

Addressing Climate Change and Environmental Justice

Emerging Urban Social Movements on Climate Change Adaptation: Cases from Indore City, India

Presenter: Eric Chu, Massachusetts Institute of Technology, (ekc@mit.edu)

Author: Eric Chu, Massachusetts Institute of Technology

Climate change impacts are projected to disproportionately impact communities in developing countries because of their higher exposure to hazards and lower capacity to respond. Existing research on urban and community-based aspects of adaptation highlights the role of public policies for institutionalizing adaptation programs while also stressing the importance of local innovations for more effectively addressing projected impacts. Still, these two bodies of literature neglect to assess whether (and if so, how) urban residents organize and mobilize around issues of climate adaptation to affect social or political change at the local level. In this paper, I explore emerging cases of local community collectives, self-help groups, community improvement and betterment organizations, and other forms of social movements for advancing adaptation in Indore City, India. I argue that civil society actors further their adaptation needs and interests through twin processes of (1) creatively framing emerging adaptation needs that are nested in, but are also in addition to, preexisting local social development and livelihoods interests and (2) actively building new alliances amongst and between state and civil society actors to uncover institutional pathways that are least resistant to change. I conclude that, despite insufficient downscaled climate models that show precise local climate vulnerabilities and impacts, local communities are increasingly aware of changes in their local environment and are beginning to mobilize to protect their own economic and social interests in the context of these climate changes. Scholars and policymakers, alike, must pay additional attention to these emerging movements in order to adequately ensure the representativeness, legitimacy, and long-term sustainability of planned adaptation programs.

It Takes a Village: Sustainability, Social Inequalities, and the Political Potentials of the Transit Village Model

Presenter: Jennifer Gray-O'Connor, UCSC, (jen.gray.oconnor@gmail.com)

Author: Jennifer Gray-O'Connor, UCSC

Despite its slippery definition, sustainability has become the dominant discourse in urban development, and the answer to the question of how to build communities that will meet long-term human and environmental needs. Proponents of sustainable development argue that a market-based urban growth project can be economically viable, environmentally sound, as well as socially equitable. However, the complexities of social inequalities have been the most difficult to address within this neoliberal development framework. This paper examines the

Fruitvale Village Transit Station (Oakland, CA), one of the most oft-cited examples of a sustainable development project that succeeds in addressing both social and environmental problems. The station circulates in academic and planning literature as an important example of socially just development due to its constellation of service-based and non-profit tenants, mixed-income housing, and access to public transportation. Engaging with previous studies of transit-oriented development, as well as emerging academic and activist literature in “just sustainabilities”, this case study critically examines the potentials and limitations of transit villages as spaces of social justice. Can environmental justice remain politically powerful in the context of economic development? How compatible are sustainable development practices and environmental justice politics? Through long-form interviews with developers, transit officials, and community members, this project finds that the political partnerships created while resisting and reshaping the village are as important to furthering environmental justice concerns as the structural elements within it. This paper argues for thinking about sustainable development as “how” rather than “what”. The most important lessons from Fruitvale are about shifting urban governance, new political and public-private entanglements, and community resistance. This study shows that the political process through which sustainable development projects emerge is an important site for the articulation of environmental justice.

Governing Urban Climate Change Adaptation: Actual and Potential Justice Implications in U.S. Cities

Presenter: Sara Hughes, National Center for Atmospheric Research, (sara.hughes@gmail.com)

Author: Sara Hughes, National Center for Atmospheric Research

Global climate change requires that cities adapt to new conditions such as changing precipitation patterns, temperature extremes, and frequency of natural disasters. Adapting cities to climate change will have consequences for urban populations as it requires a reconfiguration of urban infrastructures, services, and decision making processes. It is critical that urban adaptation is just, meaning that decision making processes involve all groups, the adaptation needs of vulnerable groups are prioritized, and adaptation actions are implemented where they are most needed and have tangible benefits for vulnerable groups. This paper addresses the issue of justice in urban climate adaptation in two ways. First it draws on urban governance theory and theories of democracy to outline a useful theoretical framework from which to evaluate the necessary conditions for just urban adaptation. Adaptation is a complex or “wicked” policy problem, which means it requires collaborations and new partnerships; this comes with challenging politics. At the same time, adaptation has unique qualities such as uncertainty and collective action barriers that require adjustments to existing theories. Second, the paper explores empirically the extent to which over 1,800 local governments are currently undertaking adaptation actions and supporting disadvantaged populations by using the ICMA 2010 Local Government Sustainability survey. The frequency and distribution of actions taken by local governments that are adaptive and/or that address justice concerns are catalogued and described. Statistical techniques are used to explain patterns in their adoption. The theoretical and empirical results highlight the extent to which justice concerns still need to be included in

local government sustainability programs, the implications this has for encouraging justice in climate change adaptation, and what next steps academics and practitioners can take to move the agenda forward.

Environmental Degradation, Place, and Premature Death

Presenter: John Gilderbloom, University of Louisville, (jjgild01@louisville.edu)

Author: John I. Gilderbloom, University of Louisville; Gregory Squires George Washington University; Joshua Ambrosius, University of Dayton; Stella Capek, Hendrix College; and Wesley L. Meares, University of Louisville

Neighborhood life expectancy varies by as much as 13 years in Louisville--perhaps the most extreme difference of any city in America. In 2013, the City of Louisville Department of Public Health (which reports to the Mayor) released a highly publicized study funded by government, business, and foundations which showed that the neighborhood a person lives in might be more important than your DNA in predicting how long a person lives. The study argued that these neighborhood differences could be blamed on the following: 40% to social and economic factors (with a major emphasis on education); 10% physical environment; 30% health behaviors and 20% access to medical care. The weights given for the causes of years of projected life lost appear to be more political than scientific and veers away from mainstream medical environmental research findings. Efforts to obtain the original data set was unsuccessful for research scientists to make validity and reliability tests. Nevertheless, our research team attempted to reproduce the data set used as well as introducing a number of other mainstream control variables. Our data set was more precise creating a data set based on 170 census tracts instead of the "neighborhood measures" that merge census tracts together. We operationalized two different measures of environmental degradation: brownfield sites and the location of lightly regulated chemical factories which have been contested by activists groups. We conducted an OLS regression analysis using the same variables used by the public health study or proxy measures; tolerance scores of our regression specification indicated no multi-collinearity issues. Our research shows that environmental contaminates is a major cause of shortened lives in neighborhoods. Our beta weights challenge many of the claims made by Public Health in terms of the suppose strength of variables measuring reduced life expectancy in neighborhoods. Moreover, we also show that "correlation does not necessarily mean causation" with some claims Public Health Department being illogical and unreasonable. We estimate that environmental contaminates (along with race, income, crime) are a major causes of shortened lives for thousands of residents and children who attend schools in these areas.