

Pathfinder Policy Brief COP28: Healthy and Just Transitions

November 2023

Introduction

The health impacts of climate change are rapidly accelerating, including due to heatwaves and other extreme events, the spread of vector-borne and water-borne disease, food insecurity, adverse outcomes of non-communicable disease, and mental health impacts.² Certain populations, including countries in the Global South, low-income communities, women and children,³ older people, people with disabilities, Indigenous peoples, migrants, and other marginalized groups are burdened with the worst impacts, on account of increased exposure to threats and limited available resources to reduce their vulnerability. The populations most impacted by climate change and its health consequences are often those which have contributed least to emissions.⁴ These social injustices undermine the human right to health and to a clean, healthy and sustainable environment.

This brief paper first touches on injustices observed across sectors, whether as a result of current practices or as a result of poorly managed 'unjust' transitions, before sharing examples of just transitions, including from the 2023 Pathfinder Commission Report.¹

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Challenges and injustices



Energy

Fossil fuel dependence harms communities who live in proximity to sites of fossil fuel extraction, transport, processing and combustion,⁵ through resulting air, water and soil pollution. Indigenous communities are among those especially impacted by current practices.⁶ Meanwhile, extraction of critical minerals required for renewable energy infrastructure can also place pastoralists and local, Indigenous and low-income populations at risk.^{7,8} Social determinants of health may be undermined due to job losses resulting from the closure of fossil fuel infrastructure.^{9,10}



Transport

Dependence on private fossil-fueled motorized vehicles is associated with increased emissions, poor air quality, reduced physical activity, increased road traffic injuries, and negative mental health impacts. Physical inactivity alone causes 3.2 million deaths annually,¹⁵ and 1.3 million die from road traffic accidents.¹⁶ In many settings, public transport is deemed unsafe, especially for women.¹⁷ Inadequately planned transport systems may hinder access to decent jobs, undermining social determinants of health.



Buildings

Homes and other buildings including workspaces and healthcare facilities in many settings do not currently provide adequate shelter from heat and other extreme weather events, even in developed countries.¹¹ Meanwhile, approximately 2.3 billion people, primarily in Africa, lack access to clean cooking technologies,¹² driving 3.2 million premature deaths annually due to household air pollution.¹³ In high income countries, retrofits to increase energy efficiency (e.g improved insulation), that are not accompanied with ventilation measures may pose particular risks for households of low socio-economic status, especially those exposed to second-hand tobacco smoke.¹⁴



Food and agriculture

Approximately 1 in 10 people globally are currently experiencing hunger.¹⁸ A higher proportion of the African population, almost 20%, faces hunger compared to other regions, but undernutrition affects communities worldwide.¹⁹ Reduced agricultural yields, driven by climate change, will further increase nutritional insecurity, placing smallholder farmers at particular risk of poverty and subsistence farmers in acute danger due to undernutrition. Rising bioenergy demand to meet net-zero targets is projected to increase food crop prices and reduce food consumption²⁰ due to competition for available land. These challenges may be compounded by the need to import foods, with an inflated carbon footprint, in efforts to address nutritional needs, but these imports can further increase market prices. Heightened reliance on imported produce from climate-vulnerable countries could reduce the availability and affordability of fruits and vegetables, affecting the health of older people and low-income households in particular.²¹ While changes in diet have significant potential to mitigate greenhouse gases (GHGs), healthy and sustainable diets are currently estimated to be almost a third more expensive in lower-middle-income and low-income countries (LMICs) than current diets.²²



Land use

Despite playing a key role in tackling the climate crisis, Indigenous peoples and local communities are often excluded from land-use decisions, impeding

the success and sustainability of interventions.²³ Poorly designed nature-based solutions (NBS) can cause adverse environmental and social impacts when rights, especially around land tenure, are not protected and benefits are not delivered to local communities²³ and nature-based solutions must not be seen as a substitute for the rapid phase-out of fossil fuels.²³ Inequality in access to green space is a barrier to realising health benefits in urban settings for deprived and marginalised groups.^{24, 25} Actions to increase urban green space can increase property value that, if distributed unevenly, can lead to green gentrification making land inaccessible to low-income residents.



Water and sanitation

Lack of access to and use of water, sanitation and hygiene (WASH) causes 1.6 million deaths every year through waterborne disease and water insecurity²⁶

and undermines sexual and reproductive health and rights (SRHR).²⁷ Women are forced to travel long distances to collect water, which can create barriers to education, decreasing economic opportunities and place them at higher risk of physical or sexual violence.²⁸ Sanitation is estimated to contribute up to 2% of methane emissions in the US annually and increased sanitation coverage in India through nationwide use of pit latrines may increase India's methane emissions by 7%,²⁹ necessitating consideration of available technology options.



Cross-cutting

Lack of coordinated action across sectors hinders the delivery of actions which simultaneously benefit climate, health and equity.

There is limited health finance for projects with climate synergies, and limited climate finance for health.³⁰ Meanwhile, subsidies continue to be invested in unsustainable practices, including USD 7 trillion in implicit and explicit subsidies for fossil fuels,³¹ and over USD 40 billion dollars of agricultural subsidies that support meat production,³² with high associated emissions and health impacts. Industrial actors have undue influence over policy-making, not least with over 600 fossil fuel company representatives attending COP27.³³

Solutions: healthy and just transitions across sectors



Energy

A just transition from fossil fuels to renewable energy can benefit health and equity through improved air quality and reduced impacts on local communities

from fossil fuel extraction, transport and processing. Community-based renewable energy projects, such as utility-scale Community Choice Aggregation (CCA) in the United States³⁴ and the Rampura Community Solar Power Plant (CSPP) for off-grid community energy in India,³⁵ promote energy access and energy sovereignty. The provision of renewable microgrids for hospitals can also provide emergency backup power supply, for example during climate-related extreme weather events, to support the continued provision of care.³⁶ Funds made available through fossil fuel subsidy reform can be redirected to protect access to affordable energy (especially for low-income communities), and improve access to healthcare, as in cases in Nigeria³⁷ and Indonesia.^{38, 39} In addition to protecting the health of local communities and of consumers, it is necessary to consider the livelihoods of fossil fuel workers, since lack of income reinforces cycles of poverty and disease, and provide training for alternative employment.⁴⁰



Buildings

Provision of improved cookstoves was identified by the Pathfinder Commission as offering significant health co-benefits alongside GHG reductions, with an estimated

1,279 years of life saved per 100,000 population per year from clean household cookstove provisions in India. Installation of improved cooking stoves, replacing traditional three stone fires, in households in Senegal, The Gambia, and Guinea-Bissau led to 40% to 60% reductions in indoor PM_{2.5}, as well as a >70% reduction in time gathering fuelwood, and 35% reduction in time spent cooking; both typically carried out by women.⁴¹

Weatherizing and retrofitting homes can offer particular gains for low-income communities. In Victoria, Australia, home upgrades for social housing required an investment of approximately AUD 2,800 with benefits including increased indoor winter temperatures, lower energy bills, reduced breathlessness, and improved mental health and social care. Healthcare savings were equivalent to AUD 887 in just one winter.⁴²



Transport

New Zealand's Model Communities Programme focuses on cycling and walking in New Plymouth and Hastings. Interventions in these cities included on- and off-road

facilities, cycle lanes, installed cycle parking, widened path entries, reduced speed limits, campaigns, events, and cycle-skills training. These efforts led to a 30% higher level of active trips, and a 5.3% decrease in motorized trips. Gains in active travel were larger for Māori compared to non-Māori, and there was a larger effect for people in lower-income households for the initial period after implementation.⁴³

Buenos Aires has created bicycle lanes throughout the city, alongside a bicycle-sharing scheme and safety initiative.⁴⁴ The cycle network spans more than 286 km and links schools, universities and hospitals in the city, as well as less densely populated areas to ensure bike lanes are accessible to all. There has been a 131% increase in the number of bicycle trips made in Buenos Aires since 2013 and in 2020, cycling accounted for 10% of all trips made in the city. The programme was estimated to reduce CO₂ emissions by 12,155 tons in 2020, while the number of cyclists killed decreased from 0.10 to 0.02 per million cycle trips. There was a threefold increase in the number of cycle trips made by female cyclists along the newly developed cycle lanes.



Food and agriculture

Actions identified within the Pathfinder Commission targeted towards improved diets could save over 300 years of life annually per 100,000 population.¹ In some

settings, a transition to healthy and sustainable diets can improve affordability²² while also reducing emissions. Localising food systems can also improve access to nutritious foods for populations most at risk of hunger and undernutrition. Such measures include the Extensive Urban Agricultural Scheme in Addis Ababa, which provided fresh produce and job opportunities during the COVID-19 pandemic,⁴⁵ and also investments by Seoul in urban farming infrastructure and jobs to enable more people to grow their own food while also providing better insulation, reducing energy costs, and improving air quality.⁴⁶



Land use

Nature-based solutions (NBS), including forest protection, agroforestry, and land restoration can promote and preserve carbon storage, while also providing

ecosystem services such as clean air and fresh water, provision of local food sources and protection against extreme events. In urban settings, greenspace and green infrastructure can build resilience to climate change impacts and benefit health by increasing active travel such as walking and cycling, improving mental health, reducing anxiety, improving mood, and boosting self-esteem.²⁴

The Ntakata Mountains project as part of the wider Tuungane project in Tanzania is an example of good practice in NBS implementation. The project aims to create integrated solutions to create healthier families, fisheries, and forests, working with multiple villages across coastal and inland settings. The Ntakata project developed Village Land Forest Reserves that allow the communities to farm in designated areas and protect forests. Carbon revenues empower local communities and help generate income to fund health and education. In 2021, it prevented around 1.25 million trees from being cut down, averted 550,000 tonnes of

CO₂ emissions and generated USD 1,570,000 through carbon credits, out of which USD 179,000 was spent on improving health infrastructure. The revenue from carbon trading is estimated to have improved the livelihoods of approximately 38,000 local people and has helped to advance education, and gender equality, and to prevent illegal logging through training village scouts.⁴⁷ A series of REDD+ safeguards have been agreed by governments to promote good practice in NBS design and implementation.⁴⁸

At the city level, it is necessary to work with communities in the design of urban parks to ensure they serve the needs of local populations and yield optimal gains for health and equity.



Water and sanitation

Sustainable, well-designed water treatment solutions can yield multiple environmental benefits and provide a safe water supply to

a growing population under threat of water scarcity. Since 2008, there has been an increase in sanitation promotion at the global and national levels, including through the Swacch Bharat Mission in India, which has provided approximately one billion people with latrines across India, many in rural areas. Between 1995–2011, the Surat Municipal Corporation in India expanded and upgraded its sewerage network. In addition, sewage sludge underwent anaerobic treatment, restricting methane emissions and permitting its use to generate electricity to operate the sewerage system, while sewage removed after anaerobic treatment can be converted to organic manure and sold for agriculture. The project resulted in a reduction of 80,000 tonnes of CO₂e emissions per year from four sewerage treatment plants, and improved water quality.⁴⁹ The four sewerage treatment plants produced 3,000–5,000 tonnes of organic manure per year, generating annual revenue of approximately INR 2.5 million, and created approximately 30 jobs.



Cross-cutting

While sectoral actions are necessary for healthy and just transitions, they are not sufficient. Cross-cutting actions are also required. This can be achieved

through promoting a whole of governance approach, with health⁵⁰ and climate considerations being integrated across sectors. Overall, dramatic degrowth is needed. This can itself be supported by a variety of interventions. Carbon pricing can offer one such solution and can be implemented across energy, buildings, transport, and food, promoting improved air quality, active travel, wealth redistribution and yielding funds for healthcare. However, it should be noted that poor implementation can exacerbate inequalities.¹ This, and other risks, can be reduced through meaningful engagements of communities most impacted by current systems, and those placed at risk by transitions.

Recommendations

We make the following recommendations to governments and non-state actors seeking to promote healthy and just transitions across sectors:

- Act rapidly to plan and implement just transitions which reduce emissions while building resilience, supported by adequate finance from high-emitting countries and industries. Delays in inevitable transitions perpetuate injustices of current systems and climate impacts, and effects on health and lives, while forced transitions are likely to exclude communities from planning processes.
- Conduct mapping at national and local levels to understand which groups are most impacted by current practices and which may be placed at risk through transitions, taking into account intersectional inequalities and vulnerabilities.
- Engage and empower these most impacted and vulnerable communities, including through radical listening, from policy design through to implementation and evaluation, to ensure that the intervention will serve the needs and priorities of the most vulnerable groups, and attention to tried and tested solutions.
- Facilitate cross-sectoral collaboration at global, national and local levels to promote integrated climate and health policymaking and implementation. Health impact assessments should be integrated as standard practice, to optimize physical and mental health and wellbeing.
- Implement policies to promote sustainable consumption across sectors, including redirection of subsidies to healthy and sustainable options. At COP28, progress towards a just transition programme which centres on the promotion of social justice, human rights and equity.

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