The Commons Digest

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Welcome to the Spring/Summer edition of *The Commons Digest*! In this issue we present the winners of the 2015 Elinor Ostrom Award on Collective Governance of the Commons. Each winner explains a bit of how they began their work on the commons, what most inspires them, and what they feel the greatest challenges are today in their commons work. The issue begins with essays by the Senior Scholar Award winners **Bonnie McCay** and **Fikret Berkes**. These are followed with the Young Scholars Award winner, **Scott Shackleford**, who comes to the commons from a space and new commons perspective. The issue is rounded out with essays by the Practitioner Award Winners, **Macedonio Cortave** and **The Indigenous Peoples Alliance of the Archipelago (AMAN)**. Cortave works with forestry management in Guatemala while AMAN is based in Indonesia. Congratulations to all of the 2015 Award Winners.

This issue also includes announcements and, of course, Emily Castle's list of Recent Publications. ***Enjoy!***

CONTENTS

COMMONS FORUM: Winners of the Second Edition of the Elinor Ostrom Award on Collective Governance of the Commons

Commons Forum

Reflections

Victims and Villains in Complicated Tragedies of the Commons

Bonnie McCay

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How it all began...

It was the early summer of 1971. I was driving my old VW bug on the highway that crosses the island of Newfoundland, hoping to learn more about the prospects of doing anthropological research there for my doctorate at Columbia University. The road was still under construction, and in the many delays I welcomed the chance to listen to the Canadian Broadcasting Corporation (CBC) radio station, which came through the static every now and then. A fishery economist who had come to Newfoundland for a conference was asked by an interviewer what could be done for the distressed coastal economy, which was based on fishing. The economist tried to explain it as a "tragedy of the commons:" poverty in the fishing "outports" of Newfoundland was due to open access in the fisheries, which led to overharvesting and depressed incomes. Ahah! A research topic! So, after visiting Fogo Island, on the northeast coast of Newfoundland, that summer, I was determined to come up with a research

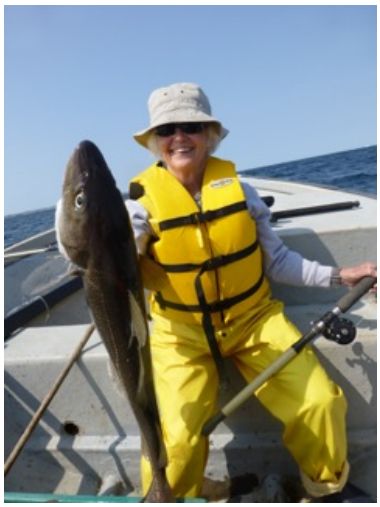
plan that incorporated this notion of the tragedy of the commons, recently popularized in a Science article (Hardin 1968).

The big question that emerged in my thesis was why Fogo Island "development" had focused on improving vessel size and performance, essentially imposing even greater fishing mortality on already stressed fish stocks, when I knew that islanders had requested help in improving fish processing and marketing, to get more value from limited resources. I found an answer in the political economy of provincial politics and business competition (McCay 1976).

But I also realized that the "tragedy of the open access commons" was a political ecology issue: the open access condition that mattered was not the freedom of Newfoundlanders to fit out a boat for handlining or trapping cod but rather the freedom of large industrialized trawlers of many nations to fish close to shore, regulated only by a flimsy international regime (ICNAF). This was before the UN Law of the Sea Conference came to agreement on 200-mile fishery economic zones (ca. 1977), and nations like Canada took seriously the opportunity and responsibility to manage coastal fisheries. Overfishing was caused less by the lack of restrictions on coastal fishing by Newfoundlanders than by the intensive fishing done offshore on the same fish stocks and the weakness of international regimes.

After Canada exerted exclusive jurisdiction over its 200 miles, Newfoundland's cod stocks improved in the early 1980s. At the same time the policy solidified of industrializing the fisheries through expansion of fishing effort and modernization of fish processing. The inshore fishery of places like Fogo Island expanded further and further offshore; an offshore fishery, replacing foreign fisheries, grew and intensified. The federal government of Canada became a leader in the science of fisheries stock assessment, but fisheries management decisions were strongly influenced by the interests of Canada's own offshore fisheries, despite evidence of levels of fishing mortality too high to sustain the stocks. In 1992 the northern cod fish population was officially declared to have "collapsed," as soon would be the inshore fishery and way of life.

Interpretations of the cause and consequences of this tragic event are many. It was indeed a situation of relative open access, as at that time there were no restrictions on the numbers of people or boats that could be used in the fishery and relatively few regulations beyond annual quotas. Consequently, there were few incentives to restrict or cut back on harvesting, despite signs of lower abundance and smaller sizes; if one cut back, there was nothing to stop others from taking the fish. Overharvesting resulted. But the story was much more complicated, including problems of scientific uncertainty, hubris, and vulnerability to interference by politicians; overreliance on data from industrial, offshore fleets and missed cues from inshore fisheries experiences and technology changes in offshore fleets (Anonymous n.d., Finlayson and McCay 1998, Martin 1995, Finlayson 1994, Steele, Andersen and Green 1992, Rose 2007, Hutchings and Reynolds 2004). There were political trade-offs, jobs in fish plants being very much at stake, and there are hints that environmental changes played a role.



Roger R. Locandro

Bonnie McCay with her catch in the waters of Fogo Island, Newfoundland, Canada

People are not only villains of complicated tragedies of the commons; some of them are victims. They suffer the costs of resource decline as well as the brunt of regulations intended to protect the sea and its resources. The Newfoundland northern cod collapse presents a sad tale of the socio-economic impacts of the loss of a major fishery. The fisheries closures that followed the collapse resulted in loss of work for at least 18,000 people, forcing many to accept modest government hand-outs and leading to mass out-migration. Rural depopulation quickly followed, with the challenges to communities and the quality of life that poses, as for example, schools shrivel in size and what they can offer. Significant social and health problems occurred (Arms 2004, Ommer 2008). There was also major decline and loss of a traditional fishery, the small-boat, coastal fishery, and its associated knowledge, skills, and culture.

The Newfoundland saga was the initial basis of my interest and participation in the initial flurry of scholarship that called into question the thesis of the tragedy of the commons in its simple form. That critique went further, leading to a focus on people as not just villains nor victims but also, in some circumstances, active and effective managers of the commons, supported by a number of case studies (McCay and Acheson 1987, Berkes 1989, Ostrom 1990). This focus became the basis of the IASC (originally the IASCP). In my own research, this perspective was enhanced by my learning how fishery cooperatives in the State of New Jersey were engaged in imposing limits on fish catches, albeit for marketing reasons (McCay 1980), and in much later work examining the roles of cooperatives and territorial concessions in co-management of important coastal fisheries in Mexico (McCay et al. 2013).

My original Ph.D. research design centered on the notion of ecological and social resilience, with the question of how, given the condition of (relatively) open access, coastal Newfoundland society managed to survive. I had looked at both fisheries diversification and periodic labor migration as essential tools, combined with some local level control over fishery effort; and how local, state, and international policy and processes both favored and constrained such sources of resilience (McCay 1978). After the 1992 collapse of Newfoundland and Labrador's northern cod fishery, Chris Finlayson and I revived the question of resilience, using a notion of adaptation, collapse, and transformation developed by C.W. Holling (Gunderson and Holling 2002); in the first decade after the collapse we observed in government policy and practice very strong resistance to learning from the fishery collapse (Finlayson and McCay 1998). It may be that the failure of a complex system to learn is a genuine "tragedy" of some commons.

The greatest challenges in my "commons" work today…

One challenge is to follow-up on the question of learning from tragedy and understanding how institutions for the commons both aid in, and adapt to, recovery. Today, in Newfoundland and Labrador, the cod stocks of the province's east coast are finally recovering (Rose and Rowe 2015), and for a few weeks in the summer and fall of the year all citizens are allowed to fish for cod. The issue now is whether to reopen a large commercial fishery and, if so, not only how big the catch should be but how it should be caught and by whom. To what extent and how will "lessons learned" from the collapse figure into personal, community, and policy decisions? This is a complex matter, given how much has changed since 1992 in markets, environment, and the local communities and fisheries, including the near-loss of a culture. And it is not clear to me yet that the concept of "resilience" will be helpful in accounting for observed measures and practices during the recovery.

Pushing further the notion that property rights and related "commons" institutions matter to how people respond to environmental change is another challenge. I am particularly interested in how different forms and instances of privatized use-rights and property rights in fisheries influence responses to climate-induced changes in the distribution and abundance of resources. I have explored the question in comparisons of the fisheries I have studied in Canada, the United States, and Mexico (McCay, Weisman and Creed 2011b, McCay, Brandt and Creed 2011a) but the question needs to be pursued in more carefully chosen and controlled comparisons. Controlled case study comparisons are difficult, given the complexity and variability of all human-ecological systems. Clearly more needs to be done to identify, for example, the ways that market-oriented privatization, as in the individual transferable quota system in fisheries, differs from the more community-oriented privatization, as in the development of exclusive territorial use-rights in fisheries.

In conclusion…

I am deeply grateful to the fisher-people who have let me come onto their docks and boats and into their offices and homes in order to learn what I could of their lives, livelihoods, pasts and futures. One of them, Bill Jenks, was also a co-author (McCay and Jenks III 1998, McCay and Jenks III 1997). I am equally grateful to colleagues in the "commons" endeavor who have contributed so much to my work. Not mentioned above but central to much of my work have been the topics of co-management and user participation. My contributions to these areas came about through relationships with scholars such as Evelyn Pinkerton (McCay 1989), Svein Jentoft (McCay and Jentoft 1998, McCay and Jentoft 1996), Ilene Kaplan (Kaplan and McCay 2004), Doug Wilson (Wilson and McCay 1998), and Fiorenza Micheli and others who worked with me in Baja California, Mexico (McCay et al. 2013). Research on related questions in national and international fisheries management also came from work with Teresa Johnson (Johnson and McCay 2012) and Poul Degnbol (Degnbol and McCay 2007). Research on privatization in the fisheries was enriched by colleagues from the US, Canada, and Norway (Apostle, McCay and Mikalsen. 2003, McCay, Apostle and Creed 1998, McCay et al. 2011a).

More recently, I was privileged to collaborate with Paul Foley, of Newfoundland, on eco-certification and the commons in the fisheries of Newfoundland and Mexico (Foley and McCay 2014), and with Tom Rudel on parallels in forest and fisheries transitions (McCay and Rudel 2012). Larger thinking about the commons is indebted to many others, including Fikret Berkes, David Feeny, and Jim Acheson (Feeny et al. 1990) and the many contributors to "The Question of the Commons" (McCay and Acheson 1987), including of course Elinor Ostrom (Ostrom 1987) in her early exploration of institutional approaches to managing the commons. My gratitude to her, and to the Ostrom award committee, is profound.

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How I Learned to Stop Worrying and Love the Commons

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I got into my commons work somewhat by accident in the mid-1970s in the lands of indigenous Cree people of James Bay, eastern subarctic Canada. I was there to examine the impacts of the James Bay hydroelectric development project (https://en.wikipedia.org/wiki/James_Bay_Project) which consisted of a series of dams on the La Grande River, the lifeline of the Cree people of Chisasibi and the source of a large portion of their protein diet. I was there to examine the fishery, but in the course of a year or so, I found myself more interested in the people than the fish.

The Cree fishery was a community-based, local subsistence fishery, with no commercial component. Therefore, it was not subject to government regulations and the usual kinds of fisheries research such as stock assessments. In fact, it was all but "illegible" to the outside world and the government, as James Scott might say (https://libcom.org/files/Seeing%20Like%20a%20State%20-%20James%20C.%20Scott.pdf). It was carried out under no apparent rules or written regulations. However, as it turned out, there indeed was a management system, although the Cree themselves would never refer to it as "management". Fishers were self-organized and self-managed, following customary practices and values passed on from their elders. As a researcher, this created a dilemma for me. How does one study and make sense of a fishery like that? I needed a theory to help me. The only theory I knew for a fishery that was seemingly open to all, was the "tragedy of the commons", but it did not explain the Cree fishery at all.

At the time, I was a recent science PhD graduate with an interdisciplinary orientation but no training in social sciences. (This changed later as I moved into postdoctoral studies in anthropology.) But at the time, I had no background to appreciate community-based resource management. To me "institutions" were official buildings in the city! Even worse, as a member of the 1970s generation of

environmental activists under the influence of Garrett Hardin's "tragedy of the commons" (http://science.sciencemag.org/content/162/3859/1243.full). Many of us believed that resources had to be protected from users by government resource management. The tragedy of the commons was the principal way in which commons were conceptualized. Hardin used the example of an imaginary pasture in Medieval England to which cattle herders had free and open access. Each herder received a direct benefit (say +1) from adding one more animal to graze in the pasture, but the costs of degrading the pasture were shared by all (a fraction of -1). Thus, each herder had the incentive to put as many cattle on the pasture as he could, since adding more animals was the economically rational choice. Yet everyone exercising their rational choice led to the degradation of the pasture, with everyone losing. It was a "tragedy" in the sense of ancient Greek tragedies in which fate locks people into inevitable outcomes from which they cannot escape.

It was a catchy model, but the James Bay Cree fishery did not fit this model. The fishers were far from the helpless actors in the Greek tragedy. They decided among themselves on the unwritten rules of conduct of the fishery which were mutually agreed upon. They communicated and used social sanctions where necessary to get compliance among members. These were not "rules" in the sense of government rules but simply common sense, the "way things were done" among the Cree.

I was fascinated by the fact that not only the locally designed fishing system worked but that it was *fundamentally different* from scientific management systems in


Nancy Turner

Fikret accepting the Award at the 2015 Global IASC Conference

use in commercial fisheries elsewhere in subarctic Canada. These commercial fisheries are usually managed by fishing gear and mesh size restrictions, season and area closures (e.g., during spawning), and in some places catch quotas. By contrast, the Cree subsistence fishery used the most effective gear available; the mix of mesh sizes that allowed the highest possible catch per unit of effort by area and by season; and deliberately concentrated the fishing effort on pre-spawning aggregations, that is, the most efficiently exploitable fish. Under the usual scientific fishery management thinking, everything seemed wrong. The fishery should have collapsed. But I was able to find historic biological data to show that the fishery had been sustainable.

The Cree fishery violated just about every measure used by government managers but used a set of practices seldom seen in conventional management: switching fishing areas according to the declining catch per effort; rotating fishing areas; using a mix of mesh sizes to proportionately thin out populations by size and age; attuning harvest levels to needs; community leadership to informally regulate access and effort; and a land use system in which resources were used under principles and ethics agreed upon by all. Some ten years of this work, published

1977 onwards, is summarized in Chapter 7 of *Sacred Ecology* (https://www.amazon.ca/Sacred-Ecology-Fikret-Berkes/dp/041551732X).

My experience with the Cree fishery made me reject the tragedy of the commons, just as other scholars were also finding problems with the tragedy model. A consensus was building that Hardin's model applied to open-access exploitation of the commons but not to other situations. In fact, Hardin's own example of the imaginary English pasture was historically incorrect. The medieval English commons were generally used under locally devised rules such as "stinting" which limited the number of heads of animals that each owner was allowed to graze. Many economic historians and others questioned if Hardin's "tragedy" ever occurred widely. With all the accumulating counter-evidence, commons theory was ripe for a paradigm change, in the sense of Thomas Kuhn http://projektintegracija.pravo.hr/_download/repository/Kuhn_Structure_of_Scientific_Revolutions.pdf\). Elinor Ostrom's 1990 *Governing the Commons* (https://www.amazon.ca/Governing-Commons-Evolution-Institutions-Collective/dp/0521405998) brilliantly formulated that new paradigm, and the rest is commons history.

After James Bay, I pursued my commons work in Turkish coastal fisheries, the North American Great Lakes, and the Eastern Caribbean. These comparative studies gave me a sense of the diversity of challenges in commons management, and of variations in community-based management. They gave me an appreciation of the notions of development, empowerment and capacity-building. In some areas, community institutions existed but in others they did not. In some areas, self-organization came readily and in others capacity-building was necessary. In the 1980s, I found myself moving along two lines of inquiry. On the one hand, we strived to document and to protect existing community-based systems from external impacts, such as hydro development in James Bay. On the other, we were trying to work with and influence paternalistic government management that suffocated peoples' capability for self-governance.

The first line of inquiry resulted in some unexpected outcomes. Initially, we thought community-based management was in a losing battle with destructive external forces. Were commons researchers doomed to play the role of chroniclers of crumbling local governance systems? But soon it became clear that the larger picture showed a dynamic situation. While some local systems were disappearing, others were emerging and flourishing. Time and again, in Turkey, Sri Lanka, the US and Canada, new commons management systems were emerging spontaneously. In the Gulf of Maine, for example, it was becoming possible to document that local commons governance was in fact giving sustainable lobster management.

The second line of inquiry also gave outcomes which were simultaneously frustrating and inspiring. They were frustrating because top-down management seemed to come naturally for some government managers. I found myself coming up against a nearly identical narrative in diverse places like the Great Lakes, Mozambique, Brazil and Taiwan: "users cannot be trusted to manage resources; why would we [government] devolve management power, even in the

Alyne Delaney

Three time World Hoop Dancer Champion performing at the IASC Biennial Conference in Edmonton

form of co-management?" And yet, from the 1980s and 1990s onwards, co-management systems were developing at a rapid pace in fisheries, forestry and other resources in various parts of the world. The recognition of indigenous land and resource rights in Canada, Australia, New Zealand and the US (such Pacific Northwest salmon) gave a huge impetus to co-management. In the process, my colleagues and I gained a new insight. There were always some government managers sympathetic to local management. The task was to find them, work with them, and help build trust between these managers and users.

Delving into the details of wondrous traditional community-based management systems brought me back to local and traditional knowledge systems, a source of fascination for me since the 1970s in James Bay. In the process, my colleagues and I developed the insight that these systems were often based on sound ecological knowledge and understanding that showed parallels to adaptive management and hence its companion, resilience theory https://www.fws.gov/nativeamerican/pdf/tek-berkes-2000.pdf). Such traditional ecological knowledge could be used to extend the range of information brought to bear on commons governance. This insight strengthened the notion that commons systems could/should be considered social-ecological systems, with explicit attention to both the ecological and the social components of the system and the interrelations (feedbacks) among them.

Several decades of commons research have left us with much brighter prospects than the dark predictions of the tragedy of the commons. We have learned to stop worrying about the "tragedy" and love the commons. For me the new commons theory embraces social-ecological systems, resilience, co-management, community-based conservation, local and traditional knowledge, and ecosystem-based management. This is the premise of my 2015 book, *Coasts for People*. We have the task of managing a world increasingly impacted by climate change, biodiversity loss, globalization, neoliberal policies and other drivers. Commons governance approaches bring the promise of a more sustainable, more just and more humane world.

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Find Professor Berkes' most recent book, *Coasts for People*, at https://www.amazon.ca/Coasts-People-Interdisciplinary-Approaches-Management/dp/1138779814

Commons Sense

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I first met Elinor (Lin) Ostrom when I joined the Indiana University faculty in 2010. I was in the midst of completing my doctoral dissertation at the University of Cambridge at the time and was looking for reviewers. Even though I have no doubt that Lin had literally dozens of other projects underway with meetings scheduled out to the horizon, I got in touch with her out of the blue and she kindly responded the same day and agreed to critique several chapters of my dissertation on global commons governance. I still remember going to her office for the first time and how she warmly put me at ease as she has so many others and offered incredibly helpful feedback that was instrumental in not only completing that project, but really in laying the groundwork for everything that has followed. Before I get into that, though, a bit of backstory is warranted.

I got interested in the commons, which inexorably led me to Lin's work, because of Star Trek. That's right, I'm happy to admit that I am a died-in-the-wool sci-fi nerd (one of my earliest memories wasn't a family trip to Disney world, but watching a Klingon battle cruiser de-cloaking in the Enterprise view screen with my Dad). So when it came time to pick a topic for my undergraduate thesis, I looked no further than space policy, particularly the then recently announced 2004 NASA Vision for Space Exploration. Though I originally was most interested in the forces shaping the policy at NASA itself, I soon found the outstanding legal issues to be too good to pass up. I still remember asking my supervisor, 'You mean I can look at how a company could legally claim an asteroid? And that counts as work?' Needless to say, I was hooked (and actually wound up later working for NASA). This study led me to investigate some of the legal debates surrounding thorny issues like defining property rights in the commons, which I expanded in my Masters, during law school at Stanford, and eventually in my international relations doctorate.

Over time, my particular interest became the sustainable development of global common pool resources under international law, though my emphasis as of late has migrated to 'new commons' spaces focusing on the related issues of cybersecurity and Internet governance. I argued in my doctorate that many environmental and security concerns facing the international community may be traced to the global commons, which may be understood as the international spaces historically existing beyond national jurisdiction including the deep seabed, Antarctica, the atmosphere, outer space and, some argue, cyberspace (See Dep't of Def, 2005; and Redden and Hughes,


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2010). From climate change and cyber attacks, to the enclosure of the deep seabed, to the associated problems of space weaponization and orbital debris, solutions to all of these issues have at their root some form of regulation over the global commons. But what form should that regulation take? And at what level?

It was that question of regulation, of course, which led me directly to Lin and Vincent's work in the field of polycentric governance generally, and the Institutional Analysis and Design (IAD) – Social Ecological Systems (SES) Framework in particular (Cole, McGinnis & Epstein, 2013). I used these invaluable analytical tools to help explain how and why governance over global common pool resources is in some cases moving away from consensual United Nations-centered multilateral treaties to polycentric governance structures. I hypothesized that this change is being influenced by three variables: advancing technology, resource scarcity, and multipolar politics. The result of the confluence of these forces is an emerging polycentric ecosystem across the global commons, what some have termed a "regime complex" (Cole, 2011). This multi-level, multi-purpose, multi-functional, and multi-sectoral model that Lin and Vincent Ostrom among many others championed through decades of field work challenges orthodoxy by demonstrating the benefits of self-organization, networking regulations "at multiple scales" (Ostrom, 2008), and examining the extent to which national and private control can coexist with bottom-up communal management. As Lin said, "simply recommending a single governmental unit to solve global collective action problems . . . needs to be . . . rethought and the important role of smaller-scale effects recognized" (See, 2011). This then is not a "keep it simple, stupid" response then (Weiss, 2009), but a multifaceted with application across an array of contexts including climate change as an application of the maxim, 'think globally, but act locally.'

Much of my work in the cybersecurity and Internet governance context has been centered around extending these insights into how we manage Internet governance and the multifaceted cyber threat. I call the field "Cyber Peace Studies," stemming from my 2014 book published by Cambridge Press entitled, Managing Cyber Attacks in International Law, Business, and Relations: In Search of Cyber Peace. Under this heading, I ask such questions as how can we take advantage of the distributed nature of the Internet's architecture and governance structure to incentivize the use of cybersecurity best practices from the bottom-up. Although that can sound daunting, I am happy to report that there is a great deal of low-hanging fruit out there – the government of Australia, for example, has reportedly been succcessful in preventing 85 percent of cyber attacks through following three common sense techniques: application whitelisting (only

permitting pre-approved programs to operate on networks), regularly patching applications and operating systems, and "minimizing the number of people on a network who have 'administrator' privileges" (Lewis, 2013). Put more simply, this stuff doesn't have to be rocket science; it's just computer science.

And more to the point, as with climate change, this idea of tackling global cyber challenges through polycentric means is catching on and with the likes of the President of Estonia, Hendrik Ilves, and the President of the Internet Corporation for Assigned Names and Numbers (ICANN), Fadi Chehadé, relying on the term to describe the Internet governance ecosystem (See Scola, 2014) Of course, no system of governance is perfect, as Lin would be the first to admit and there are important drawbacks of polycentric regulation to be addressed, such as the fact that a highly fragmented system can also "yield gridlock rather than innovation" due, in part, to an insufficient hierarchy (Keohane & Victor, 2011). However, viewing global collective action problems such as climate change and cyber attacks through this lens potentially us in a more productive direction by helping to eschew false choices, divisive top-down regimes, and all or nothing scenarios, as well as challenging all of us to take action through this inclusive conceptual framework. I like to think of that as part of Lin's legacy – to take something as abstract as the global commons, and empower all of us to take action to protect it.

Looking ahead, the greatest challenges for me lie in continuing to push the envelope of polycentric research, such as by experimenting with new regime effectiveness studies to test the utility of various global commons regimes in my next book project tentatively entitled, Governing the Global Commons in the Twenty-First Century. Relatedly, I am fascinated by the 2015 Paris Climate Change Agreement, particularly the use of national pledges to build bottom-up momentum to better address global collective action problems. As Professor David Victor has argued, this approach offers "a way to get started and build confidence that, in time, will beget more confidence and a willingness to do more" (Victor, 2015). I already have several papers forthcoming that explore the intersections between the sustainable development and cybersecurity/Internet governance contexts (Shackelford, forthcoming), and hope to make additional headway on these projects while on sabbatical at the Belfer Center this Fall, but am under no illusions about the challenging road ahead. Luckily, I am not alone as the Ostrom Workshop will be launching a new Program in Cybersecurity and Internet Governance in 2017 to help lead the charge in applying and refining polycentric principles to help meet this central twenty-first century governance challenge.

Throughout my (admittedly still rather brief) academic career, I have been proud to make some small contributions to the enormous legacy left behind by Lin, Vincent, and all the other scholars that have built out the field of polycentric governance over a period of decades. In particular, Lin and Vincent's willingness to break with dogma, to use innovative empirical methods to test their hypotheses through field work, and to keep reaching for and investigating new frontiers, I find, to be incredibly inspiring. Only by working together through polycentric partnerships can we both promote cyber peace and mitigate the effects of global climate

change; that is an important legacy of Lin's work in this arena, and a torch that we should all be willing to raise. One day perhaps such views about the commons may strike that many more students, researchers, and policymakers as common sense.

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A life of work for the commons

Marcedonio Cortave

Director
Asociación de Comunidades Forestales de Petén (ACOFOP), Guatemala

*The following is an essay, describing Marcedonio Cortave's background and history working on commons and activist issues. It was provided by his collaborators at ACOFOP.

Growing up in the town of Macanche, in Flores, of the Petén municipality, Guatemala, his grandfather, Mr Julián García Dubón, was the greatest influence in shaping the fundamental social values that have driven Marcedonio Cortave throughout his life. Eventually elected as Deputy Mayor, Marcedonio Cortave was well known as a community leader through his work towards the development of the community. He and community members had a daily interaction with the forests as they depended greatly on them.

The creation of the Mayan Biosphere Reserve in 1990 was a critical time as it opened up debates about the strict conservational discourse that was dominant at the time. In response, Cortave built a community and peasant front for the defense of their access and rights of the resources, and to demonstrate that communities have the technical and managerial capacities needed for the sustainable management of the territories. They showed that there was no need to give management rights to foreigners and enterprises which, in the end, generated no social benefits for the local communities.

Cortave's work finally bore fruit in 1995 when he formed the advisory council, Consejo Consultivo de las Comunidades Forestales de Petén (Advisory Council for Forest Communities in Petén, CONCOFOP), made up of the deputy mayors of nine communities from the municipalities of Flores, Melchor de Mencos and San Andrés. Through this organizational platform they initiated the conservation strategy for the Multiple Use Zone of the Maya Biosphere Reserve (MBR).

In 1997, with the support of IUCN (International Union for the Conservation of Nature) and the Proyecto Frontera Agrícola (Agricultural Frontier Project, PFA), CONCOFOP was legalized under the new name of Asociación de Comunidades Forestales de Petén (Association of Forest Communities of Peten, ACOFOP). It united the community leaders of the municipalities of Melchor de Mencos, Flores, San Andrés, and La Libertad, known today as Las Cruces. Today 15, 000 people directly benefit from the association, with 70, 000 benefitting from it indirectly.

ACOFOP promotes discussions and negotiations between different sectors of Non-Governmental Organisations (NGOs), the local private timber industry, and the Guatemalan government represented by the National Council of Protected Areas (Consejo Nacianal de Áreas Protegidas, CONAP). This led to concession contracts being signed from 1998 to 2001 between peasant and indigenous forest


ACOFOP
Marcedonio Cortave, Director of ACOFOP

communities and the Guatemalan government, permitting them to manage and use the natural resources of the forest, a total of 450 thousand hectares of the Multiple-use Zone of the MBR.

This area is recognised by the Guatemalan population as the largest forest area in northern Peten, thus creating a perfect example of conservation and sustainable management by communities unique to Guatemala. This feat has been recognised worldwide and used as a model example, having been replicated in Africa, Asia and throughout South America.

Using ACOFOP as a platform, Marcedonio Cortave pushed for the creation of national and international networks and alliances at a Mesoamerican level, of which the most renowned are the Alianza Nacional de Organizaciones Comunitarias de Guatemala (National Alliance of Community Organisations of Guatemala, Alianza OFC's) and the Alianza Mesoamericana de Pueblos y Bosques (Mesoamerican Alliance of People and Forests, AMPB). The Alianza OFC consists of 11 second level organisations that work throughout the whole country in 85 municipalities, 18 departments; with over 300 grassroots organisations, 64,000 associates and over 300,000 indirect beneficiaries.

Cortave also participated in the creation of the Mesoamerican Alliance of Peoples and Forests (Alianza Mesoamericana de Pueblos y Bosques) with more than 10 second level organizations of the whole region. All these spaces are used to analyze and discuss topics related to community territories, from the south of Mexico to the South American Amazonas, and are currently working on the Alliance of the Americas.

In 2003, ACOFOP founded the Forests Enterprise of Woodland Services (Empresa Forestal de Servicios del Bosque, FORESCOM), which groups community organizations and works with high technology in the transformation and cut of timber, as well as the production of timber products for exports to different countries. Marcedonio Cortave has strengthen the community committees of export of non timber products, such as the Chamaedorea sp and the Brosimun alicastrum, and has strongly promoted women participation.

From the year 2000, thanks to the effort of the forests concessions, the certification of sustainable forests management by RACert was achieved. This certification is based directly on the principles and criteria of the Forests Stewardship Council.

Cortave's effort is contributing to the creation of a carbon credits project since 2006, which will help contribute avoid deforestation. It is a pioneer project, the biggest and most advanced in Guatemala, and which will benefit mainly community members and the National Commission of Natural Protected Areas (Comisión

Nacional de Áreas Protegidas, CONAP) in the generation of social, economic and environmental benefits, by contributing to the governance and sustainable management of this area. This project has also generated a new methodology approved by the Carbon Verification Standard (Verificación Estándar de Carbono, VCS), whis is Pioneer worldwide.

As founder and CEO of ACOFOP, Cortave has achieved personal and institutional successes, and is considered an icon with regards to the organization and conservation of natural and cultural resources of the Petén region. A sampling of his many achievements includes:

- Awarded Anonymous Hero by the United Nations in Guatemala.
- Recognised for leadership skills in conservation in Latina America by National Geographic.
- Received "Outstanding Potential Innovative partnership Program Award" from CGIAR
- Awarded Medal of Merit in Sustainable Management of Natural Resources and the Environment by the Centro Agronómico Tropical de Investigación y Enseñanza (Tropical Agricultural Research and Higher Education Center, CATIE).
- Recognition from KEPA, Finland for 20 years of leadership in the movement for community forest management with social justice in Peten.
- Recognition from IUCN for fighting for nature and the welfare of communities and searching for natural, equitable and fair solutions.
- Recognition from the Rights and Resources Initiative (RRI) for his 20 years of determination, leadership and dedication to protecting the rights of the forest communities in Peten, and for inspiring younger generations to commit to

ACOFOP

sustainable management of forests and the welfare of the communities.

- Recognition from Rainforest Alliance for his contribution towards the conservation of the MBR, the promotion of responsible and sustainable forest management and the improvement of the quality of life of thousands of people.
- Recognition from the Asociación Guatemalteca de Exportadores (Guatemalan Association of Exporters, AGEXPORT) for his dedication, efforts and perseverance in the development of forest communities in Peten.
- Recognition from the Agronomy Faculty of the University of San Carlos of Guatemala, for his dedication to forest community management.
- Received an Institutional Badge from the IARNA of the University of Rafael Landívar.

Under his management, ACOFOP has received the following prizes:

- Recognition from UNDP (Equator Initiative 2002) for Biodiversity Conservation and the Reduction of Poverty, awarded in Johannesburg, South Africa at the World Summit on Sustainable Development.
- Recognition for the American Embassy through USAID, for its efforts in preventing forest fires in 2003.
- Antorcha Ambiental Prize from the IUCN for its leadership in Latin American with regards to the environment.
- Presidential Medal of Environment

form the Guatemalan government in 2003, for its for the many achievements related to the conservation of the Multiple Use Zone in the MBR.

- Recognition from Rainforest Alliance for the protection of biodiversity by involving community organization.

Marcedonio Cortave is probably one of the most emblematic figures of Guatemala. He has sought to preserve the protected forests of Peten through the sustainable management and use of its natural resources by its local communities in the form of civil societies. At the same time he has complied with governmental policies such as the Peace treaties.

As part of his vision, Mr Cortave's has stated that "in order to sustain the forest we must first sustain and consolidate the communities." That is why his career path, which has benefitted all Guatemalans, has led to him being awarded an honorary doctorate from the Faculty of Agronomy of the prestigious University of San Carlos of Guatemala (USAC).

HIs fight is not over, however. He continues the struggle with a number of current and on-going challenges, including forming and Agreement with the Government to recognize the Community Forestry Process, Create a consortium to exploit the touristic potential, particularly in El Mirador; strengthening alliances at the national and the international level; and increasing ACOFOP's leadership to guarantee the social sustainability of the process.

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Returning Ancestral Ownership to Indigenous Communities

Abdon Nababan

Secretary General
Indigenous Peoples' Alliance of the Archipielago (AMAN), Indonesia

*Bellow we present Abdon Nababan's acceptance speech to the Elinor Ostrom Award. Following the speech, we present a description of AMAN's activities, provided by the organization.

It is tradition among us indigenous peoples to offer a greeting of gratitude to our ancestors, whose tremendous wisdom and commitment sustains us, generation to generation.

To them, I dedicate our acceptance of the Elinor Ostrom Award for Collective Governance for Practitioners. Your recognition of our work through the award is a reaffirmation of Indigenous Peoples as the rightful stewards of sources of life and living space, the commons.

I must admit that I did not know much about Elinor Ostrom before receiving word that AMAN won the 2015 Award. To my knowledge, and I believe also to almost all of us in the leadership and management of AMAN, Prof. Ostrom is just one of many

recipients of Nobel Prize in economics, that she had nothing to do with our struggle as indigenous peoples. Since becoming a 2015 award winner, we have been very busy learning about Elinor Ostrom and her ideas and contributions.

I decided to attend the entire 15th Biennial Global Conference of the International Association for the Study of the Commons most specifically to become acquainted with the name Elinor Ostrom. I was enlightened with all presentations and discussions that lasted 3 days, in particular I was inspired by Heather Menzies keynote speech titled "Righting Relations with the Land and the Global Economy: Lessons from Our Ancestor on the Commons".

Now I realize that all this time, in our struggle full of blood and sweat in Indonesia, there is far away in the American continent an economics professor who is also fighting for the same rights, through intensive studies, not only with her mind but also with her heart, her testimony of taking the side of humanity and natural surroundings.

AMAN and indigenous people everywhere

I represent and lead the indigenous peoples alliance, AMAN. Consequently, this award is not for me, nor is it just for the more than 1500 AMAN organizers, but it is a tribute to the 2344 indigenous communities who have worked for nearly eighteen years constantly, tirelessly, fighting together, at all levels, in the villages, in the respective communities, in the capitals of the district, provincial, national center, up to the international level.

This award honors the AMAN members who have been evicted from their land, criminalized, jailed, murdered for fighting for their indigenous rights to manage their "the commons", thus preventing open access and tragedy that we are facing now.

With thoughts of Elinor Ostrom, I wish to thank CIFOR who nominated AMAN for the award. Initially I did not understand why CIFOR would take risk to nominate AMAN for this prestigious award. Now I do understand! Once again thank you CIFOR!

Elinor Ostrom believed that the tragedy of open access can be prevented if "the commons" is set and administered by the competent institutions, indigenous one. This exactly is AMAN's struggle. Indigenous communities were the sacred rights holders over their traditional territories, competent managers of this natural resources; indigenous peoples who have been made invisible by Indonesia's national law over the past 50 years.

Indigenous territories are seized through numerous national laws and the exclusion of collective rights by the state land and forest administration. Yet these rights are freely handed over to corporations who occupy tens of millions of hectares of land. While the Government has legal authority over these areas, it has never demonstrated competence and moral authority and legitimacy. In a situation of this type of access, it is the powerful who will win. And indigenous peoples, in general, will be the losers in the collusion of politicians, bureaucracy and corporations through the licensing regimes.

Tragedy befalls upon people and earth when the commons is robbed and made into private cash machine property of some parties. When a few corporations

are given control over forests, indigenous peoples are deprived of source of life and identity. When water is privatized, we are denied of a very basic right. When some groups of people claims God is theirs only, killings happen.

That's why, during these 17 years tens of thousands of indigenous communities in Indonesia have joined the struggle to "Reclaim the Commons", returning ancestral ownership to indigenous communities where young people can stay connected to their ancestors. In this regard we have to point out a milestone brought about by the Indonesian Constitutional Court ruling three years ago, MK 35, that customary forest is not state forest, its belong to indigenous peoples.

The commons is there so we can recognize ourselves, and we can care for sacred places. We are also building new economic models that are based on spirituality, culture and social solidarity of indigenous peoples. Strengthening cultural identity, legal and customary institutions are the next major work in indigenous communities.

This award is an encouragement for us to continue to fight, to reclaim "the commons", bring back "the commons" in the hand of "communities", guided by our ancestors spirit for the "common good."

Friends,

Many of our elders tells me that it is increasingly urgent, at this critical moment in the life of the earth and mankind, of climate change, for the Indigenous peoples to speak up and tell the world to rectify our relations with the commons, that forests and seas be set and administered by us, the time proven competent indigenous peoples.

This is now our task. And I am so very happy to have found a best ally and friend in taking this on, the Ellinor Ostrom.

Mauliate. Terimakasih. Thank you.
Horas! Horas! Horas! May The Creator and Ancestors be with us
is.

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Would you like to know more?

AMAN, The Indigenous Peoples' Alliance of the Archipelago (Aliansi Masyarakat Adat Nusantara), is an independent indigenous organization established in 1999. With a presence in 33 provinces, AMAN is composed of 2,349 indigenous communities from across the Indonesian archipelago with a population numbering about 15-17 million, with 21 Provincial Chapters, 107 Local Chapters, three wing organizations and two autonomous bodies. This makes AMAN one of the world's largest Indigenous Peoples' organizations and Asia's leading one in Indigenous Peoples issues today.

In the last 15 years, AMAN has been working on forest issues, as a majority of its constituents' culture and livelihoods depend on forest resources. Since 2007, AMAN has closely engaged with REDD+ issues as member of the International Indigenous Peoples' Forum on Climate Change (IIPFCC). AMAN is trusted by Asia's Indigenous Peoples' organizations to lead and represent the region in various climate change forums and REDD+ negotiations, such as the UNREDD Policy

Board, FCPF Participants Committee, CIF-FIP Sub Committee, GEF Counsel and REDD+ Partnership Forum.

At the national level, AMAN has engaged closely with different government entities. This engagement has resulted in the development of Memoranda of Understandings/MoU with the National Commission on Human Rights, the Ministry of Environment (now Ministry of Environment & Forestry) and the National Land Agency (now Ministry of Agrarian & Spatial Planning). The main achievements in the past 5 years at the national level have been: *(1) The Constitutional Court Ruling No. 35 on Customary Forests, (2) Draft of Indigenous Peoples Act, (3) Inclusion of Indigenous Maps into the Government's One Map Initiative and the adoption of Indigenous Maps by the National REDD+ Agency, (4) National Inquiry concerning Violations of Indigenous Land Rights in Forest Areas conducted by the National Commission on Human Rights, (5) The National Initiative Program on the Recognition and Protection of Indigenous Peoples, launched by the Vice President of Indonesia, (6) A contribution to the Vision and Mission of the President of the Republic of Indonesia (known as NAWACITA), that includes six points towards the protection of Indigenous Peoples, and (7) The President's plan to create a special Task Force on Indigenous Peoples.*

At the local level, AMAN has conducted many programs, such as *community mapping programs*, which have included 6,69 million hectares of indigenous territories, *economy empowerment* for Indigenous Communities, an *indigenous gallery* (including an online version) for indigenous products, a *renewable energy program*, *media development* (such as community radios and streaming, citizen journalism-including SMS front liners-, website and social media, and indigenous magazine) and a *cultural and education program*.

AMAN also encourages its members to involve in politics. In the 2014 national election, 25 individuals from AMAN were successfully elected in different positions at the local, regional and national level.

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Announcements

Send letters and Announcements to Alyne Delaney, Editor, Commons Digest, Innovative Fisheries Management, Aalborg University, Skibbrogade 5, Aalborg 9000, Denmark, ad@ifm.aau.dk Tel: +45 99 40 36 94

Be part of IASC!

IASC is itself a commons, and depends on its membership dues for many of the critical activities it undertakes. Become a member! https://membership.iasc-commons.org/

Suscribe to the newsletter! Tell a friend! The newsletter is the easiest way to receive all the news about the association. Contact us at iasc@iasc-commons.org to post announcements - conferences, job positions, etc. - and reach the +3K members of our community: https://membership.iasc-commons-org/civicrm/profile/create?gid=12&reset=1

Commons Management and Governnce short Courses, delivered by the CCRI at the University of Gloucestershire and the IIS-UNAM

This is a series of online short courses, first launched in 2015, focusing on different aspects of commons: their management, governance and sustainability. The courses are delivered jointly by the Countryside and Community Research Institute of the University of Gloucestershire (UK) and the Instituto de Investigaciones Sociales, Universidad Nacional Autónoma de México (IIS-UNAM), in both English and Spanish, under the auspices of the International Association for the Study of the Commons (IASC).

The following courses are available for the coming 2016-17 period:

'Managing our Commons Resources'
Start Date: Monday 10th October 2016
Finish Date: Friday 19th November 2016
Cost:
Non-member IASC: £90

Member IASC: £70

New Course: 'From source to sea - the governance of water resources'
Start Date: Monday 17th April
Finish Date: Friday 19th May
Cost:
Non-member IASC: £75
Member IASC: £60

More information and registration details: http://www.ccri.ac.uk/short-courses/

Call for Papers, Panels and Posters – XVI Biennial IASC Conference

The local organizers of the XVI Biennial Conference of the International Association for the Study of the Commons welcome abstracts for papers, posters, and panels to be presented at this conference, to be held in Utrecht, The Netherlands, from 10 to 14 July 2017.

During the conference there will be plenty of opportunities to connect academic research to practitioners' experience and vice versa. On the conference website www.iasc2017.org and in the call you will find an overview of the main themes to be addressed, including a list of potential research questions that might be the topic of paper presentations. Soon, a call for contributions to practitioners' labs will also be issued.
Please visit the conference website www.iasc2017.org. Here you can learn more about the conference timeline, keynotes, policy sessions, exciting excursions, and the conference venues. You will also find info about the city of Utrecht, opportunities to organize your own project meetings, and much more.

Call for nominations President-Elect and Council Members of the IASC

In the fall of 2016, the International Association for the Study of the Commons (IASC) will hold regular elections for President-Elect and two Council Member positions. The Nominatimg Committee of the IASC therefore welcomes nominations for these positions.

The roles and responsibilities of these positions are specified in the bylaws of the IASC, see underneath (also available at: www.iasc-commons.org/about/bylaws, in particular Article III).

Conditions

* Nominees must be current IASC-members in good standing
* Self-nominations are also very welcome
* If you want to nominate somebody, please make sure in advance that the nominee is willing to accept her/his nomination and eventually the position she/he will be elected to.

For more information on the nomination procedure and deadlines, please visit http://iasc-commons.org/_NEWS_Nomination-IASC-Elections-2016

IASC endorses Global Call to Action on Indigenous and Community Land Rights

The global call to action is a campaign of the Rights and Resources Initiative and multiple partners to support the communal land rights of indigenous people and communities. The campaign calls for doubling the land area legally recognized as owned or controlled by indigenous people and communities by 2020. On the 8th of march 2016, the International Association for the Commons endorsed and signed the "Global Call to Action on Indigenous

and Community Land Rights" in The Hague, together with more than 300 organizations worldwide.

Simple and straightforward messages are needed for campaigns and we bring our scholarship to the table to support this advocacy; with a deep knowledge of the challenges involved in ensuring the recognition of rights of communities and indigenous peoples to the shared assets and resources they hold in common. Our research has provided extensive understanding of the need to ensure that communal and indigenous rights of access to land and commons resources are protected for the long term. Evidence from decades of work on commons shows us that secure property rights are essential for the long term management of commons that will deliver sustainable local livelihoods, and achieving that requires constant vigilance.

Visit the website of the Global Call to Action at www.landrightsnow.org/ for more information on this initiative

International Journal of the Commons announces winners of Elinor Ostrom Award for Most Innovative Paper 2015

The International Journal of the Commons, official publication of the IASC, recently announced that the Elinor Ostrom Award for Most Innovative Paper of the Year 2015 has been awarded to Daniel Wright, Krister Andersson, Clark Gibson, and Tom Evans for their contribution 'What incentivizes local forest conservation efforts? Evidence from Bolivia'.

In the eyes of the jury, the article represents a strong, well-crafted analysis of decentralized institutional structures and economic incentives in promoting forest conservation investments by local municipalities in Bolivia. The jury appreciates the fact that explicit theory-based hypotheses formed the basis of the analysis, and value the clear and immediate policy relevance of the outcomes. The assessors applaud the methods for data collection and analysis, and recognize the potential to apply this approach to other commons, as well. The jury especially mentions that the use of longitudinal data is (unfortunately) rare in our community and expresses the hope that by rewarding this paper, others will be encouraged to pay more rigorous attention to processes over time, as well. The IASC congratulates the awarded authors with their accomplishment.

The awarded article may be read here: https://www.thecommonsjournal.org/articles/10.18352/ijc.494/

3rd Thematic IASC-Conference on Knowledge Commons to be held in Paris from the 20th to the 22nd of October, 2016

'ADVANCING KNOWLEDGE COMMONS THROUGH LEGAL AND SOCIAL CHANGES' - WHEN COMMONS MEET LAW AND PUBLIC POLICY

Conference chairs: Séverine Dusollier, Tom Dedeurwaerdere

On 20, 21, and 22 October 2016 (please notice that the conference has been extended with an extra conference day on the 22nd!), SciencesPo Paris will be hosting the 3rd Thematic IASC-Conference on Knowledge Commons. Building upon the successful 2012 and 2014 thematic IASC conferences on knowledge commons, this third conference aims to look at the normative effects and institutionalization of the many initiatives based on knowledge commons and how commons provide new legal tools, public policy choices, and forms of social, economic and governance innovations. To this purpose the

conference aims to take stock of the latest developments in public policies and legal initiatives around knowledge commons, as well as how the attempts to give a proper legal definition of commons in different countries bring changes in law and property regimes. The key questions that this conference will cover are the sustainability of knowledge commons that could be achieved by giving normative effects to the relationships and collectiveness they create, the possible articulation between grassroots commons movements and public policy, To such end, examples of governance models or legal revisions organizing commons in diverse countries will be studied, particularly as far as knowledge commons are concerned.

GOVENPRO Conference on Environmental Commons (Paris, 15-16 Nov. 2016)

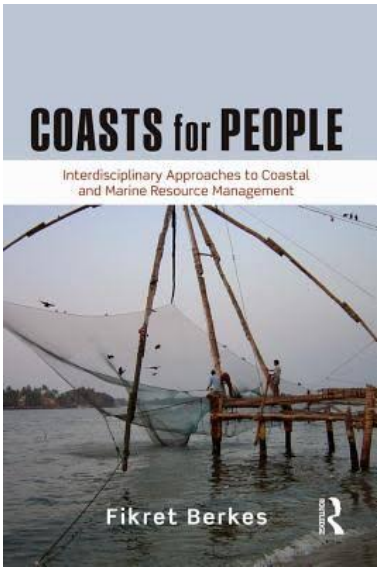
IASC-member Fabien Locher is the main organizer of the conference entitled 'The environmental commons: communities, practices and institutions. Historical approaches, France and the French colonial empire, 17th-20th centuries', which will be held in Paris, 15-16 November 2016. This conference, resulting from and supported by the GOVENPRO-project, will be devoted to the history of environmental commons in France and its colonial empire from the17th to the 20th century

This conference has three main objectives:

- to bring together and enable an international dialogue between researchers working on this topic, using a variety of analytical frameworks. This comprises research by e.g. historians of rural, economic, political and environmental history, legal historians, anthropologists, sociologists, political scientists engaged in the historical study of their subjects.
- to identify and overcome the analytical limitations of our historical understanding of environmental commons, as provisionally and nonexhaustively sketched out above.
- to contribute to the development of the emerging research (e.g., Greer 2012) on the historical trajectories of the commons in France's colonial empire.

The new book by Professor Fikret Berkes, *Coasts for People*, is now available!

Professor Fikret Berkes, former president of the IASC and winner of the Elinor Ostrom Award on Collective Governance of the Commons 2015, has released his new book, *Coasts for People*.



Coasts for People

From the Amazon website of the book: Issues of sustainability and increased competition over coastal resources are changing practices of resource management. Societal concerns about environmental degradation and loss of coastal resources have steadily increased, while other issues like food security, biodiversity, and climate change, have emerged. A full set of social, ecological and economic objectives to address these issues are recognized, but there is no agreement on how to implement them. This interdisciplinary and "big picture book" – through a series of

vivid case studies from environments throughout the world – suggests how to achieve these new resource management principles in practical, accessible ways.

Fikret Berkes is Distinguished Professor and Tier 1 Canada Research Chair at the Natural Resources Institute, University of Manitoba, Canada. His studies on community-based resource management and the use of commons in a number of regions of the world have led to insights regarding the management of coastal and marine resources. Dr. Berkes has authored some 250 peer-reviewed journal papers and chapters and ten books.

You may purchase the book at: https://www.amazon.com/Coasts-People-Interdisciplinary-Approaches-Management/dp/1138779814.