

CLIMATE  
SATYAGRAHA



**HEADING FOR  
EXTINCTION  
what should we do  
about it?**

**WHO ARE WE?  
WHY ARE WE HERE?**

# UNWAIT.

The **precautionary principle** requires that, “When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.”

In other words, if there is a strong suspicion that a certain activity may have environmentally harmful consequences, it is better to control that activity now rather than to wait for incontrovertible scientific evidence.



**But we, as a race, have ignored that.  
And now, we have a problem.**



# We are heading for extinction.

Dramatic? Hear us out.

## PART 1

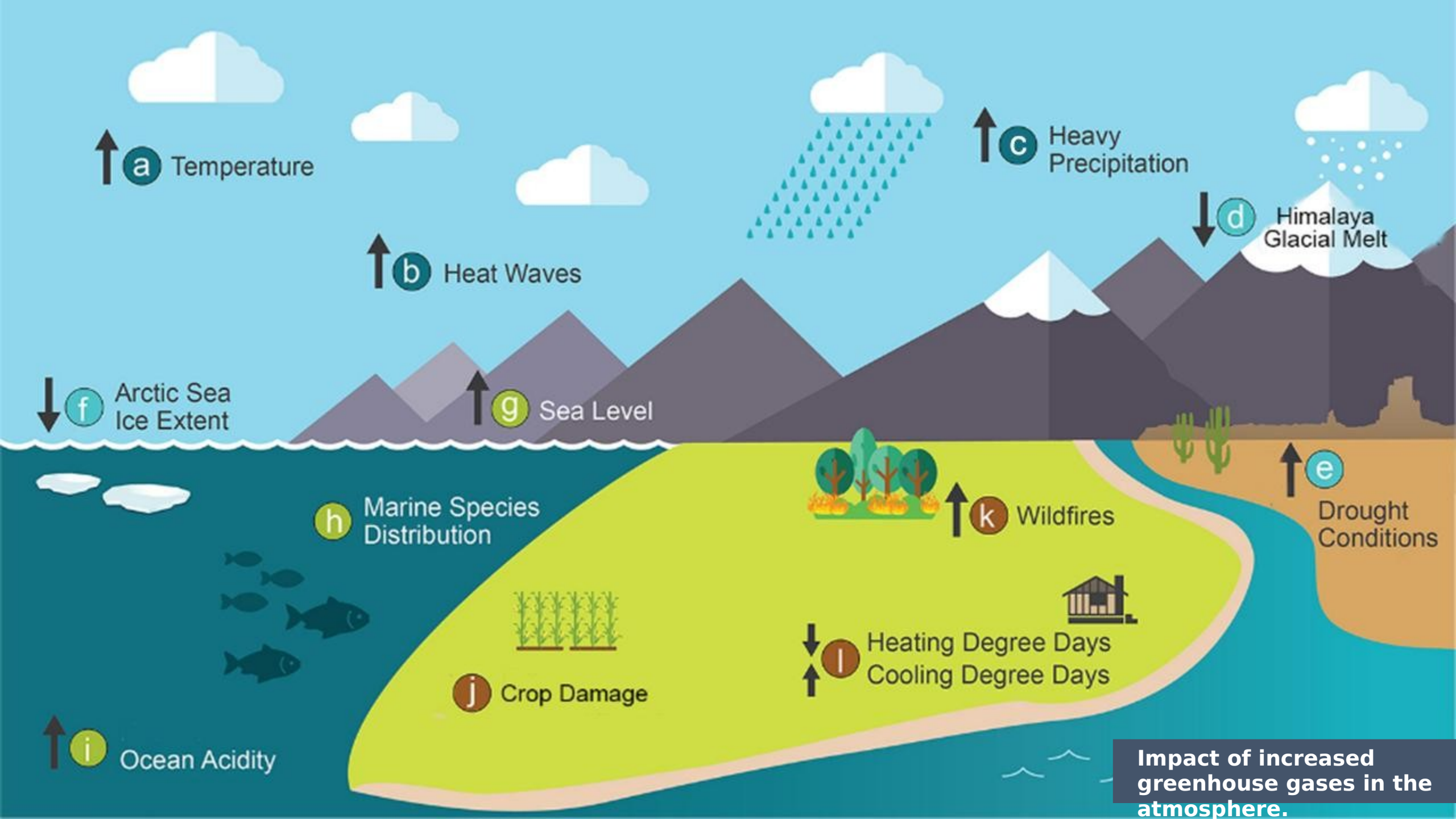
# THE CLIMATE AND ECOLOGICAL CRISIS

## PART 2

# WHAT TO DO ABOUT IT

# **A quick recap of school days.**

Greenhouse gases and climate change.



↑ **a** Temperature

↑ **b** Heat Waves

↑ **c** Heavy Precipitation

↓ **d** Himalaya Glacial Melt

↓ **f** Arctic Sea Ice Extent

↑ **g** Sea Level

**h** Marine Species Distribution

↑ **k** Wildfires

↑ **e** Drought Conditions

↑ **i** Ocean Acidity

**j** Crop Damage

↓ **l** Heating Degree Days  
↑ Cooling Degree Days

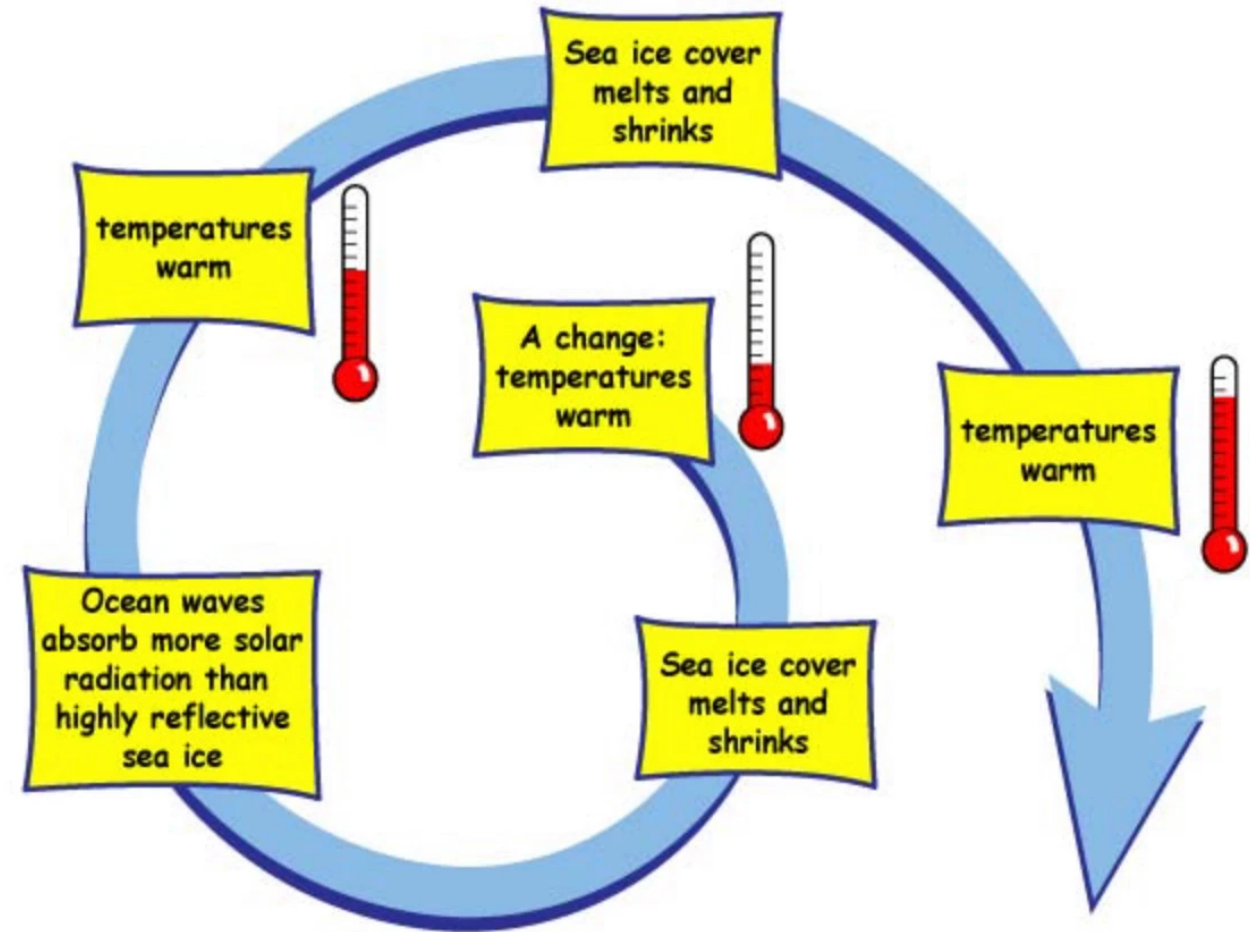
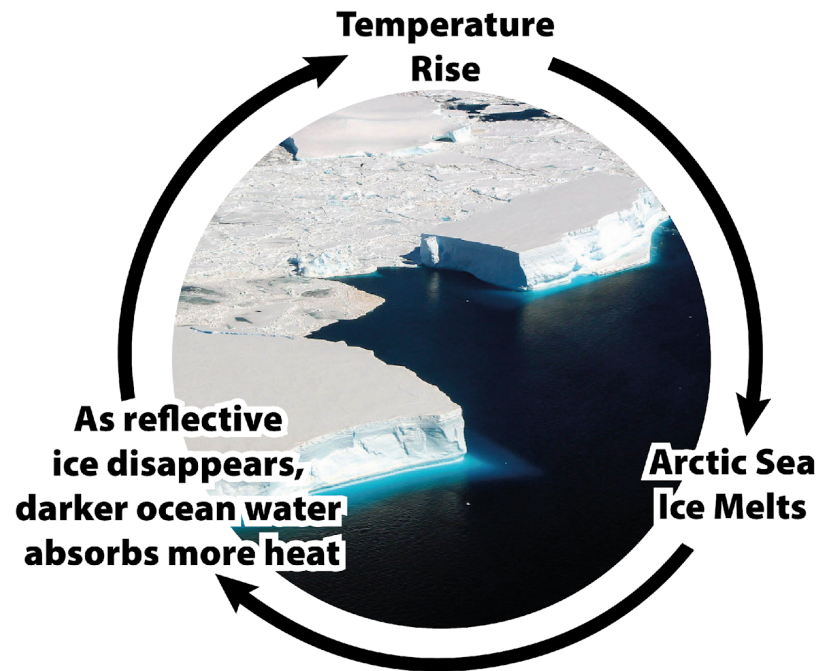
**Impact of increased greenhouse gases in the atmosphere.**

# ALBEDO EFFECT aka FEEDBACK LOOPS



*"Climate change is not simply a matter of cause and effect. It's more like a vicious circle."*

Yale Climate Connections, 2018



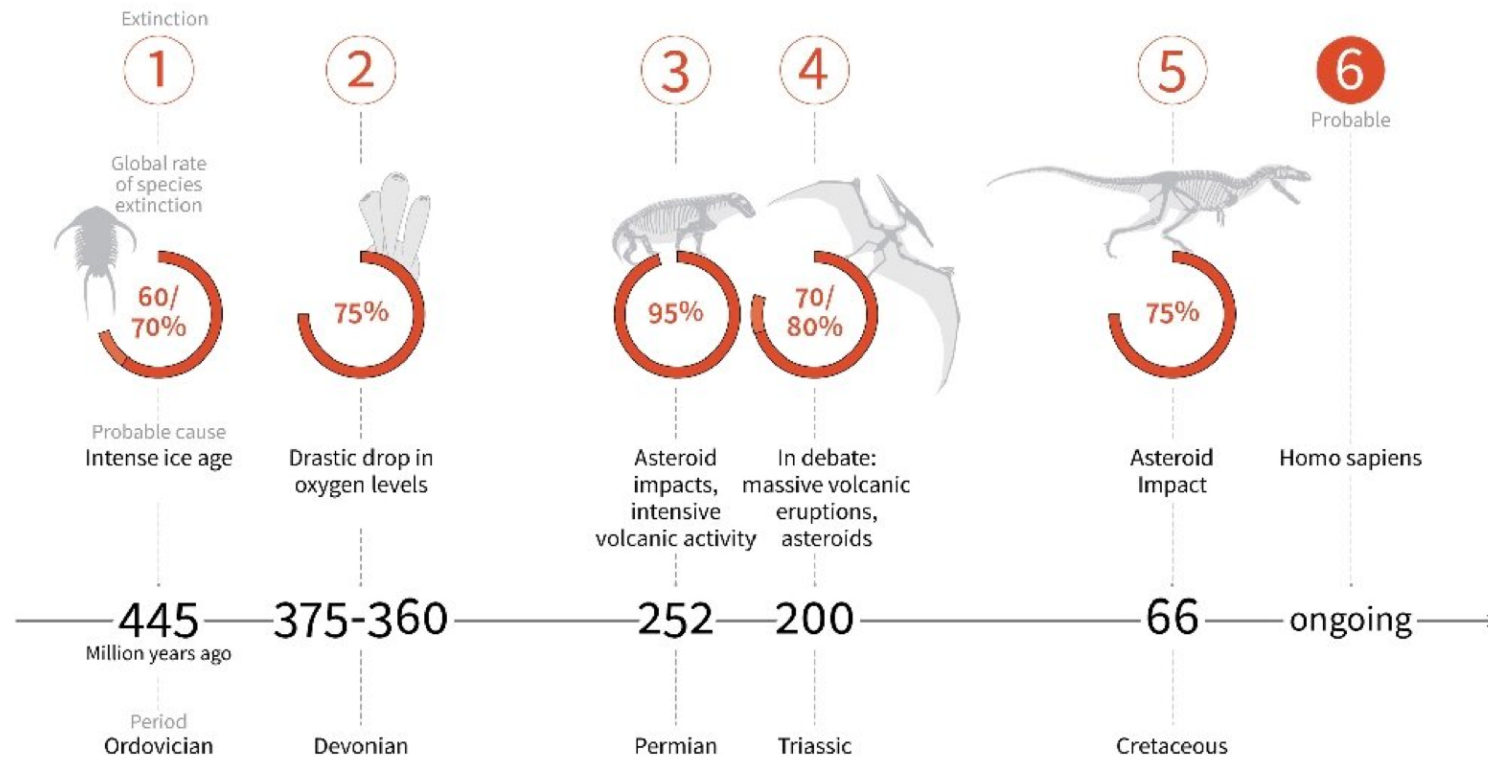
**What happens if we don't  
break the cycle?**



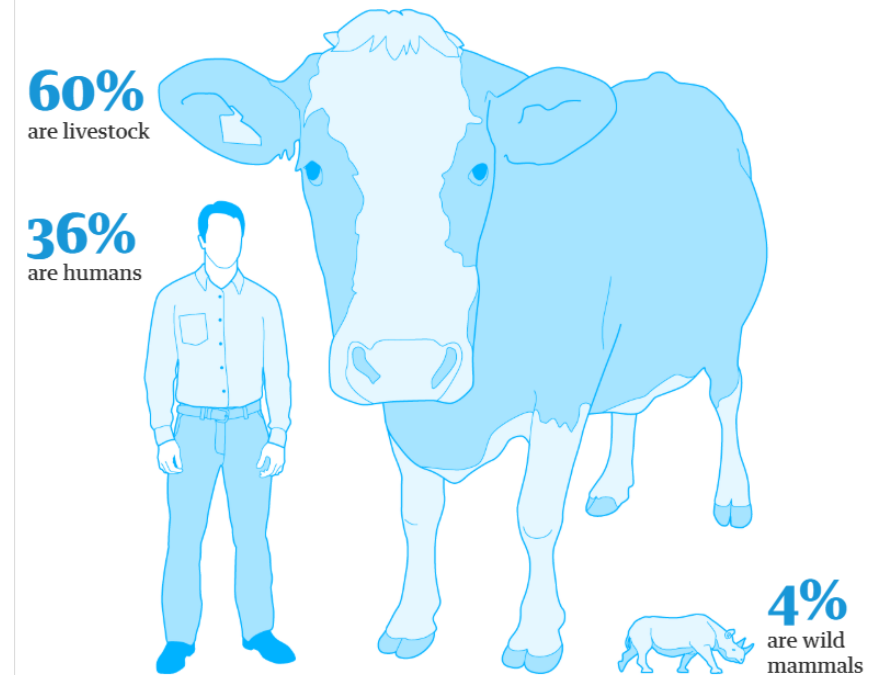
# HEADING FOR EXTINCTION.

## Earth's "mass extinctions"

During the last 500 million years, Earth has experienced five periods when at least half the living creatures were wiped out



Of all the mammals on Earth, 96% are livestock and humans, only 4% are wild mammals





**Why don't more people know  
or care about this?**

# We are currently already observing

- Global temperature rise
- Warming oceans
- Glacial retreat
- Sea level rise
- Extreme weather events
- Ocean acidification
- Loss of coral reef
- Desertification
- Species loss



# NATURE OF THE INFORMATION WE HAVE ABOUT CLIMATE CHANGE

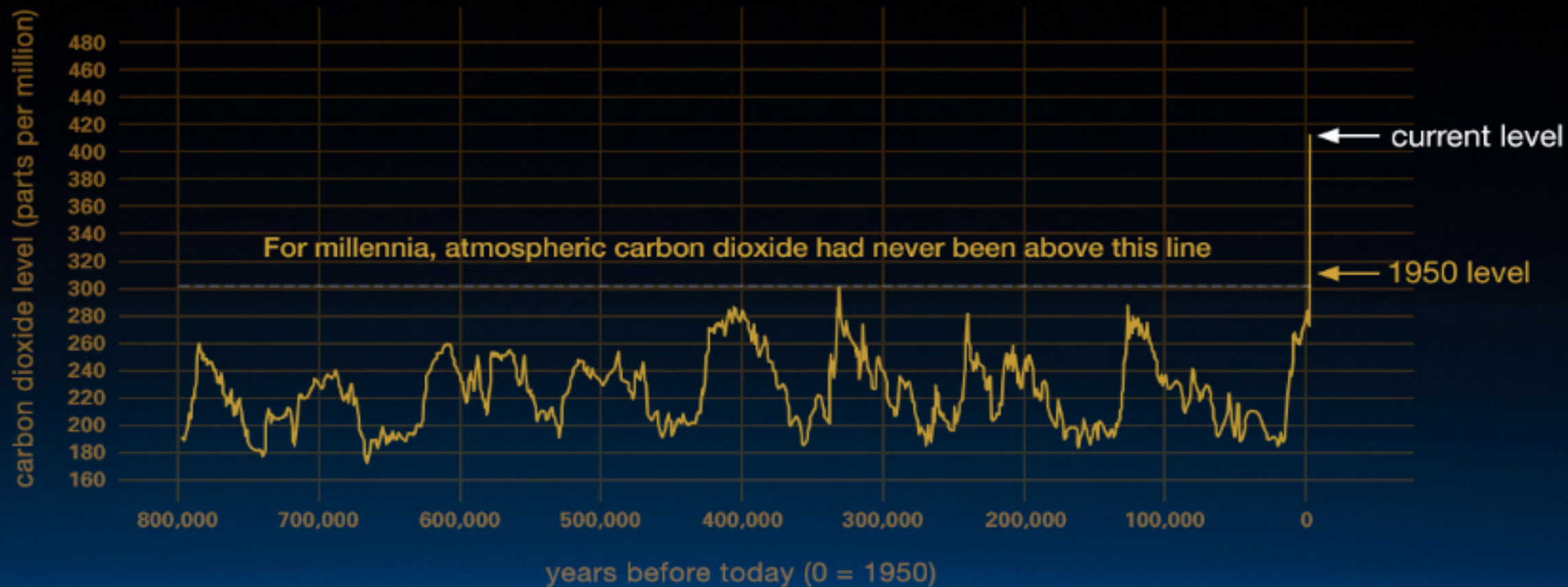


Less  
Rigorous,  
Highly  
Politicised



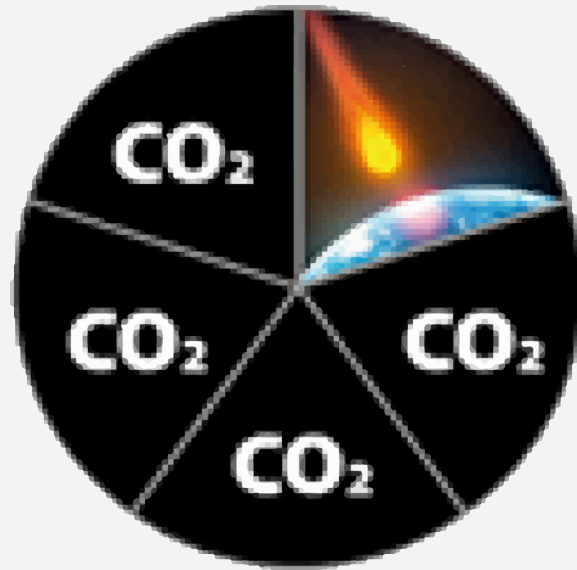
Highly  
Rigorous,  
Yet  
Conservative

**Data speaks.**

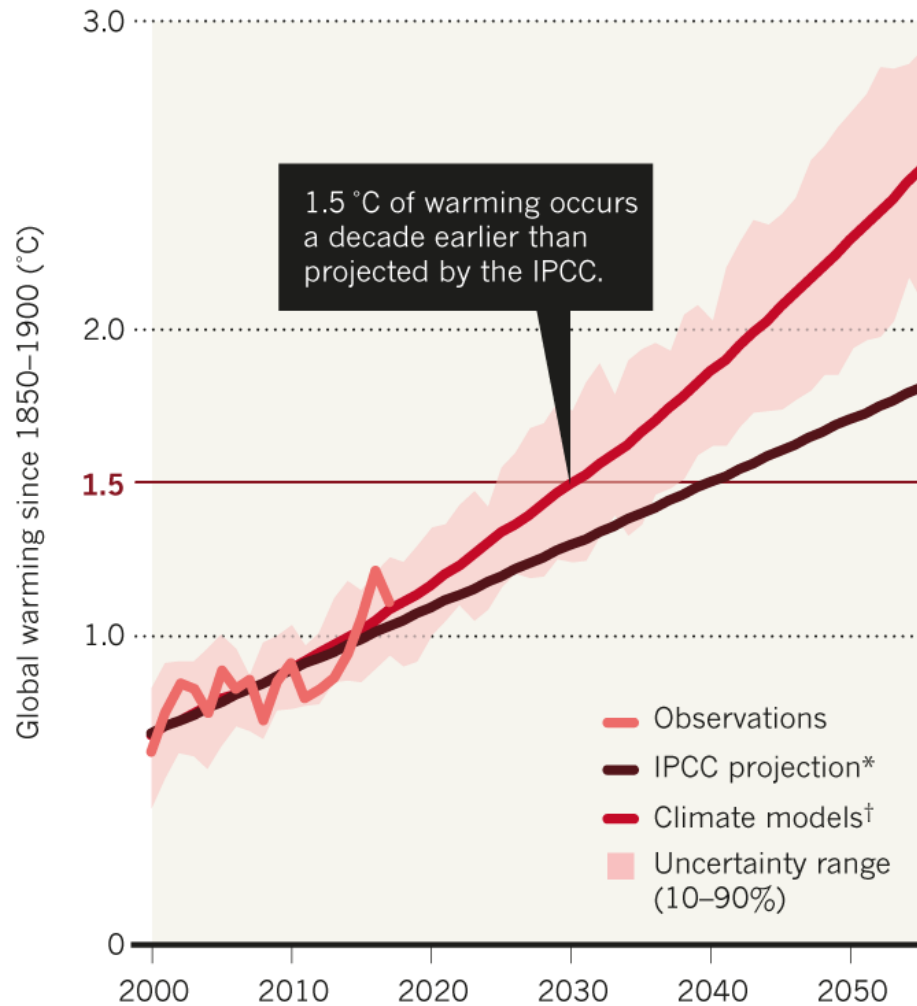


# HEADING FOR EXTINCTION.

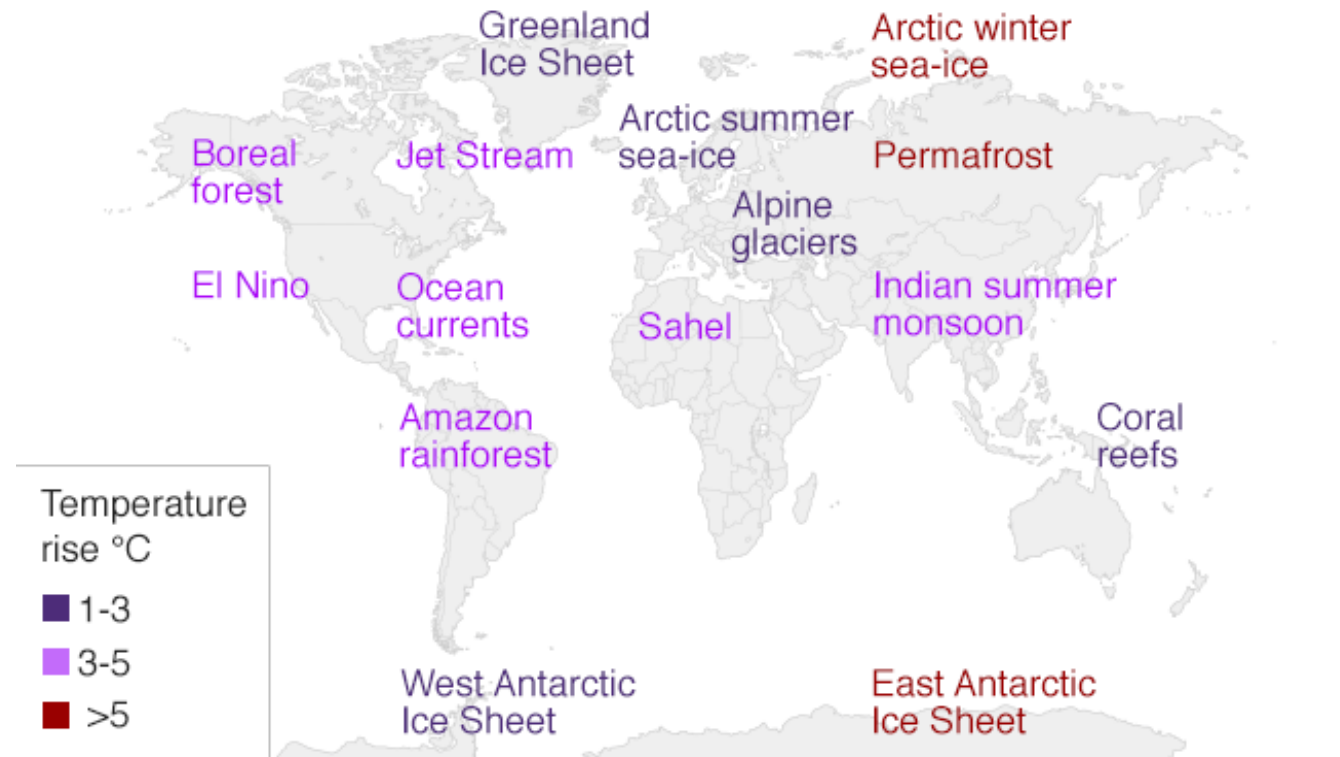
Causes of the 5 mass extinctions



# GLOBAL WARMING IS HAPPENING FASTER THAN EXPECTED



**Tipping point temperatures likely to push global systems into a 'hothouse' state**



Source: Stockholm Resilience Centre



## Why does a 0.5°C change matter?

*Climate change isn't linear - it's accelerating"*

UN Arctic Chief

0.5°C safety

1°C irreversible feedbacks (now)

1.5°C a dangerous world

2°C an extremely dangerous world

2.5°C moving towards Hell

3°C horror

3.5°C death of organised society

4°C human survival in doubt

5°C likely extinction

6°C our current trajectory





# CLIMATE RISKS: 1.5°C VS 2°C GLOBAL WARMING

## EXTREME WEATHER

**100%** increase in flood risk. vs **170%** increase in flood risk.

## SPECIES

**6%** of insects, **8%** of plants and **4%** of vertebrates will be affected. vs **18%** of insects, **16%** of plants and **8%** of vertebrates will be affected.

## WATER AVAILABILITY

**350 million** urban residents exposed to severe drought by 2100. vs **410 million** urban residents exposed to severe drought by 2100.

## ARCTIC SEA ICE

Ice-free summers in the Arctic at least once **every 100 years.** vs Ice-free summers in the Arctic at least once **every 10 years.**

## PEOPLE

**9%** of the world's population (700 million people) will be exposed to extreme heat waves at least once every 20 years. vs **28%** of the world's population (2 billion people) will be exposed to extreme heat waves at least once every 20 years.

## SEA-LEVEL RISE

**46 million people** impacted by sea-level rise of 48cm by 2100. vs **49 million people** impacted by sea-level rise of 56cm by 2100.

## OCEANS

Lower risks to marine biodiversity, ecosystems and their ecological functions and services at 1.5°C compared to 2°C.

## CORAL BLEACHING

**70%** of world's coral reefs are lost by 2100. vs Virtually **all coral reefs are lost** by 2100.

## COSTS

Lower economic growth at 2°C than at 1.5°C for many countries, particularly low-income countries.

## FOOD

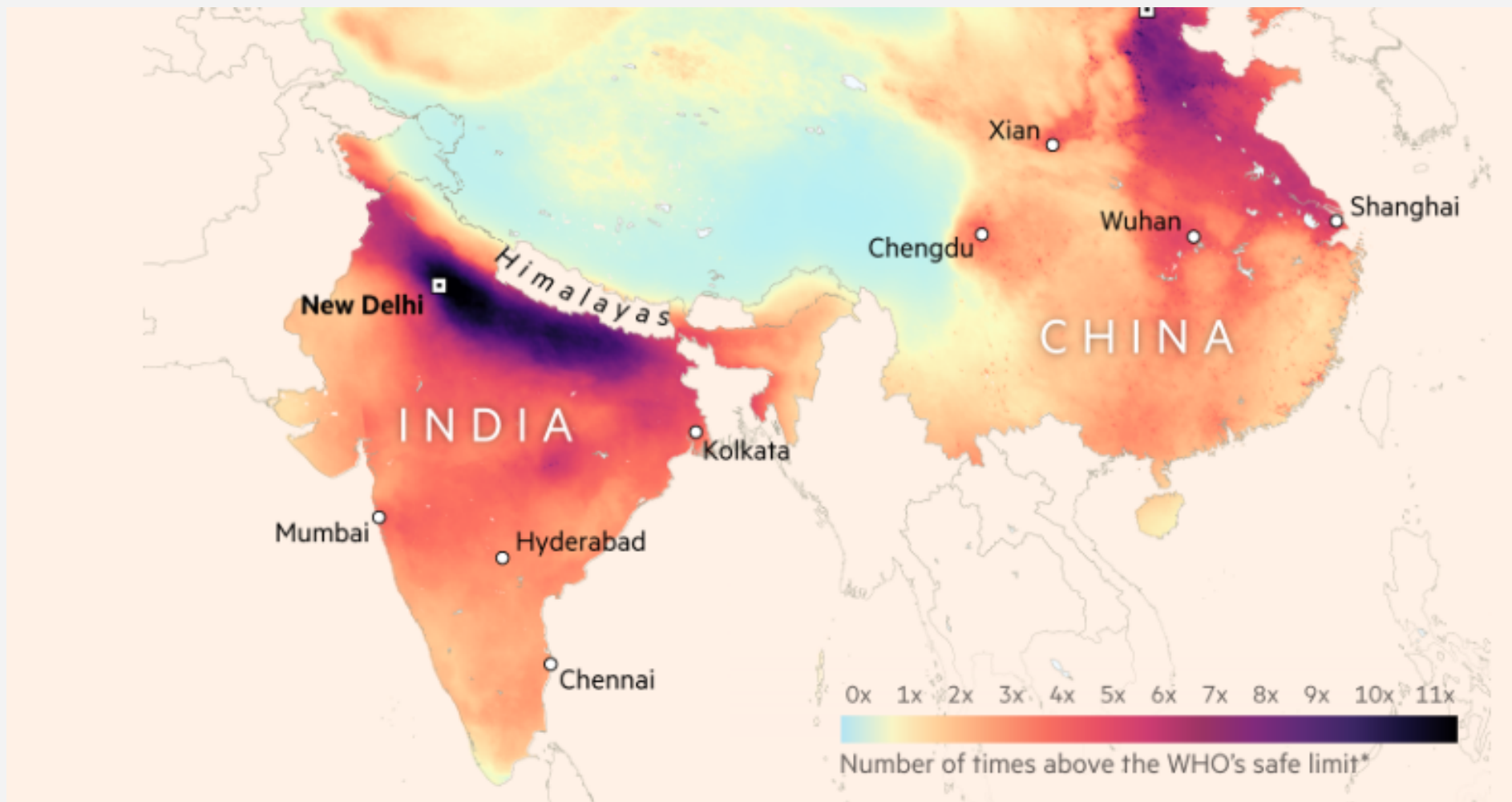
Every half degree warming will consistently lead to lower yields and lower nutritional content in tropical regions.

Just a 0.5°C increase in temperature results in more than proportionate damage to all living beings!

**Closer home.**

# India most vulnerable to climate change

In 2016 and 2017, India was more than 2° Celcius warmer than pre-industrial levels (average temperature between 1901 and 1930). This explains why over 22 million Indians were affected by extreme weather events in 2017, making the country most vulnerable to climate change



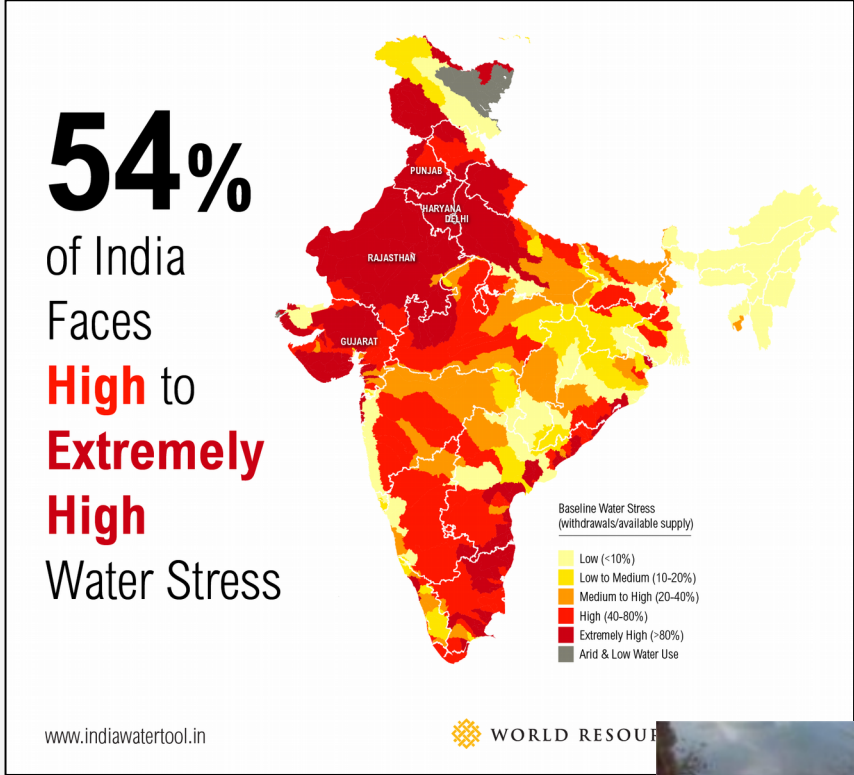
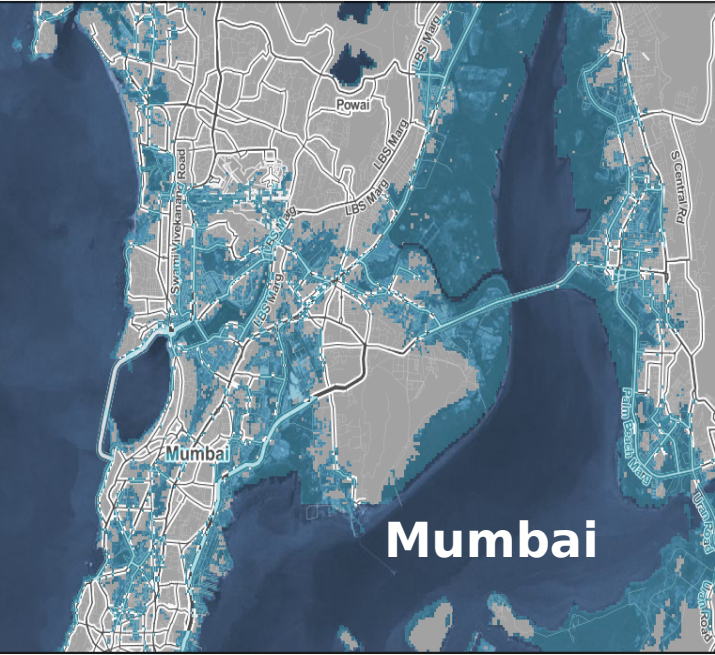
## LACK OF FRESH AIR

Air pollution is the third-highest cause of death among all health risks.

Contributed to over 1.2 million deaths in 2017.



# SEA-LEVEL RISE AT 2°C WARMINGHIGH WATER STRESS



## HUMAN IMPACT

### Current environmental impact:

- Coastal flooding
- Sea storms
- Rainfall variation

### Imminent human Impact

- 5 cr Indians will be displaced
- Incoming climate refugees







About 4,000 people, including poor fisherman Goranga Dolui, were on the electoral list for the island in the Sunderban delta.

Residents on Ghoramara island may have voted for the last time from there **before their island sinks into the Bay of Bengal.**

## LOSING OUR GREEN LUNGS

**Forest cover is concentrated to certain regions only.**



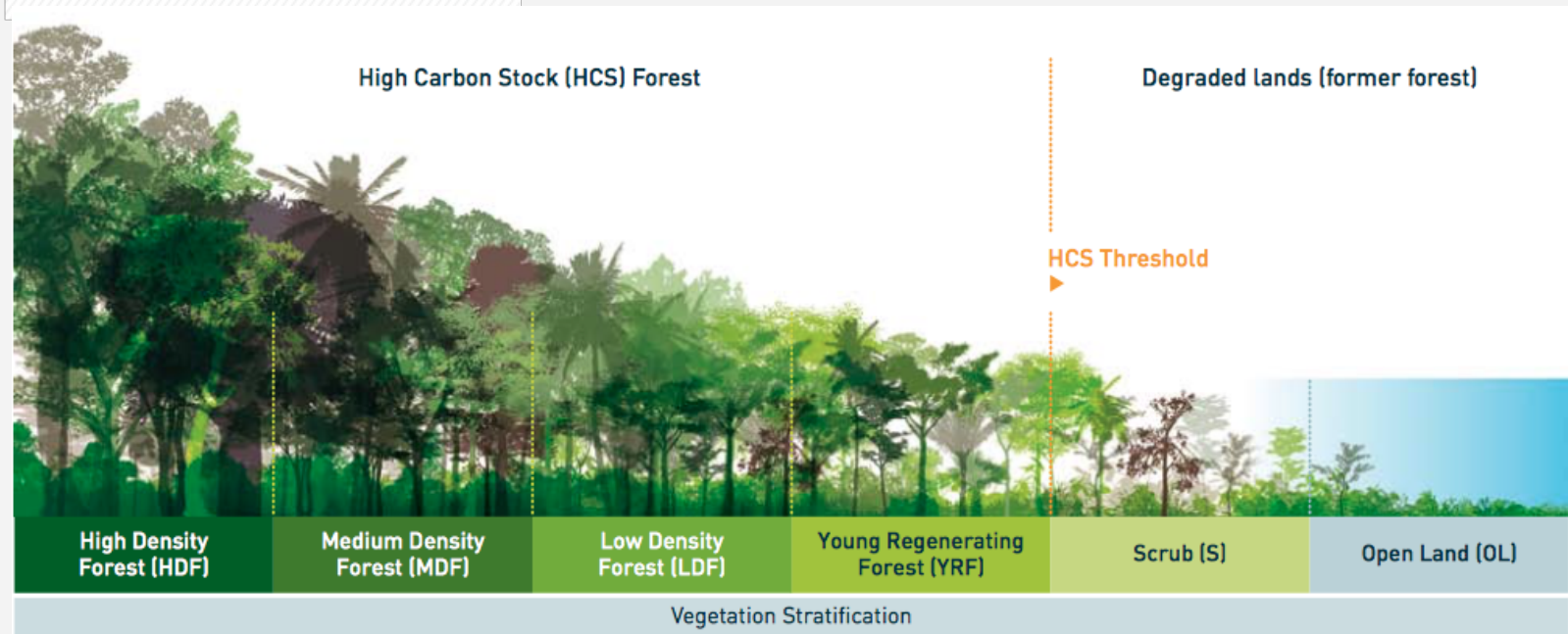
Table 2.3 Forest cover of India

Class	Area (sq km)	Percent of Geographic Area
Very Dense Forest	98,158	2.99
Moderately Dense Forest	3,08,318	9.38
Open Forest	3,01,797	9.18
<b>Total Forest Cover *</b>	<b>7,08,273</b>	<b>21.54</b>

## LOSING OUR CARBON SINKS

**4148 sq km of VDF lost**

**to MDF/OP/scrub/NF**







REFLECTI  
ONS





**“I WANT TO DO SOMETHING ABOUT  
THIS!”**



**TELL THE TRUTH**  
and  
**ACT AS IF**  
**THE TRUTH IS REAL**

# OUR RIGHTS ARE OUR OWN

## OUR FUNDAMENTAL RIGHT

***“The right to live in a healthy environment (water, air and land and the interrelationship which exists among and between air, water and land and human beings, other living creatures, plants, micro-organism and property).”***



## OUR FUNDAMENTAL DUTY

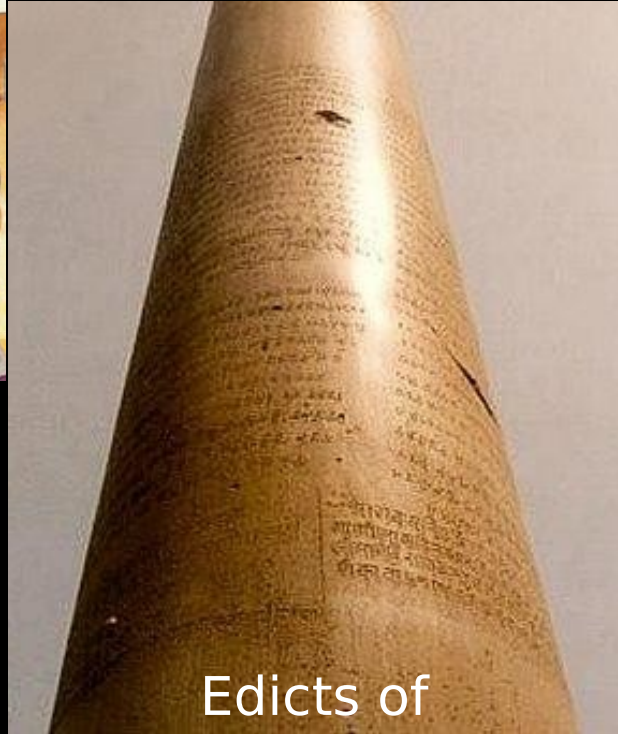
***“It shall be duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wild life and to have compassion for living creatures.”***

# NATURE HAS ALWAYS BEEN A PART OF US



Khejarli  
Massacre

But we seem to  
have forgotten  
that



Edicts of  
Ashoka



Prince Sattva in  
Jatakas



A large crowd of men, many wearing green turbans and shawls, looking towards the camera. The men are of various ages and are gathered closely together. The central figure is a man with a mustache and a green shawl, looking directly at the camera. To his right is an older man with white hair and a green shawl, also looking towards the camera. In the background, many other men are visible, some wearing green turbans. The overall atmosphere is one of a large gathering or protest.

Need a  
people's  
movement

**HOPE DIES**

**ACTION BEGINS**

# Extinction Rebellion India

## *an Informed Social Disruption*

- There has been a structural **alienation** of ecology, we need to reverse that now!
- WE ARE RESPONSIBLE FOR THE WORLD WE CREATE
  - The extrinsic is a reflection of the intrinsic
  - The Youth are rising, the Adults need to too **channel** the rage!
- Our grooming & conditioning tells us to intellectualise, rather we **act more now!**
- This is a **Global Justice** issue too - reparations from polluters to those most affected!

# ACTIVISM for Climate Action in India

- **Build** contextual authentic datasets to inform ourselves of the crisis upon us.
  - Dig deeper to know what is the true picture in India
- **Commune** with concerned citizens and experts across domains to co-create.
- **Organize** and align synergies to plan action and demands from those in power.
  - Directed/focused roles within contributors to decentralise responsibility



# CIVIL DISOBEDIENCE

Disruptive, Respectful, Non-violent, Sacrificial

It is a display and practice of reverence for law:  
"Any man who breaks a law that conscience tells him is unjust and willingly accepts the penalty by staying in jail to arouse the conscience of the community on the injustice of the law is at that moment expressing the very highest respect for the law."

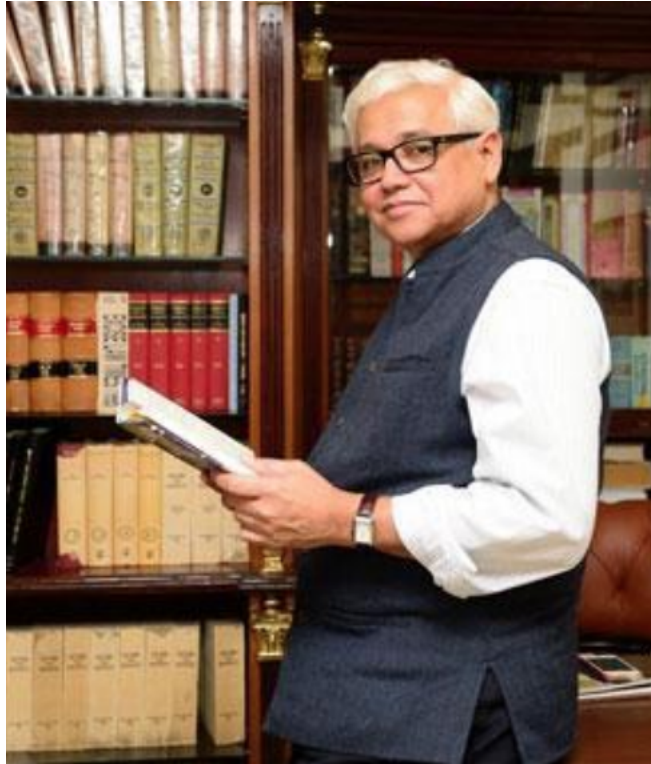


Dandi  
March  
(1930)

Anti-Corruption  
Movement (2011)



# Indians on climate change



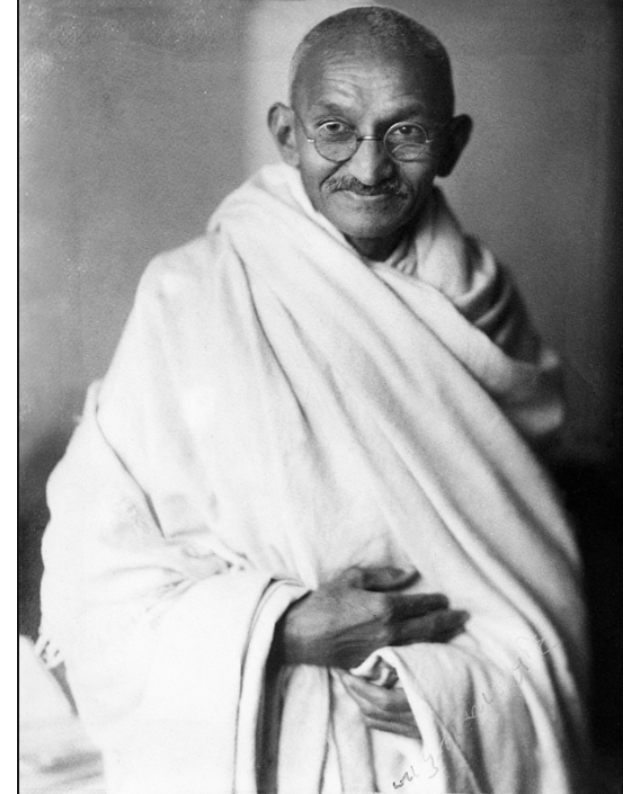
*"Climate change is not something that will happen in our children's generation; it's happening NOW."*

-Amitav Ghosh



*"My government has failed to take steps to regulate and reduce greenhouse gas emissions, which are causing extreme climate conditions. This will impact both me and future generations."*

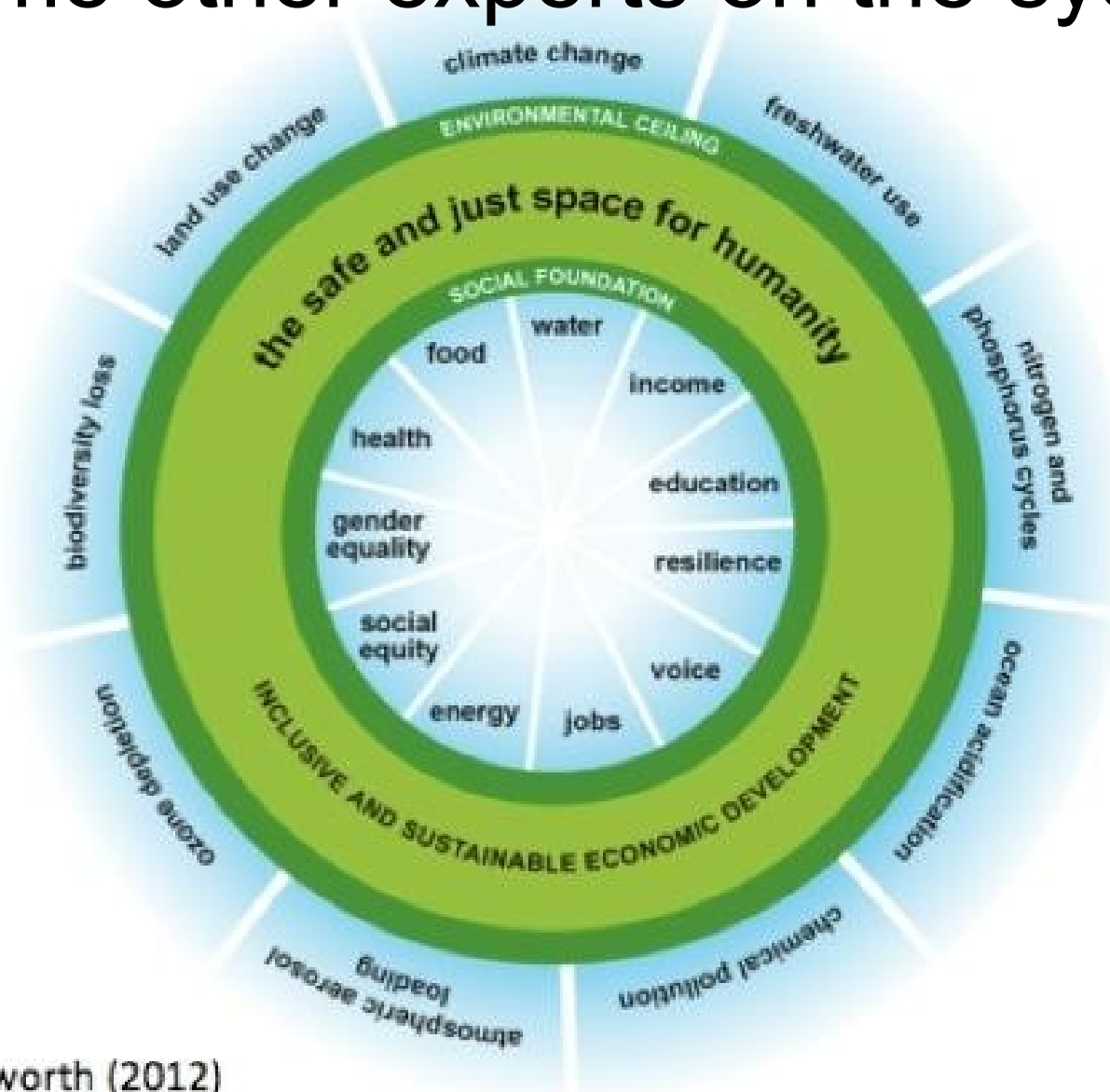
-Ridhima Pandey (11 year old who



*"Earth provides enough to satisfy every man's needs, but not every man's greed"*

-Mahatma Gandhi

# Some other experts on the systemic causes



Raworth (2012)

Doughnut economics model aptly illustrates immense pressure on India to provide wellbeing for all while keeping under planetary boundaries to avert ecological disaster.

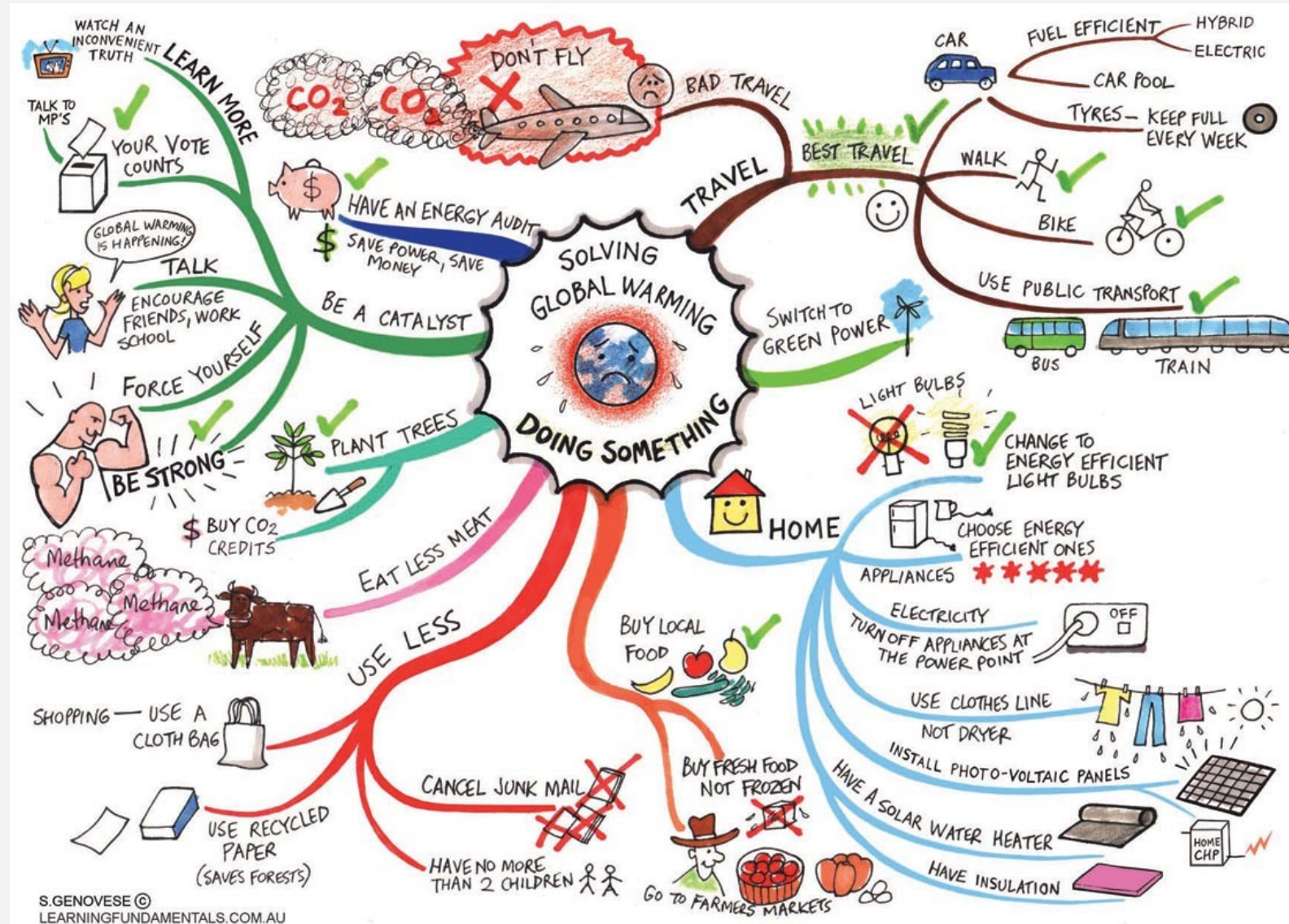
*"I used to think that top environmental problems were biodiversity loss, ecosystem collapse and climate change. I thought that thirty years of good science could address these problems. I was wrong. The top environmental problems are selfishness, greed and apathy, and to deal with these we need a cultural and spiritual transformation.*

*And we scientists don't know how*

**Acts that make a difference.**



# WHAT YOU CAN DO TODAY!



SOLUTION  
ARCS



# The XR Approach

# NON-VIOLENT DIRECT ACTION (NVDA)



- Disruptive
- Respectful
- Non-violent
- Sacrificial



# EXTINCTION REBELLION **GLOBALLY**



**Rebellion Day UK**  
17<sup>th</sup> November 2018

**International Rebellion**  
**66 countries**  
April 2019

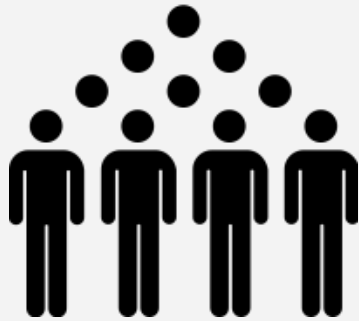
**National protests**  
**Worldwide**  
Till today

# NATIONAL DEMANDS

- 1 **Tell the truth** Government to first acknowledge the climate and ecological crisis and communicate this crisis to all citizens and corporates, recognising the need to rapidly transform our economic system into a sustainable one. (essential)
- 2 **Act now** Prepare a Climate Action Plan by June 2020 to combat the climate crisis, including but not limited to halting biodiversity loss, ensuring food security, water security & clean air, while also working towards minimising any additional emissions and the fulfilment of NDC pledges by 2025. (crucial)
- 3 **Beyond politics** Government to work and engage immediately with the affected communities facilitating citizen assemblies, as well as relevant scientific, social , financial and legal experts on climate and ecological justice, and be led by their decisions and recommendations to integrate in the national plans. (crucial)



# ON THE HORIZON



Mobilise **3.5%**  
population



**Local contextual** city-  
specific mobilisation and  
action plans



Global October  
**Rebellion Week**

**We are in a Time of Consequences.**

**Time to act together!**

# OUR CORE VALUES

There are many ways to be part of XR, as long as we embody **these core values**:

1. have a **shared vision of change**
2. set our mission on **what is necessary**
3. believe in and need a **regenerative culture**
4. **openly challenge** ourselves and this toxic system
5. value **reflecting and learning**
6. **welcome** everyone and every part of everyone
7. actively **mitigate for power**
8. **avoid** blaming and shaming
9. are a **non-violent** network
10. are based on **autonomy and decentralisation**

# WORKING GROUPS

There are many ways to be part of XR:

1. Policy, Legal & Research
2. Media & Comms
3. PR (News)
4. Regenerative Culture
5. Logistics
6. Web Infra
7. Finance
8. Outreach & Training
9. Admin & Internal Org