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# Elasticity and Revenue

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# 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



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# 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.



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# 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.



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# Continued

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

## Inelastic Demand





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# 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.





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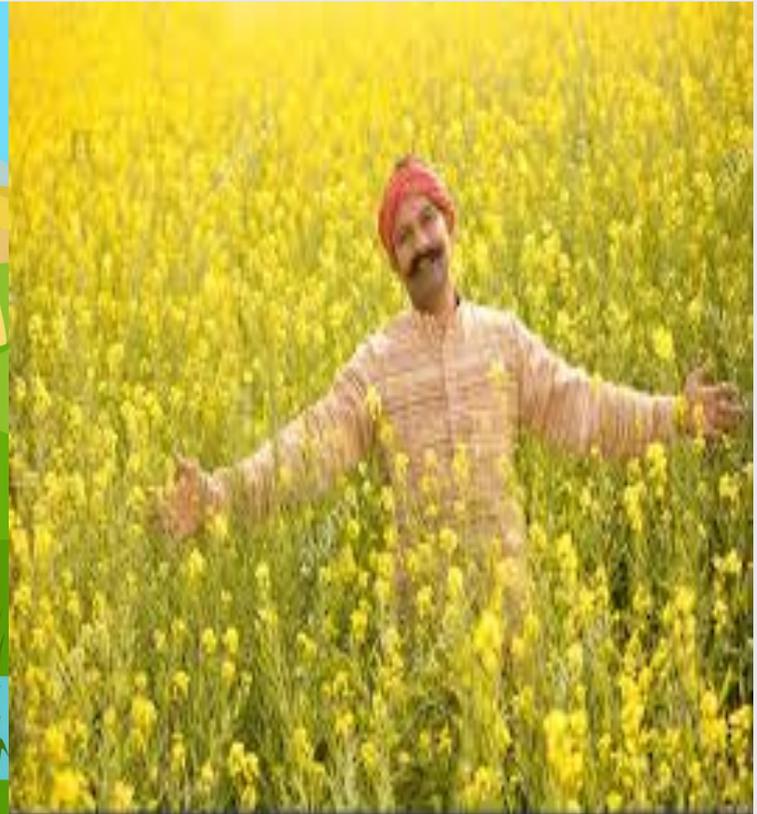
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# So record crop should mean better revenues for the farmers?



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# 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?



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# 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**



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# 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.



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# Happy Learning

