

Co-designing research and evaluation across NGOs



The Alliance for Conservation Evidence and Sustainability (ACES) is a collaborative of NGOs, academic institutions, and conservation practitioners committed to fostering evidence-informed decision-making in community-based conservation (CBC). From 2018-2022, ACES collaborated to co-design and conduct a series of cross-organizational research programs collectively referred to as “Learning Projects”. Learning Projects were designed to foster data sharing and knowledge exchange across NGOs and academic institutions to learn and tell stories about the impacts of CBC initiatives across larger spatial scales.

By bringing together data and expertise across partners, Learning Projects helped generate insights that would not have been possible with isolated studies by single organizations. However, co-designing and managing these collaborative efforts was not without challenges. In this knowledge brief, we share lessons from co-designing and implementing Learning Projects to help future collaborative and cross-organizational teams more effectively collect, store, and share data to enable cross-organizational learning in support of conservation.

In this brief¹, we share three key lessons:

- > **Common approaches to monitoring can enable shared learning across sites and scales**
- > **Effective collaboration requires balancing inclusivity with project administration capacity and maintaining constant engagement**
- > **Collaborative interpretation of findings is critical for better decision-making**

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Lesson 1: Common Approaches to Monitoring can Enable Shared Learning Across Sites and Scales

Several ACES Learning Projects were designed to identify and synthesize existing monitoring data collected by NGOs working in the same region or country to inform learning across different CBC projects and at larger spatial scales. These Learning Projects faced a number of challenges arising from varied approaches to monitoring and evaluating CBC projects and programs between organizations.

Differences in intervention types and strategic priorities across NGOs often resulted in survey instruments that targeted disparate stakeholders, were focused on answering different learning questions about different CBC processes and outcomes, and used inconsistent data scales to measure similar indicators. As a result, even when instruments focused on similar theoretical principles, the precision of synthesized datasets was often sacrificed in the process of “rolling-up” data into common measures to answer a question at a larger spatial scale (e.g., converting a five-level Likert scale response from one instrument into a binary measure when the corresponding indicator in a second instrument contained only “yes” or “no” responses).

Alternatively, when important concepts were addressed in one instrument but not another, it was not possible to incorporate them into large-scale analyses, which removed critical context from region-wide CBC assessments. In some cases, the mismatch between instruments made it impossible to bring together data from across organizations, which limited the scope of assessments and prevented learning on greater spatial and temporal scales.

Similarly, disparities in how organizations collected and aligned ecological data with social and governance data resulted in considerable difficulties in synthesizing information to produce large-scale analyses. Where organizations working in the same region conducted ecological monitoring using different scales and different methods, or did not have ecological data that was properly aligned with project sites, drawing evidence-based conclusions regarding management effectiveness was extremely difficult, if not impossible.

Finally, while some of these instruments were designed to foster learning, they were often designed to answer distinct research questions and therefore were not able to be synthesized to learn at a higher spatial scale. Even more commonly however, instruments were designed for reporting purposes to meet specific donor requirements and not used to inform learning or adaptive management.

Recommendations: Incorporate shared tools alongside context-specific instruments into CBC assessments to facilitate both project-based and cross-organizational learning

While monitoring and evaluations of individual projects will continue to require instruments that are tailored to specific interventions and organizational metrics or to meet specific funding needs or site-specific learning needs, shared tools can enable learning across regions and geographies (see Box 1 for examples of approaches used and developed by ACES). Going forward, a mixed approach that utilizes shared tools (with shared questions and metrics) across NGOs that are supplemented by context-specific instruments for project-level objectives will be critical to more effectively integrate evidence into multi-country or regional CBC initiatives. However, disparities in data collection were not only the result of contrasting priorities between organizations, but also variable staff and financial capacity. When faced with limited resources, CBC projects will inevitably focus their efforts on project-level priorities over broader-scale learning. Consequently, future support for CBC initiatives should aim to include sufficient resources to conduct both: (a) monitoring and evaluation that answers place-based learning questions, and (b) longer-term monitoring of critical variables like governance and ecosystem health that can continue after individual projects end. Further, additional support for consultants should be included to provide external capacity to CBC programs that are currently unable to commit staff resources to cross-organizational learning.



Box 1. Shared Approaches from Learning Projects

Learning Projects were structured around the Community-Based Conservation (CBC) Framework², which was developed to provide conservation practitioners a common, theory-based diagnostic approach for learning about CBC. While the CBC Framework was not always able to overcome data mismatches, having a common set of baseline indicators allowed Learning Project teams to quickly identify overlaps in important metrics across datasets and more readily define project directions. Using the CBC Framework not only provided collaborators with a shared set of social-science based principles on which to map available data, but also ensured that different Learning Projects focused on similar components of CBC theory could be easily synthesized to gain insights across studies.

The Elinor Tool and Data System

To encourage the use of shared approaches in future conservation assessments, ACES members collaborated with the conservation science and practice communities to co-design the Elinor Tool and Data System. Elinor was developed to facilitate the collection, storage, sharing, visualization, and use of governance and management data. Building on common principles important for equitable governance and management, the Elinor assessment tool and data system was designed specifically to facilitate both place-based learning and adaptive management, as well as data sharing and aggregation across scales. Increased cross-organizational use of tools such as Elinor will be critical for more effective shared learning and accelerated conservation decision-making.

Lesson 2: Effective Collaboration Requires Balancing Inclusivity with Project Administration Capacity and Maintaining Constant Engagement

The progress and ultimate success of Learning Projects was often dependent on identifying and engaging the correct and willing partners quickly, maintaining constant communication, and ensuring that mechanisms existed for partners to provide input at each phase of the project (see Table 1 for descriptions of individual Learning Project phases and associated lessons).

Identifying priority partners involved assessing how much and what kinds of data potential collaborators had available, their interest in the research and perceived willingness to share data, and whether their present and future priorities were aligned with the likely focus of the project. This process was often iterative, as data availability ultimately drove project directions. As a result, it was important to set clear expectations for partners on what might or might not be possible outputs, as data from some partners may not be included in final analyses.

While Learning Projects strived to be as inclusive as possible, decision needs and priorities inevitably varied slightly between NGOs. It was therefore critical to carefully consider how many collaborators could be involved before multiple competing interests would make it impossible to define outputs that would benefit all partners. Most importantly, partners needed to be finalized early in the project cycle, as data sharing among organizations was often a slow process. Developing formal, legally-binding Data Sharing Agreements - which were often requested by project partners - consumed considerable amounts of time early in project cycles, as they needed to satisfy the requirements of multiple legal departments and also be sufficiently binding to ensure comfort and delivery from all partners.

Once Learning Project partners had been formalized, effective collaboration required constant communication between organizations. Whether through regularly-scheduled or ad-hoc meetings, a consistent dialogue among project leads, analysis teams, and in-country partners was necessary to ensure: (a) continued engagement of partners throughout the project; (b) that any questions or issues that arose during data exploration and synthesis could be resolved by data owners quickly, and that data was properly contextualized in analyses; (c) that additional learning questions from partners could be explored throughout the project; and (d) that the scope, direction, and target audience of projects continued to make sense to all partners.

²Mahajan, SL, Jagadish, A, Glew, L, et al. A theory-based framework for understanding the establishment, persistence, and diffusion of community-based conservation. *Conservation Science and Practice*. 2021; 3:e299. <https://doi.org/10.1111/csp2.299>.



Recommendations: Formally define partnerships clearly and early in project cycles, and establish procedures that facilitate consistent dialogue between collaborators

Clearly defining partnerships and potential project targets quickly can greatly improve the efficiency of collaborative research. By focusing on engaging priority partnerships, final project teams are less likely to encounter challenges arising from competing interests or become too large to effectively manage. In addition, time-consuming early project phases, in particular the development of specific and binding data sharing agreements, can begin quickly after project conception. Throughout project cycles, maintaining mechanisms for regular communication can ensure that all partners are continuously engaged, can resolve problems quickly, and will continue to benefit from outputs if changes in project scope or direction emerge.

Table 1. The Learning Project Process

Learning projects that relied on existing data undertook six distinct phases, each of which provided valuable lessons for effective future co-designed research.

Project Phase	Reasons	What Worked Well	Lessons Learned
1. Kickoff Workshop with Priority Partners	Gauge interest of potential partners	Streamlined engagement with multiple organizations	Must balance inclusivity with manageable collaborative scope
	Gain initial understanding of decision needs and knowledge gaps to address	<p>“Sign-up” sheets facilitated rapid follow-ups and access to metadata</p> <p>Presenting insights gained from previous Learning Projects helped encourage collaboration</p>	<p>Prioritize in-country scientists and staff without creating teams that are too large to work together effectively</p> <p>Need to be clear about the commitment required from partners, given the time and effort needed to collaboratively share data, conduct analyses, coordinate meetings, participate in writing, etc.</p>
2. MetaData Sharing	Gain initial understanding of data availability across potential partners	Accessing metadata early in project cycle helps determine priority partners and potential analyses	Need to set realistic expectations with partners about what might or might not be possible
	Learn what type of data exists, in what spatial and temporal extents	Can streamline data synthesis later in project	<p>Not all data will be applicable in final analyses, even if metadata suggests it might be</p> <p>Emphasize that collaboration is still possible even if NGO-specific data is not in final analyses</p>
3. Data Sharing Agreements	Formalizes collaboration across institutions	Often necessary to satisfy institutional requirements for the release of data	Creating agreements that are acceptable to multiple legal teams across institutions can be difficult and time-consuming
			<p>Need to budget considerable time for this process by engaging legal teams early in project cycle</p> <p>Final agreements need to set clear requirements to avoid lack of follow-through by partners</p>



4. Data Sharing and Exploration	<p>Initial exploration of matches/ mismatches in data across organizations</p> <p>Begin to define potential spatial and temporal scope of project</p>	<p>Ground-truth of expectations from metadata</p> <p>Opportunity to define initial analysis framework based on data and decision needs from workshop discussions</p>	<p>Data doesn't always align with metadata, must be prepared to adjust project direction and scope at this phase</p>
5. Joint Analysis and Interpretation	<p>Define project analyses with partners to ensure that questions being addressed are relevant to decision needs</p> <p>Translate observed trends into realistic mechanisms of impact through on-the-ground expertise</p>	<p>Fosters ownership of project across the entire collaboration team</p> <p>Can identify and remove lines of inquiry that don't match realities of project sites</p> <p>Provides context to findings that would be missed without practitioner knowledge</p> <p>Helps explain unusual or unexpected trends</p>	<p>Must balance inclusivity with manageable collaborative scope</p> <p>Effective communication and collaboration is key at this stage to prevent effort being placed on analyses that will not have practical impact on decision-making</p> <p>Even when trends match theoretical predictions, the pathways by which impacts occur differ depending on context</p> <p>Local expertise is critical for accurate interpretations</p>
6. Sharing Findings	<p>Share collaborative insights with scientific and practitioner communities, stakeholders, and other interested groups through publications, workshops, and other events</p>	<p>Demonstrating the power of joint efforts helps foster future collaboration between current partners and outside organizations</p> <p>Events served as a platform to bring together stakeholders and others that have worked on similar interventions</p>	<p>Publications occur on "academic" time-frames, need to produce additional products that can be shared with decision-makers quickly</p> <p>Need considerable advanced planning to ensure that all key stakeholders can attend learning sharing events</p>

Lesson 3: Collaborative Interpretation of Findings is Critical for Better Decision-Making

There can often be a disconnect between conservation science and practice, with academics conducting theory-based analyses that may or may not be immediately relevant to practitioners making day-to-day conservation decisions. As a result, conservation science can lag behind decision-needs for practitioners or fail to produce decision-relevant evidence.

Learning Projects actively addressed this issue by facilitating joint analysis and interpretation of project findings. This occurred either through dedicated virtual interpretation sessions or in-person workshops, both during initial data exploration and after analyses had been completed. Project leads and analysis teams presented findings to partners to receive both crucial feedback on project directions as well as invaluable context that could more accurately place findings within the realities of project sites. Joint interpretation sessions were the primary mechanism by which knowledge exchange and shared learning between organizations occurred, and were invaluable tools for gaining deeper insights from large-scale collaborative efforts.



By purposefully incorporating multiple interpretation sessions throughout the project cycle, all partners maintained ownership of project outputs, analyses that were not likely to impact decision-making were adjusted quickly, and practitioners could “ground-truth” observed results against their intimate knowledge of local communities. This process ensured that project outputs would help address critical needs of in-country practitioners and conservation decision-making more broadly.

Recommendations: Invest time and resources into processes that allow multiple stakeholders to provide input on project analyses and interpretations

Collaborative interpretation between researchers, practitioners, and stakeholders leads to better project conclusions and more useful recommendations for CBC initiatives. Further, joint interpretation sessions not only provide deeper understanding of project results within local contexts, but also reduce the time required to reach final project outputs. Finally, for projects that aim to provide recommendations for practitioners and local communities, including all stakeholders in interpretation of project findings can increase the likelihood that recommendations will be accepted and implemented. It is important that these collaborative sessions are well facilitated, so consider investing resources to bring on experienced and culturally-sensitive facilitators.

Box 2. Case Study: Governance of Multi-Use Marine Protected Areas in Indonesia

From 2018-2019, ACES partners collaborated to identify the social and governance factors that influenced ecological outcomes in four large, multi-use marine protected areas (MPAs) in Indonesia. The Learning Project involved aggregating and synthesizing social and ecological data collected over a 10 year period by multiple NGOs and academic institutions. The project resulted in shared learning and actionable insights for MPA management in the region³. Implementing this project taught us several key lessons:

The limitations of data synthesis without shared approaches

In 2018, ACES members convened to discuss synthesizing social, governance, and ecological data from organizations working on marine conservation across Indonesia. During this meeting, there was a general consensus that data collected by different organizations would be fairly easy to integrate; however, upon closer examination by analysis teams, there was considerably less crossover between instruments than initially thought. As a result, the survey instrument that contained the greatest breadth of indicators and largest spatial extent was used for the entire project, as reducing analyses to metrics that were common across organizations would inevitably result in findings that lacked crucial context and would not produce useful recommendations.

Continued engagement with collaborators creates useful outcomes

Despite data mismatches across organizations, collaborators remained engaged regardless of whether their institution’s data was being utilized. Analysis teams regularly updated all participating organizations on the progress of the project to receive feedback and insights, both in terms of governance theory from academic partners and practical application from in-country monitoring and evaluation teams. These discussions drove the direction and ultimate design of the Learning Project, and receiving constant input from diverse viewpoints across the project team ensured that project outputs were useful and applicable to practitioners across the collaboration.

Collaborative interpretation leads to better science

In 2019, after initial analyses had been completed, members of the Learning Project gathered for a three-day workshop in Bogor, Indonesia. In addition to those directly working on the project, local stakeholders and practitioners were invited to learn about project findings and provide feedback. During the workshop, individuals with intimate knowledge of project sites identified indicators that were not likely to be true representations of theoretical governance principles. Stakeholders highlighted several potential misinterpretations of questions by survey takers and intricacies of governance structures that may not be accurately captured by surveys. Consequently, these indicators were either removed from final analyses or interpreted differently in project outputs based on local context. Including multiple stakeholders in the workshop was critically important to gain these insights, and greatly improved the project’s findings and subsequent recommendations.

³ Fidler, R.Y. et al. 2022. “Participation, Not Penalties: Community Involvement and Equitable Governance Contribute to More Effective Multiuse Protected Areas.” *Science Advances* 8(18): eabl8929.

