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**SID:** 21794422

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**Title (tentative):** “The Impact of Slum Upgrading on Resilience to Extreme Weather Shocks”

**Abstract:**

The harrowing costs of natural disasters are not borne equally. In tropical countries most vulnerable to earthquakes, tropical cyclones and flooding, residents of slums and other informal settlements are made more susceptible to extreme weather by unsafe housing, poor infrastructure and financial exclusion among other factors[[1]](#footnote-2). This study will examine the effect of slum upgrading interventions on household resilience to idiosyncratic weather shocks. Slum upgrading projects focus on providing basic services to slum dwellers as well as social improvements such as political participation and regularizing property rights. Using cross-country intervention data matched with geo-coded climate data, this study will implement a difference-in-difference analysis to estimate changes in extreme weather resilience induced by slum upgrading. I hypothesize that the total effect of slum upgrading can mitigate direct costs of natural disasters and facilitate post-disaster recovery, proving an effective tactic to protect the hardest hit communities from environmental catastrophes.

**About Solomon Hsiang, Ph.D.:**

Professor Hsiang studies the impact of environmental changes on social systems, with a focus on responses to climatic changes in developing communities. Using econometrics and tools from climate physics, he studies the social costs and benefits of different climatic conditions. By improving understanding of these relationships, Professor Hsiang's research guides policies that support economic development while intelligently managing the global climate.

The faculty members in the economics department specializing in development usually tackle a relatively large range of subjects within the discipline and thus may not be able to provide the level of counseling necessitated by a very narrow research question and design. Specifically, Professor Hsiang's expertise with the economics of natural disasters in a development context seems a better fit for this research project than advisers who only focus on environmental economics in a general sense. The research question outlined above is closely related to Professor Hsiang's recent publications focusing on economic losses and adaptive behavior taken by households following environmental disasters[[2]](#footnote-3).

Moreover, Professor Hsiang's work is based on the econometric methods considered part of the development economist's toolkit when conducting empirical analysis. Familiarity with these strategies along with his experience with the natural disaster literature provides me with an understanding of how to manage climate data, how to operationalize variables of interest and most importantly, how this paper fits in with current economic research in environmental disasters.

1. (2009). 2009 Global Assessment Report on Disaster Reduction. [United Nations International Strategy for Disaster Reduction Secretariat](http://www.preventionweb.net/english/professional/contacts/v.php?id=1171). [↑](#footnote-ref-2)
2. Anttila-Huges, J.K. and Hsiang, S.M. (2012) Destruction, Disinvestment, and Death:

   Economic and Human Losses Following Disaster. Columbia University, School of

   International and Public Affairs and Princeton University, Woodrow Wilson

   School of Public and International Affairs. [↑](#footnote-ref-3)