Urban Residents’ Justice Preferences in the Design of Climate Adaptation Flood Policy

Melissa Tier\textsuperscript{1}, Elke Weber\textsuperscript{2}, and Michael Oppenheimer\textsuperscript{3}

\textsuperscript{1}Princeton University, Center for Policy Research on Energy & the Environment, School of Public & International Affairs, United States of America (mtier@princeton.edu)
\textsuperscript{2}Princeton University, Center for Policy Research on Energy & the Environment, School of Public & International Affairs, United States of America (eweber@princeton.edu)
\textsuperscript{3}Princeton University, Center for Policy Research on Energy & the Environment, School of Public & International Affairs, United States of America (omichael@princeton.edu)

There is an increasing need for ex-ante climate adaptation policy planning and design. Moreover, meeting robust standards to minimize harm and environmental inequities will require innovative practices and foresight, but little is currently known regarding how such standards influence residents’ preferences for or against climate policies. One set of climate adaptation strategies ripe for such consideration is urban risk management for worsening flooding. These strategies are often complex and controversial (e.g., choices between protection, retreat, and relocation), and can vary widely in structure with regard to key justice components (e.g., types of distributive, procedural, and corrective justice).

This presentation will share results from a large-scale, international survey that examined a comprehensive set of justice values underlying residents’ urban flood policy preferences. The online survey was translated and administered in 5 cities globally (\(n=650\) residents per city): Buenos Aires (Spanish), Johannesburg (Zulu & English), London (English), New York City (English, Spanish, & Korean), and Seoul (Korean). The survey explores \textit{which} urban climate adaptation flood policies are generally preferred by residents, whether certain categories of policies are preferred over others, and whether certain characteristics of residents best predict their preferences. More specifically, analysis of survey data considers which variables are best predictors of differences in policy preferences: a) self-perceived vulnerability to flood risk; b) city of residence; c) political, economic, and psychological worldviews; or d) other common demographics. Preliminary analysis of survey results suggests that residents with higher self-perceived vulnerability to flood risk also have an increased likelihood of preferring more expansive adaptation strategies (i.e., not just homeowner-focused policies, not just protection strategies, and more reparative actions).

This survey was designed to integrate contemporary topics in environmental justice, climate
adaptation, and urban planning. The hypothesis was that people who self-identify as more vulnerable to flood risk prefer policies that focus more on other vulnerable people – in other words, an empathy effect caused by higher salience of vulnerability. Moreover, this effect was expected to be stronger than that of city of residence, worldviews (e.g., political identities), and other demographic characteristics. The presentation will both review detailed statistical analysis of the survey data, as well as discuss recommendations for how to best frame risk management policies in order to increase support for policies aimed at minimizing environmental inequities.

This dissertation thesis project has been supported by the Princeton School of Public & International Affairs and the 2023 Young Scientists Summer Program at the International Institute of Applied Systems Analysis.