



# Solving ‘wicked’ problems: can social learning catalyse adaptive responses to climate change?

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Marissa Van Epp and Ben Garside

**Working Paper**

November 2016

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**Climate change**

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*Keywords:*

Social learning, monitoring and evaluation, community-based adaptation, community-based natural resource management

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## Produced by IIED's Communications Group

The Communications Group works to position IIED for impact and influence by communicating with the right people, in the right way, at the right time. We work to three objectives: putting audiences first; creating content for impact; and enabling best practice in communications and marketing. The Group has been working with the CGIAR Climate Change, Agriculture and Food Security Research Program, and others, to explore the effectiveness of social learning methodologies in addressing complex global challenges, through the Climate Change and Social Learning initiative (CCSL, <https://ccsl.wikispaces.com>). *Solving 'wicked' problems* is the culmination of this work, and collects and analyses evidence on where effective social learning is occurring and how such an approach can contribute to tackling problems such as climate change and achieving better development outcomes.

## Acknowledgements

IIED and the authors would like to thank all the initiatives who participated in or adopted the social learning M&E framework used in this study, for their strong interest in this work and their efforts in data gathering. The five initiatives are: the African Climate Change Resilience Alliance (ACCRA) in Uganda; the Bolsa Floresta Program (BFP) in the Brazilian Amazon; the Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA); the Political Action for Climate Change Alliance (PACCA) in Uganda and Tanzania; and the Potato Park-International Potato Centre-ANDES Agreement for the Repatriation of Native Potatoes in Peru. In addition, special thanks to the Climate Change, Agriculture and Food Security (CCAFS) programme at the Consultative Group on International Agricultural Research (CGIAR) for their support in funding this work.

Published by IIED, November 2016

Van Epp, M and Garside, B (2016) *Solving 'wicked' problems: can social learning catalyse adaptive responses to climate change?* IIED Working Paper. IIED, London.

<http://pubs.iied.org/17390IIED>

ISBN 978-1-78431-428-6

Printed on recycled paper with vegetable-based inks.

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Social learning approaches can catalyse knowledge co-creation and action, so have the potential to help solve complex ‘wicked’ problems such as climate change and food insecurity. This working paper synthesises evidence from five diverse initiatives employing social learning approaches in response to such problems using the Climate Change and Social Learning initiative’s monitoring and evaluation framework. It finds initial evidence that key factors in social learning approaches can lead to clear learning outcomes with resulting positive changes in values and practice. Links to longer-term development outcomes are also evident in several completed initiatives.

## Contents

<b>Summary</b>	<b>4</b>	<b>5 Synthesis and discussion</b>	<b>29</b>
<b>1 Introduction</b>	<b>6</b>	5.1 Engagement	30
<b>2 Framework for analysis</b>	<b>8</b>	5.2 Iterative Learning	32
<b>3 Methodology</b>	<b>10</b>	5.3 Capacity Development	34
3.1 Peer assist and data collection	10	5.4 Challenging Institutions	36
3.2 Analysis and indicator scoring	12	5.5 Looking across the four dimensions at social learning	38
<b>4 Case studies and findings</b>	<b>14</b>	<b>6 Revising the framework</b>	<b>41</b>
4.1 African Climate Change Resilience Alliance (ACCRA)	15	<b>7 Conclusions and next steps</b>	<b>43</b>
4.2 Bolsa Floresta Program (BFP)	17	<b>Appendix A. CCSL M&amp;E Framework</b>	<b>46</b>
4.3 Collaborative Adaptation Research Initiative for Africa and Asia (CARIAA)	23	<b>Appendix B. Process Guide</b>	<b>49</b>
4.4 Policy Action for Climate Change Adaptation (PACCA)	25	<b>Appendix C. Diagrams</b>	<b>53</b>
4.5 Potato Park Project	27	<b>Acronyms</b>	<b>58</b>
		<b>References</b>	<b>59</b>

# Summary

Social learning approaches can catalyse knowledge co-creation and action, so have the potential to help solve complex 'wicked' problems such as climate change and food insecurity. This working paper synthesises evidence from five diverse initiatives employing social learning approaches in response to such problems using the Climate Change and Social Learning initiative's monitoring and evaluation framework. It finds initial evidence that key factors in social learning approaches can lead to clear learning outcomes with resulting positive changes in values and practice. Links to longer-term development outcomes are also evident in several completed initiatives. Complex or 'wicked' problems often cannot be adequately addressed using traditional 'top-down' approaches. Social learning-oriented approaches offer a potential solution by calling on the knowledge of multiple stakeholder groups, and encouraging knowledge sharing and integration and the co-creation of new knowledge.

Social learning is more than just group learning; it has an agenda for wider change. It encourages stakeholders to work together to implement and test solutions through iterative cycles of learning, action and reflection. Spreading the learning from this iterative process to wider stakeholder groups and networks allows for change on a larger scale. Institutional openness and support for such approaches is crucial for realising the potential for change.

Working in partnership with five initiatives, this working paper applies the Climate Change and Social Learning initiative (CCSL) monitoring and evaluation framework to assess the impacts of social learning approaches. The only tool of its kind, it is structured to track the processes that are more likely to foster social learning across four key dimensions: engagement, iterative learning, capacity development and challenging institutions. It can also be used to explore links between process activities, learning outcomes, and resulting changes to values and practice.

This paper gathers results from across these dimensions as a first step in testing whether and in which contexts the progression from process to outcomes holds true. The evidence collected across the five initiatives identifies key processes that have enabled social learning outcomes and, in some cases, development outcomes. The five initiatives are:

- The African Climate Change Resilience Alliance (ACCRA), which integrates climate change adaptation into national monitoring and evaluation (M&E) frameworks in Uganda across community, district and national levels
- The Bolsa Floresta Program (BFP), which integrates forest conservation with community-driven development projects in the Brazilian Amazon
- The Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA), which is an early stage global research programme aiming to integrate social learning approaches into programme design
- The Political Action for Climate Change Alliance (PACCA) in Uganda and Tanzania, which is an early stage programme seeking to foster multi-stakeholder learning alliances
- The Potato Park-International Potato Centre-ANDES Agreement for the Repatriation of Native Potatoes in Peru (referred to as the 'Potato Park project'), which works to repatriate native potatoes and carry out collaborative research between the International Potato Centre (CIP) and indigenous communities in the Peruvian Andes.

We found that across the dimensions of change, most of the initiatives progressed from process (where the indicator scores are highest), to learning outcomes (with slightly lower scores) and to value/practice outcomes (which had the lowest scores). More samples are needed, but these initial findings appear to confirm our hypothesis that a successful social learning-oriented approach would result in a clear overarching progression from processes to learning outcomes to value/practice outcomes. Conversely, we find where there is little or no process, there are weak outcomes — again in line with our hypothesis.

When looking at the process indicators in each of the four dimensions, we found engagement to be the strongest. The strongest aspects of engagement were found to be fostering champions and leaders, trusted facilitation, and inclusive and active participation.

Based on our limited sample size, no individual dimension of social learning appeared to be an accurate predictor of the likelihood that an initiative's process-related efforts would (or would not) result in positive outcomes. The results do however demonstrate the interconnected nature of the four dimensions. Engaging

institutions is crucial if they are to be challenged and capacity development was found to be one way to do so. Facilitation, crucial to iterative learning, can also be used to ensure that capacity development takes place during group reflection and evaluation moments.

Where social learning did occur and the programme/project had reached a stage where development outcomes could be observed, social learning's positive contribution was clear. Where indicator groups in the framework were not achieved — for example where there was a lack of engagement over a sustained period, the absence of multiple reflect and act cycles, or no attempt to challenge institutional barriers — outcomes appeared sub-optimal.

Some of the completed projects provide examples of improved development outcomes. In the Potato Park project, for instance, joint research and action by farmers and scientists resulted in potato varieties being successfully repatriated to Potato Park communities, increasing potato biodiversity in the Park to one of the highest rates in the world, with improved incomes for Potato Park communities. Again, the sample size was small, which makes it difficult to robustly assess the contribution of social learning to development outcomes, but these initial findings are encouraging.

## Key findings and conclusion

At this early stage, our analysis indicates that programmes and projects employing approaches that incorporate key factors from each social learning dimension are most likely to see positive changes among stakeholders in relevant understanding, relationships and norms. Programmes and projects that emphasise all four dimensions are most likely to see the crucial changes in values and practice across stakeholders and wider groups that can lead to improved development outcomes.

Our evidence indicates that programmes and projects that incorporate the following 'who, what, when and how' of effective social learning are most likely to see positive changes:

- **Who** — carry out stakeholder research and target specific stakeholder groups to ensure active participation, including those traditionally seen as 'external' stakeholders. Take a bottom-up approach to tailor capacity development activities and foster buy-in. Aim for inclusive collective learning. Capacity development and support helps groups/institutions lower on the power ladder to challenge those higher up.
- **What** — involve beneficiaries and decision makers in design. Soft skills and concepts are as important

as technical capacity development — for example collective learning about the process of enabling social learning. Foster institutional openness to and support for social learning-oriented processes.

- **When** — engage stakeholders and start capacity development early to enable broad participation in the project design. When and how often reflection occurs; more frequent reflection moments foster better social learning.
- **How** — improve engagement by using experienced and trusted facilitators. Participation should be continuous. Use different styles of capacity development: learning by doing, as well as facilitation, can build soft skills. Reflection moments should be structured and planned-in. Learning needs to be captured and shared. Project/programme structures and planning processes need to be flexible to adapt to the results of learning. Integrate challenging of institutions to initiatives; challenging through champions and from the inside can be effective.

In addition, we identified some recommendations for initiatives taking a social learning-oriented approach:

- **Monitor learning.** Monitoring the implementation and results of social learning can ensure that it can be adjusted to the evolving context and needs of a programme/project
- **Learning leaders.** An individual who is internal to the programme/project can champion and manage learning processes and monitoring
- **Institutionalise learning.** The learning leader should not hold the social learning banner alone. Rather, champions of social learning need to spread their knowledge to wider networks within that institution to be effective
- **Enable action.** Challenging institutions is important because more powerful institutions often control the resources, structures and decision making that enable or constrain action in projects/programmes. Institutions should put decision-making power and resources behind social learning processes to enable follow-up action.

Taken together, these form a fledgling evidence base on the potential for social learning-oriented approaches in climate change adaptation and food security activities to improve development outcomes. IIED aims to build on this evidence base, focusing on the role of social learning processes in planning and implementing appropriate strategies for adapting to climate change and better managing climate uncertainties.

## 1

# Introduction

The people who are most vulnerable to the impacts of climate change and food insecurity ever more urgently need solutions. These intertwined issues have been described as 'wicked' problems because of their complexity, evolving nature, lack of clear solutions and plurality of perspectives (Carlile *et al.*, 2013). Solutions that are planned and implemented using traditional 'top-down' approaches are not sufficient to cope with these multiple challenges.

Social learning-oriented approaches offer a way to identify potential solutions to the complexity of climate change by calling on the knowledge of multiple stakeholder groups and encouraging them to share and integrate that knowledge in their understanding, and create new knowledge together. Social learning is more than just group learning; it has an agenda for wider change.

The definition of social learning guiding this working paper is from the Climate Change and Social Learning initiative (CCSL):<sup>1</sup>

Social learning approaches help facilitate knowledge sharing, joint learning and co-creation experiences between particular stakeholders around a shared purpose, taking learning and behaviour change beyond the individual to networks and systems. Through a facilitated iterative process of working together, in interactive dialogue, exchange, learning, action and reflection and ongoing partnership, new shared ways of knowing emerge that lead to changes in practice.

A social learning approach can bring together stakeholders at different levels, with different values and perspectives, to find common ground in defining a complex challenge such as climate change adaptation and its potential solutions. It encourages them to work together to implement and test solutions through cycles of learning, action and reflection. Spreading the learning from this iterative process to wider groups and networks allows for change on a larger scale.

Social learning approaches often come up against institutional barriers in moving from collective learning around a problem to achieving action and change. In social learning, 'institutions' refers not only to the formal, bricks-and-mortar sense of the term (government bodies or research institutes), but also to the informal and intangible sense (local community organisations or cultural practices). These barriers can be related to decision making and resource allocation being made by external institutions who are not participating in the learning processes, or through rigid and often bureaucratic fixed project cycles. They can also be related to power imbalances and politics between institutions within and across hierarchies, such as community to local government to national government.

Institutional openness to and support for social learning approaches is crucial for realising their potential for change. Institutions need to have structures and systems that allow flexibility in planning processes, as well as adequate resources, to accommodate the

<sup>1</sup> The Climate Change and Social Learning initiative (CCSL) is a working group investigating how social learning-oriented approaches can improve institutional processes and effectiveness and lead to better development outcomes in the context of climate change. More information about the group, as well as resources on social learning, can be found on the CCSL wiki page at <http://csl.wikispaces.com>.

experimentation — and associated failures — central to social learning. These aspects make iterative learning possible.

There are many similar approaches, so social learning is likely happening in different guises in many places.<sup>2</sup> Elements of a social learning approach can be found in many programmes' efforts in the areas of engagement, capacity development, iterative learning and challenging institutions. In a social learning-oriented approach, however, the focus is on all of these elements together — where the theory is that doing all of them is more likely to lead to learning outcomes whilst at the same time driving an agenda for change, which results in positive development outcomes. This working paper aims to better understand the essential elements of a social learning approach, and the contexts in which these elements contribute to changes that help the most vulnerable improve their resilience to climate change.

There is a growing body of research on the value of social learning-oriented approaches to addressing complex problems such as climate change (Harvey *et al.*, 2013). Such approaches, however, can be time consuming and costly, making them inappropriate for some contexts. The research presented in this working paper seeks to fill a gap in the evidence on the utility of social learning-oriented approaches for achieving development outcomes, and the specific contexts in which they are appropriate.

The overall objective of the research was to systematically collect and analyse evidence to answer the following question:

1. Where is effective social learning occurring, and what are the key contributing factors?

The ultimate aim is to build on this evidence in this working paper to answer a second question:

2. When and how does a social learning-oriented approach contribute to better and more sustainable development outcomes in the context of climate change adaptation and food security?

To this end, this working paper presents five case studies that examine the social learning-oriented approaches used by five initiatives working to address climate change, and their outcomes. Evidence was collected in partnership with five initiatives:

- The African Climate Change Resilience Alliance (ACCRA) in Uganda, Ethiopia and Mozambique
- The Bolsa Floresta Program (BFP) in the Brazilian Amazon
- The Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA), a global program
- The Political Action for Climate Change Alliance (PACCA) in Uganda and Tanzania
- The Potato Park-International Potato Centre-ANDES Agreement for the Repatriation of Native Potatoes in Peru (hereafter referred to as the 'Potato Park project').

These five initiatives joined together with CCSL to monitor social learning by piloting a monitoring and evaluation (M&E) framework for social learning developed by CCSL. The framework is the only M&E tool of its kind available to support assessment of the impact of social learning-oriented approaches. It is structured to track processes and outcomes in four different dimensions of social learning, allowing users to unpack the key elements of a social learning-oriented approach, as well as to isolate causes and effects. The first objective was to synthesise evidence collected from the five case studies to identify the key processes that made the social learning outcomes — and in some cases development outcomes — observed possible.

A second objective of this research is to test the theory of change behind the M&E framework. This theory of change is based on assumptions about the most important dimensions of a social learning-oriented approach, as well as about the dimensions of change one can expect to see with a successful process.

A third, related, objective is to evaluate the utility of the first iteration of the M&E framework as a tool for collecting evidence on social learning, and to make suggestions for its improvement.

<sup>2</sup>The extensive range of community participatory approaches as part of the 'participation' literature — such as Participatory Rural Appraisal (PRA) and to a lesser extent Rapid Rural Appraisal (RRA) — often help foster social learning.

## 2

# Framework for analysis

The CCSL M&E framework was developed in 2014 through a participatory approach. Organisations and initiatives interested in social learning were brought together at a workshop hosted by the International Institute for Environment and Development (IIED) in London in June 2014. Drawing on practical experience, as well as on a body of research conducted by members of the CCSL initiative, workshop participants followed a social learning-oriented process to come to a consensus on the key elements of social learning. These were areas where you are likely to find processes that encourage and support social learning — engagement or capacity development, for instance. The main output of the workshop was a shortlist of these elements that was used to develop indicators, and then refined and expanded by CCSL members into a full M&E framework including indicators.<sup>3</sup>

The resulting framework was developed around four areas — or dimensions — of social learning:

1. **Engagement.** Outreach to and involvement of individuals and groups as part of the problem definition and learning process. Engagement as part of good social learning targets women, youth and other marginalised groups.
2. **Iterative learning.** Collective or group learning that occurs continuously or cyclically to co-create knowledge.

3. **Capacity development.** The development of an individual's or group's knowledge and skills. In social learning this is not limited to a one-way transfer between two parties (eg researcher to farmer), but instead is multi-directional and involves multiple parties (eg farmers to researchers, farmers to farmers, researcher to farmer, and so on).
4. **Challenging institutions.** Active questioning of institutional practices and values, potentially leading to institutional change. In social learning, 'institutions' refers not only to the formal, bricks-and-mortar sense of the term (eg government bodies or research institutes), but also to the informal and intangible sense (eg local community organisations or cultural practices).

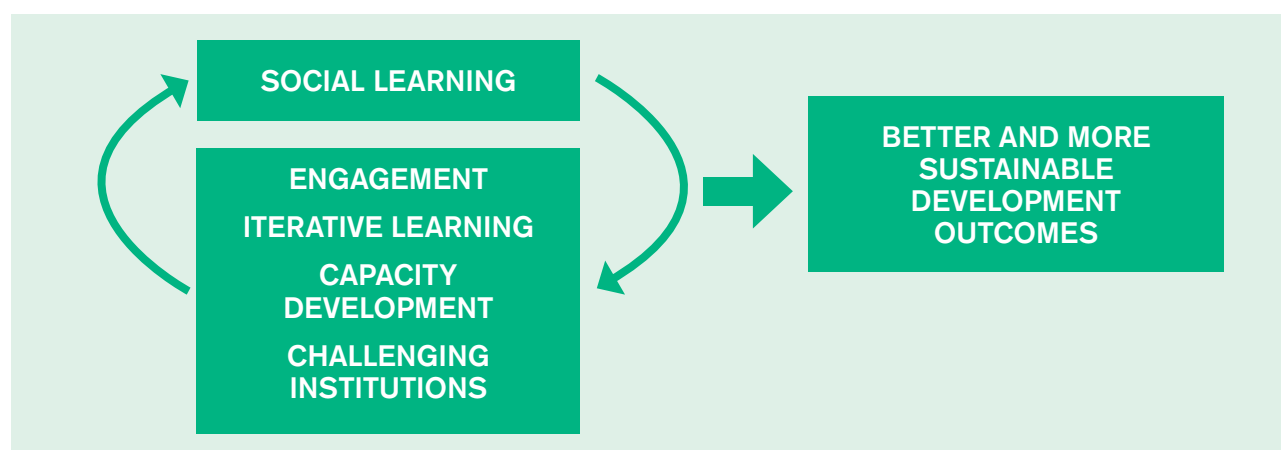
The relationship between these four dimensions, social learning and the hypothesised impact of a social learning-oriented approach is illustrated in a simple theory of change diagram in Figure 1. As shown, the dimensions can be both key processes in, and outcomes of, good social learning.

The overarching theory of change is that a combination of iterative learning, capacity building, engagement, and the challenging of systems and institutional barriers and norms (process indicators) may lead to more effective co-learning and the co-creation of solutions to 'wicked' problems — or social learning.

<sup>3</sup> Additional details on the development of the framework can be found in Van Epp, M and Garside, B (2015) Monitoring and Evaluating Social Learning: A Framework for Cross-Initiative Application. CCAFS Working Paper no. 98. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark.



Figure 1. A theory of change for social learning



Effective social learning should lead to different 'learning change outcomes' that can be tracked (learning outcome indicators). Learning change outcomes can be normative (related to norms), relational (involving relationships) or cognitive (focused on knowledge) (Lebel *et al.*, 2010). Together, these can generate changes in values and practice occurring across individuals, networks, institutions and systems (value/practice outcome indicators). The anticipated overall result is evidence of these changes having a positive impact on sustainable development with increased impacts where change at the institutional/system level also occurs (impact indicators) (Van Epp and Garside, 2015).

To monitor progress in each of the four thematic dimensions of social learning — engagement, iterative learning, capacity development and challenging institutions — the framework uses 30 'essential' indicators. These are spread across the progression from tracking process for each dimension, to learning outcomes and then to value/practice outcomes. This progression from process to learning outcome to value/

practice outcome is referred to as the 'dimensions of change'. Table 1 below summarises the structure of the framework, outlining where the indicators fit in the matrix comprised of the four thematic dimensions and the three dimensions of change. Indicators are numbered within each dimension of change. The full CCSL M&E framework can be found in Appendix A.

Of the 40 total indicators, 30 are considered essential for monitoring and 10 are considered non-essential. That said, even the essential indicators do not necessarily represent the only or required elements of a social learning-oriented approach. Rather that they are common elements of social learning-oriented approaches that have been used by a variety of programmes and projects.<sup>4</sup> The framework is a tool for assessing the extent to which these elements occur, analysing how and why each of them contributes to social learning in different contexts, and exploring the links between social learning and any changes in values and practice that positively impact climate resilience and development.

Table 1. CCSL M&amp;E framework structure

	PROCESS (P) INDICATORS	LEARNING (L) OUTCOME INDICATORS	VALUE/PRACTICE (V) OUTCOME INDICATORS
Engagement	P1–P4	L1–L3	V1–V2
Iterative learning	P5–P9	L4–L6	V3–V6
Capacity development	P10–P13	L7–L9	V7–V8
Challenging institutions	P14–P17	L10–L12	V9–V11

<sup>4</sup> More information can be found in Harvey, B *et al.* (2013) Social learning in practice: A review of lessons, impacts and tools for climate change. CCAFS Working Paper no. 38. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark.

## 3

## Methodology

## 3.1 Peer assist and data collection

Following the development of the CCSL M&E Framework, a call was issued to identify climate change adaptation and food security initiatives using a social learning-oriented approach that were interested in monitoring and evaluating the impact of that approach. These initiatives were invited to pilot the framework through a 'peer assist' process, which worked with each initiative to adapt the framework indicators and the methods for gathering results to each initiative's context.

The five initiatives chosen to take part in the peer assist process received support from a CCSL member at IIED in a) understanding the framework, b) tailoring the indicators to their specific programme or project, c) thinking around how to integrate the framework into any existing or future M&E systems, d) choosing appropriate methods for collecting evidence against the framework, e) analysing the evidence and f) writing a case study report.<sup>5</sup> A process guide was developed to help participating initiatives think about how to use the framework — this can be found in Appendix B. Data collection methods considered are summarised in Table 2.

Methods were chosen in dialogue with the initiatives and tailored to each case study's context. Process-based network mapping was found to be an especially useful tool for eliciting information about processes from community-level project dialogues. This method, which produces process 'net-maps', allows users to retrospectively track the step-by-step processes

between stakeholders as a project evolved.<sup>6</sup> This method was first used successfully with BFP, and later with other case studies. Stories of change, outcome mapping and policy change analysis were not used by any of the case studies. This was for two reasons: they were not part of existing methods being used by ongoing initiatives, and they tend to be more time and resource intensive and require longer timeframes for implementation.

Evidence was collected by members of the initiatives, with two exceptions. Evidence for CARI AA was primarily collected by the authors due to staff turnover in the programme, and for BFP the authors conducted fieldwork alongside BFP staff working with local organisations in the Brazilian Amazon.

The peer assist and associated data collection approach had several limitations. The evidence gathered to populate the framework depended on what stage an initiative had reached at the time of data collection. For those initiatives applying the framework retrospectively with limited resources for additional data collection or fieldwork, this was often not 'hard' evidence and was sometimes based on a limited number of stakeholders' experiences. In all cases, however, the authors provided a critical review through peer assist, challenging the assessment where appropriate. For ongoing initiatives that applied the framework at or near the beginning, the work had not progressed enough to make a connection between evidence collected and development outcomes by the time of publication. For these case studies, the value/practice indicators are less populated, reflecting work in progress rather than lack of effort.

<sup>5</sup>With the exception of CARI AA, for which data collection, analysis and case study write-up was carried out by a CCSL member at IIED in consultation with CARI AA.

<sup>6</sup>See the work of Eva Schiffer on Net-Map Toolbox and the Process Netmap variant: <https://netmap.wordpress.com/process-net-map>.

Table 2. Data collection methods

METHODOLOGY	DESCRIPTION	PROCESS INDICATORS	LEARNING OUTCOME INDICATORS	VALUE/ PRACTICE OUTCOME INDICATORS
Participant observation	An informal, qualitative way of capturing individual participants' thoughts and feelings at a given moment. Observations could be recorded in personal journals, for example	✓	✓	✓
Focus group discussions	A more formal, qualitative way of capturing participants' thoughts and feelings in a group setting at a given moment	✓	✓	✓
Surveys/questionnaires	A way to collect data from larger groups of people in a format that can be quantitatively analysed	✓	✓	✓
Social network analysis and process network mapping	Social network analysis aids assessment of the nature of the networks relevant to the project/ programme and participants. A variant of this, 'process network mapping', facilitates participants' illustration of the process followed and the actors involved, revealing not only relevant networks but also a timeline of interactions, processes and outcomes (indicated by bracketed tick marks)	[✓]	[✓]	✓
Community self- assessment	Enables a community to collectively reflect on a given topic, eg needs, transformation, social differentiation, and existing processes and cultural practices			✓
Stories of change, stakeholder portraits and follow-up interviews	Three qualitative tools to help researchers track participants' transformations — changes in knowledge, beliefs, attitudes, actions, and so on — over the duration of a project/programme		✓	✓
Outcome mapping	Allows project designers to systematically outline the anticipated steps/pathways for bringing about the desired changes (outcomes) of the project. This is ideally done prior to or at the beginning of a project/programme, and is revisited at key stages to aid reflection		✓	✓
Policy change analysis	Helps to determine the success of a project/programme based on the extent to which it influences policy (measured by, for example, citations)			✓

## 3.2 Analysis and indicator scoring

Both qualitative and quantitative analysis of the evidence collected against the indicators was carried out through the peer assist process. Qualitative analysis involved interpreting the evidence in the context of the indicator and the overall dimension of social learning, culminating in a qualitative score. Scoring was done jointly by the initiatives and the authors to ensure consistency of judgment across the case studies. The scores used are presented in Table 3 with definitions.

To aid the synthesis of evidence across case studies, two tools were used: visual representations of the data, and quantitative scoring. Visual representations of the data for each case study were created by assigning each dimension a colour, and each qualitative score a different shade of that colour. The score of 'Yes' was assigned the darkest shades, while 'No' was assigned white and 'No evidence' was assigned grey. The colours and shading are visible in Table 4.

Quantitative scoring was based on the qualitative scoring. The rules are outlined in Table 4. Indicative quantitative scores were given primarily for comparison across dimensions of social learning and change, rather than for comparison between the different case studies. The added value of quantitative scoring, over the visual representations, is that it enabled average scoring of the dimensions, allowing more precise comparison.

In addition to scoring each indicator, each dimension was given an average score. To calculate the average score for a dimension, the individual indicator scores were totalled and then divided by the number of indicators that received a score (ie not counting indicators for which the qualitative assessment was 'no evidence'). This method was chosen to differentiate between 'no' and 'no evidence'; in this way, 'no' decreases the average for a dimension while 'no evidence' does not affect the average.

Table 3. Qualitative scoring definitions

QUALITATIVE SCORE	DEFINITION
Yes	There is good evidence that the indicator has been well met, including examples where it has been met continuously over time. There is good evidence that the indicator can be attributed to the project/programme
Partially	There is some evidence that the indicator has been met. Evidence does not fully meet the indicator description or has not been collected often enough to be considered fully applicable. However, evidence gathering did actively happen as a repeated activity within the project/programme. Alternatively, a two-part indicator has been scored 'Yes' and 'No', 'Yes and Partially' or 'Yes and Hardly'
Hardly	Very tentative support for the indicator having been partially achieved but it is unclear whether it was met or whether progress/achievements are attributable to the project/programme. Perhaps a one-off example was given. Alternatively, a two-part indicator has been scored 'Partially and No' or 'Hardly and No'
No	There is evidence that the indicator has not been achieved
No evidence	Based on interviews and discussion, there is no evidence as to whether the indicator has been met or not

Table 4. Visual representation and quantitative equivalent for qualitative scores

QUALITATIVE SCORE	SHADING				QUANTITATIVE SCORE
	Engagement	Iterative learning	Capacity development	Challenging institutions	
Yes					3
Partially					2
Hardly					1
No					0
No evidence					–

The averages for each dimension of social learning, which fall between 0 and 3, indicate the overall extent to which a dimension has been a focus of an initiative's approach. For a completed project or programme, a score of 3 indicates a high level of success for that dimension, where success means positive learning and value/practice outcomes resulting from the processes implemented. A score of 1 indicates a low level of success, meaning few positive outcomes resulting from processes implemented or a low level of emphasis on processes to begin with.

For an incomplete project or programme, the scores have a slightly different meaning. Because high scores can still be achieved when there is no evidence for outcome indicators, these cases reflect the level of emphasis on a dimension (or specific elements of it) in the processes currently being implemented. Low scores likewise indicate a low level of emphasis, rather than a low level of outcomes.

# 4

## Case studies and findings

The five initiatives selected for the pilot were chosen to provide a wide range of sizes, types, geographic areas of focus and levels of analysis. A description of the five initiatives and their status is presented in Table 5.

It is important to note that BFP received more intensive peer assistance for fieldwork covering ten projects that the programme supported/is supporting in different communities in the Brazilian Amazon. Four of these projects representing a range of outcomes were selected for further analysis. The BFP case study is a synthesis of these four projects.

In line with their status, the Potato Park project, BFP and ACCRA all applied the CCSL M&E Framework retrospectively. CARIAA and PACCA are ongoing programmes that have integrated the framework (or an adapted version of it) into their existing Monitoring, Evaluation and Learning (MEL) strategies.

This section presents summaries of each of the five case studies. The full case studies can be found in *Solving 'wicked' problems: a compendium of case studies*, published separately on the IIED publications library. Each case study includes a description of the initiative, an overview of the programme or project process involving a social learning-oriented approach, a snapshot of the qualitative and quantitative scoring for all indicators, analysis of the evidence collected against the indicators in each of the four dimensions of social learning, analysis of the impact of the process on social learning outcomes, and development outcomes where relevant. Appendix C contains the indicator snapshots for all of the case studies, to provide an accessible visual comparison across all the studies.

Table 5. Description and status of the initiatives piloting the CCSL M&amp;E framework

CASE STUDY	DESCRIPTION	STATUS
ACCRA	<p><b>Type:</b> climate change adaptation — policy influencing project</p> <p><b>Location:</b> Uganda, Ethiopia and Mozambique</p> <p><b>Focus of research analysis:</b> community members, district-level government, national-level government in Uganda</p>	Project complete; others ongoing
BFP	<p><b>Type:</b> community-based natural resource management and development program</p> <p><b>Location:</b> Amazon, Brazil</p> <p><b>Focus of research analysis:</b> Amazonian community members</p>	Programme ongoing; each case study project complete or long enough to identify outcomes
CARIAA	<p><b>Type:</b> climate change adaptation — research initiative for policy influencing</p> <p><b>Location:</b> Africa and Asia</p> <p><b>Focus of research analysis:</b> researchers, policymakers</p>	Ongoing; limited outcomes at this stage
PACCA	<p><b>Type:</b> climate change adaptation — learning alliance for policy influencing</p> <p><b>Location:</b> Uganda, Tanzania</p> <p><b>Focus of research analysis:</b> alliance members, especially policymakers</p>	Ongoing; limited outcomes at this stage
Potato Park project	<p><b>Type:</b> community-based natural resource management and development programme</p> <p><b>Location:</b> Potato Park, Peru</p> <p><b>Focus of research analysis:</b> CIP scientists, Potato Park farmers</p>	Project complete

## 4.1 African Climate Change Resilience Alliance (ACCRA)

### 4.1.1 Project description

For the last five years, ACCRA has engaged in research and capacity building support for the government to mainstream climate change in Uganda. Initial research conducted in 2010 revealed that local governments in Uganda had low awareness of climate change and limited financial, human and technical capacity to support community adaptive capacity for climate change. To address this capacity gap, ACCRA trained local government staff to conduct risk assessments and mainstream climate change issues into plans and budgets. Shortly after, the national government began developing the national climate change policy and mainstreaming guidelines. However, there was no system in place to track and measure progress towards achieving resilience. In partnership with IIED, ACCRA facilitated a bottom-up process to develop common indicators and integrate them into relevant existing M&E frameworks at the national level.

The success in engaging government in the process was made possible in part by the conducive policy context in Uganda. For instance, the Ministry of Water and Environment (MWE) had completed the National Climate Change Policy (NCCP) and its costed Implementation Strategy (IS). The Climate Change Department (CCD) under the MWE, with support from the French Development Agency, had started the process of developing a Performance Measurement Framework (PMF) for monitoring the NCCP and IS. However, the indicators developed for this tool focused on outputs at the national level. The Tracking Adaptation and Measuring Development (TAMD) process initiated by ACCRA and IIED filled a gap and strengthened the PMF by providing outcome indicators for the community and district levels, completing the reporting cycle. The government had also finalised the second National Development Plan 2015/16–2019/20 (NDPII) in line with Uganda's Vision 2040, in which climate change was already integrated. Collecting and integrating local outcome indicators provided a framework for reporting on the NDPII, as required by the national development plan, supporting local governments who had not initially been able to do this because they did not have indicators for climate change at the local level.

In developing national standard climate change indicators, the CCD identified entry points for some existing tools into which it could integrate climate change adaptation and risk reduction indicators. Instead of developing a separate M&E framework and reporting tools, it made sense to mainstream climate change indicators into these existing systems. ACCRA's bottom-up, participatory process of developing indicators ensured that all ministries, departments, agencies and local governments had ownership.

### 4.1.2 Indicator results

Figure 2 provides a snapshot of the indicator scoring for this case study.

### 4.1.3 Analysis of social learning dimensions

#### Engagement | Score: 2.7

Using power analysis and stakeholder mapping, the project identified and engaged all relevant stakeholders using appropriately tailored means. For example, separate focus group discussions with women, men and youth were held in the districts to elicit a theory of change using local concepts, and to develop indicators for adaptation based on community needs and ideas. Later in the project, ministers visited the districts and interacted with villagers as well as district officials to gain a better understanding of key issues, as well as developing their relationships with these stakeholder

groups. There is less evidence that trust (in facilitators, between stakeholders, and so on) was a key factor, though trust in ACCRA as a facilitator of the overall process was crucial to securing buy-in to the process and its results.

#### Iterative learning | Score: 2.7

The process led by ACCRA was flexible enough to change course as new information came to light, showing evidence of iterative learning. For instance, when it was discovered that USAID was conducting a parallel project in different districts, ACCRA convinced the MWE to harmonise the two sets of indicators being produced. In another example, ACCRA shifted its focus, seeking to influencing national monitoring tools when it became clear that these could provide the incentive districts needed to implement the indicators developed.

The process did not include learning and evaluation moments for all stakeholder groups to reflect collectively. Instead, iterative learning took place primarily through formal, facilitated meetings and workshops, often involving a subset of stakeholder groups thinking about a specific step in the process. Though communities did not sit together with national government officials, ACCRA's bottom-up strategy ensured that the indicators discussed at this level were based on communities' views. This more controlled approach may have been the most appropriate for the specific context and for ACCRA's strategy of working within government processes.

Figure 2. ACCRA results

Engagement				
Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				2.7

Iterative learning					
Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					2.7

Capacity development				
Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				2.9

Challenging institutions				
Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				2.0



Overall, iterative learning was not explicitly built into a process that the programme encouraged stakeholders (especially government) to own, and as a result the legacy of the process itself may be limited.

### Capacity development | Score: 2.9

Capacity development activities were integrated into the programme, with needs determined from the bottom-up. For example, district officials completed a self-assessment for institutional capacity, which fed into ACCRA's capacity development agenda.

### Challenging institutions | Score: 2.0

The institutional capacity assessments allowed ACCRA to build a change strategy around the identified gaps and norms. The project also identified key ministries — CCD, National Planning Authority, Ministry of Local Government, and Ministry of Finance, Planning, and Economic Development — and the individuals within them who would champion the indicator development process, and who are now taking the work forward into implementation.

However, there is no evidence that the process resulted in an understanding among stakeholders that a) social learning was necessary or b) that changes in values and practice would need to be made to foster social learning in the future. As a result, although institutional barriers have been reduced and opportunities have increased regarding the problem that the project is aiming to address, there is no evidence that changes in values and practice that reflect institutional openness to (attitudes) and support for (resources) social learning have taken place beyond this.

### 4.1.4 Conclusions

Although the implementation phase (ie the integration of the indicators developed over the course of the project) has not yet started, there is evidence that ACCRA's approach, and the social learning it enabled, has led to the potential for better and more sustainable outcomes. It is difficult to imagine that the results achieved so far — the bottom-up identification of indicators, buy-in to the process and verification of the indicators by multiple stakeholder groups, and coordination of these stakeholders and their climate change mainstreaming efforts across multiple departments, ministries and levels of government, to name a few — would have been possible with a different approach. The engagement, capacity development and challenges to institutional practices will go a long way towards facilitating successful implementation of the indicators. It is hoped that this will ultimately lead to more successful adaptation to climate change at community, district and national levels.

## 4.2 Bolsa Floresta Program (BFP)

### 4.2.1 Project description

BFP, established by the Amazonas State Government, Brazil, in 2007, aims to promote sustainable involvement, environmental conservation and the improvement of the quality of life of riverine communities across the State. Implemented by the nongovernmental organisation (NGO) Fundação Amazonas Sustentável (FAS), the programme acts through four components: income, social, family and collective associations. By engaging families inside and surrounding the State Conservation areas, the project assures them direct benefits, community-level social benefits, support in forming collective associations, activities to support production and support to generate a sustainable income.

A core ethos of the programme is that communities self-select the social benefits and production activities based on their needs and preferences. Communities learn together, and succeed or fail together on a wide variety of projects that they decide on together — with support from FAS and partners, both public and private.

This research is a small snapshot of the portfolio of BFP projects. It is not intended to be representative of the 574 riverine communities that FAS works with (see map), but rather to explore and compare across a range of projects that have had varying degrees of success and challenges. The aim is to better understand where and for what reasons social learning in these bottom-up community projects is taking place, whether this has contributed to better project outcomes, and if there are indications that the absence of learning and reflection processes contributes to sub-optimal outcomes.

The four projects studied were:

1. **Maiana Pirarucu sustainable fisheries management:** started in 2004, this community project aimed to increase income from fishing for Pirarucu through more sustainable natural resource management. Pirarucu is a native fish of the Amazon that can only be fished from September to November and which requires year-round protection of the area. The communities, learning together, used an innovative approach to group-level planning and coordination over an extended period to police the lake and prevent non-authorized and illegal fishing. The result was sustainable management of the fisheries with increased yield and significantly reduced illegal fishing.
2. **Xibauzinho fisheries management and processing:** another fishing project in a very remote community in the Uacari reserve involving just 12 families. While access to markets to sell the fish

was not an issue for the community, they had faced several invasions of their fishing areas by other communities, and were initially poorly organised to respond to this problem of over-fishing. Through reflect and act learning cycles, the Xibauzinho community organised themselves with specific roles and activities (eg policing waters for non-compliance with rules, innovative approaches to fish processing and selling their fish directly to markets). This made the community specialists throughout the region — teaching other communities their approach and techniques.

3. **Nosa Senhora do Perpetuo Socorro Water supply network** (referred to as Nosa Senhora): this community started suffering from water shortages some years ago. The network, installed 20 years ago, supplied half of the houses in the community and had not been expanded as the community grew. According to the community, the old distribution network did not experience many breakdowns, however, major leakages were causing water shortages and the increased use of the pump used electricity that they could not afford. The community decided to invest the resources provided by BFP in a new water supply network, but their awareness of the problem and its root causes was limited — interviewees suggested the solution was to expand the existing infrastructure. Issues related to good system management and awareness of resource use were rarely mentioned. The decision to invest resources in the water system is therefore a reaction to a lack of reflection on the fundamental

water issues as well as weak local institutions and unwillingness to address underlying politics. The institutional support received by the community to deal with this issue did not promote the means to reflect on practice or consider the best approach more strategically to benefit the community.

4. **Terra Preta — small-scale timber management:** timber and seasonal fishing were the main sources of income for this community. In 2008, the Rio Negro Reserve was created and logging activity was heavily reduced due to the rules introduced in the reserve and an increase in activity to command and control logging. The communities in the reserve (including Terra Preta) protested to the government, complaining that creating the reserve negatively impacted their traditional logging activities. The small-scale forest management initiative was an alternative approach intended to replace the previous unsustainable (and illegal) logging practices. However, the community has faced many bureaucratic hurdles in trying to follow the rules — incrementally learning along the way but with little success so far. The licensing authority showed little willingness to change their practices to facilitate this and other small-scale initiatives facing similar challenges.

### 4.2.2 Indicator results

Figure 3 to 6 below provide a snapshot of the scoring of the indicators for each of the BFP cases.

Figure 3. BFP — Maiana results

Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				2.8

Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					2.7

Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				2.4

Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				2.1

Figure 4. BFP – Xibauzinho results

Engagement				
Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				2.8

Iterative learning					
Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					1.9

Capacity development				
Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				1.6

Challenging institutions				
Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				1.7

Figure 5. BFP – Nosa Senhora results

Engagement				
Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				0.4

Iterative learning					
Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					0.1

Capacity development				
Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				0.0

Challenging institutions				
Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				0.3

Figure 6. BFP – Terra Preta results

Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				1.5

Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					1.3

Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				2.0

Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				1.1

### 4.2.3 Analysis of social learning dimensions

The four dimensions of social learning: engagement, capacity development, iterative learning and challenging institutions, are analysed below across the four case studies, to explore similarities and differences with respect to process, learning outcomes and changes in practice. To note, in contrast to the other initiatives, the BFP initiative analysis is looking across four separate projects in different communities. As such, it does not make sense to provide a quantitative aggregate or average score at the thematic dimension level.

#### Engagement

Looking across the social learning dimensions, engagement is the strongest in terms of both process indicators and the outcomes achieved. This is perhaps to be expected given the emphasis BFP puts on encouraging participation — nonetheless it is encouraging to see positive outcomes where process has been observed.

Maiana and Xibauzinho were particularly strong on using engagement processes. A key driver in fostering engagement was trusted leadership — where leaders were instrumental in motivating others and facilitating interaction. Leaders also acted as champions — testing out new ideas and leading by example. In Xibauzinho, this trust in leadership had been fostered many years ago by the Basic Education Movement (MEB) — an initiative and movement run by the church. From a project

perspective, this is important to note — BFP did not need to do much to encourage participation because institutions for meeting, reflecting and learning were already established. This indicates that a baseline assessment would be useful to understand where extra resources are needed to help foster champions, leaders and engagement — and that doing so can take time (often beyond the cycle of a single project).

Communities with low levels of active engagement, limited leadership skills and weak community organisation tend to face difficulties in adequately promoting the necessary engagement required to maximise learning from an initiative. In Nosa Senhora, and to some extent Terra Preta, a lack of adequate engagement resulted in little reflection on practice and limiting understanding of the root causes of the problem the community was trying to resolve. In the absence of reflection, the community seemed less open to understanding the need to develop new skills.

Continuity of engagement was also important, related to a 'learning by doing' form of capacity building and creating specific spaces for reflection. This continuity of engagement was important in bringing out group learning in Maiana and Xibauzinho. One of the challenges here, identified in the interviews, was to foster 'active' and continued engagement by the same people — that is to say, not only attending meetings but contributing, discussing and as a result learning. A structured and facilitated reflection process could be a way of achieving this — in Maiana they did this by having regular 'what we have achieved so far' moments as part of meetings.

Finally, the projects in Maiana and Xibauzinho tried to foster inclusive engagement — for example actively seeking to include the youth. They stated that this was essential for wider buy-in, relational learning and for the long-term sustainability of the project.

### Iterative learning

When looking at the extent to which social learning took place, there was very little reflective co-learning in Nosa Senhora, some reflective learning in Terra Preta, and significantly more co-learning in Maiana and Xibauzinho. The Nosa Senhora water project was a case of 'patch and fix' with little learning as to the root causes of the problem.

In contrast, cyclical evaluation habits were observed in the other three cases, with room for new ideas being seen as important in Xibauzinho and Terra Preta. This was particularly the case in Terra Preta, where discussions following the expiry of a licence to sell timber led to new ideas being generated alongside discussion of failure (room to fail). This facilitated forward momentum in the face of barriers, which was crucial to keeping the project viable.

In Maiana, attention was paid to reflecting on the relationships between stakeholders and the various roles played — effectively challenging the status quo. This helped the group to identify what was needed from each stakeholder and to be able to move forward, improving the chances of success. It also had an effect of flattening hierarchies within the community and with external stakeholders.

Given the strong iterative learning process indicators in Maiana and Xibauzinho, and to a lesser extent Terra Preta, we would perhaps anticipate stronger value and practice changes (outcomes). Maiana, which was the longest running project, had the strongest value/practice changes. Yet quite a few of the iterative learning value/practice indicators were marked 'no evidence', which indicates that it was difficult to pin-point whether issues like 'room to fail' were built in to other projects/programmes.

The length of time a project has been running is also worth noting. It is perhaps to be expected that projects running over less time and with fewer 'reflect and act' cycles will have less learning and less measurable value/practice outcomes.

### Capacity development

Looking across the four cases, capacity development has improved effectiveness when demand for the capacity development comes from the stakeholders themselves rather than being externally driven. This demand-driven effect is related to the perception of ownership of the initiative and valuing the reflection

on practice, which helps with seeing gaps and opportunities for improvement.

If perceptions of ownership and reflect and act cycles are established, communities are more able to demand what they feel they need/want to improve their learning and activities on the ground. In Maiana, there was a clear perception that iterative learning and engagement increased the ability to work in mixed community groups, sharing information and understanding of the initiative and problems. In Xibauzinho, there was a lot of learning by doing, and these iterative cycles helped build capacity and learning on other concepts. Each of these communities had a more demand-driven approach to capacity development.

Both communities used 'soft enforcement' of collectively defined rules (fines for missing meetings, responsibilities) to encourage behaviour change without excluding community members. This can be seen as a form of capacity building in understanding the problem, creating informed stakeholders and encouraging better working together.

In Terra Preta, the capacity building agenda was driven by an external stakeholder, without any real demand from the community. The community did take advantage of the training they received but it is not clear if such training will be shared with others or requested if needed in the future.

In Nosa Senhora, there was a low level of engagement, with limited progress on technical 'patch and fix' discussions. When asked, the community did not feel there was a need for capacity development — despite the failure that they had experienced. The behaviours that led to the shortage of water are still in place, so the problem may reoccur.

From the results, it would seem that stakeholder-defined capacity development works best but that this 'demand-driven' capacity development does not necessarily happen spontaneously. It requires engagement and some level of established reflection over practice. In the case of Maiana and Xibauzinho, there were strong local locally trusted institutions and champions in place — in particular in Maiana where there had been many years of leadership training and support from the church before FAS arrived.

One final point is that capacity development was always targeted at the community (whether demand driven or not). Other stakeholders, such as local government and FAS, did not take part in capacity development with the community unless they were part of the training to build the community's capacity — more of a one-way effort. Mutual rather than one-way capacity building through engagement with the community helps to create a better understanding of issues such as the problems being tackled, the benefits and challenges of

working collaboratively, the respective roles of different intuitions, the project management skills needed, and the collectively defined theory of change process for achieving improved outcomes.

### Challenging institutions

Challenging institutions was one of the weakest dimensions across the four cases. It happened more frequently where institutions within communities reflected on their own practice and changed their ways of working, particularly as part of experimentation and learning by doing in Maiana and Xibauzinho.

There was no specific mapping activity of key institutions that could impact the initiative (or that needed challenging) in any of the cases, but in Maiana there was some evidence that the community engaged with external stakeholders differently after they had a clearer idea of their roles and responsibilities. They demanded more from key external institutions once they knew they had certain responsibilities. This is not to say that these institutions engaged in the social learning processes. A general challenge for all the communities was that it was difficult to challenge institutions outside of their immediate sphere of influence. The communities in both Maiana and Xibauzinho succeeded in challenging FAS in different ways, resulting in improvements to the local projects and, in the case of Maiana, improvements to BFP.

However, this difficulty in challenging external institutions was exacerbated because external stakeholders did not participate in the learning processes. Barriers also appear to be increasing as younger generations are not politically engaged (not challenging institutions). This could be seen in Terra Preta where the youth were not engaged, and the older men who were willing to engage with distant regulators found it very difficult. Reflecting with hindsight, Terra Preta would have benefited from receiving special support to solve the problems that they face. Given the issue of overcoming licensing issues to do sustainable timber management in the Amazon, this would also have helped other communities. Recognising and planning to overcome this licensing issue from an early stage would, with some but not a huge level of resources, have significantly benefited this and other projects.

This begs wider questions. To what extent should challenging institutions be the role of communities alone, particularly when there are usually difficult power imbalances? How can communities be facilitated or championed to challenge bigger and more powerful institutions? Would lobbying these institutions to participate in learning processes reduce barriers? If so, would lobbying be more effective if championed by

the communities or external stakeholders? Could the resulting outcomes be shared with other projects to increased collective learning?

### 4.2.4 Conclusions

There was clear evidence of social learning taking place in Maiana and Xibauzinho, and to some extent in Terra Preta, but not at all in Nosa Senhora. Looking across the indicator diagrams for the four cases, there is a general pattern that stronger process indicators lead to more learning outcomes, with better value/practice outcomes evident on the ground.

In the case of Nosa Senhora, there are very few process indicators, and very poor learning outcomes and development benefits. There were some immediate fixes to the water network but there was also a high likelihood of the community facing water-related problems in the near future. This corresponded with low levels of active engagement, limited leadership skills, weak community organisation and no significant reflection on practice.

Reflection on practice and co-learning processes have taken place where there have been trusted leaders, active champions and active sustained engagement over time. The willingness of institutions within the community to be challenged to support change processes was also important, and this was facilitated by a sense of inclusion and common purpose.

Capacity development appears to have helped with learning processes (rather than just building technical understanding) where it has been demand-driven — and where there are elements of 'learning by doing'. However, capacity development seems to be far more likely to be demand-driven where community institutions are already strong, and processes of engagement and learning are already taking place.

Finally, challenging institutions external to the community was quite difficult and took time and resources. Communities with established engagement and co-learning processes appeared to be better at doing it — and there are examples in the cases where this has happened to a limited extent. There are also clear examples where this has not happened, leading to sub-optimal results or failure.

Interestingly, BFP itself (and FAS as an institution) was challenged by the Maiana case, resulting in benefits in the flexibility of the programme for other communities. Including these external institutions in co-learning processes — although not an easy task — may potentially have benefits not only for a single project but for many projects experiencing similar issues across BFP.

## 4.3 Collaborative Adaptation Research Initiative for Africa and Asia (CARIAA)

### 4.3.1 Project description

Some parts of the world are especially vulnerable to extreme effects of climate change, such as sea level rise, changes in precipitation patterns and glacial melt, which endanger the livelihoods of millions of poor people. Semi-arid regions, deltas, and glacier and snow-pack dependent river basins are three such climate change 'hot spots'. The goal of CARIAA is to build the resilience of vulnerable populations and their livelihoods in these three types of hot spots by supporting collaborative research to inform adaptation policy and practice in Africa and Asia.

CARIAA, a program of Canada's International Development Research Centre (IDRC), supports four consortia, each consisting of four or five institutions, to conduct a common research programme on climate change adaptation. Each consortium is looking at how to improve the resilience of poor communities and their livelihoods in a climate change hot spot in Africa or Asia. The four consortia are: Adaptation at Scale in Semi-Arid Regions (ASSAR); Deltas, Vulnerability and Climate Change: Migration and Adaptation (DECCMA);

Himalayan Adaptation, Water, and Resilience (HI-AWARE); and Pathways to Resilience in Semi-Arid Economies (PRISE).

CARIAA's collaborative approach aims to broaden and share knowledge on addressing common adaptation challenges by informing adaptation policy and practice at the local, regional, national and international levels. To this end, the programme emphasises learning across countries and regions, scales, disciplines and stakeholder groups. It aims to foster collaboration and knowledge synthesis between the member institutions of the four consortia, as well as between the four consortia themselves. A key assumption of the programme's theory of change is that the consortium model facilitates links between researchers and research users, as well as knowledge sharing.

### 4.3.2 Indicator results

Figure 7 below provides a snapshot of the scoring of the indicators for this case study.

### 4.3.3 Analysis of social learning dimensions

#### Engagement | Score: 2.0

CARIAA consortia were designed with the idea of fostering a two-way exchange of knowledge and capacity between Northern and Southern institutions. Consortia have carried out stakeholder mapping and

Figure 7. CARIAA results

Engagement					Iterative learning				
Process	P1	P2	P3	P4	P5	P6	P7	P8	P9
Learning outcomes	L1	L2	L3		L4	L5	L6		
Value/practice outcomes	V1	V2			V3	V4	V5	V6	
Average				2.0				3.0	

Capacity development					Challenging institutions				
Process	P10	P11	P12	P13	P14	P15	P16	P17	
Learning outcomes	L7	L8	L9		L10	L11	L12		
Value/practice outcomes	V7	V8			V9	V10	V11		
Average				3.0				2.0	

sought to engage communities and governments in their research design. That said, the dominance of research institutions over other stakeholders limits collective learning between different stakeholder groups internally and externally. For instance, consortia members have noted a need for better ways to engage policymakers and are developing research-into-use (RiU) strategies to address this need. At programme level, some stakeholder groups have yet to be fully engaged. IDRC is moving towards developing a program-wide RiU strategy.

Within the consortia, Southern and Northern institutions are collaborating on research and cross-consortia collaboration is also taking place, though there is room for more, especially on research topics. Within the programme, buy-in to the overarching objectives is concentrated among coordinators, focal points and lead researchers.

### Iterative learning | Score: 3.0

Processes are in place at programme level to foster and capture learning, though formal moments for reflection happen infrequently. Iterative learning at programme level happens primarily through annual learning reviews (ALRs). CARIAA has a 'Learning Framework' that informs reflection during these reviews but is not used as a formal M&E tool. Similarly, the consortia do not have many formal processes for this purpose, but learning occurs through informal processes. After some delays, follow-up on issues identified during the 2015 ALR — primarily around RiU — is happening.

### Capacity development | Score: 3.0

Capacity development in relation to stakeholders' ability to engage in social learning is happening and has so far been focused internally on CARIAA consortia. Processes are in place at the programme level for both top-down and bottom-up identification of the capacity needs of CARIAA consortia, as well as for addressing these needs. Many — but not all — of the needs identified are relevant to social learning, with capacity for RiU a notable example. There is no evidence that the programme is making any effort to develop the capacity of other stakeholders (eg policy makers, communities) to engage in social learning.

### Challenging institutions | Score: 2.0

Challenging institutions, either internally or externally, has not been a focus for CARIAA. There are some processes and systems in place for internal change, but no evidence of actions aimed at influencing external institutions at this stage of the programme.

At programme level, while there are no formal processes in place to identify champions of change for social

learning, working groups provide an opportunity for self-identified champions to influence the programme. The ALRs provide another such opportunity and go some way towards the identification of institutional opportunities for and barriers to social learning, and the development of a change strategy. There is no evidence of efforts to map norms or endogenous processes in external institutions.

Within CARIAA, consortia members have identified particular institutional barriers to collective learning and collaboration in the programme, and some of these are being addressed. There is no evidence that the programme is doing the same for external institutional stakeholders.

## 4.3.4 Conclusions

Social learning is happening internally in CARIAA, but it is too soon to assess the extent to which social learning is taking place between the programme and other stakeholder groups, such as communities and policymakers. The programme has yet to achieve its potential for fostering social learning, but many processes that support social learning are underway and some systems have been put in place to encourage, track, and use cross-consortia and intra-consortia learning. In this global programme, the main challenges relate to the programme's size and geographic spread. While collaboration and collective learning appears to take place within the consortia, the relatively traditional structuring of research activities and budgets may limit the extent to which researchers, who are key stakeholders themselves, seek or take advantage of opportunities to make this happen across consortia.

The key factors supporting the social learning that has occurred to date include opportunities to identify capacity development needs from the bottom-up; the integration of capacity development activities (that support CARIAA members' ability to engage in social learning) into the programme at different levels; and spaces and processes that foster and/or support collaboration and collective learning across the programme, such as the ALRs and working groups.

It is too early to assess any impact from the social learning on development outcomes, given the stage of the programme. CARIAA's stakeholder engagement and RiU strategies will be key tools for ensuring that collective learning takes place. Documentation of and reflection on these processes will be key to ensuring that the learning is iterative. A greater emphasis on challenging institutions — internal and external — may be needed to ensure action follows and development outcomes are improved by this approach.



## 4.4 Policy Action for Climate Change Adaptation (PACCA)

### 4.4.1 Project description

Conventional research has long failed to impact development strategies, partly due to the fact that policy decision makers and development practitioners have often had inadequate access to research-based evidence that could inform the policy formulation processes and enable appropriate implementation. To address these gaps, the PACCA project was born. PACCA is a four-year project in CGIAR's Climate Change and Food Security (CCAFS) programme running from 2014 to 2017. The project aims to use interdisciplinary science-based recommendations to influence the development and implementation of policies that encourage the adoption of climate-smart agricultural practices across multiple scales and actors. The various policy actors interact through research-policy dialogue spaces, named Learning Alliances (LAs).

The project has two major inter-related components: 1) knowledge creation through research and stakeholder interactions that result in the capacity building of national policy actors, and 2) engaging policy decision makers to make use of evidence-based knowledge in the formulation, review and implementation of policy strategies. This is being realised through multi-

stakeholder platforms (the LAs). The LAs create an opportunity for sharing research evidence through avenues identified by practitioners as appropriate, enhance the capacity of national partners (eg institutions facilitating the LA meetings), and engage policy and decision makers to adopt strategies that enable effective policy implementation. The LA is envisaged as serving as the focal point for the implementation of policy engagement actions.

### 4.4.2 Indicator results

Figure 8 below provides a snapshot of the scoring of the indicators for this case study.

### 4.4.3 Analysis of social learning dimensions

#### Engagement | Score: 2.3

Wide consultation and targeted engagement carried out in the process of forming the LAs ensured that stakeholders were identified through an inclusive process and this led to a diversity of stakeholders actively participating in the project. Though men dominate the LAs, PACCA is developing a strategy to address the gender imbalance, which is a result of the work culture. The formation of thematic groups and development of action plans for each group in national-level LAs, as well as the development of zonal investment plans in the district-level LAs, demonstrate that the LAs have enhanced their members' ability to

Figure 8. PACCA results

Engagement					Iterative learning					
Process	P1	P2	P3	P4	P5	P6	P7	P8	P9	
Learning outcomes	L1	L2	L3		L4	L5	L6			
Value/practice outcomes	V1	V2			V3	V4	V5	V6		
Average									2.3	2.1

Capacity development					Challenging institutions					
Process	P10	P11	P12	P13	P14	P15	P16	P17		
Learning outcomes	L7	L8	L9		L10	L11	L12			
Value/practice outcomes	V7	V8			V9	V10	V11			
Average									2.7	1.0

work together to find a solution to the challenge of ineffective policy implementation.

### Iterative learning | Score: 2.1

A number of mechanisms are in place to ensure learning, reflection and iterative learning within PACCA as a project as well as within the LAs. Monitoring and evaluation play a key role in ensuring processes are documented and learning takes place at all stages of project implementation. LA members are encouraged to reflect on the functioning and outcomes of the LA. The lessons drawn are compiled by the PACCA team and shared with meeting participants, as well as being used to inform subsequent engagement and capacity building activities. Effects on wider stakeholder groups have not yet been observed, but the LAs are still in the early stages of development and action.

### Capacity building | Score: 2.7

Capacity development is a core component of the project. Capacity building initiatives target not only policymakers but also other stakeholders in the LAs, and are based on capacity needs assessments. It is too early to assess the impact of capacity building activities on stakeholders, however surveys distributed after LA meetings indicate improved knowledge on key topics.

### Challenging institutions | Score: 1.0

Policymakers have been successfully challenged by LA members on more than one occasion, resulting in changes to policymaking processes. However, these changes are singular instances with no discernable long-term effects. Policymakers' attendance at LA meetings may help to build momentum for longer-term effects.

## 4.4.4 Conclusions

PACCA is an ongoing project and the national LAs have met only a couple of times (on average four times since their inception at the time of research), with some district LAs still being formed. Therefore, it may take a while to realise the outcomes of some initiatives, such as social learning.

Engagement in the LAs has seen multiple stakeholders with diverse expertise and experience come together to generate solutions for policy implementation inefficiencies in climate change adaptation. In developing action plans in the national LAs, stakeholders used their experience and the available research evidence to generate actions to improve policy implementation. The facilitators have been essential in initiating interactions, discussions and group activities among members of the LAs. This use of experience combined with research evidence is one of the common forms in which collective learning and capacity development happens in the LA. Lessons from reflection exercises are used to inform subsequent activities and decisions. Participants have indicated in some of their evaluation forms that they share the knowledge acquired from the LA with colleagues, local politicians and community members.

Although social learning is happening within and outside the LAs, it is not a concept that is understood by many, including some PACCA team members. This poses challenges for implementation, and monitoring the progress and outcomes of social learning.

## 4.5 Potato Park project

### 4.5.1 Project description

This case study explores the social learning processes taking place in a ten-year agreement for native potato repatriation and collaborative research between the International Potato Centre (CIP) and indigenous communities in the Peruvian Andes, and assesses their impact on food security, climate adaptation and sustainable development. Through this Repatriation Agreement, the CIP gene bank has returned 410 germ-free native potato cultivars to six Potato Park communities for food security and in-situ conservation of genetic resources — the first such repatriation from a gene bank to communities, recognising the vital importance of in-situ-ex-situ linkages for food security and climate adaptation.

The agreement has enabled social learning through knowledge sharing and direct research collaboration between scientists and indigenous farmers, two groups who do not normally interact as co-researchers. The Association for Nature and Sustainable Development (ANDES) is also party to the agreement, and has played an important role in capacity building and facilitation to enable the indigenous farmers to engage in collaborative research with CIP scientists.

The agreement is one of the few examples where the usually separate formal and informal seed systems are collaborating directly for mutual benefit, with active community participation in research processes, from design to analysis. This equitable research partnership between indigenous farmers and scientists has linked science and traditional knowledge, and global and local knowledge, for a better understanding of climate change and food security problems and solutions.

This research assessment focused on the social learning impacts of the agreement, bringing together key actors from CIP, the Potato Park and ANDES, to identify key moments of knowledge exchange and co-creation, to evaluate the impacts of such actions on practice — including reflecting on whether using different types of knowledge and institutional engagement approaches benefits development outcomes (rather than using academic research alone).

### 4.5.2 Indicator results

Figure 9 below provides a snapshot of the scoring of the indicators for this case study.

Figure 9. Potato Park project results

Engagement				
Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				2.8

Iterative learning					
Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					2.8

Capacity development				
Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				2.7

Challenging institutions				
Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				2.5

### 4.5.3 Analysis of social learning dimensions

#### Engagement | Score: 2.8

A targeted, tailored engagement approach secured the active engagement of community members, including women and youth, in the design of the agreement and thereafter in the implementation and design of activities. Access to new knowledge by each stakeholder group, and comparison and validation of knowledge, led to improved understanding of problems and solutions, helped to build trust, and led to greater awareness and valuing of the knowledge and practices of other groups.

ANDES played an important role in ensuring active community participation, including in the design of the agreement, through use of indigenous research methodologies and communications systems and formats compatible with indigenous knowledge.

#### Iterative learning | Score: 2.8

Several examples of collective, iterative learning can be found in the activities leading up to the development of the agreement and in the research activities conducted under the agreement. One example was the collaborative learning between all stakeholders on climate conditions and trends, the movement of pests and diseases in relation to crops and altitudinal ranges, and pest control using traditional and modern methods.

The agreement itself is flexible to allow new findings, ideas and understanding to be incorporated, supporting the iterative learning processes. Collective learning among the different communities of the Potato Park and ANDES was fostered through the identification and analysis of customary norms and values that guide sharing of resources and knowledge within and between communities, through consensus building and collaborative development of the agreement.

#### Capacity development | Score: 2.7

Initial capacity building provided to communities to help them negotiate the agreement was crucial. During the project, capacity building was a two-way process between scientists and farmers. Farmers then provided capacity building to farmers in other communities not directly involved.

### Challenging institutions | Score: 2.5

The agreement has led to institutions and norms being effectively challenged: scientists now recognise the value of traditional knowledge and collaborative research with communities, and community members beyond those directly involved with the project have adopted conservation plans. Remaining limitations include no institutional funding for the agreement and the limited spread of the effects of institutional challenging to other CIP offices.

The agreement has also helped to shift the values and practices of other institutions not directly involved, by opening spaces for ANDES and the Potato Park communities to work with government agencies in Peru, international processes, and scientists from other institutions and universities.

### 4.5.4 Conclusions

Social learning processes have been an inherent and necessary part of this initiative, which has achieved important conservation and development outcomes. Key success factors include the ability of a CIP scientist to speak the local communities' language (crucial for integrating traditional knowledge), investment in capacity building, the flexibility of the agreement that helped learning to action cycles evolve, and the facilitation by ANDES that ensured active farmer participation and an equitable partnership, which were key for achieving outcomes on the ground.

The review of social learning using the CCSL M&E framework also acted as a useful stakeholder reflection process on the benefits and challenges of the agreement. For a third phase, the parties are considering maintaining the same basic terms of the agreement but also developing a work plan with increased focus on longer-term collaborative research, addressing issues such as the need for improved facilitation of the learning processes, and more complete and systematic sharing of information resulting from the collaboration.

# 5

## Synthesis and discussion

In this section we synthesise the results of the five case studies. We aim to identify the most important dimensions, and aspects of those dimensions, for an effective social learning-oriented approach. We also endeavour to identify the ways in which, and circumstances under which, such an approach contributes to better and more sustainable development outcomes.

We qualitatively and quantitatively synthesise the evidence collected across the case studies along the lines of inquiry below. First, based on the qualitative scoring of the indicators for each case study and looking within each dimension, we assess:

- **Progression from process to outcomes.** The extent to which a progression from process to learning outcomes to value/practice outcomes has been observed within each social learning dimension. In a successful approach, we would expect to see an overall progression through these dimensions of change within each dimension of social learning. Where outcome indicators have not been met, this indicates the incomplete status of many of the initiatives piloting the framework. Where process indicators have not been met but outcome indicators have been met, it may point to the importance of processes not captured by the framework and/or the unimportance of the processes that are captured by the framework.
- **Key factors for progression.** Elements of the process in each social learning dimension that have emerged from the case studies as the most important for achieving outcomes. Some of these align with specific process indicators in the CCSL M&E framework while others do not, indicating that

additional factors not captured by the framework have proven to be important. For each factor, we assess the links to any learning and value/practice outcomes achieved.

Second, based on the quantitative averages for the dimensions of change and the dimensions of social learning in each case study, we look across the four dimensions and explore:

- **Progression from process to outcomes.** The extent to which this progression is seen across all four social learning dimensions in a case study. Again, for case studies with a successful approach, we would expect to see that an emphasis on the process across all of these dimensions results in learning outcomes, in turn resulting in value/practice outcomes. For completed projects/programmes that have emphasised only one or two of the four, we would expect to see weaker outcomes. For ones that are ongoing, we would also expect to see lower average scores for learning and value/practice outcomes.
- **Key dimensions for progression.** Which dimensions' indicators have been strongly met across the five case studies and what are the reasons for the trends observed. We test our hypothesis that all four dimensions are important for achieving positive outcomes in a social learning-oriented approach.

Lastly, we consider:

- **The contribution of social learning to development outcomes.** Drawing some preliminary conclusions about the benefits of a social learning-oriented approach, based on our limited sample size of five case studies.

Table 6. Visual representation and quantitative equivalent for qualitative scores

QUALITATIVE SCORE	SHADING				QUANTITATIVE SCORE
	Engagement	Iterative learning	Capacity development	Challenging institutions	
Yes					3
Partially					2
Hardly					1
No					0
No evidence					–

Note that in the discussion below, some of the indicators have several components (described in Appendix A — eg L2a L2b L2c, and so on). As per the rest of this paper, the shading for the four dimensions is as in Table 6.

## 5.1 Engagement

### Progression from process to outcomes

We hypothesised that successful engagement would involve outreach to marginalised and vulnerable groups (P1), and tailored engagement strategies for those groups (P2), resulting in their active engagement (P3). This engagement should lead to an increased understanding of the problem by stakeholders (L1), better relations between them (L2), and an integration of different types of knowledge (L3). These changes in knowledge, relationships and norms should in turn lead to an increase in stakeholders’ commitment to reaching the goal of the project/programme (V1), the establishment of new social networks and initiatives (V2), and empowerment of the most vulnerable beneficiaries (V2). If this hypothesis is correct, we would expect to see a progression through the dimensions of change for engagement for case studies with an effective approach.

A visual representation of the results for the engagement dimension of each case study is presented in Figure 10. Overall, there is a general progression across the case studies from process to learning outcomes. This follows the trend that having process indicators met results in learning and value/practice outcomes. As expected, there is also the trend that where there are large numbers of process indicators met, there are proportionally fewer learning outcomes and in turn fewer value/practice outcome indicators met — ie process is required to achieve outcomes but incrementally more process indicators must be met to achieve fewer outcome indicators. There is one notable example where value/practice outcomes were stronger than learning outcomes (BFP — Xibauazihno). This partial scoring for learning outcomes was attributed to occasional community conflict hampering relational learning (L2) during the project. Despite this, relational learning was happening

and was noted as important for success of the project. There was also a lack of evidence on one of the normative learning indicators (L3a) with a ‘Yes’ for L3b, lowering the overall L3 rating. There were also a few examples of instances where missing process indicators had little impact on learning and value/practice outcomes (BFP — Terra Preta). One possible explanation for this was that the number of participants in the project was very small — consisting of 18 families — and learning happened much more informally as a result of ad hoc group encounters rather than through organised engagement processes.

### Key factors for progression

The key process factors that contributed to the outcomes achieved in the case studies fell into four general categories:

#### 1. Who is engaged

The case studies demonstrated that research on who to engage was important to understand the relevant stakeholder groups for each initiative. Different methodologies were observed in different contexts. Some examples included wide consultation in PACCA, power analysis in ACCRA and stakeholder mapping in CARIIAA. Engaging communities directly and actively engaging women were necessary to ensure their equal participation in ACCRA and PACCA, respectively. Including stakeholders who would traditionally be considered external to a programme, for example policymakers in CARIIAA and government agencies in BFP (Maiana, Xibauazihno and Terra Preta), was shown to be crucial for ensuring uptake of programme results.

Ensuring that all relevant stakeholders were engaged and actively participating in an initiative had a noticeable impact on outcomes for several of the initiatives. In ACCRA, for example, the power analysis led the programme to strategically target ministries and officials at different levels of government to build buy-in to a process and ownership of the results of that process. This element of engagement has contributed to increased understanding of the problem through interactions (L1), better relationships between stakeholder groups (L2a),

Figure 10. Engagement results for all case studies

Case	Indicator diagram								
ACCRA	P1	P2	P3	P4	L1	L2	L3	V1	V2
BFP — Maiana	P1	P2	P3	P4	L1	L2	L3	V1	V2
BFP — Xibauazinho	P1	P2	P3	P4	L1	L2	L3	V1	V2
BFP — Nosa Senhora	P1	P2	P3	P4	L1	L2	L3	V1	V2
BFP — Terra Preta	P1	P2	P3	P4	L1	L2	L3	V1	V2
CARIAA	P1	P2	P3	P4	L1	L2	L3	V1	V2
PACCA	P1	P2	P3	P4	L1	L2	L3	V1	V2
Potato Park	P1	P2	P3	P4	L1	L2	L3	V1	V2

increased awareness and valuing of other stakeholders (L2c), a change in the collective understanding of the problem and solutions (L3b), and increased commitment to reach the goal of the project (V1).

## 2. When stakeholders are engaged

The timing of engagement can determine the level of inclusion in co-creation. For instance, the Potato Park project pointed to the value of engaging communities in the design phase of the project, rather than afterwards, to ensure equitable involvement and outcomes. This strategy contributed to better relations between stakeholder groups (L2a), the creation of trust (L2b) and awareness and valuing of other stakeholders (L2c), the integration of different knowledge types (L3a), a change in collective understanding of the problem and solutions (L3b), and empowerment of the most vulnerable beneficiaries (V2c).

## 3. How stakeholders are engaged

The importance of having experienced and trusted facilitators and leadership in ensuring active participation and ownership of a process and stakeholder buy-in to the results was evident across the case studies. In the case of the Potato Park project, a third-party facilitator whose specific function was to help communities determine and

negotiate equitable terms for engagement and develop the capacity they needed to participate in social learning with other stakeholders was crucial to the outcomes achieved. In combination with the timing of the engagement discussed previously, this element of engagement in the Potato Park project contributed to all learning and value/practice outcomes in the framework, with the exception of new social networks and initiatives/projects (V2a and b).

## 4. The nature of participation

The case studies illuminated the need for continual, sustained participation by key stakeholder groups in a project/programme and in the social learning processes. In PACCA, the continual participation of key stakeholders is essential to the successful functioning of the learning alliances. Social learning cannot take place if the group of participants is constantly in flux. BFP also highlighted the difference between active and passive participation: in BFP Maiana and Xibauanzinho, there were efforts to both include a diverse range of stakeholders and allow their opinions to shape the project. Active participation and relational learning were viewed as important, despite the occasional conflict in the Xibauanzinho case. Conversely, in BFP Tera Preta and Nosa Senhora, there was not much effort to foster active participation and less social learning was achieved.

## 5.2 Iterative learning

### Progression from process to outcomes

We hypothesised that successful iterative learning involves: creating cyclical and inclusive learning, with evaluation 'moments' for the group (P5) as part of learning-action cycles; having systems in place to foster and implement new ideas (P7); and questioning the theory of change (P8), and the values, norms and governance underlying the problem (P9). This iterative learning should lead to group learning/evaluation being incorporated in the project strategy (L4), and participants understanding the need for alternatives, experimentation and room to fail (L6). As this learning and experimentation takes place and is shared through networks, we would expect to see changes in wider stakeholder groups' understanding of reasons to change their own relations and behaviours (V3), as well as learning about alternatives and allowing room to fail included in other projects/programmes (V5). If this hypothesis is correct, we expect to see a progression through the dimensions of change within iterative learning for case studies with an effective approach.

A visual representation of the results for the iterative learning dimension of each case study is presented in Figure 11. In this dimension, the progression from process to learning outcomes to value/practice outcomes is less clear than for engagement; however, the progression is still there. The scores for learning outcomes are almost as strong as the process scores, indicating that most case studies that had good processes also achieved learning outcomes. Almost all of the cases with learning outcomes, however, showed little evidence of converting these outcomes into changes in values and practice. BFP — Xibauazihno, BFP — Terra Preta and the Potato Park project provide examples of where process indicators were not met, but learning outcomes were achieved anyway.

As mentioned previously the BFP Terra Preta project consisted of a small group of families where engagement and learning happened more informally. This meant that the process side of iterative learning was more ad hoc rather than planned. In the BFP Xibauazihno project, we did not find any evidence of formal systems to foster new ideas or of deeper questioning of the theory of change. However, the project was focused from the beginning on a fisheries management project and had a model that could be adapted to the project's own purpose. There was also a lot of learning by doing, driven by trusted leaders and champions, which served to test how best the approach would work for their context.

In the Potato Park the partial scoring on the process indicators was attributed in part to information asymmetries between the stakeholders. The farmers felt that they had limited access to information, especially on the purpose and results of collaborative research managed by CIP (P5). Wider questioning of values and norms was also partial — sometimes members of CIP, ANDES and the Potato Park seemed to prioritise scientific knowledge and a micro-level approach to conservation (P9). Yet the positive aspects of these indicators did foster inclusive and iterative learning cycles, which had wider institutional learning and uptake. For example, new techniques from this case have been integrated into the agricultural system and other ANDES and Potato Park projects. This may indicate that not all problems and contexts require all of the process indicators to be met for progression from iterative learning processes to learning and value/practice outcomes. However, the more process indicators that are met, the greater likelihood of achieving positive outcomes. It is also hard with this set of data to hypothesise the counterfactual for the Potato Park — for example if the process concerns regarding information asymmetry had been addressed, would this have enhanced outcomes even further?

### Key factors for progression

The key process factors that contributed to outcomes achieved in the case studies fell into five general categories:

#### 1. When/how often reflection occurs

The number and frequency of reflect-act cycles is an important factor in successful social learning. Infrequent moments for reflection may decrease the potential for social learning to improve development outcomes. Reflection at key points, for example after an action has taken place and/or when an outcome is expected, allows a group to adjust its strategy based on learning and increases the potential for social learning to improve development outcomes.<sup>7</sup> In the BFP cases, there was very little reflective co-learning in the BFP Nosa Senhora project and the outcomes were poor — a case of 'patch and fix' with little learning and reflection to identify the root causes of the problem. In contrast, cyclical evaluation habits were observed in the other three BFP cases, with room for new ideas seen as important in Xibauazinho and Terra Preta. In Terra Preta, generating new ideas along with a discussion of failure ('room to fail') helped the project move forward when facing barriers and this was crucial to keeping the project viable.

<sup>7</sup> This quantitative aspect of iterative learning is complemented by a qualitative aspect — the level of reflection. While the latter did not strongly emerge from the case studies as a key factor for successful social learning, we argue that moving beyond first loop learning (considering how to do an activity better) to second and third loop learning has the potential to improve development outcomes, or at least prevent poor outcomes.



Figure 11. Iterative learning results for all case studies

Case	Indicator diagram											
ACCRA	P5	P6	P7	P8	P9	L4	L5	L6	V3	V4	V5	V6
BFP — Maiana	P5	P6	P7	P8	P9	L4	L5	L6	V3	V4	V5	V6
BFP — Xibauazihno	P5	P6	P7	P8	P9	L4	L5	L6	V3	V4	V5	V6
BFP — Nosa Senhora	P5	P6	P7	P8	P9	L4	L5	L6	V3	V4	V5	V6
BFP — Terra Preta	P5	P6	P7	P8	P9	L4	L5	L6	V3	V4	V5	V6
CARIAA	P5	P6	P7	P8	P9	L4	L5	L6	V3	V4	V5	V6
PACCA	P5	P6	P7	P8	P9	L4	L5	L6	V3	V4	V5	V6
Potato Park	P5	P6	P7	P8	P9	L4	L5	L6	V3	V4	V5	V6

## 2. How reflection takes place

The case studies demonstrated that adequate preparation for reflection, including planning reflection moments and structuring them, can improve the chances that social learning results from reflect-act cycles. BFP projects, for instance, illustrated the difference in results between planned, structured reflection moments and unplanned, unstructured reflection moments. In the BFP Maiana project, there was specific planning for regular moments of reflection throughout the project, which stakeholders noted as being important to the quality and depth of learning. This in turn resulted in improved resource management, and relational awareness of which activities worked to build social cohesion for lake protection and how to better engage with external stakeholders such as the environmental protection agency.

## 3. Follow-up to reflection

What happens after a reflection moment is an important element of encouraging social learning. Capturing the learning that has taken place and sharing it with relevant stakeholders improves the chances that the learning will be a) acted upon and b) eventually reach wider networks. Documenting learning processes and outcomes also allows those involved to adjust their social learning-oriented approach to ensure that social learning takes place and is given the opportunity to positively influence outcomes. PACCA, for instance, documents learning taking place in the learning alliances and collects members' reflections on the learning process, in order to improve this process. The information collected is analysed and shared with alliance members, and subsequently used to inform the structure and content of future meetings (L4a).

## 4. Context of reflection

Reflection moments and the social learning they enable can only be catalysts of change when project structures allow for such change. Flexible project structures and planning that leave room to integrate new information as it becomes available, and learning as it occurs, are the ideal context for reflect-act cycles. ACCRA's work on mainstreaming climate change adaptation in local government planning through the development of adaptation indicators, for example, shifted direction and added new stakeholder groups as new information was acquired. When it became clear that local governments needed an incentive to plan and monitor against the indicators developed, ACCRA targeted national level processes and ministries to make it a requirement. Similarly, when it was revealed that USAID was working on a parallel project in different districts, ACCRA influenced a key ministry to see that efforts were coordinated. In this way, the learning results were incorporated into the project strategy (L4a) and creative solutions were developed (L4b). This contributed to wider stakeholder groups' understanding of the reasons to change their relationships and behaviour (V3). Making room for testing new ideas and for failing — which often necessitates adequate resources — also makes a difference. Testing new ideas was a strong element in the BFP Maina project, where the community learnt from mistakes and were flexible in the way they allocated resources, allowing them to create and sell a fish drying business after their initial success with fisheries management. In the BFP Xibauazinho project it was noted that although discussing failure was potentially useful, it was culturally difficult, particularly when due to negligence rather than accidental. Although this was not a direct learning from failure, they did implement a 'three strikes and you are out' enforcement policy for those breaching the new fishing rules, which to some extent worked around this cultural issue.

## 5.3 Capacity development

### Progression from process to outcomes

We hypothesised that successful capacity development involves integrating activities into a project/programme (P10, P13), targeting all stakeholders in appropriate ways (P11), and addressing needs that are determined in a bottom-up manner (P12). These activities should ensure that all stakeholders have a similar level of understanding of the problem being addressed (L7), and increase their understanding of other stakeholders' needs and perspectives (L8). These changes in understanding and relationships should result in more informed stakeholders (V7), stakeholder groups working together better and changes in practice that reflect a better understanding of the problem

(V8). If this hypothesis is correct, we expect to see a progression through the dimensions of change within capacity development for case studies with an effective approach.

A visual representation of the results for the capacity development dimension of each case study is presented in Figure 12. Most case studies exhibit strong evidence that process indicators were met, though there are a few exceptions (BFP — Xibauazinho, BFP — Nosa Senhora). As expected from a progression, learning outcome indicators were not as comprehensively met. Value/practice indicators, however, were arguably met as fully as the learning outcome indicators and even more so in some cases (ACCRA, Potato Park, BFP — Maiana). This can be partly explained by the observation that many of the case studies had trouble meeting indicator L9: *"increase in collective challenging/ understanding methods of building capacity for particular stakeholders."* Because this change in norms was not a focus of capacity development activities in most of the case studies, it was a challenging indicator to meet. That said, the strength of the value/practice scores in the absence of evidence for L9 indicates that it is not a crucial factor for achieving the value/practice outcomes for capacity development.

### Key factors for progression

The key process factors that contributed to outcomes achieved in the case studies fell into four general categories:

#### 1. Design of capacity development

Several of the case studies demonstrated the utility of bottom-up identification of capacity development needs, ie involving the future beneficiaries of capacity development activities in decisions about what kinds of activities would be useful. PACCA, ACCRA and CARIAA all engaged in some level of this. This strategy decreases the risk that resources might be wasted on irrelevant capacity building. For example, in CARIAA, training activities around climate science were provided by a member institution but uptake of the information was not consistent, as the training was redundant for some participants and too high level for others. In a different example, CARIAA members came together in an annual meeting and agreed the need for capacity development around RiU, which contributed to significant improvements in consortiums' RiU strategies. However, other case studies, such as the Potato Park project, demonstrated the utility of a more top-down approach to capacity development activities. This may be needed for softer topics, as opposed to technical topics, as stakeholders may not be aware of some of the skills and types of knowledge that could better enable them to participate in social learning.

Figure 12. Capacity development results for all case studies

Case	Indicator diagram								
ACCRA	P10	P11	P12	P13	L7	L8	L9	V7	V8
BFP — Maiana	P10	P11	P12	P13	L7	L8	L9	V7	V8
BFP — Xibauazinho	P10	P11	P12	P13	L7	L8	L9	V7	V8
BFP — Nosa Senhora	P10	P11	P12	P13	L7	L8	L9	V7	V8
BFP — Terra Preta	P10	P11	P12	P13	L7	L8	L9	V7	V8
CARIAA	P10	P11	P12	P13	L7	L8	L9	V7	V8
PACCA	P10	P11	P12	P13	L7	L8	L9	V7	V8
Potato Park	P10	P11	P12	P13	L7	L8	L9	V7	V8

## 2. Whose capacity is developed

Integrating stakeholder groups traditionally perceived to be external to a programme into capacity development activities can help to ensure uptake of project outcomes. This can be done through the development of activities tailored to their social learning needs. In PACCA, policymakers were invited to join the learning alliances, and in ACCRA, capacity development on climate change mainstreaming for national government officials allowed them to join the conversation and take ownership of processes that ACCRA initiated at district level. This contributed to a similar level of understanding of the problem by all stakeholders (L7), increased understanding between different groups of different needs and perspectives (L8), led to more informed stakeholders (V7), and resulted in changes in practice that reflected a better understanding of the problem and solutions (V8).

In the BFP Maiana and Xibauazinho projects, capacity development on technical issues, often through learning by doing, came hand-in-hand with building understanding between stakeholders. This strengthened their capacity to learn together and think more strategically about the problem. However, the lack of integration of traditionally external stakeholders, such as local government officials, was seen as a barrier to getting learning into action. The communities reflected that if the external stakeholders had at least partially participated in the capacity building and learning processes, they would have been more willing to change their own approaches to make geographically remote and small-scale projects like theirs work — improving outcomes. Another way to conceptualise this factor might be as inclusive capacity development, ie capacity development for all stakeholder groups, not just for those who are traditionally targeted, like community members.

### 3. Style of capacity development

Capacity development can take many forms and the case studies have shown the effectiveness of two non-traditional methods. Facilitation, for instance, can be passive or active when it comes to ensuring that participants in an activity are engaging in social learning. In PACCA, facilitators at learning alliance meetings went beyond their traditional role, for instance by emphasising the need to respect the ideas of others. This contributed to building a similar level of understanding of the issues considered in the meetings by all stakeholders (L7), and so led to more informed stakeholders (V7), as well as different groups working together better (V8a) and changes in practice that reflected a better understanding of the issues (V8b). Second, learning by doing was seen to be an effective form of capacity development. BFP — Maiana, for example, demonstrated that learning by doing helped build softer skillssets in relational learning, driven from a more bottom-up perspective. Community stakeholders responded better to learning by doing than to technical training from an external 'expert', being able to do an activity in their own way and learn from their own mistakes and the successes and failures of their peers. This type of capacity development was found to be unlikely to be effective unless there were strong local institutions and champions already present.

### 4. Topics for capacity development

Capacity development on softer issues, such as understanding issues, was found to be as important for enabling social learning as capacity development on technical issues. For example, in the Potato Park project, the NGO ANDES provided third party support to Potato Park farmers, helping them to develop an understanding of conservation, rights and economic development, which in turn helped them to negotiate an equitable agreement. This kind of capacity development contributed to an increased understanding between different stakeholder groups of different needs and perspectives (L8), and led to the groups working together better (V8a). It also contributed to more informed stakeholders (V7) and changes in practice that reflected changes in understanding (V8b). That said, across the case studies, technical capacity building that allowed different stakeholder groups to use common language and concepts to communicate about climate change adaptation was equally important.

## 5.4 Challenging institutions

### Progression from process to outcomes

We hypothesised that successfully challenging institutions involves identifying key individuals or institutions who would champion change (P14), and a change strategy would be developed that included mapping norms and endogenous processes (P15). This would enable key institutions to be challenged to make changes that facilitated social learning (P17). We expected that this process would help project/programme participants to better understand particular opportunities and barriers (L10), that institutions would understand that a shift in values/practice is needed to foster social learning (L12), and that this would result in changes to institutional openness towards social learning-oriented approaches (eg through changed attitudes or reduced conflicts) as well as a reduced number of institutional barriers and/or increased opportunities (V9, V10). These institutional challenges would lead to changes in institutional support for social learning-oriented approaches — for example through changing policy, roles and resource allocation to support activities coming out of social learning reflect-act cycles. (V11). If this hypothesis is correct, we would expect to see a progression through the dimensions of change within challenging institutions for case studies with an effective approach.

A visual representation of the results for the challenging institutions dimension of each case study is presented in Figure 13. There are a few instances of learning indicators being met while process indicators are unmet (BFP — Xibauazihno, BFP — Nosa Senhora), but for the most part a progression from process to learning outcomes to value/practice outcomes is visible. It is notable that most of the case studies struggled with normative learning indicator L12: *"institutions understand that a shift in values or practice is needed to foster social learning,"* and practice indicator V11: *"challenges lead to changes in institutional support for SL-oriented approaches (evidenced in eg policy/roles and resources made available for implementation)."* In the Potato Park project, the key research institution involved developed an understanding of the barriers to collaborative learning and integrating indigenous knowledge, but did not necessarily understand the barriers to social learning specifically (L12). In BFP — Xibauazihno there was some evidence that the project challenged some institutions and that this strengthened their position for making a case to BFP to support youth groups and women's groups within the reserve, which have their own spaces for learning, reflection and developing new projects.

Figure 13. Challenging institutions results for all case studies

Case	Indicator diagram									
ACCRA	P14	P15	P16	P17	L10	L11	L12	V9	V10	V11
BFP — Maiana	P14	P15	P16	P17	L10	L11	L12	V9	V10	V11
BFP — Xibauazihno	P14	P15	P16	P17	L10	L11	L12	V9	V10	V11
BFP — Nosa Senhora	P14	P15	P16	P17	L10	L11	L12	V9	V10	V11
BFP — Terra Preta	P14	P15	P16	P17	L10	L11	L12	V9	V10	V11
CARIAA	P14	P15	P16	P17	L10	L11	L12	V9	V10	V11
PACCA	P14	P15	P16	P17	L10	L11	L12	V9	V10	V11
Potato Park	P14	P15	P16	P17	L10	L11	L12	V9	V10	V11

## Key factors for progression

The key process factors that contributed to outcomes achieved in the case studies fell into three general categories:

### 1. Making challenging institutions an integral part of a project

Several case studies demonstrated the value of building institutional challenging into the design of the project and doing this from the beginning. PACCA, ACCRA and the Potato Park project were all built around challenging specific stakeholders (government, policymakers, scientists) to work in different ways, using evidence in policymaking, mainstreaming climate change and adaptation, and indigenous knowledge, respectively. These projects integrated members of the institutions they wanted to challenge into their initiatives through engagement, capacity development and iterative learning. In all three cases, this contributed to different stakeholder groups better understanding the opportunities for and barriers to achieving outcomes through social learning (L10, L11), which led to a

reduction in the number of barriers and an increase in the number of opportunities (V9). In the Potato Park project, it also contributed to institutional understanding that a shift in values and practice was needed to foster social learning (L12), and changes in institutional openness to social learning (V10).

### 2. Challenging through champions

The initiatives mentioned above all used their engagement with institutional stakeholders to open doors to institutional challenging. PACCA, for instance, aimed to influence policy through the policymakers who attended the learning alliance meetings, and ACCRA aimed to influence government planning for climate change through the officials involved in capacity development activities. This contrasts with an approach in which an initiative seeks to challenge institutions without any internal conduits for information and learning. Challenging institutions often highlights significant power imbalances, seen in BFP — Maiana and BFP — Terra Preta, where the communities needed to engage with powerful external agencies to address natural resource management licensing

issues. In both cases the communities found it difficult to engage directly with the environmental agency, which is geographically distant, and has very rigid and often complex structures and processes. This made it very difficult for a community learning process to engage with it directly. To some extent, the NGO FAS assisted with this, acting as an intermediary and championing the community issues. Doing this in a more deliberate way to build higher-level champions can help bridge these imbalances.

### 3. Identification of institutional capacity gaps

Institutional capacity assessments can help to identify gaps, which are opportunities for challenging institutions to improve their acceptance and use of social learning. ACCRA, for instance, helped local government officials in Uganda complete a self-assessment of institutional capacity and then worked with them to address gaps identified by the assessment. Although this process was aimed at institutional capacity to mainstream climate change rather than social learning specifically, it is an example of 'working from within' to challenge institutions. With this approach, ACCRA, as the external organisation, brings with it new concepts and approaches that help challenge softer issues such as approaches to learning.

## 5.5 Looking across the four dimensions at social learning

Many of the key factors for progression discussed previously demonstrate the interconnected nature of the four dimensions. Engaging institutions is crucial to challenging them and capacity development is one way to engage. Facilitation, crucial to iterative learning, can also be used to ensure that capacity development takes place during group reflection and evaluation moments. With these interdependencies in mind, we turn now to explore social learning in the case studies from a more holistic perspective.

### Progression from process to outcomes

We hypothesised that a successful social learning-oriented approach would see a clear overarching progression from processes to learning outcomes to value/practice outcomes. We did not necessarily expect to see direct links between specific indicators, as not all of the indicators were designed to lead logically to another indicator in the next dimension of change (eg P1 is not expected to lead to L1). Rather, we expected to see, and focused our assessment on, links between the different overall dimensions of change.

The right-hand side of Figure 14 shows the average score for each of these dimensions of change across the case studies. Again, we see a general progression from process, where the scores are highest, to learning outcomes, with slightly lower scores, and finally to value/practice outcomes, with the lowest scores. This evidence appears to confirm our hypothesis, although a larger sample size is needed to draw definitive conclusions.

There are a few exceptions. In one case study (BTF – Terra Preta), the learning outcome average was higher than the process average. As discussed earlier, this is likely to be related to the nature of the project, which involved just a small number of families and so processes happened more informally in an ad hoc way. In three case studies, the value/practice outcome average is higher than the learning outcome average (Potato Park, PACCA, ACCRA). Notably, for PACCA and ACCRA this unexpected result stems from the high number of value/practice indicators scored 'No evidence'. As value/practice indicators are generally more difficult to meet, scores for this dimension of change are generally lower than for the others. Because the score of 'No evidence' is not factored into the averages in the method we have chosen, the value/practice averages are higher than they probably would have been had there been evidence for more indicators.

### Key dimensions for progression

By examining the level of focus on each of the four dimensions of social learning for all the initiatives, we can begin to unpack the progression from process to outcomes and offer some preliminary conclusions about the relative importance of each dimension in this progression. The left-hand side of Figure 14 shows the average scores for each dimension of social learning across the case studies.

From the scores, we see that engagement had the strongest performance of the four dimensions across all five case studies. This is a somewhat predictable result, as engagement is a key element of the participatory approaches commonly used in development programmes. Many (particularly initiatives engaging at the community level) are rooted in standard Participatory Rural Appraisal (PRA) approaches and the principle of engaging with free prior and informed consent (FPIC).

The extent to which these participatory approaches encourage more 'active' and enduring participation, rather than consultation, technical assistance or a one-off event, is assessed by the engagement indicators in the framework. These indicators overlap strongly with the long history of literature on meaningful participation, but are specifically tailored to aspects of engagement that have come out strongly in the social learning literature, including fostering champions and leaders, trusted facilitation, and inclusive and active participation.

Figure 14. Average scores by dimension across the case studies

	Dimensions of social learning					Dimensions of change		
	Engagement	Capacity development	Iterative learning	Challenging institutions		Process	Learning outcomes	Value/practice outcomes
BFP — Maiana	2.8	2.7	2.4	2.1		2.9	2.5	1.9
BFP — Xibauazihno	2.8	1.9	1.6	1.7		2.0	2.0	1.9
BFP — Nosa Senhora	0.4	0.1	0.0	0.3		0.3	0.3	0.0
BFP — Terra Preta	1.5	1.3	2.0	1.1		1.3	2.3	0.9
Potato Park	2.8	2.8	2.7	2.5		2.6	2.5	3.0
PACCA	2.3	2.1	2.7	1.0		2.4	1.9	2.0
ACCRA	2.7	2.7	2.9	2.0		2.8	2.3	2.5
CARIAA	2.0	3.0	3.0	2.0		2.7	2.3	1.0

■ 0.0    ■ 1.0    ■ 2.0    ■ 3.0

In two of the BFP projects, these factors are a crucial part of the learning process. For instance, in the case of BFP — Xibauazihno, the trusted leadership and culture of reflective engagement established over many years (and prior to the project) by the church was key in engaging the community in problem-solving activities around fisheries management — and in driving forward action where the champions led in learning by doing reflect-act cycles.

Capacity development and iterative learning scored in the middle relative to the other dimensions. While capacity development is often emphasised as an important element of successful programmes and projects, it is typically technical in nature and does not necessarily build capacity to engage in or promote social learning, as examined in the CCSL M&E framework. That said, the softer skills needed to learn and reflect collectively can be built through continued engagement and action cycles with integrated reflection moments (ie learning by doing), as was seen in the BFP — Maiana case.

Iterative learning is made challenging by the inflexible nature of funding, fixed log-frames and outputs, and the relatively short timeframe for most programmes and projects. Most of the case studies did not achieve — or had no evidence that they had achieved — value/practice outcomes in this category.

The weakest of the four dimensions, in terms of performance across the five case studies, was challenging institutions. This is also not surprising, as it is the most difficult dimension to work on and is not something that is often stressed in development work. Given the difficulty, however, it is also perhaps the most crucial dimension for realising effective social learning that leads to long-term, systemic change.

Based on our limited sample size, no individual dimension of social learning appears to be an accurate predictor of the likelihood that an initiative's process-related efforts will (or will not) result in positive outcomes. This suggests that all four dimensions are important for ensuring progression from process to outcomes.

## Contribution of social learning to development outcomes

One ambition in piloting the framework was to strengthen the process for assessing the overall contribution of social learning to better and more sustainable development outcomes. A related ambition was to better understand in which contexts social learning contributes, when it does not and why. This question is difficult to answer with a sample size of five initiatives. What we can say, given the experience of the five initiatives piloting the framework, is that where social learning has occurred and the programme/project has reached a stage at which development outcomes can be observed, social learning's positive contribution is clear. We also saw examples of sub-optimal outcomes where indicator groups in the framework were not achieved — for example lack of engagement over a sustained period, absence of multiple reflect and act cycles, and no attempt to challenge institutional barriers.

Through engaging all relevant stakeholder groups in tailored ways, providing capacity development support that improves stakeholders' ability to learn from each other and co-create new knowledge, fostering iterative learn-act-reflect cycles that build the understanding of all participants, and challenging key institutions to support and engage in these cycles, initiatives were seen to achieve development outcomes that would not have been possible without this effort.

A few of the completed case studies provide examples of improved development outcomes. In the Potato Park project, for instance, potato varieties were

successfully repatriated to Potato Park communities from the International Potato Centre, increasing potato biodiversity in the Park to one of the highest rates in the world. Through evolving joint research by farmers and scientists, potato yields increased 20–50 per cent, best practices for conservation and sustainable use were established, and traditional knowledge and practices were revived. The economic benefits for Potato Park communities from new potato products and tourism have also increased. These development outcomes would not have been possible to the same degree without the project's effective social learning-oriented approach.

In the BFP cases, there was clear evidence of social learning in Maiana and Xibauzinho, and some evidence in Terra Preta. The group learning processes that were fostered by trusted leadership, purposeful moments for reflection, capacity development that often involved learning by doing and experimentation, and most importantly a continuity of cycles of reflection and action, were key to the outcomes achieved. In Maiana and Xibauzinho, learning outcomes also included learning about how to better relate to each other, learn together and engage with external stakeholders to achieve their goals. Successful project outcomes were widely recognised and cited as best practice examples by other communities, creating a sense of pride in the project communities. These successes included creating sustainable fishing practices with resulting increases in yield, fostering new generations of leaders and fishermen, and creating lucrative spin-off businesses such as fish drying.



## 6

# Revising the framework

Working with the framework through the peer assist approach with five initiatives has highlighted its strengths, as well as some of its weaknesses. One key objective of the pilot phase was to assess its utility as a tool for monitoring social learning processes and outcomes. The learning gained from this phase was intended to inform revisions to the framework where appropriate. This section summarises our findings on the format and content of the framework, and suggests revisions.

The overall format of the framework — with four dimensions of social learning and three dimensions of change — proved to be well suited to its purpose. No additional dimensions of critical importance were identified, nor were any of the existing dimensions deemed irrelevant. The total number of indicators is high, which can be challenging for large initiatives.

Some improvements could be made to the definition of the dimensions, to clarify what is meant by each. It is not clear from the framework's definition of capacity development that this refers specifically to capacity development aimed at improving stakeholders' capacity to support and engage in social learning. While other types of capacity development, such as building technical skills, may contribute to social learning, the CCSL M&E framework specifically seeks to monitor efforts to encourage social learning, rather than activities aimed at achieving programme or project goals more generally. There is, however, sometimes a thin line between the two. For instance, in the Potato Park project, ANDES' work with farmers to help them understand scientific language around climate change functioned both to develop their technical knowledge

and to develop their ability to interact with CIP scientists on an equal footing, and the latter is essential to social learning. A similar adjustment could be made to the definition of challenging institutions, where there was confusion about which kinds of activities were relevant to the framework for the second dimension.

In terms of the flow of indicators in each dimension from process to learning outcomes to value/practice outcomes, there is room for improvement. For some dimensions, there is a clear logical progression from one process indicator to a learning outcome indicator and to a value/practice indicator. In others, the progression is less clear. Improving the logical progression may also improve consistency between the dimensions in terms of the total number of indicators and the number of indicators per level of social learning. This would in turn make quantitative scoring, specifically the averages for each dimension, a more reliable indicator of relative strength and success.

Regarding content, several amendments are suggested based on the key elements of social learning identified across the five case studies. Table 7 presents the proposed amendments and the rationale for each.

Lastly, multi-part indicators could be broken down into their respective parts to make qualitative and quantitative scoring more straightforward. In the few instances where one part of an indicator was scored as 'no evidence' and another part was scored differently, it was difficult to determine a fair overall score for the indicator. The main drawback of this modification would be an increase in the number of indicators in the framework.

Table 7. Proposed amendments to the CCSL M&E framework

SUGGESTED REVISION TO THE FRAMEWORK	RATIONALE
Include <i>structured reflection moments</i> in P5 or a new indicator	This is a key element of a successful social learning-oriented approach that emerged from the case studies that is not covered by the existing framework indicators
Include <i>the context of reflection</i> in indicator L6	As above
Include <i>identification of institutional capacity gaps</i> in indicator P15	As above
Emphasise the <i>collective aspect of iterative learning</i> across the indicators in this dimension	This is a key aspect of the definition of iterative learning that is not currently stressed in the framework. Iterative learning can take place within a single group of stakeholders or between a select few stakeholder groups, but social learning is better supported/ encouraged through iterative learning processes that involve as many relevant stakeholder groups as possible
Emphasising the idea that <i>action must follow reflection</i> — and that <i>action requires institutional resources and decision making</i> — in the iterative learning and challenging institutions dimensions	Iterative learning as it was intended in the framework is co-learning for a shared purpose — a shared vision of change. Implicit in this is being empowered to enact knowledge outcomes, which requires decision making and resources. Often social learning processes end abruptly, after significant time and effort in fostering them, because of lack of resources or decision-making power. This is linked to challenging institutions and could be brought out more explicitly across the framework
<i>Add a value/practice indicator</i> under capacity development that captures the extent to which capacity development activities carried out lead to <i>changes among wider networks</i>	This dimension is the only one not to have an indicator that captures the shift from behavioural change among a smaller group of individuals to change among a larger network — a shift that is key to social learning in the CCSL definition. These types of value/ practice indicators in the other three dimensions were among the most difficult to meet, which also meant that their absence from capacity development made it easier to fully meet the value/practice indicators for this dimension. This made quantitative comparisons across dimensions uneven

# 7

## Conclusions and next steps

Through this working paper, we have begun to fill a gap in evidence on the utility of social learning-oriented approaches for achieving development outcomes, and the specific contexts in which they are appropriate. Working in partnership with five initiatives aiming to address climate change adaptation and food security issues, we have systematically collected and analysed evidence on social learning using the CCSL M&E framework. The framework has allowed us to assess where effective social learning-oriented approaches were being used and to unpack the key elements of those approaches.

Though we are only just starting to build an evidence base with these case studies, our analysis has also allowed us to begin to paint a picture of when and how social learning-oriented approaches contribute to better and more sustainable development outcomes. This is a valuable first step towards enabling institutions, programmes and projects to understand how to encourage social learning and realise its potential to improve outcomes for those who are most vulnerable to the impacts of climate change and food insecurity.

Our key findings on the most important elements of an effective social learning-oriented approach are summarised in Table 8. **Text** indicates key factors for progression identified in the synthesis section; *text* in italics indicates additional important factors inferred from the interconnectedness of the four dimensions of social learning.

Evidence from the case studies indicates that programmes and projects employing approaches that incorporate the key factors of each dimension are most likely to see positive changes among stakeholders in understanding, relationships and norms relevant to those dimensions. Programmes and projects emphasising all four dimensions are most likely to see the changes in values and practice across stakeholders and beyond in wider groups that are crucial to improving development outcomes.

Table 8. Overview of key findings

	ENGAGEMENT	CAPACITY BUILDING	ITERATIVE LEARNING	CHALLENGING INSTITUTIONS
<b>Who</b>	<p><b>Who is engaged</b></p> <ul style="list-style-type: none"> <li>Stakeholder research</li> <li>Targeting specific stakeholder groups to ensure their active participation</li> <li>Including traditionally 'external' stakeholders</li> </ul>	<p><b>Design of capacity development activities</b></p> <ul style="list-style-type: none"> <li>Bottom-up and top-down identification of capacity needs both important</li> </ul> <p><b>Whose capacity is being developed</b></p> <ul style="list-style-type: none"> <li>Capacity development for stakeholders who do not traditionally receive it</li> </ul>	<p><i>Who takes part in iterative learning</i></p> <ul style="list-style-type: none"> <li><i>Inclusive collective learning is better than learning between just a few stakeholder groups</i></li> </ul>	<p><i>Who challenges institutions</i></p> <ul style="list-style-type: none"> <li><i>Capacity development and support helps groups lower on the power ladder to challenge those higher up</i></li> </ul>
<b>What</b>	<p><i>Topics for engagement</i></p> <ul style="list-style-type: none"> <li><i>Involvement of beneficiaries and decision makers in design</i></li> </ul>	<p><b>Topics for capacity development</b></p> <ul style="list-style-type: none"> <li>Soft and technical skills and concepts both important</li> </ul>	<p><i>Topics for iterative learning</i></p> <ul style="list-style-type: none"> <li><i>Collective learning on the process of enabling social learning as important as technical topics</i></li> </ul>	<p><i>Topics for challenging institutions</i></p> <ul style="list-style-type: none"> <li><i>Openness to and support for social learning-oriented processes</i></li> </ul>
<b>When</b>	<p><b>When stakeholders are engaged</b></p> <ul style="list-style-type: none"> <li>Early engagement of communities</li> </ul>	<p><i>Timing of capacity development</i></p> <ul style="list-style-type: none"> <li><i>Starting early can enable a wider group to participate in design</i></li> </ul>	<p><b>When and how often reflection occurs</b></p> <ul style="list-style-type: none"> <li>Higher number and frequency of reflection moments better than lower</li> </ul>	<p><b>Making challenging institutions an integral part of a project</b></p>
<b>How</b>	<p><b>How stakeholders are engaged</b></p> <ul style="list-style-type: none"> <li>Experienced and trusted facilitators</li> </ul> <p><b>The nature of participation</b></p> <ul style="list-style-type: none"> <li>Continual, sustained participation</li> </ul>	<p><b>Style of capacity development</b></p> <ul style="list-style-type: none"> <li>Learning by doing as capacity development (for soft skills)</li> <li>Capacity development through facilitation</li> </ul>	<p><b>How reflection takes place</b></p> <ul style="list-style-type: none"> <li>Planned and structured reflection moments</li> </ul> <p><b>Follow-up to reflection</b></p> <ul style="list-style-type: none"> <li>Capturing and sharing of learning</li> </ul> <p><b>Context of reflection</b></p> <ul style="list-style-type: none"> <li>Flexible project structures and planning processes</li> </ul>	<p><b>Challenging through champions</b></p> <ul style="list-style-type: none"> <li>Challenging from the inside</li> </ul> <p><b>Identification of institutional capacity gaps</b></p>

Based on our experience of the peer assist approach, we have a few additional recommendations for initiatives wishing to implement a social learning-oriented approach:

- **Learning by doing as a form of capacity development.** Learning by doing is often an overlooked form of capacity development. In some contexts, this kind of capacity building can enable stakeholders to both build capacity and understand their own capacity gaps, subsequently allowing them to demand specific, more formal capacity development activities.
- **Monitoring learning.** If using a social learning-oriented approach, monitoring the implementation and results of that approach is a good way to ensure that it is done well and can be adjusted to the evolving context and needs of a program/project. This monitoring can be done by using the CCSL M&E framework or an adaptation of it, or by integrating learning process and outcome indicators into a programme or project's broader M&E framework.
- **Learning leaders.** It is useful to have an individual who is internal to the programme/project who can champion and manage learning processes and monitoring. It is not as effective to have an external person assess learning in a programme/project and produce a report.
- **Institutionalising learning.** The learning leader should not be an isolated individual who holds the social learning banner alone, and who takes the knowledge and motivation for social learning with them when they leave an initiative or organisation. Rather, in the spirit of social learning, champions of social learning in an institution need to spread their knowledge to wider networks within that institution to be effective.

- **Enabling action.** Challenging institutions is important in part because more powerful institutions are often in control of the resources, structures and decision making that enable or constrain action in projects/programmes. Reflection without action incorporating the shared learning that has taken place is insufficient. Institutions may need to be encouraged to provide adequate resources and develop an institutional culture that encourages experimentation and reflection on failure.

Taken together, the key factors and recommendations summarised form the basis of a fledgling evidence base on the potential for social learning-oriented approaches to climate change adaptation and food security programmes/projects to improve development outcomes.

Working with others, IIED aims to build on this evidence base with a particular focus on the role of social learning processes in planning and implementing appropriate strategies for adapting to climate change and better managing climate uncertainties.

# Appendix A.

## CCSL M&E framework

Thirty essential indicators spread across the process, learning and value/practice categories are summarised below. Italics refer to optional/secondary indicators.

ID#	PROCESS INDICATORS	ID#	LEARNING OUTCOME INDICATORS	ID#	VALUE/PRACTICE OUTCOME INDICATORS
P1	Women, youth and other disadvantaged groups are identified and targeted	L1	[Cognitive] Knowledge of the problem enhanced by interactions	V1	[Value] Engagement leads to increased commitment on the part of target groups/ individuals in reaching the goal of the project
P2	Groups/individuals identified are engaged through appropriately tailored means	L2	[Relational] Three parts: a. Engagement has led to better relations between target groups/individuals <i>b. Trust created</i> <i>c. Engagement has led to awareness and valuing of other stakeholders</i>	V2	[Practice] Three parts: a. New social networks established b. New initiatives and projects c. Empowerment of most vulnerable beneficiaries (communities) including women and children
P3	Two parts: a. All target groups/ individuals are actively participating in the project <i>b. Facilitator role identified as trusted and effective by all parties</i>	L3	[Normative] Two parts: a. Different knowledge types successfully integrated b. Engagement has led towards a change in collective understanding of the problem and solutions		
P4	<i>Emergence of champions is fostered</i>				

ENGAGEMENT

	ID#	PROCESS INDICATORS	ID#	LEARNING OUTCOME INDICATORS	ID#	VALUE/PRACTICE OUTCOME INDICATORS
ITERATIVE LEARNING	P5	Cyclical, inclusive learning and evaluation 'moments' are available for the group	L4	[Cognitive] Two parts: a. Results of learning/ evaluation are incorporated into the project strategy b. <i>Creative solutions and innovations are developed</i>	V3	[Value] Wider stakeholder groups understand the reasons to change their relations and behaviours
	P6	<i>Learning and evaluation processes are supported and facilitated</i>	L5	[Relational] <i>Evidence as learning/ evaluation takes place that people understand the reason to change relations and behaviours between people and groups</i>	V4	[Practice] <i>Wider stakeholder groups relate to each other differently</i>
	P7	Systems are in place to foster and implement new ideas	L6	[Normative] Participants understand the need for alternatives and room to fail	V5	[Value] <i>The need for alternatives and room to fail is evident in other projects/programs</i>
	P8	Questioning the theory of change itself and key assumptions is valued and happening regularly			V6	[Practice] Alternatives and room to fail are built in to other projects/ programmes
	P9	Questioning of values, norms and governance underlying problem is valued and happening regularly				

	ID#	PROCESS INDICATORS	ID#	LEARNING OUTCOME INDICATORS	ID#	VALUE/PRACTICE OUTCOME INDICATORS
CAPACITY DEVELOPMENT	P10	Capacity development activities are integrated into the project/program	L7	[Cognitive] Similar level of understanding of the problem by all stakeholders	V7	[Value] More informed stakeholders
	P11	Capacity development activities target all participants in appropriate ways (eg governments, farmers, scientists)	L8	[Relational] Increased understanding between different participant groups of different needs and perspectives	V8	[Practice] Two parts: a. Capacity development leads to different groups working together better b. Capacity development leads to changes in practice that reflect a better understanding of the problem and solutions
	P12	Capacity needs are determined collectively in a bottom-up manner	L9	[Normative] Increase in collective challenging/understanding methods of building capacity for particular stakeholders		
	P13	Capacity development needs are systematically integrated into all project components				
CHALLENGING INSTITUTIONS	P14	Key individuals/institutions who will support/champion change are identified	L10	[Cognitive] Project participants understand the particular opportunities and barriers	V9	[Value/Practice] Reduced number and severity of barriers; increased number and potential impact of opportunities
	P15	A change strategy is developed, including mapping of existing norms and endogenous processes	L11	[Relational] Key institutional and project actors share a common understanding of the problem and approach to solving (social learning)	V10	[Value] Challenges lead to changes in institutional openness towards social learning-orientated approaches (evidenced in eg attitudes, conflicts)
	P16	Existing norms and endogenous processes are mapped	L12	[Normative] Institutions understand that a shift in values or practice is needed to foster social learning	V11	[Practice] Challenges lead to changes in institutional support for social learning-oriented approaches (evidenced in eg policy/roles and resources made available for implementation)
	P17	Key institutions are challenged to make changes that facilitate social learning				



# Appendix B.

## Process guide

### Process guide to the CCSL M&E framework

The CCSL initiative is building an evidence base on social learning-oriented approaches to climate change adaptation and food security research. The initiative aims to answer two questions: 1) where is effective social learning occurring, and 2) how and when does social learning contribute to better and more sustainable development outcomes? To do this, the initiative

developed the CCSL M&E framework. The framework can be found online in [CCAFS Working Paper 98](#).

### 1. Five steps for integration

This document offers some simple guidance on how to implement the CCSL M&E framework and integrate it into a project's overarching M&E strategy. This guidance is given as a series of logical steps, which were intentionally left broad to allow for adaptation by a wide variety of initiatives. The five steps are as follows:

<b>1. FAMILIARISE</b>	<p>Read through the CCSL M&amp;E framework document.</p> <p>If you are not that familiar with social learning, follow the links in the M&amp;E framework to some online resources.</p>
<b>2. COMPARE AND CONTRAST</b>	<p>If your project is already underway and/or already has an M&amp;E strategy and framework, this can be compared to the CCSL M&amp;E framework. Look for areas of overlap or synergy, as well as for areas of dissonance.</p> <p>If you do not yet have a wider M&amp;E strategy or framework, you can start by thinking how you might design one that integrates social learning.</p>
<b>3. BRAINSTORM</b>	<p>Discuss the synergies/opportunities with your M&amp;E lead and other relevant team members. Begin to brainstorm ways to work the social learning monitoring into your more general monitoring strategy. You will likely be using methods/tools your project/stakeholders feel comfortable with to gather the data.</p> <p>Remember that some of the indicators in the social learning M&amp;E framework may need to be monitored over a period of time, or through intermediate indicators that are relevant to your project context.</p> <p>'Triangulation' of indicators through a number of different project-specific proxy indicators is one way to point to the broader (more general) indicators in the framework.</p> <p>You may want to consider:</p> <ul style="list-style-type: none"> <li>▪ How (methods) and when (frequency) will the monitoring take place?</li> <li>▪ How will the results of the monitoring be recorded and analysed?</li> <li>▪ Who will do the monitoring, and how much time and resources are needed?</li> </ul>
<b>4. IDENTIFY GAPS</b>	<p>Using the results of your brainstorming, assess the gaps: what are you missing? Work together with your wider team to assess feasibility of and strategies for obtaining missing tools, people and money.</p>
<b>5. PLAN</b>	<p>Once you have determined that using the framework to monitor is feasible, set out a workplan with your wider team to obtain resources needed and begin implementation.</p>

## 2. Examples of integration processes

Below, three examples of projects participating in the CCSL initiative may usefully illustrate how the CCSL M&E framework can be integrated into a specific project's overall M&E framework and tailored to its monitoring and learning objectives using the five steps.

### 2.1 Social learning M&E in a project focused on improving farming yields and crop resilience

A Peruvian agricultural research-focused NGO had been working on participatory approaches, working with farmers over co-learning over five years, to improve farming yields and crop resilience. After **familiarising** itself with the CCSL M&E framework, it decided that many of the activities that it was doing were likely fostering social learning for change, and it wanted to use the framework to try to track this.

**Comparing and contrasting** the CCSL M&E framework with what it was already doing on M&E, the NGO wanted to adapt the social learning M&E framework in terms of language and how it integrates with its other M&E objectives, such as linking to intermediate results and sustainable development (SD) outcomes. The NGO already uses the Convention on Biological Diversity (CBD) Aichi targets as a core M&E framework for assessing SD outcomes — focusing on development/food security, genetic resources and traditional knowledge.

Once the NGO was familiar with the CCSL M&E framework and **brainstorming** in conjunction with a social learning M&E support team, it decided it would be useful to define the social learning specific indicators and approaches to collecting them for three different groups:

- 1) Community focused — indicators with indigenous people that focus more on outcomes: biodiversity, culture, knowledge transmission, diffusion, resilience, and so on.
- 2) Intermediaries — role NGOs and other intermediaries play. For example as facilitators and brokers between local and national level. Bridging learning and so on.

- 3) NGO institutional level — how the NGO engages with communities and internalises/exchanges knowledge and ways of doing with communities. For example, devolution of rights more than a devolution of seeds.

For each of the three groups, the NGO decided to:

- Develop a matrix and see where the CCSL M&E indicators fit and how they bridge in to other indicators of interest, such as those focused on SD outcomes
- Identify which of the CCSL M&E indicators are relevant and which are not — and why
- Where language of the indicators is not appropriate, adapt it; where the indicator itself was very high level, develop project-specific indicator with an explanation of how they point/proxy to the CCSL M&E indicators. They anticipated this being particularly applicable for group 1, where it will likely not be useful to talk about 'social learning' per se
- Construct approaches to encourage open dialogue. Some of the questions posed by the indicators in the framework could be potentially sensitive/difficult — particularly for the third group. The groups themselves help create safe spaces where people are more likely to be open.

**In identifying gaps**, the NGO's proposed methodology for engaging the third group was a small intimate one day workshop (seven people) with the following format: strong facilitation focused on answering the indicator question in an informal context — the facilitator talked around the questions rather than listing them as tasks to do or a list of questions to get through. It was described to participants as a case study exercise. Any questions that the facilitator felt did not come out in the group because of sensitivities were followed up with one-on-one conversations. **In planning** the workshops, the NGO determined there would be less resources required and less inconvenience if the M&E workshops were attached to other events happening within the programme. It was also determined useful to hold a parallel workshop at the same time as the group 3 workshop with key members from the relevant communities — and at the end of the day, the farmers presented the results to the NGO and vice versa.

## 2.2 Social learning M&E in a programme focused on community-driven environmental and social protection in the Amazon

A Brazilian NGO focused on cash transfers, community-level social investment and environmental conservation issues was interested in using the CCSL M&E framework in an evaluation of their programme, which had been running for seven years. The aim was to assess the extent to which social learning was happening across the programme's projects running in over 700 communities as part of a systematic review of the programme. The first step was to pilot an approach to evaluating social learning across ten different project examples.

After **familiarising** itself with the CCSL M&E framework, the programme decided to assess the indicators through two separate approaches:

- 1) Interviews with project staff. Each interview would cover several project examples in order to hone in on one or two examples to discuss in detail. This would enable the selection of a range of projects across different geographic areas and contexts.
- 2) Focus group discussions with community members. These would centre on the projects and how they had evolved. The aim would be to tease out co-learning. Due to limitations in time and resources, all projects covered fell within one particular geographic area, though they were spread across a spectrum of level of social learning.

**Comparing and contrasting** the indicators with the nature of the projects and the programme-specific social investment approach, the programme leaders then **brainstormed** interview questions that would 'answer' the indicators in the framework using language that would be familiar to project staff and beneficiaries. Questions were developed across the four main areas of the social learning M&E framework. Each question was mapped against the indicators it was expected to cover using a simple table. Interviewee responses were then also mapped onto the indicators to assess achievement against each. Through a desk exercise, a narrative would then be developed for each indicator and a rating applied using the categories: 'Yes', 'Partial', 'Hardly' and 'No' to signify the degree to which an indicator had been 'met'. Visuals would be used to allow easier comparison of the status of each indicator across the ten examples.

In **identifying gaps** and challenges, it was decided that the community focus groups might benefit from a more visual approach to telling their story of how each project evolved. This approach would help to bring out processes, relationships and challenges as they evolved over time — along with associated learning and reflection points — in a more natural way for community members. The tool selected was an adapted version of Netmap Toolbox<sup>9</sup> called 'Process Net-Map'. With this tool, simple diagrams are drawn on a large piece of paper to show how stakeholders are linked with actions as a facilitator asks questions. When tested, this tool was found to help bring out when and how learning was happening, and distinguish activities/processes that contributed to learning from those aimed at overall project objectives. The visual nature of the tool was useful for engaging the community and rapidly understanding the story.

The **plan** was to cover ten different project examples by combining the three to four staff interviews with the community focus groups. Staff were to be chosen based on their long-term engagement with communities and geographic location in remote areas. Focus group members were to be identified by asking each community for a list of people involved in the relevant project and trying to ensure a balance of community leaders and members, as well as men and women.

Lessons learned from this process included the importance of taking historical context into consideration when assessing social learning indicators. In one project area, for example, a church that had engaged in leadership building for the past decade had helped to build trust in the community. The institutions and relationships needed for social learning to take place had a history of being established long before the social investment project prompted by the NGO started.

Looking at this purely from a project resource perspective, the NGO did little capacity building or relationship forming, instead acting as a hands-off source of finance. Because the project was very successful, assessing the approach (and associated resourcing) based on the level of effort versus outcomes could lead to the erroneous conclusion that this approach would work in a context where this leadership/trust building had not happened. This underscores the importance of having a baseline understanding for each indicator and of the overall historical context.

<sup>9</sup>More information on Netmap Toolbox available at <https://netmap.wordpress.com>

## 2.3 Social learning M&E in a project on climate change adaptation in hotspots in Asia and Africa

A large programme consisting of four consortiums, each working on a different climate change hot spot, is explicitly designed to capture learning on the process of producing adaptation research and supporting its use in policy and practice. The programme wants to test its theory of change through implementation in order to inform its programme strategies, as well as produce learning on processes of wider interest to the sector. It aimed to develop a learning framework in addition to its existing monitoring framework, drawing on CCSL's M&E framework.

By engaging with CCSL's work, the programme hopes to better understand how a 'learning-based approach' might improve performance and outcomes. It also wishes to share and compare its findings with a community of peers.

A key member of the programme staff who has been involved in CCSL's work and was **familiar** with the CCSL M&E framework, **compared and contrasted** the CCSL framework with the programme's own monitoring framework and learning goals. This comparison started in the design stage of the programme's monitoring and evaluation. Because the programme's learning framework is aimed at programme level, the CCSL monitoring areas and indicators needed to be reinterpreted for this context. Programme staff worked together to **brainstorm** which of the CCSL indicators were most relevant at programme level and rephrase/condense them as needed in order to develop an appropriate learning framework. The indicators selected were then presented to consortium partners to assess whether together they made sense as a framework for collective reflection.

In **planning** how the learning framework would be implemented, it was decided that the framework would be utilised primarily in a bi-annual review process, consisting of a face-to-face meeting of programme participants once a year, as well as a follow-up meeting six months later. Each main annual meeting would be centred on a theme — a monitoring topic that the programme as a whole would like to discuss — in addition to a high-level learning review. A facilitation process adapted from the CCSL community of practice will be used to guide reflections on progress against the theory of change, as well as to monitor the outcomes of the learning process. In the former exercise, thematic questions that will allow the programme to focus in on and test links and assumptions in the theory of change as the programme evolves will also be used.

## 3. How to join the CCSL M&E framework pilot

The CCSL initiative is currently soliciting projects to participate in the piloting of the CCSL M&E framework. It is offering a virtual peer-assist to five projects that are interested in using the framework to monitor learning. If you are interested in participating, please get in touch with Ben Garside at [ben.garside@iied.org](mailto:ben.garside@iied.org).

# Appendix C. Diagrams

The overall indicator diagrams for the five case studies are presented below for ease of comparison.

African Climate Change Resilience Alliance

Process	P1	P2	P3	P4	
Learning outcomes	L1	L2	L3		
Value/practice outcomes	V1	V2			
Average					2.7

Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					2.7

Process	P10	P11	P12	P13	
Learning outcomes	L7	L8	L9		
Value/practice outcomes	V7	V8			
Average					2.9

Process	P14	P15	P16	P17	
Learning outcomes	L10	L11	L12		
Value/practice outcomes	V9	V10	V11		
Average					2.0

Bolsa Floresta Program – Maiana

**Engagement**

Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				2.8

**Iterative learning**

Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					2.7

**Capacity development**

Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				2.4

**Challenging institutions**

Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				2.1

Bolsa Floresta Program – Xibauazihno

**Engagement**

Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				2.8

**Iterative learning**

Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					1.9

**Capacity development**

Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				1.6

**Challenging institutions**

Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				1.7

Bolsa Floresta Program – Nosa Senhora

Engagement

Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				0.4

Iterative learning

Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					0.1

Capacity development

Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				0.0

Challenging institutions

Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				0.3

Bolsa Floresta – Terra Preta

Engagement

Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				1.5

Iterative learning

Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					1.3

Capacity development

Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				2.0

Challenging institutions

Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				1.1

Collaborative Adaptation Research Initiative in Africa and Asia

Engagement

Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				2.0

Iterative learning

Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					3.0

Capacity development

Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				3.0

Challenging institutions

Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				2.0

Policy Action for Climate Change Adaptation

Engagement

Process	P1	P2	P3	P4
Learning outcomes	L1	L2	L3	
Value/practice outcomes	V1	V2		
Average				2.3

Iterative learning

Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					2.1

Capacity development

Process	P10	P11	P12	P13
Learning outcomes	L7	L8	L9	
Value/practice outcomes	V7	V8		
Average				2.7

Challenging institutions

Process	P14	P15	P16	P17
Learning outcomes	L10	L11	L12	
Value/practice outcomes	V9	V10	V11	
Average				1.0



## Potato Park-International Potato Centre-ANDES Agreement for the Repatriation of Native Potatoes

## Engagement

Process	P1	P2	P3	P4	
Learning outcomes	L1	L2	L3		
Value/practice outcomes	V1	V2			
Average					2.8

## Iterative learning

Process	P5	P6	P7	P8	P9
Learning outcomes	L4	L5	L6		
Value/practice outcomes	V3	V4	V5	V6	
Average					2.8

## Capacity development

Process	P10	P11	P12	P13	
Learning outcomes	L7	L8	L9		
Value/practice outcomes	V7	V8			
Average					2.7

## Challenging institutions

Process	P14	P15	P16	P17	
Learning outcomes	L10	L11	L12		
Value/practice outcomes	V9	V10	V11		
Average					2.5

# Acronyms

ACCRA	African Climate Change Resilience Alliance
ALRs	Annual Learning Reviews
ANDES	Association for Nature and Sustainable Development
ASSAR	Adaptation at Scale in Semi-Arid Regions
BFP	Bolsa Floresta Program
CARIAA	Collaborative Adaptation Research Initiative in Africa and Asia
CCAFS	Climate Change and Food Security programme of the CGIAR
CCD	Climate Change Department
CCSL	Climate Change and Social Learning initiative
CIP	International Potato Centre
DECCMA	Deltas, Vulnerability and Climate Change: Migration and Adaptation
FAS	Fundação Amazonas Sustentável/The Sustainable Amazonas Foundation
FPIC	Free prior and informed consent
HI-AWARE	Himalayan Adaptation, Water, and Resilience
IIED	International Institute for Environment and Development
IS	Implementation Strategy
LAs	Learning Alliances
M&E	Monitoring and evaluation
MWE	Ministry of Water and Environment
NCCP	National Climate Change Policy
NDPII	Second National Development Plan 2015/16-2019/20
PACCA	Policy Action for Climate Change in Africa
PMF	Performance Measurement Framework
PRA	Participatory Rural Appraisal
PRISE	Pathways to Resilience in Semi-Arid Economies
RiU	Research-into-use
TAMD	Tracking Adaptation and Measuring Development

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Social learning approaches can facilitate knowledge sharing and so have the potential to help solve complex 'wicked' problems such as climate change and food insecurity. This working paper synthesises evidence from five diverse initiatives employing social learning approaches in response to such problems using the Climate Change and Social Learning initiative's Monitoring and Evaluation framework. It finds initial evidence that key factors in social learning approaches can lead to clear learning outcomes with resulting positive changes in values and practice. Links to longer-term development outcomes are also evident in several completed initiatives.

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Funded by:



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Agriculture and  
Food Security**



This working paper has been funded by the Climate Change Agriculture and Food Security (CCAFS) program within the Consultative Group on International Agricultural Research (CGIAR). Any opinions stated herein are those of the author(s) and do not necessarily reflect the policies or opinions of CCAFS, CGIAR, donor agencies or partners.



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