



H4: Future health in the context of the Paris Agreement

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Summary of themes covered in workshop

- Air quality, transport and diet co-benefits of climate action
 - Ozone-related mortality, including combined effect with higher temperatures
 - Undernutrition: Synergies and trade-offs with mitigation
 - Temperature-related mortality
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Most controversial question that came up in this workshop?

What role could Green Climate Funds transactions have on reducing the negative effects of the economy-wide costs and GDP loss of mitigation measures for vulnerable populations?

Results of the discussion

- Components of greenhouse gas emissions include air pollutants associated with negative health outcomes; therefore, reducing fossil fuel combustion would benefit health and reduce climate change.
- Estimates of the health co-benefits of mitigation policies generally suggest the costs associated with these benefits, in terms of avoided hospitalizations and death, are larger than the costs of mitigation, and occur much sooner than the benefits of mitigation.
- Future socio-economic development strongly determines the magnitude and pattern of projected changes in undernutrition. Using a simplified model, a 2 C mitigation scenario would be associated with a larger risk of hunger and undernutrition than a unmitigated scenario because of the competition between use of land for biofuels instead of agriculture. Including socio-economic development increases the benefits of mitigation.

Research gaps identified

- To what extent could transfers through the Green Climate Funds offset the negative effects of mitigation on, for example, nutrition?
- How much competition could there be for food under different scenarios of bioenergy use?
- What is the overall magnitude of the health co-benefits of mitigation policies that affect air quality, active transport, and dietary preferences? Increasing the comparability of health co-benefits studies to promote meta-analyses.
- How much could ground level ozone concentrations change internationally and regionally, under different assumptions of climate and development? How could these changing concentrations interact with increases in ambient temperature and heat waves to affect morbidity and mortality?
- How much could hot- and cold-temperature morbidity and mortality change with climate change, taking into account acclimatization, changing urban infrastructure, and implementation of other adaptation options?

Next steps

- Additional research needed on all topics covered, but limited funding means scientific advancements will be slower than needed to generate timely insights to inform adaptation and mitigation
- Explore approaches for incorporating development pathways into projections of risks with climate change
- Develop guidelines for planning and reporting health co-benefits of mitigation policies

Other

NA

3-5 keywords that characterize the session

Co-benefits, air quality, mortality, undernutrition