# ANDRÉS DE LOERA

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HARVARD UNIVERSITY


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**Education**

**Harvard University**
Ph.D. Economics, 2026 (expected)
M.A. Economics, 2023
B.A. Economics, 2020. Magna Cum Laude, High Honors, Harvard College Scholar, Phi Betta Kappa

**Fields**

Environmental Economics
Public Economics

**References**

Professor Ed Glaeser
eglaeser@harvard.edu

Professor Wolfram Schlenker
wolfram_schlenker@hks.harvard.edu

Professor Joe Aldy
joseph_aldy@hks.harvard.edu

Professor Charles Taylor
ctaylor@hks.harvard.edu

**Fellowships & Awards**

NMFS-SeaGrant Fellowship in Marine Resource Economics, 2024-2026
Pre-Doctoral Fellowship on Carbon Pricing and Alternative Instruments in the Future of U.S. Energy and Climate Policy, 2022

**Teaching**

Course Head, *Natural Resource Economics*, Fall 2022 & 2023
Head Teaching Fellow, *The Economics of Climate Change*, Spring 2023-2025

**Research Positions**

Research Assistant to Michael Chernew, Harvard Medical School, 2018-2020
Research Intern, The Brookings Institution, Summer 2018
Research Assistant to Emmerich Davies, Harvard Graduate School of Education, 2017-2018
Research Assistant to Jeffrey Hoch, UC Davis, Summer 2017

**Job Market Paper**

**Climate Change and Fisheries Exploitation**


How significant is the common-pool problem in global fisheries, and how will it be affected by climate change? Many fisheries are not fully contained in a single country's Exclusive Economic Zone, and therefore face an international common-pool problem. As the ocean warms and acidifies, fishery ranges will shift and alter the distribution of populations across borders. This could lead to maladaptive overexploitation, but could also increase conservation by countries gaining control. I construct a panel of fishery ranges and estimate how fisheries extraction responds to the share of a stock in the given management area. My results show a large increase in extraction in response to a decrease in the share of a stock in a managed area, consistent with the theory that controlling a smaller share of a stock reduces incentives for conservation. I then simulate the effects of climate change on fisheries extraction using these empirically estimated responses. The behavioral response to climate change is close to zero on net, but stock-gainers increase escapement by 1.6 million tons (2.6%) and stock-losers decrease escapement by 1.5 million tons (3%). I also simulate fisheries outcomes under cooperative management, and find a 47.5 million tons (77%) increase in escapement under global cooperation.

**Working Papers**

**Pay Thy Fisher, Beggar Thy Neighbor? China's Fuel Subsidies in the 21st Century** (with Aaron Berman)

Countries facing over-exploitation of domestic waters may find it politically and economically advantageous to offer subsidies as a way of "decongesting" their domestic fisheries. Fuel subsidies, the most significant form of fisheries subsidies, may play such a role if they induce distant water fishing. We characterize the conditions under which fuel subsidies are decongesting and then estimate their empirical effects using a triple-difference design exploiting a change in Chinese subsidy policy. We show that China's fuel subsidy increased fishing in its domestic waters, by suppressing a 1.24% elasticity of domestic fishing with respect to the oil price. Meanwhile, it decreased distant water fishing. We also show that non-Chinese vessels in spatial competition with China decreased their fishing in response to China's subsidies. However, we show that the evolution of China's subsidy policy away from fuel subsidies and towards spatially specific subsidies did promote domestic decongestion: Had China not changed it subsidy policy, vessels in our sample would have fished 39% more in the Chinese EEZ and 33% less outside of it.

**Papers in Progress**

**Exploring and Mining the Deep Sea**

Scientific exploration in remote environments is an underprovided public good. In the case of the deep sea, there is significant interest both in biological exploration and exploitation through commercial mining. Therefore, the institution governing deep-seabed mining in areas beyond national jurisdiction has created a requirement for mining contractors to explore their deep-seabed tracts before applying to mine them. However, this may not entirely resolve the public goods problem because the mining contractor has an incentive to shirk in their exploratory effort to avoid discoveries that could prevent them from mining. I investigate whether the publicly reported exploration data is of lower quality in tracts eligible for mining when explored by the mining contractor, compared to areas that have been protected. I find evidence that mining contractors underreport the taxonomic characteristics of biological samples in their mining area, consistent with this perverse incentive to shirk in exploratory effort.

**Mining, Critical Minerals, the Environment, and the Clean-Energy Transition** (with Dale Squires and Pedro Madureira)

This paper describes the modern problem of critical mineral supply with respect to the choice between terrestrial and deep-seabed mining. We describe the global utilitarian social planner's optimum and then introduce institutional features that drive a wedge between that optimum and the realized outcome. While the issues facing terrestrial mining are common in many settings, we introduce several unusual features of the management of deep-seabed mining which diverge from the global utilitarian social planner's optimum. Deep-seabed mining in areas beyond national jurisdiction is governed by an international social planner, but its objective function is non-utilitarian. We discuss how some of its legal mandates can be interpreted for economic purposes, such as revenue sharing, and explain how these principles can apply in the cases of other international commons.

**Seminars & Conferences**

Occasional Workshop in Environmental and Resource Economics, 2025
CU Environmental & Resource Economics Workshop, 2025
Global Food+ Symposium, 2025
North American Association of Fisheries Economists, 2025
Eastern Economics Association, 2024
Oxford Workshop on Global Priorities Research, 2022

**Academic Service**

Organizer, Harvard Workshop in Environmental Economics, 2022-2024

**Research Grants**

Chae Family Fund for the Economics of Crises