

 **Down To Earth****CLIMATE**

INDIA 2022

An assessment
of extreme
weather events
JANUARY - SEPTEMBER



India saw extreme
weather events on **88%**
of the days in the first
nine months of the year

The country recorded its
warmest March,
3rd warmest April in
over a century

Weather events have
killed **2,755** people,
affected **1.8** million
hectares of crop area

Climate change is real

IPCC 2022



- A. That the world has a small (and getting smaller) window to act to reverse damage
- B. That climate change impacts are devastating; half the world population is highly vulnerable to catastrophic changes; and that this will get worse, much worse.
- C. That the poor in the world as worst hit – they are victims, they have not contributed to the stock of greenhouse gases in the atmosphere. This is why, for the first time, IPCC has acknowledged the need for equity and climate justice.
- D. That climate change related displacement – people being forced out of their villages/homes because of repeated extreme and variable weather impacts is now happening and will increase. **This will increase insecurity in our world.**

Why this report?



- We need to get the 'full' picture of the extreme weather events
- We need to count more than the disasters; **we need to count the losses and damages**
- We need to put a **human face** on the impacts of climate change
- So that we can invest in risk and resilience
- So what we can demand reparations for loss and damage from the countries that are responsible for the emissions in the atmosphere
- So that we understand the fact that the future will be worse – temperatures are expected to cross 1.5 degree C and even reach 3 degree C

New abnormal; increased frequency speaks of the change that is happening



- India has seen close to a disaster every day in the nine-months of this year – from heat and cold waves, cyclones, lightening and heavy rain, floods and landslides.
- It also experienced record-breaking temperatures for several months and regions across the country were deluged because of very and extremely heavy rainfall.
- This led to floods and loss of life, property and livestock. This variable and extreme rain also led to drought in the country – another disaster, which is not even counted as an extreme weather event

Once in 100 years is now once in 5-4-3-
2-1 years



- In 2022, India recorded its seventh wettest January since 1901.
- This March was also the warmest ever and the third driest in 121 years.
- It was also the country's third warmest April, 11th warmest August and 8th warmest September since 1901.
- Eastern India and Northeast India saw its warmest and driest July in 121 years. The region also recorded its 2nd warmest August and 4th warmest September in 2022.

Watermark of climate change



- Climate change is not about the single event but about the increased frequency of the events—that what we saw as the one in 100 years extreme event has now compressed to become one in five years or even less.
- Worse, it is now all coming together—each month is breaking a new record.
- This in turn is breaking the backs of the poorest who are worst impacted and are fast losing their capacities to cope with these repeated and frequent events.

Revenge of nature: all extreme weather disasters happening in this period



- Lightening and storms were spread over 30 states and claimed 773 lives.
- Every day of the three months of monsoon—from June to August saw heavy to very heavy and extremely heavy rainfall in some part of the country.
- Heatwaves claimed 45 lives, but what is not captured in the data is the impact of the prolonged high temperatures on peoples' wellbeing in north India – from farmers to construction workers and how they would have coped (or not) because of the intense and searing heat.
- The impact of severe cold episodes and frost is worse for crop damage – this is also not captured in the data that is available. It is clear that farmers must have adequate systems for compensation for weather-related losses. Without this, their livelihoods are threatened; every loss adds to their mounting debt burden and pulls them into the cycle of marginalisation and poverty.

Cyclones: good and bad news



- The good news is that fatalities because of cyclones were few—only 2 lives were lost according to available data from the cyclones that destroyed 95,066 ha in the country.
- This is because IMD's work on cyclone forecasting. And because state governments have vastly improved their systems of disaster management so that they can evacuate people quickly and provide them the assistance that is needed in the shelters.
- But the fact is each cyclone takes away that development dividend that governments work so hard to build—from public schools to water and health facilities and road and communication infrastructure. It also destroys peoples' ability to cope as their lose livelihoods and resources.

Drought-flood-cyclone not single day events



- Cripple people
- Destroy livelihoods
- Take away development dividend
- As events become more frequent, survival becomes more difficult
- No option but to move – migrate – **to cities to new countries**
- Add to growing insecurity in world
- This is why we must get the big picture on the extreme events and human costs

Count losses and damages, not just number of disasters



- It is said “everybody loves a good drought” – this is because natural disasters were ways in which state governments would over-estimate their bills for central assistance.
- But now we need rigorous systems of accounting of the losses and damages. These are abnormal times.
- The magnitude of the number of such events needs assessment; the fact that this will lead to cumulative and extensive damage needs to be accounted for and people compensated.
- This is where governments must focus at COP-27: on the need for reparation funds for countries for these losses and damage.