Urban Water Innovation Network

Transitioning toward sustainable urban water systems

National Science Foundation
WHERE DISCOVERIES BEGIN

Project C1-1
Understanding Adoption of Sustainable Urban Water Solutions

PROJECT OUTPUTS

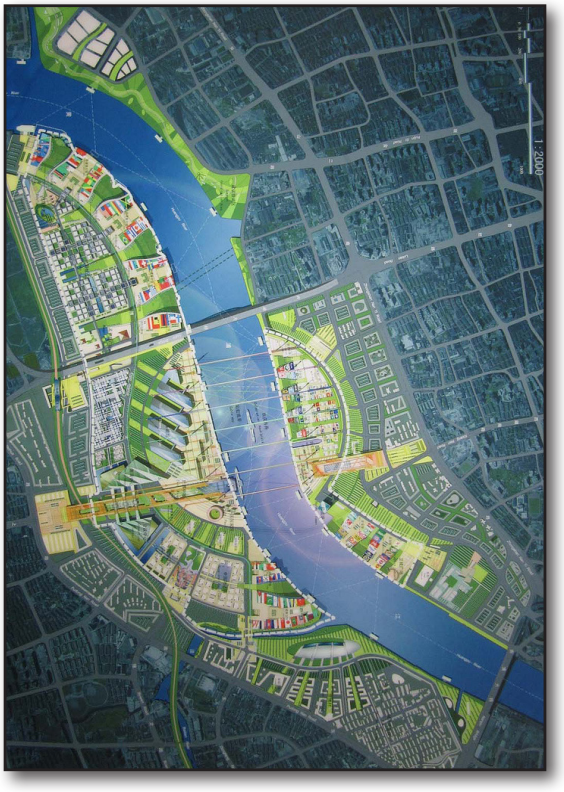
We will be producing several products including:

- A survey of existing studies on the topic;
- An assessment of what sorts of practices are being adopted nationwide, and;
- Data on the types of conditions and social networks that seem to move communities in a more sustainable direction.

This will help people think about the tools they may wish to use in their communities and how they can organize people in ways that will bring about positive change.

What Causes Sustainable Urban Water Policy Learning?

The purpose of this project is to learn about the factors that cause some communities and not others to adopt more sustainable urban water practices. In particular, we are focusing on the role of local governments in this process because of their central role in building infrastructure, regulating land development standards, and creating incentives that can influence consumer behavior.



We are interested in a wide variety of sustainable water practices including those that reduce the negative social or environmental effects caused by our urban water systems and those that help our water systems cope with pressures which threaten their reliability. The sorts of factors that shape local water policy include who governs us and how, conditions in our natural, social and built environment, and the characteristics of the policies or innovations under consideration.

We are particularly interested, however, in how social learning and social networks shape how policy makers and specialists think about these issues and make choices about which solutions to adopt.

As a result we hope to be able to answer local officials and citizens when they ask, “what can we do to help make our water system more sustainable?”

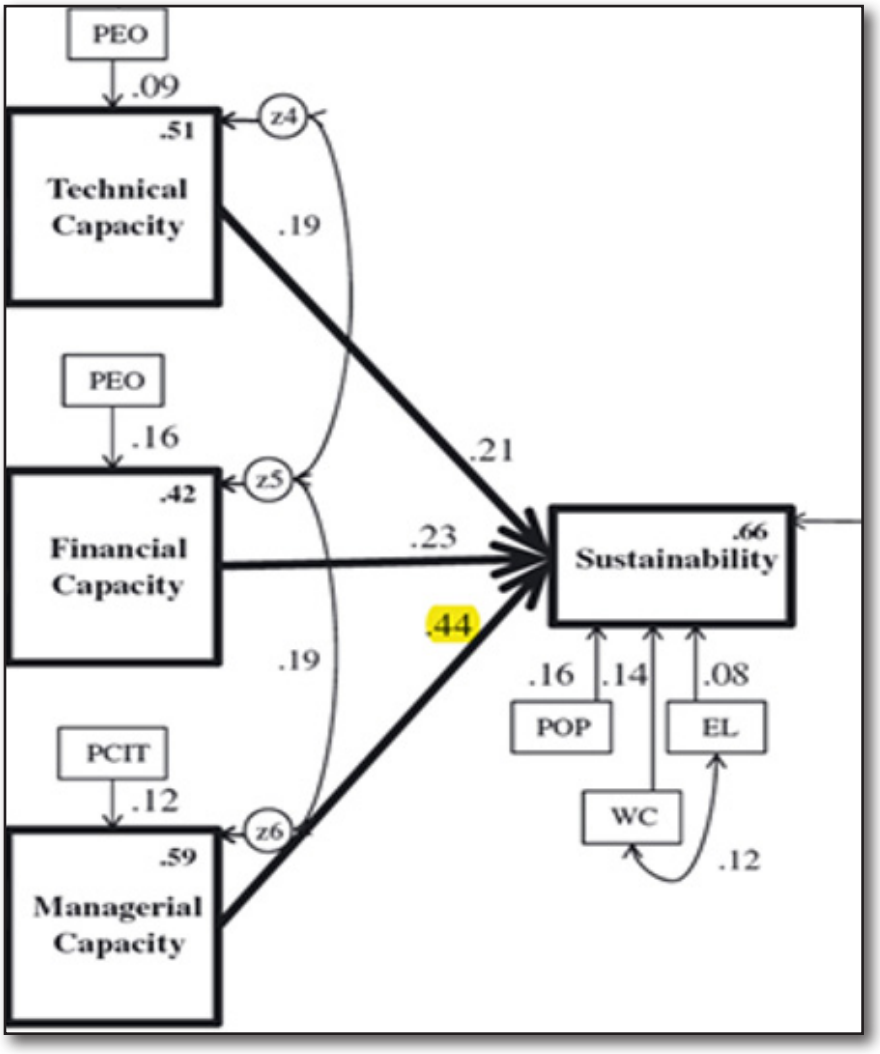


Figure 1: An illustrative path model showing the relative importance of different types of organizational capacity for the adoption of sustainability practices

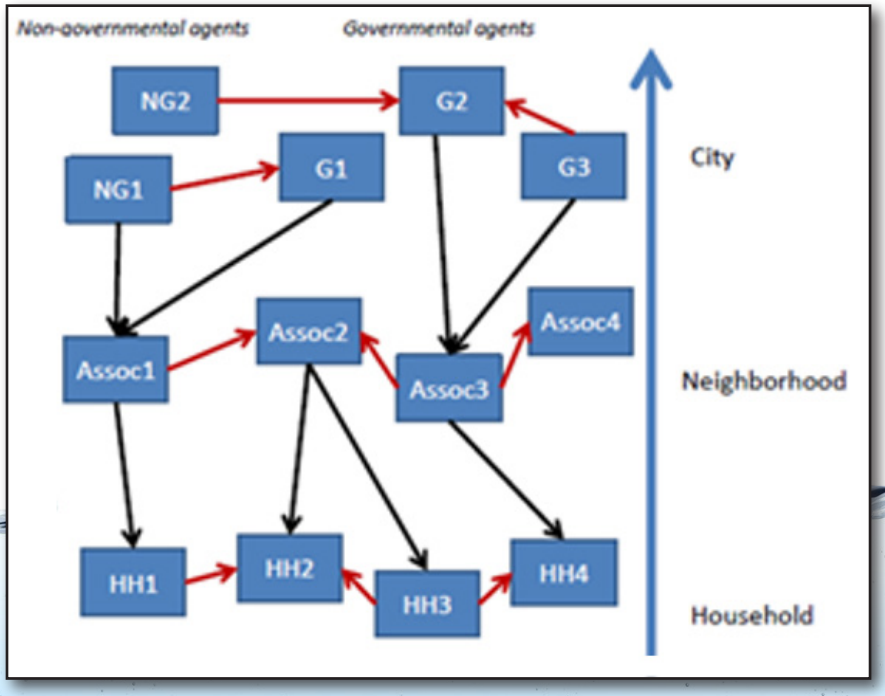


Figure 2: An illustrative social network map showing relationships between different types of actors in a community

DATA

We will be needing and creating a database of water governments in the UWIN regions and a survey of their water practices and the social and natural conditions that may help us to explain them.

DATA USE

We will use the data to produce statistical models that show which factors are most commonly associated with more sustainable water policies.

PROJECT KEYWORDS

- Social Networks
- Sustainability
- Water policy
- Social Learning
- Postiive Change
- Policy Adoption
- Urban Planning
- Local Government
- Community Relations
- Social Responsibility

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