

## NO. 9 SPECIAL PUBLICATION OF THE INTERNATIONAL ASSOCIATION FOR THE STUDY OF THE COMMONS

On October 2009 the IASC community around the world woke up to the extraordinary news: “the Royal Swedish Academy of Sciences had decided to award the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel for 2009” to our former and funding president, Professor Elinor Ostrom, “for her analysis of economic governance, especially the commons”. From the moment *The Commons Digest’s* editorial team learnt about Lin winning the Nobel, it was decided to dedicate an issue to the relevance of this high recognition to the main fields that Lin has worked on over the years, and are also key fields of analysis for many IASC members.

This special issue begins with a contribution written by Charlotte Hess who follows up Elinor and Vincent Ostrom’s work evolution, and their contribution to “the way we think about commons, self-governance, institutions, and the capabilities of human beings”. The second piece is a fragment of Leticia Merino’s interview to Elinor Ostrom held in February 2010 at the Workshop on Political Science and Policy Analysis. Next, José Saruhkán highlights the importance of Elinor Ostrom’s work in times of “unprecedented global environmental problems”. The next three articles are more “resource oriented”: Doug Wilson analyses the impacts on the debates over fisheries; Esther Mwangi reflects on the importance of Lin’s ideas and research on forest governance and Bryan Bruns writes about the influence of Lin’s work in the field of irrigation and water management. To close this issue, an article by Nitin Desai—Chair of the next XIII IASC Global Conference—, originally printed in the financial daily *Business Standard*, India. Advancing the interest and the richness of the upcoming Global IASC meeting to be held in Hyderabad, India, Mr. Desai mentions the applicability of some of Elinor Ostrom’s proposals on contemporary Indian realities and policies.

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## The Calculus of Commitment:

*The Ostroms, The Workshop and The Commons*

### Charlotte Hess

Associate Dean for Research, Collections & Scholarly Communications at Syracuse University

When Elinor Ostrom was interviewed at Indiana University after winning the 2009 Nobel Prize in Economics for her study of economic governance, particularly the commons, she said “The prize did come to me personally, but it would never have come but for the work I did with Vincent Ostrom all these years and the Workshop.”<sup>1</sup>

This piece ponders those humble words by a world-renown scholar through an—albeit brief—examination of the decades-long collaboration between Lin and Vincent Ostrom: two brilliant minds committed to better understanding the complexities of human behavior and the challenges of cooperation. They have shared a rich and ever-constant intellectual exchange that has surely enriched each others’ lives and scholarship. Particularly striking is their clear focus, the complete integration of their intellectual theories with the life they have created around them, with their dogged persistence throughout the years. As the hundreds or thousands of researchers who have made the pilgrimage to Bloomington Indiana to visit the Workshop in Political Theory and Policy Analysis have experienced, it’s a dynamic place where people engage in rigorous debate, wrestle with difficult ideas, and immensely enjoy themselves and their colleagues along the way. “We called it a workshop,” Vincent once commented, “to communicate a commitment to artisanship and collaboration.”

<sup>1</sup>See <http://www.idsnews.com/news/atory.aspx?id=73788>

# The Commons Digest

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As many of us commons folk are aware, this year is the twentieth anniversary of Elinor Ostrom's groundbreaking volume, *Governing the Commons: the Evolution of Collective Action*. It is certainly the most cited<sup>2</sup> and well-known of all of Lin's works and considered a landmark publication on many grounds. Among them are: its case studies of successful commons which refute the myth of the tragedy of the commons; its deep analysis that lead to the eight design principles of long-enduring, robust commons; its situating the study of commons within a multidisciplinary approach, especially political economy; its once and for all distinction between common-pool resources as types of goods and common property as formal or informal property regimes.

Few people are aware that this year also marks the anniversary of two other important milestones for the study of the commons: the 45<sup>th</sup> anniversary of Lin Ostrom's Ph.D. dissertation from UCLA, *Public Entrepreneurship: A Case Study in Ground Water Basin Management* (1965)<sup>3</sup> and the 60<sup>th</sup> anniversary of Vincent Ostrom's dissertation (also from UCLA) *Government and Water: A Study of the Influence of Water Upon Governmental Institutions and Practices in the Development of Los Angeles* (1950). While these are quite different studies, both examine the relationship between institutions and their outcomes on water resources—and both contain the seeds of future institutional and commons-related analysis.

Lin's dissertation expands on Joseph Schumpeter's work on entrepreneurship, taking the concept beyond the realm of private enterprise. Her focus is on the role of public entrepreneurs in water users' associations to craft institutional arrangements in order to create more efficient outcomes in the West Coastal Basin of Southern California. In her introduction Lin expresses her dissatisfaction with popular analytical approaches in her discipline: "The traditional literature of political science and economics has given little consideration to the strategy used by individuals in organizing public enterprises to provide public goods and services (P. xvi)." Both Lin and Vincent have noted the important influence of Buchanan and Tullock's 1962 volume *Calculus of Consent* because of its focus on public choice as well as individuals' capacity for self-governance and collective action.

<sup>2</sup> There are well over 10,000 citations to this book according to Google Scholar (5-22-2010)

<sup>3</sup> Both dissertations are available in open access on the Digital Library of the Commons, Lin's at: <http://dlc.dlib.indiana.edu/dlc/handle/10535/3581>; Vincent's at: <http://dlc.dlib.indiana.edu/dlc/handle/10535/3608>

Vincent's thesis traces the institutional structure of L.A.'s water system to the shared property of the original *pueblo* system of *El Pueblo de Nuestra Señora la Reina de Los Angeles*, the original name of the city of Los Angeles, California. He notes, "in no other phase of modern life has the impact of the Spanish origin of Los Angeles been so great as in the establishment of the general policy of community control of water resources (p. 37)." One sees from the outset the strong presence of Alexis de Tocqueville, whose method of political analysis has had such a lasting influence on the Ostroms' theory and methodology. His analysis echoes the structure of Tocqueville's in *Democracy in America*, beginning with the physical description of the resource (southern California, its desert, and its water systems), and continuing with a survey of the evolving institutions in a rapidly growing community. Vincent understands the historical governance of L.A. groundwater as a type of commons: "From the various instructions and regulations governing the pueblos of California, elaborate rules were established for the government of the water distribution system, beyond the provisions declaring water to be subject to the common use of the *pobladores* (p. 40)."

Vincent began to work with Lin and Lin's colleague Louis Weschler on the evolution of southern California water institutions in what he refers to as "the 1958-62" era<sup>4</sup> when he was also collaborating with the organization of metropolitan government as political economies.<sup>5</sup> It was during this time that Ostrom, Tiebout, and Warren were developing their concept of *polycentricity* where there are multiple levels of (self) governing activities. (Later, Lin would argue the utility of this concept in possibly solving collective-action problems by developing systems of governmental and nongovernmental organizations at multiple scales).<sup>6</sup>

By the time they met, Vincent was a leading analyst of natural resource policy and administration.<sup>7</sup>

Their mutual interest in water institutions led to analyses of self-governance, institutions as rule-ordered relationships, and the benefits of multidisciplinary of political economy. When they came to Indiana in 1964 Lin was finishing her dissertation and they were working on their first co-authored article<sup>8</sup>. During the next few years, amidst their other research, they wrote working papers and correspondence with colleagues, working toward a deeper understanding of the nature of common-pool resources and institutional analysis.

In 1968, the same year that Garrett Hardin wrote that "Freedom in a commons brings ruin to all,"<sup>9</sup> proposing privatization and government intervention as the only viable solutions to such commons problems, Vincent Ostrom wrote a paper called "Organization of Decision-Making Arrangements and the Development of Atmospheric Resources."<sup>10</sup> Here he proposed an antithetically different approach to the commons-problem, one that underlines his belief in human capabilities to self-govern:

The existing structure of institutional arrangements provide a basis for taking the first steps in the development of atmospheric resources. Concepts associated with the development of common property resources and the organization of public and mixed enterprise systems will help guide the way to further solutions.

Concurrently, Lin was working on the problem of groundwater basin management.<sup>11</sup> Lin also advocated an institutionalist approach finding it helpful to "understand the logic of constitution making since it is a classic example of a common-pool resource—the actions of any producer affect all other producers utilizing the basin."

Vincent and Lin may have disagreed with many of Hardin's assumptions but they enjoyed the challenges he posed. Lin engaged in a vigorous correspondence with him. They also contributed two chapters to Hardin's edited 1977 volume with John Baden (a former student of the Ostroms) *Managing the Commons*.<sup>12</sup>

<sup>4</sup> From a letter to Tjip Walker, October 1, 1992 with the subject: Intellectual Program. (Note: letters as ongoing works of intellectual exchange were often freely shared with other Workshopers)

<sup>5</sup> Ostrom, Vincent, Charles M. Tiebout, and Robert Warren 1961. "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry." *American Political Science Review*. 55:831-842

<sup>6</sup> See "Polycentric Systems as One Approach to Solving Collective-Action Problems." 2009. In *Climate Change and Sustainable Development*, M. Salih, ed. Edward Elgar. Preprint: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1304697](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1304697)

<sup>7</sup> See Barbara Allen's "Preface" outlining Vincent's exceptional career and scholarly contributions in: Ostrom, Vincent. 2008. *The Political Theory of a Compound Republic: Designing the American Experiment*. 3rd ed. New York: Lexington.

<sup>8</sup> "A Behavioral Approach to the Study of Intergovernmental Relations." 1965. *The Annals of the American Academy of Political and Social Science* 359:137-146.

<sup>9</sup> Hardin, Garrett. 1968. "The Tragedy of the Commons." *Science* 162:1243-1248. <http://hdl.handle.net/10535/4282>

<sup>10</sup> Available at: <http://dlc.dlib.indiana.edu/dlc/handle/10535/4436>

<sup>11</sup> Ostrom, Elinor. 1968. "Constitutional Decision-Making: A Logic for the Organization of Collective Enterprises." Presented at the Midwest Political Science Association Annual Meeting, Chicago, IL, May 4, 1968. <http://dlc.dlib.indiana.edu/dlc/handle/10535/183>

<sup>12</sup> Ostrom, V., and E. Ostrom. 1977. "A Theory for Institutional Analysis of Common Pool Problems" and Ostrom,

A groundbreaking contribution to the study of the commons was their 1977 publication “Public Goods and Public Choices” where they outlined their typology of four types of goods—rather than Samuelson’s two—based on the degree of jointness of use and difficulty of exclusion. (As Lin has often pointed out, these are not discreet units but rather continuums or even “continents.”) The expanded typology provided a much-needed distinction between the simplistic public-private dichotomy, adding an important new element to the language and understanding of commons scholarship as well as providing greater clarity to important differences between common property regimes and common-pool resources as types of economic goods.

When the Ostroms founded the Workshop in 1973 it was to fulfill a number of goals: to provide a multidisciplinary approach to the study of institutions; to acutely integrate the process of teaching, research, and intellectual problem-solving; to build an international network of like-minded scholars; and to build a publications and dissemination program. They modeled the Workshop



Photo: Courtesy of Indiana University

*Elinor and Vincent Ostrom*

according to their belief that organizations are artifacts that contain their own artisans. Anyone who has visited the Workshop has witnessed that each member—whether visiting scholar, local student, staff members, or affiliated faculty—is an essential artisan who makes important contributions to the Workshop commons.

As a well-crafted institution, the Workshop encompasses a unique combination of characteristics:

its Monday noontime cross-campus colloquium series; its two-semester Seminar on Institutional Analysis and Development,<sup>13</sup> the unique two-day miniconferences at the end of each semester; the self-governing and often spontaneous study groups, and its library with unique collections on the study of institutions and the commons. Today, the workshop has its own Facebook page, where our colleague Anil Gupta recently wrote on the wall: “The Ashram-like atmosphere of the Workshop is something that teachers worldwide need to learn from.”

Considering the many successes of the Workshop—as evidenced by the large and ever-growing number of publications, the impressive number of dissertations, a distinguished international network of scholars, the many awards and honors that have been bestowed on Vincent and Lin, even those prior to Lin’s Nobel Prize; the millions of dollars in research grants; the Tocqueville Endowment that Lin and Vincent started years ago; the Digital Library of the Commons that provides free universal access to thousands of full-text commons papers, articles, and dissertations—it is hard to imagine how challenging it must have been in the formative years. In a letter dated June 20, 1984<sup>14</sup> Vincent wrote: “We have struck a sensi-

tive and hostile response where our work has not confirmed the predispositions and aspirations of other scholars. We have had great difficulty in securing publications; and we have a great reservoir of important work that has never seen the light of day.” He worried about being able to attract students and about the high demands

made upon them, but then reminded his colleagues of their overall mission:

Our distinctive contribution is best indicated by how a science of association would contribute to an understanding of human institutions... My conclusion is that institutional analysis and design, in light of both recent and earlier intellectual developments in an appropriate subject for focused inquiry by a rather highly disciplined sort, which is also strongly multidisciplinary in character.

Much began to change in the mid 1980s. The Ostroms often refer to their first year at the *Center for interdisciplinary Research* at Bielefeld University in 1981-82 as a turning point for their research and for the Workshop. There, they studied some new intellectual traditions such as the European sociologists, *Ordnungstheorie* of the Freiburg and Marburg schools of economics, and game theory and experimental economics.<sup>15</sup> Upon their return

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E. “Collective Action and the Tragedy of the Commons.” In *Managing the Commons*. G. Hardin and J. Baden, eds. San Francisco: WH Freeman.

<sup>13</sup> A study of the extensive syllabi from this seminar over a 45-year period would give a wonderful intellectual and institutional history of Workshop thinking and research.

<sup>14</sup> Written to Bobbi Herzberg, Elinor Ostrom, Roger Parks, and Hal Schneider; with the subject “Reviews and Plans.”

<sup>15</sup> From an Interdepartmental Communication from Elinor Ostrom and Vincent Ostrom to Morton Lowengrub and Roger Farr, Sept. 7, 1984; Subject: Response to the External and Internal Review Reports.

they brought a more international focus to the Workshop and began inviting postdoctoral students along with graduate students who could help deepen productive scholarship in the social sciences. They began to define their work as more interdisciplinary and less confined to political theory.

The 1985 Conference on Common Property Resource Management (CPRM) hosted by the National Research Council was the catalyst that radically redirected Lin's research and writing. Before the conference almost all her commons-related work was in tandem with Vincent, while her other work was on U.S. police services and metropolitan governance and reform.<sup>16</sup> After the CPRM conference her contributions to commons research grew at exponential proportions. She hired a professional librarian, Fenton Martin, to help build a concerted library on the commons. In 1986, she worked with Vincent and with Larry Kiser to further develop the IAD framework, and began working with her graduate students to code case studies of natural resource commons based on that framework. In 1987, she and student Edella Schlager collaborated on their first paper exploring types of property rights<sup>17</sup>; and she began her long collaboration on game theoretical analyses of common-pool resources and economic behavior with Jimmy Walker and Roy Gardner. In 1989, Lin was one of the founders and the first president of IASC(P). By that time, she had already taken off: Between 1985-2010 Lin Ostrom has published 22 books, over 200 chapters in books, and over 150 journal articles, all related to commons research and analysis.

In truth, the enormous contributions Lin and Vincent have made to scholarship cannot be captured with numbers or statistics. It will take scholars many years to determine how Lin's work on the commons has shaped our understanding of democratic societies and governance. Other researchers will study how Vincent's theories of polycentricity and the constitutional level of analysis have facilitated a better appreciation of how commons work. Both the Ostroms have fundamentally changed the way we think about commons, self-governance, institutions, and the capabilities of human beings. The Workshop has changed our understanding of

how best to teach, learn, do research, problem-solve, and engage in intellectual exchange.

In February 2010 Vincent and Elinor Ostrom were awarded Indiana University's highest award, *The University Medal* which only ten other people in the university's history have received.

## Fragment of *Elinor Ostrom's* *Interview for The Commons Digest*

### Leticia Merino

Instituto de Investigaciones Sociales,  
Universidad Nacional Autónoma de México

*I just got fascinated, so it was fascination, and I didn't think of myself as a social scientist, I was just having fun, working hard, but having fun [...] yes, now I do see myself as a social scientist and I love it! And again, it is enthusiasm and my respect for humans and trying to understand where they are able to achieve things. . .*

Elinor Ostrom

### LETICIA MERINO: How do you define "the commons"?

ELINOR OSTROM: I don't use "the commons" as a technical [term]. To me "commons" means a wide diversity of non private goods, so I use the term "Common Pool Resources" (CPR) as a technical term to refer to resources where it is difficult to exclude people, not impossible, but difficult, and where, whatever I take, takes it away from everyone else. Public goods may also be commons, in a broader sense, so when we talk about "the commons" then I'm thinking in both, public goods and CPR. Public goods are like knowledge, it's still difficult to exclude people, but if I use your book and the kind of ideas that you have, that doesn't exclude others.

### Why are the commons or CPR important today at the beginning of the XXIst century?

Everyone is upset about loss of biodiversity! Well, where does biodiversity reside? It resides in forests, in pastures, in lakes and all the rest, and we are worried about global commons, so it's right up there.

### What role does collective action play in the sustainability of the commons or CPR?

Well, it's the fundamental problem that people have to solve, with a public good or a CPR the problem is that you can benefit from whatever I do and you don't have to do a thing, and the prediction is that, because you don't have to do a thing and you can benefit too, you just sit back and loaf on me.

<sup>16</sup> Although she had just published an article with graduate student William Blomquist in *Policy Studies Review* 1985. "Institutional Capacity and the Resolution of a Commons Dilemma." 5(2): 383-393

<sup>17</sup> Search the *Comprehensive Bibliography of the Commons* at <http://dlc.dlib.indiana.edu/cpr/index.php> for references to works mentioned and the Digital Library of the Commons at <http://dlc.dlib.indiana.edu/dlc> for over 5000 works including 135 by Lin or Vincent.

Right at the core is finding ways of solving collective action and, yes, the government can come in and do some things, but if it comes in and then leaves? The protected areas that we have studied that really work have an immense amount of budget, so if you look in the Mayan reserve, Tikal, it is a very successful government protected area, but the budget that it has is immense, partly because of tourism—I shouldn't say partly—, 100% from tourists, they give money to the government, they have so much money, they have guards everywhere, and walls everywhere, but very few biosphere reserves have the kind of funding that Tikal has.

**Do you think local actors should play a role in the protection and sustainable use of key contemporary commons such as global climate and biodiversity, although they are often poor or illiterate local community members?**

Of course!

In all of the areas that you and others, and I to a certain extent have studied in Mexico, their futures depend on whether or not they protect their local environment, and really make investments; they frequently have a lot of indigenous knowledge, and there are things they can add that sometimes externals do not recognize. Even in a large metropolitan area, there are many things that can be done in a small neighborhood that are difficult to manage from the center, and so the more we restrict what people can do, the less we actually see done.

**Recently, in Mexico and in Central America some Protected Areas and Programs of Payment for Environmental Services (PES) provide payments to forest communities; in exchange, communities give up their rights to use and manage forests in favor of governmental agencies. Do you think these kinds of incentives are sufficient to achieve conservation and sustainability in the long run?**

Yes and no. PES is sometimes looked at as a panacea and as if it always works, and it doesn't always work.

There are ways of doing this that do enable the people who live there to make decisions when they are thinking of the sustainability of the resource. I'm very nervous about REDD, reduced emissions and deforestation and degradation... some of it is looking like it could be that some big corporation comes in to an indigenous area and says "here's a lot of money for your forest" and the local people are paid a substantial amount, they say "yes, the money is wonderful", and then they plant a forest someplace else, and so you lose an indigenous biodiverse forest, you get another forest the same size, but you've lost an immense biodiversity,

and then the people who paid may not have rights to use anything of the replaced forest. So, you have to be very careful in the ways these [incentives] are designed. The interest of all of us is in reduced carbon in the atmosphere, and forests make an immense difference, but we also have to worry about livelihoods and people's rights, and sometimes those are not paid attention to.

**How can local experiences of successful common forest management—or successful pilot projects—be “scaled up”? Which challenges need to be overcome and what issues have to be considered?**

Well, we need to write textbooks that have a lot of examples of good and bad; so that students, instead of just seeing hypothetical ways of organizing, recognize that there [are] a diversity of forms. I would love to see the UZACHI<sup>1</sup> community case study, with their permission, made into a text. One could develop a series of handbooks, not a single big textbook, so that one included successes and failures, and then part of the student learning has to be: "Ok, what are some of the similarities and some of the differences?", and recognize that, sometimes, what's called the same policy succeeds in one and fails in another, and that is particularly important for teaching: That policy "A" [in one case is a] success [and a] failure [in another], why? The resource in one condition was huge and small in the other, the people were dependant on the resource in one place and not in the other, there was urban migration coming in one and not on the other... There are many, many, many reasons for failures, and recognizing and beginning to understand the diversity of variables and how they interact, for success and failure, is very important.

**What roles do markets and the private sector play in the development of forest sustainability?**

It's about markets and taxes, where we put heavier taxes on certain products and use that tax money for investment in new technology, then can get demand for better building materials that, one, last longer, two, trying to get the market to induced incentives. Here in urban, instead of tearing things down and building all new houses, know how we invest very carefully in insulation and improving some houses so that the wood in the house doesn't end up on the junk pile and burnt down, but is sustained; getting better roofs so that the rain isn't pouring in. There are all sorts of things that can be done to make construction more sustainable, but again it's not just a simple answer.

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<sup>1</sup>Unión Zapoteco-Chinanteca, a federation of four indigenous forest communities that own and manage communal forests in the southern Mexican state of Oaxaca.

Think through a variety of different things and where are we using up resources faster than we need to, or even where we don't need to do it.

**Which are the main lessons and themes that public policies should incorporate in order to contribute to forest sustainability, from the perspective of the collective action theory or CPR?**

If we have policies that reduce trust in each other and in the government, we can expect people to be far of their action more disruptive of the environment and ignoring the harm on the rest of us. It takes a lot of trust to take actions that you see have a long term benefit. If you fear you're not going to be able to get the long term, why not take the benefits now? And part of the problem in many places is that local people have not had an assurance of the future and so, given that, the only reasonable thing to do is to act now.

**Do you think local democracy has a role in crafting or developing sustainability or models of sustainability?**

Yes! If we don't understand how to govern ourselves, then we can't be sustainable, so self governance is a way of increasing the probability that the elites don't just take over. So if you don't understand the challenges of governance, it's not simple. It isn't just simply that once every two years we go to the ballot box and that's all there is to democracy. We have to learn that there are problems to be solved, they're difficult, you have to think what happens if we do this or we do that or we do something else different, and one of the ways you can learn that is knowing about real problems, and if people only watch TV and think about things way up here, rather than in their own neighborhood, they don't learn how to govern themselves.

**Getting back to REDD: In the development of global schemes for climate sustainability, do you think local democracy should be taken care of, that this is a dimension that should be considered in the architecture of policy schemes such as REDD?**

Yes, this is why we are polycentrists rather than centrists... Recognizing that problems exist at multiple scales and that we can do things at multiple scales that have impact across scales, and that these are challenging, is absolutely essential. I am very concerned about global, I think

we do need solutions, not "the solutions", we need treaties and agreements at an international level, we must cut back on greenhouse gases, must!, or we are going to have Katrina and tsunamis and all sorts of problems that are tragic, and costal peoples are threatened across the world. So we need to be acting, but if it's just top down and people do not agree on it, then they'll find all sorts of little ways to manipulate, and if you have a democratic foundation and some people try to manipulate and others observe it, then they can challenge, but if you don't have a foundation people don't challenge.

So school kids can, for example, learn how to take water samples and, in some places that's been built into a curriculum, and so if they find some pollutants in water that shouldn't be downstream from outlets, they can record it and get public officials to go back and verify, but a public official can't just go and take sample, after sample, after sample... But students can learn how to do this and they then

may make it much more effective for the government to check on a sample and say: "hmm... we are letting bad water into that stream".

**Could you tell us some of the main lessons of the International Forestry Resources and Institutions (IFRI)?**

Well, this is a very exciting program that is researched by centers in Latin America and Africa, Asia and here in the US, where each of us agreed to conduct both, social data

analysis and collection and analysis, and forestry collection and analysis, and we now have a large set of forest that we have studied over time, so it is really valuable because we can begin to see the change and that is where we've been able to look at the differences in governance, and we do not find any specific rule always to be successful. We do find that when people have long term interest and when they are able and have incentives to engage in monitoring and have their own rules and things of this sort, this can make a huge difference, so we have some very important findings that it isn't just "let's have a top-down solution to protect these forests" and then we've solved it. We have to recognize that it takes a lot of work to protect a forest.



Photo: Courtesy of Universidad Nacional Autónoma de México  
*Elinor Ostrom during the interview*

**You were one of the founders and the first president—in 1990—of the International Association for the Study of Common Property, now International Association for the Study of the Commons. Which were the projects, goals and dreams that lead you and other colleagues of yours to create the IASCP?**

Well, it was how to get an interdisciplinary, interregional, intersector association. What we found in the meetings of the National Research Council in the US, was that literature written by historians wasn't read by sociologists, and then even their people in a particular country, with a focus on a region, wasn't read outside, or sectors, so we saw three big divisions. That was very worrisome; we had some meetings organized by the Council, one in Indianapolis in 1985, I think it was, and all of a sudden we realized the immense literature that actually existed and the lacunae between, so that's why the policy literature was able to make these sweeping statements without knowledge of what was going on. So IASC grew out of that, and many of us who had been on it, were part of the group that started the IASC, and our hope was that we could bridge discipline, sector, and resource, and I think we have.

**Which are some of the main achievements of IASC?**

I do think we now have a very alive, active group of researchers who are communicating across disciplines about these important questions, and their writing has now added up and is now known across the world in a way that it wasn't before. So I think we are now seeing that it is not just the market or the state.

**Which are the main challenges IASC faces today?**

If we're going to stay genuinely international it does mean we need to meet alternatively in different parts of the world, and that is expensive for whoever isn't local, so partly it is how we really sustain. Fortunately now with the email and Skype, and all sorts of things, there is a lot we can do internationally without traveling; but you have to have some meetings where you are really face to face, and I'm very excited about the one in Hyderabad, I've never been there so it gives me an opportunity to visit a new one. The one we had in Mexico was memorable, we all remember that as an excellent meeting. So I think there are big challenges, but we are overcoming them.

**What will the importance of IASC be in 20 years from now? Which do you think should be the new themes in its agenda?**

Well, twenty years from now we hope that we have even a firmer empirical foundation for some of the theoretical developments that are evolving and we do have a lot of good theory that is now based...

I'll advertise: I just finished a book with Amy Poteete and Marco Janssen, two members of IASC, and it is called *Working Together. Collective action, the Commons and Multiple Methods in Practice*, and it will be out by Princeton this spring, and what's so important about it is that we have taken the theory of collective action as it relates to commons and looked at what can we learn from individual case studies, what can we learn from meta-analysis, from large-in, from experimental, from ABM, from other sorts of methods, and this is very tough theory, it isn't just two or three variables that you can analyze, and so then how do you accumulate what we've learned, and I think we've done a very good job as of now, but it's how sometimes variables that may be conducive under one condition aren't under another and some people say "you need very small groups", well, what Arun Agarwal has shown is that if the task you have to do needs either a lot of money or a lot of people, having a small group frequently is insufficient, so he found a curvilinear relationship in terms of some of the forest groups, because of the amount of space they had to patrol and work on and things of this sort, was large and if you were too small, you didn't have the personnel, you don't have the people to do it.

**How do you envision IASC in 2030?**

There will be all sorts of the young people who are up today and there will be new technology. Chainsaws didn't look that threatening at the beginning, but they became such a fast way of cutting, that it is not that we want to get rid of chainsaws, but we have to think through the rules and technology to cope, with very, very rapid ways of cutting down forests or harvesting fish or any of these things, and we don't know what, one of the things that is encouraging is that some groups now use cell phones to help monitoring and so there's where technology has reduced the cost of some of the monitoring, so how we look at technology, information, international markets and the polycentric organization, the ground-up organization and how they fit together, those are very important questions.

**So you think there is work to be done for the long run?**

I think more than just 2030.



This interview was a courtesy of TV UNAM, Consejo Civil Mexicano para la Silvicultura Sostenible, A.C. and, Workshop in Political Theory and Policy Analysis.



## A Modest Homage

to Elinor Ostrom

**José Sarukhán**

**National Coordinator of the National Commission for Knowledge and Use of Biodiversity (CONABIO)**

*We must learn to be wise gardeners of our own biological diversity.*

José Sarukhán

The announcement, in October of 2009, of the winners of the Nobel Prize in Economy, which was first promoted by the Bank of Sweden as a memorial to Alfred Nobel, constituted for many of us a more than pleasant surprise. The first reason for the pleasantness of the surprise was that, for the first time, a Nobel in Economy was awarded to a woman, breaking decades of a masculine—and mostly white—club of recipients of the award. The second was that the woman receiving the prize was not an economist! She was “only” a political scientist... the third reason, and surely the less important, but nonetheless the most pleasurable for all of us who have had the privilege of interacting with her, is that she is a woman that has a profound social sensibility and an invaluable human quality. Prof. Elinor Ostrom’s life-long work analyzing the economy, governance and management of common properties mostly by rural groups outside the orthodoxy of established markets, was duly recognized with the prize. Prof. Ostrom’s studies have supported the idea that it is necessary to arrive to alternative solutions to those proposed by the theoreticians of the privatization. Her long-time studies are particularly relevant nowadays when we are faced with the unprecedented global environmental problems and the various efforts to try to reach some kind of global international agreements among governments.

Prof. Ostrom’s work is also particularly relevant for Mexico and many of us who are interested in the land tenure-natural capital-utilization in the country, and with whom Prof. Ostrom has interacted in different degrees, in her various visits to Mexico. Actually her influence has served to develop a school of thought closely related to her approach to resource utilization in communal lands at the Institute for Social Research (IIS) at the National University of Mexico (UNAM). The international recognition that the Nobel Prize confers to her studies is particularly relevant as support for the ideas of a number of academics in Mexico who think that the rural and indigenous communities, owners of a large proportion

of the forested areas but belonging to the most marginalized and poorest fifth of Mexican society, have a key roll to play in the conservation of biological diversity. These communities can, within a favorable context of internal social organization and with a modest initial economic support, become successful entrepreneurs of their natural capital, not only generating economic benefits that will be fairly shared within their communities, but also maintaining the integrity of their forests as functional stable ecosystems in the long run. However, in my opinion one fundamental change for the owners of the forests would be the adoption of an entrepreneurial attitude that will provide the members of the community with a sense of empowerment on the definitions about their future. Many of us have insisted that the government, at the federal and state levels should promote more community owned, managed, and certified forests. This would be the only viable way to protect the natural capital represented by the natural ecosystems of the country.

In Mexico, as in many other biodiversity rich countries, where rural populations are widely scattered in their territories and depend on the resources of natural ecosystems for their livelihood, having a system of natural protected areas like the one existing in Mexico—and which incidentally is exemplary in the World—is important but also quite limited. Between 11% and 12% of the Mexican territory is now protected within the National System of Protected Areas; however, the large majority of biodiversity represented by endemic, endangered species as well as by unique ecosystems lies outside the protected portion of the territory: most of it is within the land owned by *ejidos*, rural and indigenous communities. We have to work with them to adopt, adapt and develop a number of sustainable and diversified processes of utilization of our natural capital, as real and durable alternatives to the conservation of that natural capital.

It would be wrong to assume automatically that land tenure systems such as *ejidos* or communal lands constitute, by themselves, successful models for the rational and ecologically sound use of natural resources. There are many examples in Mexico where social land tenure structures remain, but the basic cultural traits have disappeared or have been seriously eroded through political maneuvering for votes, heavy emigration of adults, mostly males, to cities or abroad.

The 1992 constitutional changes in Mexico that partially modified the regime of social land tenure never addressed some of the crucial problems associated with ecosystem deterioration, various negative impacts on the environment such as land erosion, loss of biodiversity, amongst others.

The extremely limited horizontal integration of policies in relation to their impacts on the environment is another major factor that exacerbates the effects of the agrarian changes made to the Constitution in the early '90s. This constitutional reform was apparently conceived under the assumption that "efficiency" and "productivity" would result from implementing more "corporate" models of land tenure and management, in total ignorance of the need for understanding and count with knowledge about how to manage an enormously diverse and complex set of ecosystems in the landscape; a knowledge that is not taught in the business administration or engineering schools in universities.

The recognition of Prof. Orstom's work must also be interpreted as a recognition to the substantial value of human capital represented by the indigenous and rural communities inhabiting a country, which possess their own forms of social, political, and productive organization. Her work addresses the question of why such human resources and their social values are not brought into the mainstream for the development of a country. For us in Mexico, it is also an extremely valuable stimulus to reinforce our work with her ideas and to continue searching for ways to combine the conservation of our biological patrimony and, at the same time, helping conserve the social values of knowledge and organization of the rural and indigenous sectors of our society. Both resources constitute a fundamental richness for this country.

### **Elinor Ostrom's** *Contributions and Fisheries* *Management Scholarship*

#### **Doug Wilson**

**Innovative Fisheries Management, Aalborg University, Denmark**

The concepts underlying approaches to fisheries management have undergone very extensive changes in the last two decades. This has been driven by a series of collapses of major fish stocks, beginning most spectacularly with the Northern Cod in Canada, and the resulting perception of a crisis in the condition of globally fisheries. Elinor Ostrom's thought has had an important influence on the direction of these changes.

Within fisheries social science two major fisheries management paradigms have been competing, particularly but not entirely in temperate fisheries. One, stemming from mainstream economics, has

defined lack of private property as the problem and recommended the implementation of pseudo-privatization techniques as the solution. This discourse has been until recently a fairly strident one, insisting that "high quality" rights are the answer to both the economic and biological problems of overfishing. High quality in this case means individual rights that are transferable, secure and permanent. The ideal form of such rights is the Individual Transferable Quota (ITQ), which in North America people have begun to refer to as "cap and trade" for fisheries. ITQs, particularly those that can be widely traded, can be destructive to communities through a loss of local control of the resource. Proponents of ITQs have fairly consistently blamed the problems within the fishery on "common property" and in some cases been very dismissive of "community" concerns. One proponent of ITQs actually blamed the collapse of the Northern Cod on decision makers worrying about fishing as a lifestyle and a community activity, rather than purely as a business.

The other, less powerful discourse promotes fisheries "co-management" in which the fishing industry and the government work together to manage a fishery as a commons. Co-management is often, but not always, community-based. Proponents of this discourse are mainly anthropologists and sociologists, and they are the ones who have drawn most directly on Ostrom in discussions of management approaches.

Fisheries social science seems to be moving much more toward a consensus position. The respect given Ostrom's work by the mainstream economists has been an important part of that shift. Her work, especially her use of the language of incentives, has spoken to people trained in a Hardin/privatization paradigm in a way that has led to greater appreciation of more complex arguments about the commons. It has become very common to hear economists and other proponents of ITQs give less emphasis to the ideal "high quality rights" and argue more generally about rights-based management in which they explicitly recognize that forms of group rights can bring many of the benefits of individual privatization while avoiding many of its problems. Proponents of co-management have also noticed that a number of community and/or industry-based fisheries co-management regimes have decided on their own initiative to use ITQ-type approaches as a key internal management measure. This has also contributed to a convergence of perspectives, one in which Ostrom's work provides commonly accepted concepts.

It has clearly been *Governing the Commons* and the design principles that have had the most influence on the fisheries community. The idea of "clearly

defined boundaries” and its relative the “nested system”, have both appealed to and challenged fisheries scholars. Fisheries are a fugitive resource within a marine environment which makes the clear definition of boundaries extremely difficult. It is more than just a stock moving from one place to another; the energetic characteristics of the marine environment make pulsating blooms and busts across time and space a common pattern for marine organisms. Drawing boundaries in these circumstances is always a difficult and tentative activity. Much recent commons scholarship in

fisheries has adopted the idea of cross-scale institutional linkages, in which boundaries depend on both geography and issue, and nesting looks more like a network than it does a hierarchy. Exactly where the characteristics of the resource make the direct application of the design principle difficult the principles have helped to catalyze new sets of concepts.

Another area where Ostrom’s work has been applied has been in complex commons situations in developing countries where household strategies rely on access to several common pool resources. In Africa this is often a floodplain that may include fisheries, grasslands and forests. This situation sometimes leads to commoners dealing with multiple commons management agencies and/or village committees. In this case her concept of the “co production of goods and services” which guides the analysis of the resources, rules and commitments, and incentives of users and organizations related to a complex commons. These ideas help us relate fisheries to a broader commons.

A short Digest article can only point at a few the many ways that Ostrom’s work has influenced fisheries scholarship. It has made a large difference, not least in finding ways to relate aquatic commons to terrestrial ones both for academic and practical purposes.



Photo: Courtesy of Indiana University

*Elinor Ostrom giving a lecture at Indiana University*

## The Struggle to Understand: *Elinor Ostrom and Institutions for the Governance of Forests*

**Esther Mwangi**

**Scientist, Center for International Forestry  
Research (CIFOR)**

*I would applaud thee to the very echo  
That should applaud again.*

Macbeth. Act V. Sc. 3

Like no other resource system, forests have been central to the application of Elinor Ostrom’s intellectual enterprise. This essay is a modest attempt to highlight, in my own estimation, some of Ostrom’s contributions to an improved understanding of how forestry institutions work and to options for problem-solving within the forestry arena. I begin with a consideration of Ostrom’s well-known theoretical contribution

before moving on to highlight some empirical applications and policy implications. I draw heavily from the work of Ostrom and her colleagues in the IFRI research program (see [www.sitemaker.umich.edu/ifri/home](http://www.sitemaker.umich.edu/ifri/home) for more on the IFRI program), and also attempt to locate CIFOR’s own work within this effort.

While a student at Indiana University, I found two interim research reports to be exemplars of Ostrom’s. These reports are: *Governing the Commons* (Ostrom, 1990) and *Rules, Games and Common Pool Resources* (Ostrom, Gardner and Walker, 1994). These well-known studies provide a deeper reflection on factors that enhance the likelihood that individuals will engage in collective action. Together the reports use a complement of methods, including in-depth case analyses, formal modeling and experiments, to generate dependable knowledge. Discontented with the three dominant models (i.e. the tragedy of the commons, the prisoners dilemma, and the logic of collective action) of collective behavior, which are all based on the assumption of the universal nature of the free-rider problem, and which all lead to nationalization or privatization as solutions to resource mismanagement, Ostrom explores and explains a third

alternative. Though interdependent resource users might individually face temptations to free-ride or to act opportunistically, they often are able to develop a shared perspective of the resource system and organize themselves in order to obtain mutually-beneficial outcomes, including sustainable resource use.

Ostrom isolates design principles that successful, small-scale,<sup>1</sup> long-enduring common resource institutions all seem to share. These include clearly defined boundaries determining who has rights to withdraw a resource, internal monitoring, and a graduated system of sanctions. She argues that these institutions order interactions amongst individuals and have visible outcomes. The unsuccessful ones are characterized by resource overexploitation, frequent social conflict and lack a number of the design principles. Ostrom also finds that in the successful cases individuals repeatedly communicate, interact with one another, and learn whom to trust, what effects their actions will have on each other and how to organize themselves to consolidate joint benefits and to avoid harm. This leads her to conclude that when boundary, authority, monitoring and sanctioning rules are defined and enforced internally, the outcomes achieved are likely to be more effective than those achieved when the rules are imposed externally. For local resource users the costs of obtaining relevant information about their use and of the condition of the resource are low relative to benefits that can be reached through designing institutions.

Overall, Ostrom found the role of communicating and monitoring, or of informal agreements without enforcement by external agents to be equally important across different methodologies in the field, in the laboratory, and in formal game theoretic approaches. The policy implications of these studies are twofold. First, that assigning property rights to local groups and/or communities can be a viable alternative in the management of natural resources; nationalization and/or privatization are not the only solutions to resource degradation. Moreover they often have unexpected outcomes that lead also to open access, exclusion, social conflict and ecological deterioration. Second, that an understanding of how individuals and groups work to solve common problems can help policy makers and practitioners design more effective policies, strategies and programs.

Throughout this endeavor, Ostrom has been (to a fault) a strong advocate for conceptual clarity, by, for example emphasizing the difference between

the nature of the good (common pool resource) and the broad property rights structure for its access and control (e.g. individual, collective/communal, state). Importantly, she and colleagues have contributed substantially to the analytical characterization of property rights to forests and other resources as comprising of bundles of rights regardless of the broad recognized property regime (whether individual, state, communal/common property). Thus any property regime (i.e. the bundle) can be decomposed into its constituent sticks such as access, withdrawal, management, exclusion and alienation (Schlager and Ostrom, 1992). Such unbundling of property rights to forest resources uncovers their multidimensionality and recognizes that forest resources can provide different benefits to different user groups simultaneously and that even absent of complete ownership resource users can have access to resources that make significant contributions to their livelihoods and provide sufficient incentives for them to engage in resource-enhancing behavior (Mwangi and Markelova, 2009).

What more can we learn from Ostrom's research program? Many developing countries have over the past two decades adopted extensive reforms to devolve or decentralize authority over forests to lower levels of governance, including to districts, municipalities or even communities. It is unclear the extent to which Ostrom's foundational work may have influenced this shift, though it is not unlikely that her findings may have increased the momentum at which such reforms were advocated for by leading global institutions especially in the natural resources sector. The implementation of these forest sector reforms and policies can be further informed by emerging findings in forestry that highlight the nuances of Ostrom's foundational work. One such finding is that to be effective, property rights to forest resources must be enforced. Enforcement is a major undertaking that involves collective action. Even though community forests generally appear to be in better condition than state forests, the distinguishing feature between over-harvested and sustainably managed forests (whether used commercially or for subsistence) in different parts of the world is not necessarily the property regime but rather the ability to monitor the forest and sanction rule breakers i.e. enforcement (Banana and Ssembajjwe, 2000; Gibson *et al.* 2005; Nagendra, 2006; Persha and Blomely, 2009). Chhatre and Agrawal (2008) find that the probability of forest degradation declines with increases in the levels of local enforcement and local collective action, even in the presence of other factors such as forest resource size, levels of dependence, commercial value of other factors that influence forest resource regeneration and overall

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<sup>1</sup>These may apply to larger scale commons—see Dietz, Ostrom and Stern, 2003

condition. Enforcement develops trust among individual users that other users are complying with agreed rules and that no individual is gaining an advantage over others (Gibson *et al.* 2005). Thus monitoring and enforcement provide incentives for sustainable forest management, irrespective of the property regime, and can involve collaborative efforts between diverse actors, including local and central government agents, local communities and private, individual resource owners.

Local enforcement is in turn influenced by the salience of the resource to communities, their autonomy in decision making, effective leadership for conflict resolution and support from civil society agents who served as a bridge to government agents (Gautam and Shivakoti, 2005; Sudtongkong and Webb, 2008). Where rule enforcement institutions and mechanisms do not exist, property assignment loses value and forests can revert to open access (Dorji *et al.* 2006). An emphasis on institutions and governance, however, tends to overestimate their importance in assessing forest condition and sustainability (Agrawal and Chatter, 2006), and biophysical factors such as tree species composition, elevation, aspect and rainfall can overwhelm the significance of institutions and must accordingly be factored into any institutional analysis.

Similar frameworks have been applied to assess the impacts of major policy changes such as decentralization reforms (see Andersson *et al.* 2010). In Uganda, for example, because village level monitors and officials are poorly paid and receive no tangible benefits for their monitoring and sanctioning activities, enforcement is at best lax or absent and forests, especially those further away from the district headquarters exhibit higher levels of unregulated consumptive use (Banana, undated). Decentralization of forest resources to the district level did not affect forest management and condition in Uganda in the desired direction (Banana *et al.* 2007), and may have resulted in declining income levels especially for poorer households (Jagger, 2009, 2008). Agrawal and Gupta (2005) suggest that in order for decentralization policies to achieve their equity objectives, they must provide mechanisms that enable poorer and more marginal households to access and interact with government officials. Other studies conducted at a different governance level demonstrate the beneficial effects of encouraging such interaction and suggest that regular, face-to-face interactions between municipal governments and local communities raise the performance of local forestry governance systems (Andersson, 2004). Indeed, the feedback interactions between local and central government monitors, as well as pressures from civil society and voters further serve

to enable local government agents to better deliver on the goals of decentralization (Andersson *et al.* 2004, 2006).

The number and reach of studies in the forest sector that draw directly from Ostrom's foundational work is overwhelming. This account does not pretend to be exhaustive, but rather this limited selection is intended to provide a flavor of some of the significant findings relevant to ongoing policy debates, such as which institutions are the most effective in resolving forest resource problems. It draws mostly from the IFRI set of studies where methodologies are consistent over space and time. Clearly, Lin Ostrom's work (and the works of closely related colleagues) suggests that the more relevant question might be: what features of institutions are more likely to improve forest resource management while also improving the distribution of benefits from the resource? Their collective efforts show that institutional regimes that strengthen enforcement, regardless of property assignment are fundamental. Their collective works further suggest that increased interactions between relevant agents can improve governance, including even tempering elite capture of benefits, an enduring challenge of any decentralized initiative.

CIFOR's own governance research adds important nuances to Ostrom and colleagues' efforts. Work in Indonesia, Ethiopia and Uganda (Komarudin *et al.* forthcoming and German *et al.* forthcoming), for example, demonstrate that interactions between local communities, government agents, private companies and civil society, that are facilitated by trusted, external agents can serve to lower the transactions costs of collective action and to build trust, and can ultimately enhance equity and access to decision making in decentralized settings. CIFOR's ongoing work in climate change, in assessing the impacts of globalized trade and investments on the forestry sector, in re-assessing the conservation and development nexus, and in enhancing the sustainable management of production forests provide fertile ground for further testing and refining of Ostrom's hypotheses in a context of emerging global challenges. These emerging challenges threaten to roll back the gains of the past decades that saw a formal devolution of resource rights and authorities to local communities.<sup>2</sup> There is also, I think, further opportunity for researchers to more better separate out policy failures attributable to weaknesses of relevant implementing agents from implementation

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<sup>2</sup>Note that even though there is a general tendency for these reforms to be on 'paper' (see Poteete, 2010), they represent a paradigm shift and a locus upon which communities and their partners can organize.

difficulties attributable to the uncertainties and complexities of the social, political and legal setting in which implementation occurs.

Ostrom has paid great attention to the relationships between different institutional forms and the incentives that they generate and/or the practices they prompt. Forest research, policy and practice are all the better for her discomfort with easy answers and her unrelenting exposure of the 'wickedness' of natural resources problems. In the end, Lin Ostrom's Nobel Prize opens the door not only for more knowledgeable and responsible policies, but for greater visibility and trust to local actors—communities with no voice or power—and a growing recognition of the need for a more "comprehensive Economic Science" that incorporates social values.

When I sought to identify the design principles, I did not know whether I had discovered anything of long term value. I was simply struggling with a way of understanding what held some systems together better than others.

Elinor Ostrom

### Governing Water Commons:

*Some Thoughts on Elinor Ostrom's Contributions*

#### **Bryan Bruns**

**Visiting Scholar, Workshop in Political Theory and Policy Analysis, Bloomington, Indiana USA.**

For water governance, as in other fields, Elinor Ostrom's work has shown how users can successfully self-organize, in diverse ways, to govern commons; and how scholars can combine multiple disciplines and methods to create research results that speak to practical problems in governing increasingly contested environmental resources.

*Polycentric water governance.* Elinor Ostrom's dissertation research on groundwater governance in southern California, (linked with work by her husband, Vincent, and continued by their students), documented how city governments, water districts, (linked with work by her husband, Vincent, and continued by their students), documented how city governments, water districts, private firms and others came together to create polycentric institutions for solving problems of water shortage and seawater intrusion, sometimes more successfully and sometimes less so. [Her dissertation, along with much of her other work, is available on the Digital Library of the Commons: <http://dlc.dlib.indiana.edu/dlc/>]

Internationally, this still constitutes an outstanding example of groundwater governance, of particular interest since its multi-scale user-initiated governance contradicts centralized assumptions about how water should be managed. Students and other researchers influenced by her work have also analyzed the complex, polycentric, and politically contested processes through which institutional changes in water laws in the western United States have actually occurred, and have compared river basins around the world to assess the limitations of state-centric conceptions of integrated water resources management (IWRM) and potential for more polycentric alternatives.

*Long-enduring irrigation commons.* Irrigation systems built and managed by farmers, some centuries-old, provided major examples, along with fisheries and forestry, that common property governance could work, refuting Garrett Hardin's conjectured tragedy and crude prescriptions for privatization or government takeover. Ostrom and other members of a National Research Council committee identified common issues and synthesized research from a range of academic disciplines looking at various aspects of common-pool resources and common property regimes. Their work reframed ideas about common property and redefined research questions. It also led to the creation of the International Association for the Study of Commons, which has continued to bring together a mix of scholars and practitioners concerned with governing commons. While known for her work on commons, Ostrom has emphasized that the choice of institutions, including property regimes, should be based on actual conditions, not simplistic panaceas.

*Institutional design principles.* Meta-analysis of case studies of common property regimes revealed the enormous diversity of rules devised by irrigators and other commoners to fit their circumstances. Ostrom synthesized a set of design principles characteristic of long-enduring commons. These have been highly influential, and a recent review of work that has applied and discussed the principles found they have been well-supported, while suggesting minor adjustments. Although the principles have sometimes been treated simplistically as a checklist or blueprint, Ostrom herself has argued that the principles may best be seen as a starting point for questions and discussions, for example about who is included and excluded, how to fit rules to resource characteristics, and how to monitor and enforce.

*Performance of self-governance.* Detailed empirical research with colleagues in Nepal compared the performance of farmer-managed and agency managed irrigation systems, showing that on key indicators including water delivery and

maintenance FMIS performed better, with far less in the way of funds, bureaucracy or engineering expertise. The Nepal irrigation studies refuted assumptions that bureaucratic management was necessarily better, analyzed the capabilities of local governance, and showed the wisdom of caution about intervention and need for careful cooperation with communities. Work by Ostrom and those influenced by her has inspired projects to promote participatory irrigation management (PIM) and irrigation management transfer (IMT) around the world. Arguably, the most important impact of research on irrigation self-governance was to help slow and sometimes even reverse government takeover of irrigation management. The impact of actual projects for participation and turnover seems more problematic, often concentrated on infrastructure improvement and formal organization, without necessarily developing locally tailored rules or an enabling institutional environment sufficient to sustain local irrigation systems.

*Games irrigators play.* As another example of her willingness to ask new questions and try different methods, Ostrom applied game theory and laboratory experiments to study the kind of collective action problems faced by irrigators and other commoners. Comparing use of guards to monitoring by users revealed complexities and surprises that may result from designing rules to govern commons. As with other work in experimental economics, laboratory experiments on irrigation and other commons have helped to challenge hypotheses of narrow selfish rationality, and instead show that, under most (but not all) conditions, a better default assumption is that people are conditional cooperators, ready to work with others in governing commons. Recent work has taken the laboratory to the field, in countries such as Colombia and Thailand, to explore how resource users behave in experiments.

*Analyzing institutional diversity.* In irrigation and other fields, reforms (including some influenced by Ostrom and other commons scholars) have unfortunately too often been applied as if devolution, self-organization, or common property might be panaceas, one-size-fits-all solutions to be imposed regardless of context. Ostrom has worked with colleagues to critique the pursuit of panaceas, developed diagnostic tools for understanding institutional diversity, and proposed a framework for integrated analysis of complex social-ecological systems; setting an important agenda for better sharing of knowledge, research, and action in commons.

*Crafting polycentric governance.* Elinor Ostrom found design principles of institutions for successfully governing irrigation systems and other commons. She pioneered changes in concepts, questions, and

methods for research, asking how commons work, and seeking to understand institutional diversity. Her work has been part of a larger turn in water policy and programs toward governance institutions. Better understanding of the capacity of self-governance has helped slow or reverse state takeover of irrigation, or at least encouraged greater attention to the potential for combining community and bureaucratic management institutions. Ideas of polycentric governance continue to offer an important alternative to conventional notions of centralization or simplistic decentralization in water resources management, instead showing the merits of careful attention to the scope and scale of problems, and the potential for those concerned to join together in crafting institutions for problem solving and self-governance.

## Nobel Thoughts

### Nitin Desai

**Member of the Board of Governors of the Foundation for Ecological Security (FES)**

Elinor Ostrom, the co-winner of this year's Nobel Memorial Prize for Economics, is actually a political scientist. Her work is in the area of governance, particularly of common property resources, and includes both field work on the management of local irrigation systems and forests as also substantial contributions to how such systems can be analysed. Almost exactly a year ago Elinor Ostrom spoke at the Institute of Economic Growth as part of the Golden Jubilee celebrations and IEG deserves our thanks for spotting an exceptional talent and bringing it to our attention. This was in keeping with its emphasis on linking economics with the other social sciences.

Ostrom's theme at the IEG was how institutions for collective action evolve. Her talk was based on her extensive field work in Nepal where she found that "farmers, who lack education or formal training, can on average outperform highly educated engineers in the design and operation of irrigation systems."<sup>1</sup> She cites results comparing farmer-managed and agency-managed irrigation systems and shows that the former are superior in their performance on measures of technical and economic efficiency.

<sup>1</sup>Elinor Ostrom, "How do Institutions for Collective Action Evolve", Fourth Lecture in the Golden Jubilee Series, Institute of Economic Growth, Delhi, October 2008.

This however is only the beginning. What is even more exciting is her approach to describing and analysing such systems. Her work is in the rapidly developing discipline of institutional economics, which looks beyond supply and demand functions to the evolution of the institutional structures that determine the shape and position of these functions, how equilibrating processes work, and, even more important, how they evolve over time.

Ostrom's focus on common property resource management is perhaps the most fruitful area for this institutional approach, as the assignment of rights and responsibilities cannot be set by the standard market procedure of individual users maximising utility, individual producers maximising profits and competitive markets securing a balance between demand and supply.

This is of particular interest to us in India because of the role that common property resources play in rural life. According to the NSS 54th round survey done 10 years ago these resources account for 15 per cent of the geographical area and amount to about 0.31 ha per household. The percentage of rural households who rely on access to commons for grazing is 20 per cent, for water 23-30 per cent, and for firewood 45 per cent. Yet they play only a minor role in our rural development programmes and the general tendency, till recently, was to let public agencies or even private parties displace local customary institutions. There is some change now with the growth of panchayati raj institutions, pani panchayats, forest management groups, cooperative approaches for wasteland rehabilitation and so on. But we still lack a proper understanding of the pulls and pressures of local communities and power structures. But we still lack a proper understanding of the pulls and pressures of local communities and power structures.

This is where Ostrom's work can help. The conceptual structure that she uses for analysing the properties of systems for managing common property resources centres on the rules that are made by the community or given by some external agency for assigning rights and responsibilities to the users of the resource.

Ostrom distinguishes seven categories of rules. First, there are boundary rules about who are the relevant stakeholders— for irrigation systems they could be the land owners in the command area. Second, there are position rules about the appointment of monitors or guards to ensure compliance. Third, there are allocation rules which for irrigation could be a fixed percentage of the available water, a fixed time slot for each user or a fixed order of use. Fourth, there are information rules about public knowledge on resource availability,

infractions and so on. Fifth, there are aggregation rules which are essentially rules about how decisions can be made or disputes resolved. Sixth, there are fiscal rules about cost sharing or labour obligations for maintenance. Seventh, there could be scope rules, for example about what the water can be used for.

The base case is where there are no rules and access to the commons is a free for all. This is the case made famous 40 years ago by Garret Harding in his seminal work, *The Tragedy of the Commons*. This state of nature is more or less what prevails for most global commons, including notably the atmosphere.

But at a more local level communities do develop rules or are given them by public agencies. Apart from the comparison of community-made and agency-made rules, Ostrom analyses how the rules are shaped by external conditions like the bio-physical environment and the attributes of the community. Rules remain tentative in that the participants evaluate outcomes and modify rules in response to the evaluation. This is what leads her to make a powerful case for avoiding a "monoculture" of rules that impose standard institutional patterns in diverse ecological and social circumstances.

An institutional approach to common property resources that focuses on rules that define rights and responsibilities is much richer for policy purposes than standard micro economic analysis leavened by some consideration of externalities. The one difficulty I have is the fuzziness of the boundary that defines the resource and the community of concern. How a water body or a forest or a hill slope is used affects not just the land owners or residents in the area but many others including unborn future generations. How can a decision making structure that is community-based take account of this wider impact?

All of these issues will be explored in a major global conclave of researchers at Hyderabad in January 2011.<sup>2</sup> Hopefully, the Nobel for Elinor Ostrom will stimulate Indian social scientists to join in this exciting exploration. Even more importantly, one hopes that the government wakes up and starts understanding and strengthening community control and management of common property resources.

**Tailpiece:** A few days before the Economics Nobel, the Peace Nobel was given to President Obama, among other things, for the belief that "the USA is now playing a more constructive role in meeting the great climatic challenges the world

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<sup>2</sup>For further information see <http://iasc2011.fes.org.in/>



is confronting.” Ironically, this announcement came just about the day when the USA renounced any notion of historical responsibility and rejected any international obligation to cap its use of the most important of the global commons. Maybe Obama should talk to Ostrom and test the validity of the US stance on climate change against the standards of rule-based management of the commons developed by Nepali peasants.

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(BSL), India

## Recent Publications

### Emily Castle

Director of the Digital Library of The Commons,  
Indiana University

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## Announcements

### IASC AT UNAM

Since October 2008 IASC secretariat is hosted by the Instituto de Investigaciones Sociales at the Universidad Nacional Autónoma de México (UNAM). Moving IASC to the IIS-UNAM is the result of different processes and seeks diverse objectives.

The board of IASC looked for a new organizational scheme, when Michele Curtain—IASC longtime executive director—renounced in August 2007 to pursue new professional goals. Since its foundation in 1990 and particularly during the last ten years, IASC membership has grown considerably and has diversified in geographical, cultural and thematic terms. The visibility of the association also widened noticeably. Simultaneously with this development, IASC faces new challenges and demands: the global meetings and the need to attend them has increased considerably together with the costs of their organization. Regional meetings across the world have also taken place frequently. Communication and inter-exchange among members—one of the main objectives for founding IASC—has become more difficult and complex; generational replacement of the membership is now an issue that demands special attention. Last but not least, the impact of the global financial crisis has also made necessary to seek a larger margin of financial autonomy.

The decision to place the secretariat within an academic institution aimed to give IASC more

stability and institutional backup. This transition also intended to base the operation of the secretariat in a working team with different abilities, profiles and responsibilities, able to respond to the association's new demands. Finally the IIS-UNAM—organizer of the IASC'S Xth Conference in Oaxaca, Mexico in 2004—as host of the secretariat tries to make IASC more capable of responding to the increasing cultural diversity of its members, specially overcoming strong language barriers and building a larger presence in the Spanish speaking world.

The IASC secretariat is now integrated by a team:

Gabriela Ortiz has joined us as Executive Director. She is responsible for keeping contact with all IASC'S members and friends. Since January, she has been in charge of administrative, fiscal and bookkeeping updating of IASC. Gabriela has a Master Degree on Administration and Public Policy; her previous work has been focused on the analysis of public policy in the forestry sector in Mexico, she has also participated in research projects for FAO on Environmental Services, Climate Change and REDD+ in forest communities in Mexico. Also, she was part of the organizing team for the IASCP Conference in Oaxaca, 2004.

We have added Simone Buratti as Communication Coordinator at IASC, where he has used his enthusiasm in open source software to offer good tools to improve our communication strategy. With a bachelor's degree in History from the University of Bologna, Italy, Simone has been working with open source software for several years. He has redeveloped IASC website with many new features. Stay tuned for more information about the new site.

Teresa Ruiz is liaison with conference organization and member of the editorial team and will also participate as editor of the Spanish version of the Digest. Since 2003, Teresa has worked as translator, proofreader and editor of diverse joint publications for the Instituto de Investigaciones Sociales, UNAM-IASCP. During the IASCP Tenth Biennial Conference in Oaxaca (2004), she coordinated panel reports and theme synthesis. In 2005 she coordinated the translation for the set of referencing tools put together as follow-up of IASC'S 10th Conference. Teresa studied Spanish and Latin-American literature and language at UNAM, translation at Colegio de México, and editing with Versal.

Lorena Ortiz is collaborating with the new IASC secretariat team. She is participating as a translator, and she is part of the editorial team of the Digest. Lorena Ortiz began collaborating with IASC in July 2004, as part of the organizational team working for the 10th Biennial Conference held in Oaxaca, Mexico. She assisted the coordination of

conference reports and thematic themes. She is finishing her bachelor's degree in History at UNAM.

We do hope that during this new period of the IASC, the work of the secretariat will meaningfully contribute to the development of the association and will also help to strengthen the communication and academic ties among the IASC global community.

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## INVITATION FROM ELINOR OSTROM

May 27, 2010

To Colleagues Interested in the Commons:

Scholars interested in a variety of common-pool resources and public goods are scattered across the world and in multiple disciplines interested in diverse common resources. We were fortunate to be able to establish the International Association for the Study of the Commons two decades ago. This has provided us a forum that disciplinary meetings do not. We can engage in a very serious and cumulative discussion of how diverse groups at multiple scales have or have not solved problems of great importance.

IASC is now itself a "global commons" committed to the production and dissemination of knowledge, which is a "public good," about how many diverse institutions help or hinder the solutions of common-pool resources, in complex social-ecological settings. As members, we also face a social dilemma in keeping IASC funded. Without our contributions, IASC is not sustainable over time.

I have learned so much from being a member of IASC, and I hope that you will join in this effort by renewing your membership or becoming a member.

Regards,

**Elinor Ostrom**

**Former President and Current  
Active Member of IASC**

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## MEMBERSHIP DRIVE

Dear members,

Thank you for supporting the International Association for the Study of the Commons (IASC) by means of your membership. IASC is itself a commons, and depends on its membership dues for many of the critical activities it undertakes, such as organizing

the Global and Regional Conferences, publishing the Commons Digest and the International Journal of the Commons, supporting the Digital Library of the Commons and other networking among IASC members that we are working on. Your support has increased the financial viability of the organization over these years.

Elinor Ostrom's Nobel Prize and the increasing attention to the commons have given our association a big lift, but we can't rest on our laurels. We need to move forward to meet the (old and) new challenges to the commons.

**We remind you that president and council elections will take place in September!**

In order for you to vote you have to be a IASC member, therefore, **we cordially invite you to remain as an active member of the IASC and renew your 2010-2011 membership.**

The individual membership dues are based on incomes as listed in the categories below:

Incomes US \$80,000 and above dues are \$175.00

Incomes US \$50,000-79,999 dues are \$120.00

~~Incomes US \$20,000-49,999 dues are \$75.00~~

Incomes US \$19,999 and below dues are \$20.00

You can make your renewal in a clear and simple way in the following electronic address:

<http://www.regonline.com/Checkin.asp?EventId=780497>

**or you can go to:** <http://www.iasc-commons.org/>

Then follow the links in the bottom right corner:  
**Join IASC / Renew IASC Membership.**

If you do not have a credit card, we have two alternatives for you to pay your membership.

You can send a check by mail or through a bank transfer (wire transfer) to our account. For more information about these options, please contact Gabriela Ortiz at: [gabrielaortiz@iasc-commons.org](mailto:gabrielaortiz@iasc-commons.org)

Finally, we suggest you to visit IASC's new website at: [www.iasc-commons.org](http://www.iasc-commons.org)

Our site is being upgraded to provide you with better information about: conferences, organization's activities, publications (The Digest of The Commons and International Journal of the Commons), and contacts with other members.

We look forward to your continued support!

Best Regards,

**Ruth Meinzen-Dick**

**President, International Association for the  
Study of the Commons (IASC)**

[iasc@iasc-commons.org](mailto:iasc@iasc-commons.org)

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### Call for Proposals to Host IASC XIV Global Conference, and to Host Regional and Global Thematic Meetings

The International Association for the Study of the Commons (IASC) is now accepting preliminary proposals from individuals/organizations interested in **HOSTING** our **14th global conference** for 2012 or 2013.

IASC Global Conferences bring together commons scholars and practitioners from around the world. The benefits of hosting these conferences for your organization include an expanded network of both global and regional commons scholars, substantial organizational capacity building, and a major opportunity to place a spotlight on the needs of people dependent on commons in your region.

For long term planning purposes, we are also accepting preliminary expressions of interest from individuals/organizations for the period 2012-2015 for **HOSTING regional and global thematic meetings**.

The flexibility in timing is meant to accommodate possible regional differences in the best times of year to schedule meetings.

Those interested should submit a two page statement identifying your interests in hosting an IASC conference, a regional or a global thematic meeting.

The most useful statement will include the following information:

1. proposed program chair (listing qualifications);
2. identification of the sponsoring organization;
3. list of potential co-sponsors;
4. proposed themes and sub-themes;
5. identification of appropriate venues;
6. proposed logistical arrangements, including field trips;
7. proposed funding sources; and projected budgetary information.
8. projected budgetary information.

If you need additional information, please contact:

Gabriela Ortiz IASC's Executive Director  
[gabrielaortiz@iasc-commons.org](mailto:gabrielaortiz@iasc-commons.org)

Teresa Ruiz liaison for conference organization  
[teresa.ruiz@iasc-commons.org](mailto:teresa.ruiz@iasc-commons.org)

Proposals must be sent electronically no later than August 30, 2010 to IASC Executive Director,

Gabriela Ortiz at:

[iasc@iasc-commons.org](mailto:iasc@iasc-commons.org)

### North American Regional Meeting Capturing the Complexity of the Commons

Hosted by the Center for the  
Study of Institutional Diversity

September 30 - October 2, 2010

Arizona State University Tempe, Arizona, USA

The North American IASC 2010 conference will take place in Tempe, Arizona, USA, hosted by Arizona State University, especially by the Center for the Study of Institutional Diversity.

The North American regional meeting will have as its theme "capturing the complexity of the commons" reflecting the increasing efforts to understand commons over time at multiple levels of scale. The goal is to foster more discussion and collaboration especially among North American researchers working on commons from an interdisciplinary point of view.

The conference is interdisciplinary and open to any individual interested in common-pool resources and common property issues. It is aimed at encouraging the discussion on the conference topics among researchers and practitioners living in North America or elsewhere. This should result in a stronger research network and an enhanced exchange of experiences primarily among North American researchers and students working on CPRs and also with scholars elsewhere.

The conference is organized in three subthemes:

#### *Complexity*

This theme address the increasing focus of commons research on cases with historical depth, multiple resources and resource uses, and multiple levels of social and ecological processes. Topics included in this subtheme are the resilience of common pool resources, institutional learning and adaptation, and transboundary commons and conflicts.

#### *New Commons*

This theme includes commons that can be grouped in four broad classes: the urban commons, the virtual commons, the environmental services and public health. Research on those topics using conceptual tools designed for the study of commons has strongly increased in the last few years. Moreover, many of those commons are, at present, crucial for the welfare of human beings as a whole.

#### *Multiple Methods to study the commons*

This theme addresses the methodological contributions to study the commons including ethno-

graphic case studies, collaborative field studies, experiments, formal modeling and participatory processes. Besides contributions of the individual methodologies we recognize the benefits of using multiple methods to address the same research questions.

For more information please visit the conference website:

<http://csid.asu.edu/USIASC2010>

Contact: [Marco.Janssen@asu.edu](mailto:Marco.Janssen@asu.edu)



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### 13th Biennial Conference of the International Association for the Study of Commons (IASC)

January 10-14, 2011 Hyderabad, India

**Sustaining Commons: Sustaining our Future**

Hosted by the Foundation for Ecological Security

Chaired by: Mr. Nitin Desai,

Co-Chair: Jagdeesh Puppala

<http://iasc2011.fes.org.in/>

The Conference will provide opportunities for academics, researchers and practitioners to exchange ideas, knowledge and experience. Multiple forms of participation are envisaged at this global meeting. These include:

- Paper presentations
- Thematic panels
- Poster presentations
- Video presentations
- Pre-Conference workshops
- Practitioners' Colloquium
- Young researcher sessions
- Exhibitions

#### SUB-THEMES

The Conference will deal with physical common resources such as Forests, Grazing resources, Protected Areas, Water Resources, Fisheries, Coastal Commons, Lagoon Commons, Irrigation Systems, Livestock and Commons as well as New Commons such as Information Commons, Cultural Commons, Genetic Resources, Patents, Climate, etc.

The above subjects would be captured under the following sub-themes:

The Commons, Poverty and Social Exclusion;

Governance of the Commons: Decentralization, Property Rights, Legal Framework, Structure and Organization;

The Commons: Theory, Analytics and Data;

Globalisation, Commercialisation and the Commons;

Managing the Global Commons: Climate Change and other Challenges;

Managing Complex Commons (Lagoons, Protected Areas, Wetlands, Mountain Areas, Rangelands, Coastal Commons);

New Commons (Digital Commons, Genetic Commons, Patents, Music, Literature etc).

#### IMPORTANT DATES

September 30, 2010: Early registration deadline

For more information, please visit the conference website at <http://iasc2011.fes.org.in/> or the IASC homepage: [www.iasc-commons.org](http://www.iasc-commons.org)

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