



## Self-Governance and Environmental Solutions

Jordan Lofthouse

With this year marking the 10th anniversary of Elinor Ostrom's Nobel Prize in Economics, now is an excellent time to reexamine her intellectual contributions. Elinor and her husband, political scientist Vincent Ostrom, worked for decades researching how societies can solve their own problems. They found that self-governing societies can create their own ways to overcome problems without the need for top-down, one-size-fits-all public policies.

Every society needs rules to function, and the Ostroms distinguished between rule-makers who govern *over* others and those who govern *with* others. When politicians and bureaucrats choose what the rules will be, they govern over others, which can easily turn into tyranny. However, when ordinary members of a society participate directly in the development of rules, they govern with others. People in self-governing societies create and enforce their own rules, rather than rules being imposed on them from above.

The Ostroms thought that societies should be self-governing, and they spent decades exploring how self-governing societies *can* and *have* solved problems. Elinor Ostrom was particularly interested in how self-governance could solve a type of environmental problem called the “tragedy of the commons.” A tragedy of the commons occurs with common-pool resources—resources that are either unowned or owned in common by a large group. For example, no government has jurisdiction over the open oceans, meaning that anyone can take as many fish as they want. Many open-ocean fisheries are collapsing because they lack an effective governance structure to stop overexploitation.

Without some sort of rules, a tragedy will result because each person acts rationally to use up the common-pool resource before other people do. Many environmental problems today are tragedies of the commons, such as wildlife conservation and air quality.

The Ostroms found that all across the world, local people devised rules that solved tragedies of the commons in a self-sustaining and self-enforcing way. When local people with on-the-ground experience and knowledge come up with rules that fit their own priorities, they are better equipped to solve environmental problems. When far-removed “outsiders” try to force environmental policies on local communities, even with the best of intentions, those policies can perform poorly and may also be oppressive.

Self-governance come in many shapes and sizes, and Maine’s lobsterman community is just one example. In these fishing towns, community members make rules, monitor adherence to those rules, and enforce punishments for violations so that the lobster fishery doesn’t suffer from the tragedy of the commons.

The rules for lobstermen are both formal and informal. The informal side is made up of “harbor gangs,” which are private associations of lobstermen from the same harbor. To take lobster from a specific harbor, a lobsterman must be a member of that harbor’s gang. The harbor gangs provided clear boundaries and membership for access to the common-pool resource. The Maine

coastal economy is heavily dependent on fishing, so harbor gang members have a strong incentive to monitor each others' behavior. If non-gang members attempt to fish in a particular gang's territory, the gang will enforce its rules. A gang will make verbal threats against trespassers or let other community members know of the trespasser's actions. In more extreme cases of violations, gang members will cut off the traps from buoys of trespassers, and there are occasional reports of suspicious boat sinkings for trespassers.

The informal harbor gangs operate within the formal management under state regulations. State regulations include a statewide trap limit, an apprenticeship program for new entrants, and a trap tag program that links traps to their owners. The state also licenses lobsterman, who generally belong to the harbor gangs. Under state laws, license holders in each zone elect members to local councils who can modify existing regulations. If the state commissioner approves the councils' policy changes, those changes are made into state regulations by the Department of Marine Resources.

The example of Maine's lobsterman communities shows how the Ostroms' perspective on self-governance has many applications. The community was given the freedom to create an informal structure of rules with their harbor gangs, which have helped to avoid the tragedy of the commons for generations. Additionally, Maine's approach to formal regulations has allowed a large amount of self-governance—local council members can modify regulations to fit with the desires and knowledge of local communities.

The Ostroms' work is especially helpful as we try to think of new ways to solve environmental issues, like wildlife conservation or climate change. The question for policymakers and local communities is how to leverage the power of self-governance to make effective rules and solve environmental problems.

Recommended Readings:

Hardin, Garrett. 1968. "The Tragedy of the Commons." *Science* 162, no. 3859 (December 13, 1968): 1243–8.

Acheson, James M. *Lobster Gangs of Maine*. Hanover, NH: University Press of New England, 1988.

Ostrom, Elinor. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge and New York: Cambridge University Press, 1990.

Ostrom, Elinor. "Beyond Markets and States: Polycentric Governance of Complex Economic Systems." *American Economic Review* 100, no. 3 (June 1, 2010a): 641–672.

Ostrom, Elinor. "Polycentric Systems for Coping with Collective Action and Global Environmental Change." *Global Environmental Change* 20, no. 4 (2010b): 550–557.

Ostrom, Vincent. "Polycentricity: The Structural Basis of Self-Governing Systems." In *The Meaning of American Federalism*. San Francisco, CA: ICS Press, 1991.

Tarko, Vlad. *Elinor Ostrom: An Intellectual Biography*. New York: Rowman and Littlefield, 2017.