

The future is  
In Our Hands



STOP  
CLIMATE  
CHANGE



NABARD

Taking Rural India >> Forward

# Climate Change

Climate change refers to long-term shifts in temperatures and weather patterns. But since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil, and gas. Burning fossil fuel generates greenhouse gas emissions that act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures.

The main greenhouse gases come from using gasoline for driving a car or coal for heating a building. Clearing land and cutting down forests also releases carbon dioxide. Agriculture, oil, and gas operations are major sources of methane emissions. Energy, industry, transport, buildings, agriculture, and land use are among the main sectors causing greenhouse gases.

## DID YOU KNOW?

Typical "exporters" of emissions are USA, Europe, China and Russia, while a few Asian countries, as well as a number of African countries are typical "importers" of emissions.

## DID YOU KNOW?

Half of the world's coral reefs have died in the last 30 years, and two-thirds of the Great Barrier Reef have been damaged by coral bleaching – this happens when the sea temperature is too high.

## CLIMATE, WEATHER, AND NATURAL DISASTERS

Climate determines temperatures, weather diversity, rainfall patterns, as well as the nature of meteorological phenomena such as the severity of storms. It is due to this delicate relationship that we are facing both temperature rises and more frequent weather extremes and natural disasters as a result of climate change.

## BURNING FOSSIL FUELS

As we began to extract and burn fossil fuels on a large scale, unprecedented amounts of Carbon Dioxide (CO<sub>2</sub>) were released into the atmosphere. The concentration of CO<sub>2</sub> has increased by almost 50 percent since the Industrial Revolution.

## MAN-MADE EMISSIONS

Burning fossil fuels for electricity, heat, in industry and in transportation; deforestation; overuse of chemical fertilizers; and industrial production all increase the concentration of greenhouse gases in the atmosphere, leading to global warming.

## DID YOU KNOW?

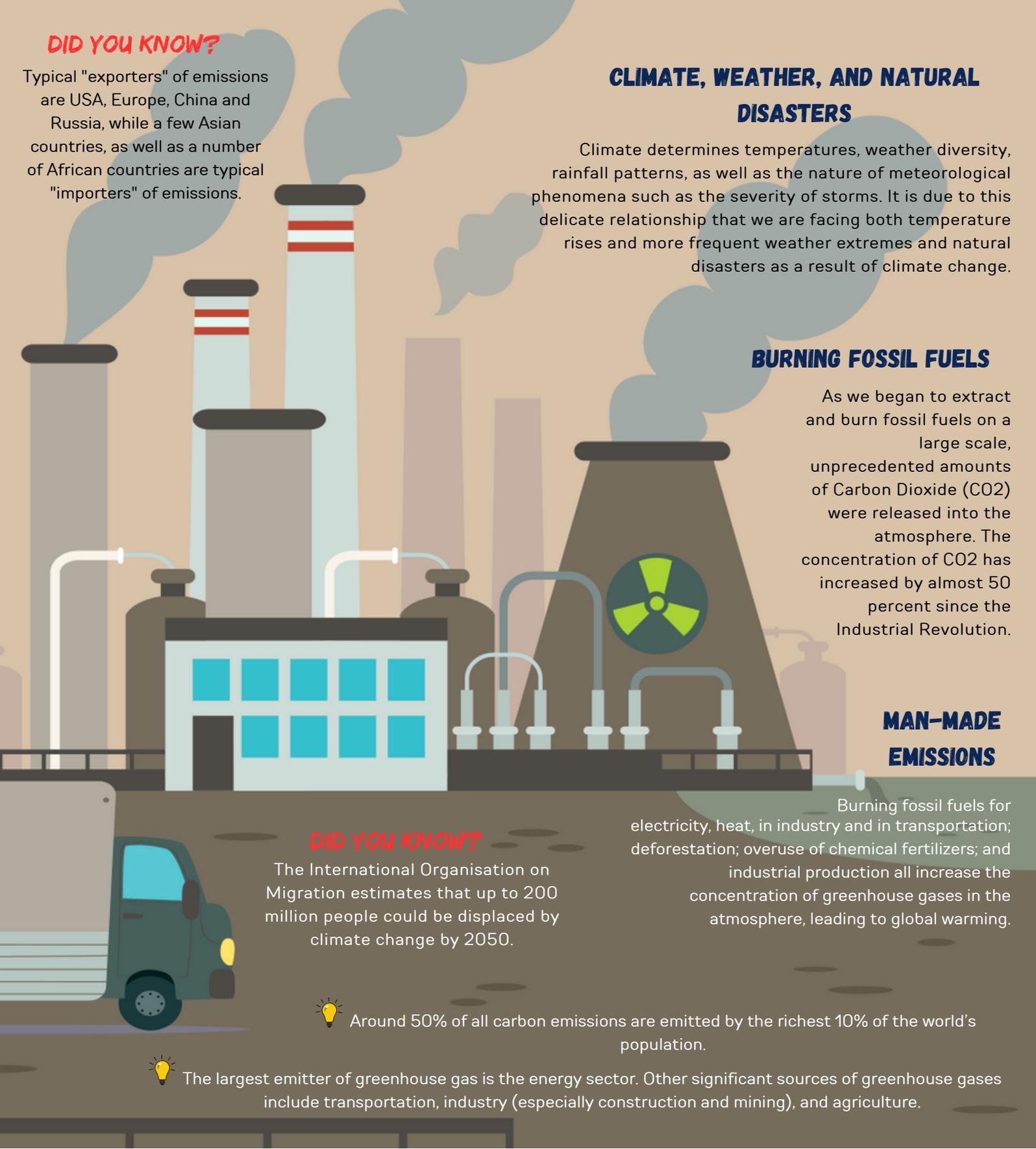
The International Organisation on Migration estimates that up to 200 million people could be displaced by climate change by 2050.



Around 50% of all carbon emissions are emitted by the richest 10% of the world's population.



The largest emitter of greenhouse gas is the energy sector. Other significant sources of greenhouse gases include transportation, industry (especially construction and mining), and agriculture.



## What NABARD is doing to mitigate climate change?

NABARD in the capacity of National Implementing Entity (NIE) for important funding arrangements viz., Adaption Fund (AF), Green Climate Fund (GCF), National Adaptation Fund for Climate Change (NAFCC), and Climate Change Fund (CCF) aims to channelize national, international and private finances for adaptation and mitigation of risks posed by Climate Change. Keeping in view the need for focused attention on capacity development, NABARD has taken the lead in establishing the Centre for Climate Change at BIRD, Lucknow.

### CHANGE-MAKING INTERVENTIONS OF NABARD



**Adaptation Fund (AF)**  
Officially launched at CoP 7 in 2007 at Marrakech, Morocco, this fund aims to finance concrete projects and programmes that help vulnerable communities in developing countries.

**The National Adaptation Fund for Climate Change (NAFCC)**  
This fund aims to meet the cost of adaptation to climate change of States and UTs which are most vulnerable.

**Green Climate Fund (GCF)**  
NABARD as Direct Access Entity (DAE) to GCF aims to promote a paradigm shift towards low emission and climate-resilient development pathways.

**Climate Change Fund (CCF)**  
An unique initiative of NABARD which aims towards addressing climate change impacts, adaptation and mitigation measures, awareness generation, knowledge sharing and facilitate sustainable development.



*Creating Impact and Mitigating Climate-Change*



Weather station installed at Kashipur Purulia



Vegetable cultivation on embankment



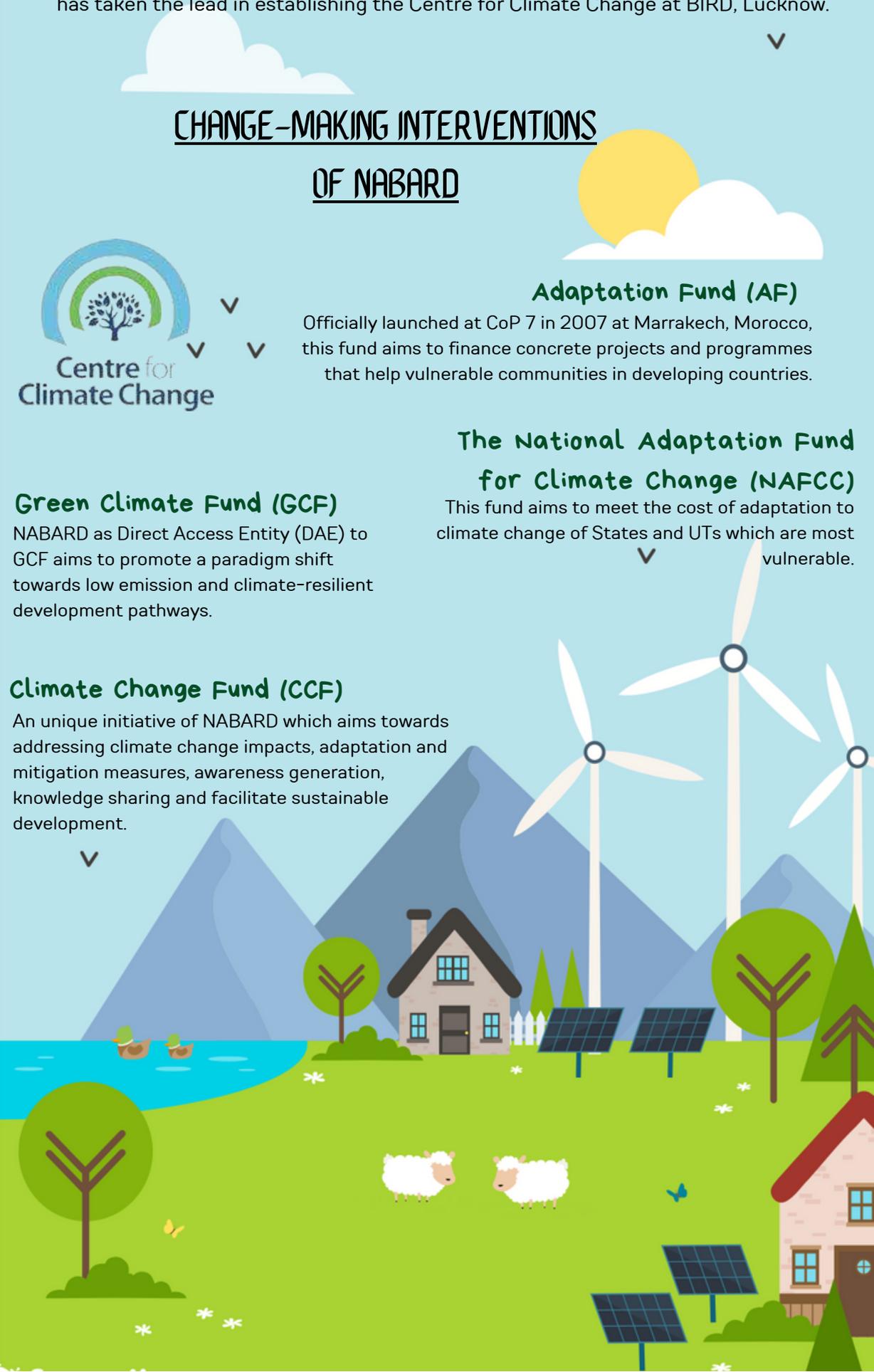
Watershed Development Project of NABARD at Purulia



Smokeless Chulha under Tribal Development Fund of NABARD



Water Conservation Project under Adaptation Fund of NABARD



# WHAT TWO DEGREES TEMPERATURE RISE MEANS TO OUR EARTH



Since the last century, the Earth has already experienced an exponential rise in temperature by 1°C. If the increase continues to reach 2°C in the future, the consequences will be catastrophic and irreversible.



Once every five years, 37% of the world population is exposed to extreme heatwaves.



More than 400 million people worldwide are living with water scarcity.



The earth loses 18% of insects, 16% of plants, 8% of vertebrates.



The coral reefs around the world declined up to 99%.



Sea levels rise by up to 46 cm and impact 30 to 80 million people.



By 2030, around 8 crore global job losses are projected due to heat-stress-associated productivity decline.

**National Bank for Agriculture and Rural Development**  
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