# Bengaluru is known for its rapid urbanization and technological advancements

- City is increasingly facing the adverse effects of climate change, which significantly impact the health of its residents.
- Rising temperatures, unpredictable rainfall patterns, and urban flooding are some of the key climate challenges that exacerbate health risks in the city.
- Prolonged heatwaves have led to an increase in heatrelated illnesses, dehydration, and cardiovascular stress, particularly among vulnerable populations such as the elderly, children, and pregnant women.



## NAMMA BENGALURU

- The city recently also witnessed a rise in vector-borne diseases
- dengue, chikungunya, and malaria, fuelled by changes in temperature and rainfall that create breeding grounds for mosquitoes.
- Waterlogging during heavy rains and inadequate drainage systems amplify these risks, leading to disease outbreaks.
- Additionally, poor air quality, compounded by vehicular emissions and industrial activity, contributes to respiratory illnesses, including asthma and chronic obstructive pulmonary disease (COPD).

 Mental health is another emerging concern, with climate-induced stressors such as displacement due to flooding, loss of livelihoods, and heat-related discomfort affecting the psychological well-being of residents.



Impact of Climate Change on Physical, Mental, and Community Health



#### Medical and Physical Health

- Changes in fitness and activity level
- Heat-related illness
- Allergies
- Increased exposure to waterborne and vector-borne illness

#### Mental Health

- Stress, anxiety, depression, grief, sense of loss
- Strains on social relationships
- Substance abuse
- Post-traumatic stress disorder

#### **Community Health**

- Increased interpersonal aggression
- Increased violence and crime •
- Increased social instability
- Decreased community cohesion

- •Most of our population is **unaware** of the damage caused by air pollution to their health.
- •There is very little demand from people for actions to reduce air pollution.
- •The steps taken by the Government towards clean air are often criticized and not complied with by the people as it causes inconvenience to them.

We need to use our ability to communicate bad news in a way that stimulates a positive response

•Lack of information about the severe health ill effects of air pollution, including the damage occurring to their children is the reason for people's opposition to any corrective measures to control air pollution.

•If people are made aware of the seriousness of the issue, they will not only accept the measures but will also contribute actively towards solutions.



#### Healthcare professionals play a pivotal role in addressing climate change

to drive initiatives that mitigate climate change effects

#### **Examples of Climate Initiatives in Healthcare**

- **Green Hospital Initiatives**: Hospitals adopting renewable energy and green building standards.
- **Climate Health Networks**: Groups of professionals advocating for integrated climate-health solutions.
- **Sustainable Procurement**: Sourcing eco-friendly medical supplies and equipment.

It is impossible to have healthy people on a sick planet

We must act fast and we must act first.



#### the Doctors can be a "motivated motivator"

Sustainable Procurement: Sourcing eco-friendly medical supplies and equipment.



#### **Our RESPONSIBILITY**

- To make environmentally-sustainable products easily accessible to our girls and women of today
- To create an awareness about conscious consumption and environment-positive products



• Climate Health Networks: Groups of professionals advocating for integrated climate-health solutions.

counseled based on the current evidence

- For example, if women choose water bottles made with "BPA-free" plastic in an attempt to avoid EDCs, they may inadvertently expose themselves to
- BPA replacements such as
- bisphenol S or
- bisphenol X,
- which are also thought to be EDCs.







Plastics is a global health crisis hiding in plain sight. Reduce the use of single-use plastics and promote ecofriendly alternatives.



# A large hospital can produce up to one tonne of waste per day.

- Waste Management:
  - Ensure proper disposal and recycling of medical waste.
  - Minimize pharmaceutical waste.

pregnant women have a higher risk of gastrointestinal illness if they come in contact with **contaminated water** than other adults.

Pregnant women are also more prone to heat exhaustion and heat stroke

Extreme events, such as <u>wildfires</u>, floods, <u>heat waves</u>, and droughts, may disrupt food production and distribution, **increase costs, and limit availability**. These impacts could make it harder for mothers to get healthy food

#### Food System Impacts





**Heat linesses** 



#### **Metrics and Accountability**

- Track and report the carbon footprint of healthcare facilities.
- Develop benchmarks for sustainable practices within the healthcare sector.



#### FOGSI APPROVED ARTIST MANYATA SKILL DEVELOPMENT TRAINING FOR MATERNAL AND CHILD HEALTH CARE NURSES AND PARAMEDICAL STAFF HAS SUCCESSFULLY OFFERED TRAINING IN:



Karnataka, Tamil Nadu, Assam, Rajasthan Mumbai, Ludhiana, Himachal Pradesh, Bihar, Madhya Pradesh



Process-based solutions, such as transitioning to digital health records and optimizing operational workflows, can streamline efficiency while reducing paper usage and associated costs.



**Telemedicine**: Promote telehealth to reduce the carbon footprint associated with patient travel

ARTIST for Her

Every woman in every village and every city in India should have access to this.

FemTech stakeholders should connect and collaborate to achieve this.



Dr Hema Divakar

ONLINE

DOCTOR

www.artistforher.com



Climate-resilient healthcare refers to the capacity of healthcare systems to anticipate, prepare for, and effectively respond to climate-related risks while maintaining essential services and ensuring equitable access to care.

## **Educators and Advocates**

- **Public Awareness: Educate patients, communities**, and policymakers on the health risks of climate change, such as respiratory diseases, heat stress, and vector-borne illnesses.
- Advocacy: Support policies promoting renewable energy, sustainable agriculture, and reduced greenhouse gas emissions.



#### **Role Models in the Community**

- Lead by example in adopting sustainable lifestyles, such as using public transport or reducing meat consumption.
- Organize community events
- (e.g., tree planting drives, clean-up campaigns).

### Student's Climate Perception Survey clean water, nutritious food, and healthcare.

Collaborate with schools and universities to incorporate climate change and health into curricula.

Capacity-building programs and community involvement in decision-making are essential.





#### **Climate-Resilient Healthcare Systems**

- Infrastructure Planning: Develop healthcare facilities resilient to extreme weather events (e.g., floods, hurricanes).
- **Disaster Preparedness**: Train teams to respond to health emergencies caused by climate-related disasters.
- **Surveillance**: Establish monitoring systems for climatesensitive diseases like malaria or dengue.

ISRO

## **Research and Innovation**

- Conduct studies on the health impacts of climate change.
- Develop innovative solutions, such as low-carbon medical technologies.
- Share data on climate-sensitive diseases to inform global strategies.

Leadership in Healthcare Settings: Advocate for sustainable practices in hospitals and clinics, such as reducing waste and energy consumption.



# For us by us

- The dual role of healthcare facilities as contributors to climate change and as front-line responders to its impacts is particularly significant in this context.
- These challenges underscore the urgent need for Bengaluru's healthcare facilities to adopt climate-resilient measures, including sustainable energy solutions, water management, waste reduction, and disaster preparedness planning.
- Investing in such measures can enable Bengaluru to build a robust healthcare system that not only withstands climate shocks but also reduces its environmental footprint, contributing to the city's broader sustainability goals

