Policy and Governance for Climate-Resilient Health Systems

Digital Health for Climate Resilience

Lecture 8

Lecture Outline

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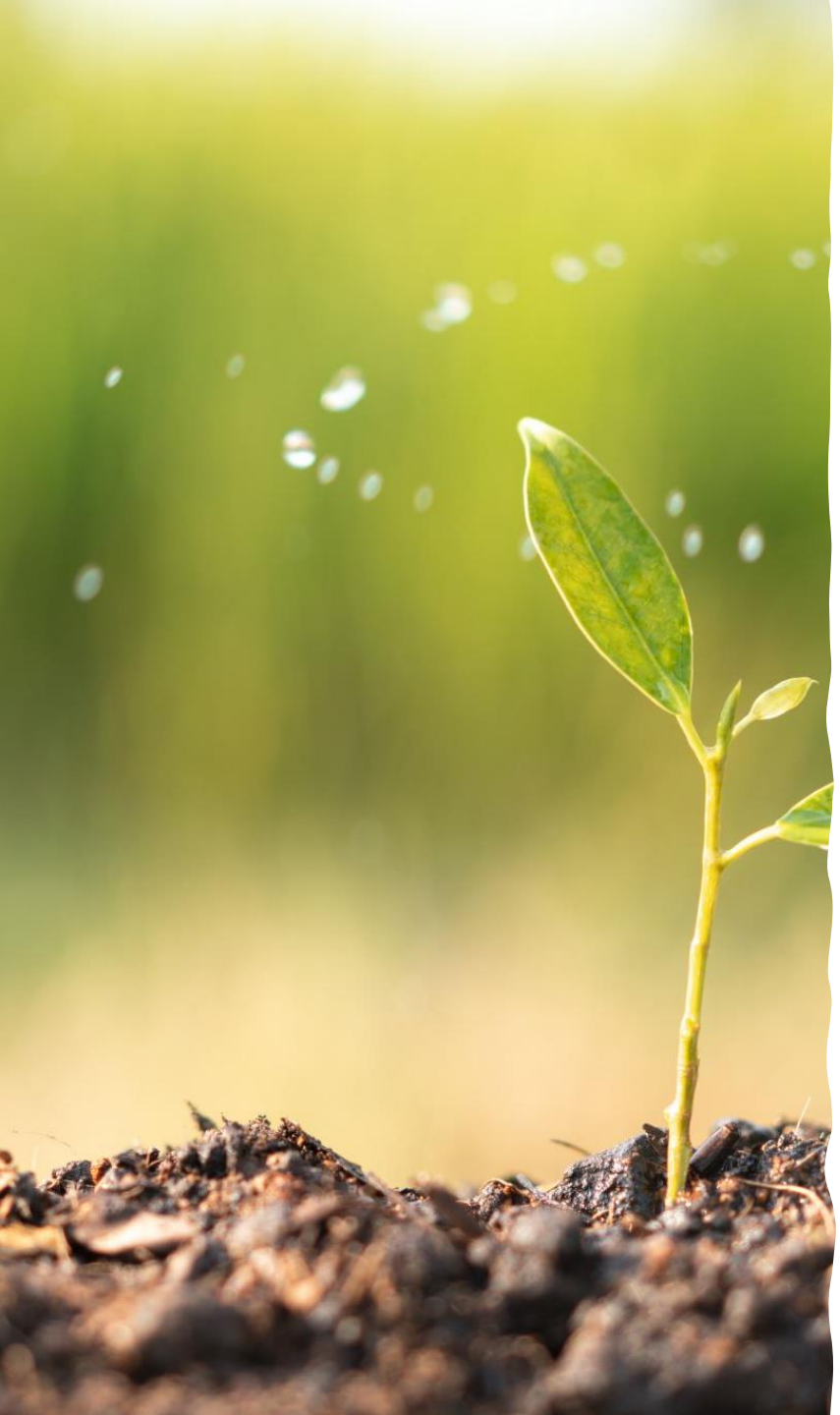
Defining Climate-Resilient Health Systems and Governance

- **Climate-Resilient Health System (CRHS):** A system that can anticipate, respond to, cope with, recover from, and adapt to climate-related shocks and stresses, while continuously transforming to meet evolving health needs and reducing its own carbon footprint
- **Governance:** The ensemble of institutional structures, policies, regulations, decision-making processes, and accountability mechanisms that guide and constrain collective action
- **Climate-Health Governance:** The specific application of governance to the intersection of climate change and health—encompassing how decisions are made, who participates, how resources are allocated, and how accountability is ensured across sectors and levels
- **Why It Matters:** Without effective governance, even the best technical solutions fail to be implemented, sustained, or scaled



The Imperative: Why Governance Matters

- **Climate change is a "threat multiplier"** that exacerbates existing health challenges and creates new ones
- **Health systems are themselves vulnerable** to climate impacts—facilities at risk, supply chains disrupted, workforce affected
- **Responses require action across multiple sectors:** health, environment, water, energy, agriculture, finance, disaster management
- **Impacts are unevenly distributed**, requiring governance that addresses equity and protects the most vulnerable
- **Time horizons are mismatched:** political cycles are short; climate change is long-term. Governance must bridge this gap
- **The WHO warns:** "The cost of inaction is measured in lives lost, services disrupted, and development gains reversed"

WHO Operational Framework for Climate-Resilient Health Systems · 10 Components

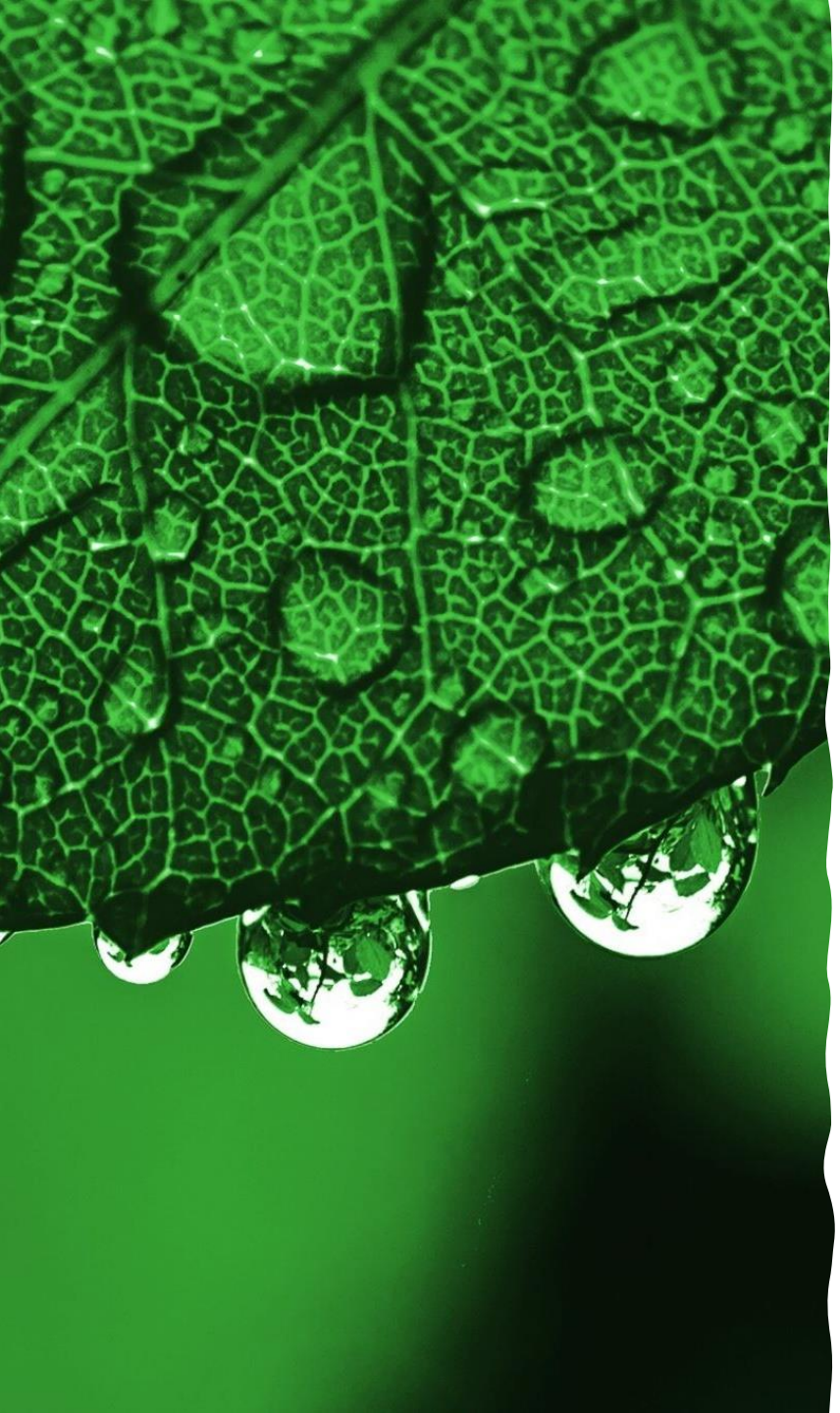
Components 1–6: Core Health System Building Blocks

Components 7–10: Climate-Resilient Additions

Source: WHO (2015). Operational Framework for Building Climate Resilient Health Systems. Geneva: World Health Organization.

Institutional Architecture for Climate and Health

- **The Core Challenge:** Climate and health are typically managed by separate institutions with different mandates, cultures, and funding streams
- **Common Governance Gaps:**
  - No dedicated unit or focal point for climate and health within Ministry of Health
  - Lack of formal coordination mechanisms between health and other sectors
  - Climate considerations not integrated into health policies, budgets, or infrastructure standards
  - Absence of climate budget tagging in health sector
- **Institutional Solutions:**
  - Dedicated **Climate and Health Technical Units** within Ministries of Health
  - **Inter-ministerial committees** or technical working groups
  - **Formal coordination mechanisms** with meteorological, environmental, and disaster management agencies
  - **Integration of climate resilience** into health sector plans, strategies, and budgets



Case Study 1: Mauritius and the Climate and Health Technical Unit

- **Context:** Mauritius, with WHO and Green Climate Fund support, conducted a comprehensive gap analysis of its health system's climate resilience
- **Five Critical Systemic Gaps Identified:**
  - Absence of a dedicated climate-health coordination unit
  - No standalone Climate and Health Strategy or climate-proofing standards
  - Fragile surge capacity (operational readiness)
  - Limited integration of climate variables into health surveillance
  - Lack of climate budget tagging in the health sector
- **Proposed Institutional Framework:**
  - Establishment of a **Climate and Health Technical Unit (CHTU)** within the Ministry of Health and Wellness
  - Strengthening of the existing Technical Working Group on Climate Change and Health
  - Integration of climate resilience into health policies, budgets, infrastructure, and monitoring
  - Development of a financing strategy combining domestic resources and international climate funds
  - Institutionalization of a Monitoring, Evaluation, and Learning (MEL) system with climate-sensitive health indicators
- **CHTU Mandate:** Coordination of multisectoral action, strengthening data systems and early warning, capacity building across health workforce, and partnership development

Case Study 2: Rwanda's Technical Working Group

- **Context:** Rwanda has established structured climate-health governance through a dedicated **Technical Working Group (TWG)**
- **Composition:** Brings together government ministries, health agencies, climate authorities, and development partners
- **Functions:**
  - Develops guidelines for climate and health action
  - Integrates climate considerations into national health strategies
  - Aligns vertical coordination across sectors
  - Supports systematic mainstreaming of climate risks into health policy, infrastructure standards, and emergency preparedness
  - Fosters multisector collaboration, evidence generation, and adaptive decision-making
- **Significance:** Demonstrates how formal technical governance mechanisms can accelerate climate-resilient, equitable, and sustainable health system adaptation at national level
- **Key Lesson:** A dedicated, well-constituted working group with clear terms of reference and high-level buy-in can drive systematic integration

The Implementation Gap: Policy vs. Practice

- **A Recurring Pattern:** Many countries have developed climate and health policies, but implementation at subnational and local levels lags
- **Common Causes of the Gap:**
  - Policies developed in a **top-down manner** without engaging those responsible for implementation
  - Lack of **local ownership** and relevance
  - Insufficient **resources** (financial, human, technical) at local level
  - Weak **coordination** across levels of government
  - Unclear **roles and responsibilities** for implementation
  - Competing **priorities** and political will fluctuations
- **Consequence:** Even well-designed national policies fail to translate into tangible action on the ground

Case Study 3: Western Cape, South Africa – Heat-Health Governance

- **Context:** South Africa developed National Heat-Health Action Guidelines in 2020. The Western Cape province faces increasing heat events
- **Study:** 31 in-depth interviews with decision-makers across national, provincial, and municipal levels, health and non-health sectors
- **Key Findings:**
  - Despite existence of National Guidelines and recognition of urgency, **implementation remains fragmented**
  - **Subnational and local actors were not involved** in developing the National Guidelines, limiting their applicability at local level
  - Provincial and municipal stakeholders are actively working to mitigate heat impacts, but **lack of coordination, unclear roles, and need for local adaptation** of national policy are major challenges
  - The City of Cape Town has developed its own Heatwave and High-Heat Day Action Plan (approved late 2023), but implementation is in early stages
- **Critical Insight:** "Subnational and local actors were not involved in developing the Heat-Health Action Guidelines limiting their applicability at the local level"
- **Recommendations:** Strengthen coordination, define departmental roles, enable local adaptation of policy strategies

Multisectoral Coordination: The Pan-European Protocol on Water and Health

- **Context:** The Protocol on Water and Health is a **legally binding international agreement** serving the pan-European region (53 countries)
- **Unique Features:**
  - Legally binds the **health, environment, and water sectors** around regional targets
  - Establishes clear **accountability mechanisms**
  - Provides **evidence-based tools and guidance** (e.g., water safety planning, health facility assessments)
- **20 Years of Impact:**
  - Over **30 countries** now use risk-based water safety planning to address climate and other risks
  - Assessments conducted in **more than 1,500 health facilities across 10 countries**, leading to concrete improvements for tens of millions of people
  - Recent evidence guidance on **Legionella** supports prevention and control
- **Relevance to Climate-Resilient Health Systems:**
  - Directly supports climate resilience, health security, and health system adaptation
  - Demonstrates the power of **legally binding, multisectoral governance frameworks**
  - Ensures that water, sanitation, and hygiene are integrated into health system investments

Social Dimensions: Leadership, Ownership, and Intermediaries

- **Beyond Formal Structures:** The success of climate-health governance depends not only on institutions but on social factors
- **Key Social Dimensions (from Thailand case study):**
  - **Strong leadership:** Champions who drive action and maintain momentum
  - **Sense of shared ownership:** Stakeholders at all levels feel invested in outcomes
  - **Trust and relationships:** Personal networks sustain progress when formal systems falter
- **Crucial Intermediaries:**
  - **Sub-district public health officials** in Thailand serve as crucial intermediaries between government and local communities, translating national policies into locally relevant action
  - These "street-level bureaucrats" ultimately determine how policy translates into practice
- **Implication:** Governance strengthening must invest in people, relationships, and leadership, not just institutional design

Case Study 4: Thailand's GREEN and CLEAN Hospitals and H-NAP

- **Context:** Thailand has developed two key policies: the **GREEN and CLEAN hospitals policy** (mitigation) and the **Health National Adaptation Plan (H-NAP)** (adaptation)
- **What Works Well:**
  - **Government level:** Adaptation and mitigation planning is well-developed
  - **Local level:** Sub-district health officials effectively engage communities
  - **Mitigation policy:** GREEN and CLEAN provides clear, prescriptive guidance that hospitals can follow
- **Identified Gaps:**
  - **Organizational level:** Adaptation planning could be strengthened within healthcare organizations themselves
  - **Data integration:** Need for stronger coupling of environmental monitoring data with health impact analysis
- **Lessons for Other Systems:**
  - Benefits of detailed health-focused national mitigation and adaptation policy
  - Value of establishing local public health units as implementation arms
  - Importance of encouraging shared ownership
  - Conceptualizing environmental sustainability as core to healthcare, not an add-on

Health Information Systems Governance

- **The Challenge:** Climate and health data are often scattered across different institutions, in incompatible formats, with no protocols for sharing
- **Common Data Governance Gaps:**
  - Data scattered across sources, hindering interoperability
  - No defined protocols for data sharing between agencies
  - "Data ownership" concerns create reluctance to share
  - Mortality and morbidity data often delayed, hindering timely decision-making
- **Consequences:** Without integrated data, early warning systems fail, vulnerable populations are missed, and policies are not evidence-based
- **Solutions:**
  - Establish data-sharing agreements between health, meteorological, and environmental agencies
  - Develop interoperable platforms (e.g., DHIS2 Climate App)
  - Integrate climate variables into routine health surveillance
  - Invest in real-time monitoring and early warning systems

Financing Climate-Resilient Health Systems

- **The Gap:** Climate change poses significant financial risks to health systems, yet financing for climate-resilient health systems is inadequate
- **Key Challenges:**
  - Health sector often not included in national climate finance planning
  - Lack of **climate budget tagging** in health budgets—making it impossible to track spending
  - Competing priorities for limited domestic resources
  - Accessing international climate funds (e.g., Green Climate Fund) is complex and requires capacity
- **Strategies:**
  - Integrate health into **National Adaptation Plans (NAPs)** and **Nationally Determined Contributions (NDCs)** to access climate finance
  - Implement **climate budget tagging** in health sector
  - Develop financing strategies combining domestic resources and international climate funds
  - Make the economic case: investments in resilience are cost-effective compared to inaction

Governance Across Borders: Regional and Global Mechanisms

- **Climate change knows no borders.** Health systems must cooperate regionally and globally
- **Examples of Regional Governance:**
  - **Pan-European Protocol on Water and Health** (legally binding, multisectoral)
  - **Africa CDC Strategic Framework for Climate Change and Health** (guiding principles: One Health, partnerships, equity)
  - **CHOICE Consortium** (Ghana, Kenya, Pakistan, Tanzania, Kyrgyzstan) linking think tanks across regions
- **Global Governance Mechanisms:**
  - **WHO's Alliance for Transformative Action on Climate and Health (ATACH)**
  - **COP process** and increasing health focus (first Health Day at COP28)
  - **Green Climate Fund** and other financing mechanisms
- **Value of Cross-Border Governance:**
  - Shared learning and capacity building
  - Coordinated response to transboundary threats
  - Amplified voice in global negotiations

Challenges and Barriers to Implementation

- **Political:** Fluctuating political will, short electoral cycles, competing priorities
- **Institutional:** Fragmented governance, siloed ministries, lack of coordination mechanisms
- **Financial:** Inadequate and unpredictable funding, lack of climate budget tagging
- **Technical:** Limited capacity for data integration, modeling, and evidence generation
- **Human Resources:** Insufficient trained workforce, high turnover, lack of climate literacy
- **Social:** Inequities, lack of community engagement, trust deficits
- **Legal/Regulatory:** Absence of mandates for climate action in health sector
- **Cross-Cutting:** The "implementation gap"—translating policy into practice at local level

Conclusion and Key Takeaways

- **Governance is the foundation** upon which climate-resilient health systems are built. Without effective governance, even the best technical solutions fail
- **Institutional architecture matters.** Dedicated units (like Mauritius's CHTU), technical working groups (like Rwanda's TWG), and formal coordination mechanisms are essential
- **The implementation gap is a central challenge.** Policies must be co-developed with subnational and local actors to ensure relevance and ownership
- **Multisectoral coordination is not optional.** Climate change requires binding together health, environment, water, finance, and other sectors
- **Social dimensions—leadership, shared ownership, trusted intermediaries—are as important as formal structures**
- **Health information systems must be governed for integration**—breaking down data silos and enabling evidence-based action
- **Financing must be adequate, tracked, and sustained.** Climate budget tagging and access to international funds are critical
- **Governance must operate across levels—local, national, regional, global**—because climate change respects no borders
- **Ultimately, climate-resilient health system governance is about accountability**—to current and future generations, to the most vulnerable, and to the principle that health is a fundamental human right

Q&A / Discussion

Thank you.

Questions for Discussion:

- In your context, what are the most significant governance barriers to building climate-resilient health systems?
- How can we ensure that subnational and local voices are included in national policy development?
- What mechanisms can sustain political will across electoral cycles?
- How do we hold governments and other actors accountable for climate and health commitments?
- What would a "climate-resilient health system" look like in your community, and who would need to be at the table to build it?

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