APHRC African Population and
Health Research Center

PATHFINDER PROJECT BRIEF

Background

Climate change poses an urgent global challenge, requiring immediate and sustained action to limit greenhouse gas (GHG) emissions. To avoid catastrophic consequences, the global temperature rise should be kept well below 2°C—preferably 1.5°C—above pre-industrial levels. However, a significant gap remains between the projected emission trajectories under current policies and the reductions needed to meet the Paris Agreement targets. Bridging this gap demands evidence-based, context-specific actions that not only cut GHG emissions but also yield co-benefits for public health.

PARIS CLIMATE AGREEMENT

1. <2°C NET ZERO EMISSIONS
Limit the avg. global temperature increase to < 2° centigrade + achieve net zero emissions by mid-century

2. Enhance resilience and adaptation to climate impacts certain to occur

3. Align financial flows in the world with these objectives

The **1st phase of the Pathfinder Initiative** focused on gathering and synthesizing evidence to identify pathways that provide significant health co-benefits[1] from climate mitigation actions. This was done by conducting an umbrella review (an analysis of systematic reviews), which brought together existing evidence on the effectiveness of strategies for mitigating climate change and improving human health.

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1 Health co-benefits of climate change mitigation actions refer to the positive health outcomes that result from efforts to reduce greenhouse gas emissions and mitigate the impacts of climate change (Lancet).

The final umbrella review comprised 14 systematic reviews and 57 primary studies from which 200 mitigation actions across a range of sectors were identified.

The key pathways identified from the review that had the most health co-benefits include:
  i. Reduced air pollution through the transition to clean energy
  ii. Improved physical and mental health from sustainable diets and active travel
  iii. Ecosystem restoration through natural climate solutions.
  iv. Improved urban design and green infrastructure which also play a crucial role in mitigating environmental impacts.

The review however revealed that most of the current evidence is based on modeled estimates rather than real-world implementations, often relying on diverse assumptions and limited data from high- and middle-income countries.

Given the rapid growth of climate and health research, there is a strong demand from scientists, policymakers, and practitioners for accessible and up-to-date evidence to support informed decision-making. This resulted in a need for **phase 2 of the Pathfinder initiative** to generate evidence to ensure that the actions with the greatest potential health co-benefits can be implemented and evaluated to achieve optimal outcomes, particularly for low- and middle-income countries.

Pathfinder 2 Objectives

Pathfinder 2 aims at accelerating effective action towards a healthy net zero future by:

i. Identifying and delivering context-specific evidence on the benefits (and potential trade-offs) of the mitigation actions for human health and the climate.

ii. Strengthening capacity to develop, implement and evaluate climate mitigation actions that sustain and promote human health and increase equity and resilience, using principles of co-design

Methodology

These objectives will be achieved in 3 work packages:

WP 1. Evidence for Action

- This work package aims to make up-to-date and relevant evidence and tools for health co-benefits of climate change mitigation actions accessible to key decision-makers.
  - The evidence collected and synthesized in Pathfinder 1 will be used to create a machine-learning-assisted living systematic map of the evidence on climate and health with a particular focus on mitigation actions.

WP 2. Monitoring and Evaluating Progress

- The work package aims to promote rigorous and practical monitoring and evaluation of climate mitigation actions that aim to promote health, through the development of a 'Coalition on Climate Action for Health."
  - This will be achieved by building upon the relationships and networks developed in the first phase of the Pathfinder Initiative to create a coalition comprising; **research partners** who will support with application of evidence to local contexts, **enabling partners** who will facilitate access to cities and **implementing partners** who will participate in an ongoing process, with support from Pathfinder to identify relevant data for climate mitigation intervention with health co-benefits and also to measure and monitor the progress of mitigation actions

WP3. Strengthening capacity and sharing lessons

- The work package aims to support the implementation of high-ambition decarbonization initiatives by strengthening the capacity of partner organizations, including providing expert technical support and enabling rapid sharing of evidence within and beyond the Coalition. Investigate the role of health co-benefits assessments in climate policy-making through a literature review.
  - This review will assess how different types of information on health co-benefits might affect policy decisions, at the different stages of the policy cycle through engagements, interviews and surveys. In Kenya, a desk review will be conducted to identify how well connections between climate policy and health co-benefits are identified, estimated and maximized within the recently launched key Kenya Climate Change Strategy Documents (Kenya's National Climate Change Action Plan (NCCAP) 2023-2027, Long-Term Low Emission Development Strategy (LT-LEDS) 2022-2050 and Climate Change Act (Amendment 2023) (by Aug 2025).

Expected Outcome

The main outcomes will be:

i. Delivery of specific evidence to support intervention programs among the Coalition members

ii. To have the Coalition itself as an ongoing entity that will generate new evidence from monitoring and evaluating interventions

iii. Establishment of a community of practice to further the reach of interventions.

Project Information

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Partners: African Population and Research Center (APHRC), African Institute for Development Policy (AFIDEP)

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