

XIAOJIA BAO

Columbia University
323.1 International Affairs Building
420 West 118th Street
New York, NY 10025

Phone: (347) 703-1519
Email: xb2112@columbia.edu
Homepage: <http://www.columbia.edu/~xb2112/>

Education

Ph.D. Sustainable Development, Columbia University, 2013 (*expected*)
M.A. Sustainable Development, Columbia University, 2010
M.A. Environmental and Resource Economics, Renmin University of China, 2008
B.A. Environmental and Resource Economics, Renmin University of China, 2006

Fields

Environmental Economics, Development Economics, Environmental Policy

Fellowship and Awards

V.K. Wellington Koo Fellowship, Weatherhead East Asian Institute, 2011-2012
Doctoral Empedocle Maffia Fellowship, Columbia University, 2009-2010
Graduate Faculty Fellowship, Columbia University, 2008-2013

Job Market Paper

"Dams and Intergovernmental Transfers: Are Large-scale Dams Pareto Improving in China?"

Abstract: Large-scale dams are controversial public infrastructure projects due to the unevenly distributed benefits and losses to local regions. The central government can make redistributive fiscal transfers to attenuate the impacts and reduce the inequality among local governments, but whether large-scale dam projects are Pareto improving is still a question. Using the geographic variation of dam impacts based on distances to the river and distances to dams, this paper adopts a difference-in-difference approach to estimate dam impacts at county level in China from 1996 to 2010. I find that a large-scale dam reduces local revenue in upstream counties significantly by 16%, while increasing local revenue by similar magnitude in dam-site counties. The negative revenue impacts in upstream counties are mitigated by intergovernmental transfers from the central government, with an increase rate around 13% during the dam construction and operation periods. No significant revenue and transfer impacts are found in downstream counties, except counties far downstream. These results suggest that dam-site counties benefit from dam projects the most, and intergovernmental transfers help to balance the negative impacts of dams in upstream counties correspondingly, making large-scale dam projects close to Pareto improving outcomes in China.

Working Papers

"Rural Household Residential Water Use Behavior in Northern China"

Abstract: Economic development in rural regions can change household water use behavior dramatically due to lifestyle change and life quality improvement. This paper studied household residential water use behavior in rural Northern China using household level data. Several household characteristics were identified to impact water use

significantly. Household size showed a scale-economy effect, indicating that larger households used less water in the perspective of per capita water use. Gender structure and household head characteristics didn't show a significant effect. In addition, households adjusted their water use as a response to weather variability. The increase of average monthly precipitation by 1mm corresponded to a 0.1-0.2% decrease in per capita water use. And the increase of average monthly temperature by 1 degree corresponded to a 2-3% increase in per capita water use. The response of households' water use to weather variability also showed heterogeneity. Generally, households using more water on average tended to adjust water use more flexibly to weather change than "frugal" households.

Work-in-Progress

"Governmental Responsiveness to Typhoon Risks in Asia", with Solomon Hsiang and Daiju Narita

"Diverting Water: Agricultural Impacts of Canal System in China"

Teaching Assistantship Experiences

Challenges of Sustainable Development, by Jeffrey D. Sachs, Spring 2010 and Spring 2012

Sustainable Economic Development, by Sophia Johnson, Spring 2011

Quantitative Techniques and Statistics, by Ion Bogdan Vasi, Fall 2009, Fall 2010, Fall 2011

Mathematics for Economists, by Muhammad Asali, Summer 2011

Presentations

Columbia (Political Economy Breakfast, Sustainable Development), 2012; European Association of Environmental and Resource Economics Meeting, 2011; Columbia (Sustainable Development, Water Center Meeting), 2010

Non-Academic Experiences

Research and program assistant at Clean Air Initiative, 2008

Research assistant at World Bank Beijing Office, 2007

References

Douglas Almond
Department of Economics & SIPA
Columbia University
New York, NY 10027
(212) 854-7248
da2152@columbia.edu

Suresh Naidu
Department of Economics & SIPA
Columbia University
New York, NY 10027
(212) 854-0027
sn2430@columbia.edu

Wolfram Schlenker
Department of Economics & SIPA
Columbia University
New York, NY 10027
(212) 854-1806
wolfram.schlenker@columbia.edu

Upmanu Lall
Department of Earth and Envi. Engineering
Columbia Water Center
Columbia University
New York, NY 10027
(212) 854-8905
ula2@columbia.edu