

# Science-based Policy Solutions for Climate Change and Health Challenges

Presenting **real-world** examples of **co-designed, systems-based, multidisciplinary approaches** that can be used to support policy development at the nexus of climate change and health.

The InterAcademy Partnership (IAP) and Save the Children present **14 case studies** from around the globe, especially from low- and middle-income countries, that can be **useful guides** to scientists and policy makers seeking information on how to engage diverse publics, develop research projects, and devise effective **win-win** policies.

## Lessons Learned from an Analysis of the Case Studies



Take a systems-based approach with cross-sectoral integration



Co-produce evidence with policy-makers and affected communities



Prioritize equity: Identify groups who are most vulnerable and why




Build trust for formulating policy: invest early in end-user relationships




*Strategic aspects of policy opportunities and challenges, and their interconnections emerging from workshop discussion*

Identify policy target at the outset 

Build trust for implementing policy: produce scientific findings that address context-specific climate and health priorities 

Identify policy trade-offs and mitigate unintended consequences 

Incorporate lessons learned as part of long-term capacity building for better decision-making 

The IAP and Save the Children present **14 case studies** from around the globe, of co-designed, systems-based, multidisciplinary approaches that can be used to support **policy development** at the **nexus of climate change and health**.

- **Benin:** Lessons from the formulation of a National Adaptation Plan
- **Ethiopia:** Mapping the urban overheating hazard and its driving factors in Addis Ababa
- **Ghana:** Co-production methodologies to deliver city-level flood resilience and reduce health inequalities in sub-Saharan Africa
- **South Africa:** Using machine learning to map bioclimatic zones and crop yields in water-scarce conditions
- **South Africa:** Addressing heat-health threats among women, infants and children in primary healthcare settings
- **Sub-Saharan Africa:** Food security and resilience using a small-scale funding model

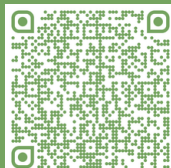
- **Bangladesh:** Community engagement to reduce dengue transmission in Dhaka
- **Bangladesh:** Aquifer storage and recovery technology for irrigation water supply
- **India:** The health benefits of response actions to air pollution and extreme heat in Ahmedabad
- **Lao, Pakistan, Somalia, Sri Lanka:** Systems thinking to estimate the health co-benefits of climate action

- **Brazil:** Climate, air pollution and socioeconomic vulnerability: a research platform to implement policies to improve environmental health

- **Malaysia:** A technology-based approach to predicting fire risk in tropical peatlands and developing a transboundary haze alert system
- **Malaysia:** The Urban Heat Island phenomenon and its impacts on vulnerable groups
- **Thailand:** The link between mental health and ecosystem health in Indigenous farming communities



The case studies referred to are available in a book published by IAP and Save the Children. Scan the QR code on the left to access.



More information is available in the Science-policy brief. Scan the QR code on the left to access.

#### Websites

**IAP:** [www.interacademies.org](http://www.interacademies.org)

**SCUS:** [www.savethechildren.org](http://www.savethechildren.org)