

RÓGER MADRIGAL-BALLESTERO

Ph.D, / Researcher/ Professor

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EDUCATION

Ph.D. Environmental Sciences. Freiburg University, Germany

M.Sc. Environmental Economics. Tropical Agricultural Research and Higher Education Center (CATIE), Costa Rica

Licentiate. Economics. University of Costa Rica

B.A. Economics. University of Costa Rica

PROFESSIONAL EXPERIENCE

2023. Visiting Scholar. Macmillan Scholar, Gund Institute for Environment, University of Vermont.

2017- to date. Director, Environment for Development (EfD) for Central America and Mexico at CATIE. <https://www.efdinitiative.org/central-america-and-mexico>

2015 – to date. Academic director. MSc Program. Economics, Development and Climate Change. CATIE

2020 - to date. Steering Committee. GIACT-Universidad de Costa Rica. MSc Program. Integrated management of tropical coastal areas

2007- to date. Senior Research Fellow. Environment for Development Center (EfD-CATIE).

2007. Visiting scholar. Workshop in Political Theory and Policy Analysis, Indiana University

RECENT PROJECTS/CONSULTANCIES, ROLE AS TEAM LEADER (Last 5 years | non-exhaustive list)

- i. Preparation of the feasibility study for the structuring of a financial mechanism to establish a fishing fleet specialized in the sustainable capture of tuna in Costa Rica's Exclusive Economic Zone. Forever Costa Rica Association.
- ii. Economic incentives to support a transition to sustainable and equitable agriculture in Central America and the Dominican Republic. Interamerican Development Bank (IADB).
- iii. Eastern Tropical Pacific Marine Corridor (CMAR): Financial mechanism and economic valuation of ecosystem services. The World Bank.
- iv. Ecosystem Services Mapping, Prioritization and Economic Valuation in the Shekerley Mountains Management Area. Department of Environment, Antigua and Barbuda.
- v. Developing a financial programme for Sustainable Land Management and Climate-Smart Agriculture practices in St Kitts and Nevis. UICN
- vi. The economics of Marine Spatial Planning. The World Bank.
- vii. Feasibility evaluation of a Transboundary Water Fund (FdAT) for the Lempa River basin in the Trifinio region. Interamerican Development Bank (IADB).
- viii. Development of a Payment for Ecosystem Services (PES) model applicable in the Global South. NIFOS-Korea, 2021-2025.

- ix. Strengthening of the FONAFIFO PES monitoring scheme. Methodologies for quantifying the impacts of the Costa Rican PES program on water resources. AFD-FONAFIFO. 2021.
- x. Mangroves for Development. Financial mechanism design for mangroves conservation in the Dominican Republic. Caribbean Biodiversity Fund. 2021-2022.
- xi. Coastal and Marine Resources Program (CMaR). Chile, China, Costa Rica, India, South Africa, Tanzania, Vietnam. EfD Initiative. 2021-2024.

RELEVANT PUBLICATIONS (Refereed | not exhaustive list)

2024. Madrigal-Ballester, R; Mullan, K; Pacay, E; Pattanayak, S.K; Robalino, J; Evia, P. Volumetric pricing in rural Central America: Drivers of adoption and potential effects on water delivery, *World Development Sustainability*, Volume 4.

2024. Viguera, B; Madrigal, R; Pacay, E; Navarrete, G. Alternatives for improving PES effectiveness on water resources. *Journal of Soil and Water Conservation* 79(1):5A-9A.

2023. Palou, N; Madrigal-Ballester, R; Schlüter, A; Alvarado, JJ. Applying the SES Framework to coral reef restoration projects on the Pacific coast of Costa Rica. *Revista de Biología Tropical*, Vol. 71 (S1). <https://doi.org/10.15517/rev.biol.trop.v71iS1.54853>

2021. Albers, H., Ashworth, M., Capitán, T., Madrigal-Ballester, R. and Preonas, L., Marine Protected Areas and aspatial policies in artisanal fisheries. *Marine Resource Economics*

2020. Albers, H.J., Preonas, L., Capitán, T. Robinson, E., Madrigal, R. Optimal Siting, Sizing, and Enforcement of Marine Protected Areas. *Environmental & Resource Economics*.

2019. Chávez, I; Partelow, S; Madrigal-Ballester, R; Schlüter, A; Gutierrez, I. Do responsible fishing areas work? Comparing collective action challenges in three small-scale fisheries in Costa Rica. *International Journal of the Commons*. 13.

2017. Madrigal, R; Albers, J; Capitán, T, Salas, A. Spatial decisions, livelihoods, and perceptions in small-scale fishing grounds of Costa Rica. *AMBIO A Journal of the Human Environment* 46(4):1-10.

2017. Madrigal, R; Jurado, D. Livelihoods, attitudes towards regulation and the participation in performance-based payments for protecting turtles: Empirical evidence from Nicaragua. *Conservation and Society* 15(1): 74-86.

2013. Madrigal, R; Schlüter, A; López, M C. What makes them follow the rules? Empirical evidence from turtle egg harvesters in Costa Rica. *Marine Policy*, 37, 270–277.

2012. Schlüter, A; Madrigal, R. The SES Framework in a marine setting: methodological lessons. *Rationality, Markets and Morals*, 3: 158-179.

2011. Madrigal, R; Alpizar, F; Schlüter, A. Determinants of performance in rural water community organizations in Costa Rica. *World Development*, 39 (9): 1663-1675.

2008. Madrigal, R; Alpizar, F. Adaptive design and management of a payment scheme for ecosystem services in Copán Ruinas, Honduras. *Revista Investigación Agraria: Sistemas y Recursos Forestales*. 17(1): 79-90. Spain.

OTHER RELEVANT PUBLICATIONS AND REPORTS (not an exhaustive list)

2023. Madrigal, R; Alpízar, F. Análisis de oportunidades para la introducción de instrumentos fiscales que incentiven la descarbonización del sector de gestión de residuos en Costa Rica. Documentos de Proyectos (LC/TS.2023/28), Santiago, Comisión Económica para América Latina y el Caribe (CEPAL), 2023. <https://www.cepal.org/es/publicaciones/48861-analisis-oportunidades-la-introduccion-instrumentos-fiscales-que-incentiven-la>

2022. Alpízar, F; Madrigal, R; Castaño, J. Applying Economic Analysis to Marine Spatial Planning (English). Washington, D.C.: World Bank Group <http://documents.worldbank.org/curated/en/099515006062210102/P1750970bba3a60940831205d770baece51>

2020. Alpízar, F., Madrigal, R., Alvarado, I., Brenes Vega, E., Camhi, A., Maldonado, J. H., Marco, J., Martínez, A., Pacay, E., and G. Watson (2020), '[Mainstreaming of Natural Capital and Biodiversity into Planning and Decision-Making: Cases from Latin America and the Caribbean](#)', IDB Working Paper Series, No. IDB-WP-01193.

2017. Alpizar, F; Madrigal, R. Conditional cash transfers and payments for ecosystem services. *Revista Integración y Comercio*, 41: 100-114.

2016. Kim, J; Madrigal, R; Alpizar, F; Rojas, S. . GGGI, Seoul, Corea. [Bridging the Policy and Investment Gap for Payment for Ecosystem Services: Learning from the Costa Rican Experience and Roads Ahead — Global Green Growth Institute \(gggi.org\)](#)

2008. Madrigal, R; Alpízar, F. Payment for environmental services within the context of collective action in watersheds. FOCUENCAS II-CATIE. Turrialba, CR. 17 p.

2008. Retamal, R; Madrigal, R; Alpízar, F; Jiménez, F. Supply of water ecosystem services in the municipality of Copán Ruinas: Where are they generated? How to protect them? How much to pay for protection?. FOCUENCAS II-CATIE, Turrialba, CR. 40 p.

2008. Cisneros, J; Alpízar, F; Madrigal, R. Estimation of the demand for water environmental services in Copán Ruinas, Honduras. *Revista Recursos Naturales y Ambiente*, 51:143-152.

2007. Alpizar, F; Madrigal, R. Ecosystem goods and services in Latin America and the Caribbean: good practices, financing mechanisms and the role of the State. BID-CATIE. 198 p.

2007. Madrigal, R; Alpízar, F. Principles of design and implementation of payment schemes for ecosystem services. CCAD- Mesoamerican Biological Corridor Initiative. 55 p.

TEACHING EXPERIENCE

Graduate MSc Level:

2024-. At Universidad de Costa Rica: Economic valuation of coastal and marine resources.

2020-to date. At Universidad de Costa Rica: Coastal-Marine Governance

2019-to date. At CATIE: Climate Change Economics.

2004-to date. At CATIE: Introduction to Environmental Economics and Natural Resource Economics.

On the job training:

2004-to date. At CATIE: Annual course on Economic Valuation and Management of Ecosystem Services.

2007 & 2013. INFOR, Chile & Universidad Nacional, Paraguay. Economic Valuation of Ecosystem Services

2019. At CATIE: Annual course on Water Economics

2019. Forestry Department, Jamaica. Natural Resources and Ecosystem Services Valuation

SELECTED CONFERENCES (as presenter)

2020-2022-2023-2024. European Association of Environmental and Resource Economists.

2014. Workshop on the Ostrom Workshop, Indiana University.

2020. Association of Environmental and Resource Economists.

2011-2017-2019. International Association for the Study of the Commons (IASC).

2016-2018. World Water Week

2015. World Water Conference

2014. Workshop on the Ostrom Workshop, Indiana University.

OTHER TRAINING ATTENDED

2007. Institutional Analysis and Development Course. Workshop in Political Theory and Policy Analysis. Taught by Elinor Ostrom, Indiana University, U.S.

2007. International Forestry and Resources Institutions. Workshop in Political Theory and Policy Analysis. Taught by Burnell Fisher, Catherine Tucker, and Elinor Ostrom, IU, U.S.

2006. I International Conference on Commons and Citizenship. DF, México.

2006. Welfare and public economics course. Latin American and Caribbean Environmental Economics Program. Taught by David Shogren, Wyoming University, U.S.

2006. Environmental Economics and Policy Course. Latin American and Caribbean Environmental Economics Program. Taught by David Zilberman, Berkeley University, U.S.

SPECIAL APPOINTMENTS

2023-to date. Board of Directors. Nectandra Institute.

2023 to date, the Research Advisory Committee (RAC) of the South African Research Chair (SARCHI) has focused on Governance and Economics for Water and Sanitation Institutions.

LANGUAGES

- Spanish – native speaker.
- English - fluent (speaking, reading, writing)