

Adaptive Collaborative Management in Forest Landscapes

Villagers, Bureaucrats and Civil Society

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6 Capacity building for ACM

Lessons learned from training in distinct contexts

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Introduction

A significant challenge to using the adaptive collaborative management (ACM) approach is building the capacity of participants so that they have the skills, awareness, and confidence to understand and implement ACM methods to address local priorities. Not only is this true for community participants, but it is also true for the facilitators, researchers, and donors who are involved in the process. This chapter examines our insights from three cases from Bolivia, Nicaragua, and Ghana in which we introduced ACM methods in distinct contexts to assist local stakeholders in addressing forest management challenges. In each case, an initial capacity-building phase was necessary to facilitate ACM processes.

Just as social learning lies at the core of ACM (Colfer 2005a; Lee 1993; Maarleveld and Dabgbégnon 1999), training should be approached through an ACM lens to generate social learning processes, placing experimentation and reflexivity at the core of such capacity-building programmes. Social learning is central to adaptive collaboration (Berkes 2009). It is a process of “iterative reflection” where experiences, ideas, and environments are shared with others (Keen, Brown, and Dyball 2005). Iterative reflection is often conceptualized as cycles (Kolb 2014), or loops (Colfer 2005a; Kolb, Osland, and Rubin 1995), where conscious phases of group reflection are interspersed within information collection and analysis (Colfer 2005a). Applying ACM in training creates a self-reinforcing cycle that allows participants to reflect on their learning so that they can better facilitate learning with others. It also allows trainers to gauge the effectiveness of capacity building in imparting information and new understanding.

While conscious reflection on learning is foundational to ACM, communicating this basic message to both communities and facilitators, and demonstrating ways to do it, requires creativity. We found that building capacity in ACM often requires flipping conventional ideas about what it means to learn and relearning what it means to teach. One of our favourite examples from our trainings illustrates this point: as children, did we learn to ride a bicycle by going to a classroom, listening to a teacher present concepts on a flipchart

and then passing an exam? Of course not! We watched other children, then gave it a try ourselves (probably with other children's help), and undoubtedly fell down a few times until we got it right. In this situation, the primary actor is not a teacher, but the learner, who drives the learning process through her own interest and determination with the help of the group. This simple story of learning by doing shows how we naturally embrace experimentation and trial-and-error; in turn, we can channel our innate curiosity through the ACM process to learn together systematically. These experimentation processes are just as important to support during the ACM training process. In other words, just like riding a bicycle, the best way to learn to do ACM is to jump in and try. And that can be scary, especially for adults who are trained to avoid failure.

Our capacity-building efforts focused on making trainees conscious of how they learned so that they could facilitate learning with others. This involved creating learning loops that are structured to occur in short cycles, as in the course of a day or week, or over longer cycles, such as during a harvest. In our examples, we illustrate how both short and long cycles operate, and how nested learning loops can create more fundamental shifts in knowledge and understanding. Ensuring that these concepts were clear to trainees and village participants was key to engagement in these activities. Collaboration can be complicated and time-consuming, and facilitators and donors alike often underestimate the learning required on all sides to adopt collaborative approaches.

ACM is perhaps best conceptualized as an ethos – a way of understanding the world and how we can engage with change. In ACM, the ethos should apply throughout the lifecycle of a project from the initial design, through training of technicians, and engagement with local stakeholders, continuing as the project evolves and practitioners and participants alike learn together. We discuss how our approach to training emerged as experience transformed our thinking of how best to convey an understanding of social learning and experimentation as crucial components of ACM at every step of the process.

Methods

The three cases were synthesized from the authors' observations as participants in different ACM processes over a 20-year period. We present the cases in chronological order. The evidence draws from documentation, observations, and reflections created at the time. Documents included publications, training plans, workshop proceedings, project reports, evaluations, and surveys. Observations were recorded by the researchers during the ACM activities. Reflections include those among the researchers as well as regular reflections in the field with ACM teams during and after training events and ACM activities. We use these experiences to distil lessons learned for training both ACM facilitators and community members participating in ACM activities. We present the cases in chronological order to provide a historical perspective and to demonstrate how our understanding evolved as we learned over almost 20

years. As we learned how to teach others to do ACM, our own perspectives evolved – a process of researcher learning.

The cases are geographically dispersed, involving different constellations of actors and focused on different management issues; however, common themes emerge from these experiences. In the first case, ACM helped Indigenous people in lowland Bolivia to develop novel community institutions for sharing benefits from a forest management initiative. In the second case, ACM facilitated the involvement of Indigenous women in territorial and forest governance in Nicaragua.¹ In the final case, ACM created conditions for farmers, particularly women, to engage in dialogue about resource degradation in northern Ghana. In all cases, ACM provided a flexible set of tools for addressing diverse management problems; nonetheless, we faced the recurring challenge to provide local actors – both facilitators and participants – with the capacity, insight, and confidence to apply ACM to local priorities. We hope that our experiences provide insights into addressing that challenge, both during the initial ACM implementation phase as well as over the long-term uptake of ACM concepts and practices.

Case study 1: Indigenous community forestry organizations testing benefit distribution mechanisms in Guarayos, Bolivia

Issue

The first case focuses on the use of ACM methods to help a Guarayo Indigenous community in Bolivia develop a benefit distribution system as a component of their sustainable forest management plan. In the mid-1990s, Bolivia instituted reforms that devolved communal property and forest rights to Indigenous people. When the ACM work started in 2002, the Guarayo village of Cururú had gained the approval of a forest management plan with assistance from the USAID-funded Bolivian Sustainable Forest Management Project (BOLFOR), and the village was in the process of negotiating their first timber sale. The community expected that commercial timber management would generate needed income, but there was much uncertainty about how it would work. Residents had invested almost two years working on the plan, and there was increasing tension as they waited for the promised economic return from the project. It was crucial to develop a system for distributing benefits from timber sales before payments arrived to ensure that residents understood how it would work and agreed that the rules were fair (see Cronkleton, Keating, and Evans 2007, for a fuller discussion). Once cash payments were at play, it would be difficult to set the rules. By treating this challenge as a training opportunity, the ACM approach was ideal for building capacity to govern benefit distribution and create consensus around a system that villagers could trust.

Context

Cururú is located in the Guarayos TCO (the Spanish acronym for *Tierra Comunitario de Origen* or Indigenous Community Land) located in Bolivia's

Santa Cruz Department, in a lowland area characterized by broadleaf semi-humid Amazonian transitional forest. Guarayos was one of the first TCOs, created in 1996, so villages in the TCO had only recently gained rights over forests on their land (Cronkleton et al. 2009). Cururú residents were interested in using the surrounding forests to generate income opportunities, but to undertake logging activities, policies required the preparation and approval of a sustainable forest management plan and compliance with management regulations, which mostly focused on silvicultural practices, such as minimum cutting diameters and rotational harvest cycles. In 2000, the 26 families of Cururú started developing a management plan for 29,000 hectares of forest with the assistance of BOLFOR. The BOLFOR project helped the village form a community forestry organization (CFO). While the law required the formation of a CFO, the only instructions defining these institutions stated that they should follow “*usos y costumbres*” (i.e., customary practice). However, CFOs were novel institutions, as Indigenous communities lacked prior experience managing commercial timber operations.

BOLFOR provided technical guidance for Cururú’s inventory of the forest management area, as well as a commercial census for the first harvest unit. BOLFOR also provided financial support that paid half the daily wage for each community member participating in the forest brigades gathering information for the inventory and census. The plan was that the Cururú CFO would pay the remainder of the daily wages with proceeds from timber sales. In 2001, the Center for International Forestry Research (CIFOR) was invited to assist BOLFOR with its community forestry programme. CIFOR introduced an ACM approach as part of a strategy to strengthen management institutions at the community scale.

By that time, Cururú’s CFO was aspiring to manage a complex, commercial forestry operation. The annual harvest unit covered approximately 1500 ha, each with 4000 to 6000 m³ of commercial timber. The harvests could potentially generate vast sums of money in the context of Guarayos. For example, in 2003, the negotiated sales grossed 60,000 USD. In 2002, BOLFOR helped Cururú negotiate a good price for their timber, however, the terms of sale were for logs delivered to forest log landings (*puesto en rodeo*) ready to be transported to the sawmill. The community would receive a higher price but also agreed to take on more responsibility. The CFO would have to pay service providers such as skilled sawyers and skidder operators to fell and yard the logs. If they did not set aside money for those operations, the harvest and sales would grind to a halt. The organization also would need to set aside funding to invest in start-up and operating costs for the following year to prepare a logging plan and receive authorization for a second sale. In addition, the CFO’s revenue had to cover other expenses – such as maintenance of the forest access road as well as payments for professional services, including a licensed forest engineer to sign timber transportation permits and an accountant to manage payments to service providers and receive payments from timber buyers. Only after setting aside funds for these costs would benefits be allocated to reimburse

community members, who worked both as administrators and labourers in the CFO.

The CFO's challenge was how to distribute benefits in a way that paid those who worked on the project, benefited the community at large, and sustained project activities into the future. Because it was a communal forest, the law required that benefits from timber sales would go to the community, but the law did not explain the mechanics of how this should take place. To function well, benefit distribution had to happen transparently and generate both trust and accountability among the community members who were managing and receiving the funds. The potential for conflict, misunderstanding, and corruption was rife.

The distribution of timber sale benefits offered a surprisingly complex challenge. As a communal forest, one might think that benefits derived from the forest should be spread equally to all residents; but would that be equitable? Not everyone had invested labour to develop the management plan. Of those who had, some worked many weeks, while others worked only a few days. Some women had spent weeks in the forest working as cooks for the brigades. Others expected to receive benefits through their husbands' payments. However, for that to work, women needed information on how much their husbands were owed, as well as how and when payments would take place (see Cronkleton 2005).

Furthermore, payments from buyers would come in instalments, so benefit distribution would have to take place over time. This meant that individual payments from loggers would not cover all wages the CFO owed its members until weeks or months after the harvest. Payments would have to be made incrementally as the sawmills processed and sold lumber, since, in general, cash flow was a critical bottleneck across the entire timber value chain. Finally, to overcome these challenges, it was important that community members understood that cash flow would have to be managed to reimburse their labour investments, pay service providers, and set aside capital for the next year.

How we applied ACM

We looked to ACM as a way to generate a culture of transparent information sharing and learning in an environment where examples of good governance were rare, and where logging historically had been conducted through bribery, conflict, and clientelism. Fortunately, Cururú had a detailed record of labour investment by CFO members: BOLFOR's financial assistance to support the forest inventory and commercial census had been conditional on the submission of timesheets and signed invoices from members to release funds to cover 50% of wages. These records provided information on who had worked and when, and, importantly, tracked the CFO's debt owed to members who had invested in the forest management plan.

Therefore, prior to payments arriving, we (the ACM team) worked with the CFO members to create a system to visually illustrate the relative debt

owed to members for the days of labour invested in the project, track payments of wages to members for days worked, and mark the deposit of timber payments from loggers. Importantly, the system also explained the allocation of payments between operating costs and payment of wage debt. This involved creating meaningful visuals as well as carefully prepared paperwork so that members – often with low levels of literacy and numeracy – could verify and hold accountable the process as well as those responsible for the accounts.

The system was designed to adhere to several basic criteria. First, it needed to be *transparent* so that people understood the process, could see how they would get repaid, and could compare their share to others in the community. Second, the payments must be *equitable*: when payments were distributed, everyone should get a portion of debt reimbursed, but those who had invested more should receive a larger share. Third, the information had to be *accessible*, meaning that the accounting had to be simple and visible but maintain accuracy. Finally, to be *sustainable*, everyone needed to understand that the CFO could not just make payments to members but had to ensure that funds were set aside for forest operations and future activities.

To manage payments, we developed a simple system to visualize the CFO's financial transactions and show members' individual wages as well as the CFO's accounts and payments. The CFO's administrators had piles of receipts and timecards from their reporting to BOLFOR, so, working with the CFO leaders, we tabulated the records and created a large poster depicting all members and the days worked as a bar chart. The chart would be used to illustrate how timber payments were distributed. Funds allocated for reimbursing members would be distributed as a proportion of the total debt (e.g., if a payment was 10% of the total wage debt, each member was reimbursed 10% of funds owed, ensuring equitable distribution). Segments of the chart would be coloured in with each payment distributed to members during CFO meetings.

In addition to the large chart held by the CFO leaders, each member would receive a paper receipt accounting for the transaction (i.e., what they were owed in total, what they had received in payment, and how much remained). Community members could individually or in small groups review the materials and the accounts. Those who could not read could get help from family members in a more private small group setting. However, even when simplified, there would be a steep learning curve, and errors or misunderstandings were possible. Relying on trial-and-error could risk conflict once money was at stake. Therefore, to test the system and build capacity, we introduced several different simulation activities.

In the first simulation, we used an “aquarium” (fishbowl) method with a small group of volunteers play-acting while the others sat around the outside observing and then discussing. The volunteers were divided into several groups for their pretend roles: CFO administrators, members who were owed wages, and service providers such as chainsaw and skidder operators. We started with a first timber sale, and the leader had to allocate the money. If the leader paid all wages in full, the service providers could not be paid to harvest more wood,

so there would be no second sale and no second payment. Alternatively, dividing the funds between wages and service providers meant that, while members would not be paid their wages in full immediately, service providers could harvest timber and there would be a second payment, and then another so everyone would eventually be fully reimbursed. The objective was for people to understand – before money was in hand – that payments would have to be distributed to both members and service providers to sustain the activities, and that members would not receive their full payments, at least not immediately. After this exercise, we also adapted the system to create colour-coded individual statements and a notebook with receipts to match it up to each person's account and wages to make the system easier to follow.

The process worked. When the first payment was deposited, the CFO leaders convened a community meeting to distribute payments as they had practised. Afterwards, members stayed and talked in small groups, comparing and discussing how it had worked. Because of the practice, they understood that it would take multiple payments to be fully reimbursed. Sure enough, after three or four payments over the following months, members were fully paid. The CFO was able to use a portion of the funds to finance a commercial census for a second timber harvest, continuing the practice of paying only half wages prior to the timber sale. The process also catalysed more interest among members in monitoring the CFO's activities. For example, members requested that the CFO leaders report regularly on log volumes delivered to the landing. The CFO kept detailed records of log volumes delivered to landings as this was the basis for paying service providers and sales to the timber company buying the wood. This monitoring tracked progress with the logging operation and indicated the future payments that were in the pipeline. Since the big picture was not as opaque, people had a clearer understanding of how the money moved, and they wanted more information about it. This is crucial to transparency: presenting financial information creates accountability only if people can understand and question it.

The next year, after a successful harvest, members wanted to double their daily wage, so we tried a different scenario-type game to simulate how that would work. To do this, we worked with the CFO members to develop three different scenarios of how to distribute the funds. We worked through the scenarios several times before there was any real money in play so that people could practice and know how the different steps fitted together. It made it possible for them to discuss different wages for different roles in the CFO and determine how much money should be left for the community projects and the CFO. It was time-consuming but preparing useful and visual materials mattered. This is an example of short-cycle learning, and it was an exercise in accountability, transparency, and social learning because the CFO literally "opened up the books" to all of its members. Short-cycled processes created meaningful opportunities for learning and identified issues early to head off conflict before it occurred. This included creating scenarios before cash distributions were made, then returning to discuss with people if they had concerns

or suggestions. Through this process, members also learned what a transparent and accountable system looked like so that they could hold their own administrators to it.

Building capacity for ACM

It can take several learning cycles for ACM concepts, and the value of the process, to sink in. For the BOLFOR technicians, we were uncertain if we ever convinced them that ACM had value. The concepts were so different from how they were trained as foresters; they did not see their jobs as facilitating group learning or how ACM related to getting trees out of the forest. We had a lot to learn as facilitators, and this included recognizing that we did not have all the answers. In our own learning processes, we realized that we needed to better understand the problems as well as where the opportunities existed. This required listening, observing, and learning from the range of actors involved, including community members, BOLFOR foresters, and others involved in the CFO's interactions, such as timber buyers and sawmill operators. If we had not learned how the logging operations were functioning, how timber payments would take place, or the differences between members in terms of investment in the forest management plans, we would not have known where to start.

Case study 2: Indigenous women in territorial and forest governance in Nicaragua

Issue

The second case, from Nicaragua, illustrates the use of ACM to strengthen the role of women in forest governance in Indigenous communities within a multi-ethnic autonomous region on the Caribbean coast of eastern Nicaragua. In theory, decentralization in Nicaragua has transferred power to subnational levels, and particularly to the autonomous region and its Indigenous territories² (A. M. Larson and Lewis-Mendoza 2012). Furthermore, several laws have mandated quotas for women's participation in governance bodies. However, the challenges faced by the subnational government and local authorities in Indigenous territories are steep; governance reform must address the realities of a region that lacks financial resources, lacks democratic traditions and institutions, favours local elites, and privileges men over women. In spite of a policy context in Nicaragua that may seem favourable to the political participation of women (see http://www3.weforum.org/docs/WEF_GGGR_2020.pdf), women living in rural communities tend to play a nominal or passive role in formal and informal decision-making processes, particularly on natural resources at the community level (Mairena et al. 2012; Evans et al. 2016). Studies of Indigenous community cultures have found strong disincentives for women to participate, with sanctions by community members, other women,

and spouses (Flores et al. 2016). How to encourage good forest governance and equitable women's participation in this disadvantageous context formed the central motivation for our research.

Context

From 2011 to 2015, CIFOR and the Institute of Research and Development of the Central American University of Nicaragua (Nitlapan) implemented a participatory research project promoting more proactive roles for women in community forestry-related decisions in Indigenous communities (Mwangi and Larson 2009, see also Chapters 4 and 5). The study site included five communities with majority Indigenous presence in Nicaragua's Northern Caribbean Autonomous Region (RACCN for its initials in Spanish). Equitable forest governance is a salient issue in this complex region (Finley-Brook 2007; Larson, Cronkleton, and Pulhin 2015). The RACCN is ethnically diverse, with Miskitu Indigenous people making up the largest ethnic group (57%), Mayangna Indigenous people representing 4% of the population, and *mestizos* comprising 36% (according to the last census, INIDE 2005).³ Although national legislation established quotas to encourage gender equity in national and municipal elections, this does not legally apply to Indigenous territories and communities. In fact, customary practice and institutional inertia mean that women are typically marginalized in decision-making processes at the communal and territorial scale.

How we applied ACM

We used ACM because it explicitly recognizes the importance of collaboration at various levels and seeks to create opportunities for the participation of marginalized stakeholders, especially women, in forest-related decision making (Colfer 2005a; Kusumanto 2007; Evans et al. 2014). After initial scoping research and training the field team, the ACM activities started with a series of community-based visioning workshops where participants articulated current problems, envisioned possible future scenarios, set priorities for the future, and discussed how to enhance community governance and women's participation in decision making (Evans et al. 2006). Three of the nine communities identified the need to improve governance as their priority problem and requested support in strengthening community-level governance. This included improving the participation of women in community decision-making forums, in particular, the community assembly. The other communities decided to focus on projects related to tree planting, building a community garden, and a carpentry shop. The idea was that all these projects would use the ACM approach, meaning that the field teams would facilitate iterative cycles of learning during the activities, applying approaches such as monitoring and group reflection.

Together with community members, we created simple monitoring activities to track the participation of women in this range of ACM projects. Initially,

the field team themselves struggled with implementing the monitoring: the process was new, and, without guidance, it was difficult for them to know where to start. We found it important to support the field team with regular visits where we all worked together with community members to define a set of simple monitoring activities that allowed for follow-up discussion and group reflection. These included counting the number of times that women spoke in meetings, or how often their ideas were adopted.

As the fieldwork proceeded, a moderate increase in the attendance of women at meetings was observed. However, men continued to dominate meetings and workshops, both in discussions and decision making. When the ACM activities were moved out of a schoolroom or community house, which were typical meeting spaces, women's participation improved, with more active discussion and expression of their opinions. Women were most active in the monitoring activities that took the groups out of a meeting room and into the field, where they engaged in discussions and reflections at levels equivalent to men as we stood in the forest or in a garden. This was contrary to what community leaders had said – that women would not show up for work in the forest or participate. In fact, monitoring tended to create a more welcoming space where women were more likely to participate as equals with men.

In response to the interest in addressing governance, and the growing participation of women in the monitoring activities, we then proposed creating a monitoring tool that would focus on monitoring goals specifically related to governance. With the support of facilitators, community members and leaders came together in workshops to define the aspects, of governance, or indicators, to be monitored. To do this, first the groups constructed a vision of good governance. They identified four key components: (a) strengthened community organization; (b) good participation by women; (c) good leaders; and (d) good forest management. The next step in the workshop was to analyse each component and specifically define that component in terms of questions that could be answered with either a yes or no.

We learned the importance of keeping the process simple and uncomplicated to keep everyone focused on the goals. Generating monitoring questions instead of indicators can lead to monitoring that is more locally relevant and usable (Demeo et al. 2015; Kusumanto 2007; Lawrence et al. 2006), and it avoids the complicated practice of trying to define indicators in a participatory context (Dey and Schweitzer 2014). Monitoring can start with a simple (although not easy) goal, like “A strengthened and institutionalized community government.” To avoid confusing terms like “monitoring,” it helped to instead adopt the Miskitu term that translates as “looking from above” (see Chapter 7, this volume).

Similarly, we never used the term “indicators.” In our contexts, finding the questions that people want to answer instead of seeking indicators helped avoid overly technical and abstract goals. Other researchers have similar findings with regard to indicators and also recommend focusing on questions instead (Paudel and Ojha 2007; Demeo et al. 2015). In fact, the ACM project arose

out of a project to define criteria and indicators for sustainable forest management, which subsequently found the emphasis on indicators sometimes to be unnecessarily complex (Pokorny et al. 2004; Purnomo, Mendoza, and Prabhu 2005).⁴

For instance, to monitor women's participation in forest-related decisions, the participants defined several questions that would tell them if they were achieving "equitable benefits for both men and women from forest resources," one of which was: "In the last three months, did the community leaders respect the area used by women to collect fruits?" We found creating questions such as these came relatively easily, whereas deciding upon indicators would likely have been more challenging and confusing.

Over the next year and a half, the ACM team helped to organize three monitoring sessions in each community, and, in most cases, the local monitoring committee leaders did the facilitation. During the meetings, community members voted "yes," "no," "sometimes," or "don't know" on each monitoring question by putting his or her vote into a ballot box. Then the votes were tallied in front of the group. This process, while emphasizing the importance of each individual's vote, became tedious because of the long list of questions. Participants grew tired, participation started to lag, and the group discussion suffered. Therefore, three adaptations were made. First, components were combined, and the number of questions was cut down from 73 to 18. The second adaptation was collecting the monitoring information from each committee member at his or her home in the form of a poll and then presenting results in a meeting with monitoring participants. This adaptation allowed more time in the monitoring meetings to reflect upon and analyse the results. Finally, not all components were evaluated at the same time, so people could focus on one aspect at a time, for instance, women's participation.

In each community, the monitoring activities were performed at least three times. Then, after the results were collected, communities discussed them in a session geared towards group reflection. These opened up meaningful dialogues about women's exclusion from decision making, particularly in forest management issues. For instance, the monitoring discussions brought to the forefront several instances where women's access to forest resources was negatively impacted by men.

Building capacity for ACM

While initially we had conceptualized the project as launching mini ACM "projects" in each community, where ACM approaches were facilitated by the ACM team, we came to realize that the entire project itself was adopting the ACM mindset. The learning occurred among all participants, including the ACM team, and we adapted the project activities as we learned.

This learning was catalysed by a regular practice of reflecting as a team immediately after an activity. Our reflections started with the simple question: "What did we learn?"

In addition, in the process of encouraging the uptake of ACM within the communities,⁵ the research team too adopted adaptive collaborative behaviours, learning and adapting their own methods, approaches, and attitudes. In other words, they “learned how to learn.” The team, composed of Indigenous members with roots in the communities as well as international researchers, had their own learning processes: about gender and Indigenous identity, and how to feel comfortable adapting methods as needed. Because the team members had left the community and earned university degrees, they felt they had to come back with their degrees as “experts,” and the communities expected them to show their expertise. In other words, both sides expected experts with solutions, not facilitators. One facilitation technique that helped them overcome this barrier – both conceptually and in practice – was to make it a habit to always ask questions, when possible, instead of giving answers.

The team’s perspectives on gender also evolved; by changing their assumptions about how women and men relate and interact in different spaces, their new frameworks made it possible to understand women’s and men’s behaviours and obstacles to participation. For instance, when encountering little participation of women in meetings or in leadership positions, the men in the team at first repeated what the leaders of the community (who were men) said: that the women are given opportunities to participate in meetings, but that women simply do not want to. In other words, it was women’s fault for not participating. These perspectives were reinforced by what they saw in meetings and workshops: men participating and women sitting silently, with few exceptions. We realized that the team needed to learn more about gender. Field team members attended gender trainings, and the male team members attended a masculinity workshop. These trainings provided them with concepts and language to discuss and question gender. When the team members began to engage in other methods – participant observation, participatory monitoring, interviews, and activities outside of the meeting spaces – they observed significant obstacles to women’s participation, including social exclusion and physical violence. They noted how the three most active female leaders were each sanctioned by the community at certain points. The team learned that barriers to participation are complex and that a more in-depth understanding of dynamics at the household level would be necessary to fully understand the constraints on women’s participation. They also noted that outside of meetings – particularly in the field – gender roles were less rigid, and women assumed leadership roles. For example, they observed one woman who, after a morning activity in the community forest, spontaneously led a group reflection on the activity. In contrast, in the afternoon community meeting, she sat silently.

Learning how to do ACM together – deliberately reflecting on our attitudes and the roles and interactions of women and men – generated new knowledge about gender. As one technician noted

ACM promotes gender participation in a more diplomatic way through activities. For example, in the ACM workshops on monitoring, there was

an activity on gender, but no one knew that that same activity encouraged the participants to have equal opportunity and rights. In this sense I believe that approach to gender in ACM works in the communities.

Furthermore, the team learned and adapted the methodology as our knowledge about gender evolved: we applied ACM learning cycles to our own ACM activities. One team member reflected, “At the beginning we were resistant. Now we know that not all experiences have to come out as successes. We recapture those experiences and learn from them.”

Case study 3: Encouraging farmers, particularly women, to engage in dialogue about resource degradation in northern Ghana

Issue

This final case focuses on northern Ghana, in a landscape consisting of six villages in the Kassena-Nankana West District in the Upper East, a semi-arid region of dry forest and savanna parklands. This work was part of the West African Forest-Farm Interface (WAFFI) project that worked to understand smallholder management of complex multi-use landscapes and to build capacity so that resident villagers could engage with policymakers and represent local interests in public meetings. The goal of the WAFFI project was to create platforms where local people – traditionally with little voice in policymaking – could effectively express their concerns and share information about their realities with decision makers.

Context

We knew that resource management in this landscape was governed by a complex mix of customary rules and formal regulations. Understanding this complexity would be improved by gaining local perspectives of people living at these sites (Boakye and Baffoe 2006). To meet the project goals, it was crucial to build the capacity of villagers to assess local needs and problems, identify shared interests, and engage with authorities to discuss common issues.

We also knew that this pluralistic system assigned differentiated rights to access and use of land and trees, which created complex mosaic patterns of resource management and socio-economic outcomes. As in many parts of West Africa, collecting shea nut (*Vitellaria paradoxa*) is an important component of women’s livelihoods (Carney and Elias 2006). Traditionally, women do not own land but access areas to cultivate through husbands or other male relatives. Although men are involved too, women have customarily had a dominant role in shea nut collection and processing (Elias 2016). Shea provides a crucial source of nutrition and income for women to meet the needs of the household (Kent 2018). However, commercial demand for shea nut has increased

because of its growing use by the international cosmetic and confectionary industries (Laube, Awo, and Derbile 2017). As a result, in some locations, men are asserting more decision-making control over the women in their households in exchange for allowing them to collect more shea, in an example of intra-household bargaining (Kent 2018).

We wanted residents to identify local patterns of resource management and wellbeing within their families and communities to define strategies to address their problems. Considering the particular challenges facing women and their crucial roles in household wellbeing, we decided to make sure that women participated and that their voices were prioritized. This meant creating an environment of trust where women felt welcomed, where their opinions were valued, and where topics that were interesting and meaningful to these time-strapped women were discussed. ACM and participatory action research (PAR) have been particularly effective at involving economically or socially marginalized groups, such as rural people and women, in problem-solving processes (Colfer 2005b; Guijt 2007; Evans et al. 2014).

How we applied ACM

To create a process that helped us to understand the local context and facilitated participation by people from these villages in analysis and knowledge creation, we started with training workshops for technicians from partner organizations and local village facilitators in the use of ACM approaches. We adopted a multi-stage approach that built on our previous ACM experience. These stages consisted of an initial appraisal of the local context using an innovative approach called auto-appraisal, followed by exchange workshops that brought participants from all the villages together, followed by periods of participatory action research. However, these stages were interspersed with training activities during implementation.

We began with training for “auto-appraisal,” a structured assessment of local conditions, needs, and opportunities (Taylor et al. 2008), carried out by teams of community members trained as facilitators rather than external technicians. Auto-appraisal includes a series of structured information-gathering activities that include sketch mapping of village boundaries and features, historic timelines for the community, and group interviews to collect information on community capitals – social, human, economic, physical, and natural – using DFID’s sustainable livelihoods approach (DFID 1999). At the end of the auto-appraisal stage, the village facilitators came together for an exchange workshop and invited village leaders to share results and discuss common issues and differences between the communities. These discussions laid a foundation for the next stage, which applied PAR. PAR uses hands-on experimentation to catalyse group learning processes that are foundational to ACM (Borda 2001; Colfer et al. 2011, see Chapter 9, this volume). In other words, applying PAR is one way to operationalize ACM.

When it came time to start the PAR activities, we realized that additional training was needed for the field technicians implementing the work. They had learned the PAR terms and concepts, but as they returned to work, their tendency was to return to conventional extension approaches. We needed to rethink training and decided to adapt elements of the ACM approach to address a training challenge. We drew on earlier experiences using techniques like “learning by doing” to create situations where the technicians could discover the effectiveness of ACM to orient capacity building. We did this through a training exercise in mapping, where community facilitators and WAFFI team members learned the basics of using a GPS, plotting coordinates, and mapping features in their villages and landscapes. This training activity gave the technicians a more tangible understanding of the ACM approach and learning cycles. We learned that as ACM trainers, we too had to observe and adapt as we went.

After the training, the team was able to lead PAR groups through an iterative process that brought women together to examine distinct village-scale problems (fuelwood supply, land access, shea access). Then, over time, and after exchange meetings, the field team helped the PAR participants converge on shared issues, such as competition for shea nut, and further refined the understanding of the problems surrounding women’s access. For example, women were still harvesting from on-farm trees, but men were increasingly claiming the income.

The PAR groups, assisted by the WAFFI team, then focused on problems related to shea access and collection. They did this by tracking the shea harvest through participatory monitoring. Villagers in PAR groups used worksheets to record the quantities and the locations of daily nut collection. They then used the information to discuss underlying problems. Men were claiming more control over shea trees on farmland, which were not only closer to home but were also the most productive trees, less damaged by fire and firewood collectors. These discussions revealed that on-farm purchases of shea – as opposed to selling in the market – removed the stigma of male involvement in selling the shea nut. Furthermore, women were growing more dependent on the shea trees in the forest, which were common-pool resources and not as productive. The information that was collected informed discussions with community leaders and policymakers. We do not know the degree to which women achieved greater impact on decision making, but it was evident that on an individual level, the ACM process empowered women to express their opinions and placed topics important to them on the agenda. Leaders noted a difference in women’s capacity to engage in multi-stakeholder meetings; they were surprised at how confidently women presented their findings in front of customary chiefs and government authorities.

Building capacity for ACM

In all cases, ACM was not familiar to local collaborating partners, who were more familiar with conventional approaches to agricultural and forestry extension

that emphasized technical expertise over group learning. This required more time for training and follow-up than we had anticipated. We learned that it was important to accompany the work of technicians at first, including regular visits to the field and workshops, to help technicians and partners use the approaches and adapt activities to local reality. While the methods were not complex, they did require people to change how they worked and to be self-aware of their roles. For facilitators, the ACM work with communities took them into a level of empathy with community life, touching on the challenges the people face every day. As one technician stated “Doing this work, we are learning a lot from the communities. Before we did not think that the communities could teach us much.”

For our part, we learned that group learning was necessary not just at the community level, but among the entire team implementing ACM. This required adapting training in the field together, facilitating together, and learning together. As a team and as individuals, we developed trust and rapport and built on our shared experiences: travelling, eating, sharing jokes, laughing, succeeding and failing together. This part of the process – nurturing the human connections – is as much a part of ACM as training.

Lessons learned from the cases

Our principal insight gained from ACM training – whether the trainees are field teams, village facilitators, or local participants – is that successful training should be organized to replicate ACM processes. Out of that broad message, we can identify four interrelated insights that illustrate what this meant in practice. The first is that “learning by doing” helps individuals become more conscious of how they learn so they can facilitate learning with others. The second is the importance of focusing on the interests/needs of participants, which maintains their enthusiasm but can also catalyse creativity. The third is to emphasize short-cycle learning at the early stages, which allows participants to conceptualize connections and logic in the approach. Finally, we learned the importance of designing and implementing capacity-building activities to accentuate collaboration between participants (including trainers) to catalyse social learning and adjust the programme content to address learning needs and opportunities. Below, we expand on these insights.

“Learning by doing” to build capacities

Helping people to become more conscious of how they learn entails creating opportunities for them to reflect on the process they are experiencing. We learned early on that building understanding and skills occurred best when participants were actively working together to solve a problem or complete a task. Facilitating an activity like ACM entailed approaches that are different from the conventional training typically experienced in formal education where an expert or teacher lectures the trainees. Instead, the facilitator needs to guide

others as they explore an issue, learn about it, and practice. As we mentioned earlier, to introduce this concept, we would often start training workshops asking people whether they knew how to ride a bike. As participants responded, we would shift the question to ask them to tell *how* they learned to ride a bike. Then, how they *knew* they had learned to ride a bike. This discussion would allow us to introduce “learning by doing,” a key focus of our training approach.

It was also important to scale the learning to the capacities of the participants. Trainers need to gauge the skill or knowledge level of participants and tailor content and materials at an appropriate scale. It takes an iterative process and periodic adaptation of the training approach throughout. A central tenet of this type of learning is making people conscious of how they learn by embracing experimentation and not being afraid to make mistakes. This extended to the design of training efforts. Embedding a tangible technical skill into the ACM process – in the case of Ghana, GPS use and mapping – generated so much interest that people embraced and adopted ACM learning cycles without realizing it. This not only built capacity, but also helped people develop sufficient understanding of the tool so that they could imagine applying the tools to solve other problems.

Focus on the needs and interests of participants

When doing ACM, and particularly PAR, it is important to focus on a problem or issue that is a concern or priority to participants. This ensured continued motivation and engagement with the exercise. In Bolivia, people were understandably most interested in determining how much money they would be putting in their pockets and how much the community could put towards badly needed projects like wells for potable water. While there were some presentations about the overall enterprise and accounting, the core area of the scenarios was on wages because that was what people cared about most. These experiences were crucial for building transparency and lowering tension.

In the same way, it is important to make sure that training aligns with local concerns and needs. Not only should training address an objective seen as important, but the training should also offer clear steps or techniques that participants recognize as useful. For instance, in Ghana, we used training techniques that addressed practical, relevant topics, with real-world experiential exercises so that training activities were purpose-driven and interesting to participants. We focused on skills that helped participants solve problems, such as learning how to use a GPS, map coordinates, and interpret maps for discussion. As a result, turnout for mapping training and related activities was enthusiastic, and participation grew as the activities progressed.

Focus on simple, short cycles of learning initially

Learning occurs at different scales, combines multiple processes running in parallel, and in cycles that vary in duration. In agriculture and forestry, some

processes that producers track may stretch across a season, years, or decades. When leading ACM training, for example, using PAR techniques, facilitators need to find examples that will allow participants to track the process to allow reflection and discussion of results. Introducing an activity that would take months to come full circle, that is spread out geographically, or is extremely complex is unlikely to succeed. Participants will lose interest or not understand why they are doing the activity. In order to encourage people to consciously think of learning as a loop, it is important to engage in short cycles – monitoring/observation, discussion, new action, monitoring/observation – initially so that people understand how the different activities fit together. The short cycles allow participants to conceptualize the entire process and to see the connections between the steps and link back to the evaluation of the original question. In fact, if a full learning cycle can be completed within a single day, the learning is immediate and further motivates participation. For example, we learned to plan workshops so that each day was organized to provide opportunities to reflect on the learning loop; even individual sessions were arranged this way. We made this explicit at the start and returned to this message frequently. Short cycles help people visualize and understand the iterative learning process created through ACM. As participants gain skill, it is possible to take on greater complexity and duration.

Learning cycles also happened at longer scales, such as across timber harvest cycles, as we showed in Bolivia. We learned that an ACM learning process can be effective when it includes nested loops of both short-cycle and long-cycle learning, as we saw in the case in Nicaragua, where the many short cycles created by the monitoring activities over multi-year time periods led to larger shifts in behaviours. As one technician observed:

With this process, the women woke up; they gave opinions more, expressing their concerns, needs and lack of compliance by authorities who made decisions about natural resources, and in a certain way they demanded that they be taken into account in the consultations about their resources or that they know better how [resources] were being managed by the authorities, with greater transparency of funds and taxes.

Emphasize collaboration to promote social learning

Collaboration is crucial for training exercises to help ensure facilitators understand how they should engage with people at the community level. Group work among trainees and trainers is a key element of capacity building for ACM. It is important to make clear that the dynamics in training reflect how ACM is done in the field. We learned that technicians could go through training workshops following all the instructions and learning all the terminology, but without realizing this really entailed changing how they engaged with communities. We learned that the best way to assess whether trainees understood was to create realistic situations where they used the method to observe

how they worked and then followed up periodically to see how they were doing. For trainees, grasping the need to adjust their approach required working hand-in-hand with trainers to fully understand how the approach would work in the field. Due to social pressure, inertia, or fear, it is easy for trainees to fall back into business as usual or conventional approaches that are usually top-down and non-collaborative.

For instance, in Nicaragua, the team was sceptical about ACM at the beginning: the goals seemed abstract (i.e., learning, adaptation), the methodology seemed open and unstructured, and the potential for impacts was unclear. Initially, the trainees interacted little with community members outside of the meetings and resisted engaging in participant observation. Over time, however, several admitted that their perspectives shifted in fundamental ways. For instance, at first, they perceived gender as a foreign concept imposed from outside on their culture. They were uncomfortable discussing or challenging the gender roles in communities because, in some local views, preserving Indigenous culture and preserving gender roles are linked. That perception evolved and became more nuanced and complex. As one technician mentioned, “Through the ACM process I learned that gender is a concept about relationships and values and complementarity.” These shifts changed the way these young professionals perceived and worked with their communities.

We also learned that trainees need to observe how an ACM approach supports learning so that they can facilitate the process. For example, in Ghana, the field team was at first uncertain how to analyse the data collected by the PAR groups until they realized, when working with the CIFOR team, that the analysis could be simple and should be done in the communities with the participants. It did not take much data to generate good reflection and discussion. It was also good not to wait until all the data had been collected, but to begin facilitating reflection on the process as data collection took place. Furthermore, it was more important to collect data in a way that was sufficient to “adequately and practically answer the question” (Demeo et al. 2015, 6), rather than insist on the most scientifically rigorous data.

Conclusion

This chapter described insights we gained facilitating ACM activities and training local technicians to do the same. As we worked with ACM, we realized that an initial capacity-building phase was usually necessary to introduce the methods and underlying concepts. The challenge was then how to train people in an approach that was different from most of the formal training they had been exposed to previously. We learned that training people to use an ACM approach is best done by deliberately creating an ACM experience in the capacity-building process. This could mean structuring a training workshop to include short cycles of learning. It also means that the real learning of “how to do” ACM often does not occur until ACM related activities begin; this means encouraging everyone – participants, facilitators, technicians, and

researchers – to jump into the ACM process and embrace an ethos of experimentation, trial-and-error, and learning by doing. Furthermore, ACM blurs the line between training and implementing – as ACM is about creating a series of experiences and opportunities to strengthen capacity on the part of the participants and facilitators. The goal was to create self-reinforcing cycles in which participants reflected on their learning so that they could consciously facilitate learning with others. This allowed us to gauge the effectiveness of the capacity-building exercises and whether key messages were being captured by trainees.

The three cases presented, from Bolivia, Nicaragua, and Ghana, drew from distinct contexts to help us distil our insights about training people to use ACM. We realized that “learning by doing” needed to be part of training so that trainees would become more conscious of how their views changed through capacity building. It became clear that focusing on locally relevant topics was key for driving enthusiasm and creativity. Structuring activities to provide “short-cycled” exercises gave participants active experiences that helped them understand the intuitive links between distinct steps in the process. Finally, structuring training activities so that trainees and trainers worked together accentuated the role of collaboration in this approach and indicated ideal relationships between facilitators and participants in ACM activities.

In ACM, everyone is learning. As one of the field team members in Nicaragua commented after a team reflection that generated insights into their personal growth: “We are now applying ACM to our own lives.” We argue that training local partners and field teams in ACM is not simply about teaching a new methodology, it is about adopting an ethos of experimentation, learning, and collaboration. This ethos can be transformative for all involved, including researchers and facilitators. ACM can be time-consuming and challenging to get off the ground; the approaches require creativity and an openness both to new ideas and to making mistakes. However, the outcomes and benefits – engagement, transparency, learning – for all involved are fundamental and lasting.

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Notes

- 1 Part of the CIFOR project “Gender, Tenure and Community Forests in Uganda and Nicaragua.” Findings here focus on Nicaragua; see Chapters 4 and 5 for discussion of the experiences in Uganda.
- 2 The relationship between the different entities – autonomous regional government, municipalities, Indigenous communities and territories – is very complex and beyond the scope of this chapter.
- 3 Recent trends in migration suggest *mestizos* were a much larger portion by 2021.
- 4 Other researchers however found them appealing, e.g., Dangol (2005); Gunter (2001); Colfer et al. (2001). See also Chapter 7 and 8.
- 5 See discussion by Fisher and Jackson (Chapter 9).

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