, the demand would be elastic, as their demand can be postponed if price changes.
- 2. **Availability of substitutes**: If the substitutes are available for the commodity, its demand would be elastic as the consumer can exercise several options. If the commodity has no substitutes, then its demand would be inelastic.
- 3. Part of total expenditure upon good: If only a small part of income is being spent upon the good, its demand would be inelastic. This won't affect the demand of the consumer much. However, if significant part of income is spent upon the good, the demand would be more elastic.
- 4. **Habits:** If the consumer is habitual to the use of any particular commodity, the demand for this commodity would be inelastic and vice versa e.g. demand for alcohol and cigarette would be inelastic for drunkards & smokers.