Reference: - eagri.org

Elasticity of Demand

(1) Price Elasticity of Demand:

It is the ratio of proportionate change in quantity demanded of a commodity to a given proportionate change in its price. Price elasticity of demand (EP) is, thus, given by:

Price Elasticity = Percentage change in quantity demanded / Percentage change in price

(2) Income Elasticity of Demand:

It may be defined as the ratio of proportionate change in the quantity demanded of commodity to a given proportionate change in income of the consumer.

Income Elasticity = Percentage Change in Quantity Demanded / Percentage change in income

(3) Cross Elasticity of Demand:

Cross elasticity of demand is calculated by dividing the percentage change in quantity demanded by the percentage change in price of a related good

Cross Elasticity = % change in quantity demand of good X / % change in price of good Y

Degrees of Elasticity of Demand

Ed	Type of Ed	Description	Type of Good	Shape of Demand Curve
Ed = 1	Perfectly Inelastic	No change in Qty demanded due to change in price	Essentials of life	Vertical St line
0 < Ed < 1	Inelastic	% change in demand < % change in price	Necessities	Downward sloping steeper
Ed = 1	Unitary Elastic	% change in demand = % change in price	Normal Goods	Rectangular hyperbola
1 < Ed < ∞	Elastic	% change in demand > % change in price	Luxuries	Downward sloping flatter
Ed = ∞	Perfectly Elastic	Infinite change in demand without any change in price	Imaginary (under PC)	Horizontal

Factors Influencing the Elasticity of Demand:

- Degree of necessity
- Proportion of Consumer's income spent on the commodity
- Existence of substitutes
- Several uses of the Commodity
- Time

Measurement of Elasticity of Demand

1. Total Expenditure or outlay method
2. Measuring Elasticity at a point
3. Point method
4. Arc method
5. Revenue method