

Global Warming and Major Climate Disasters

A five-year news feature and summary report 2022-2026

The climate is changing faster than cities, farms and public systems are adapting. This report follows six major disasters, explains the damage, and connects global responsibility with practical community action in Thailand.



Rio Grande do Sul floods, Brazil, 2024 | FEICON

Prepared for public communication by the Community of Bio Organic Fertilizer Plant Enterprise, Chaiyaphum

Five years of warning signals

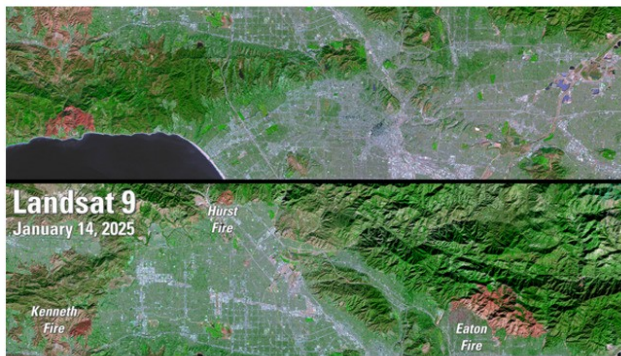
Year	Location	Event
2022	Pakistan	Flood
2023	Libya	Flood and dam failure
2024	Brazil	Historic flood
2025	Los Angeles	Wildfire
2026	Mozambique	Flood
2026	Bangkok	Urban flood

The climate is changing faster than cities, farms and public systems are adapting. This report follows six major disasters, explains the damage, and connects global responsibility with practical community action in Thailand.

Disasters are not the responsibility of ordinary people alone

Climate risk is shared, but responsibility is not equal. Industrialised economies and high-emitting businesses have contributed more to accumulated greenhouse gases and possess greater financial and technological capacity. They should therefore cut emissions faster and support adaptation and recovery in vulnerable countries and communities.

- IPCC reports that least developed countries contributed only about 0.4% of cumulative CO₂ emissions from 1850 to 2019.
- The UNFCCC principle of common but differentiated responsibilities requires action from all countries, with greater leadership and support from developed countries.
- UNEP reports that high-income countries use about six times more resources and generate roughly ten times the climate impacts of low-income countries.
- Loss-and-damage finance should reach people and places that face impacts they did little to create.



Multiple locations: Pakistan, Libya, Brazil, Los Angeles, Mozambique and Bangkok | Credits listed by event

Shared responsibility now

Actor	Required action
Industry and large companies	Reduce Scope 1, 2 and 3 emissions; disclose progress; use clean energy and circular materials; purchase low-carbon products fairly.
Developed countries	Provide grants, concessional finance, technology transfer and adequate contributions to loss-and-damage mechanisms.
Governments and cities	Upgrade drainage, water management, land-use planning, early warning, public health and social protection.
Finance and buyers	Link finance and procurement to verified outcomes and provide long-term offtake and carbon premiums.
Communities	Reduce burning, restore soil, manage water, produce safe food and document results without carrying the full cost alone.

What our small community enterprise is doing

The Community of Bio Organic Fertilizer Plant Enterprise, Chaiphaphum is small, but it is acting in real fields. Its work connects no-burn farming, biomass management, soil restoration, safe food, digital MRV and community income.



Real community-enterprise activities: organic fertiliser, field work, Healthy Greenhouse and safe produce

Project information: Suraput Muensirach website: <https://suraphat-mueangsirat.suraput-m.chatgpt.site/> | Community enterprise website: <https://chaiyaphum-organic-enterprise.pattanachaiyaphum888.chatgpt.site/>

Workstream	How it works	Results and targets
BIO-NO BURN	Collect and process cane leaves and farm residues instead of open burning.	Target: 5,000 rai and about 2,500 tonnes of biomass per year.
Bio-organic fertiliser	Convert biomass and organic materials into soil inputs that reduce chemical dependency.	3,353 kg sold for THB 354,870; target capacity 55 tonnes per year.
Soil and water	Increase organic matter, water retention and resilience to heat and dry spells.	Demonstration plots record costs, yield and soil conditions.
Healthy Greenhouse	Produce safe vegetables and fruit under protected cultivation.	1.2-rai demonstration area and two operating greenhouses.
Digital MRV	Record plots, biomass, avoided burning,	Supports carbon, ESG, supply-chain and

inputs and outcomes.

partner reporting.

Market and learning

Connect farmers, buyers, students,
technology and funding.

Start with 100 households/220 rai; scale
toward 1,000 households.

We are not waiting for someone else to solve the crisis. We are reducing burning, restoring soil, producing food and building income in real fields. What is missing is not commitment, but a fair support system that allows small action to scale.

Pakistan submerged

Monsoon rainfall and river flooding across the Indus basin



Indicator	Evidence
People affected	More than 33 million
Deaths	More than 1,700
Estimated damage	About USD 40 billion
Main losses	Homes, roads, bridges, crops, livestock and sanitation

What happened

Exceptional monsoon rain, combined with pre-monsoon heat and meltwater, produced vast flooding visible from space. More than one million homes were damaged or destroyed, agriculture and livestock suffered, contaminated water increased disease risk, and broken transport routes delayed relief.

Climate connection

A warmer atmosphere can hold more moisture and increase the intensity of heavy rainfall, while exposure, poverty and infrastructure determine the final scale of loss.

Lesson

Early warning, safe housing, resilient roads and international recovery finance must reach vulnerable communities.

Derna, Libya swept away

Storm Daniel, extreme rainfall and dam failures



Storm Daniel, extreme rainfall and dam failures

Indicator	Evidence
Date	10-11 September 2023
Deaths	Several thousand
Critical failure	Two dams collapsed upstream of Derna
Main losses	Neighbourhoods, roads, bridges, power, water and health services

What happened

Torrential rain filled reservoirs above Derna. Two dams failed and a destructive wall of water crossed the city, sweeping buildings and families toward the sea. Weak maintenance, fragmented governance and settlements along the wadi multiplied the toll.

Climate connection

Warmer Mediterranean waters can add heat and moisture to storms, but climate was not the only cause: dam safety and disaster governance were decisive.

Lesson

Infrastructure must be inspected and redesigned for current and future extremes, not only historical weather.

Historic floods in southern Brazil

Rio Grande do Sul and Porto Alegre inundated



Rio Grande do Sul and Porto Alegre inundated

Indicator	Evidence
Period	Late April-May 2024
Deaths	More than 180
Economic impact	Agricultural losses around BRL 8.5 billion
Main losses	Cities, farms, airport, roads, bridges, water and electricity

What happened

Persistent rainfall pushed rivers beyond their banks and isolated municipalities. Homes, schools, hospitals and supply chains were disrupted while crops, livestock and storage facilities suffered heavy losses.

Climate connection

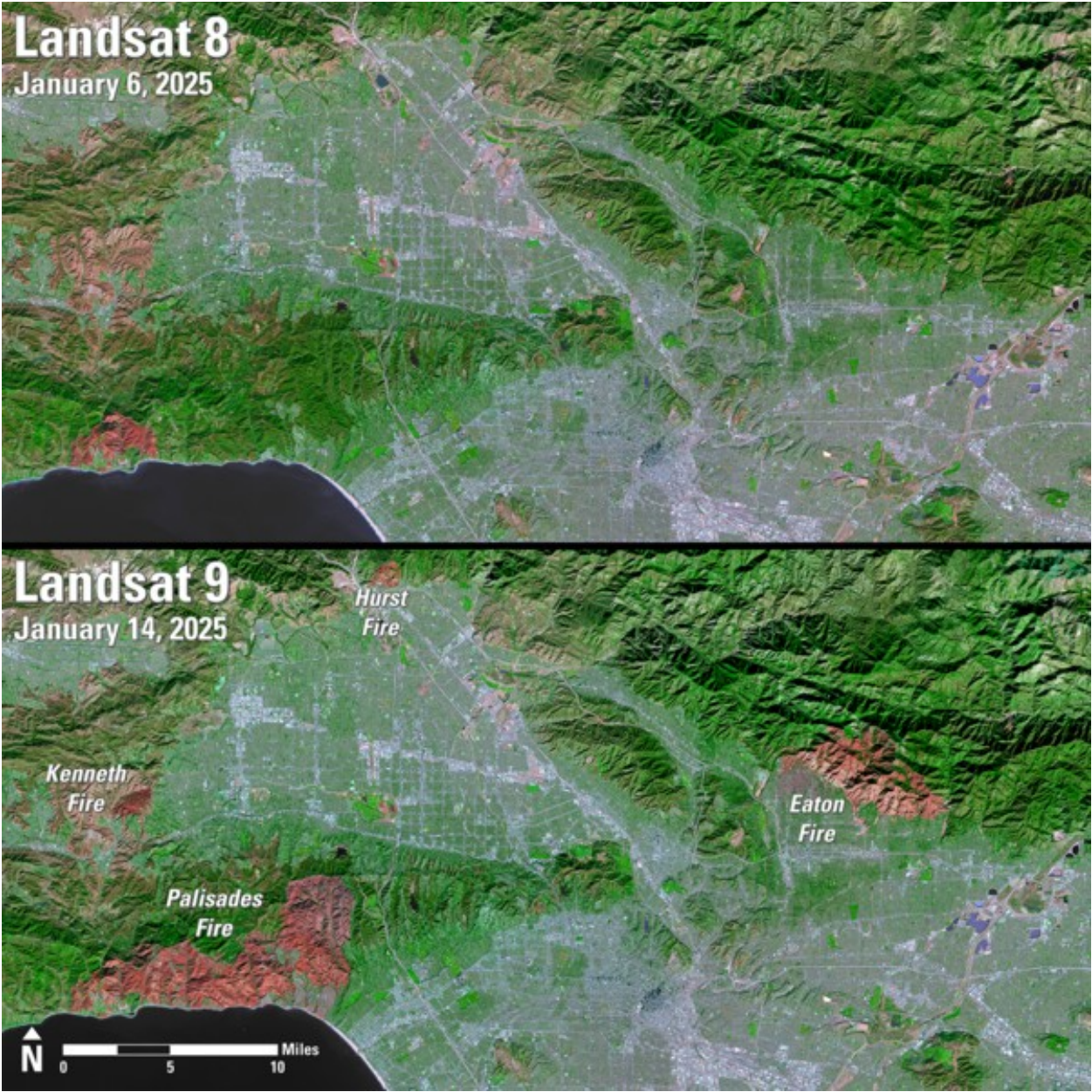
El Nino influenced regional rainfall, while a warmer atmosphere increased heavy-rain potential. Drainage, land use and settlement patterns shaped the damage.

Lesson

Cities need retention areas, upgraded drainage, resilient construction and protection for food systems.

Los Angeles in flames

Palisades and Eaton fires at the urban-wildland edge



Palisades and Eaton fires at the urban-wildland edge

Indicator		Evidence	
Start		7 January 2025	
Deaths		At least 28	

Buildings

More than 16,000 damaged or destroyed

Attribution finding

Fire-prone conditions about 35% more likely with global warming

What happened

Dry vegetation and strong Santa Ana winds drove flames rapidly into communities. Evacuations, smoke, housing losses and insurance pressure extended well beyond the burn area.

Climate connection

Climate change increased the likelihood of hot, dry and windy fire-weather conditions, while ignition, fuel management, development and evacuation readiness remained important.

Lesson

Fuel reduction, defensible space, fire-resistant buildings, warnings and land-use planning must operate together.

Major floods in Mozambique

Heavy rain across southern river basins



Heavy rain across southern river basins

Indicator	Evidence
Period	January 2026
Displaced	More than 300,000 in Gaza Province
Affected	Around 600,000 in Gaza and Maputo provinces
Main losses	Homes, roads, farms, water supplies and health access

What happened

Weeks of rain caused the Limpopo and Incomati rivers to overflow. Communities and farmland were submerged, roads failed and crowded shelters faced waterborne disease risks.

Climate connection

The event fits a broader rise in heavy-rain risk, but a precise fraction attributable to global warming had not been established when this report was prepared.

Lesson

Lower-income countries need early warning, resilient infrastructure, recovery grants and fair loss-and-damage support.

Bangkok races to drain the city

Torrential rain, urban flooding and transport disruption



Torrential rain, urban flooding and transport disruption

Indicator	Evidence
Period	24-27 September 2026
Status	Disaster zones declared in affected areas
Main impacts	Roads, homes, businesses, commuting and public services
Risk factors	Extreme rain, drainage capacity, canals, subsidence and exposure

What happened

Intense rain overwhelmed roads and drainage, stranded vehicles and disrupted daily life. Authorities accelerated pumping and canal drainage as water gradually receded.

Climate connection

Climate change can intensify heavy rainfall, while dense development, hard surfaces, subsidence and constrained waterways determine urban flood depth and duration.

Lesson

Bangkok needs basin-wide water management, permeable space, protected canals, climate-ready drainage and transparent public warnings.

What the five-year pattern means

Dimension	Observed pattern
Human safety	Deaths, displacement, disease and prolonged mental stress.
Food and farming	Crop, livestock and soil losses; higher prices and disrupted supply.
Cities and infrastructure	Damage to housing, transport, utilities, schools and health services.
Economy and inequality	Low-income households recover more slowly and often carry uninsured losses.
Required response	Rapid emissions cuts, adaptation, early warning, resilient investment and fair finance.

Climate risk is shared, but responsibility is not equal. Industrialised economies and high-emitting businesses have contributed more to accumulated greenhouse gases and possess greater financial and technological capacity. They should therefore cut emissions faster and support adaptation and recovery in vulnerable countries and communities.

From warning to action

We are not waiting for someone else to solve the crisis. We are reducing burning, restoring soil, producing food and building income in real fields. What is missing is not commitment, but a fair support system that allows small action to scale.

Sources and image credits

1. IPCC AR6 Working Group I Chapter 11 and Working Group III Chapter 2.
2. UNFCCC climate finance and Fund for Responding to Loss and Damage.
3. UNEP International Resource Panel, Global Resources Outlook 2024.
4. World Meteorological Organization, State of the Global Climate reports and event updates.
5. NASA Earth Observatory imagery for Pakistan, Libya and Mozambique.
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7. Contemporary reporting and official updates on Bangkok flooding, 24-27 September 2026.
8. Suraput Muensrirach website: <https://suraphat-mueangsirat.suraput-m.chatgpt.site/>
9. Community enterprise website and activity images: <https://chaiyaphum-organic-enterprise.pattanachaiyaphum888.chatgpt.site/>

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Figures may be revised after official verification. This report was checked through 28 September 2026 and does not claim that global warming is the sole cause of every disaster.