



## Mains Practice Question

**Q.** Discuss the consequence of Climate change on the food security in tropical countries. (150 Words, UPSC Mains 2023)

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### Approach

- Introduce briefly by writing impacts of climate change.
- Discuss the consequences of climate change on the food security in tropical countries.
- Conclude by mentioning measures to boost food security in the wake of climate change.

### Introduction

Climate change impacts crop yields, water resources, biodiversity, food costs, and public health.

### Body

#### Some of the consequences are:

- **Reduced crop yields:** Higher temperatures, changing rainfall patterns, and more frequent and intense droughts and floods can reduce crop yields and quality.
  - In Sub-Saharan Africa, maize yields have declined by 5.8%.
- **Altered growing seasons:** Climate change can alter farming seasons, harming agriculture's productivity.
  - In India, climate change is leading to erratic rainfall patterns and shorter growing seasons for crops like rice.
- **Food price volatility:** Climate change can disrupt food supply and demand, causing price instability and harming food access.
  - The 2007-2008 food crisis was partly triggered by climatic factors such as droughts and floods.
- **Increased vulnerability:** Tropical countries face increased vulnerability to cyclones, and storms, leading to damage to crops, and food systems.
  - In 2021, Cyclone Amphan caused widespread damage to agriculture and fisheries in India.

### Conclusion

To boost food security in tropical countries, we require adaptation and mitigation measures such as:

- Enhancing land management to reduce emissions and increase carbon sequestration.
- Developing resilient crop varieties.
- Diversifying food production systems and diets.
- Promoting healthy and sustainable eating habits.
- Reducing food waste throughout the supply chain.

