

Elinor Ostrom

(1933–2012)

Nobel laureate who showed that people who share a resource can regulate themselves.

Elinor Ostrom was the first, and so far only, woman to win the Nobel prize in economics. Researchers had long assumed that the only way to avoid the 'tragedy of the commons' — or the inability of people to conserve shared resources — was through strict government regulation or privatization of the resource. Championing an interdisciplinary approach that used field work and laboratory experiments as well as theory, Ostrom showed that, in fact, the users of a resource will quite often regulate themselves. Her theoretical framework for studying this effect earned her a share of the Nobel prize in 2009.

Ostrom, who died from cancer on 12 June, was born Elinor Awan in 1933 to a relatively poor family in Los Angeles, California. Her parents had not gone to university and they did not encourage her to, but she got the idea while attending what she called a "rich kid's school" in Beverly Hills. She studied political science at the University of California, Los Angeles, and after a brief stint as personnel manager for a business firm, she returned to earn a master's degree and a PhD — which was unusual for a woman at that time. Her doctoral thesis, which she finished in 1965, focused on the management of shared groundwater resources in southern California.

That same year, she accompanied her husband, Vincent Ostrom, to Bloomington, Indiana, where he had taken a full professorship in political science at Indiana University. The university's need for someone to teach an early-morning 'Introduction to American Government' class got her a temporary faculty position; its need for a graduate adviser led to a tenure-track faculty appointment. In her first 15 years on the political-science faculty, she studied police forces in US cities, seeking to learn what type of organization led to the most effective policing.

In the early 1980s, Ostrom began to develop a more theoretical understanding of the institutions, rules and norms that humans use to organize themselves. She was influenced by a sabbatical at the University of Bielefeld in Germany with Reinhard Selten, who in 1994

earned an economics Nobel prize for his work on game theory. Her theoretical work led to the Institutional Analysis and Development (IAD) framework — a system for analysing and comparing case studies using a common terminology and method of data coding. At first, the IAD was strongly resisted. Ostrom was accused of making it too complex by



including, for example, seven different classes of governance rules. Today, the framework is used throughout the social sciences.

During the mid-1980s, Ostrom returned to her study of the commons. At the time, an increasing number of scholars were realizing that reality clashed with the conventional view that such sharing would always lead to environmental disaster. Ostrom compiled hundreds of case studies of self-organization, from the lobster fisheries of Maine to the irrigation systems of Nepal. She travelled the world to conduct her own field research. In her book *Governing the Commons*, (Cambridge University Press, 1990) she identified eight 'design principles' that characterize successful self governance, such as having monitors who are accountable for the users of a resource, and using inexpensive mechanisms of conflict resolution. Those principles have stood the test of time.

In the late 1980s, Ostrom began designing controlled experiments to test her insights. For example, she had seen a group of farmers in Nepal track down thieves who were stealing water from their shared irrigation system. Economists considered such self-policing an anomaly. They assumed that people would not invest time in enforcing

rules if they could free ride on the policing efforts of others. In her lab, Ostrom tested whether people would give up their time and effort to police the behaviour of others. They did. Ostrom and her colleagues replicated her proposed principles of self-governance in the lab many times.

Over her career, Ostrom pushed to enhance interdisciplinary research. She recognized that much of the work in sustainability was fragmented: theorists were critical of experimentalists and vice versa; economists and socialists were not familiar with each others' work. In 1973, Ostrom and her husband founded the ongoing Workshop in Political Theory and Policy Analysis at Indiana University to help bridge these gaps. In the 1980s, she helped to create the International Association for the Study of the Commons, of which she was the first president, and she helped to set up the Center

for the Study of Institutional Diversity at Arizona State University in Tempe, of which I am now director.

With her energy, curiosity and down-to-Earth attitude, Lin — as she liked to be called — was the driving force of many collaborations. She was humble about her achievements: she considered her Nobel prize a mark of success for her entire community, rather than a personal achievement. And she was generous with her time, especially for her students. She broke through academic and gender barriers, paving paths for future generations. She is irreplaceable, and she will greatly be missed. ■

Marco A. Janssen is an associate professor at the School of Human Evolution and Social Change, Arizona State University, Tempe, Arizona 85287, USA.
e-mail: marco.janssen@asu.edu