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Deadly Heat Waves and the Urban Poor

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This presentation will address future deadly heat in major cities worldwide, urbanization trends and vulnerabilities. Heat risk is one of the most direct existential threats resulting from global warming and is increased by the urban heat island effect. Particularly in hot regions, the urban poor belong to the most vulnerable groups.
We explore spatially explicit and quantitative estimates of how the urban poor are exposed to deadly heat. For this aim, we rely on published forecasts for future deadly heatwaves (Mora et al., 2017), but attempt to correct for the urban heat island effect.
A spatial correlation of the deadly heat hazard with population exposure and vulnerability factors shows how many are affected where. While sensitivity analysis demonstrates high uncertainty in prospective outcomes, the results quantify in how far poor and rapidly urbanizing cities in the Global South will be impacted most by deadly heat.