Scaling up Co-production

Maria Carmen Lemos

School for Environment and Sustainability –University of Michigan

lemos@umich.edu





The Art of Engagement

Valued traits:

Co-production:

- Public
 Administration
- Descriptive
 Tradition
- Normative view

- Participation/action research
- Interaction/
 Iteration
- Plurality of
 Knowledge, Equity,
 Justice
- Increased use in support of desirable outcomes/decisions



Mach et al. 2020

Useful to Usable





Partners: Christine Kirchhoff and Vijay Ramparasad

Lemos, M.C., C. Kirchhoff and V. Ramparasad (2012). Narrowing the Climate Information Usability Gap. *Nature Climate Change*, vol. 2, issue 11, pages 789-94.



Co-production space

Factors across the production-use range

Stakeholder Interaction/collaboration/Iteration Salient, Credible, Legitimate Customization, communication, visualization, value-adding, retailing Purposefulness, social learning, adaptive governance of and across boundaries, Boundary organizations, boundary objects and spanning Evaluation, Decision Science, Translational science, Policy Sciences

How does climate information diffuses?

S.E. Kalafatis et al./ Global Environmental Change 32 (2015) 30-39





Contributors: Scott Kalafatis, Yun Jia Lo, Ken Frank

Kalafatis, S. E., M. C. Lemos, Y.-J. Lo and K. A. Frank (2015). "Increasing information usability for climate adaptation: The role of knowledge networks and communities of practice." *Global Environmental Change* **32**: 30-39.



Chains connect researchers, organizations and users

Chains decrease transaction costs: financial, time, logistics and especially trust and legitimacy

Partners: Christine Kirchhoff, Scott Kalafatis, Don Scavia, Ricky Rood

Lemos et al. (2014) "Moving climate information off the shelf: Boundary Chains and the role of RISAs as adaptive organizations." *Weather, Climate, and Society* **6**(2): 273-285.

Boundary Chains: Key Chain



Boundary Chains: Linked Chain

Great Lakes Climate Action Network



Partners: Matt Naud plus 30 other Sustainability Directors and Coordinators from GL cities



Can boundary chains sustain? Can they in effect decrease costs? Can they increase impact?

Boundary Chains: Networked Chain





- 20 small grants
- Required communication and exchange of experience for two years
- Diversity of impacts from increased awareness, leverage of resources, longer term partnerships with GLISA, direct application of knowledge in decision-making, academic outputs.

Partners: Yun Jia Lo, Katherine Browne, Ian Robison

How does co-production "thicken"?

- U2U: Diffusing Co-production (USDA-AFRI)
- Making Gulf communities more resilient (NAS/GRP)

U2U



Partners: Junyu Lu, Vikram Koundinya, Linda Prokopy

Scaling up Co-production

Partners: Kim Wolske, Christine Kirchhoff, James Arnot, Laura van xx, Jenna Jorns, Missy Stults, Rebecca Esselman, Mark Schaffer, Gabrielle Wong-Parodi, Patty Good, Adaptation International



Lemos, M. C., K. S. Wolske, L. V. Rasmussen, J. C. Arnott, M. Kalcic & C. J. Kirchhoff (2019) The Closer, the Better? Untangling Scientist–Practitioner Engagement, Interaction, and Knowledge Use. *Weather, Climate, and Society*, 11, 535-548

- Co-production phase funded by USDN, GLISA
- Proof of concept project funded by NOAA/SARP
- Significantly affected by COVID
- Preliminary findings:
 - Awareness
 - Inter-departmental collaboration
 - Direct use in plans (adaptation, Master plans)



Free stormwater system vulnerability assessments for Gulf communities

Apply now at FloodWiseCommunities.org





Work with a team of experts and use a suite of customized tools to better prepare your community for future storms.

Participating communities receive

 A guided step-by-step process that walks practitioners through examining vulnerabilities to their stormwater system.
 Weather, climate, and socioeconomic profiles tailored for your community.
 A customized, comprehensive vulnerability assessment, training package, and continued support.

 Assistance from experts in climate change science, strategic planning, economic development, public policy, public health, and stakeholder engagement and collaboration.

Application Details

Gulf Coast communities are eligible. Applications must be submitted by local government. Priority will be given to communities that apply by December 18, 2020.

FloodWise Communities is a program of GLISA, SCIPP, Stanford University, Adaptation International, and

mics, and endorsed by National League of Cities, National Ass

Apply now for free assistance at <u>FloodWiseCommunities.org</u>.

hotos L to R: "Rain" by Rich Anderson is licensed under CC BY-SA 2.0 Ottps://www.flic

"When we got invited to participate, it was sort of a no-brainer... it's really going to increase our capacity It has essentially eliminated the conversations and the amount of time we had to spend on data source and data collection methodology It really provided the information in a way that a lot of people were able to digest it."

City of Evanston (IL) Chief Sustainability and Resilience Officer on his community's experience using this vulnerability assessment process.

tion of Counties. and Texas Sea Gran