

SECHINDRA VALLURY

 Odum School of Ecology, University of Georgia

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Education

2019 School of Sustainability, Arizona State University, AZ.
Ph.D., Sustainability. Advisors: Drs. Joshua K Abbott & John M Andries.

2014 Department of Natural Resources, TERI School of Advanced Studies, India.
M.S., Environmental Studies and Resource Management.

2006 Department of Mechanical Engineering, Jawaharlal Nehru Technological University, India. B.S., Mechanical Engineering.

Professional Experience

08/22- Assistant Professor of Environmental Policy, Odum School of Ecology
Director of Policy, River Basin Center, University of Georgia, GA.

02/20-07/22 Postdoctoral Associate, WA Franke College of Forestry & Conservation,
University of Montana, MT.

09/19-02/20 Postdoctoral Associate, Nicholas School of the Environment, Duke University,
NC.

06/18-06/19 Instructor, School of Sustainability, Arizona State University, AZ.

08/16-05/18 Research Associate, School of Sustainability, Arizona State University, AZ.

01/15-05/16 Teaching Assistant, School of Sustainability, Arizona State University, AZ.

Research Activities

Order of names is as published and does not necessarily indicate priority of authorship. Papers where authorship is equally shared between myself and one or more authors are indicated by a *. Publications involving students or postdocs are indicated with a †. Publications since the start of my tenure-track position are indicated by a ‡.

Peer-Reviewed Journal Articles

20. Sarr, M., Mensah, E., **Vallury, S.‡**, Kapko, A., and Ojong, M. (2025). “Rethinking Resilience: Lessons from Climate-Smart Innovation in African Agriculture.” *Accepted at Journal of Development Perspectives. Penn State University Press.*
19. **Vallury, S.‡**, Nelson, D. R., and Cook, N. J. (2025). “Rethinking adaptation interventions in agricultural systems for sustainability.” *Current Opinion in Environmental Sustainability*, 77, 101571.
18. Benedum, M.E.†, Cook, N.J., and **Vallury, S.‡** (2025). “Out-Migration and Participation in Community-Based Natural Resource Management: The Role of Remittances.” *Ecology & Society*, 30(3).
17. **Vallury, S.‡**, Cook, N.J., and Nelson, D. (2024). “Social inequalities shape climate change adaptation in Indian farmers.” *Environmental Research Letters*, 19(11), 114035.

16. Olivier, T.* and **Vallury, S.*‡** (2024). “Institutional Fit and Policy Design in Water Governance: Nebraska’s Natural Resources Districts.” *Policy Studies Journal*, 52(4), 809-832.
15. Nesbitt, H., Metcalf, A., Floyd, T., Uden, D., Chaffin, B., Gulab, S., Banerjee, S., **Vallury, S.‡**, Hamlin, S., Metcalf, E., Fogarty, D., Twidwell, D., and Allen, C. (2024). “Social networks and transformative behaviors in a grassland social-ecological system.” *People & Nature*, 6(5), 1877-1892.
14. Smith, A.P.†, **Vallury, S.‡**, and Metcalf, E.C. (2023). “Social dimensions of adaptation in range-land social-ecological systems: A systematic literature review.” *Climatic Change*, 176, 180.
13. **Vallury, S.‡**, Chaffin, B. C., Hamlin, S. L., and Allen, C. R. (2023). “Communication in the science-policy interface: Evidence from a boundary organization in Nebraska, USA.” *Environmental Science & Policy*, 148, 103558.
12. Shin, H.C.†, Yousefi, P.†, Park, S.†, Yu, D.J., Janssen, M., **Vallury, S.‡**, and Araral, E. (2023). “Coping with Unreliable Water Supply: An Experimental Study of Exit and Voice.” *Water Resources Research*, 59, e2022WR032468.
11. Breetz, H.L., Stokes, L.C.*, **Vallury, S.***, and Cuiffo, K.V. (2022). “City Pledges for 100% Renewable Energy: A Matched Pair Analysis of Policy Adoption.” *Energy Research & Social Science*, 90, 102664.
10. Shin, H.C.†, **Vallury, S.**, Janssen, M.A., and Yu, D.J. (2022). “Joint effects of voluntary participation and group selection on the evolution of altruistic punishment.” *PLoS ONE*, 17(5), e0268019.
9. **Vallury, S.**, Smith, A.P., Chaffin, B.C., Nesbitt, H.K., Lohani, S., Gulab, S., Banerjee, S., Floyd, T.M., Metcalf, A.L., Metcalf, E.C., Twidwell, D., Uden, D.R., Williamson, M.A., and Allen, C.R. (2022). “Beyond the household: a literature review of scale and aggregation in adaptive capacity research”. *Environmental Research Letters*, 17, 063001.
8. **Vallury, S.**, H. C. Shin, M. A. Janssen, R. Meinzen-Dick, S. Kandikuppa, K. R. Rao, and R. Chaturvedi. (2022). “Assessing the institutional foundations of adaptive water governance in South India”. *Ecology and Society*, 27(1):18.
7. Shin, H.C., **Vallury, S.**, Abbott, J.K., Andries, J.M., and Yu, D. (2022). “Understanding the role of competitive and participatory institutions in sustainable governance of irrigation systems”. *Ecological Economics*, 191, 107221.
6. **Vallury, S.** and Leonard, B.J. (2022). “Canals, Climate, and Corruption: The Provisioning of Public Infrastructure under Uncertainty”. *Economics & Politics*, 34, 221-252.
5. **Vallury, S.**, Abbott, J. K., Shin, H. C., and Andries, J. M. (2020). “Sustaining Coupled Irrigation Infrastructures: Multiple Instruments for Multiple Dilemmas.” *Ecological Economics*, 178, 106793.
4. Mueller, V., Masias, I.*, and **Vallury, S.*** (2019). “Labor-Saving Technologies and Structural Transformation in Northern Ghana.” *Agricultural Economics*, 50(5), 581-594.
3. Janssen, M., Andries, J.M., Baeza, A., Breetz, H.L., Jasinski, T., Shin, H.C., and **Vallury, S.** (2019). “Highways as coupled infrastructure systems: an integrated approach to address sustainability challenges.” *Sustainable and Resilient Infrastructure*, 1-12.
2. Baggio, J.A., Schoon, M., and **Valury, S.** (2019). “Managing networked landscapes: conservation in a fragmented, connected world.” *Regional Environmental Change*, 19(8), 2551-2562.
1. Bernstein, M.J., Mancha-Cisneros, M., Tyson, M., Brady, U.*, Shin, H.C.*, **Vallury, S.***, Smith-Heisters, S., Ratajczyk, E. (2019). “Mapping Ostrom’s Common-pool Resource Systems Coding Handbook to the Coupled Infrastructure Systems Framework to Enable Comparative Research.” *International Journal of the Commons*, 13(1), 528-52.

Manuscripts in Review

Vallury, S. and Kaur, R. "Spatial Inequalities in U.S. Electric Vehicle Infrastructure." *Under revision at Energy Policy*.

Vallury, S., Cook, N.J., Nelson, D., and Rao, Shishir. "Who Migrates? Social Identity and the Limits of Climate Adaptation." *Under review at World Development*.

Vallury, S. and Nelson, D. "Scale-Dependent Inequality in the Distribution of Climate Losses in Rural India." *Under review at World Development*.

Work in Preparation

Vallury, S., Cook, N.J., Paudel, S., Ahn, M., and Koontz, T. "Does Information Drive Conservation Behavior? Evidence from a Field Experiment."

Vallury, S. and Abbot, J.K. "Who Recovers? The Political Economy of Climate Resilience in India."

Vallury, S. "Climate Extremes and the Distributional Returns to Roads in Rural India."

Zhang, F., **Vallury, S.**, and Cook, N.J. "The Limits of Scaling Justice in U.S. Climate Adaptation Plans."

Teaching Activities

Courses Taught

- Ecological Basis of Environmental Issues (Spring 2025)
- Agent-Based Modeling (Fall 2023, 2025)
- Environmental Policy & Natural Resource Management (Fall 2023, 2024, 2025)
- Water Policy Seminar (Spring 2023)
- Introduction to Applied Math for the Life & Social Sciences (Summer 2017-2019; Fall 2018)
- Economics of Sustainability (Spring 2019)
- Systems, Dynamics & Sustainability (Spring 2019)

Research Grants

USDA NIFA Foundational Program. "Farmers' Adoption Research and Choice Modeling of Agrivoltaics (FARM-AV)." *In Review*. (PI, \$300,000).

2024-2027 NSF Human-Environment and Geographical Sciences Program. "Equitable pathways to climate-smart agriculture: Rethinking adaptation as a continuum." (PI, \$400,000).

2024-2025 US Department of Interior. "2025 Biennial Georgia Water Resources Conference" (PI, \$25,000).

2024-2027 US Department of Army ERDC. "Expanding Research Test Beds for Nature-based Solutions in the Southeastern U.S.E US." (Co-PI, \$5,484,643).

2024-2027 NSF-Belmont Forum. "Mitigation and adaptation in cultural heritage landscapes: Lessons from transhuman pastoral systems for managing novel climate risks." (Co-PI, \$399,906.)

2023-2024 NSF CRISES Program. "Planning Proposal: Collaborative Research and Education Center for Transformative Water Solutions." (Co-PI, \$100,000).

2023-2024 UGA E-Mobility Initiative Seed Proposal Program (Co-PI, \$65,000).

2023-2024 UGA Teaming for Interdisciplinary Research Pre-Seed Grant (PI, \$4,000).

2018-2019 Graduate Dissertation Fellowship, Center for Study of Economic Liberty, Arizona State University, AZ. (\$10,000).

2018-2019 Humane Studies Fellowship, Institute for Humane Studies, (\$5,000).

2016-2017 Neely Foundation Food & Agriculture Sustainability Research Grant, School of Sustainability, Arizona State University, AZ. (\$4,000).

Awards & Fellowships

2024 The Institute for Humane Studies, Travel Fund (PI, \$750)

2023-2024 UGA Teaching Academy Early Career Fellows Program.

2021-2022 Hayek Travel Fund, Institute for Humane Studies, (\$1600).

2018-2019 Adam Smith Fellowship, Mercatus Center, (\$10,000).

Conference Participation

- “Does Information Drive Conservation Behavior? Evidence from a Field Experiment.” Biennial Conference of the International Association for the Study of the Commons, Amherst, USA. June 16-20, 2025.
- “Access Inequalities in Electric Vehicle Infrastructure in the Southeast U.S.”. Midwest Political Science Association Annual Conference. Chicago, Illinois, USA. April 4-6, 2025.
- “Differentiated Effects of Climate Migration”. National Sustainability Society Symposium. Seattle, Washington, USA. September 9-11, 2024.
- “Social inequalities shape climate change adaptation among Indian farmers”. 2023 Association of Public Policy Analysis & Management. November 9-11, 2023.
- “Institutional Fit and Policy Design in Water Governance: Nebraska’s Natural Resources Districts”. 2023 Association of Public Policy Analysis & Management. November 9-11, 2023.
- “Social inequalities shape climate change adaptation among Indian farmers”. XIX Biennial IASC Conference, Nairobi. June 19-24, 2023.
- *(Invited)* Panel on “Natural Infrastructure and Equity”. 2023 Georgia Water Resources Conference. March 30-31, 2023.
- “Assessing the institutional foundations of adaptive water governance in South India”. 2022 Toronto Conference on Earth System Governance. October 20-24, 2022.
- “Beyond the household: a literature review of scale and aggregation in adaptive capacity research”. International Association for Society and Natural Resources Virtual Conference. 20-22 June, 2021.
- “Institutions Without Romance: Corruption and Provision of Shared Infrastructure in Canal Irrigation Systems.” 6th Workshop on the Ostrom Workshop, Indiana University, Bloomington, June 19-21, 2019.
- “Technology Adoption in the Presence of Shared Infrastructure: The Case of Long-Enduring Tank Irrigation Systems in India.” 2018 Utrecht Conference on Earth System Governance, November 5-8, 2018.

- (Invited) “Technology Adoption in the Presence of Shared Infrastructure: The Case of Long-Enduring Tank Irrigation Systems in India.” IHS Graduate Research Colloquium, Arlington, VA, October 12-14, 2018.
- “Institutions Without Romance: Corruption and Provision of Shared Infrastructure in Canal Irrigation Systems.” 55th Annual Meetings of the Public Choice Society, Charleston, SC, March 1-3, 2018.
- “Labor-Saving Technologies and Structural Transformation in Northern Ghana.” Workshop on Gender, Agricultural Growth, and Rural Transformation Research in the CGIAR, International Food Policy Research Institute, Washington D.C., December 14-15, 2017.

Student Mentoring

Current Graduate Students

- Mackenzie Hallmark, Advisor, M.S. Ecology Integrative Conservation and Sustainability.
- Kaili Gregory, Committee Member, Ph.D., Warnell School of Forestry & Natural Resources.
- Monika Giri, Committee Member, Ph.D., ICON Anthropology.
- Maria Ramsey, Committee Member, Ph.D., Department of Agricultural Leadership, Education, & Communication.
- Michaela Collins, Committee Member, M.S. Warnell School of Forestry & Natural Resources.
- Niketa Nandan, Committee Member, M.S. Civil and Environmental Engineering.

Past Graduate Students

- Jonathan Parrish, Advisor, M.S. Ecology Integrative Conservation and Sustainability. *Graduated Spring 2025.*
- Crystal Pendargast, Committee Member, M.S. Integrative Conservation and Sustainability. *Graduated Spring 2024.*
- Sabyasachi Kar, Committee Member, M.S. Warnell School of Forestry & Natural Resources. *Graduated Spring 2024.*
- Megan Seidel, Committee Member, MNR Warnell School of Forestry & Natural Resources. *Graduated Fall 2023.*

Undergraduate Students

Samantha Dilley, 2023 Spring CURO Research Award

Professional Service

- *Associate Editor:* Ecology & Society; Journal of Development Perspectives
- *Reviewer:* Policy Studies Journal; World Development; Ecological Economics; Environmental Science and Policy; International Journal of Commons
- *Ad-hoc grant reviewer:* National Science Foundation Human-Environment Geographical Systems; Social Sciences and Humanities Research Council of Canada.

Administration

- Program Chair, 2025 Biennial Georgia Water Resources Conference.
- Organizer, 2024 Climate & Research Slam.
- Organizer, 2024 Confluence: UGA Water Science and Policy Poster Symposium.
- Co-chair, 2023 Biennial Georgia Water Resources Conference
- Organizer, 2023 Confluence: UGA Water Science and Policy Poster Symposium.

University Service

- 2024-2027 University Council
- 2024-2027 Undergraduate Committee

Professional Memberships

- American Economic Association
- Midwest Political Science Association
- International Association for Society and Natural Resources
- International Association for the Study of the Commons

Related Programming Skills

- Simulation Software: R, MATLAB, NetLogo, XPPAUT
- Statistical Software: STATA, R
- Other: QGIS, L^AT_EX