



Climate change

Read in conjunction with the Overstrand Disaster Management Plan

2025/2026

DEFINING GLOBAL WARMING AND CLIMATE CHANGE

Climate change refers to long-term shifts in global or regional climate patterns, primarily driven by human activities such as burning fossil fuels, deforestation, and industrial processes. These activities release greenhouse gases, such as carbon dioxide (CO₂) and methane (CH₄), into the atmosphere, trapping heat and leading to a rise in global temperatures—a phenomenon known as global warming.

The effects of climate change are widespread, impacting weather patterns, sea levels, biodiversity, and human societies. Rising temperatures contribute to extreme weather events such as hurricanes, droughts and wildfires while melting ice caps and glaciers lead to rising sea levels, threatening coastal communities.

Addressing climate change requires international cooperation, policy changes and sustainable practices such as transitioning to renewable energy sources, improving energy efficiency, and protecting natural ecosystems. The urgency to take action is greater than ever, as scientists warn that failing to reduce emissions could lead to irreversible environmental and societal consequences.

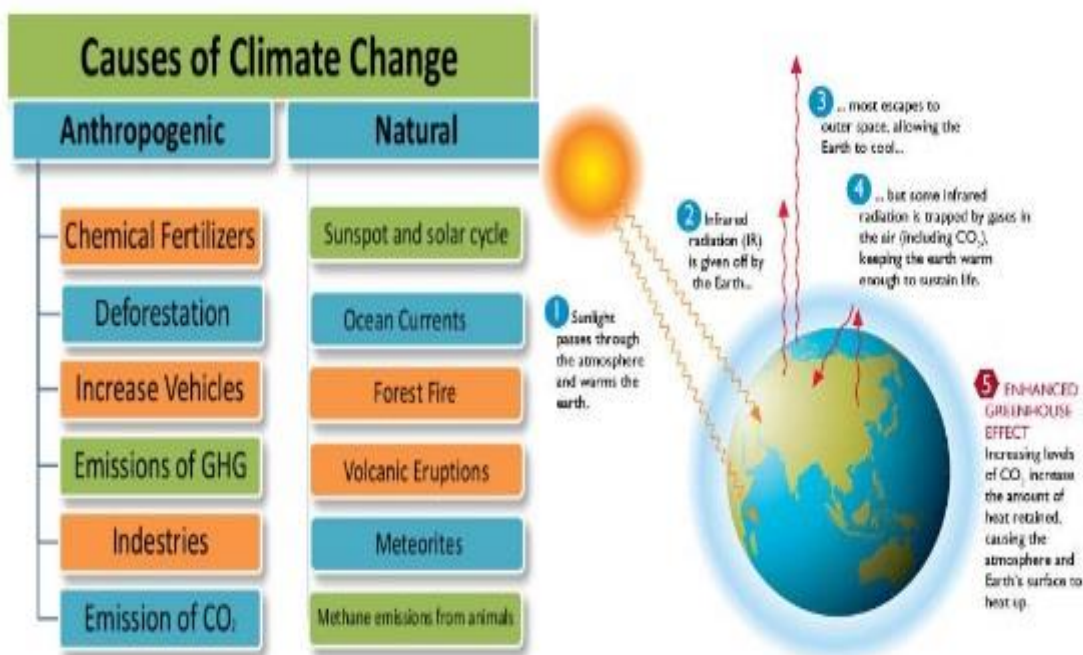


Figure: Climate Change

CAUSES OF CLIMATE CHANGE

- Warmer temperatures over time are changing weather patterns and disrupting the usual balance of nature. This poses many risks to human beings and all other forms of life on Earth.
- Changes in temperature cause changes in rainfall. This results in more severe and frequent storms. They cause flooding and landslides, destroying homes and communities, and costing a substantial amount of capital.
- Water is becoming scarcer in more regions.
- Droughts can stir destructive sand and dust storms that can move billions of tons of sand across continents.
- Deserts are expanding, reducing land to changes in climate and increases in extreme weather events are among the reasons behind a global rise in hunger and poor nutrition.
- Fisheries, crops and livestock may be destroyed or become less productive. Heat stress can diminish water and grasslands for grazing.
- Climate change intensifies the conditions that perpetuate poverty, making it increasingly difficult for communities to sustain themselves. Floods may sweep away urban slums, destroying homes and livelihoods. Heat can make it difficult to work in outdoor jobs.
- Weather-related disasters displace 23 million people a year, leaving many more vulnerable to poverty. People now face the threat of not having enough water on a regular basis.
- More frequent and intense droughts, storms, heat waves, rising sea levels, melting glaciers, and warming oceans can directly harm animals, destroy the places they live, and wreak havoc on people's livelihoods and communities.

AWARENESS PROGRAMS

- SAWS warnings
- Social media platforms
- Awareness campaigns