



CGIAR systemwide program on
COLLECTIVE ACTION AND
PROPERTY RIGHTS

CAPRI Working Paper No.103

December 2011

CATALYZING COLLECTIVE ACTION TO ADDRESS NATURAL RESOURCE CONFLICT

Lessons from Cambodia's Tonle Sap Lake

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The CGIAR Systemwide Program on Collective Action and Property Rights (CAPRI) is an initiative of the 15 centers of the Consultative Group on International Agricultural Research (CGIAR). The initiative promotes comparative research on the role of property rights and collective action institutions in shaping the efficiency, sustainability, and equity of natural resource systems. CAPRI's Secretariat is hosted within the Environment and Production Technology Division (EPTD) of the International Food Policy Research Institute (IFPRI). CAPRI receives support from the Governments of Norway, Italy and the World Bank.

CAPRI Working Papers contain preliminary material and research results. They are circulated prior to a full peer review to stimulate discussion and critical comment. It is expected that most working papers will eventually be published in some other form and that their content may also be revised.

Cite as:

Ratner, B.D., G. Halpern, and M. Kosal. Catalyzing Collective Action to Address Natural Resource Conflict: Lessons from Cambodia's Tonle Sap Lake. CAPRI Working Paper No.103. Washington, D.C.: International Food Policy Research Institute. <http://dx.doi.org/10.2499/CAPRIWP103>.

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ABSTRACT

This paper reports on outcomes and lessons learned from a 15-month initiative aimed at strengthening collective action to address natural resource conflict in Cambodia's Tonle Sap Lake. Employing the Appreciation-Influence-Control (AIC) model of participatory stakeholder engagement, the initiative aimed in particular to build collective understanding of the sources of vulnerability in fisheries livelihoods and to catalyze efforts to support resilience in this valuable and productive social-ecological system. Outcomes include important shifts in fishery access rights and resource management authority—notably the transfer of a large, commercial fishing concession to community access, and the resolution of a boundary dispute involving community fishery organizations in neighboring provinces. Motivated by such successes in collaborative problem analysis and advocacy, the main national grassroots network representing fishing communities have also modified its internal governance and strategy of engagement to emphasize constructive links with government and the formal NGO sector. The experience demonstrates the potential of such an open-ended process of action research to enable collective action and improve natural resource governance, even amidst ongoing resource conflict. We conclude with a set of lessons learned to guide such efforts in practice.

Keywords: collective action, resource conflict, stakeholder collaboration, governance, social-ecological resilience, Cambodia, fisheries

ACKNOWLEDGMENTS

The experience related in this paper represents a collective undertaking. The action research team included: Kaing Khim, Ly Vuthy, Ouk Vibol, and Keo Sovatapheap (Fisheries Administration); So Sovannarith, and Kim Sour (Cambodia Development Resource Institute); and Om Chhim, Chheng Kim Heng, Ke Sothy, Keo Rotha, Hout Han, and Long Sochet (Coalition of Cambodian Fishers), in addition to the authors, Blake Ratner and Mam Kosal (WorldFish Center). The outcome evaluation team was comprised of Mam Kosal, Guy Halpern, Eam Dyna, and Chea Seila, with guidance from Mark Dubois on the Most Significant Change methodology. For guidance and support on behalf of the Fisheries Administration, the team is indebted to H.E. Nao Thuok, Fisheries Administration Director General. Carol Colfer, Eric Haglund, Jane Pratt, Kaing Khim, and Lieng Sopha each provided helpful review comments on an earlier draft. For guidance and feedback on the AIC approach, our thanks go to William E. Smith. This work was made possible through a grant from the CGIAR Systemwide Program on Collective Action and Property Rights (CAPRI).

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CATALYZING COLLECTIVE ACTION TO ADDRESS NATURAL RESOURCE CONFLICT

Lessons from Cambodia's Tonle Sap Lake

Blake D. Ratner¹, Guy Halpern, and Mam Kosal

1. INTRODUCTION

Efforts to synthesize lessons from diverse experiences in community-based natural resources management point to the importance of social capital and collaborative partnerships, effective communications, participatory decisionmaking, and mechanisms for conflict resolution linking actors across sectors and scales (Armitage et al. 2008; Gruber 2010). Yet, many well-intentioned efforts in community-based natural resource management are stymied by power relationships and institutional obstacles that prevent desired outcomes, or make them very difficult to achieve without the “shelter” of a project administration structure and high levels of sustained financial investment. Especially challenging are situations where poor local resource users are marginalized in social, political, and economic terms, and where there is active conflict over resource access and use, or a high risk of such conflict.

While there is broad agreement among development analysts that “empowerment” of local resource users is key to achieving improvements in resource management and governance under such circumstances, the conventional development project approach is poorly suited to the task. The conventional project approach focuses on things that can be controlled—inputs, activities, deliverables, and outputs—and less on things that cannot be controlled but whose influence is often much more significant in determining the long-term outcomes of an intervention. In particular, many interventions fail to achieve their goals because of power relations and institutional obstacles. Because of this, it is critical to focus explicitly on how to achieve social and institutional change, even for initiatives whose results are measured primarily in terms of technical changes in natural resource management.

For these reasons, development practitioners need effective models of organizing amid power imbalances and conflict to address the challenges of governance in natural resources management. One such model is Appreciation-Influence-Control (AIC), a framework for understanding stakeholder interactions and organizing for social and institutional change, distinguished by its emphasis on whole systems, open search for solutions, and explicit treatment of power. These characteristics make the model especially well-suited to catalyzing collective action to address shared challenges of natural resources management.

This paper reports on outcomes and lessons learned from a 15-month initiative aimed at strengthening collective action to address natural resource conflict in Cambodia's Tonle Sap Lake. Employing the AIC model of participatory

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stakeholder engagement, the initiative aimed in particular to build collective understanding of the sources of vulnerability in fisheries livelihoods and to catalyze efforts to support resilience in this valuable and productive social-ecological system. A secondary aim was to document and reflect on the change process underway and its outcomes. Documented outcomes include important shifts in fishery access rights and resource management authority—notably the release of a large, commercial fishing concession to access by local communities, and the resolution of a boundary dispute involving community fishery organizations in neighboring provinces. Motivated by such successes in collaborative problem analysis and advocacy, the main national grassroots network representing fishing communities have also modified its internal governance and strategy of engagement to emphasize constructive links with government and the formal NGO sector. The experience demonstrates the potential of such an open-ended process of action research to enable collective action and improve natural resource governance, even amid ongoing resource conflict. We conclude with a set of lessons learned to guide such efforts in practice.

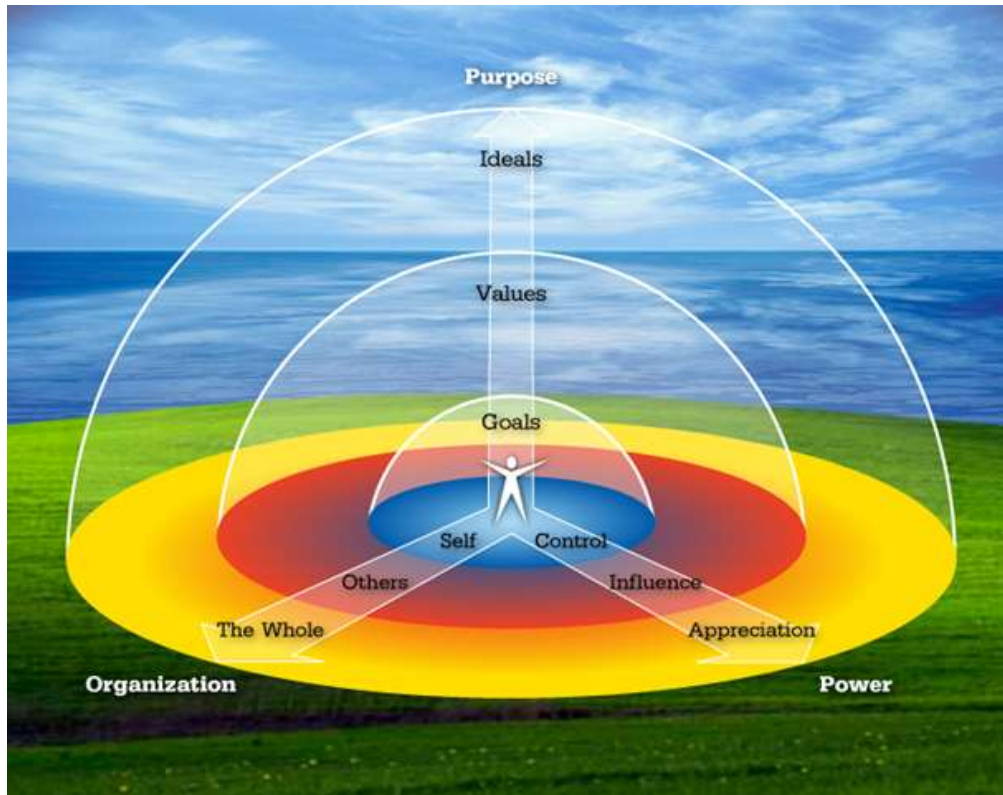
2. THE AIC MODEL

AIC is a whole-systems approach to stakeholder interaction, analysis, and collaborative planning. Applicable in small as well as very large groups, the approach entails developing a shared appreciation of the context for the issue at hand, sharing experience with the aim of influencing others' perspectives and preferences for potential courses of action, and finally narrowing in on the particular realm of actions within an individual's or group's control. By distinguishing factors that can be appreciated, influenced, and controlled, the model makes explicit recognition of the whole context for action and the power of different actors who are either directly engaged or who have influence on the outcomes (Smith 2009). Conceptually, this dynamic interaction is represented in three dimensions as nested levels of power, organization, and purpose (see Figure 1). Critically, power is conceived not as a zero-sum game (one's gain is another's loss) but as a realm that can be expanded as different actors identify together with higher levels of common purpose, and then organize to achieve goals aligned with that purpose.

The foundation for AIC as an organizing process in international development emerged as a critique of the failures of the conventional project approach of the World Bank, where a control-centered model derived from engineering had been carried over into the field of rural development, effectively ignoring the dispersed and contested dynamics of power (Smith, Thoolen, and Thoolen 1980). A crisis in the energy sector in Colombia in 1985 provided the opportunity for the first large-scale application of the AIC organizing process, and helped legitimize the notion of stakeholder engagement to produce solutions that are contextualized within the broader constraints and opportunities afforded by cultural, societal, and political factors (World Bank 1996). The approach was later applied to community-driven development planning in rural Thai villages, focused on women's empowerment, natural resource management, and reproductive health (MacNeil 1998), and was

replicated in diverse realms of Thai development planning from local to national levels addressing rural and urban poverty (Furugganan and Lopez 2002).

Figure 1. The Appreciation-Influence-Control model: An overview.



Source: Smith (2009), reproduced with permission.

The AIC organizing process is not a methodology in the strict sense but rather a framework for investigation and action when diverse actors and interests are involved (MacNeil 1998). While the details of the process are meant to be adapted to the particular context in which it is applied, generally it is a facilitated process bringing together participants representing the whole range of stakeholders, and calls for a purposeful focus on the three phases in sequence:

- **Appreciation.** What is the purpose that different actors are striving towards? What are the elements of shared purpose? What is the current reality? What are the factors that constrain or enable progress towards that desired future? The appreciation phase is focused on increasing awareness of the whole system, and the perspectives of all actors involved. There is no judgment, critique, or debate; participants are asked to share their insights without regard to status or position.
- **Influence.** What are the potential courses of action? What are the merits and risks of alternative paths? What roles could each actor potentially play in either advancing or blocking progress? The influence phase is characterized by intense debate, and convergence and divergence in

values are made explicit and explored; participants negotiate and aim to influence one another.

- Control. What specific actions am I (or my group) ready to commit to in service of a shared purpose? How will we gather the resources required, monitor progress, and increase our capacity to achieve these goals? Who else do we need to engage? The control phase focuses on developing a plan of action, making explicit commitments, and taking first steps; participants choose their commitments without coercion, motivated by their appreciation of broader needs and possibilities.

These phases of the AIC process can be applied and repeated in a wide range of contexts, from a single meeting, to a full day or multiday workshop, to a longer term initiative. The basic principles can be made more or less explicit as the situation demands. As was demonstrated in Thailand, the process is a flexible one, which local organizers are able to adapt to new sectors and use to work across multiple scales (Furugganan and Lopez 2002; Layanana 2004).

The three phases of the process can also be understood as efforts to exercise three distinct "powers": the power of appreciation (building a shared awareness of the broader context, the opportunities, and constraints), the power of influence (engaging in effective dialogue among diverse interest groups), and the power of effective decisionmaking or "control" (making responsible commitments and following through on these). One goal of the process is to have participants exercise these three powers in roughly equal parts.

As illustrated in the AIC model (Figure 1), the three levels of power correspond as well to three levels of organization. Critical here is the ability to shift attention and effort from the individual or small group, to the realm of multistakeholder interaction, to the "whole system" of social and ecological relationships that affect the goals of an initiative. Precisely because so many problems of natural resource management cannot be "solved" at the level of the farmer's plot or the fishing household, the ability to foster collective action is especially important (Knox, Meinzen-Dick, and Hazell 2002).

3. AN INITIATIVE TO STRENGTHEN COLLECTIVE ACTION AROUND THE TONLE SAP LAKE

More than half of Cambodia's rural population depends on fish and aquatic resources for some portion of their livelihood. Fish is also the leading source of animal protein in the rural diet, and a vital source of nutrition in a country where 30 percent of children are undernourished. The Tonle Sap Lake, the largest lake in Southeast Asia, is the heart of this remarkably productive fishery. Today the resource is under threat from a combination of sources, including destructive fishing practices, land use change, fishing beyond the natural capacity of the system to regenerate, and dam development in the Mekong upstream. As the range of competing uses of water and wetlands expands, as well as the numbers of people seeking a livelihood from fishing, the most vulnerable risk being excluded (So et al. 2011).

In September 2009, the WorldFish Center and local partners launched an action research project with a purpose to “strengthen the capacity of fishing communities of the Tonle Sap Lake to engage in collective action beyond the local scale, in support of governance arrangements that anticipate and manage competing uses of aquatic resources equitably.” Specifically, it focused on the collective capacity of an emerging grassroots network of fishing communities to identify and articulate threats, negotiate with authorities to represent the common interests of fishing communities, and collaborate with government and private actors to resolve resource conflicts. The overall development aim was conceived as social-ecological resilience, encompassing improved livelihood security, reduced vulnerability, and sustained productivity of the fishery resource. The initiative was financed primarily by the CGIAR Systemwide Program on Collective Action and Property Rights (CAPRI) as part of a broader set of grants on the theme of securing rural people’s access to natural resources.

Partners in the initiative employed the AIC approach to plan the overall research and stakeholder engagement process, to structure and facilitate the consultations, and to analyze emerging results collaboratively. The team organized a series of local and provincial consultations in the five provinces that border the Tonle Sap Lake, which engaged local stakeholders in assessing the character and roots of resource conflicts in the lake and developing strategies to address these. The substantive conclusions of this analysis—detailing the issues of destructive and illegal fishing practices, clearing of flooded forests, competing land and water use, and overlapping resource claims and boundary disputes—along with policy recommendations, are reported separately in So et al. (2011). That paper also details the governance constraints that have often obstructed efforts by different actors to address these problems. These include poor coordination among government agencies across sectors and across levels of administration, weak accountability of authorities towards local constituencies, and ineffective mechanisms of recourse through the courts or administrative channels.

The focus in the present paper is the process the action research team employed, particularly its application of AIC, the outcomes of that process, and the lessons learned with regards to catalyzing collective action to improve management of contested resources. The initiative was distinguished from the outset by its commitment to shared ownership and decisionmaking among a unique collection of partners. The three domestic partners were the Coalition of Cambodian Fishers (CCF), a grassroots network of fishing communities around the lake; the Fisheries Administration (FiA), the key sectoral authority within government; and the Cambodia Development Resource Institute (CDRI), the leading domestic policy research institute. The WorldFish Center convened the parties to initiate the collaboration, and supported the domestic partners to undertake the consultative process.

Employing an action research approach (Whyte 1984), the partners agreed that the goal was not only to study a problem, but also to work collaboratively with local stakeholders in assessing both the underlying causes of the problem and possibilities for cooperative action to address it. Indeed, the core purpose was defined in terms of capacity for social and institutional change, with the functions of research, learning, and communication of outcomes conceived as supporting that core purpose.

Following the AIC model (see Figure 1), the team worked to first articulate the high-level statement of purpose in terms of “ideals” of capacity for collective action and improvements in governance, contributing to livelihood resilience and resource sustainability. This high-level purpose became the premise for convening diverse stakeholders, in that it provided elements that all could agree with, even if they maintained important differences at the level of values, and more specific goals relating to the multiple interests of individual groups. The dialogue events then provided a process by which participants could work down this hierarchy—not “resolving” differences but making them explicit and helping each group appreciate those differences, then moving on to action commitments that support the shared purpose.

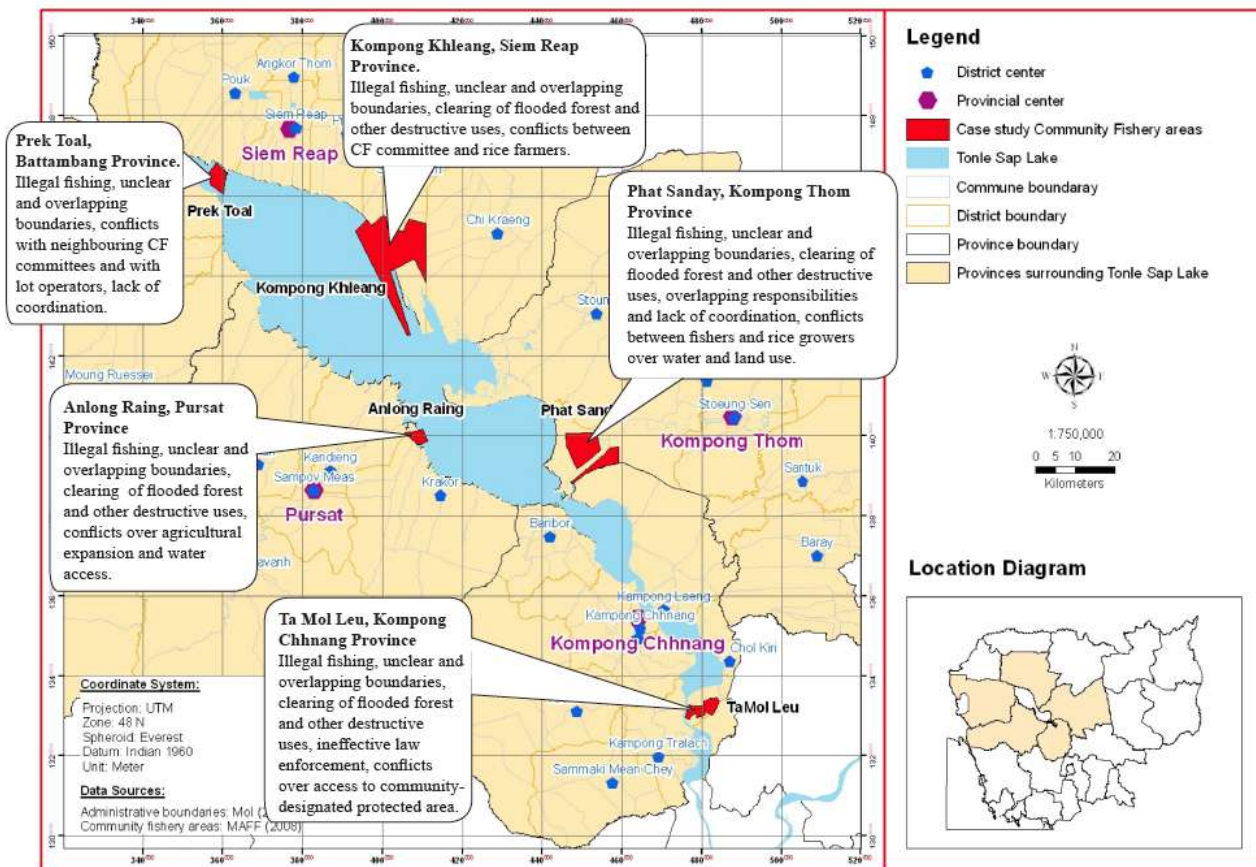
Site selection followed a purposive approach (Patton 1990), based on the following criteria:

- Representation of sites in the five provinces surrounding the lake. This was to enable exchange of experiences and networking among participants in the research process across provinces, a contributing factor for more effective collective action at the lake basin scale.
- Prior research activities that provide a documented record of aquatic resource-related conflicts and efforts to manage or resolve these conflicts. This offered a dual advantage. First, the research team was able to work from this documented record to probe and compare the evolution of resource conflicts and conflict management efforts involving the case study community. Second, one or more of the partner organizations had an established set of relationships to build on, providing a basis of trust that enables participants to quickly probe sensitive issues, and extend the analysis from local to broader scales.
- Representation of a variety of conflicts with regards to resources in dispute (fishing access, water use, land tenure) that impinge on fisheries livelihoods, scale of conflict, and stakeholders involved. This enabled the research team to address the main types of conflict currently affecting Tonle Sap fisheries.

An overview map of the five local sites and key issues for each is provided in Figure 2.

The action research process began with a series of local and provincial consultations between October 2009 and January 2010. The local consultations were convened in each of five case study communities, involving local fishers, fish traders, community fishery members and leaders from the host village and neighboring communities, police officers, commune council councilors or chiefs, and fisheries officers, as well as in some cases environment officers, military police, and district officials—a total of 172 participants in five local consultations. Each local consultation was followed immediately (typically the next day) by a provincial consultation, which provided an opportunity for select participants from the local consultation to present outcomes and explore further solutions with the next level of stakeholders, involving a broader range of provincial agencies, NGOs, provincial police, gendarme commissioners, sector department heads and other senior government staff—a total of 113 participants in five provincial consultations.

Figure 2. Local case study sites and key issues.



Source: So et al. (2011).

In addition to seeking a balanced representation of these various stakeholder groups, the partners worked to achieve as much gender balance as possible. Organizers took this into account in issuing invitations for participants, by explicitly including representatives of women’s self-help and marketing groups as well as women in leadership roles in community fisheries, village councils, and provincial departments, and in NGOs and civil society networks. Facilitators helped draw out women’s voices where needed during the dialogue events. The Deputy Director General of the Fisheries Administration, Ms. Kaing Khim, also played a key role as chair of two of the provincial workshops and overall leader of the Fisheries Administration partnership in this initiative. Nevertheless, women’s participation remained imbalanced, reflecting the broader gender disparity in leadership positions from local to national levels.

A national consultation was held at the Fisheries Administration headquarters in Phnom Penh in April 2010. The consultation was chaired by the Director General of the FiA and included senior management from the FiA and other associated government agencies, the Tonle Sap Basin Authority, the Cambodian National Committee, NGO representatives, and participants from the five provincial consultations. Core team members from FiA, CCF (the provincial coordinator from

each of the five provinces plus the national coordinator), CDRI, and WorldFish participated in all the consultations and shared responsibility for facilitation.

An outcome evaluation exercise was launched in mid-October 2010, which entailed revisiting the case study sites and conducting followup interviews on events that had occurred in the intervening 8 to 12 months (depending on the site). Participants at all levels had undertaken a range of followup actions in response to the issues identified at the consultations, sometimes with the support of the FiA and/or CCF, but without any direct assistance by the research partners (CDRI and WorldFish). Apart from minor costs to compensate for the time and travel of CCF partners, as well as travel and workshop costs for one followup meeting convened by FiA, no additional CAPRI project funds were applied in support of the followup actions.

The outcome evaluation process relied on the Most Significant Change methodology (Davies and Dart 2005), using semistructured interviews to elicit people's perspectives on the changes occurring in their lives and in their local context without prejudicing the answer in any one direction. In order to ensure a degree of neutrality in assessing outcomes, the interview team was comprised of a different set of researchers than those who took part in implementing the initiative, apart from one, who provided a necessary bridge of introductions and continuity for local stakeholders. The interviews were conducted with a wide variety of stakeholders, some who participated in the original consultations and some who did not. They included fishers, traders, police officers, village leaders, commune council members and leaders, community fishery (CF) members and leaders, and NGO representatives. Some of the interviews were conducted in small groups, while others were conducted individually; in sum, 41 interviewees were included across the five local sites. Additional interviews were conducted with the Deputy Director General of FiA and the national coordinator of CCF. Evaluation team members aimed to triangulate by verifying key information with interviewees representing different sectors and perspectives, then conducted followup checks to confirm findings and minimize errors in interpretation.

4. OUTCOMES

The three most significant outcomes of the initiative were each unanticipated, though very much in line with its purpose. Two represent important shifts in fishery access rights and resource management authority—notably the release of a large, commercial fishing concession to access by local communities, and the resolution of a boundary dispute involving community fishery organizations in neighboring provinces. The third is a shift in institutional relationships, as CCF modified its internal governance and strategy of engagement to emphasize constructive links with government and the formal NGO sector in response to its successes in collaborative problem analysis and advocacy. This section details each of these main outcomes, followed by a summary of additional outcomes related to stakeholder representation and accountability in decisionmaking over resource access and use.

The release of fishing lot number 1

Villagers in Phat Sanday commune (Kompong Thom Province) have long voiced concerns over Fishing Lot Number 1. The lot was operated since the 1980s as a commercial concession administered by auction under the authority of the Ministry of Agriculture, Forests, and Fisheries (MAFF). In 2001, amid a broader wave of reform (Ratner 2006), a substantial portion of the lot was released to community access. The remainder was converted in 2003 to a “research lot.” Despite the shift in official status there was little change on the ground; commercial exploitation continued and local villagers were excluded from fishing during the lot operating season. In October 2010, however, in response to community mobilization, the lot was terminated, and MAFF granted access and management rights to the local communities. The newly released area, measuring 2,684 hectares, represents a significant resource for local livelihoods (Phoeun Phean, Deputy Director, Department of Fisheries Affairs, FiA).

Despite similar local complaints and conflicts in other sites around the lake and along the Mekong and Tonle Sap rivers, this is the first fishing lot to have been released to community control since the major reforms of 2000/2001, making it an important outcome at both local and national levels. Indeed, in Phat Sanday as well, locals had made earlier requests repeatedly for access to better fishing grounds, including efforts to swap seasonally-flooded portions of their existing community fishery zone for the more productive zone within the lot. The CF chief had previously organized petitions and pressed the villagers’ case with delegations of senior officials from Phnom Penh visiting the area.

What made the difference this time? Local interviewees point to a convergence of factors.

“We don’t have many opportunities to raise these issues at the provincial level,” says Long Sochet, the national CCF organizer, highlighting one of the turning points in the process. The provincial consultation provided a constructive setting for the local CF chief to present the community perspective to provincial officials, and his words carried more weight when a cantonment fishery official who had participated in the local consultation confirmed the concerns he raised. A fisheries official from the inspectorate level then suggested a followup roundtable, which explored the options in more depth and with other officials involved.²

“More active communication and engagement from senior officials helped support the lot’s release,” reports Ung Meng, CF Chief in Phat Sanday. Emboldened by the encouragement they received at the provincial level, local village leaders decided to organize a new petition, endorsed by local authorities and with the support of CCF. The petition was delivered to the National Assembly, and Nguom Ngel, second deputy president of the National Assembly, responded by organizing a visit to Phat Sanday, accompanied by the Minister of Agriculture and the Director General of FiA. According to participants in the meeting, despite reluctance on the part of MAFF to consider a release given that over half the surface area of fishing lots had already been released to communities in the reforms of 2000/2001, Nguom Ngel replied that “there’s nothing we can’t resolve.”

² The Fisheries Administration is structured in tiers, with a national headquarters and – in descending order – inspectorates (large national subregions), cantonments (one or more provinces), divisions, and triages (the most local post).

The President of the Senate subsequently backed the idea of a release, it was debated internally at the highest levels of government, and the MAFF decision was later announced by radio, to the joy and astonishment of villagers who had long pressed for a change. For other communities on the Tonle Sap, this experience demonstrates the possibilities for effective advocacy. It also helped strengthen the community's relations with government, and influenced the strategic thinking of CCF about its role in relation to government.

"The government seems to understand the significance of fisheries better due to [this initiative]" says Chheng Kim Heng, the CCF provincial organizer for Kompong Thom.

A negotiated agreement to resolve a boundary dispute

One of the most challenging conflicts over resource access identified in the research process concerned a disputed area claimed by CF organizations from Koh Chiveang (near Prek Toal, in Battambang province) and Keo Por (in neighboring Siem Reap province). The concerns emerged in both local consultations and provincial consultations in the two provinces but could not be effectively addressed at that level because the dispute crossed provincial boundaries. Following the national consultation, FiA and CCF team members agreed that the boundary dispute was a top priority for followup intervention, and worked together to organize a negotiation on site. The negotiation involved CF members from both sides, the commune chiefs, fisheries officers from the two provinces, the regional cantonment, and two officials from the central FiA offices in Phnom Penh. Direct negotiations between the local parties resulted in an agreement to designate the disputed area as a jointly managed fishing ground, and established a joint management committee for the purpose, with membership from both the Keo Por and Koh Chiveang community fishery organizations.

Interviewees credit the open process of negotiation, which genuinely explored alternative options to resolve the dispute, for building mutual awareness and raising the level of trust among local stakeholders to a point where a jointly implemented solution became feasible. Importantly, even though the agreement has not yet been formalized by the Fisheries Administration, it has already been implemented on the ground, with all key parties who took part in reaching the agreement now taking steps to uphold it. Chhe Samnal, a CF executive in Prek Toal reports a sharp drop in conflict among fishers over resources in the area since implementation of the agreement.

While the convening role of FiA was essential, along with the institutional support it provided to reach and enforce an agreement, the terms of the agreement were locally defined. FiA officials had initially proposed designating the disputed area a conservation zone.

"I pointed out that if you accept this solution, there will be no more fishing in the zone, and people won't be allowed to travel through the area either, which is an important travel route" says Long Sochet, the national CCF coordinator. By exploring the implications of various management options on all parties involved, the stakeholders were able to arrive at a solution perceived by all sides as legitimate, which would likely not have occurred in the case of a solution imposed

from above. Reflecting on the importance of building that shared understanding among local stakeholders and working with government officials as partners, Long Sochet notes that the CCF "...learned from advocacy efforts in Phat Sanday ... to settle differences in Prek Toal."

A shift in strategy for the Coalition of Cambodian Fishers

The Coalition of Cambodian Fishers acts in a variety of roles: as an advocate for the interests of fishing communities, as a conduit for capacity building, and as a vehicle for information sharing between geographically disparate communities. As a result of CCF's involvement in the CAPRI initiative and bolstered in particular by the outcomes described above, this grassroots network has shifted its strategy in several important ways.

"We have learned from this experience . . . realizing how important it is to bring people together at the village level, at the commune level, and then to take these issues to discuss at the provincial level. We've seen how this can help those above understand the problems that local people face," explains Long Sochet, the national coordinator of CCF. Having observed and practiced stakeholder facilitation using the AIC approach, the core team members from CCF have worked to replicate and adapt the process in other locales, especially where communities are constrained by the fishing lots or face disputes over access to and management of fisheries resources. They developed plans to expand this work in 2011, and are seeking funding to support that expansion.

Second, CCF is conducting internal organizational changes aimed at strengthening and formalizing its links with established NGOs and improving its capacity to collaborate with and influence government. The network has recently established a permanent board of representatives from national and local NGOs, in order to coordinate action, share information, and advise the CCF on its strategy. As a grassroots organization lacking the formal status of an NGO, CCF organizers see formalizing these links as a route to extending their capacity for collective action across different geographic regions and from local to national levels. Having achieved an improved profile in the wake of its recent successes, CCF organizers have since received invitations for the group's participation in events and activities addressing river protection, water management, advocacy, and human rights.

Third, CCF has deepened its commitment to supporting the very small-scale efforts of community-based organizations (CBOs) that address immediate needs in fishing communities. An important thrust in its evolving strategy is aimed at building capacity at the CBO level for activities such as microcredit, women's groups, and fish processing and marketing. Drawing on its improved NGO links, the network hopes to identify partners to assist with local livelihood development, build connections to markets, and increase financial support for these small initiatives. CCF leaders envision that the combination of effective support to CBOs and improved links to NGOs and government will make it an increasingly effective voice supporting the interests of poor villagers in fishing communities and conduit for collective action at subnational and national scales.

CCF was inspired initially by the Assembly of the Poor in Thailand, which helped catalyze a significant policy shift towards investments in rural development

and rural services by linking together a wide range of community-based organizations and speaking with a shared voice (Missingham 2003). Its roots date to 2004, when the first strands of the network began to form in the provinces around the Tonle Sap Lake, and it subsequently expanded to include networks along the Mekong River and coastal Cambodia as well. While CCF was frequently vocal in its criticisms of government and had managed to attract media attention through a protest stance, it achieved little measurable influence on actual policy implementation in the past. While not relinquishing the option to protest, CCF members point to the CAPRi initiative as demonstrating the value of a collaborative approach when there is an opportunity to convene relevant stakeholders, and cite improved links with FiA in particular as opening important new opportunities.

Additional outcomes

Interviewees cited a range of other positive changes during the outcome evaluation, some of these clearly citing the CAPRi consultations as the primary or contributing factor in the changes, others where the attribution is less clear or direct. Though interviewees were asked to identify both positive and negative changes, no negative outcomes attributed to the consultations or subsequent efforts at collective action were reported. The only negative changes reported concerned general livelihood issues, such as declining fish stocks or difficult rice markets. Table 1 summarizes those additional outcomes that were deemed either clearly attributable to the initiative or likely influenced by it; all are positive changes from the perspective of community fishery members, the main “beneficiary group” identified at the outset.

There were of course “losers” in this process as well, particularly the lot operators who lost access and use rights to fishing grounds released to communities. But compared to the broadly shared gains in income, food security, and nutrition that are expected for local fishing families, as well as the associated opportunities in processing, trade, and support services in the local economy, it is easy to make the case that the change is in the public good. Indeed, the Prime Minister made that very argument the following year (August 2011), when he announced the suspension of all the remaining fishery concessions on the Tonle Sap Lake. He explicitly acknowledged the political calculus involved in disappointing a few commercial interests in favor of sustaining benefits more broadly shared among the local population (Ratner 2011).

Table 1. Summary of additional outcomes.

Type of relationship	Type of Change	
	Improving Representation	Strengthening Accountability
Within and between villages	<p>Increased cooperation between neighboring CFs with assistance from CCF (Ta Mol Leu)</p> <p>Improved relations between neighboring commune councils, as well as between the CF and local villagers (Kg Khleang)</p>	<p>Neighboring CFs have engaged in joint patrols in order to combat illegal fishing and flooded forest harvesting (Ta Mol Leu)</p> <p>Increased reporting of illegal activity, more meetings between the commune council and CF, more patrols by CF members, and more effective collection of illegal fishing equipment (Kg Khleang)</p> <p>Increased interaction with neighboring commune councils, resulting in better protection of flooded forests (Kg Khleang)</p>
Villages and NGOs or civil society networks	<p>Neighboring CFs in dialogue to resolve dispute with assistance from CCF (Prek Toal)</p> <p>NGOs operating in the area have been more open to input from local villagers (Anlong Raing)</p>	<p>CF is increasing engagement with NGOs to raise awareness amongst villagers of laws regarding natural resource management (Phat Sanday)</p> <p>Villagers' increased knowledge of the working of NGOs in the area has helped obtain support for the construction of a school and a building for the CF, as well as seek support for further projects (Anlong Raing)</p>
Villages and local admin.	<p>Improved relations between the police, the community and the military police (Anlong Raing)</p> <p>More effective collaboration between fisheries officers, environment officers, and the CF, with more ad hoc meetings organized to deal with emerging issues (Kg Khleang)</p>	<p>More open communication between villagers and fisheries officers, resulting in better control of illegal fishing (Ta Mol Leu)</p> <p>More CBOs formed to improve local livelihoods, and these CBOs are working more with fisheries and environment officers through joint training and workshops (Phat Sanday)</p> <p>Improved relationship between the CF and the fisheries and environment officers, with better responsiveness to reports of illegal activities and calls for assistance in law enforcement (Phat Sanday)</p>

Source: Authors.

Note: Case study site noted in parentheses

5. LESSONS

What lessons can we draw from this initiative regarding the application of AIC, the outcomes of that process, and the factors needed to catalyze collective action to improve management of contested natural resources?

AIC can be an effective process to influence the stakeholder “action arena” towards positive forms of collective action. Ratner et al. (2010) propose an analytical framework for analysis of environmental resource conflict and resilience,

distinguishing context, collective action institutions, action arena, and outcomes. In the terms of this framework, the Tonle Sap initiative employed AIC was a means of influencing the action arena, by introducing a structured process of stakeholder engagement that shifted the power dynamics typical of interactions among these stakeholders, enabling new partnerships and patterns of interaction.

Collective action in defense of local livelihoods and resource access can influence policy implementation and governance in unanticipated ways. The core team at the outset agreed on objectives for the initiative that focused on “improving collaboration between local civil society actors and government in assessing the interests of fishing communities,” improving awareness “regarding the factors that drive resource competition in Tonle Sap fisheries,” as well as awareness of “the potential roles of different actors in addressing these . . .” Actual outcomes achieved included these and much more, quite to the surprise of the team members, given the modest resources, short time period, and relatively few activities devoted to the undertaking. Indeed, the outcomes detailed above reflect improvements in all three dimensions of natural resource governance: stakeholder representation, distribution of authority, and mechanisms of accountability (Agrawal and Ribot 1999; Ribot 2002; Ratner 2011).

The principles of the AIC process are more important than particular techniques. In facilitating the stakeholder consultations at local, provincial, and national levels, the core team drew on a wide range of tools and techniques. These included small group exercises to visualize and communicate alternative futures and describe present realities, network mapping to represent the relationships among stakeholders and their relative influence, as well as visual depictions of the factors and actors that could advance or deter progress towards shared goals. The techniques were adapted over time with adjustments made to conform to shifting circumstances, including a monsoon storm that threatened to disband the very first local consultation. No matter the technique or the facilitator, however, the most important interventions concerned efforts to reaffirm the purpose and the principles at play, and sometimes these occurred outside the formal consultation process. For example, this meant seeking representation from the “whole system” even if people felt this was uncomfortable, such as the decision to join community fishery representatives and local government in a common dialogue at the Prek Toal site, despite initial resistance on both sides. It also meant affirming the autonomy of each participant to make decisions, which yields a more authentic commitment to collective action than would be achieved through a “coerced” gathering of volunteers. These repeated efforts to reaffirm the core purpose and principles meant nurturing the six conditions for transformation defined by Smith (2009), as summarized in the Box 1, below.

Because AIC imposes unfamiliar roles on facilitators and participants alike, it requires visible, high-level support and effective brokering. Though initially skeptical, the Director General of FiA became convinced of the importance of the initiative and provided a strong authorizing environment that signaled to the core team and FiA staff at all levels that this initiative was a high priority. This support, along with the persuasive energy of FiA team members and full use of their connections, helped ensure participation of senior officials at the provincial level and appropriate officers from a range of agencies at local level as well. In parallel, CCF, with its national coordinator as champion of the initiative, employed its own

influence network to ensure appropriate participants engaged in the process from civil society groups and NGOs. While the core team shared facilitation responsibilities, a senior official at the appropriate level convened each consultation, and was carefully briefed to help establish an atypical tone—one of authentic joint exploration. At the national consultation, the Director General of FiA played this role.

Box 1: Six conditions for transformation

1. *Focus on a real, pressing need.* People engaged because fisheries are central to their livelihoods and they perceive these livelihoods at risk.
2. *Organize around a purpose that transcends the interests of every stakeholder.* The organizing process focused on securing a livable future, expressed variously in terms of strengthening social-ecological resilience, reducing conflict, and sustaining livelihoods.
3. *Ensure the whole system is represented in the process.* Consultations included the widest possible range of private, public, and civil society actors at each level, and those who were not initially included were often engaged through followup actions after participants determined they had an influential role in the problem or solution at hand.
4. *Provide equal opportunity for all to participate.* While typical meetings are dominated by the most senior officials (typically men), the consultation processes improved the balance of voices through a purposive selection of participants representing different groups (including attention to gender balance) and a structure that required each to be heard.
5. *Respect the autonomy of each participant.* Participants worked hard, at the appropriate phase in the process, to influence each other's perspectives, but facilitators made clear that commitments for action, in particular, are voluntary.
6. *Structure the process to provide a way for participants to make use of all three powers.* While participants often arrive with the expectation that formal authority (control) is the only power that matters, the process provided numerous demonstrations of how the powers of influence and appreciation enable new possibilities for collective action.

Source: Smith (2009), with CAPRI Tonle Sap examples added by the authors.

Outcomes of the process rely very heavily on the people involved. The research team was formed on the basis of prior working relationships, for example, between WorldFish researchers and Fisheries Administration, as well as CDRI. This track record and trust was critical in making the case for inclusion of the CCF as a core partner in the initiative. The existing relationships of key participants in the dialogue workshops were also essential in influencing the eventual outcomes. The community fishery leader in Phat Sanday, for example, had worked over many

years to help organize petitions requesting a release of Fishing Lot number 1. When given the opportunity to speak before officials gathered at the provincial consultation, he was able to gather support in a way that enabled subsequent connections at higher levels.

Crisis can present an opportunity to reinforce purpose. The initiative met with a series of crises that could have derailed the collaboration altogether. The first crisis came at the outset, when the FiA Director General, frustrated with past public statements by the CCF, declared he would not support the proposal to partner. The second arose from an internal dispute within the project team concerning budget allocation and decisionmaking authority. The last, and most serious, followed a radio interview by the CCF national coordinator that angered the Director General to the point that he was prepared to call off the national consultation. In each instance, the effort to resolve the crisis proved a major step forward in achieving the overall purpose, because it served to clarify the commitment to joint ownership of the initiative. Rather than glossing over differences, these were made explicit; the team worked to understand the root of each concern and the complementary values this pointed towards, recognized the challenge and agreed to work to bridge it.

Social reinforcement provides incentives for follow up, independent of any project or formal monitoring structure. Typical rural development projects aim to maximize the realm of control with detailed implementation plans, activities, and objectives, an internal project management structure that absorbs significant resources, and regular supervision and monitoring of local activities as an incentive to implement according to plan. At great cost, the plans may be implemented, though they are frequently delayed, unforeseen institutional obstacles and power relationships often frustrate progress towards planned objectives, and once the project is completed and resources stop flowing, activities often stop as well. In the AIC process, because the locus of decisionmaking over strategies for the future and the freedom to choose courses of action lie with the stakeholders involved, the incentives are completely different. Having engaged in a difficult process together to develop a shared appreciation of the whole context, influenced each other, and made their individual or collective commitments public, each stakeholder has incentives to follow through based not on external monitoring but on the social reinforcement that comes from other actors who expect accountability for those commitments.

6. CONCLUSION

The experience of this initiative in the Tonle Sap Lake demonstrates the potential of AIC as an open-ended process of stakeholder engagement and action research to enable collective action and improve natural resource governance, even amid ongoing resource conflict. The outcomes are all the more encouraging given the legacy of war and revolution in Cambodia that other research in the country has identified as a significant barrier to re-establishing trust and fostering collective action (Weingart and Kirk 2008). In this respect, the fisheries sector in Cambodia has particular advantages. The legacy of forced collectivization is not as profound

as in the case of crop agriculture. There is, moreover, the positive legacy of past successes in community mobilization a decade earlier that raised public awareness about injustices in the commercial lot system and contributed to the fishery tenure reforms of 2000/2001, an extensive transfer of fisheries access and management authority from the commercial sector to communities (Ratner 2006). These reforms not only significantly improved resource access for the poor but also helped foster a sense of empowerment for many, a sense among fishing communities that it is possible to envision an alternative future and work together to achieve it (Kurien, So, and Mao 2006).

The experience has also shown that attributing outcomes to an organizing process such as AIC is complex. When participants reflect upon and strategize around solutions to some of the most intractable challenges they face, considering the whole range of stakeholders involved, the stories they paint are necessarily fine grained. As opposed to launching a relatively simple and discrete activity (such as building a clinic or a school), actors who aim to improve institutional relationships, negotiate resource conflicts, or influence policy decisions are engaging in dynamic interactions with typically a long prior history and a complex array of actors involved. Even after significant outcomes emerge, no one may have the “full story” of just what happened and why, there may be competing versions, and some may choose to downplay or highlight their influence with an eye to future relationships.

The Most Significant Change methodology adopted for outcome evaluation in this initiative was appropriate given the uncertainty about the sorts of outcomes that would emerge, and the interviews with participants and nonparticipants in the original consultations provided a useful check on the observations made. Nevertheless, devoting much more time to unraveling the complex web of interactions and storylines at each site probably would have yielded a richer picture of outcomes and the particular influence of the AIC process in relation to other factors. In the case of this evaluation, despite significant follow up, over half of the local outcomes that were deemed plausibly influenced by the initiative were excluded because the team was unable to confirm the findings in the time available. In future applications, an outcome evaluation process repeated at staged intervals over a longer period could reveal more about the stakeholder dynamics and processes of adaptation and learning as they unfold. A systematic effort to follow individual interviews with group interviews to sort out differences in opinion or interpretation could also enhance the consistency of findings.

The final question is what happens next? The outcomes documented in this paper have all been valued as positive changes in the eyes of local stakeholders. Yet the risks to fisheries livelihoods in the Tonle Sap basin remain high, as the economic viability of small-scale fishing is put under pressure by increased competition and declining catch per unit effort (Hap and Bhattarai 2009), and as water resource infrastructure and land use changes threaten to further undermine fisheries productivity. Will increases in community resource access translate into improved conservation, more equitable distribution of fisheries resources and more sustainable livelihoods for the most vulnerable? Will agreements for joint management endure in practice? Will CCF’s newfound influence allow it to broker new agreements in the interests of poor fishing communities, or will it face a backlash from private commercial interests? We do not yet know the answers, so in this sense the story we have documented is still unfolding.

Yet, one year after the project reported here officially concluded, it is clear that there are lasting influences. Most strikingly, in August 2011, ten months after the release of Fishing Lot number 1, the Prime Minister announced the suspension of all commercial lots on the Tonle Sap Lake. Civil society groups were buoyed by the success in campaigning for the release of Fishing Lot number 1, and had coordinated efforts in the intervening months to make the release of all commercial lots their top priority. While a host of political factors no doubt contributed to the policy shift, it is notable that the Prime Minister in his announcement reiterated concerns that civil society organizers had made key features of their campaign: irregularities in the allocation and administration of the fishing concessions, the need to control illegal fishing, and a goal of increasing equity in the distribution of benefits from the fisheries resource (CNV 2011).

Key civil society activists point to their experience with the CAPRI-supported collaboration as an important learning experience for the approaches to dialogue and influence that they continue to practice in work on fisheries at the lake basin scale. The evidence of gains in community resource access, improved capacity for collaboration in enforcing laws and local rules, and enhanced communication for dispute resolution suggest positive steps in the governance context for social-ecological resilience in the Tonle Sap Lake.

Much remains to be learned as well about how to sustain such efforts over time, and to maintain the gains of multistakeholder collaboration as circumstances change. The challenge of sustaining collaboration across scales is well documented across many domains of natural resource management, for example with forests (Colfer and Pfund 2011), and water resources (Lebel et al. 2005). The experiences documented here suggest a strong case for continued efforts to apply and adapt the AIC model in ways that a range of groups can incorporate into their own efforts at social and institutional change beyond the confines of a particular development project. As the approach is applied in other domains of natural resource management and rural livelihood development, it will also be essential to document and compare the lessons that emerge in order to improve the effectiveness of investments in development aid and governance reform.

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