





### COP27: Worst of times

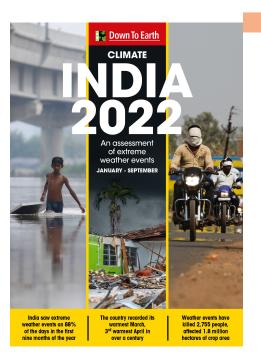


- Industrialized countries have to drastically cut emissions; but high fuel prices; fear of cold winter is driving them back to fossil fuels
- We are <u>not on track</u> to reduce emissions at the scale and pace needed
- At the same time
- Climate change impacts are devastating the world rich but it is the poor who are worst hit
- And future will be worse temperatures are expected to cross 1.5 degree C and even reach 3 degree C – our world is in trouble; big trouble

## 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.



https://www.downtoearth
.org.in/weather\_disasters
\_india/

#### **INDIA 2022**

### **DISASTER A DAY**

India experienced extreme weather events on 241 of the 273 days, or a little over 88% of the days from January 1 to September 30, which claimed 2,755 lives, affected 1.8 million hectares (ha) crop area, 416,667 houses and killed over 69,007 animals

#### Region-wise extreme weather events (January 1- September 30, 2022)

- Total animal deaths (big and small)

#### Central region

It recorded extreme weather events on 198 of the 273 days, which claimed 887 lives, damaged 136,780 ha crop area, 28,032 houses and killed 7,519 animals

|                |     | 8   | <u>\$\$\$</u> | <b>a</b> | )     |
|----------------|-----|-----|---------------|----------|-------|
| Madhya Pradesh | 140 | 276 |               | 6,646    | 997   |
| Maharashtra    | 112 | 230 |               | 3,592    | 4,330 |
| Gujarat        | 78  | 152 |               | 6,574    | 1,436 |
| Chhattisgarh   | 62  | 91  | 458           | 1,439    | 527   |
| Odisha         | 62  | 50  | 1,36,323      | 9,693    | 229   |
| Goa            | 36  |     |               | 88       |       |



#### South Peninsula region

It recorded extreme weather events on 125 of the 273 days, which claimed 350 lives, damaged 1.06 million ha crop area, 64,837 houses and killed 4,382 animals

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|-------------------|----|----------|------------|--------|-------|
| Karnataka         | 82 | 117      | 9,96,190   | 47,703 | 1,664 |
| Kerala            | 53 | 74       |            | 2,215  | 136   |
| Andhra Pradesh    | 45 | 33       | 25,212     | 45     | 9     |
| Telangana         | 41 | 27       | 16,997     | 14,858 | 1,574 |
| Tamil Nadu        | 39 | 4        |            |        |       |
| Puducherry        | 13 |          | 9          | 16     | 999   |
| Lakshwadeep       | 2  |          |            |        |       |
| Andaman & Nicobar | 9  |          |            |        |       |



#### Northwest region

It recorded extreme weather events on 195 of the 273 days, which claimed 735 lives, damaged 393,726 ha crop area, 5,122 houses and killed 1,707 animals

| •                 |     |     |          |          |     |
|-------------------|-----|-----|----------|----------|-----|
|                   |     | 8   | <u> </u> | <b>a</b> | ž   |
| Uttar Pradesh     | 104 | 158 | 2,94,811 | 805      | 2   |
| Himachal Pradesh  | 98  | 160 |          | 1,427    | 966 |
| Rajasthan         | 99  | 70  |          | 25       | 184 |
| Uttarakhand       | 55  | 37  |          | 977      | 352 |
| Haryana           | 53  | 1   | 16,187   |          |     |
| Punjab            | 47  | 15  | 28       | 1,888    | 203 |
| Delhi             | 41  | 3   |          |          |     |
| Jammu and Kashmir | 31  | -   |          |          |     |
| Chandigarh        | 10  | -   |          |          |     |



### ★ Total animal deaths (big and small) East and Northeast region

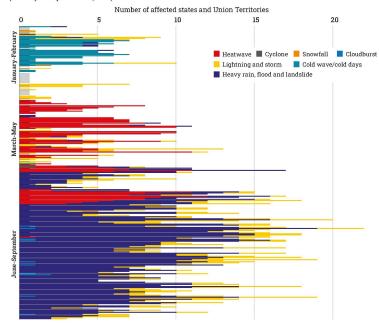
It recorded extreme weather events on 171 of the 273 days, which claimed 783 lives, damaged 256,517 ha crop area, 318,676 houses and killed 55,399 animals

■ Number of days Deaths H Crop area affected (ha) Houses damaged (fully and partially)

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|-------------------|-----|-----|---------|---------|--------|
| Assam             | 131 | 280 | 243,929 | 306,362 | 54,948 |
| Meghalaya         | 58  | 41  | 1,114   | 4,924   | 359    |
| West Bengal       | 56  | 6   |         |         |        |
| Bihar             | 52  | 246 | 10,700  | 140     |        |
| Jharkhand         | 46  | 23  |         |         |        |
| Sikkim            | 40  | 4   | 193     | 3,871   | 12     |
| Arunachal Pradesh | 32  | 49  | 96      | 800     | 49     |
| Tripura           | 20  | 1   |         | 1,879   | 1      |
| Manipur           | 16  | -   |         |         |        |
| Nagaland          | 14  | 30  | 484     | 700     | 30     |
| Mizoram           | 4   |     |         |         |        |

#### Day-wise extreme weather events in India

(January 1 - September 30, 2022)



 $Sources: India\ Meteorological\ Department, Pune, Disaster\ Management\ Division\ under the\ Union\ Ministry\ of\ Home\ Affairs\ and\ media\ reports$ 



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



- India has seen close to a extreme weather disaster every day of 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

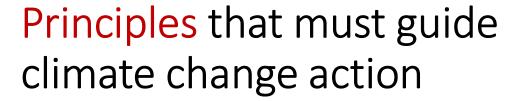


- Climate change is not about the single event but about the increased frequency of the events
- Each month is breaking a new record.
- Each region of the world is hit. Devastated by the increasing frequency, intensity and ferocity of the events; Revenge of Nature
- This is breaking the backs of the poorest who are worst impacted
- They are fast losing their capacities to cope with these repeated and frequent events

## Drought-flood-cyclone not single day events



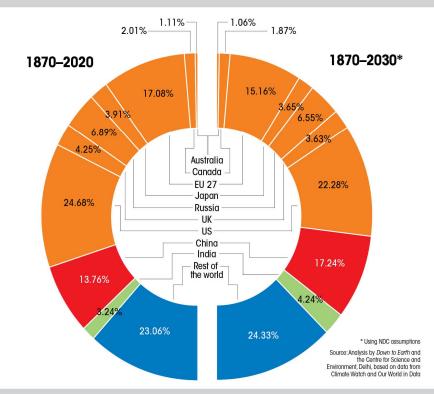
- Cripple people
- Destroy livelihoods
- Take away development dividend
- As events become more frequent, survival becomes more difficult
- No option but to move migrate to cities to new countries
- Adds to growing insecurity in world
- We have to get serious about building resilience; mitigating risks (adaptation) and we have to demand reparation (loss and damage)



- Global problem, which demands cooperation of all
- Rules must be fair and just, for rich and poor
- Action must be based on the responsibility of individual country to the stock of greenhouse gases (which are leading to temperature increase and so extreme weather)
- Loss and damage is about payment for compensation/reparation and it is the liability of polluters







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