



General Studies-2; Topic: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

Focusing on Food Systems

Introduction

- The agenda of ending world hunger and malnutrition by 2030 is faced with challenges as the **climate crisis and hunger are linked inextricably**.
- The COVID-19 pandemic has doubled the population under chronic hunger from 130 million to 270 million.

Climate crisis and hunger

- Analysis by the **United Nations World Food Programme (WFP)** shows that a 2°C rise in average global temperature from pre-industrial levels will see 189 million additional people in the grip of hunger.
- **Vulnerable communities**, who rely on subsistence agriculture, fishing, and livestock will **continue to bear the brunt of the impact of Climate crisis**.
- The absence of social protection measures forces the food insecure to depend on humanitarian aid for survival.
- The **poor and the vulnerable continue to be hardest hit** and people in low-income countries face the worst impacts.
- The top 10 most food-insecure countries contribute 0.08% of global carbon emissions.
- Crop failures, water scarcity, and declining nutrition threaten millions who rely on agriculture, fishing, and livestock.

- As per the latest IPCC report, **the climate crisis will threaten nutrition through multi-breadbasket failures.**
- Weather extremes and their adverse impacts on people and nature will continue to increase with rising temperatures.

Adaptation Measures

- **Adaptation and resilience-building** for poor and vulnerable communities are critical for food security.
- Reducing emissions are essential to protect livelihoods and the food security of millions.
- Strengthen resilience and reduce vulnerability to climate change in line with the best available science.
- Adaptation needs to further the understanding of global, regional, and local impacts of climate change.

Adaptation finance

- The recent pledges made by the developed countries on enhancing climate finance were welcomed in the outcome document from COP26.
- Multilateral development banks, other financial institutions, and the private sector needs to enhance finance mobilization to achieve climate plans.

World Food Program

- The WFP is working with communities to adapt to the changing climate that threatens their ability to grow food, secure incomes, and withstand shocks.
- It has supported 39 governments, helping them realise their national climate ambitions.
- In 2020, the WFP implemented climate risk management solutions in 28 countries, which benefited more than six million people.
- In India, the WFP and the Ministry of Environment, Climate Change, and Forestry are planning to develop a best practice model on adaptation and mitigation.

Way Forward

- Creating resilient livelihoods and food security solutions by protecting and improving the livelihood of vulnerable communities.
- The adaptation of **climate-resilient food crops**, such as millets, for nutritional security.
- Enabling women's control and ownership of production processes and assets and increased value addition and local solutions.
- **Promoting a resilient agriculture sector** by creating sustainable opportunities, access to finance, and innovation for small-holder farmers, with climate information and preparedness.
- **Building capacity and knowledge of civil society and governments** for vulnerability analysis to increase food security.