# MICROECONOMICS (BCS 2002 & BSE 2002)/BA]

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## (C) DEMAND AND SUPPLY

#### SUPPLY LECTURE-8

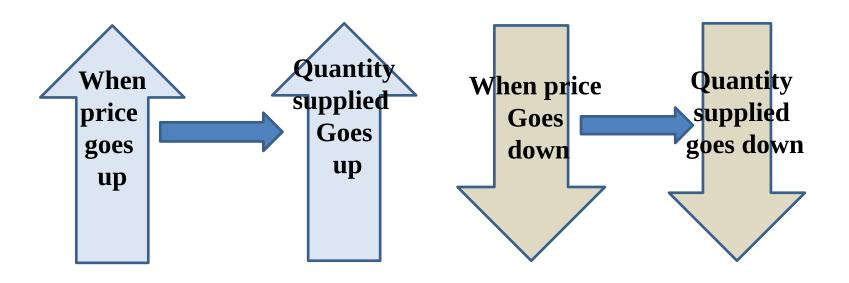
#### 1.What is Supply

Supply, is defined as the amount of a product that would be offered for sale at all possible prices at market prices. Because the producer is receiving payment for his or her products, it should come as no surprise that more will be offered at higher prices. This forms the basis for the Law of Supply.

#### 2.LAW OF SUPPLY

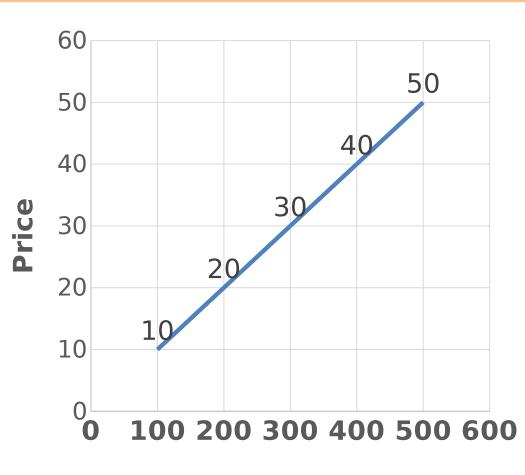
- According to law of supply There is a direct relationship between price and quantity supplied. The law of supply can be defines as other things being remaining constant, the quantity of the goods produce and offered for sale will increase as the price of goods rises and decrease as the price fall.
- The law is based upon the economic sense that at higher the price the greater amount of profit can be earned and thus the greater the incentives to produce the goods and offer it for sale.

#### ....2.LAW OF SUPPLY



#### ...2.Law of Supply

Price Rs	Goods Supplied (000 KGs)
10	100
20	200
30	300
40	400
50	500

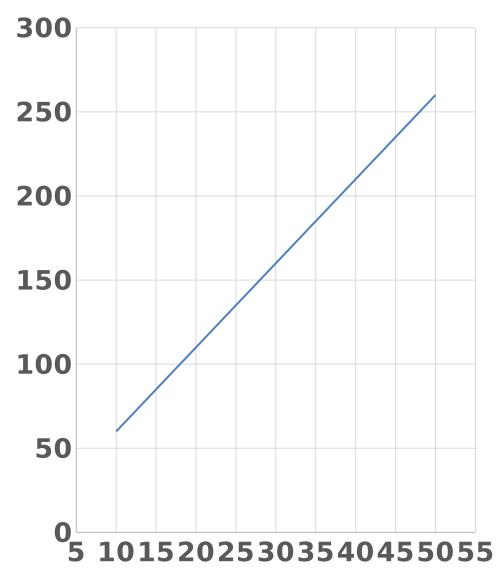


**Quantity supplied** 

#### 3. Supply Function Qs = 10 + 5P

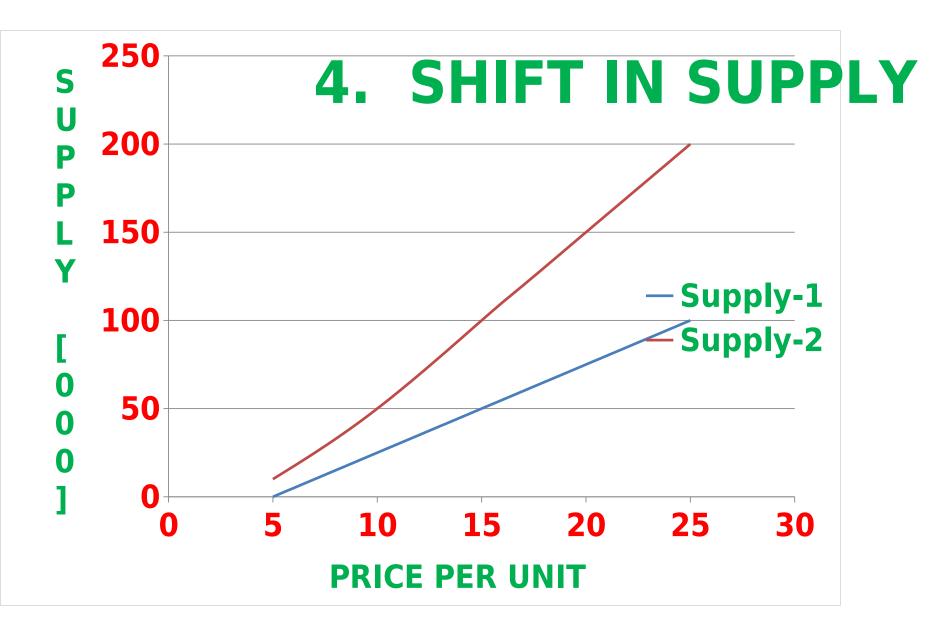
SUPPLY (000 KGs) & PRICE (Rs.Per Kg)

<b>Supply Schedule of</b>				
Vegetable				
<b>Price Per</b>				
KG	Supply			
[Rupees]	[KG-000]			
10	60			
15	85			
20	110			
25	135			
30	160			
35	185			
40	210			
45	235			
50	260			



## 4. CHAGE & SHIFT IN SUPPLY

Price	Supply-1	<b>Supply-2</b>
<b>Per Unit</b>	[000]	[000]
5	<b>O</b>	<b>10</b>
10	25	50
<b>15</b>	50	100
17	60	120
20	<b>75</b>	150
22	85	170
<b>25</b>	100	200 9



#### 5. THE SUPPLY SHIFTERS [Non-Price Determinants of Supply]

- 1. Number of Products: A successful new product or service always brings out competitors who initially raise overall supply.
- 2. Input Costs: Input costs, the collective price of resources that go into producing a good or service, affect supply directly

#### **Examples**

- Minimum Wage increases
- Cost of cotton increases, supply of textile fabrics decreases

#### 5 .....Supply Shifters

- 3. <u>Labor Productivity:</u> Better trained or more-skilled workers are usually more productive. Increased productivity decreases costs and increases supply.
- 4. Technology: By applying scientific advances to the production process, producers have learned to generate their goods or services more efficiently.
- 5. Government Action: Government actions, such as taxes or subsidies, can have a positive or negative effect on production costs.
- 6. Number of Sellers: When number of sellers increases, supply increases and # of sellers decreases, supply decreases
- 7. Producer Expectations: The amount of a product that producers are willing and able to supply may be influenced by whether they believe prices will go up or down.

#### **6.ELASTICITY OF SUPPLY**

- 1. Measures the responsiveness of a change in the quantity supplied of a good to a change in its price
- 2. Ranges from zero (vertical supply curve-crossing X-axis) to infinity (horizontal supply curve-crossing Y-axis)
- 3.Longer period of adjustment, greater is the elasticity of supply

## ....6 ELASTICITY OF SUPPLY

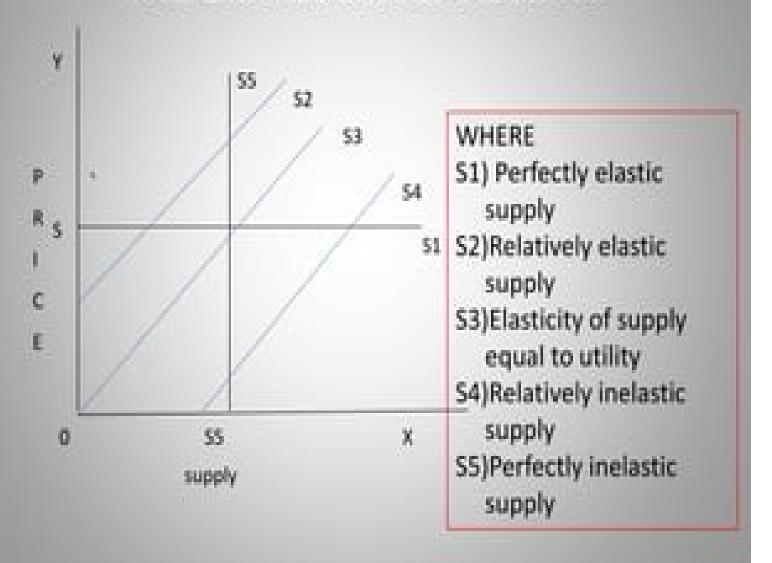
- The responsiveness of supply to price changes.
- (DS/S)/(DP/P), percent change in quantity supplied divided by percent change in price.
- Usually positive.

**Price Elasticity of Supply is:** 

%°Qs %°P

- ° Q=Change in quantity supplied
- °P=Change in unit price of the product

### ALL KINDS OF supply CAN BE SHOWN IN ONE DIAGRAM AS FOLLOW



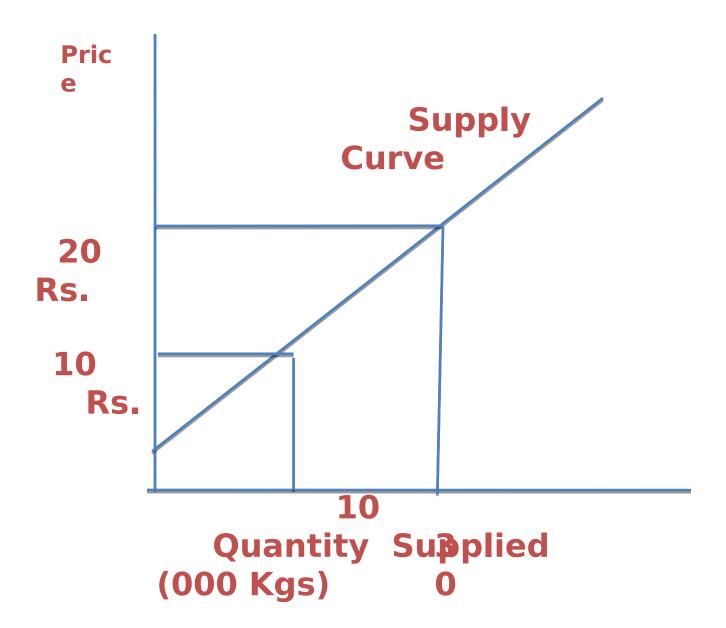
#### ....6. Elasticity of supply

- Market
   Supply
   (MS) is
   zero
   elastic
- Short-Run(SS) is inelastic
- Long-Run(LS) is elastic

## POINT & ARC ELASTICITY of Supply

- 1. Elasticity =  $%^{\circ}Q$   $%^{\circ}P$
- 2. Point Elasticity: [°Q/
  Q]÷[°P/P]
- 3. Arc Elasticity:

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[°Qs/
(Qs1+Qs2)]÷[°P/(P1+P2)]
[Illustration with Example -
Next Slide]
```



#### **POINT & ARC ELASTICITY of SUPPLY:**

Price Increases from Rs-10 to Rs 20 per KG & Supply Increases from 10 to 30 thousands:

POINT ELASTICITY:

$$\xi = [^{\circ}Qs/Qs] \div [^{\circ}P/P] = [20/30] \\ \div [10/20] = 1.3$$

ARC ELASTICITY:

$$E = [^{\circ}Qs/(Qs1+Qs2)] \div [^{\circ}P/(P1+P2)]$$

• =

$$[20/(20+30] \div [10/10+20)]=1.2$$

**Point Elasticity** Supply Function Qs = a + bPSupply Function Qs = 10 + 5PPoint Elasticity = Slope X P/Q e.g. Price Rs.10 per KG **Therefore: Supply 60 (000) KG Point Elasticity of Supply is:** 5 X (10 60)  $5 \times 1/6 = 5/6 = 0.83$