



Webinar 4 of 7, May 2024

**Advancing infant, child
and youth mental health
and wellbeing in climate
and ecological crisis**

Agenda

1. Introduction

1. Impacts, drivers and frameworks

1. Enabling environment

1. Impacts and interventions

1. Q&A

1. Wrap up



Impacts, drivers, frameworks and enabling environments



Dr. Jura Augustinavicius

- Lead Researcher on climate change and MHPSS at the MHPSS Collaborative.
- Assistant Professor at the School of Population and Global Health at McGill University
- Adjunct Professor at the Johns Hopkins School of Public Health.
- Provides technical support to governments, NGOs, and UN agencies on mental health and psychosocial support in the context of climate change.

Dr. Zeinab Hijazi

- Global Lead on Mental Health at UNICEF, New York.
- 18 years of experience supporting community-based mental health programmes globally.
- Programme guidance and technical support across sectors and divisions to enhance UNICEF's multi-sectoral approach to the provision of MHPSS for children and families in humanitarian and development settings



Impacts, drivers and frameworks

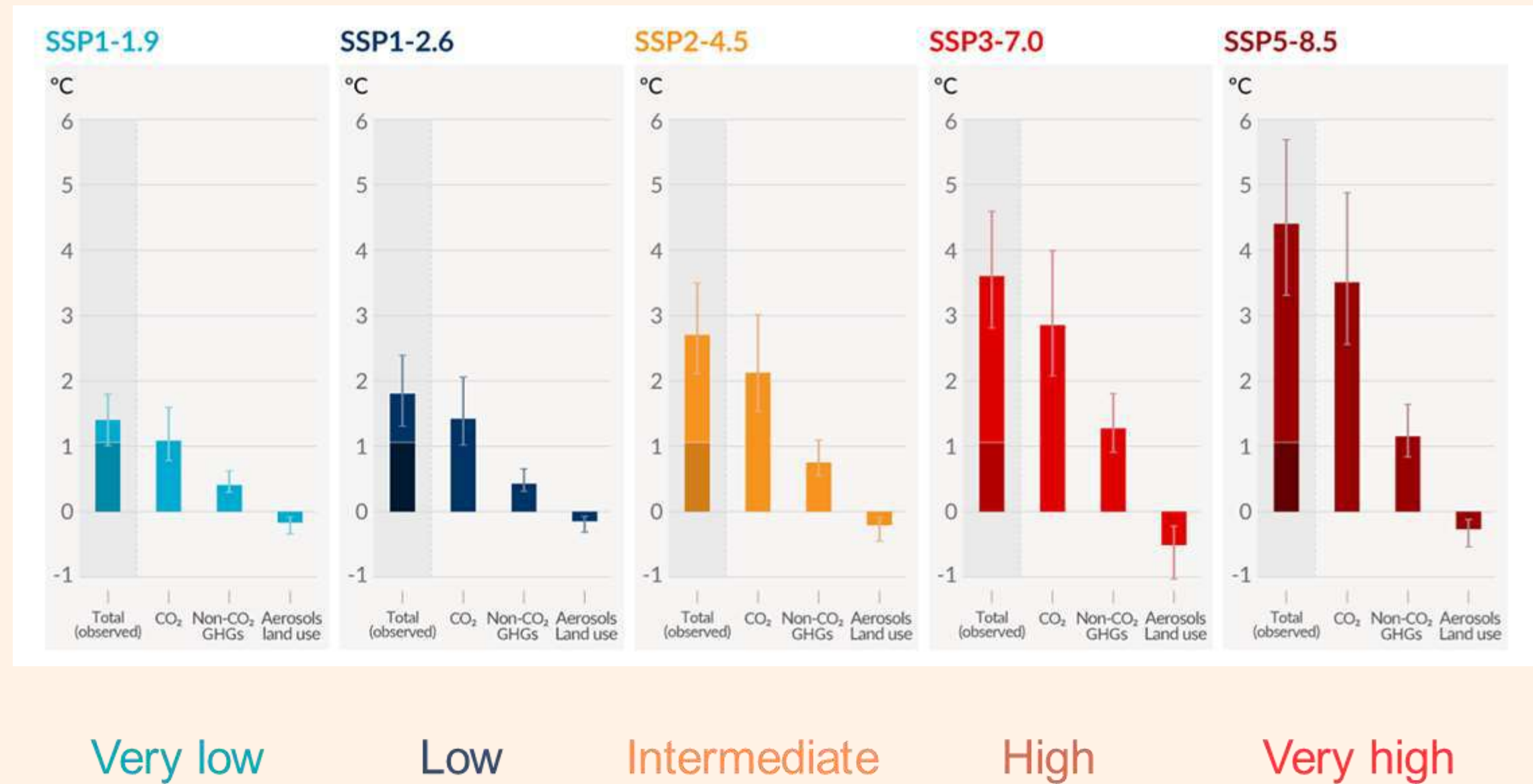
Jura Augustinavicius, the MHPSS Collaborative and McGill University

(IPCC AR6)



Climate Change

Change in global surface mean temperature in 2081-2100
relative to 1850-1900 (°C)

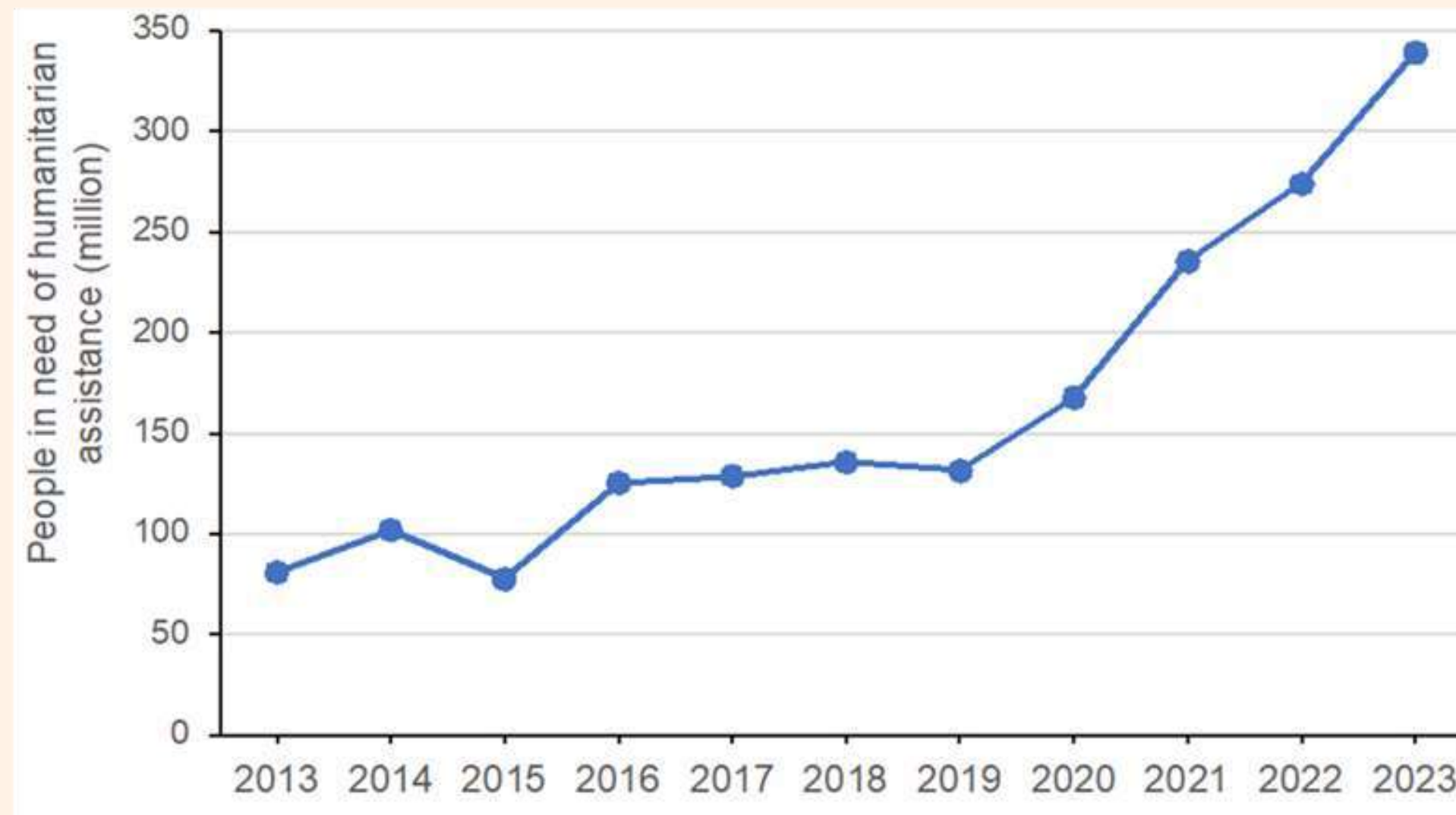


(OCHA, 2023)



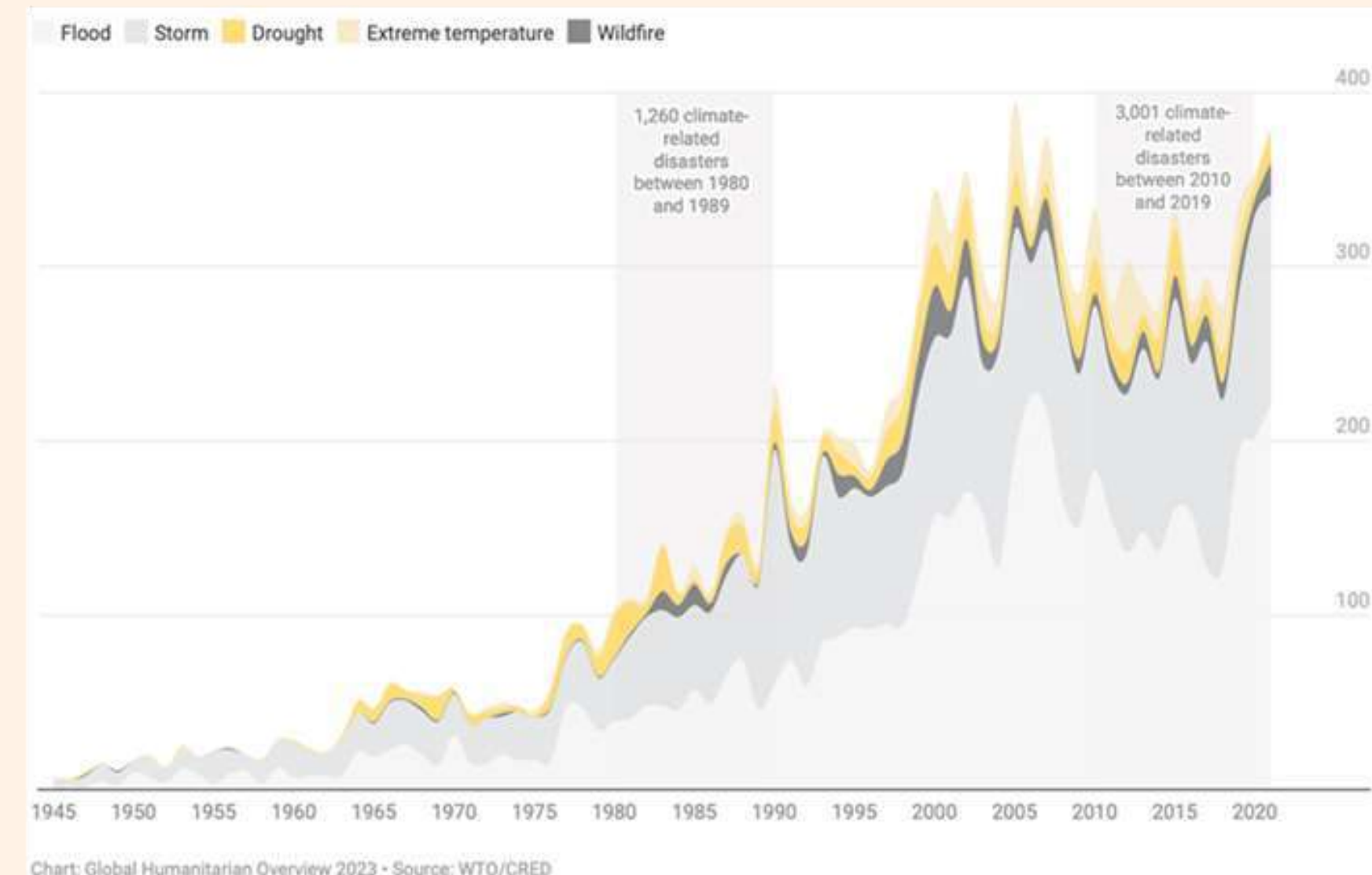
“The climate crisis is a humanitarian crisis”

Humanitarian needs are growing



OCHA, 2013-2023

Climate change is increasing the frequency of extreme weather events and disasters



OCHA, 2023

Climate change as a driver of humanitarian needs

Climate change is driving:

- Severe food crises
- Water shortages
- Conflict
- Migration
- Gender based violence
- Infrastructure and service disruption



Climate change and mental health

Exposure categories and outcomes



Cumulative climate change exposures

- Rising temperatures
- Rising sea levels
- Melting sea ice
- Etc.



Extreme weather events

- Storms
- Floods
- Wildfires
- Extreme heat
- Etc.



Anticipated and vicarious climate change exposures



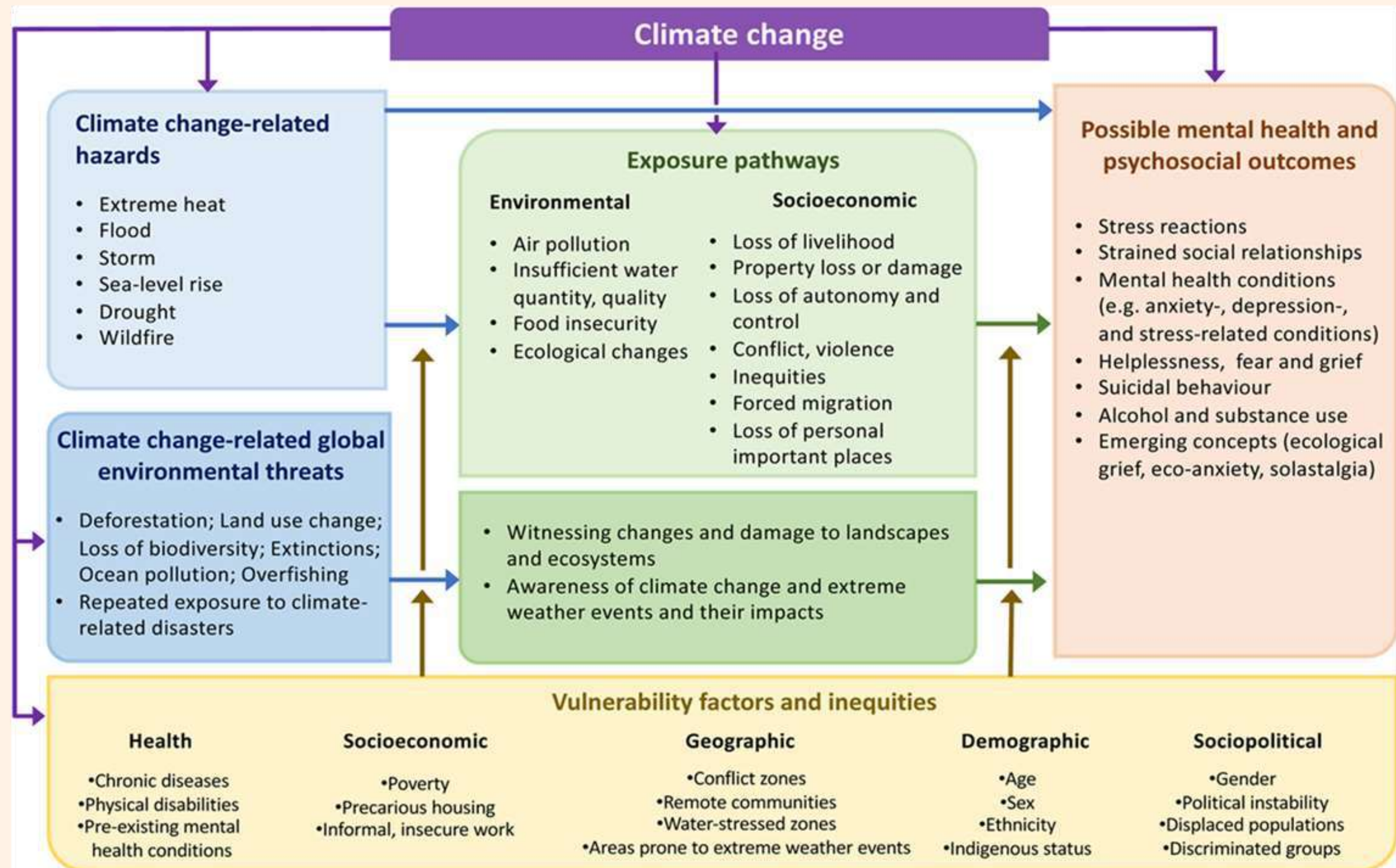
Mental health morbidity and mortality

Impacts to well-being





Multiple pathways of impact

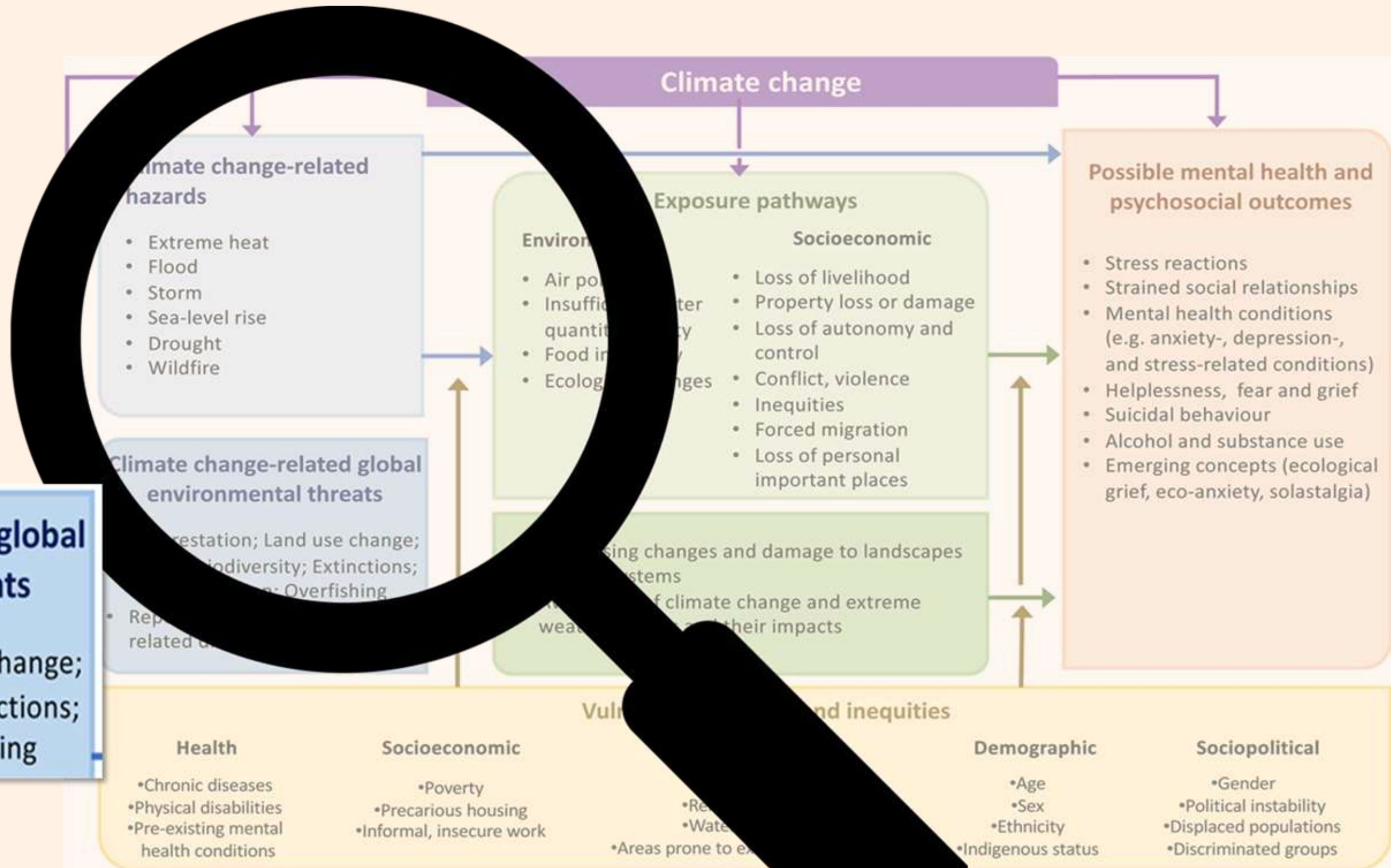




Multiple pathways of impact

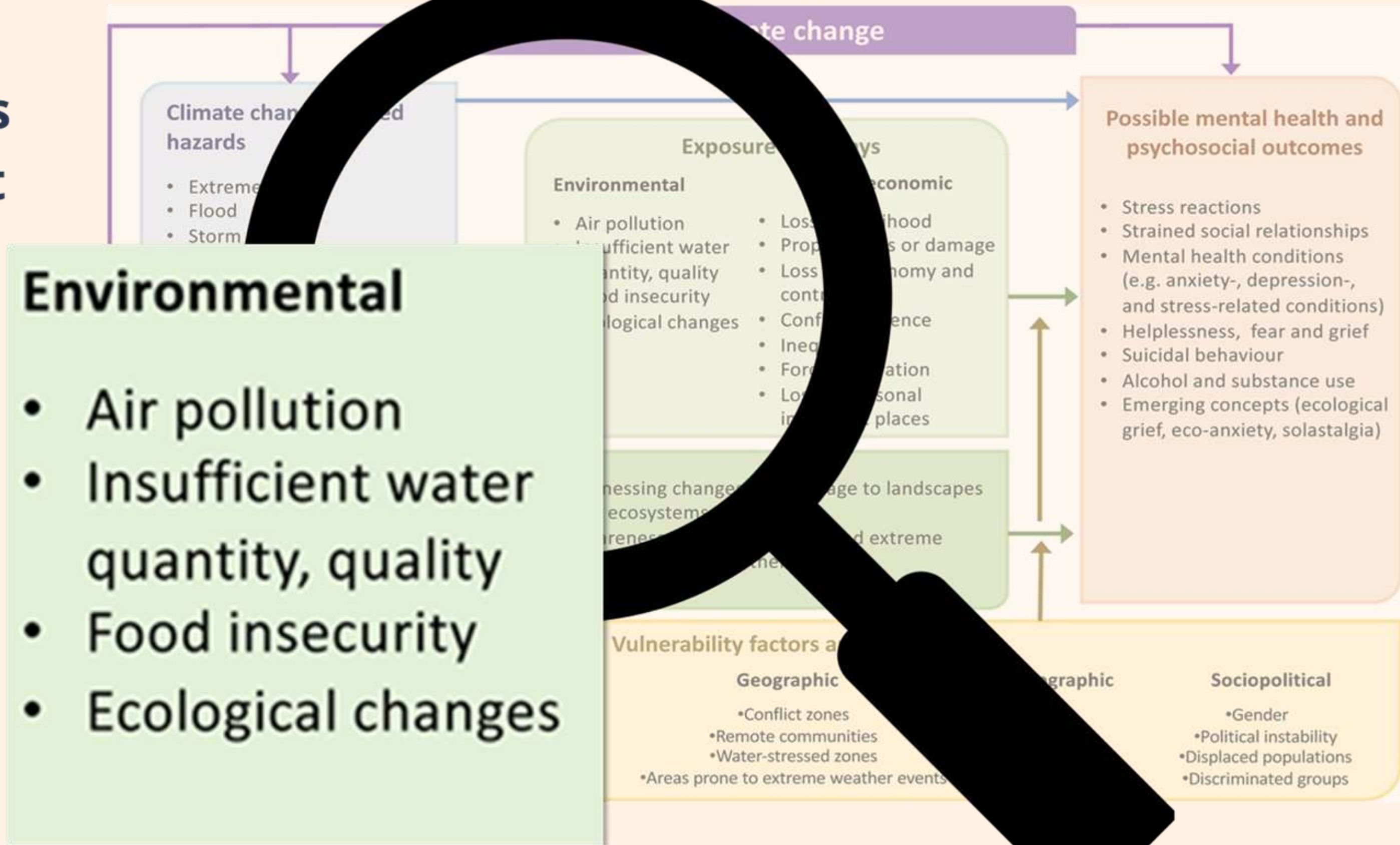
Climate change-related global environmental threats

- Deforestation; Land use change; Loss of biodiversity; Extinctions; Ocean pollution; Overfishing



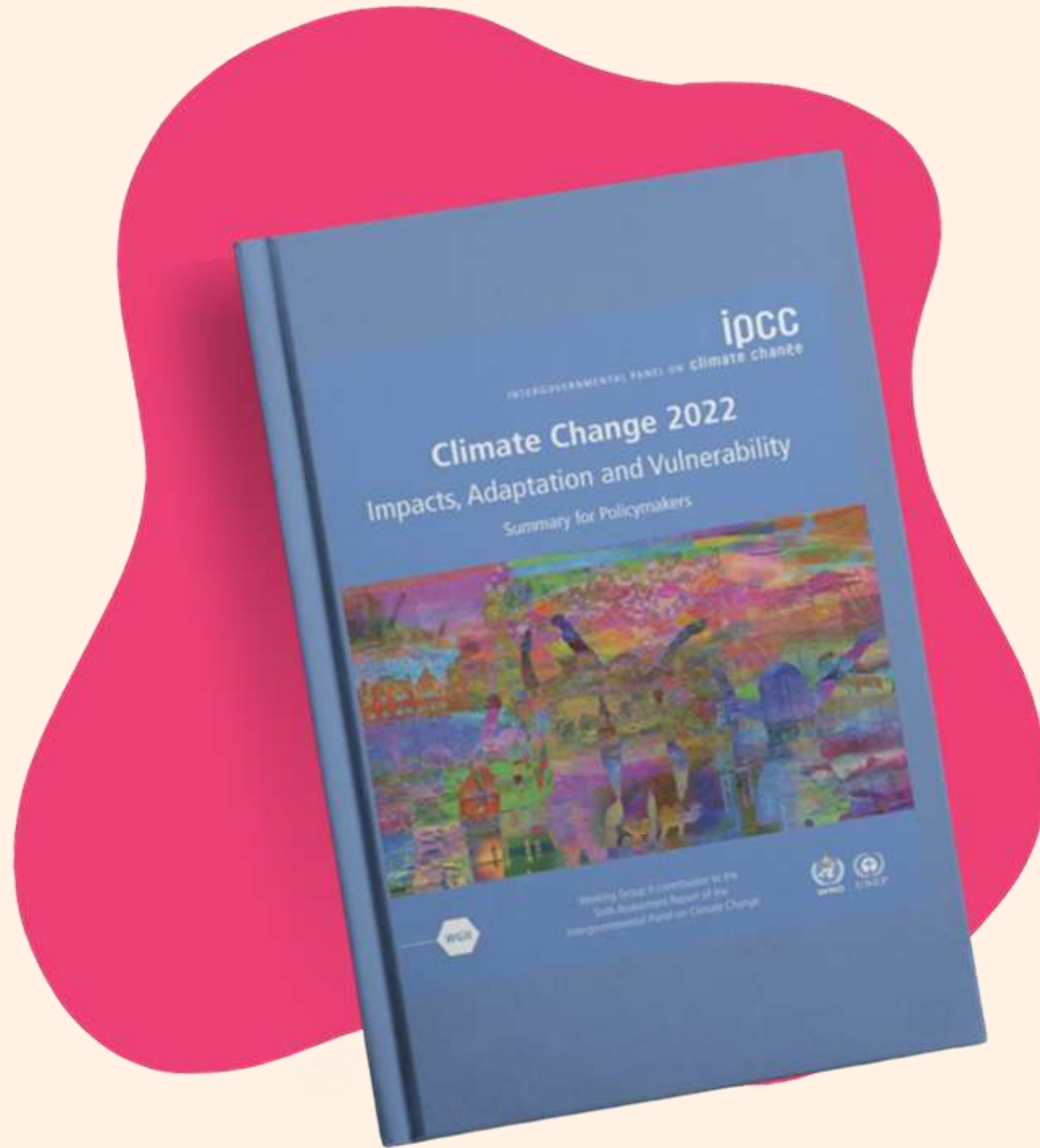


Multiple pathways of impact



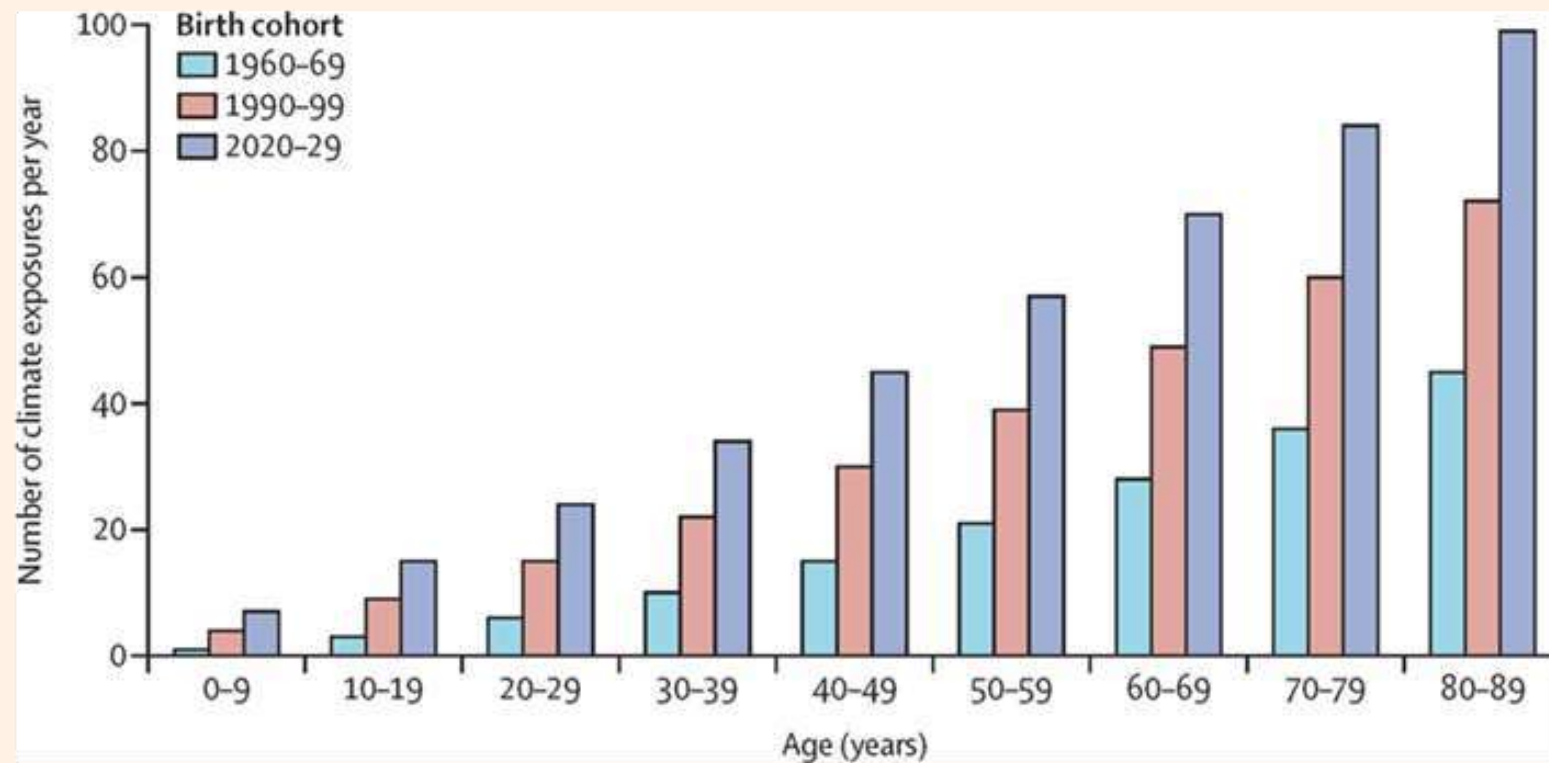


Increased risk for specific populations



“Mental health challenges, including anxiety and stress, are expected to increase under further global warming in all assessed regions, particularly for children, adolescents, elderly, and those with underlying health conditions.”

Climate change and inequality: A life course perspective

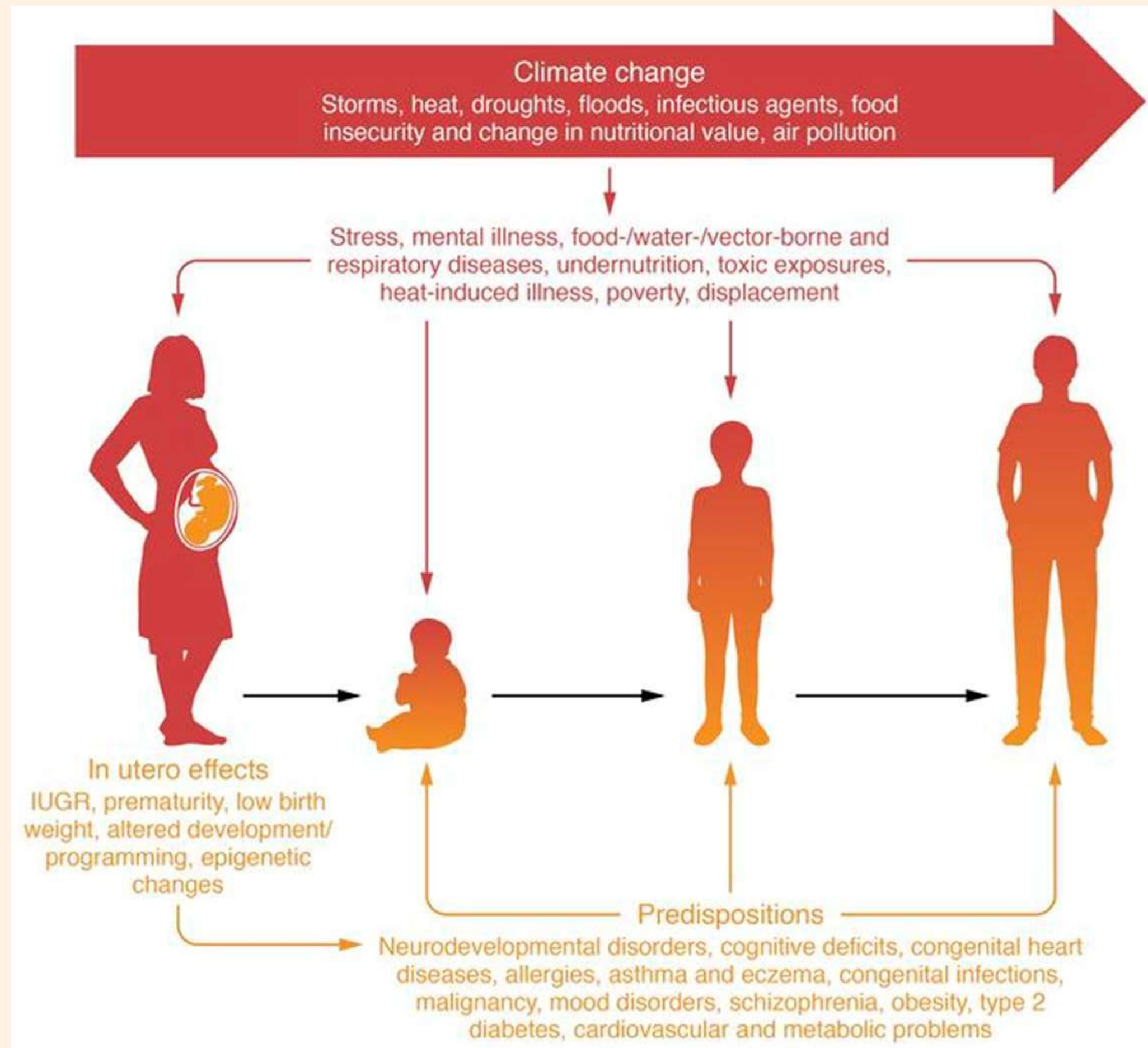


- Birth cohorts in the past few decades will experience more climate change exposures than earlier cohorts
- Each additional climate change exposure increases risk of poor health outcomes later in life
- Effects are age dependent: infants, children, and older adults are at highest risk



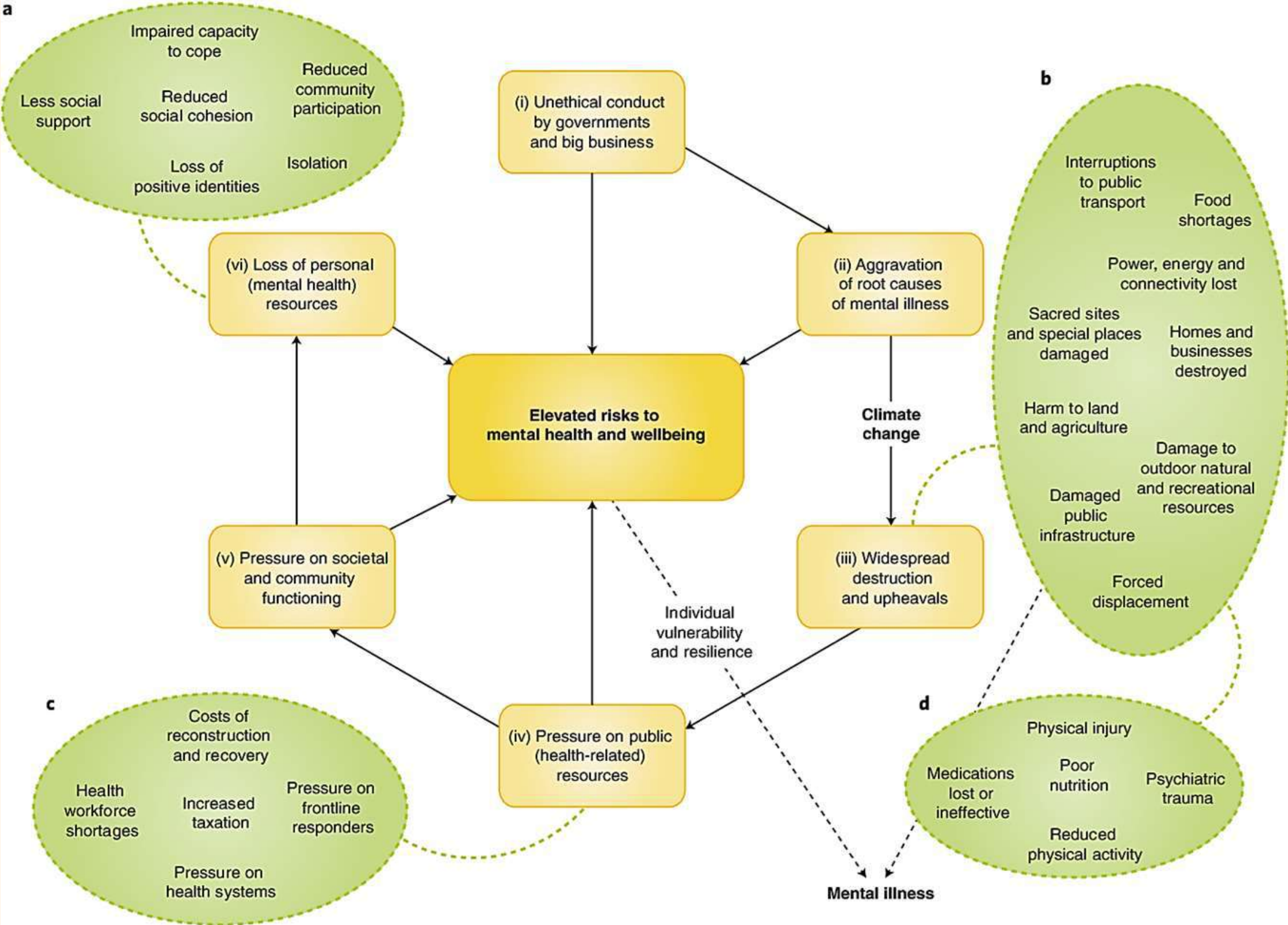
In their lifetime a child born in 2020 is predicted to experience 2-7x more heatwave events than a child born in 1960.

“The catastrophic effects of climate change on children’s health start before birth”





Systems thinking for
infant, child, and
youth mental health
and well-being in
climate and
ecological crises.





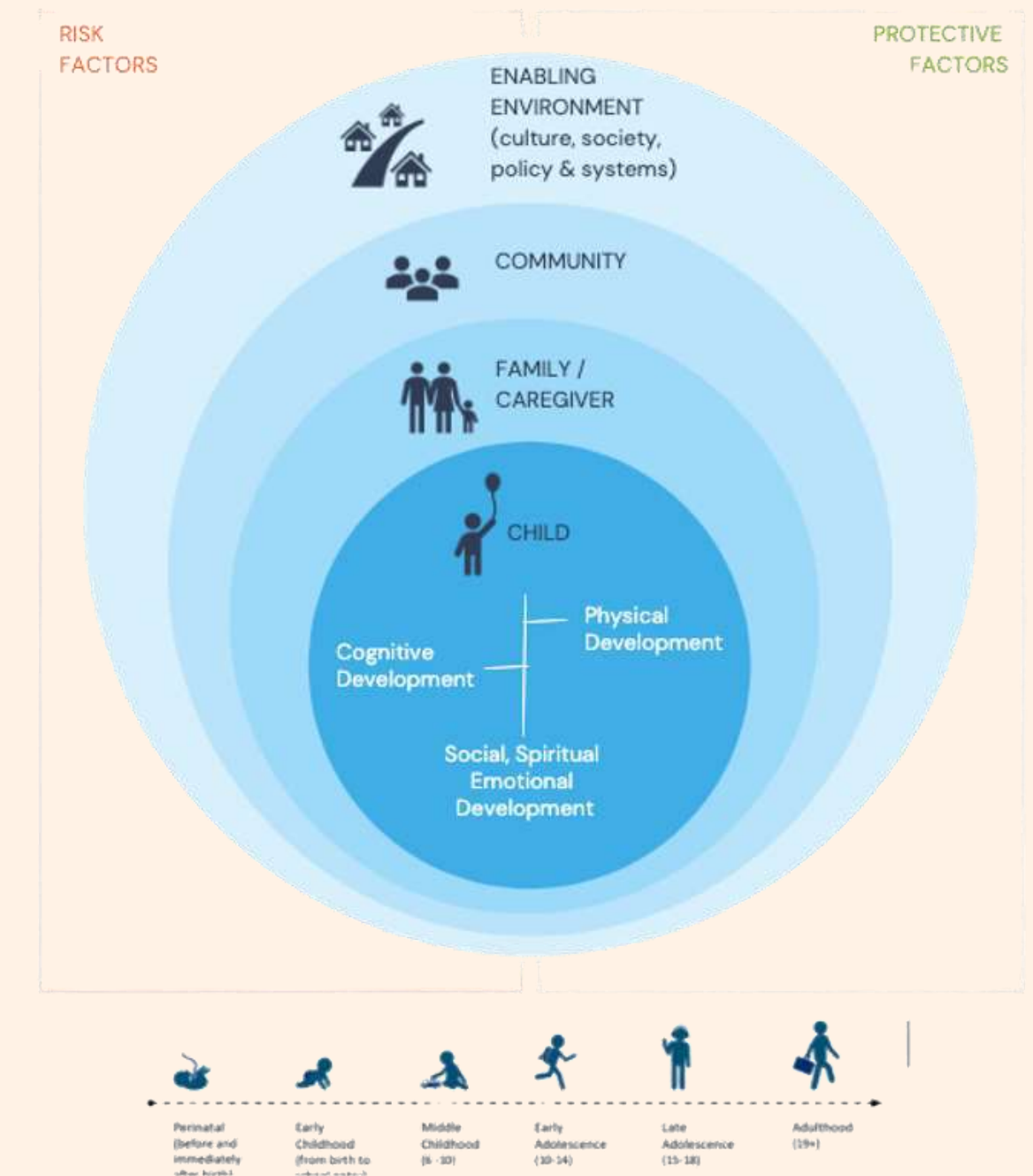
Enabling environment: Climate and ecological crisis impacts, frameworks and cross-cutting best practices

Zeinab Hijazi, UNICEF

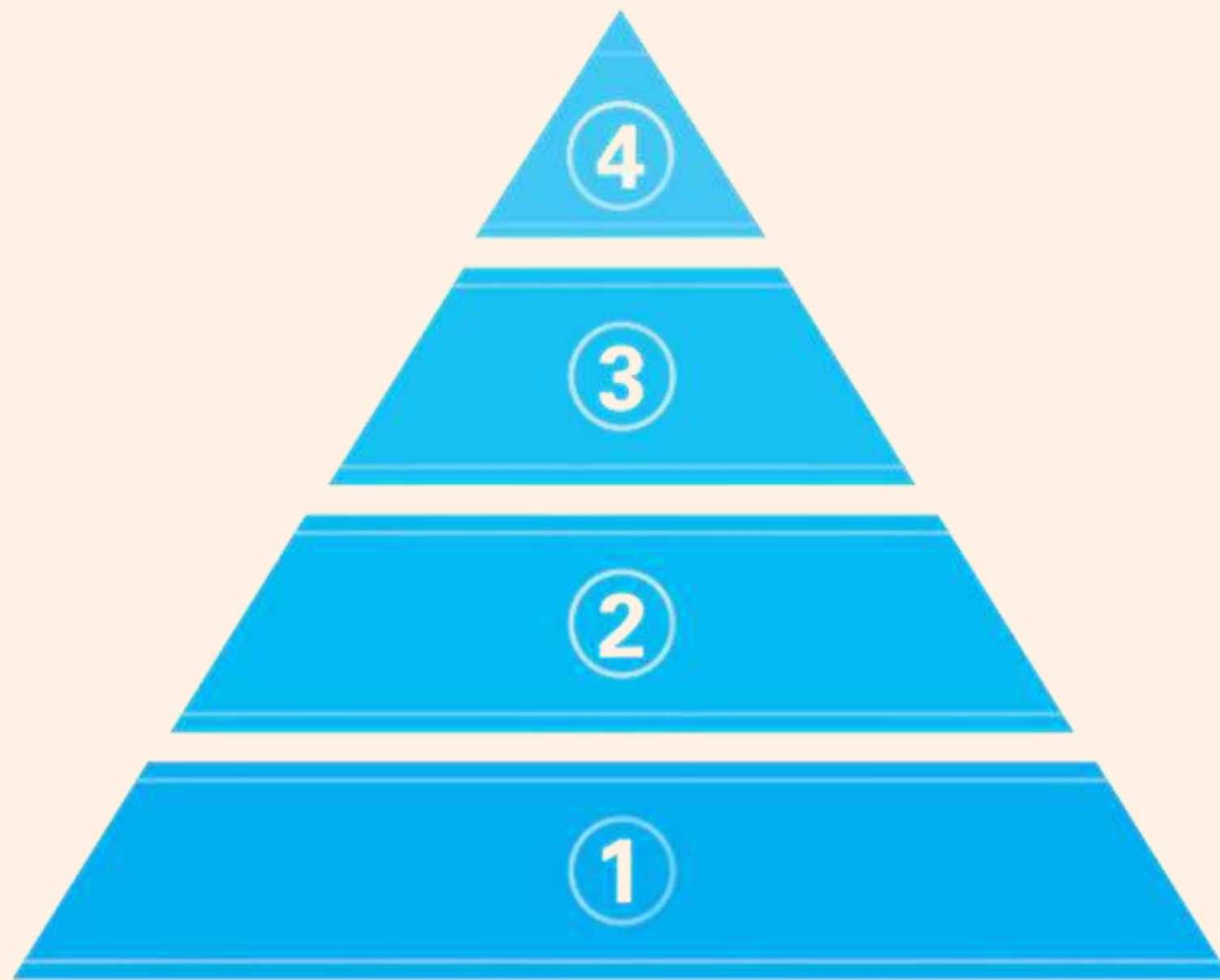
Integrating MHPSS interventions across the lifecourse amidst the climate and ecological crisis: using a socioecological lens



- **Multisectoral approach** that integrates MHPSS across other sectors
- Adopting a **social-ecological lens** to address MHPSS across levels
- **Life course & Developmental Stage** approach from pre-birth to adulthood



A note on addressing misconceptions surrounding mental health and psychosocial wellbeing and the climate and ecological crisis



LAYER 4

Specialized services (management)

LAYER 3

Focused care (indicated prevention)

LAYER 2

Family and community support (selective prevention)

LAYER 1

Universal preventive interventions & social considerations in basic services and security

Considerations and recommendations for implementing MHPSS interventions for infants, children, adolescents, and caregivers during climate and ecological crises



Child

- Accessible, quality, and at-scale MHPSS services across sectors
- Peer-to-peer programs and community mental health support
- Intergenerational collaboration for climate action

Family

- Caregiver MHPSS and capacity strengthening – for themselves and to support children
- Tailored support to caregivers of children with specific needs

Community

- MHPSS activities for families, teachers, and children in schools, learning environments, and communities.
- MHPSS preparedness & refresher trainings for first responders across all sectors

Systems

- MHPSS considerations into global resolutions and national preparedness, adaptation and mitigation plans
- Integrating MHPSS across humanitarian-development plans
- Research, data, and evidence

Impacts and interventions across the life course



Dr Lynne Jones, OBE FRCPsych

- Child and adolescent psychiatrist, Writer, relief worker
- Honorary associate professor at the London School of Hygiene and Tropical Medicine.
- Developed interventions to improve maternal and child mental and physical wellbeing in adverse environments, including addressing the impacts of the climate and ecological emergency.

Dr. Andria Spyridou

- Mental Health and Psychosocial Support Specialist at UNICEF Latin America and Caribbean Regional Office
- Strong interest in psychological trauma and psychosocial factors of the maternal experiences and early childhood
- Worked in emergencies and humanitarian crisis around the world for UNICEF, IFRC, International Medical Corps and Medicos del Mundo.

Maria Bray

- Child protection and Mental Health and Psychosocial Advisor, Terre des Hommes
- Expertise includes MHPSS, children and youth resilience and empowerment, capacity and systems strengthening.
- Passionate about co-creating and innovating with children and youth to answer new challenges such as the climate crisis.

Prathit Singh

- Youth advocate working with UN Agencies and international NGOs in areas of violence against children, meaningful child participation and justice.
- Student of International Development at the Geneva Graduate Institute, specialising in Human Rights and Humanitarianism
- Passionate about working to uphold children's rights and to ensure that every child around the world gets the future they deserve.

The climate and ecological crisis impact on infants and children



Dr. Lynne Jones OBE FRCPsych.
Honorary associate professor, LSHTM

Heat



Mother

Adverse pregnancy outcomes

- >eclampsia, preeclampsia, hypertension
- >stillbirths, low birthweight, premature birth (long term health impacts on child)

Maternal wellbeing

- Dehydration
- Immune system more vulnerability to infection
- Poor attention and cognitive functioning
- Stress, low mood

Infant/young child

Less ability to regulate temperature:

more surface to mass, less sweating, dehydration

- Multiple organ effects: muscle breakdown, kidney failure, seizures and collapse, altered immune response
- Heat - excessive activation stress response- poor emotional regulation
- Learning loss- slower cognition, poor attention
- Poor sleep: . Emotional/behavioural challenges, >obesity in adults
- Long term effects: Adolescents exposed to heat as infants,< academic achievement, <years in school

Water



- Four billion people experience severe water scarcity for at least one month each year.
- Half of the world's population could be living in areas facing water scarcity by as early as 2025..
- 1 in 3 children - or 739 million worldwide - live in areas exposed to high or very high water scarcity, with climate change threatening to make this worse.



**BY 2050
3,700,000,000
WILL SUFFER
EXTREME
DROUGHT**

UNICEF/UNI315914/Haro

Niger, 2020. Early in the morning, children go to the nearest water point to fetch water, 15 kilometres away from their home in Tchadi village.

Extreme weather events



© UNICEF/UN0847811/Haro

Young children

Grief and loss, acute stress reactions including sleep disturbance, behaviour change, regressive behaviour

Carers

Grief and loss reactions, depression, anxiety, PTSD, anger, helplessness and hopelessness, suicidality, increased aggression, intra family violence, harsh parenting

Loss of community infrastructure

Health centres, schools, social networks, further displacement

Vector Born Diseases



Spread increased/altered

- Increased temperatures
- Increased precipitation
- Stagnant water



West Nile virus: Neurological damage including depression, memory loss and motor dysfunction

<https://www.cdc.gov/mosquitoes/gallery/mosquito-control/>



- **Dengue:** >maternal mortality, stillbirths, neonatal deaths
- **Chikungunya:** fever, peripheral oedem, haemorrhagic symptoms, myocardial disease, neurological disorders in infants
- **Zika** in pregnant women increases risk of babies with microcephaly and other severe brain problems
- **Tick borne Lyme Disease:** Neuropsychiatric disorders in adults.

Possible congenital transmission

<https://www.cdc.gov/lyme/index.html>

Air Pollution



Particulate matter (PM)

Coarse, pollen, dust, mould, smoke from wildfires

Fine, fossil fuels household combustion

Gases NO₂, SO₂, CO, CO₂, Methane

Ozone (ground level)

Toxins black carbon, soot, lead

99% of global population breathe polluted air (WHO)

General

- **Low birth weight, preterm birth**
- **Allergies, asthma, cancers**
- **Impaired neurological development:** Lower intelligence, Poor memory and attention
- **Increased long term risk of severe mental disorders:** anxiety depression schizophrenia
- **Increase risk neurodevelopmental disorders:** ADHD, ASD
- **Indirect effects secondary to physical health impacts:** eg. Childhood asthma- increased stress, impact on education

SPECIFIC POLLUTANTS

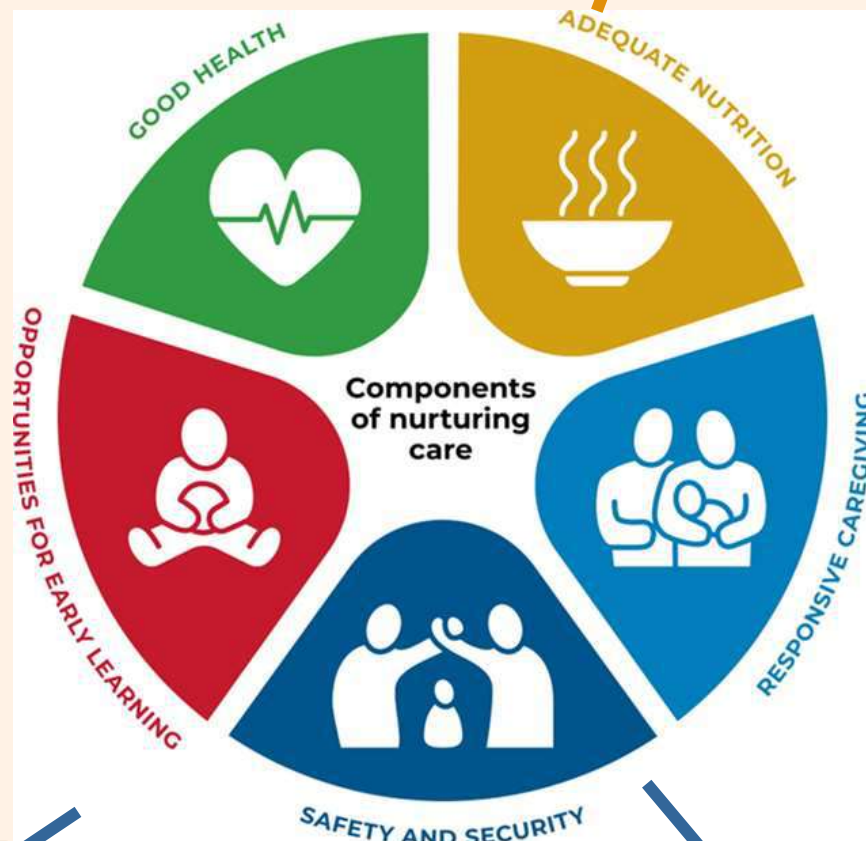
- **Early exposure Methane:** long term cognitive and behavioural impacts
- **Lead:** reduced IQ, reduced attention span, increased antisocial behaviour, reduced educational attainment

The climate and ecological crises are adverse child events that disrupt nurturing care, increase toxic stress with long term impacts on mental and physical health

Increased risk of disease. Health care unavailable

Food insecurity, water scarcity

Education disrupted



Conflict, displacement, poverty

Exploitation, abuse of young children

Stressed caregivers more neglecting, less responsive, more aggressive or violent.

TOXIC STRESS

(excessive activation of stress response)

Adulthood

- Poorer educational outcomes
- Depression
- Suicides
- Behavioural disturbance
- NCD

Protection for individuals and communities



- Learn how the climate and ecological crises are affecting their community
- Learn what they are already doing
- Educate as to risks
- Map heat islands/access to water
- Ensure pregnant women infants and children have access to cool spaces/shade
- Adequate hydration and good nutrition
- Support community engagement



Guatemala: Reclaiming Mayan knowledge to address climate change ...*work with ancestral men and women leaders and young people in developing content about ancestral knowledge for community radio stations and social networks*

Prevent a climate catastrophe by drastically reducing greenhouse gas emissions and keep 1.5 degrees celsius alive



- All governments **must cut emissions by at least 45 per cent by 2030** to keep heating to no more than 1.5°C.
- **G20 countries** - emitters of 80 per cent of all greenhouse gas emissions - must take the lead, yet all countries must act.
- The world must accelerate the transition to renewable energy production, all fossil fuel subsidies must end, windfall profits from fossil fuel producers must be taxed and redirected to the vulnerable, as urged by the United Nations Secretary General.

United Nations Children's Fund, The climate-changed child: A children's climate risk index supplement, UNICEF, New York, November 2023.

Addressing MHPSS needs of adolescents and youth amidst the climate and ecological crises: Perspectives from Latin America and the Caribbean



niñas y niños del Caserío Santa Rosa de Abujao, perteneciente al distrito de Masisea en la provincia Coronel Portillo, Ucayali.

© UNICEF/2015/Barco

- 820 million children (more than a third of the world's children) are highly exposed to heat waves.
- 330 million children (one in seven of the world's children) are exposed to river floods are exposed to river flooding.
- 240 million children (one in 10 of the world's children) are highly exposed to coastal flooding.
- 400 million children (nearly one in six of the world's children) are highly exposed to cyclones.
- 920 million children (more than one-third of the world's children) are highly exposed to water scarcity.
- 600 million children (more than one in four children in the world) are at high risk of vector-borne diseases, such as malaria and dengue fever.



Launch of the Regional Youth Network for Mental Health

Participation in plenaries and workshops in the Global Mental Health Summit Argentina

2022

2023

2023

2024

Youth Forum Parallel to the Global Mental Health Summit

Youth-led SPOTIFY Mental Health Podcasts adaptation and Launch in 8 Countries



The Purpose

The Mental Health Youth Network was developed to provide them with a platform for meaningful participation, where they can break the silence surrounding mental health issues

1

Developing socio-emotional skills to take care of personal mental health and their environment.



*I Support my Friends
Helping Adolescents Thrive*

2

Co-creating relevant content on mental health and psychosocial support and promoting advocacy and communication campaigns



3

Promoting intergenerational dialogue and **advocacy** on mental health





About the game

- Its main objective is for adolescents and young people to reflect and dialogue on biographical, biological, cultural and emotional dimensions of mental health.
- Participants are invited to devise, propose, and report transformative actions – initiatives or strategies that can generate a positive impact and promote well-being in the communities in which they are implemented.



In 2024, **UNICEF and Let's Unpack It** developed a Child and Youth Mental Health Focal Point Network comprised of youth from 17 Caribbean countries.

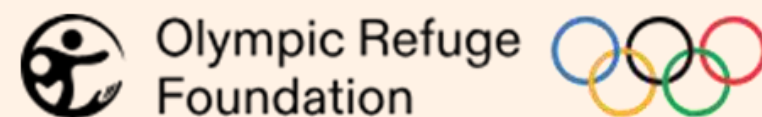
To address climate change and mental health, the young people developed the youth for youth resource:

“The Young Caribbean Minds Mental Health & Well-being Technology Enhanced Workbook” and website **www.youngcaribbeanminds.com**



- Research studies assert that Caribbean children and youth are more likely to be victims of psychological distress due to climate-related events such as natural disasters
- UNICEF for the Eastern Caribbean Area executed a study in 2022 titled: *“Participatory Research on Climate Change and Other Shocks on the Mental Health and Psychosocial Well-Being of Adolescents and Youth in the Eastern Caribbean Area.”*
- The study revealed the need to develop educational material for children and youth and further in-depth research. As a result, a U-Report Survey was executed in 2023 in collaboration with PAHO.
- The survey revealed that of the **1370 young people surveyed** from Eastern Caribbean countries, **80% reported thinking about how climate impacts their health and almost 70% called for large-scale efforts to tackle the effects of climate change on health.**

Sport for protection, resilience and transformation in context of climate crisis - Kurigram , Bangladesh





- One of the **world's most vulnerable nations** to the impacts of climate crisis
- **41% migrate to urban cities** due to climate reasons.
- **19 million Bangladeshi children are at risk** from climate change disasters such as floods and cyclones (UNICEF 2019 report)
- **Up to 80% of the communities** get affected by major flood events in Kurigram.
- One of the **highest rates of child marriage - 67% (in Kurigram)** in the world (Bangladesh Demographic Survey, 2017)





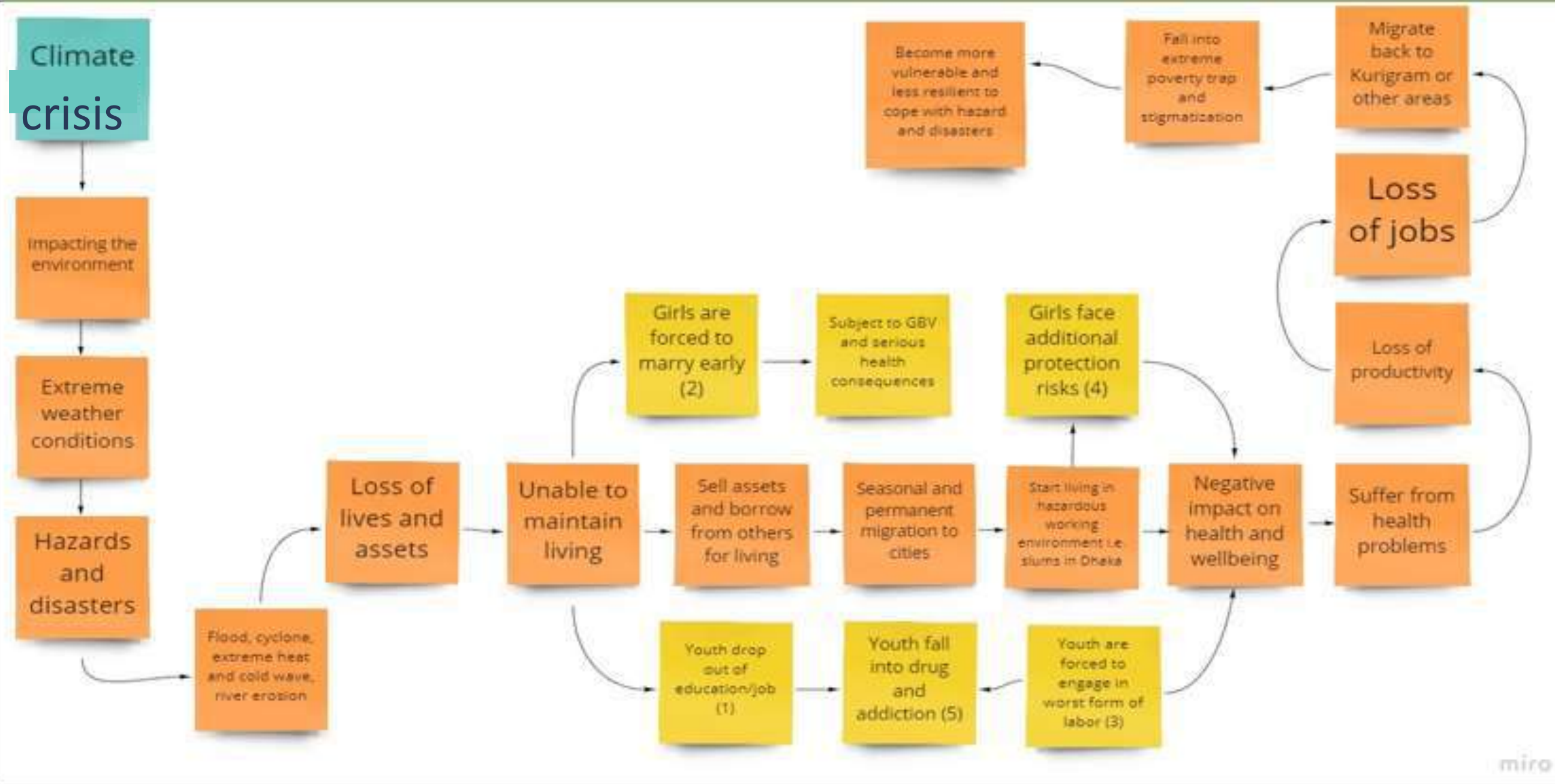
Dhaka, the capital is the most preferred destination of the climate vulnerable people



Almost 70% of slum dwellers in the capital having experienced environmental shocks



Casual pathway of Climate Change in Kurigram



Voices of children on psychosocial challenges they face in context of climate crisis and displacement



Feeling safe ; (*security and safety*)

- **Feelings of insecurity** (due to frequent changes in their living conditions)
- **threats to their physical integrity and emotional stability**
- **uncertainty and lack of basic information**, and limits access to basic needs and basic survival
- **Increase the risk and cases of gender-based violence and other violence** against children



Feeling connected; (*connection and network*)

- **Disrupt bonds and connections & disrupt sources of support**
- **Breakdown of cohesion and increase social tension**



Feeling worthy; (*Role and identity*)

- impact on **education and capacity to learn**
- **No access to information** on Climate crisis



Feeling respected (*sense and access to justice*)

- **No space to participate and take action**
- **Gender discrimination** with consequences of climate crisis



Feeling hopeful (*giving sense and meaning to life*)

- fear of developing **their future**

Sport for protection, resilience and transformation in context of climate crisis



Project Goal:

Improved **inclusion and empowerment** of vulnerable adolescents and youth displaced or at risk of displacement through sports for protection activities in Bangladesh.

Outcome 1: Adolescent and youth (15-24) displaced or at risk of displacement from vulnerable communities have **meaningful access to safe sports activities to enhance their physical, mental, and psychosocial wellbeing** and participate in sports activities regularly

Outcome 2: Adolescents and youth displaced or at risk of displacement participating in Sports for Protection and related activities have **contributed to sustainable local solutions through youth-led initiatives**

Outcome 3: Sports actors at local, district and national level **contribute to creating an enabling environment** for safe sports participation for youth and adolescents in Dhaka and Kurigram

Funded by: Olympic Refuge Foundation (ORF)

Duration: Jan 2022 – June 2025

Project Participants:

10,000 (Adolescent & Youth)

Kurigram (Sadar, Ulipur and Chilmari) – 9,000 and Dhaka (Mirpur) – 1,000



Participants by Gender:

Female =50%
Male =50%

Participants by Age:

15-19 =60%
20-24 =40%



5% persons with disability and GDP



Olympic Refuge Foundation



Terre des hommes
Helping children worldwide.

Theory of change and strategies to support children, youth and community resilience



CLIMATE CRISIS CURRICULUM

- IMMERSE**
Realities of Climate Crisis
Introducing the science: What is Climate Crisis?
- UNDERSTAND**
Cause and Effect: Human Habits and Actions
Effects on Children and Youths
- PERSPECTIVE**
The Ripple Effects: Global and Local Realities
- EMPOWER**
Emotional Responses to Climate Change
Taking Action
Shifting from Anxiety to Empowerment



ENGAGE curriculum
Participatory action research by youths



Supporting children, youth and community to cope, adapt and transform



Feedback from children on the changes they experience after participation in the project:

- A space to **share their feelings freely**.
- **Have access to information and feel more in control**
- supports **developing their sense of calming and sense of control**
- Support in **developing meaningful roles and positive identities** through perceived agency, autonomy, or independence and perceived roles and efficacy.
- **Increasing their social networks and peer relationships**, and fostering supportive bonds.
- This has helped them **cope with stress, fear, anxiety, and grief**.
- Also Breaking the existing bias and stereotypes, **positive gender norms** have been developed through these sessions..



Children and young people's participation in discussions around the climate crisis

- Children's rights and climate crisis: Giving importance to how children and young people **feel** towards the climate crisis
- Need to ensure **child-friendliness** and **meaningfulness**
- Addressing **eco-anxiety**: often overlooked when involving children and young people





<https://www.youtube.com/watch?v=laMnacmeGF8>

<https://youtu.be/laMnacmeGF8?si=MDQ40j0w1gUu8WUI&t=143>



Thank you!



List of Resources

- [Navigating the climate crisis: Mental health and well-being](#)
- [Crisis climática: amenaza para los derechos de la niñez y la adolescencia | UNICEF](#)
- A child-friendly version of: 2022 report to the UN General Assembly my report to the General Assembly is about how the climate crisis harms children. [child-friendly-version-unga-2022-en.pdf](#)
- Short video ; [Our right to a safe & healthy world free from violence \(youtube.com\)](#)
- General comment N°26 children's right and the environment with a special focus on climate change [Child Friendly Version - English \(ohchr.org\)](#)
- [Engaging with children about the climate crisis and violence against children: A rights and resilience-based approach | Terre des hommes \(tdh.org\)](#)
- <https://www.nature.com/articles/d41586-024-00998-6>
- Early Childhood Scientific Council on Equity and the Environment. (2023). Extreme Heat Affects Early Childhood Development and Health: Working Paper No. 1. <https://developingchild.harvard.edu/heat-paper/>
- United Nations Children's Fund, The Coldest Year of the Rest of their Lives: Protecting children from the escalating impacts of heatwaves, UNICEF, New York, October 2022. <https://www.unicef.org/media/129506/file/UNICEF-coldest-year-heatwaves-and-children-EN.pdf>
- <https://www.unicef.org/wash/water-scarcity>
- <https://www.unicef.org/press-releases/1-3-children-exposed-severe-water-scarcity-unicef>
- Storm Alex: Acute stress in pediatric population: <https://pubmed.ncbi.nlm.nih.gov/35599977/>
- United Nations Children's Fund, The climate-changed child: A children's climate risk index supplement, UNICEF, New York, November 2023. <https://www.unicef.org/reports/climate-changed-child>
- The Climate Crisis is a Child Rights Crisis: Introducing the Children's Climate Risk Index New York: United Nations Children's Fund (UNICEF), 2021: <https://www.unicef.org.uk/climate-change/>
- Save the Children (2021). 'Born into the climate crisis'. Report; https://www.savethechildren.org.au/getmedia/dfb07742-4f10-40fa-8011-971399140136/stc-cc-full-report_final_220921_no-map.pdf.aspx
- Sampath, V., Nadeau, K.C., Ebi, K.L. et al. Improving planetary health is integral to improving children's health—a call to action. *Pediatr Res* (2022). <https://doi.org/10.1038/s41390-022-02432-x>
- Inter-agency Network for Education in Emergencies (INEE). (2023). Promoting Climate-sensitive Early Childhood Care and Education in Emergencies. INEE. <https://inee.org/resources/promoting-climate-sensitive-early-childhood-care-and-education-emergencies>
- IPCC (2021). Summary for Policymakers. *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. V. Masson-Delmotte, P. Zhai, A. Pirani et al.
- OCHA (2023). Global Humanitarian Overview 2023.
- Berry, H., et al. (2010). "Climate change and mental health: a causal pathways framework." *International Journal of Public Health* **55**(2): 123-132.
- Hayes, K., et al. (2018). "Climate change and mental health: risks, impacts and priority actions." *Int J Ment Health Syst* **12**: 28.
- Hayes, K., et al. (2019). "Factors Influencing the Mental Health Consequences of Climate Change in Canada." *International journal of environmental research and public health* **16**(9): 1583.
- Cunsolo, A. and N. R. Ellis (2018). "Ecological grief as a mental health response to climate change-related loss." *Nature Climate Change* **8**(4): 275-281.
- Corvalan, C., et al. (2022). "Mental health and the global climate crisis." *Epidemiol Psychiatr Sci* **31**: e86.
- Burrows, K. and E. Fussell (2022). "A life course epidemiology approach to climate extremes and human health." *The Lancet Planetary Health* **6**(7): e549-e550.
- Thiery, W., et al. (2021). "Intergenerational inequities in exposure to climate extremes." *Science* **374**(6564): 158-160.
- Pacheco, S. E. (2020). "Catastrophic effects of climate change on children's health start before birth." *The Journal of Clinical Investigation* **130**(2).
- Berry, H., et al. (2018). "The case for systems thinking about climate change and mental health." *Nature Climate Change* **8**(4): 282-290

