

Knowledge brief

# The Community Based Conservation (CBC) Framework



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## A tool for understanding CBC: from establishment to spread.

Most community-based conservation initiatives are designed to help create the conditions for or enhance the capacity of local institutions to govern natural resources. Yet knowing which actions to take at what time to ensure these institutions can deliver on their mandate is not always easy. Research and practice have shown that there are a number of social conditions that can support community-based conservation (CBC) in three important areas, its 1) establishment, 2) its persistence through time, and 3) scaling.

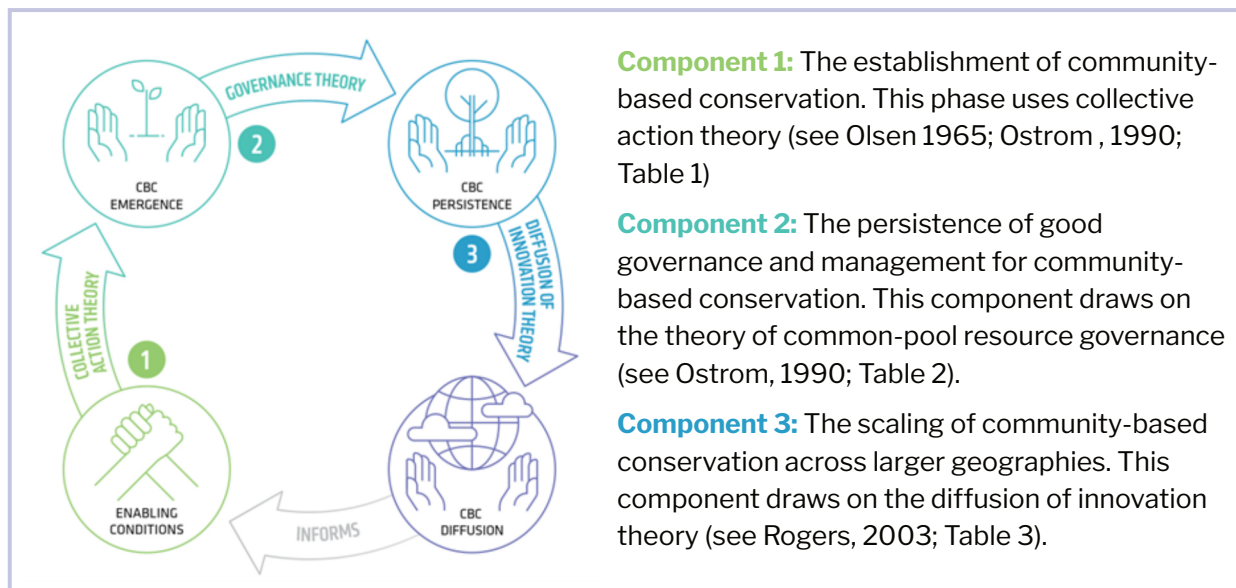
The Community-Based Conservation (CBC) framework brings together three social science theories that can help conservation stakeholders design, implement, and evaluate interventions to support CBC. It combines foundational theories from natural resource management on collective action and common-pool resource governance, with theory on how new ideas and practices spread across groups (see Tables 1 - 3 below). Together, these theories can help conservationists reflect on what conditions support the establishment, persistence, and scaling of CBC initiatives, what actions to take to create or enhance conditions for CBC, and how to monitor and evaluate the success of these actions (see the Box below for example applications).

## The CBC Framework<sup>1</sup>

The framework (see Figure 1) helps users organize their thinking about CBC. There are three components to the framework (1-3) that introduce how to think about CBC establishment, persistence through time, and its spread. While the components are introduced sequentially - with each preceding component laying the foundation for the next - in practice, it is likely that conservation on the ground may exhibit elements of all three components at the same time. For example, the enabling conditions for CBC may be developing in one place as the idea of CBC is spreading rapidly across a region. So while discrete, all the factors in the framework are in fact, interrelated. The next section explores how you might use the CBC framework to inform conservation initiatives.

<sup>1</sup> For more please read: Mahajan, et al. 2021.

Figure 1: CBC Framework

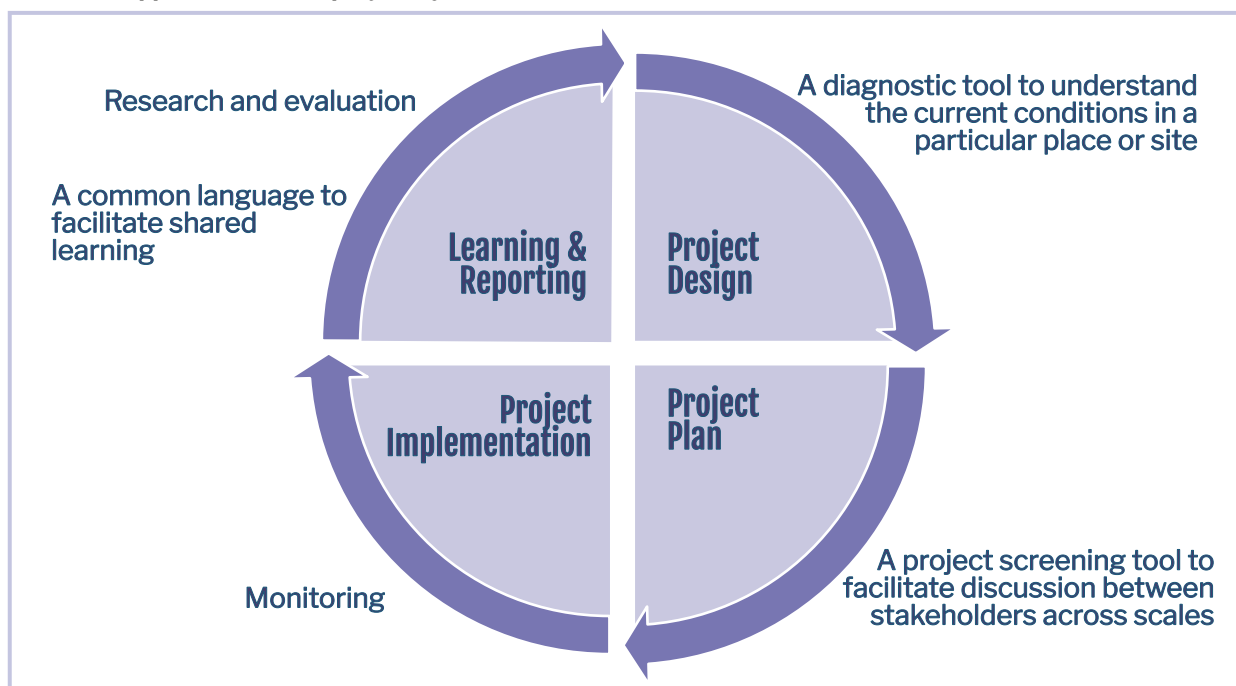


## Using the CBC framework

There are multiple entry points in the project cycle for using the CBC framework in practice (see Figure 2). Its application, along with some examples are presented in Box 1. There is no set methodology for its application, but it is worth noting the two distinct ways in which the framework can be applied:

- 1. Understanding the CBC conditions at a specific site or location.** The framework can be used to understand or ‘diagnose’ the current CBC context of a proposed or ongoing initiative. See example applications 1 & 3 in Box 1 below, and
- 2. Supporting the planning or evaluation of CBC projects and interventions.** The framework can be used to assess, monitor or evaluate activities to support CBC initiatives. See example applications 2, 4 & 5 in Box 1 below.

Figure 2: CBC application in the project cycle



## Box 1: The potential application of the CBC framework

### 1. A diagnostic tool to understand the current conditions in a particular place or site.

Use the framework to understand CBC at a site. You may wish to know:

- Is CBC in the early stages of establishment?
- Has CBC been established but is not properly functioning?
- Are CBC elements in place to enable its spread across a geography?

If a site exhibits elements of all three components at the same time it may be helpful to ask more questions about each component of the framework to better understand which factors are most important to you and your work at any given time. See Tables 1 -3 for factors related to each component.

Once you have a better understanding of what component of the framework is most relevant to your work at the time, you can use the principles from the relevant component of the framework to assess the (current) state of CBC. This can be a simple 'presence/absence' assessment of which principles exist, or an estimate of the degree to which a principle is present (low - medium - high). This will allow you to understand the relative strengths/weaknesses of the CBC system. Based on this diagnosis, you can then identify what actions to take as part of your project or program to enhance principles that may be weaker or missing. See example conservation actions linked to the relevant principles in column 3 of Table 1

### 2. A project screening tool to facilitate discussion between stakeholders across scales

When screening potential CBC projects, the framework can be used to facilitate discussions between global funders, support staff and local implementers to answer questions such as:

- "Do the proposed conservation actions support or enhance the current CBC conditions at the site?" or
- "Are there any blind spots or opportunities among the current conservation activities?"

For example, the activities proposed as part of a project to expand a local fishery reserve can be screened against principles related to the scaling of community-based conservation across larger geographies (component 3) to understand which activities may be most worthwhile supporting. It may uncover that there are no activities supporting the principle of 'observability.' This could prompt funders and implementers to discuss if activities designed to 'encourage communities to share information on the reserve and their results' are important to invest in - see example conservation action listed alongside Observability in Table 3.

### 3. Monitoring

Use the principles from the framework to inform monitoring protocols that track social and economic conditions important to CBC at a site<sup>2</sup>. Monitoring the CBC context will help to answer questions such as:

- 'Which conservation strategy would be most appropriate to the CBC context' or
- 'Which site would be most appropriate for a CBC intervention'?

For example, the principle 'personality traits of the adopter'<sup>3</sup> (see Table 3) can be turned into a closed question that asks - 'how comfortable are you with taking risks when making decisions concerning your livelihood activities' - in order to monitor how conditions related to scalability of an intervention change over time. This can also feed into or foster adaptive management.

<sup>3</sup> Defined as 'The degree to which an adopter's risk orientation, favorable attitude towards change, and spirit of competition influence adoption'. Taken from Jagadish et al. 2022.

## Box 1 (cont.): The potential application of the CBC framework

### 4. A common language to facilitate shared learning

The CBC framework can provide a common language to frame discussions about lessons learned from community-based conservation in a more informal context (outside of formal design, monitoring, and evaluation processes).

For example, should you wish to bring together groups working on CBC to exchange experiences, the components or principles of the framework can be used to discuss issues on a broad level, such as those identified below:

- How does the CBC context differ between sites, and which of the factors is most prominent?
- What are factors that have contributed to success in one site that may be useful in another?

WWF used such an approach in a workshop on identifying suitable actions for scaling CBC<sup>4</sup>.

### 5. Research and evaluation

The CBC framework can be used as a theoretical framework to guide research and evaluation. The principles and components of the framework can be used to examine the social conditions that support or enhance CBC. For example a research question could ask:

- Which principles are most important to the establishment of CBC institutions (component 1) at this site<sup>5</sup>?

In evaluations, the framework can be used to help shape questions, particularly if interventions were designed to create and/or enhance principles of CBC. For example, drawing from component 2 an evaluation could be designed to ask:

- Did interventions enhance principles considered important for sustainable governance (component 2)?
- How does governance (component 2) influence CBC outcomes?

In a similar approach, Glew et al (2012) used component 2 to characterize governance in control and project sites as part of a broader evaluation project focused on the social and ecological impact of MPAs.

## Principles to guide action

Each component (the establishment, implementation, or scaling out of CBC initiatives) contains factors considered important to their success. Factors linked to the establishment and implementation of CBC have been developed over decades of social science research and on-the-ground experience into principles for successful community-based conservation. Factors linked to scaling CBC interventions have been less explored to date and diffusion of innovation theory represents a novel approach to understanding this phase of CBC (See Mascia and Mills, 2018 and Jagadish et al., 2021). The principles linked to each component of CBC are presented in Tables 1- 3 below. Example activities that seek to contribute to each principle are presented in the 'example conservation action' column.

<sup>4</sup> WWF used the CBC framework to inform the design of a workshop that brought together conservation practitioners from 15 countries. The workshop focused predominantly on sharing lessons on scaling CBC and identifying what actions and interventions conservation practitioners could employ based on experience elsewhere to help scale CBC.

<sup>5</sup> See a recent paper by Wilkie and Painter, 2021, who used it to inform a research effort that (a) identified which factors lead people to cooperate (Component 1 of the framework) and (b) explored how features of governance institutions influenced social and ecological outcomes (Component 2 of the framework) within community forestry initiatives in eight countries.



**Table 1: Component 1 – Establishment of CBC**

Component 1 in the framework focuses on enabling conditions for CBC. i.e. What needs to be in place to build sustainable natural resource management institutions?

<b>Principle</b>	<b>Description</b>	<b>Example conservation action</b>
<b>High salience</b>	Community members/institutions are dependent on the resource system for a major portion of their livelihood.	Assess peoples' dependence on natural resources for livelihood and well-being
<b>Common understanding of the resource system, and how actors affect each other and resources</b>	Community members/institutions have a shared image of how the resource system operates and how their actions affect each other and the resource system.	Provide learning arenas - for example participatory mapping exercises
<b>Low discount rate that individuals attach to future resource flows</b>	The cost of conserving resources today must not exceed the expected benefits of conserving resources for the future	Support development of diverse livelihood opportunities
<b>High trust and reciprocity among users<sup>6</sup></b>	Relations among community members and between community members and CBC institutions should be characterized by a) trust and b) shared costs and benefits.	Facilitate arenas for conflict resolution
<b>High autonomy—ability to self-organize</b>	Community members/institutions are able to determine access and harvesting rules without external authorities overriding them.	Support legislation that ensures local rights to organize; support capacity for self-organization
<b>Prior organization experience and local leadership</b>	Community members/institutions have organizational and leadership skills acquired through previous experience	Support local leadership and build on prior experiences of cooperation among people—for example, women's collectives, agricultural cooperatives
<b>Feasible (ecological) improvements</b>	Resource conditions are, not at a point of deterioration such that it is useless to organize, or so underutilized that little advantage results from organizing	Collaboratively assess existing resource conditions and identify steps for improvement—for example, participatory planning exercises
<b>Indicators for resource condition exist at a low cost</b>	Reliable and valid indicators of the condition of the resource system are frequently available at a relatively low cost	Collaboratively identify effective and feasible indicators for monitoring the resources.
<b>Predictability of resource dynamics</b>	The flow of resource units is relatively predictable	Support education and training programs on natural resources sustainability.
<b>Spatial extent</b>	Spatial extent is sufficiently small for users to know boundaries and internal micro-environments	Support participatory mapping of resource boundaries and locations.

<sup>6</sup> Olson (1965) identified five requisites of social cohesion that facilitate collective action that relate to Ostrom's attribute (A4) on trust and reciprocity. These include: (a) familiarity; (b) frequent interactions; (c) shared identity; (d) trust; and (e) reciprocity.

## Table 2: Component 2 – Persistence of good governance and management for community-based conservation

Component 2 centers on sustaining community natural resource institutions and is based on Ostrom's Nobel prize-winning work on common-pool resource theory. This component introduces eight principles important for supporting the governance of shared (community or publicly owned) resources<sup>7</sup>.

Principle	Description	Example conservation action
<b>Clearly defined boundaries</b>	Boundaries are clearly defined for a) the resource and b) around who is permitted to use the resource	Support participatory mapping of resource boundary; post signs.
<b>Congruence between appropriation and provision rules and local conditions</b>	Rules for resource use are tailored to the local conditions, and the benefits that individuals derive from resources are proportional to the costs they bear	Facilitate a forum to discuss and codify locally accepted rules for resource use with appropriate stakeholders.
<b>Collective choice arrangements</b>	Community members/institutions who are affected by resource management rules can participate in modifying them	Support the development of a transparent and democratic governance structure for community-based natural resource management grounded in traditional systems.
<b>Monitoring</b>	Monitoring (often led by resource users) of the resource and its use exists, and those who monitor resources and enforce rules are also held accountable by the resource users	For monitoring CPR, provide training in indicator selection; data collection, entry, analysis, disseminating information, and application of learning. For accountability, establish and support community ranger program; establish ranger code of conduct and whistle-blower system.
<b>Graduated Sanctions</b>	Punishments for breaking resource use rules are proportional to the severity of the crime	Facilitate the collaborative development of appropriate sanctions by stakeholders; support the development of enforcement procedures (in line with existing structures) to ensure sanctions are upheld.
<b>Conflict-resolution mechanisms</b>	Community members/institutions have rapid access to low-cost, local areas to resolve conflicts	Train conflict mediators and facilitate the development of grievance mechanisms.
<b>Minimal recognition of rights to organize</b>	The rights of community members to devise their own institutions are not challenged by external governmental authorities	Advocate for legislation that enables resource management by communities. Assist communities with governance principles 1-6.
<b>Nested enterprises</b>	The different levels of management that exist within the CBC system function as a cohesive unit.	Facilitate dialogues between communities and other stakeholders (e.g. government, companies) to ensure governance is effective across scales.

<sup>7</sup> See Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action* for more information.

### Table 3: Component 3 – The scaling of CBC across larger geographies

Component 3 introduces the Diffusion of Innovation theory<sup>8</sup>. It hypothesizes that rates and patterns of spread are strongly influenced by: 1) the type of innovation (such as a temporary reserve), 2) the adopters (individuals and community groups), and 3) the context. Complementary theories on scaling ‘up, out and deep’ (Morre, Riddell & Vocisano, 2015), resilience (Berkes, 2004), and from the behavioral sciences and social marketing (Green et. al. 2019) also add useful insights to the pathways of diffusion<sup>9</sup>.

Principle	Description	Example conservation action
<b>INNOVATION</b>		
<b>Relative advantage</b>	The expected net benefits of adopting an innovation compared to the status quo.	Support design of CBC practices that have relative advantage over status quo.
<b>Compatibility</b>	The degree to which the practice is perceived as consistent with existing values, existing actions, past experiences, and needs of potential adopters.	Support design and implementation of CBC practices in ways that are compatible with people’s values, needs, and lived experiences.
<b>Complexity</b>	The degree to which the practice is perceived as difficult to understand and use.	Synthesize and mainstream information on CBC practices in a way that is simple to understand and implement.
<b>Trialability</b>	The degree to which the practice may be experimented with on a limited basis.	Support and encourage principles of experimentation and rapid prototyping in community-driven projects.
<b>Observability</b>	The degree to which the practice and the results of that practice are visible (observable or communicated) to others.	Enhance visibility of or encourage adopters to share information about CBC practices and their results to facilitate social learning.
<b>Flexibility</b>	The ability to transform the practice to something that aligns with the adopter’s desires and constraints.	Support adaptation of CBC practices to suit adopter’s individual needs.
<b>ADOPTER</b>		
<b>Social-economics</b>	Social-economic characteristics that influence adopters’ ability to learn or implement a new practice (economic well-being, education, social status)	Facilitate capacity-building workshops on for example, resource use rights, engagement in decision making, livelihood opportunities or modify implementation strategy to status quo.
<b>Personality</b>	Personality traits that influence an adopter’s willingness to learn and implement new practices, such as risk orientation and competitiveness	Facilitate inter-community learning exchange on natural resource management opportunities or modify implementation strategy to suit status quo.
<b>Knowledge</b>	The degree to which the adopter is familiar with the innovation and innovation consequences.	

<sup>8</sup>See Rogers, E. M. (2003). Diffusion of innovations for more information

<sup>9</sup>Scaling “up, out, and deep” recognizes additional pathways to scale that involve policy and legal actions (scaling up—e.g., through legalizing land tenure rights) and focusing on values, cultural practices, and relationships (scaling deep) (Moore, Riddell, & Vocisano, 2015). And with accelerating global change and increased risks from climate change, insights from resilience theory could offer a complementary lens to help guide the adaptation of CBC governance over time (Berkes, 2004).



**Table 3 (cont.): Component 3 – The scaling of CBC across larger geographies**

Principle	Description	Example conservation action
<b>ADOPTER (cont.)</b>		
<b>Decision making</b>	Decision making arrangements specify the rights of individuals or groups to make choices regarding other aspects of conservation intervention design and management.	Support development of/reinforce traditional resource governance structures, and local leadership opportunities or modify implementation strategy to suit status quo.
<b>CONTEXT</b>		
<b>Geographical settings</b>	Physical features of the landscape/ seascape, as well as spatial proximities to other adopters, markets, etc. that affect adoption by influencing the applicability of the innovation.	Support the implementation of legislation which enables the implementation of the conservation initiative. Some contextual characteristics can rarely be changed, so assess local ecological, cultural, and political conditions and applicability of the CBC practices in those conditions. Where possible, support identification of compatibility between CBC practices and context.
<b>Culture</b>	Shared behaviors and ideas— belief systems, traditionalism, and socialization of adopters—that influences adoption of innovations.	
<b>Political Conditions</b>	Character of political systems, along with the regulations and norms inherent in the legal systems that influence the potential adopters' behaviors.	
<b>Technical support</b>	We define technical support broadly to include public and private sector activities relating to technology transfer, education, human resource development, and sharing of information which influences adoption and implementation of the initiative.	
<b>Global discourse</b>	Diffusion is affected by the extent to which the adopter's context influences and is influenced by globally circulating ideas, norms, and practices related to the innovation.	

**Please cite as:**

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