



SNS COLLEGE OF TECHNOLOGY

**An Autonomous Institution
Coimbatore - 35**

Accredited by NBA – AICTE and Accredited by NACC – UGC with ‘A++’ Grade
Approved by AICTE , New Delhi and Affiliated to Anna University , Chennai.

DEPARTMENT OF AGRICULTURAL ENGINEERING

19AGE401 – CLIMATE CHANGE AND ADAPTATION

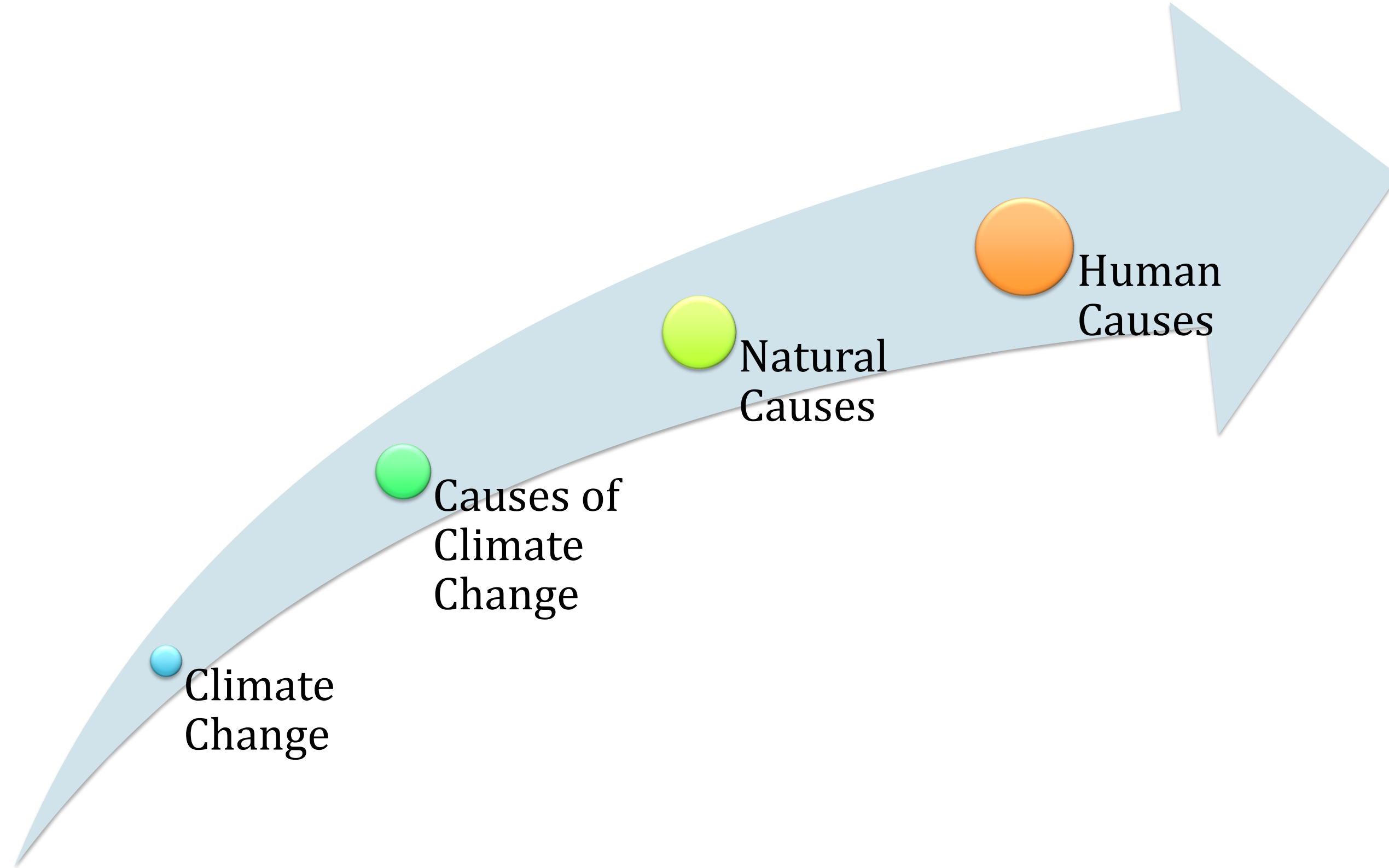
IV – YEAR VII SEMESTER

UNIT 3 – IMPACTS OF CLIMATE CHANGE

TOPIC 3 – SEA LEVEL RISE



Last Class Review





Effects of climate change

❖ Rise in sea level





Effects of climate change

- ❖ Heavy Rainfall across the Globe





Effects of climate change

❖ Extreme Drought





Effects of climate change

❖ Decline in Crop Productivity





Effects of climate change

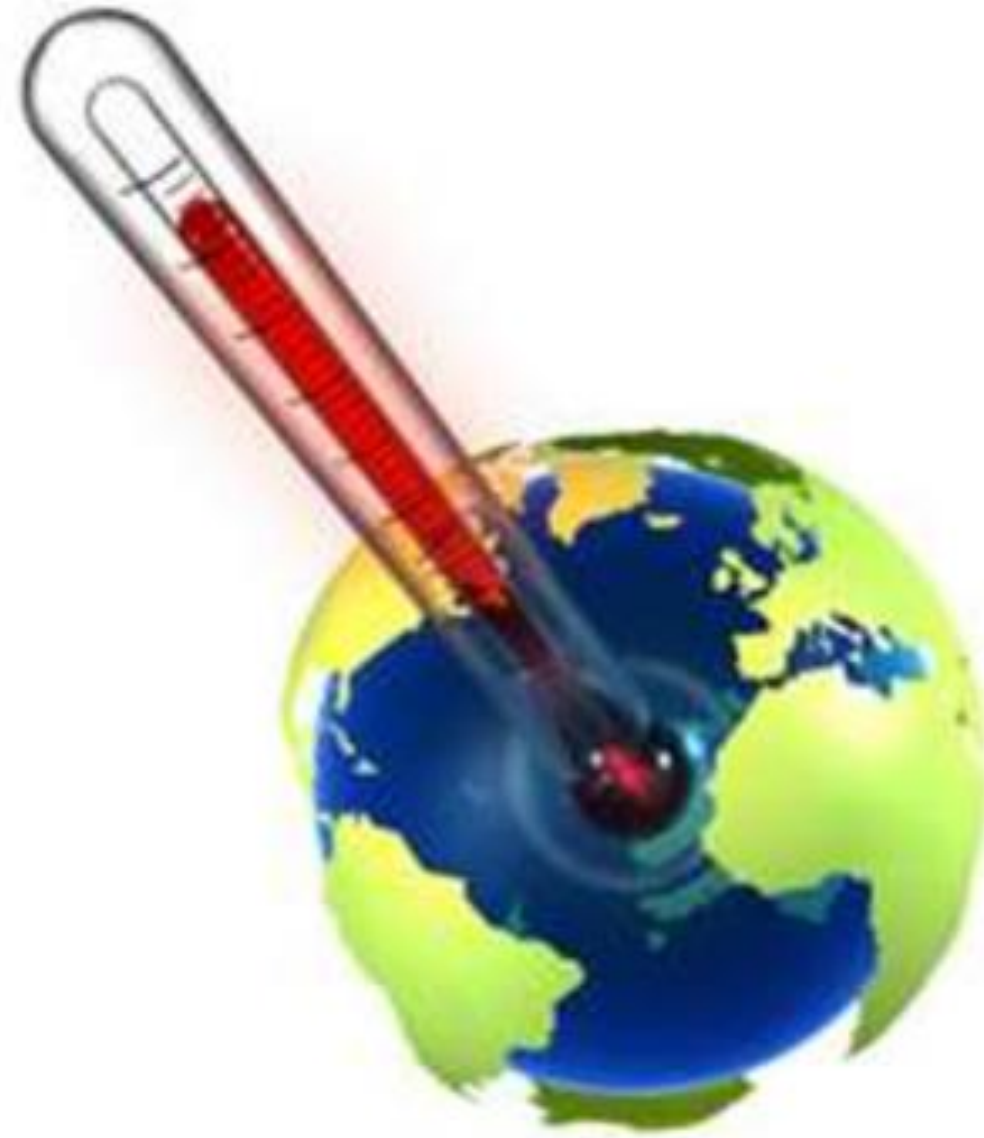
❖ Hurricanes





Effects of climate change

❖ Rise in Temperature



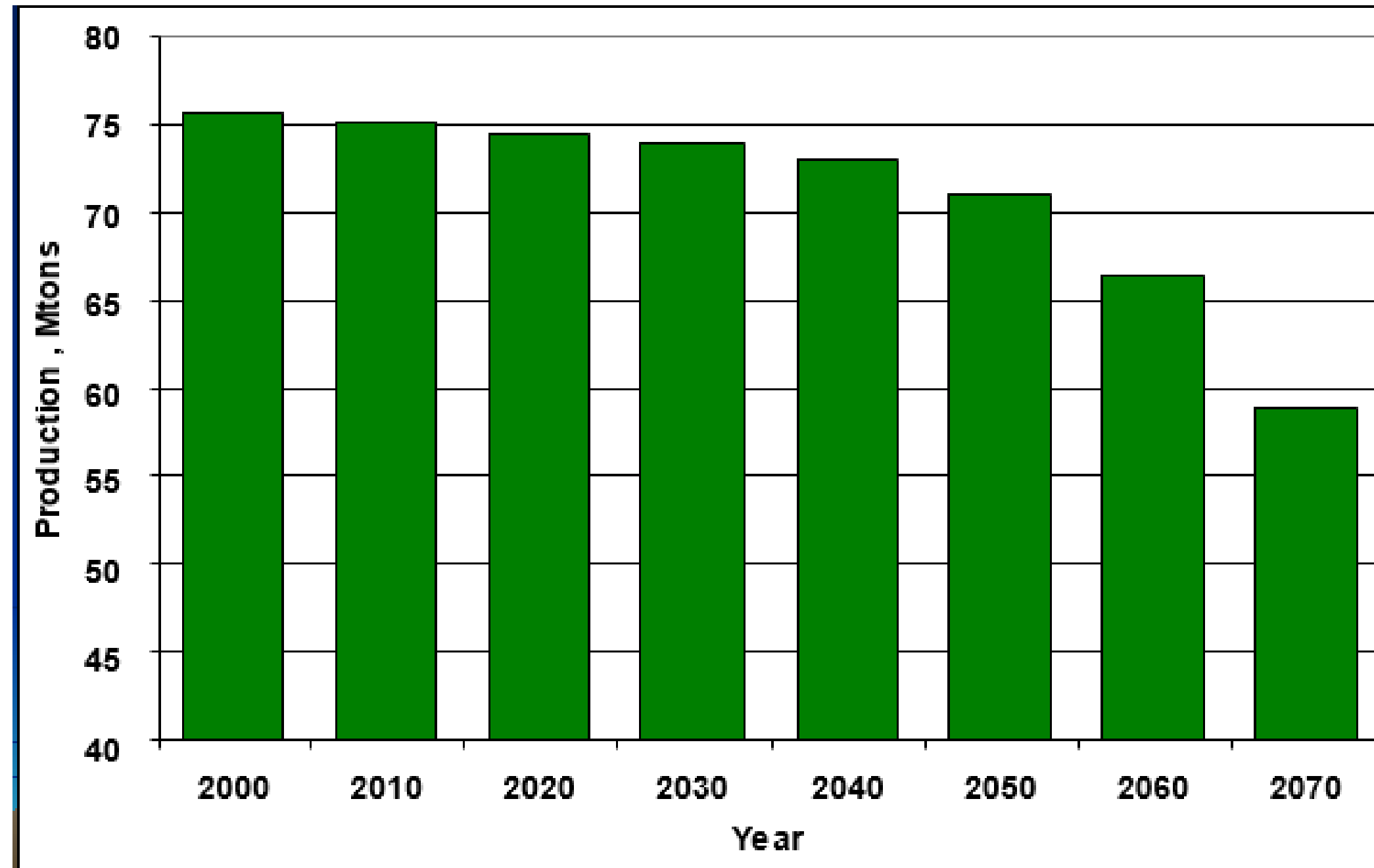


Climate Change Scenarios for India

| Year | Season | Increase in Temperature, °C | | Change in Rainfall, % | |
|-------|--------|-----------------------------|----------------|-----------------------|----------------|
| | | <i>Lowest</i> | <i>Highest</i> | <i>Lowest</i> | <i>Highest</i> |
| 2020s | Rabi | 1.08 | 1.54 | -1.95 | 4.36 |
| | Kharif | 0.87 | 1.12 | 1.81 | 5.10 |
| 2050s | Rabi | 2.54 | 3.18 | -9.22 | 3.82 |
| | Kharif | 1.81 | 2.37 | 7.18 | 10.52 |
| 2080s | Rabi | 4.14 | 6.31 | -24.83 | -4.50 |
| | Kharif | 2.91 | 4.62 | 10.10 | 15.18 |

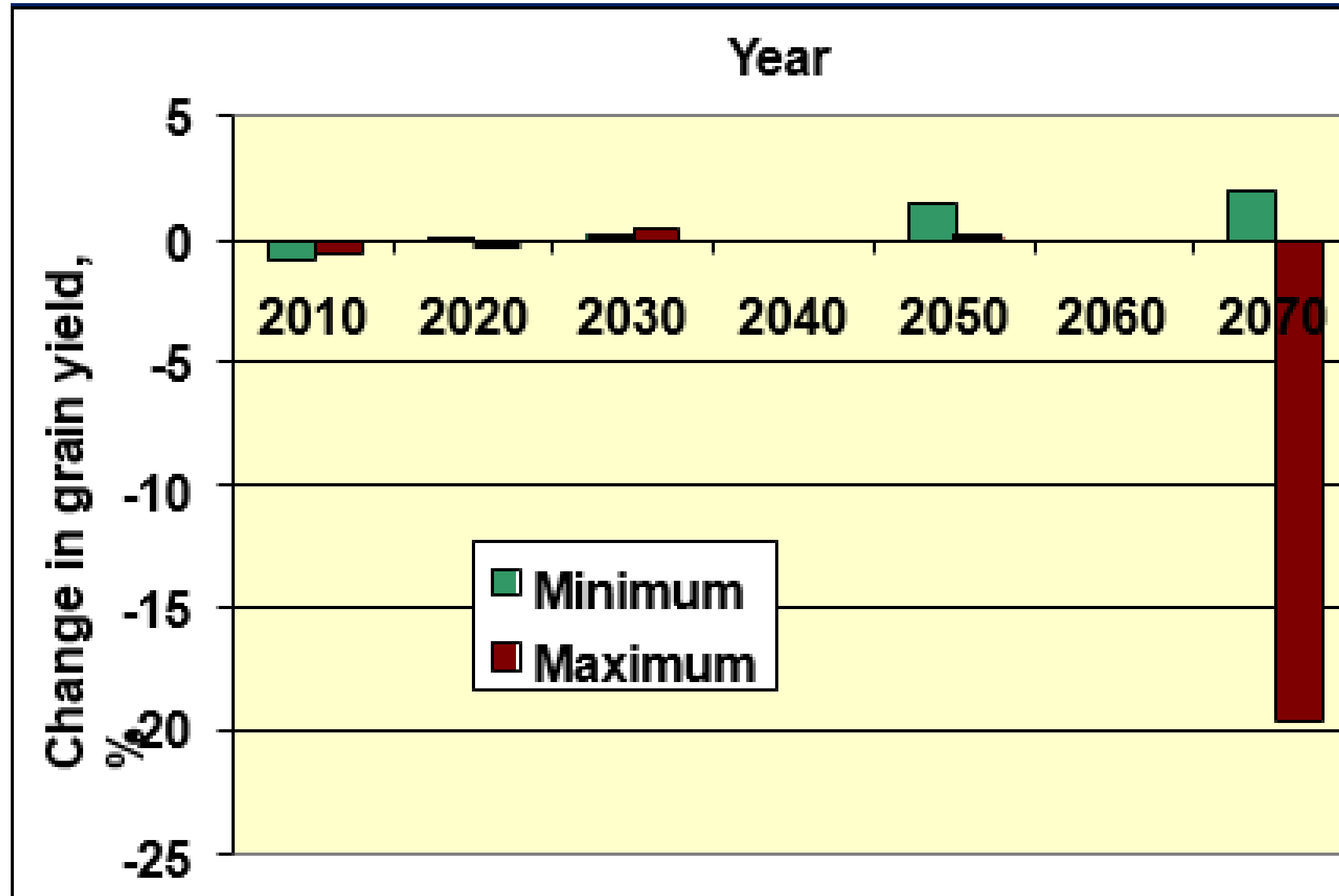


Potential Impact of Climate Change on Wheat Production in India





Simulated Impact of Global Climate - Irrigated Rice Yields in North India





Reference Videos





See You at Next Class!!!!