

CLIMATE CHANGE AND AGRICULTURE

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Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. But since the 1800s, human activities have been the main driver of climate change, primarily due to burning fossil fuels like coal, oil, and gas.

Burning fossil fuels generates greenhouse gas emissions that act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures.

Examples of greenhouse gas emissions that are causing climate change include carbon dioxide and methane. These come from using gasoline for driving a car or coal for heating a building, for example. Clearing land and forests can also release carbon dioxide. Landfills for garbage are a major source of methane emissions.

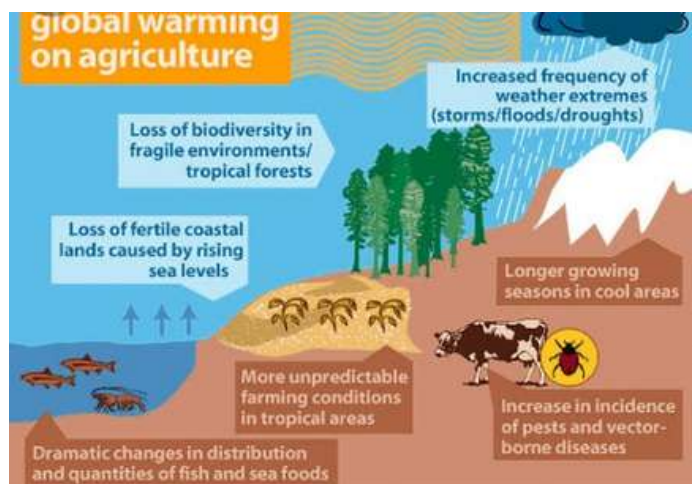
Greenhouse gas concentrations are at their highest levels in 2 million years and emissions continue to rise. As a result, the Earth is now about 1.1°C warmer than it was in the late 1800s. The last decade (2011-2020) was the warmest on record.

Many people think climate change mainly means warmer temperatures. But temperature rise is only the beginning of the story.

Because the Earth is a system, where everything is connected, changes in one area can influence changes in all others.



The consequences of climate change now include, among others, intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms, and declining biodiversity.



source: agrivi

AGRICULTURE

Agriculture, with its allied sectors, is unquestionably the largest livelihood provider in India, more so in the vast rural areas. It also contributes a significant figure to the Gross Domestic Product (GDP). Sustainable agriculture, in terms of food security, rural employment, and environmentally sustainable technologies such as soil conservation, sustainable natural resource management, and biodiversity protection, are essential for holistic rural development. Indian agriculture and allied activities have witnessed a green revolution, a white revolution, a yellow revolution, and a blue revolution.

This section provides information on agricultural produces; machinery, research, etc. Detailed information on the government policies, schemes, agriculture loans, market prices, animal husbandry, fisheries, horticulture, loans & credit, sericulture, etc. is also available.

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CAUSES, IMPACTS AND INTERVENTIONS



source: oecd.org

FACTS

- Agriculture is the largest employer in the world.
- India is the 2nd largest agricultural producer and 7th largest exporter of agricultural goods.
- Farmers need to produce 70% more food than today to feed the world's growing population by 2050.
- Agriculture is the single largest employer in the world.
- There are 914 million acres of farmland just in the U.S.
- The average U.S. farmer can feed 155 people.
- Beef farming accounts for 29% of American farms.

