



**Centurion**  
**UNIVERSITY**

*Shaping Lives...*  
*Empowering Communities...*

# Elasticity and Revenue

**Dr. Madhumita Das**



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...*  
*Empowering Communities...*

# Introduction

- The concept of price elasticity is widely used today
- Businesses attempt to separate customers into groups with different elasticities
- **Price discrimination** is the followed practice
- It is charging different prices for the same service to different customers on the basis of elasticity



**Centurion**  
**UNIVERSITY**  
Shaping Lives...  
Empowering Communities...

# Total Revenue

**Total revenue** is by definition equal to price times quantity (or  $PQ$  )

If consumers buy 5 units at INR3 each, total revenue is INR 15 :

1. When demand is price-inelastic, a price decrease reduces total revenue.
2. When demand is price-elastic, a price decrease increases total revenue.
3. In the borderline case of unit-elastic demand, a price decrease leads to no change in total revenue.



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

# Revenue and Price Elasticity

## Price Elastic



An *increase* in price...



*reduces* total revenue.



A *reduction* in price...



*Increases* total revenue.

Total revenue moves in the direction of the quantity change.

## Price Inelastic



An *increase* in price...



*Increases* total revenue.



A *reduction* in price...



*reduces* total revenue.

Total revenue moves in the direction of the price change.

## Unit price Elastic



An *increase* in price...



no change in total revenue.



A *reduction* in price...



no change in total revenue.

Total revenue does not change as price changes.



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

# Continued

How does demand tend to be for necessities like Food, Electricity?

## Inelastic Demand





**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

# Let us take a Case

Imagine that in a particular this year nature smiles on farming. Spring comes early for planting; there are no killing frosts; rain nurture the growing shoots; and a record crop come to market.





**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

# So record crop should mean better revenues for the farmers?



VectorStock®

VectorStock.com/20418535



alamy stock photo

100/110  
www.alamy.com



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

# Continued

- But here the farmers are taken by surprise
- The farmers' incomes are lowered in the times of record crop
- So what is the catch here?





**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

# Excerpts

- The essential agricultural commodities tend to have inelastic demand (agricultural produce like rice, wheat etc.)
- Good harvests increases the supply of these essential food items in the market, but does demand also react in the same way?
- **The answer is it does not**



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

# Continued

- Due to ample production the price is lowered
- The drop in the price is not accompanied by much increase in the quantity demanded and as a result the farmers tend to earn less during good harvest than during the bad ones.



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

# Happy Learning

