

RESILIENCE RESULTS

BRACED EXTENSION FINAL EVALUATION

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Synthesis paper



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DISCLAIMER

The views expressed in this report are those of the evaluators. They do not represent those of DFID or of any of the individuals and organisations referred to in the report. The Evaluation team was able to work freely and without interference. There were no conflicts of interest between evaluators and programme implementation. Information sources and their contributions were independent of other parties with an interest in the evaluation.

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Acronyms and abbreviations

3As and T	Anticipatory, Absorptive and Adaptive Capacities and Transformation
AFL	Acting For Life
ANICT	National Agency for Local Government Investment (Mali)
ASAL	Arid and Semi-Arid Lands
BRACED	Building Resilience and Adaptation to Climate Extremes and Disasters
BRACED-X	Building Resilience and Adaptation to Climate Extremes and Disasters Extension
BRACED-X-LM	Livestock Mobility (BRACED-X project)
BRES-X	Building Resilience (BRACED-X project)
CIARE	Climate Information and Assets for Resilience in Ethiopia (BRACED project)
CMESA-E	Climate and Meteorological Service Advancement in Ethiopia (BRACED-X project)
CMO	Context-Mechanism-Outcome configuration
CRS	Catholic Relief Services
CTS	Crescent Takaful SACCO (Kenya)
CVACC	Village Committee for Adaptation to Climate Change
DCF	Decentralising Climate Funds (BRACED-X project)
DFID	Department for International Development (UK)
DRR	Disaster Risk Reduction
ESS	Evaluation Synthesis and Support
EWS	Early Warning System
FE	Final Evaluation
FM	Fund Manager
ICMO	Intervention-Context-Mechanism-Outcome configuration
IDE	International Development Enterprises
IP	Implementing Partner
IRD	International Relief and Development
KII	Key Informant Interview

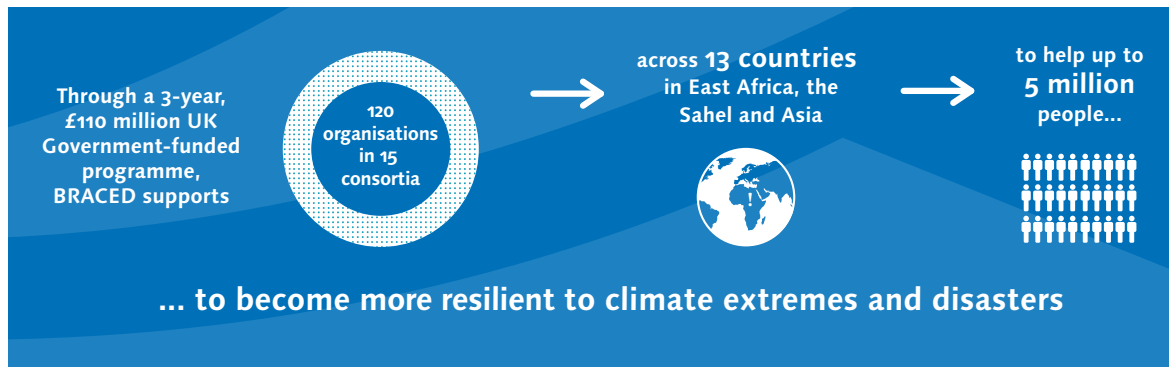
KM	Knowledge Manager
LAPA	Local Adaptation Plan for Action
M&E	Monitoring and Evaluation
MAR-X	Market Approaches to Resilience (BRACED-X project)
MFI	Microfinance Institution
MoU	Memorandum of Understanding
MRR	Monitoring and Results Reporting
MTR	Mid-Term Review
MUS	Multiple Use Water System
NEF	Near East Foundation
NFCS	National Framework for Climate Services (Ethiopia)
NGO	Non-Governmental Organisation
NMA	National Meteorological Agency (Ethiopia)
NRM	Natural Resource Management
ODI	Overseas Development Institute
PNDL	National Programme for Local Development (Senegal)
PPP	Purchasing Power Parity
R4D	Research for Development
SACCO	Savings and Credit Cooperative Organisation
SILC	Savings and Internal Lending Community
SUR1M-X	Scaling up Resilience to Climate Extremes for over 1 Million People (BRACED-X project)
ToC	Theory of Change
ToR	Terms of Reference
UK	United Kingdom
VSLA	Village Savings and Loan Association
WASH	Water, Sanitation and Hygiene
WHH	WeltHungerHilfe
WMO	World Meteorological Organization
WYL	Waati Yelema Lebenw (BRACED-X project)
XFE	Extension Final Evaluation

Executive summary

Introduction

This report presents a synthesis of nine project-level final evaluations, carried out after an 18-month, costed extension to the Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme.

Building Resilience to Climate Extremes and Disasters



The purpose of BRACED-X was to consolidate and expand work already completed in nine projects. It was expected that BRACED-X Implementing Partners (IPs) would build on BRACED results to ensure progress towards sustainability of outcomes. As well as allowing for the scaling-up and rolling-out of successful interventions, it also meant that, for some activities requiring a longer maturation period, for example planning and institutional change, there was more opportunity for projects to progress along the change pathways. This would add to BRACED programme evidence and learning about how and why change happens in resilience-building programmes. BRACED-X projects were expected to demonstrate progress towards achieving transformative change, moving beyond supporting incremental changes in people's resilience towards a more radical shift in human systems, *'to fundamentally and sustainably improve the resilience of vulnerable citizens to climate impacts'*.

Using evidence provided by IPs, looking across a range of contexts in building and strengthening resilience, the report examines the following central synthesis evaluation question:

What difference did BRACED-X make, how, why, for whom and in what circumstances?

The projects implemented **packages of activities** working directly with individuals, households and communities, as well as with local-level institutions and local and national governments, and in collaboration with the private sector. These packages of activities, in combination, aimed to contribute to the overall outcome of improved resilience to climate-related extremes and disasters.

Project activities included advocacy and policy influencing; institutional support and strengthening; training (e.g. in the use of improved seeds, in climate-smart technology, health and nutrition); support for natural resource management; establishing and supporting early warning systems; water management and water, sanitation and hygiene activities; improving access to climate information; and supporting access to financial services.

We supported IPs to use a **realist approach** while collecting their final evaluation data and in their analysis to help us answer the synthesis question. In realist evaluation, context is understood as the most important influence on whether an intervention succeeds in activating a change process (often referred to as a 'mechanism') that will cause an outcome. Causation in realist evaluation therefore rests on understanding the influence of context on 'mechanisms' and outcomes, as well as the mechanisms themselves.

Building resilience through the BRACED-X projects

Within BRACED-X, resilience is understood as the **ability to anticipate, avoid, plan for, cope with, recover from and adapt to (climate-related) shocks and stresses**. Outcomes of resilience-building processes are therefore seen by the BRACED programme as a set of interlinked 'capacities' to absorb, anticipate and adapt to shocks and stresses. Absorptive capacity refers to the ability to face and manage adverse conditions, using available skills and resources. Anticipatory capacity means anticipating and reducing the impact of climate variability and extremes through preparedness and planning. Adaptive capacity is being able to adapt to multiple, long-term and future climate change risks, and also to learn and adjust after a disaster. Building these capacities lays foundations for transformation and transformative change – fundamental changes to systems, institutions and the 'rules of the game'. BRACED-X projects report evidence of a **range of outcomes for individuals and households**, as well as building understanding of how and why projects contributed to this change in different contexts.

Individual and household resilience capacities have been built, with access to financial services and market development playing a key role

A key resilience outcome was increased incomes, which is directly related to agricultural or livestock livelihoods activities. There is medium–weak evidence of increased incomes in the BRACED-X Final Evaluation (XFE). Projects enabled participants to increase and diversify their sources of income largely through boosting agricultural and livestock productivity and improving access to financial products and services. This contributed to basic absorptive and adaptive capacities. Interventions implemented in combination helped achieve this, with strong evidence of a BRACED-X project contribution through: access to finance; market development and strengthening; and business training. What people do with these incomes matters; there is some evidence that they are being used to meet immediate needs and to further invest in livelihood activities, improving absorptive and, potentially, adaptive capacity.

The projects continued to **influence contexts to create conditions for change**, providing services to meet basic needs and clean water provision, freeing up time to invest in productive activities. 'Time-saving' acts as a mechanism for further change and therefore is part of the whole process of building and strengthening resilience.

The change pathways highlight **the importance of demonstration effects**, and these manifest in different ways. First, at the level of the individual (in households and communities), these relate to trust and credibility, peer learning and awareness. Second, project XFEs present evidence that practical demonstration fills gaps in knowledge between players at different institutional levels or levels of the system.

Multiple projects working to develop market linkages helped create **more resilient local markets that are accessible** to small-scale producers (e.g. camel milk in Kenya; support to important value chain links such as collection centres), although the evidence is still somewhat thin. Smallholder farmers saw increased and diversified income as a result, bolstering their absorptive and adaptive capacities.

The main mechanism was linking and establishing better relationships between existing relevant private sector actors. In some cases, this involved creating new spaces or institutional arrangements. BRACED-X project support to community-level savings and loans groups continued to help diversify income-generating activities, developing absorptive and adaptive capacities. Access to **appropriate financial services was a key building block on the pathway to resilience** in a range of contexts. This relies strongly on trust in formal and informal financial institutions.

BRACED-X projects have broadened and deepened their work at higher institutional levels

Projects were able to capitalise on the efforts made, relationships developed and knowledge gained from the previous BRACED phase for work at higher policy and institutional levels under BRACED-X. Projects focusing on **fostering links and relationships between key national-level stakeholders and institutions forge a more sustainable and enabling environment for resilience policy-making**. Linking across institutions from local to national levels can bring local knowledge into high-level decision-making, and in some cases changed national policy-maker mindsets about issues like pastoralism and cross-border mobility.

Further evidence of **raised awareness and shifting attitudes** tells us more about what it takes to influence key decision-makers and motivate them to make resilience-building changes to policy and implementation processes. This helps to generate ownership in these. One way projects achieved this was through using their knowledge of local socio-economic and policy contexts developed during BRACED to reach out and mobilise a wider range of stakeholders and at higher institutional levels. Interventions that were **informed by local contexts and that**

spoke directly to stakeholders' needs were perceived by stakeholders as valid, created new partnerships and enabled changes to existing structures. This helped lay solid foundations for further change and sustainability.

Building capacities of women can improve their status, but we are not yet seeing transformational change

Building women's absorptive and adaptive capacities through a range of income-generating activities was effective in promoting positive changes in women's status within households and communities in some instances. Where projects **increased women's income**, women also gained **control over some elements of household decision-making**, signalling **small shifts to gendered norms at household level**. While the projects increased women's participation in community institutions, evidence of women's resilience concerns being included in 'community' decision-making is mixed. Echoing the findings of the previous evaluation, success in gender and inclusion requires strategic approaches to shift power so that we see more transformative change in gendered power structures.

Projects target marginalised people, but it is unclear who might have been excluded and why

Projects continued to implement successfully activities that reduced risk and increased coping and were inclusive insofar as they targeted the most vulnerable people, including women. However, it is **difficult to say who has been excluded**, how and why, as the data does not provide sufficient depth.

Developing and strengthening institutions for climate information has great potential to build resilience, but this takes time

Better provision and access to information owing to BRACED-X can be seen across a range of contexts, based on development and strengthening of regional and local networks, both formal and informal. While clear achievements have been made in establishing structures for disseminating climate information, the impacts of this on resilience will emerge only over time. Developing structures, awareness and knowledge represents fundamental and necessary progress towards building anticipatory capacities. There is mixed evidence on the uptake of and response to climate information. Users need to trust forecasts and use them consistently over time for them to inform and influence decision-making in ways that lead to greater resilience. Access to information needs to be sustained beyond the life of the project both to engender trust and to ensure resilience in the longer term. National and local ownership of climate information systems and processes, and capacity of both local and national actors, will mean services are likely to continue without direct project support.

How and why change happens

Collaborative processes lead to an enabling policy-making environment

Policy work under BRACED-X was, on the whole, founded on projects investing in understanding political economy and power. The collaborative processes involved in reaching outcomes created a more enabling policy-making environment, with greater awareness of the need for 'resilience thinking'. BRACED-X projects continued to work collaboratively with communities to ensure their needs and priorities were identified bottom-up. However, in the context of climate resilience, communities' decisions need to be informed by future climate scenarios (not just 'needs'). Final evaluations lack evidence of this happening in the projects. The XFE provides (strong) evidence to further support the importance of 'getting the right people on board' (stakeholders) to enhance the credibility of projects, so that communities (individuals and households) participate. This links strongly to contexts of trust, and the need for projects to build and capitalise on this.

Responding to need mobilises stakeholders, but it is not always clear whether 'needs' match what is required to build resilience

Policy work shows strong evidence for filling gaps and responding to 'pressing need', demonstrating that there is already a policy space for BRACED-X processes and outcomes. Timely mobilisation of key decision-makers promoted buy-in at different institutional levels. This **bodes well for political will/commitment**, which is further strengthened by engaging key actors (national and local government stakeholders) in project design and implementation. But this raises **questions about needs versus climate considerations**. Is a 'need' actually what is required in terms of adapting to climate risk, extremes and disasters, bringing about transformational change and resilience in the long term? Interventions at the community level largely work to shore up and improve strategies reliant on natural resources and therefore subject to the vagaries of the climate. There is some evidence of fundamental differences to the way people are earning incomes, through diversified livelihood activities in sectors with much improved market connections thanks to value chain support from some projects (e.g. essential oil in Nepal; camel milk in Kenya). But it is not evident how sustainable outcomes would be in the face of longer-term, changing climate-related risks and opportunities.

Institutional change points to shifts significant enough to make a difference at scale

BRACED-X achieved outcomes at scale in Ethiopia through strategic engagement with government stakeholders and institutions, resulting in a national policy framework. Important progress has been made towards successfully scaling up climate financing initiatives. BRACED-X project coverage offers evidence of change at a scale significant enough to make a difference to whole communities and many thousands of people, especially in the case of institutional change, although in some cases the evidence base remains thin. Most evidence of **innovation** is in the higher institutional and policy-related work carried out under BRACED-X. Across the projects, there is some evidence of inclusion in decision-making processes, and engagement with strategic planning processes, pointing to potentially transformative change in terms of **leadership and empowerment**, but not enough to say definitively that it IS transformative. The building blocks seem to be in place.

What difference has BRACED-X made?

BRACED-X projects successfully contributed to resilience outcomes by building on work from the previous phase of BRACED and learning from experience – for example recognising how important it is to cater to/address basic needs, such as water and food, and especially time-saving. This is an important factor in inclusion, in enabling participation in project activities and in continuing to support activities to achieve this.

More opportunity to appropriately link and sequence activities

A strong contribution of BRACED-X to learning about implementing resilience-building projects is that we find 'timeframes' are more about having the **space and time to sequence effectively**. There is evidence that access to financial services needs to go hand-in-hand with interventions directly supporting productive activities. Projects need to change the context within which they are operating – creating an 'enabling environment' for change to happen – for example through building trust or addressing food security concerns. We also see this in the **outcomes that act as mechanisms for further change**. For example, a number of projects dealt with basic needs before moving on to a more commercially-oriented focus. This is also an example of sequencing activities effectively. **Resilience is about creating the key elements in the change pathways, as well as the links between them: the outputs, intermediate outcomes and processes that take us closer towards resilience outcomes and impact.**

Working with 'champions' and policy moments to get resilience on the agenda

Working to bring about policy change sees an emphasis on the **importance of champions (both local and national)**, for gaining access and a 'space at the table'. This is not peculiar to resilience-building programmes. Nevertheless, it is important to highlight here. Projects need to identify and work with the right change agents: those with the **mandate and resources to deliver change**. Influencing and advocacy play a strong role in creating action, especially at higher institutional levels, working to align climate concerns with existing policy needs and demands to generate/internalise the need for change among the key actors.

Tapping into windows of opportunity or policy 'moments' increased the likelihood of timely policy changes in favour of local community resilience. A synthesis of the experience of the five policy IPs shows the importance of making connections between the local and higher institutional levels in order to demonstrate the value of local knowledge for decision-making processes. BRACED-X offered the opportunity to invest more time in building relationships with key regional and national actors, as an important springboard for further change.

Concluding comments and reflections

Evidence from the previous evaluation suggested that change needed to be adaptive, responding to and dealing with multiple, long-term and future climate change risks, for it to be transformative in terms of fundamental changes to systems and institutions and the way things are done. The synthesis of evidence from the XFEs of the BRACED extension shows adaptive capacities being built, for example diversifying livelihoods and income sources. Are projects doing enough to bring about (or laying the foundations for) transformative change, which is necessary for change to be sustainable and resilient in the long term?

Bringing about transformational change relies on resilience-building actions instigated by the projects being embedded and internalised within local and national processes. Impressive progress was made during BRACED-X to secure the foundations for this. These foundations lie with changes in mindset, political will and commitment to taking the actions necessary to build and support adaptation and resilience. It also needs sustained capabilities and resources to see things through.

Challenges remain. We see in the various barriers and contextual factors that projects were unable to circumvent prominent systemic bottlenecks to resilient change. Examples include social norms that continue to exclude women from important decision-making and priority-setting processes and continued mistrust in formal institutions by marginalised people (and vice versa) that prevent systemic change in marginalised people's access and inclusion, which ultimately hinder resilience.

A photograph of a woman from behind, walking through a field of tall grass. She is wearing a white headwrap and a light-colored t-shirt. A child is strapped to her back in a colorful, patterned cloth. She is holding two yellow buckets, one in each hand, by their handles. The image has a blue tint and a semi-transparent text overlay.

PART 1. BACKGROUND TO THE EVALUATION



1. INTRODUCTION

Image: CIF Action

1.1 The BRACED programme and the BRACED extension

The Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme was originally a 3-year, £110 million programme funded by the UK Department for International Development (DFID). BRACED aimed to **build the resilience of 5 million vulnerable people** against climate extremes and disasters. This was through:

- Scaling up proven technologies and practices;
- Research and evaluation to build knowledge and evidence on how best to strengthen resilience in different contexts;
- Enhancing local and national capacity to respond to climate-related shocks and stresses.

From its launch in January 2015, BRACED supported over 140 organisations in 15 consortia to implement 15 projects across 13 countries in East Africa, the Sahel and Asia. These consortia included local government and civil society organisations, research organisations and the private sector.

At the end of October 2018, DFID decided to extend the BRACED programme for a further 15 months, from 1 January 2018 to 31 March 2019. This period (and the implementation wrap-up period that followed between 1 April 2019 and 30 June 2019) is referred to as BRACED-X. BRACED-X was a continuation of the BRACED programme. **The purpose of BRACED-X was to consolidate and expand work already completed.** The funds were organised into two windows: implementation (£10 million) and policy (£4 million). While the former aimed to deliver results on the ground (Components A and B of the BRACED programme),¹ the latter aimed to accelerate policy-influencing activities at national and local levels (Component D).²

Within the BRACED implementation period, medium- and long-term changes were achieved, and it was expected that Implementing Partners (IPs) would build on these results to ensure progress towards sustainability of outcomes. BRACED-X was expected to directly benefit millions more people, especially women and children, by building on and extending BRACED activities of nine of the original fifteen IPs.

1.2 Purpose of this report and intended users

This report presents findings of a synthesis of project extension final evaluations (XFEs) carried out by the nine BRACED-X IPs. It examines the following central evaluation synthesis question:

What difference did BRACED-X make, how, why, for whom and in what circumstances?

This question is answered through a qualitative, process-oriented and explanatory synthesis that brings together evidence from across the set of projects, building on the BRACED mid-term review (MTR) and Final Evaluation (FE), in order to draw overall conclusions and lessons about how, where, when and why BRACED interventions worked, what we can learn and how we can replicate good practice.

- 1 BRACED Component A: Grants to consortia, alliances or partnerships of non-governmental organisations (NGOs), local government, private sector and research organisations to scale up actions on the ground to build the resilience of people to cope with climate extremes in the Sahel. BRACED Component B: Grants to consortia, alliances or partnerships of NGOs, local government, private sector and research organisations to scale up actions on the ground to build the resilience of people to cope with climate extremes in DFID focal countries at risk of climate extremes.
- 2 BRACED Component D: Support to build the capability and capacity of developing countries and regional organisations to prepare and plan for the expected increases in the frequency and severity of climate extremes.

To answer the synthesis question above, we discuss progress towards outcomes from BRACED projects at the XFE stage, after four years and three months of implementation (three years under BRACED plus fifteen months under BRACED-X). The purpose of this evaluation activity is not to assess the progress and performance of individual projects. Rather, we **synthesise evidence and key lessons** on implementing a resilience-building programme and consider what difference BRACED-X has made, looking across a range of contexts in building and strengthening resilience.

This programme-level synthesis is the main evaluation activity for BRACED-X led by the BRACED Knowledge Manager (KM).³ By focusing on evidence on how, where, when and why BRACED projects worked, it complements other work under the Resilience Measurement Theme, including annual reporting by the IPs and BRACED monitoring and routine results reporting under the monitoring and evaluation (M&E) framework, including the BRACED Annual Report Synthesis.⁴

The intended users of this report are:

- **DFID:** By providing an assessment of the difference BRACED-X has made, founded on evidence on how and why BRACED intervention packages are working, capturing innovation and strengthening the BRACED theory of change (ToC), it is hoped that this report can assist further with decisions about how to plan and implement strategic resilience-strengthening interventions.
- **The BRACED IPs:** The report provides a qualitative synthesis of evidence from projects on how, when and where the nine BRACED-X project interventions worked, highlighting achievements and lessons and deepening the findings of the evaluation activities in the first phase of BRACED. This could be used to inform future programmes.
- **KM and Fund Manager (FM) teams:** The report provides further evidence of what has worked in building and strengthening resilience, how and why. The evidence presented can inform further research and future iterations of resilience work and complements the monitoring and results reporting (MRR) synthesis findings.
- **Others designing, implementing, funding and evaluating resilience-building projects and programmes:** The evaluation methodology draws on realist evaluation principles and methods, building on the evidence generated at MTR and BRACED FE. Realist evaluation is a relatively new and untested approach in evaluating complex development projects, which has been further applied to the policy work the IPs carried out during BRACED-X. Our experience with the methodology may offer some useful insights and learning for others designing, implementing or evaluating complex and complicated programmes.

³ BRACED (2015a).

⁴ Silva Villanueva, P. *et al.* (2016); Silva Villanueva, P. and V. Sword-Daniels (2017).

1.3 The BRACED-X Final Evaluation

The BRACED-X FE synthesis design is set out in a separate 'design addendum' document, which also contains a detailed theory of change for the programme extension. This has evolved and been developed from the original BRACED programme evaluation design (in lieu of a Terms of Reference (ToR)).

The synthesis draws on evidence from project-level XFEs carried out by IPs between November 2018 and March 2019. The BRACED-X projects carried out their XFEs before the end of March 2019 in order to be able to collect data before projects officially closed on 31 March 2019 (and project staff moved on). The KM deadline for the XFE reports was 31 May 2019, in order for the Evaluation Synthesis and Support (ESS) team to be able to analyse and synthesise results along a timeline to allow for the necessary rounds of internal and external quality assurance review and report production to meet the KM final DFID deadline of 14 September 2019.

In line with the objectives of previous BRACED evaluations, the **XFE focused on learning. The aim of the evaluation was not to evaluate the effectiveness and value for money of the projects and in this respect it does not perform an accountability function.** We assess how and why project interventions were leading to outcomes and building resilience in different contexts, and, where possible, for whom and in what circumstances. To achieve this, BRACED-X IPs needed to conduct an XFE that was:

- Process-oriented and explanatory in nature;
- Focused on 'mechanisms' – defined in BRACED M&E Guidance Note 7 as '*the causal forces or powers that explain why a change happens*'.⁵

During the XFE, as in the BRACED FE and MTR, IPs reflected on evidence on project successes and failures, and any enablers and constraints, in order to explore, test and revise assumptions about pathways to change. So that IPs did not repeat the same exercise less than a year after the FE of the first phase of BRACED, in line with the process of conducting a realist evaluation, they were encouraged to use the first three years of data (including, but not confined to, the MTR and FE) as a jumping-off point for newly collected evidence on the difference BRACED-X had made. IPs were expected to build on the evidence gathered for the FE as well as subsequent M&E data gathered under BRACED-X, with the XFE focusing on collecting only supplementary data on outcomes in addition to the data they already had on the previous three years' results. This formed the basis for in-depth, mostly qualitative, data collection and analysis to tell us how, why, for whom and in what circumstances BRACED-X had worked, and the contribution the projects had made to building and strengthening resilience. The learning and evaluation around change will therefore reflect the totality of the work, considering what BRACED-X added/allowed projects to do because they had extra time and resources.

⁵ BRACED (2015b).

The BRACED Evaluation team continued to provide guidance and support to IPs to promote consistency and quality, so that IPs could generate robust evidence and learning about how change happens in projects designed to build resilience to climate extremes and disasters in different contexts.

Table 1 describes the main components of the XFE including key outputs.

Table 1: Extension Final Evaluation main components and timeframe

	XFE PLANNING AND DESIGN	XFE CONDUCTED	XFE SYNTHESIS
	August– September 2018	November 2018– April 2019	May–July 2019
Focus	<ul style="list-style-type: none"> • Evaluative learning orientation • Resilience-strengthening outcomes, delivered against each project's logframe and ToC • Learning to tell us 'what works and why' about interventions for supporting resilience in particular contexts and informing future interventions 		
Evidence base and outputs for XFE	<ul style="list-style-type: none"> • 9 x project-level inception reports • 9 x project-level evaluation matrices and ToRs • 9 x project-level XFE reports • 1 x project-level policy case study • 4 x supplementary project-level key informant interviews (KIIs) on policy window work <p>To feed into:</p> <ul style="list-style-type: none"> • 1 x programme-level synthesis report • Synthesis 2-page summary 		
Process	<p>Conducted by external, independent consultants or in-house M&E staff, or a blend of both, using a robust methodology. Methodological support to evaluation teams, and quality review of reports provided by the KM ESS team.</p>		

Variation on the original design: The design addendum for the XFE details two policy case studies. Timing, project design and IP fatigue meant that, in practice, we could do only one in-depth case study, which was designed and carried out by an ESS team member (PROGRESS-X). We additionally carried out KIIs with project staff in the remaining four IPs that were undertaking work under the BRACED-X policy window (Anukulan-X; DCF; BRACED-X-LM; CMESA-E), following receipt of the IP XFE reports on 17 May 2019. This allowed us to dig deeper into the policy work being carried out by IPs in the extension phase, test policy theories and Context-Mechanism-Outcome statements (CMOs), fill gaps in evidence and triangulate evidence across the projects, expanding the dataset and improving quality of data.

The **primary audience** for the BRACED XFE synthesis report is DFID. Insights from the report should act as prompts for implementers to take BRACED learning and reflections into account, rather than acting as a comprehensive, prescriptive set of recommendations. The full report, the French translation of the executive summary and the English and French versions of a two-page summary will be shared with DFID as well as the IPs and the BRACED FM and KM. These will also be available to wider audiences on the BRACED programme and Itad websites, and shared through the BRACED programme mailing lists, social media feeds and other communication channels used by the programme. The report and summary will also be shared via the Research for Development (R4D) website and associated Thomson Reuters, Itad, Overseas Development Institute (ODI), DFID and Red Cross social media. Any additions to the **communication and dissemination plan**, as well as the **use and influence plan** (which are beyond the range and scope of the synthesis) for the XFE synthesis will be discussed and finalised with DFID.

1.4 Report structure

The report is presented in two parts (Part I: Background and Part II: Findings), broken down into a number of sections.

Section 2 describes the BRACED-X projects; how we conceptualised resilience within the BRACED programme and the resilience framing used in the analysis and synthesis of the IP evaluations. We also summarise the main findings from the FE of the previous phase of BRACED. Section 3 sets out the methodology, including the evaluation approach, a description of the data and the approach to the synthesis and assessing quality of evidence. Section 4 presents the findings of the XFE synthesis, focusing first on what BRACED/BRACED-X projects achieved in strengthening and building resilience before moving on to explain how and why change happened across the projects, for whom and in what contexts in Section 5. Section 6 concludes with a discussion and summary of what we have learned through the XFE process across the BRACED-X portfolio about future resilience-strengthening programming.



2. BRACED-X PROJECTS

Image: ILO/
Pradip Shakya

The nine BRACED-X projects operated across a range of contexts to build local-level resilience, on both national and regional scales. They employed diverse partnership arrangements and ways of implementing, using a variety of strategies (packages of activities). The complicated nature of the programme influenced and guided the choice of evaluation methodology and the way we analyse and present the data in this report.

2.1 Project contexts

Summaries of the BRACED-X project contexts are set out in Table 2.

Table 2: BRACED-X project climate contexts

PROJECT	PROJECT FOCUS	CLIMATE CONTEXT
Anukulan-X (IDE⁶ – Nepal)	Driving small farmer investment in climate-smart technologies in mid-west and far-west rural Nepal	Nepal has experienced frequent climate-induced disasters such as drought, landslides and floods, which disproportionately affect women, children, marginalised social and ethnic groups and the very poor. Since 2019 Nepal has been undertaking a federalisation process, creating semi-autonomous local government authorities, which will affect the relevance of Local Adaptation Plans of Action (LAPAs).
CMESA-E (Christian Aid – Ethiopia)	Improving access to reliable climate information and increasing local communities' capacity to respond to climate threats in Ethiopia	Recent trends show an overall decline in rainfall, resulting in more intense and frequent droughts in Ethiopia. Weather forecasts play an important role in informing farmers' decisions as to when to plant and harvest their crops or destock their animals. However, in many parts of Ethiopia, farmers have no way of accessing timely and relevant forecasts. The project was implemented in a context of civil unrest and displacement, during a National State of Emergency.
MAR-X (Farm Africa – Ethiopia)	Financial models and economic opportunities adaptable to climate extremes, working with lowland pastoralists and unemployed youth and women in urban areas	In Ethiopia's lowlands, pastoralist communities face increasing pressures owing to increased incidence of drought. Reduced rainfall patterns combined with a more variable, unpredictable climate and fast-growing population have progressively worsened the situation, resulting in a much more vulnerable pastoralist population. Added to this, pastoralists generally do not have farming skills; are illiterate; do not receive weather information; are excluded from accessing formal financial services and insurance products; and do not have access to training. The extreme drought in 2015 exacerbated many of these issues.
PROGRESS-X (Mercy Corps – Kenya & Uganda)	Building resilient governance, markets and social systems among pastoralist communities in Karamoja sub-region in north-eastern Uganda and Wajir county of north-east Kenya	The communities of Wajir and Karamoja experience seasonal shocks and stressors such as flooding, deforestation, soil erosion and drought, which climate change has exacerbated. Pastoralists have traditionally led a nomadic lifestyle, relying on the livestock they herd (camels, cattle, goats) for their livelihood and nutrition. Because of climate change and land pressure, however, many are attempting to settle and farm without sufficient knowledge or training. The devolution process currently underway in Kenya has introduced county governments with independent budgets and policy, providing an opportunity to address the needs of pastoralists and urban settlers.
WYL (Ric4Rec) (Blumont – IRD⁷ – Mali)	Strengthening communities' initiatives for resilience to climate extremes in Mali	People living in rural areas are facing increasing vulnerability owing to their dependence on shrinking natural resources, their geographical isolation and their lack of means to cope with extreme weather conditions. In central and southern Mali, reducing this vulnerability and supporting effective adaptation for rural populations is challenging as a result of the limited presence of government services and, in some areas, increasing conflicts.
SUR1M-X (CRS⁸ – Niger & Mali)	Intelligent agriculture, saving circles and radio messaging for resilience in the Niger River Basin	Increasingly frequent and intense climate extremes (floods and droughts) are being experienced in the Niger River Basin, particularly in the drier regions, which are almost entirely dependent on the river for water. Climate change and water scarcity combined with high population growth, poor infrastructure and weak governance have had considerable negative impacts on people's livelihoods, food security and resilience. This has resulted in recurring emergencies as well as conflicts between communities. Women are the most vulnerable to climate shocks as they have less control over their assets and more limited mobility.

⁶ International Development Enterprises.

⁷ International Relief and Development.

⁸ Catholic Relief Services.

PROJECT	PROJECT FOCUS	CLIMATE CONTEXT
DCF (NEF ⁹ – Mali & Senegal)	Working with vulnerable communities through local governments to integrate climate adaptation into local planning and budgeting processes in Mali and Senegal	Rural communities in Mali and Senegal are regularly affected by drought, conflicts and a lack of resources, making them particularly vulnerable to climate-related stresses and shocks. While climate adaptation funds have been in place for several years, transfers to groups affected by shocks can be slow, and their hierarchical nature can exclude communities from decisions about how to use the funds.
BRES-X (WHH ¹⁰ – Burkina Faso)	Changing farming practices to prepare for heavy rain and high temperatures in four provinces in Burkina Faso	With nearly no major industry, Burkina Faso's economic activity relies heavily on subsistence agriculture and livestock production. A vast majority of the population lives below the poverty line, with a significant proportion chronically undernourished. High population growth has led to rising food demands but the scarcity of agricultural land and water resources are limiting domestic food production. Increasingly frequent and severe climate extremes such as rainfall variability and rising temperatures have exacerbated food insecurity and malnutrition rates across the country.
BRACED-X-LM (AFL ¹¹ – Senegal, Niger, Mauritania, Mali, Burkina Faso)	Strengthening the resilience of pastoralists and agro-pastoralists, through trans-border livestock mobility, in Burkina Faso, Mali, Mauritania, Niger and Senegal	Expansion of agriculture and the growth of infrastructure projects and related settlements have led to tensions between pastoralists and agricultural communities, threatening traditional livestock corridors. Simultaneously, the effects of climate change have undermined pastoralist livelihoods. Recurring droughts, combined with rainfall shortages, have increased animal fodder deficits, leading to a loss of livestock and animal health issues. Traditionally pastoralists have had limited access to veterinary services and products including protein-rich fodder supplements.

2.2 Project activities

By learning from projects about how different approaches work and in what contexts, BRACED and subsequently BRACED-X aimed to influence resilience and adaptation policy-making and planning in national and local governments, and regional and international initiatives.

The projects implemented packages of activities working directly with individuals, households and communities as well as with local-level institutions and local and national governments, and in collaboration with the private sector. These packages of activities, in combination, aimed to contribute towards achieving the overall outcome of improved resilience to climate-related extremes and disasters. Project activities included advocacy and policy-influencing; institutional support and strengthening; training (e.g. in the use of improved seeds and in climate-smart technology, health and nutrition); support for natural resource management (NRM); establishing and supporting early warning systems (EWS); water management and water, sanitation and hygiene (WASH) activities; improving access to climate information; and supporting access to financial services (savings and loans groups, microfinance and insurance). For some activities, the projects worked directly with beneficiaries, building institutional capacity,

⁹ Near East Foundation.

¹⁰ WeltHungerHilfe.

¹¹ Acting For Life.

providing grants and technical support or carrying out resilience-building activities. In other cases, the projects worked through private sector actors. Table 3 lists the different activities the nine BRACED-X projects carried out.

Table 3: BRACED-X summary of activity areas by agency/ implementing partner

PACKAGE OF INTERVENTIONS	ANUKULAN-X (NEPAL)	CMESA-E (ETHIOPIA)	DCF (MALI & SENEGAL)	MAR-X (ETHIOPIA)	BRACED-X-LM (5 COUNTRIES*)	PROGRESS-X (KENYA & UGANDA)	WYL (MALI)	SUR1M-X (NIGER & MALI)	BRES-X (BURKINA FASO)
1a) Horticulture and Cropping	•		•	•		•	•	•	•
1b) Livestock Management			•	•	•	•	•	•	•
2. Nutrition and Health (including training, behaviour change)	•							•	•
3. Water Supply (system development, water management for households and agriculture)	•		•	•	•	•	•		•
4. NRM (forest and watershed governance and development, pasture management, cookstove technology)	•		•	•	•	•	•		•
5. Financial Inclusion (village saving/loans schemes, linkages to service providers, insurance)	•			•	•	•	•	•	
6. Entrepreneurship (training, group formation, value chain development, service providers)	•			•	•	•	•	•	•
7. Planning and policy influence (community planning, local capacity-building, grant-making, advocacy and lobbying, national policy influence)	•	•	•	•	•	•	•		
8. Disaster Risk Management and Early Warning (group formation, EWS, hazard mitigation, improved forecasting and climate information)	•		•	•	•	•	•	•	•
9. Gender and Social Inclusion (organisational change, training, policy influence, self-help and support)	•		•		•	•	•	•	•

* Senegal, Niger, Mauritania, Mali, Burkina Faso.

2.3 Resilience in the BRACED-X projects

Within BRACED-X, resilience is understood as the '*ability to anticipate, avoid, plan for, cope with, recover from and adapt to (climate-related) shocks and stresses*'.¹² As part of their M&E systems, the BRACED-X projects measured the 'outcomes' of resilience-building processes, conceptualised as **a set of interlinked capacities to absorb, anticipate and adapt to shocks and stresses**, as well as **laying foundations for transformation and transformative change** ('the 3As and T').¹³ These capacities, in turn, are seen to ensure that the wellbeing and human development of communities carry on in spite of climate-change induced shocks.¹⁴ This continues the common approach established under BRACED. The capacities making up the 3As are:

- Anticipatory: before a shock or stress – ability to undertake proactive actions to avoid upheaval, e.g. heeding early warnings, changing the way houses are built, reducing landslide risk, targeting by radio announcements;
- Absorptive: after a shock or stress – ability to buffer shocks in the short term, e.g. access to savings and finance, disaster preparedness, social protection;
- Adaptive: before, during and after a shock or stress – able to react to evolving/dynamic risk of disturbance to reduce likelihood of harmful outcomes, e.g. growing drought-resistant crops, diversifying livelihoods, irrigating agricultural production.

BRACED-X projects were also expected to demonstrate progress towards achieving transformative change. This means moving beyond supporting incremental changes in people's resilience towards a more radical shift in human systems, '*to fundamentally and sustainably improve the resilience of vulnerable citizens to climate impacts*'.¹⁵

In line with the approach followed in the BRACED FE synthesis, the XFE synthesis recognises resilience as an intermediate outcome, not an end in itself but a step towards improving wellbeing.¹⁶ We also recognise that the changes (outcomes or results) of project activities should be intermediary steps in a longer-term (strategic) process of transformation.

¹² DFID (2014), cited in Bahadur, A. *et al.* (2015), p. 11.

¹³ Bahadur, A. *et al.* (2015).

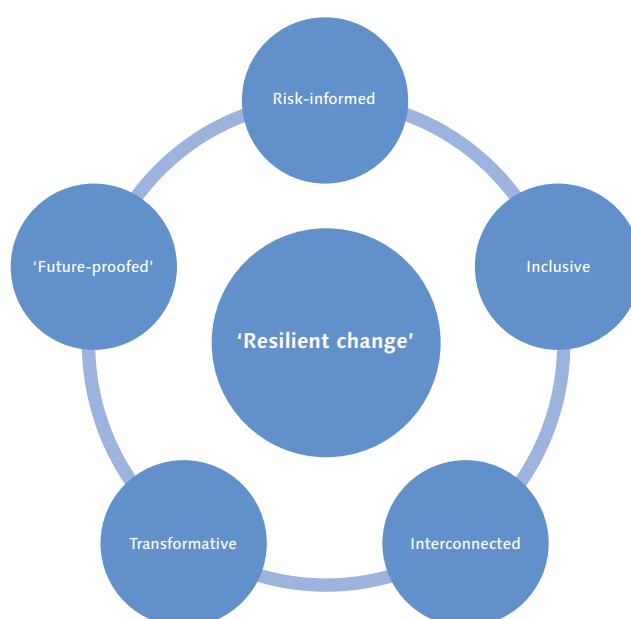
¹⁴ BRACED (2015c and also 2015b).

¹⁵ Silva Villanueva, P. *et al.* (2016), p. 62.

¹⁶ Béné *et al.* (2015).

To take into account whether the underlying processes in change pathways embody resilience, during the BRACED FE synthesis we expanded on the 3As conceptualisation of capacities largely related to outcomes that contribute to resilience, to give resilience 'dimensions'. These include features of processes and outcomes (including 3As and T), clustered under the headings 'risk-informed', 'inclusive' and 'interconnected', to provide a way of thinking about resilience as both the set of characteristics that make an outcome 'resilient' and how the outcomes themselves contribute to resilience. Figure 1 sets out the overarching components of our resilience dimensions, with further detail available in Annex 1.

Figure 1: Resilience dimensions



2.4 BRACED Final Evaluation synthesis 2018 findings

BRACED projects aimed to enhance participants' resilience, partly through achieving development outcomes, and through the processes involved in realising those outcomes. The previous BRACED FE synthesis identified resilience outcomes and processes in four broad pathways and explored how and why changes happened.¹⁷

¹⁷ Leavy J., Boydell, E., McDowell, S., and B. Sladkova (2018) 'Resilience Results: BRACED Final Evaluation'. BRACED Knowledge Manager Synthesis Report. Brighton Itad.

1. Individual and household-level change:

i) Increased and diversified income; improved food security and dietary diversity; improved access to water for food and agriculture. The result of greater absorptive, adaptive or anticipatory capacities, these achievements were also intermediate outcomes creating the contextual conditions needed for further progress towards resilience.

ii) Improvements to agricultural systems and practices; improvements to livestock systems and practices; access to financial services, including credit, loans and insurance. These outcomes were key elements in building progress towards resilience, in that they strengthened absorptive, adaptive or anticipatory capacities. They also combined to influence the first group of individual-level outcomes (i).

2. Supporting local and national institutional change: embedding climate risk within local planning; building and strengthening local organisations to implement resilience activities and respond to disasters; creating and facilitating land tenure and resource agreements to reduce conflict; influencing national policy and building capacity to govern adaptation. These institutional changes were essential to shaping contexts that foster resilience capacities. They also had transformative potential for creating impacts at scale, and to disrupt power structures that marginalise vulnerable groups, enabling more inclusive decision-making processes.

3. Inclusive outcomes: As inclusion both supports and is supported by resilience, a majority of BRACED projects focused on ensuring vulnerable groups benefited from activities. A smaller number sought to address the root causes of social exclusion and inequality. The strongest evidence of change centred around **gender and women's empowerment**.

4. Information: BRACED projects successfully brokered **access to climate information**, and improved anticipatory capacity. People used short-term and seasonal forecasts in agricultural and livelihoods planning to reduce climate-induced losses. Projects included a focus on technology and information products, as well as the institutions that influence how information is communicated, interpreted and used. The FE found more work was needed to integrate longer-term climate projections into decision-making.

BRACED projects operated in contexts of weak markets and institutions, high levels of poverty, low asset bases and low levels of trust in external intervention. Providing appropriate incentives for people to engage with project activities was therefore crucial, and a key factor in effecting positive change. In such contexts, activities that promote market access can incentivise participation. Savings and loans groups were particularly effective when linked to other income-generating activities, supported by **improved market and institutional linkages**. People's confidence to invest in new activities grew as a result, in turn developing their absorptive and adaptive capacities.

BRACED projects also **supported private sector actors** to operate in these contexts by mitigating the risks involved, such as subsidising service provision in remote locations with low population densities, and ensuring products and services were adapted to project participants' needs. This was another means to strengthen market linkages and fill gaps in provision, while altering the context in terms of the role of private sector, potentially in transformative ways.

Addressing basic needs, particularly food security, encouraged people to engage with project activities and resources. When participants were sure of food availability, they were more able to take risks and to sell surplus yields, earning them increased income and improving absorptive capacity. Meeting basic needs therefore became a mechanism in itself, driving project success and the potential for tangible, longer-term benefits.

Projects that **earned communities' trust** were responsive to (and involved in) the context throughout the life of the project. Collaboration, practical demonstration and relevant technologies/techniques were key to achieving community buy-in. Engaging with people with community influence and building on the work of early adopters were further ways to encourage participation. This made sustainable change, after direct project involvement, more likely.

In contexts where policy worked against poor or marginalised groups, a **strategic, thoughtful approach to advocacy** was needed. Partners with capacity to influence powerful regional and national stakeholders were vital in achieving sustained change.

Overall, the FE synthesis for the previous phase found that the *combination* of activities, *approaches* to implementation and *layering* of outcomes determined the extent to which projects built resilience. These matter, crucially, to fostering the right (enabling) contexts and, in turn, appropriate incentives so that people respond to the project activities in the right ways. To bring about systemic, transformative and resilient change, project activities must address any disconnectedness between different institutional levels by building and strengthening capacity at community, local and national levels.

A photograph of a man in a small boat on water, with a large blue overlay. The man is shirtless and wearing blue shorts, looking down at something in his hands. The boat has some colorful patterns on its side.

3. METHODOLOGY

Image:
Mary Newcombe

The synthesis design is contained in a separate, detailed design document that forms the terms of reference for the XFE, and is available on request. In addition, there are separate ToRs available for each of the projects' FE. This section sets out key elements of our approach.

3.1 Realist evaluation approach and research questions

In line with the approach taken during MTR and FE of the previous BRACED phase, we supported IPs to approach their XFE in a 'realist' way (described in more detail in Annex 2) to help us answer the synthesis question:

What difference did BRACED-X make, how, why, for whom and in what circumstances?

In realist evaluation, **context** is understood as the most important influence on whether an intervention succeeds in activating a change process (often referred to as a '**mechanism**') that will cause an outcome. Causation in realist evaluation therefore rests on understanding the influence of context on 'mechanisms', and context on outcomes, as well as the mechanisms themselves.

In taking a realist approach, IPs were able to 'formalise' important questions about how, why, for whom and in what contexts their projects had worked, in order to bring more depth to the XFEs, allowing us to 'interrogate' the BRACED ToC. This continues the approach laid out in the BRACED MTR and FE.¹⁸

In their XFEs, the IPs addressed the following evaluation questions, set out in BRACED M&E Guidance Note 7.¹⁹

Evaluation question 1 – To what extent have particular packages of interventions delivered in terms of strengthened resilience?

Evaluation question 2 – Specifically focusing on understanding 'mechanisms', how and why have particular intervention packages led to observed results and changes? Sub-questions under this question should explore:

- How do IPs, project stakeholders and beneficiaries think an intervention results in change?
- What is it about the nature or design of the intervention that enables it to be effective or not?
- What evidence is there that the interventions and the mechanisms that support them have delivered 'amplified results' and/or 'transformational impact'?

Evaluation question 3 – Based on your accumulated knowledge and understanding, what key resilience-strengthening lessons can be learned and replicated from your project?

3.2 Theories of change: how BRACED-X works

The overall BRACED programme evaluation framework follows a theory-based approach. There is an inherent 'hierarchy' in these theories about how the programme works. At the top level is the BRACED Common ToC (see summary in Figure 2);²⁰ the individual project ToCs then align with the

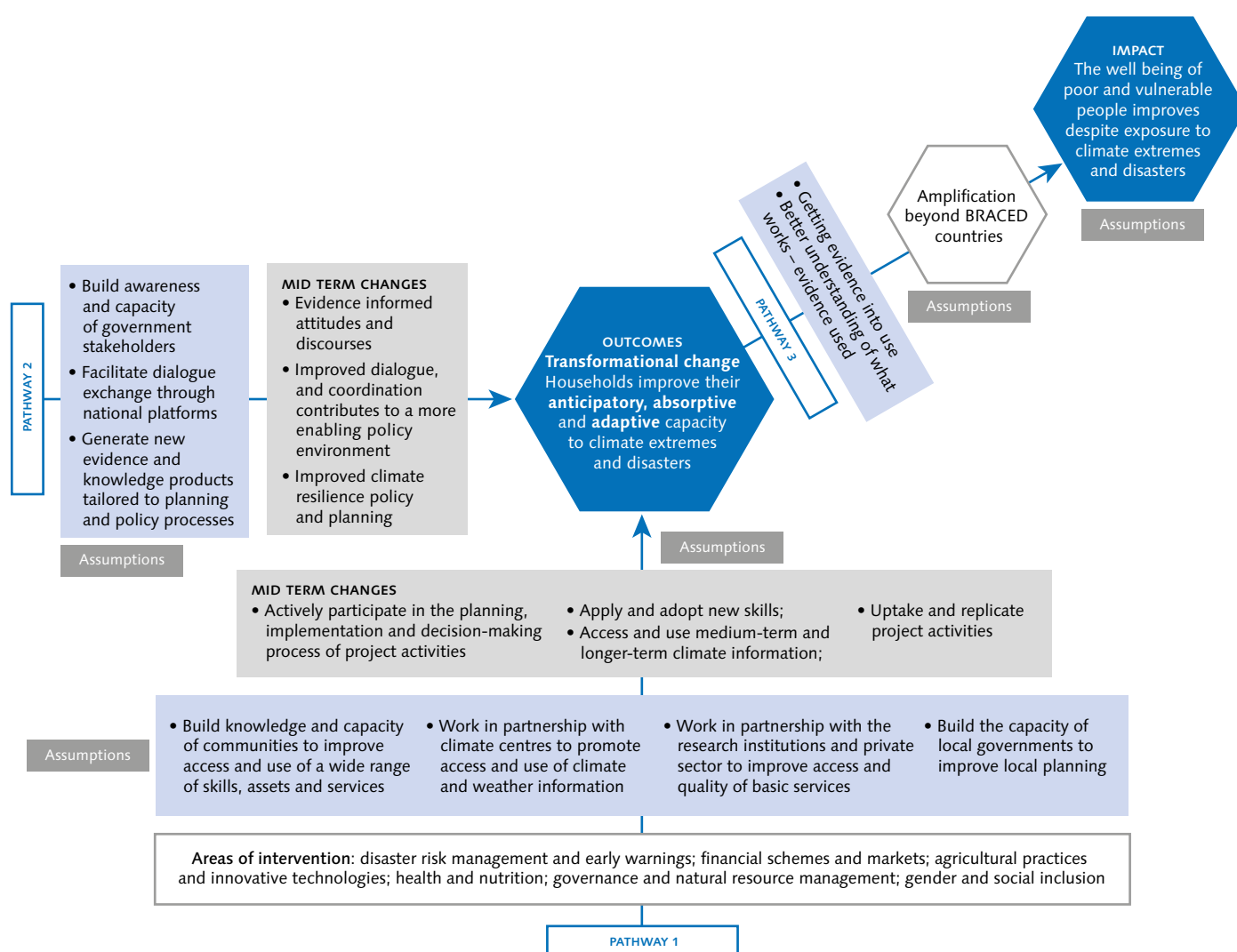
¹⁸ Explanations and theories about how change happens are expressed as Context-Mechanism-Outcome configurations (CMOs): '*In Context C, by implementing activity I in a particular way, a change process M (mechanism) fired for these actors, generating outcomes O*'. At MTR, IPs applied a realist lens enabling us to develop CMO configurations to shed light on change pathways hypothesised in the project and programme ToCs (see Annex 5 for Intervention-Context-Mechanism-Outcome configurations (ICMOs) generated at FE).

¹⁹ BRACED (2015b).

²⁰ The detailed report on the amended BRACED X ToC can be found in the following document: BRACED-X Theory of Change, BRACED Knowledge Manager. FINAL VERSION. 30.04.2018, available on request. This evaluation activity takes these amendments as given. The XFE Design Document contains a complete ToC description and narrative for the programme. Individual projects have ToCs that nest within the programme ToC.

Common ToC. Next come the programme theories for the IPs' activity packages, and then Intervention-Context-Mechanism-Outcome (ICMO) configurations (see Annexes 4 and 5). ICMO configurations are very detailed change pathways that include underlying causal forces or powers that may explain why change or an outcome may or may not happen (mechanisms). During the BRACED MTR and FE, IPs and the BRACED Evaluation team generated ICMOs related to behavioural change and the decision-making and actions of human beings: how people react to the opportunities presented by the BRACED programme within their context.²¹ This enables the analysis to go deeper to explain why the intervention leads to change.

Figure 2: BRACED-X Theory of Change²²



²¹ Wong, G. *et al.* (2013).

²² The detailed report on the amended BRACED X Theory of change can be found in the following document: BRACED-X Theory of Change, BRACED Knowledge Manager. FINAL VERSION. 30.04.2018 This evaluation activity takes these amendments as given. The Extension Final Evaluation Design Document contains a more complete theory of change description and narrative.

3.3 The data

This section summarises the main data sources for the synthesis.

3.3.1 Desk study

The BRACED Evaluation team carried out a desk review of the BRACED programme, project and KM background documents (secondary data), including:

- Project proposal documents
- BRACED-X ToC narratives
- Project M&E plans
- BRACED-X annual reports and MRR reports
- IP MTR and FE reports

3.3.2 BRACED XFE reports

In the XFE, echoing the approach taken in the FE of the previous BRACED phase, IPs aimed to generate and elaborate further detailed understandings not only of what had worked but also of how and why an intervention had led to a particular change. Understanding the mechanisms at work (and the contextual factors that affected the working of that mechanism) required asking a range of project stakeholders why things had happened in a certain way. This was grounded in an evidenced understanding of what projects had achieved during both BRACED and the extension phase.

Most IPs took a mixed methods approach to the XFE, combining quantitative data from end-line surveys and/or monitoring data with qualitative enquiry using a realist evaluation approach to explore how and why change happened, for whom and in what circumstances. This paid attention to how context affected the ways in which activities led to behavioural and institutional changes that, in turn, led to outcomes. XFE reports were syntheses of the analysis of all the data (primary and secondary) gathered for the FE.

3.3.3 Policy case study and key informant interviews

In addition to the support provided to IPs in developing and carrying out their XFEs, the ESS team carried out an in-depth realist case study of the policy work of one BRACED-X project, PROGRESS-X. This case study was a closer look at the policy work at the level of the intervention, examining in depth how change happens between intervention and project-level outcomes. Applying a realist approach to data collection and analysis, the case study draws on evidence from 22 documents and primary evidence collected from

18 key informants (beneficiaries and project team staff).²³ The case study was designed to complement the XFE work of the IP, to test policy programme theories specific to the project ToC. The policy case study report was included in the XFE synthesis along with the nine IP XFE reports.

The choice of case study was driven by pragmatic concerns: Five IPs carried out policy work, four of which combined it with continuing to implement other activities. By choosing the IP doing solely policy work (CMESA-E), we risked merely repeating the FE exercise that the IP had engaged consultants to do, so this ruled out this organisation. The MRR and Component D teams were also carrying out case studies, which included policy IPs, so we needed to coordinate with these teams in order to minimise the burden on the IPs. This ruled out DCF, leaving a choice of two out of PROGRESS-X, Anukulan-X and BRACED-X-LM. Anukulan-X declined as it felt, and we agreed, that its policy work was too intertwined with other activities: it would be difficult not to create an extra burden of work and double up on effort. For BRACED-X-LM a case study was not feasible in terms of timing. As a result, we were able to proceed only with PROGRESS-X.

To compensate for there being only one case study, the in-depth PROGRESS-X case study was complemented by KIIs, with project staff in the remaining four IPs also carrying out policy work: DCF; Anukulan-X; BRACED-X-LM; and CMESA-E, in order to generate further data to triangulate findings from the in-depth case study and test the policy theories. The interview guide is in Annex 6. This is based on the interview guide developed and tested for the MTR, modified to focus on policy work and incorporating relevant elements and theories developed and tested during the in-depth case study.

One reason for this data collection activity is that the application of realist evaluation in this kind of programme, particularly the policy work, has not been done before and is largely 'experimental', so it would benefit from the direct expertise of the team. In addition, it not only adds a degree of independence but also will serve as a validation exercise, given that the Evaluation team has generally been one step removed from the data collection.

3.4 Synthesis approach

3.4.1 Coding and analysis

The IP XFE reports were coded and analysed in MaxQDA, computer-assisted qualitative data analysis software. An initial list of codes was generated from the programme ToC, the projects' ToCs and the ICMOs generated during the

²³ The sample is very low considering pastoralism is the main form of livelihood in Wajir with a population of over 657,000. However, given the thematic focus of the case study and the evaluation approach used, the interviewees' knowledge and experience of the project's policy activities were given more importance than the size of the sample.

BRACED FE. Annex 7 contains a detailed description of the coding and analysis process. Further codes were added iteratively during coding and analysis from the XFE reports and KIIs. We used outcomes and mechanisms as the primary unit of analysis, where possible keeping data related to each ICMO configuration together.

The XFE synthesis is based on a thematic analysis of the data from each IP XFE report, the PROGRESS-X policy case study and the policy IP KIIs. This involved identifying, examining and recording patterns (or 'themes') within the data, which are important to describe what is happening on the pathway towards achieving strengthened resilience. By taking a comparative case study analysis approach, we analyse and synthesise similarities, differences and patterns across cases that share a common focus or goal. This generates generalisable knowledge to respond to the synthesis question of what difference BRACED-X has made, supported by evidence on how, why and for whom BRACED projects work (or not) in building and strengthening resilience in particular contexts.

3.4.2 Level of abstraction

Level of abstraction refers to the level of generalisation when explaining the findings from projects. This can range from a specific finding from one distinct project, to more general explanations that encompass findings from different contexts, to highly abstract explanations that are so general as to be of limited use. Our analysis in the FE synthesis seeks patterns and dissonance across the underlying pathways of change (or ICMOs), evidenced by the individual BRACED-X projects in their XFEs, synthesising to create more **abstract explanations for groupings of findings across the projects**. Synthesising in this way adds an explanatory layer, helping us tell a generalised story about how and why BRACED-X project activities have built resilience, and for whom, thinking about theories that have a bearing on resilience at a larger scale to tell the 'resilience story' of the programme. **Process theories are presented in Section 5 at this more generalised level.**

3.5 Quality and strength of evidence

We consider the **quality and strength of evidence for conducting a realist analysis and synthesis of the data** on three levels:

1. The quality of the underlying data related to outcomes – how confident are we that outcomes happened?
2. 'Filtering' outcomes and processes using the resilience dimensions outlined in Section 2.2 above – to what extent can outcomes or the characteristics of pathways and processes leading to those outcomes be said to be 'resilience'?
3. How confident are we that theory (ICMOs) explains the outcomes and change processes? Is there a range of evidence from across a number of projects? Or strong evidence from individual projects or activities?

We reviewed the IP XFE reports, focusing on the design and methodology, to assign a rating for strength of underlying evidence considering both outcomes and contribution, as well as the extent to which the approach taken to the evaluation was realist. The scoring and narrative tables are in Annex 8.

The 'rating' for each project depends on the following:

- Implementation
 - Scale and scope of outcomes/findings
- Methodology
 - Draws on high-quality M&E and previous evaluation data
 - Scale and scope of XFE
 - Mixed methods
 - Credible counterfactual (where relevant)
- Analysis
 - Quality of report in evidencing outcomes; triangulation of data sources; contribution/attribution
 - Strength of report: richness (reflective and critical) and realist

Table 4: Strength of evidence in XFE reports

PROJECT	COUNTRY	XFE QUALITY OF DATA AND STRENGTH OF EVIDENCE RATING
BRACED-X-LM	Niger; Burkina Faso; Mali; Senegal; Mauritania	High
DCF	Mali; Senegal	Medium–high
WYL	Mali	Medium
Anukulan-X	Nepal	Medium
SUR1M-X	Niger; Mali	High
MAR-X	Ethiopia	High
BRES-X	Burkina Faso	Medium–high
CMESA-E	Ethiopia	High
PROGRESS-X	Uganda; Kenya	Medium–high

We also take into account where reports have particular areas of strength. Given the relatively short implementation period where new activities under BRACED-X are concerned, because the elapsed time between baseline and end-line was very short, we need to exercise caution accepting benefits presented by the projects at face value. This is especially the case where long data series are often needed to confirm significant trends (as is the case in agriculture).

The strength of evidence for mechanisms/ICMOs is only as strong as the evidence for the underlying outcomes. So the extent to which we are confident that our synthesis of mechanisms/theory explains the outcomes and change processes is based on a combination of the strength of evidence for outcomes, how emerging theory compares with the ToC and BRACED FE findings and the degree and extent to which the ICMOs are evidenced by the underlying projects.

To assess strength of evidence of ICMOs, we apply the criteria we used for the BRACED FE, originally developed by the Building Capacity to Use Research Evidence (BCURE) Evaluation team for the realist enquiry in its FE (Table 5):²⁴

Table 5: Strength of evidence of ICMOs

STRENGTH OF EVIDENCE	REALIST ENQUIRY
Strong evidence (high)	<p>High level of confidence that the outcome occurred/did not occur as a result of x mechanism, operating in y context and as a result of z features of the intervention...</p> <ul style="list-style-type: none"> • ... Based on a good degree of triangulation: i) within interviews, ii) across stakeholders and types of stakeholders and/or iii) across data sources; • ... Taking into account the position, knowledge, analytical capacity, reflexivity and potential biases of primary informants; and • ... Also taking into account what we know about the broader context and other causal factors.
Some evidence (medium)	<p>More confident than not that the outcome occurred/did not occur as a result of x mechanism, operating in y context and as a result of z features of the intervention...</p> <p>... But confidence is reduced by:</p> <ul style="list-style-type: none"> • Shortcomings with regard to triangulation; and/or • Concerns that the position, knowledge, analytical capacity, reflexivity and potential biases of primary informants lower the reliability of evidence; and/or • What we know about what is happening within the broader context.
Limited evidence (low)	<p>Low level of confidence that the outcome occurred/did not occur as a result of x mechanism, operating in y context and as a result of z features of the intervention, given that...</p> <ul style="list-style-type: none"> • ... Evidence comes from a small number of sources with limited triangulation; and/or • ... There are major concerns that the position, knowledge, analytical capacity, reflexivity and potential biases of primary informants lower the reliability of evidence; and/or • ... There are contradictory insights into what is happening within the broader context.

²⁴ <http://itad.com/reports/annexes-final-evaluation-building-capacity-use-research-evidence-bcure-programme/> (accessed 11 September 2019).

3.6 Limitations of the synthesis

The Evaluation team was able to work freely and without interference, and there are no conflicts of interest to report. We adhere to OECD DAC Quality Standards for Development Evaluation on ethical standards and DFID's Ethics Principles for Research and Evaluation.

3.6.1 Quality of underlying data

The main limitation to the synthesis relates to the **quality of source evidence**. The realist synthesis depends on the underlying XFE data provided by the projects, and the degree to which the evidence has been generated and presented in order to allow the kind of analysis of contexts and mechanisms intrinsic to a realist approach. The team had limited direct control over the evaluations, which the IPs were responsible for commissioning and conducting using resources from their project budget. Five of the nine projects engaged external consultants, with the remaining four opting to use in-house M&E staff. The ESS team provided guidance and one-on-one coaching, as well as reviews of evaluation inception reports, and IPs had also experienced applying this approach in the BRACED MTR and FE. While the XFEs were on the whole rigorous, with high-quality data, we have not played a quality assurance or verification role (with the exception of in the follow-up policy KIIs), and therefore need to take the data at face value. The degree to which the projects' evaluation teams followed a realist approach varied, and the resulting inconsistency of data in terms of poses challenges in corroborating the theory, which relies on pulling stronger and weaker 'realist' evidence all together. Different levels of detail and different methods used in the individual XFEs pose challenges in comparing insights. Further, quantitative data is derived from surveys of different scales and levels of rigour, therefore quantitative insights are not necessarily comparable. However, by triangulating and synthesising across all data sources available, not just the FE reports, we hope to have minimised these limitations as much as possible. For some IPs, payment delays meant that the most recent M&E data (Year 4 Annual Report Supplement) might not have been available at the time of their XFE data collection. The Evaluation team filled gaps by using these data sources in the synthesis as they became available.

An important weakness identified in the BRACED FEs, with implications for the realist-focused synthesis, was the lack of adequate data on 'for whom' change was occurring and low consideration of different characteristics of the project participants, including gender and other forms of social differentiation. This is different from merely providing sex-disaggregated data, which was generally stronger across the XFEs than in the previous phase FEs. The ESS team supported the project teams and the evaluation guidance emphasised the need to design XFE sampling procedures and data collection instruments to ensure all efforts were being taken to collect the necessary data. The XFE projects were generally stronger in terms of sex-aggregated data and presenting outcomes for targeted marginalised groups (women, pastoralists). However, consideration of 'for whom' in a more differentiated way in the underlying change pathways and ICMOs was still somewhat patchy and incomplete, reflecting, we believe, the time constraints on the evaluation process.

3.6.2 Timing

A second concern is that the **timing** of the XFE means a relatively short time had elapsed since the start of implementation (just 15 months). While the purpose of the extension was to allow for a maturation effect that may not have been seen during the course of BRACED, to allow more time for BRACED outcomes to be visible, projects were also implementing new activities, or rolling out activities to new communities/populations. There was once again very little time for outcomes and impact from these interventions to manifest (this is noted in the risk register and was similarly found to be a challenge in the BRACED MTR and FE). However, the story of how change happens in resilience-building and strengthening is as much about processes – how things are done – as it is about outcomes, so the IPs also collected data on important pathways towards resilience, to reflect fully on what they had achieved through BRACED-X funding.

When dealing with information about natural processes, there is a lot of natural seasonal variation. Very long time series are needed to demonstrate non-zero change with confidence. We need to bear in mind that short-duration projects will not by themselves produce convincing evidence – only a glimpse of potential.

From the point of view of the Evaluation team, there has been some tension between working with much squeezed timeframes while keeping the processes as similar to the previous evaluation rounds as possible. As mentioned above, this meant we were unable to accommodate quality review of the XFE reports, although support was provided to IPs and their consultants as in previous evaluation rounds.

A photograph of a woman with long, dark, wavy hair, smiling and looking down at a baby she is holding. The woman is wearing a colorful, patterned shirt. The baby is wearing a pink shirt and is looking towards the camera. The background is blurred, suggesting an outdoor setting. The entire image has a blue tint.

PART 2. WHAT DID WE LEARN?

This section presents the main findings of the XFE synthesis process, looking at what the extension has achieved and how and why change happens. The ways in which BRACED-X projects were to bring about change to build and strengthen resilience for individuals, households and communities depended on a combination of the way projects do things ('intervention factors' or 'resources' in realist terms) and the way people respond ('reasoning' to realists). These factors together constitute '**mechanisms**', which operate in relation and in response to contexts.

The BRACED extension presented an opportunity for nine of the original fifteen BRACED projects to extend their implementation period – either i) continuing to implement the same activities as under BRACED with the same beneficiaries or ii) rolling out existing activities to new populations or iii) implementing new activity areas, as in the case of some of the work funded under the BRACED-X policy window. As well as allowing for the scaling-up and rolling-out of successful interventions, it also meant that, for some activities requiring a longer maturation period (highlighted in the BRACED MTR and FE syntheses), for example planning and institutional change activities, there was more opportunity for projects to progress along the change pathways. This would add to BRACED programme evidence, with potentially more learning about how and why change happens in resilience-building programmes.

We synthesise across the nine extension projects, **focusing on what is new as a result of BRACED-X** and the extent to which BRACED-X achievements have strengthened participants' resilience. The concept of resilience used throughout is shaped by the framing in Section 2.2 and the 3As and T. Evidence has largely been drawn from projects' XFE reports, the in-depth policy case study of PROGRESS-X and the KIIs with policy window IPs, with any additional sources presented in footnotes.

Section 4 sets out the main, evidenced resilience outcomes of BRACED-X, along with key intervention factors and mechanisms along the relevant change pathways. Section 5 presents change pathways at higher, more abstract, levels to draw generalised lessons about implementing resilience-building programmes. Section 6 concludes.



4. BRACED-X ACHIEVEMENTS: HOW AND WHY CHANGE HAPPENS

Image: Aisha Faquir/
World Bank

This section provides an overview of the key outcomes reported by BRACED-X projects, briefly summarising their contributions to the overarching BRACED-X programme-level outcome and examining the pathways to achieving them. The XFE generated further evidence to confirm, refine or refute the explanations (theories, CMOs and mechanisms) we identified and evidenced in the BRACED FE synthesis for resilience achievements of the BRACED projects (see Annex 5 for a list of ICMOs from the FE), contributing to the evidence base for building and strengthening resilience.

We have drawn on professional judgement and contextual information to gauge which aspects of resilience are reflected in different outcomes or pathways. An assessment of the strength of evidence supporting each outcome (evidence that the outcome happened and was a result of the project activities) is also presented. We used a combination of what we know about the quality of the underlying dataset (FE reports, M&E data, interviews) and judgements made in the initial coding and analysis phase (using Excel spreadsheets and project summaries), and the FE reports themselves to gauge how much evidence there was to support each outcome and the quality of that evidence (including triangulation and contribution).

This section examines outcomes and change pathways in four interconnected domains:

- **Individual and household-level outcomes:** What difference has BRACED-X made for individuals and their families, and how has wellbeing increased in spite of (climate-related) shocks and stresses?
- **Institutional and policy-level change from local community to national level:** How are people planning and acting differently as a result of BRACED-X? What have been the processes and outcomes put in place by BRACED-X projects to effect institutional and policy change?
- **Inclusive outcomes:** What change has BRACED-X created for women and other socially marginalised people, and how have the projects promoted social inclusion?
- **Information outcomes:** How are people using climate information to anticipate risks and plan for long-term change?

The analysis focuses on achievements from the BRACED extension phase, but, where reported outcomes from project XFEs (set out in the tables in the sections that follow) encompass the previous phase of BRACED, the indicator is marked with an asterisk (*) within the table.

Throughout the section, (C) in the text denotes a contextual factor, (M) a mechanism, (O) an outcome and (I) intervention factors.

4.1 Individual and household-level outcomes

This section sets out the BRACED-X outcomes for individuals and their families, and how wellbeing has increased (in spite of climate-related shocks and stresses). It considers progress towards building and strengthening resilience, as both a process and a stepping-stone towards intermediate outcomes, as well as resilience outcomes themselves.

4.1.1 Meeting basic needs

The BRACED FE found projects were successfully implementing a number of activities to meet participants' basic needs, contributing to increased resilience. These included activities to improve food security and nutrition (both growing and purchasing food) as well as access to water. Improvements to food security and nutrition included a reduction in months of food shortage, an increase in dietary diversity and ability to consume preferred food and a decline in the need for people to use harmful coping strategies to meet consumption needs. BRACED projects also increased the volume of water stored or accessible, as well as reducing the time taken for collecting water, which freed up time for other activities – especially for women. Increased water storage helps households and communities manage rainfall variability, creating a context that unlocks potential for agricultural activities and meets basic needs – important foundations for

resilience. However, multiple evaluations noted that it was unclear to what extent infrastructure could withstand future changes to rainfall.

BRACED-X projects (five out of nine) continued to implement activities to meet basic needs, focusing on food security and water access. Food security is both the result of activities that build absorptive, anticipatory and adaptive capacities and critical to wellbeing. People need to be food-secure in order to take steps toward longer-term adaptation and resilience. Meeting basic needs is also fundamental to encouraging people's engagement with wider project activities and aims. So too is freeing up time to participate (Table 6).

Table 6: Meeting basic needs – BRACED-X reported outcomes

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Nepal (Anukulan-X)	Support to agricultural activities; installation of multiple use water systems (MUS); access to savings and loans; support to development of small businesses; health and nutrition training	<p>Medium evidence of outcomes to support absorptive and adaptive capacity:</p> <p>Increase in household with sufficiently diverse diets from 50% to 79%</p> <p>Decrease in percentage of underweight children from 18% to 12%</p> <p>Strong evidence of outputs to support absorptive and adaptive capacity:</p> <p>Access to water improved for 2,278 people through 20 new MUS*²⁵</p> <p>Percentage of households with access to drinking water <30 minutes: increased from 58% in the baseline to 81% in the FE</p>
Niger (SUR1M-X)	Support to agricultural activities; access to savings and loans; support to development of small businesses	<p>Strong evidence of outcomes to support absorptive capacity:</p> <p>Household Dietary Diversity Score increased from 5.54 in Year 3 of BRACED to 7 by end of BRACED-X</p>
Mali, Senegal (DCF)	Support to agricultural activities; improving drinking water provision	<p>Strong-medium evidence of outcomes to support absorptive capacity:</p> <p>Average of 8.5 months of food security achieved for households with DCF investments, representing a 7.8% increase on 2015 baseline²⁶</p> <p>Low (some) evidence of increased food diversity</p>
Burkina Faso (BRES-X)	Support to agricultural activities; access to savings and loans; support to development of small businesses	<p>Strong evidence of outcomes to support absorptive capacity:</p> <p>52.4% of beneficiary households had an 'acceptable' amount of food compared with 42.3% of non-beneficiary households²⁷</p>
Burkina Faso, Mali, Mauritania, Niger, Senegal (BRACED-X-LM)	Support to agricultural activities; construction of water and boreholes; development of animal feed banks	<p>Weak evidence to support outcomes that build absorptive and adaptive capacities:</p> <p>Some breeders experienced increased milk availability and productivity as a result of better availability of animal fodder</p>

* Reporting period encompasses BRACED and BRACED-X.

²⁵ Anukulan-X Year 4 Annual Report Supplement, p. 16.

²⁶ DCF Year 4 Annual Report Supplement, p. 8.

²⁷ Using the Food Consumption Score as a measure.

How and why did BRACED-X contribute to change?

The final BRACED evaluation found that:

In contexts with high levels of food insecurity:

- by carrying out activities that provide resources to address people's food security concerns, this changes the context (by addressing immediate and pressing needs) so that participants are better placed to subsequently invest in technical change, contributing directly towards building their resilience (9/15 IPs).

In contexts where poverty levels are high and people struggle to meet their basic needs:

- addressing basic needs first (including access to food and water) means that people not only are likely to buy in to an intervention because it is seen to be responding to their needs and priorities but also are subsequently more confident that their needs are met and they are better able to take risks. Improved confidence in food availability means that the sale of surplus yield is more likely, potentially leading to increased income and improved absorptive capacity (9/15 IPs).
-

BRACED-X projects continued work started under BRACED to meet participants' basic needs. The XFE data is thinner than in the previous phase, reflecting the later stage of implementation (by addressing food security concerns from the first phase of BRACED, over time the context had already begun to change) and the shift in focus across the nine projects towards working more at (higher) institutional levels compared with very 'micro'-level individual and household-focused activities. Nevertheless, five out of nine projects reported continuing to **provide services to meet basic needs** (BRES-X, BRACED-X-LM, Anukulan-X, WYL, SUR1M-X), and there is further (medium) evidence of **ongoing efforts to minimise the risks of food insecurity**, for example cereal banks under WYL; rice cultivation that is entirely down to the BRES project.

Clean water provision under BRACED-X continued to contribute to a crucial shift in context for achieving resilient outcomes (see, for example, WYL's work on irrigation systems, which also served as a source of drinking water for communities and animals; BRACED-X-LM's work on boreholes). This established important outputs and intermediate outcomes leading to improved resilience – for example vegetable cultivation and access to water for domestic use – but also, crucially, **freeing up time to invest in productive activities**. 'Making more efficient use of time' was an intermediate outcome that started to emerge from the evaluation of BRACED's previous phase. This has an important gender aspect, as it is mostly women, girls and/or other young people who spend time collecting water or firewood. Evidence suggests this plays an important role as an **outcome that acts as a mechanism for further change and therefore part of the whole process of building and strengthening resilience**. An example of this is from Ethiopia (MAR-X), leveraging work in the first phase to meet basic needs:

*If HHs were situated near water sources for irrigation or drinking, and other natural resources utilised for livelihood activities as well as roads and markets (C), (agro) **pastoralists were able to make more efficient use of their time to buy and sell goods in local markets** (M) and were more accessible by project staff for continuous support and training (O) because they were not spending time collecting water. Financial capital has increased as a result of making better use of nearby resources (O) and enhanced ability to deal with climatic shocks (O). This also meant increased relative gains from their investment of loans and would have accrued more in less time, if they were involved in VSL groups or had received an MFI loan (C). The timing in relation to market activity and price of livestock and other goods when the loan was received also impacted whether (agro) pastoralist were able to make greater returns on their investments and pay their loan back in time (C).*

MAR-X XFE, pp. 41–42

The time burden of accessing fuelwood and water (seen across all the projects), limiting women's mobility and their ability to adapt to climate extremes and disasters, especially in contexts where women and girls are the most vulnerable to climate-related shocks and stresses because they have little control over assets, justifies the time-saving intermediate outcomes of BRACED project activities. Even if time-saving cannot be mapped directly onto a resilience capacity, this can be a **crucial factor in inclusion in project activities**. This can be seen, for example, in the case of the Nepal (Anukulan-X) MUS, which cut down on time and effort to collect water, and in the Niger River Basin (SUR1M-X), where rice husk stoves reduced time and costs associated with collecting or purchasing firewood. In the SUR1M-X case, the XFE reports a direct link between better use of time-saving technologies and the ability of women to participate in savings and internal lending community (SILC) activities, decision-making and productive/profitable activities. These not only have potential for increased wellbeing but, building on achievements across both BRACED and BRACED-X, also have been linked to inclusion and 'empowerment':

The project has contributed to the empowerment of women through capacity building on smart skills (how to organise groups, financial education, marketing), awareness sessions on land ownership through community radio partners, and advocacy to local authorities on gender mainstreaming into annual investment plans. Also the participation of women in SILC activities and community organisations (such as farmer organisations, SCAP/RU/EWGRU [Community Bodies for Early Warning and Emergency Response] and vulnerability monitoring watchdogs) has enabled them to contribute increasingly to the development and implementation of local initiatives (among others: participation in building protective dikes, classrooms, fence walls for CSI, sale of improved seeds, income-generating activities and

cultivation of community plots) aimed at improving the wellbeing of households and communities (O1), at creating an environment conducive to empowerment and at ensuring women's participation in decision making while also recognising their role as agents for change (O2).

SUR1M-X XFE, p. 62

Evidence from the same project in the Niger River Basin (SUR1M-X), however, demonstrates obstacles to achieving absorptive capacity in the medium to long term in terms of basic needs, with the project experiencing barriers to effective implementation owing to security risks and adverse climatic conditions. In Mali, there was very little improvement in dietary diversity over the BRACED or BRACED-X phases, and the percentage of households experiencing moderate or severe hunger increased over the four years. The project XFE suggests that the high household hunger score could be explained by lack of income preventing people from accessing the diverse range of food available in the market. While there was a net decrease in the equivalent measure of hunger in Niger, there were considerable fluctuations from year-to-year. The percentage of moderately or severely hungry households doubled over the BRACED-X project period, for instance. These results suggest that households in the Niger River Basin still struggle to absorb and respond to shocks, and that the challenge of reducing vulnerability in this region remains formidable. BRACED-X findings enable us to revise the first part of the original ICMO to additionally include a mechanism for 'making more efficient use of time':

**Refined ICMO: Influencing context to create conditions for change;
Meeting basic needs as an underlying condition for further participation**

In contexts where poverty levels are high, people struggle to meet their basic needs and water and fuelwood collection are time-consuming (C):

- Addressing basic needs first (I), including access to food and water, means that people are not only likely to buy in to an intervention (M) because it is seen to be responding to their needs and priorities but also subsequently more confident (M) that their needs are met and they are better able to take risks (M to O). Reducing time spent collecting water/fuelwood means participants' time is freed up (M) to potentially invest in productive activities and adaptive practices, especially women and girls. Improved confidence in food availability means that the sale of surplus yield is more likely, potentially leading to increased income (O) and improved absorptive capacity (5 IPs; some evidence).
-

4.1.2 Improving agricultural systems and practices

The BRACED FE found the introduction of more climate-adaptive farming practices and the support of extension services to be effective in increasing agricultural productivity – a major factor in participants increasing and diversifying their income.

During the BRACED-X phase, projects continued to see similar improvements, with the uptake of adaptive agricultural practices still playing an important role (seven out of nine projects). Two projects also supported better care of livestock in order to improve productivity (Table 7).

Table 7: Agricultural yields, productivity and sustainability – BRACED-X reported outcomes

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Nepal (Anukulan-X)	Training in climate-smart farming and land management	Medium evidence to support intermediate outcomes that build adaptive capacities: 84% of households used climate-smart agricultural technologies (22% at baseline)*
Burkina Faso (BRES-X)	Support to agricultural activities; training in climate-smart farming and land management; subsidised inputs; support to poultry production	Strong evidence to support outcomes that build adaptive capacities: Cassava yields increased, with 35% of projected annual production achieved in first quarter of 2019 Good rice yields of 2.7 to 3.4 t per ha enabled farmers with 0.1 ha to produce enough rice for 9 months' consumption 38% of market garden producers saw income increases of 5% to 20%; 53% saw an increase of more than 20% in comparison with the year before 40% of 2,795 trained farmers adopted the low-level mechanised Zai (compost/ water pits) practice; the other 60% relied on digging Zai pits by hand. 40% mobilised others to use the technique 53.4% of 2,931 farmers actively adopted composting practices 67% of poultry producers participated in one vaccination session; 33% in two or more
Burkina Faso, Mali, Mauritania, Niger, Senegal* (BRACED-X-LM)	Support to livestock production; development of animal feed banks	Strong-medium evidence to support outcomes that build adaptive and anticipatory capacities: Breeders have facilitated access to 54 animal feed banks, improving production and availability of milk, increasing fodder for dry seasons ²⁸ Important growth in veterinary product distributors and livestock breeding auxiliaries with services functioning and improving
Burkina Faso, Mali, Mauritania, Niger, Senegal* (BRACED-X-LM)	Demarcated and secured livestock corridors	Strong evidence to support outcomes that build adaptive capacities: Livestock corridors allow access, increasing available grazing for agro-pastoralists*
Ethiopia (MAR-X)	Training in climate-smart farming and land management; livestock fattening	Strong evidence to support outcomes that build adaptive capacities: 90% of respondents in the Somali region found training and provision of productive agricultural assets improved their time efficiency Managed watershed and rangeland areas increased by 3,000 ha; 3% increase in grazing pasture in Chifra woreda
Mali (WYL)	Training in climate-smart farming and land management	Medium-weak evidence to support outcomes that build adaptive capacities: 89% of surveyed farmers had adopted two new climate-smart agricultural practices
Mali, Niger (SUR1M-X)	Training in climate-smart farming and land management	Strong evidence to support outcomes that build adaptive capacities: 75.77% of agro-pastoralists have implemented at least two climate-smart agriculture/natural resource management practices*

* Reporting period encompasses BRACED and BRACED-X.

How and why did BRACED-X contribute to change?

The final BRACED evaluation found that:

In contexts where literacy levels are low and if the security situation allows it:

- ongoing involvement of project staff and follow-up with communities, emphasising practical demonstration, helps build trust of communities in project staff. This creates the right conditions for the project to flourish: participants are more likely to take up project activities and apply new practices and techniques, and this is more likely to be sustained. This contributes to the likelihood of resilience being built and strengthened (5/15 IPs).
-

The shift in the balance from household and individual-level implementation, towards more policy-focused work during the BRACED extension phase means that the above theory appears to be less prominent in the form it appeared in the BRACED FE. From the XFE, practical demonstration as a mechanism for change is still relevant but the change pathways towards improved agricultural practices, leading to improved agricultural techniques leading to higher productivity and outputs, are expressed slightly differently. We find at this stage that the context is broader and eight out of nine IPs present (medium–strong) evidence that enables us to confirm which mechanisms are important, how they operate and where to refine the theory. For some IPs, demonstration and ongoing involvement are relatively 'light-touch' compared with in BRACED, although encouragement by project staff and awareness of community needs are just as important in effecting behavioural change in the form of applying new practices and techniques to improve productivity and, ultimately, output (in both agriculture and livestock).

We find stronger evidence for the **importance of demonstration effects** and these manifest in different ways. First, at the level of the individual (in households and communities), these relate to trust and credibility. **Peer learning and awareness** sessions can be an important implementation factor in farmer and/or agro-pastoralists' systematic adoption of climate-smart techniques. In Niger (SUR1M-X), by involving state technical services in the monitoring and implementation of techniques, this reportedly contributed to improved agricultural production and diets, as well as crop sales and incomes to invest in income-generating activities. Exchange visits organised under WYL for non-participants in communities and surrounding villages to increase awareness of climate-smart technologies (so-called '**farm of the future**' approach) led to greater uptake of activities outside of the 'boundaries' of the project, signalling potential sustainability and systemic change. Social networks and peer learning were also supported with visits for participating producers to other communities to exchange knowledge and experience in climate-adaptive practices, and to research stations to learn about improved seed:

As a result, at least one beneficiary from the 30 intervention villages was brought to similar villages to exchange with these different communities on the means and techniques used by them to adapt and fight against the vagaries of climate change. This innovation amazed the producers because they went to the research station of the Institute of Rural Economy (IER) of Cinzana (Commune of Cinzana-Gare, Region of Segou) to see how the improved seeds are produced and the future supply locations. Beneficiaries from the three (3) intervention regions took an initiative at the end of the visit to create a contact list to exchange among themselves even after the end of the project.

WYL XFE, p. 27

Second, project XFEs present evidence for practical demonstration to fill a gap in knowledge between players at different institutional levels or levels of the system. This was particularly strong in Kenya/Uganda (PROGRESS-X) and Nepal (Anukulan-X). A vital part of PROGRESS-X's work in Kenya and Uganda was to change mindsets and attitudes towards pastoralists, a group that has traditionally been marginalised (also a key focus of BRACED-X-LM's work in West Africa). This involved projects facilitating field site visits by national-level stakeholders to bridge these gaps in knowledge and understanding, raising awareness of those who have the power to effect change.

'My perception of pastoralism has totally changed. I have learnt so much. We commit to training field officers at sub-county levels about everything we have learnt here.' 82 Yussuf Abdi Gedi, CEC – Agriculture and Livestock.

PROGRESS-X Realist Case Study, p. 31

Evidence from PROGRESS-X suggests these have worked to great effect, with the visits generating buy-in to participatory activities with pastoralists to identify their needs. This is discussed in more detail in Section 4.2.1. This has almost certainly been helped along by a prominent contextual factor related to the translation and implementation of national rangeland policy to county level, emphasising the importance of context to trigger change processes:²⁹

This process was further incentivised, and to some extent speeded up, by national directives requiring existing national policy, namely the Rangeland Management Act and Community Land Act, to be translated into county policy and implemented at the county-level.

PROGRESS-X Realist Case Study, p. 29

As in the initial phase, however, BRACED-X evaluations suggested that farmers may struggle in some instances to maintain climate-smart practices without project support or subsidised inputs. In Kenya and Uganda (PROGRESS-X), the majority of respondents said they would not continue to use adaptive seed varieties when they were no longer subsidised. Farmers in Burkina Faso (BRES-X) also noted that the time needed for composting made them less likely to continue with the practice. However, also in BRES-X, the more adaptive variety of cassava introduced under the project could be grown from cuttings, so, once producers had grown initial crops, they were able to continue cultivating successfully. The difference between the BRES-X and PROGRESS-X experiences is that BRES-X chose varieties that allow farmers to produce their own no-cost seeds/cuttings (where this is possible). Lack of continued availability of the improved seed varieties promoted by SUR1M-X in the Niger River Basin, was also raised as a potential risk to the project's sustainability by SILC members – beneficiaries of its climate-smart agriculture component. This is an important factor to consider in future programming intended to address resilience through agricultural activities.

Another barrier to sustained adoption of promoted agricultural practices was the level of difficulty of techniques involved, for example digging *Zai* (composting) holes is physically demanding, and depends on the long-term availability of required equipment. Both of these pose a risk to future agriculture production by beneficiary households (SUR1M-X).³⁰ In Burkina Faso, it remains to be seen whether BRES-X has built the entrepreneurial and organisational capacity (like basic accounting, bookkeeping and entrepreneurship) of local farmer groups to sustain their operation as independent cooperatives.³¹

²⁹ The national Community Land Act posed a barrier to the policy work of PROGRESS-X in Wajir initially. The project dropped its work around the legislation as it was politically too sensitive in the context of the political events of 2019 and prioritised the water governance study instead (PROGRESS-X Case Study Report, Annex 7). However, the case study on PROGRESS-X found weak evidence that the Wajir government's senior official had taken steps to coordinate support from civil servants in other arid and semi-arid lands (ASAL) countries to influence the Pastoralist Parliamentary Group to make changes to the Community Land Act and prevent communal land from being privatised (PROGRESS-X Case Study Report, p. 21).

³⁰ Note that evidence of the lack of equipment is only anecdotal.

³¹ BRES-X XFE, p. 68.

We can refine our original theory to encompass how the mechanisms for change manifest at different institutional levels:

Refined ICMO: Regular involvement of project staff and partners in communities

Across a range of contexts:

- Ongoing involvement of project staff and follow-up with communities (I), emphasising practical demonstration (I to M), helps build trust of communities in project staff (M). This creates the right conditions for the project to flourish (M to C): participants are more likely to take up project activities and apply new practices and techniques, and this is more likely to be sustained (O). This contributes to the likelihood of resilience being built and strengthened (6 IPs; medium–strong evidence).

In contexts where there is discrimination against and lack of understanding of vulnerable, marginalised groups (C):

- Peer-learning (I) and awareness-raising (M) across all institutional levels bridge gaps in knowledge and understanding of the priorities and needs of traditionally marginalised groups on the part of those who have the power to effect change (O) (4 IPs; strong/some evidence).
-

4.1.3 Market improvements

At the BRACED FE there was some evidence that projects had contributed to strengthening market linkages, for example in input or produce markets, by supporting private sector actors to operate in the remote areas in which many of the BRACED project participants were living. This reduced the risk to private sector providers entering new markets and brokering products and services that met the needs of BRACED project participants. This included work under Anukulan on essential oil value chains, which continued through BRACED-X.

In the extension period, once again multiple projects working to develop market linkages across the value chain, from inputs to processing, helped create more resilient local markets that were accessible to small-scale producers (e.g. PROGRESS-X's work across the entire camel milk value chain in Kenya; Anukulan-X's support to important value chain links such as collection centres), although the evidence is still somewhat thin and emerging. Even so, smallholder farmers saw increased and diversified income as a result, bolstering their absorptive and adaptive capacities (Table 8).

Table 8: Value chains and markets – BRACED-X reported outcomes

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Kenya (PROGRESS-X)	Support to savings and credit cooperative organisations (SACCOs); conducting market research; incentivising private sector partners; investing in equipment for producers; developing cost-sharing logistics support; improving market information flows and building the capacity along the camel milk value chain	<p>Strong evidence to support outcomes that build absorptive capacities, with transformative potential:</p> <p>Multiple interventions have strengthened the camel milk value chain, attracting £380,000 in investment from the county government and investment in a £1.5 million project by Kenyan company Nourishing Nomads</p> <p>Links with small business in Scotland established for sale of camel milk³²</p>
Ethiopia (MAR-X)	Support to the development of SACCOs/upgrading of Village Savings and Loan Associations (VSLAs) into SACCOs	<p>Strong–medium evidence to support outcomes that build absorptive and anticipatory capacities:</p> <p>SACCOs have been formally recognised as cooperatives by financial institutions</p> <p>Cooperatives connected with buyers e.g. universities/schools³³</p> <p>Mobile market information services to improve market access and the prices livestock and crop producers receive (see MAR-X FE, p. 7)</p>
Burkina Faso (BRES-X)	Establishing or strengthening of rural producer groups/ cooperatives	<p>Strong–medium evidence to support outcomes that build adaptive capacities:</p> <p>Producers have better access to local traders and markets</p> <p>40 producer groups supported to restructure and register as simplified cooperatives</p>
Nepal (Anukulan-X)	Establishing or strengthening of rural producer groups/cooperatives	<p>Strong evidence to support outputs that build adaptive capacities:</p> <p>57 (37 new and 20 strengthened) produce collection centres established in rural areas³⁴</p> <p>Medium evidence to support outcomes that build adaptive capacities:</p> <p>55 (10 new and 45 improved) essential oil distillation units have improved market linkages for producers^{35*}</p>
Mali (BRACED-X-LM)	<p>New livestock feed store set up</p> <p>Support to and strengthening of management committees responsible for transhumance corridors/pastoral facilities/livestock feed stores</p> <p>Partnerships put into place through fodder supplements</p>	<p>Strong–medium evidence to support outcomes that build absorptive and anticipatory capacities:</p> <p>1 livestock feed facility established</p> <p>1 management committee for local conventions, 6 management committees for water points and 1 management committee for transit campsite supported/strengthened³⁶</p> <p>8 private sector contracts</p>

* Reporting period encompasses BRACED and BRACED-X.

³² Madaraka Day speech by HE Ahmed Muktar Ali, Deputy Governor of Wajir county, 1 June 2019.

³³ MAR-X XFE, p. 3.

³⁴ Anukulan-X Year 4 Annual Report Supplement, p. 15.

³⁵ Ibid.

³⁶ Note that the management committee figure was difficult to establish; it was possible to count the same management committee multiple times.

How and why did BRACED-X contribute to change?

The final BRACED evaluation found that:

In contexts where participants have poor access to markets and information:

- strengthening market linkages and working with the private sector to provide services in ways that are appropriate and sensitive to needs and the context, at the same time as implementing activities to enhance productivity and production, means that project participants will be confident to engage with private sector actors to amplify the benefits of productive activities, leading to improved absorptive capacity and more sustainable and systemic change (7/15 IPs).
-

There is medium evidence from five IPs that, in contexts where there were poor linkages between participants and markets, strengthening these and supporting private sector actors to provide appropriate services improved access to markets and in turn increased participants' income.

The main mechanism was **linking and establishing better relationships** between existing relevant private sector actors (e.g. agrovets, agro-dealers and national sectoral experts) and smallholders or traders, to help project participants benefit from improved technologies and practices or new markets (Anukulan-X, BRES-X, SUR1M-X, MAR-X). For example, SUR1M-X created new links between farmers and private veterinary services, *'encouraging [veterinary services] to be more proactive in areas where they already provide services and cover SUR1M areas where they don't'*, while BRES-X established new communication channels between traders and producers. In some cases, this involved creating **new spaces or institutional arrangements**. Anukulan-X created 'commercial pockets', organising smallholders into entrepreneurial groups linked to local planning committees and collection centres. Through the commercial pockets, farmers are able to access services and training from private sector providers, and produce is also aggregated and sold on competitive markets.

Three IPs (PROGRESS-X, Anukulan-X, MAR-X) invested in **strengthening capacity and incentives on both the supply and the demand side** – training and providing subsidies to smallholders or traders to engage with and profit from markets while simultaneously incentivising and strengthening the capacity of private sector actors to provide relevant services. Two IPs also worked to **'thicken' markets** by creating multiple opportunities for farmers to access seeds, training or other services, which helped increase access and availability for project participants (SUR1M-X, Anukulan-X).

For two IPs, **investing in value chains** through purchasing equipment, cost-sharing and seed funding also succeeded in strengthening markets and raising incomes (PROGRESS-X, BRES-X). While BRES-X in Burkina Faso built on its support to cassava farmers through BRES to provide equipment and training for cassava processing units, in Kenya, PROGRESS-X invested in multiple areas of the camel milk value chain, providing equipment and cost-shared vehicles to improve transportation and supporting a national company to invest in a milk processing plant. Early success provided proof of concept, leading to further investment from the county government and private transporters. This demonstrates how important phasing and sequencing is for successful implementation – for example the value of identifying a market gap with the potential to benefit vulnerable groups, and targeting investments along the value chain to address it.

PROGRESS... partnered with a Kenyan company called Nourishing Nomads who was interested in investing in the camel milk industry by building a camel milk processing plant. After conducting market research, developing a profit model, producing a business plan, and hiring a food engineer to design the plant, the local business person agreed to invest in the camel milk factory and secure investments from others with a total project cost of £1.5 million. PROGRESS' total investment on this initiative was less than £20,000.

PROGRESS-X XFE, p. 27

An important precursor to success is a **thorough understanding of the market, its gaps and the potential for sustainability**. PROGRESS-X conducted rigorous market research and feasibility study before investing in the camel milk chain, which involved pivoting away from a focus on a different sector after early attempts to improve a gums and resins value chain failed.³⁷ In contrast, the sustainability of its work with a Sharia-compliant SACCO (financial services provider) was threatened by a lack of available capital, which could potentially have been foreseen. In the case of Mali, two projects had differing experiences (BRACED-X-LM; WYL). BRACED-X-LM interventions in the animal feed sector were effective partly because a gap in the market had been identified; animal feed retailers were not present in rural areas. In a different area of Mali (WYL), however, providing communities with small ruminants (goats or sheep) for breeding disrupted the local livestock market. Traders raised their prices, knowing that the project was purchasing livestock, making it more difficult for small ruminant breeding groups to be effective.

³⁷ PROGRESS-X XFE, p. 25.

Both WYL (Mali) and BRES-X (Burkina Faso) supported agricultural production (BRES-X) and income diversification of local communities (WYL), by working with cassava processing plants (BRES-X), growers of market-oriented produce (BRES-X), farmers (WYL) and local community members (WYL) to strengthen participants' absorptive capacities by diversifying and boosting their incomes (and improving their nutrition). The market-based activities of those projects affected market prices of targeted produce as well as profit margins of the activity participants as a result. This created a 'market within a market' in the case of BRES-X, where cassava processing plants, set up by BRES and supported by BRES-X, bought cassava tubers for prices two to three times higher than the national price levels. This incentivised BRES-X cassava producers to sell to the processing plants (58%), with only 20% sold in the local market, which was one of the project's 'love to see' objectives.³⁸ Designed in a participatory planning process and based on a diagnostic of community needs, WYL supported livestock (cattle, sheep, swine) fattening with the objective of participants selling higher-value livestock at higher prices on the local market by the end of the project. These subsidised activities, however, substantially increased demand for livestock feed (crop residue) on the local market, which drove up its price, reducing the profit margins of the project's beneficiaries. The spike in prices for livestock feed is also expected to have had an unintended negative impact on neighbouring villages, further increasing the vulnerability of their community members. This points to the importance of carrying out initial market studies to inform designs of market-based interventions.³⁹

Another finding related to interventions promoting agricultural production (and income) worth mentioning here is the potentially negative impact of projects that aim to increase income from market-oriented production in the form of shifts in production towards cultivation of a single crop that is preferred as a result of its relatively high profit margins. For example, in the case of BRES-X, onion became a predominant crop at the expense of more diverse vegetable production, despite crop diversification being one of the project's primary objectives.⁴⁰

Anecdotal evidence of disease was identified as another barrier to income generation from agriculture activities supported by PROGRESS-X in Uganda, where Newcastle Disease severely affected crops and poultry, with damages to local communities that necessitated aid distribution. While the disease itself was not addressed by the project, the overall context of unaddressed animal disease is an important contextual factor in Karamoja that illustrates the wider lack of accessible services.⁴¹

³⁸ BRES-X XFE, p. 22.

³⁹ WYL XFE, p. 22.

⁴⁰ BRES-X XFE, p. 16.

⁴¹ PROGRESS-X XFE, p. 2.

Evidence from BRACED-X enables us to refine our understanding of how market improvement change pathways work to build and strengthen resilience:

Refined ICMO: Systemic focus – working with the private sector and public-private linkages

In contexts where participants have poor access to markets, linkages between market participants are poor and there are pre-existing private sector actors but who face barriers/lack of incentives to engage (C):

- By making sure they have a thorough understanding of market, gaps and potential for sustainability (I), and/or by working with the private sector to provide services in ways that are appropriate and sensitive to needs and the context (I), projects can create new spaces or institutional arrangements (M to C), strengthening capacity and incentives on both the supply and the demand side (M to C). By investing in value chains and thickening markets to increase availability (I), at the same time as implementing activities to enhance productivity and production (I), this means that project participants will be confident to engage with private sector actors to amplify the benefits of productive activities (M), leading to improved absorptive, anticipatory and adaptive capacities (O) and, potentially, sustainable and systemic change (theoretical) (7/9 IPs; some evidence).
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4.1.4 Access to financial products and services

At the BRACED FE, evidence demonstrated the ways that the original 15 projects had been effective at promoting financial inclusion, with the majority of projects facilitating access to savings, credit and other financial services for large numbers of project participants. The most common intervention was support to group-based savings and loans collectives (including VSLAs), but projects also linked participants to microfinance, mobile banking and insurance. Many of these activities targeted, or were exclusively focused on, women.

BRACED-X project support to community-level savings and loans groups continued to support diversifying income-generating activities at scale, developing absorptive and adaptive capacities (Table 9: 5/9 IPs, medium-strong evidence). As in BRACED, access to appropriate financial services was a key building block on the pathway to resilience in a variety of contexts.

Table 9: Financial products and services – BRACED-X reported outcomes

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Ethiopia (MAR-X)	Support to savings and loans groups; development of subsidised insurance products; support to microfinance institutions (MFIs) and mobile banking	<p>Strong evidence to support outcomes that build absorptive and anticipatory capacities:</p> <p>272 new village savings and loans groups saved £49,936</p> <p>MFI loans provided to 3,616 households worth £72,900 (ETB 27 million)</p> <p>31 SACCOs formed from MAR's village savings and loans groups</p> <p>19,105 pastoralists signed up to livestock insurance products</p>
Kenya (PROGRESS-X)	Support to savings and loans groups; support to MFIs and mobile banking	<p>Strong–medium evidence to support outcomes that build absorptive capacities:</p> <p>Crescent Takaful SACCO (CTS) distributed a total of 225 loans and had a total membership of 2,246, which smoothed consumption</p>
Mali (WYL)	Set-up and support to savings and loans groups	<p>Medium–weak evidence to support outcomes that build absorptive and adaptive capacities:</p> <p>30 self-managed microcredit groups with 1,508 members established at village level⁴²</p> <p>89% of beneficiaries reported increased income as a result of savings and credit groups</p>
Mali, Niger (SUR1M-X)	Support to savings and loans groups	<p>Strong–medium evidence to support outcomes that build absorptive and adaptive capacities:</p> <p>Village savings and loans groups led improved access to financial services for over 18,240 people*</p>
Nepal (Anukulan-X)	Support to savings and loans groups; development of subsidised insurance products	<p>Medium evidence to support outputs and intermediate outcomes that build absorptive, adaptive and anticipatory capacities:⁴³</p> <p>3,111 households have taken loans and invested in agricultural production</p> <p>2,104 households have taken up crop insurance</p> <p>Weak evidence to support outputs that build absorptive, adaptive and anticipatory capacities</p> <p>Anecdotal evidence of entrepreneurs supported to provide short-term credits to smallholders</p>

* Reporting period encompasses BRACED and BRACED-X.

⁴² WYL Year 4 Annual Report Supplement, pp. 15–16.

⁴³ Anukulan Logframe indicators. Fund Manager 2019.

How and why did BRACED-X contribute to change?

The final BRACED evaluation found that:

In contexts where projects are implementing their activities in remote areas with low population densities so that the commercial viability of private sector operation is low:

- by (temporarily) subsidising and supporting private sector actors these are incentivised to provide services (e.g. financial services) to populations in these remote areas. This links usually marginalised people and communities into (financial) systems. This means that people benefit from access to financial institutions where previously there were none, building up a financial history that could eventually improve their access to credit and potentially increase productive investments (theoretical). This contributes to building absorptive and adaptive capacities as incomes increase or people are able to invest in more climate-resilient livelihood activities (theoretical) (1 IP).
-

Village-level savings and loans groups continued to be effective. Based on analysis of gaps in coverage from the BRACED evaluations, BRACED-X projects in Nepal (Anukulan-X) and Ethiopia (MAR-X) worked towards providing insurance products. In Nepal, project activities were coordinated with local government and the Agriculture Development Bank Ltd, enabling producers to take up crop insurance. There is weak, emerging evidence to show this improved participants' sense of security. In Ethiopia, insurance and microfinance providers were supported to develop tailored livestock insurance for pastoralists in the event of losses during severe drought. Some doubts over their sustainability arose in stakeholder interviews, however, with project staff noting that, when people had not yet made a claim, they saw insurance as a wasted investment. This raises questions about the suitability of the product for addressing resilience.

Strong–medium evidence from PROGRESS-X and MAR-X suggests that subsidising and supporting financial service actors to provide context-specific services (e.g. Sharia-compliant savings and loan products in Kenya that meet the unique needs of pastoralists) increased access to finance and income among project participants. Both MAR-X and PROGRESS-X played a **brokering role**, building demand for and capacity to benefit from financial services through training and supporting VSLAs, SACCOs or farmers' groups, at the same time as capacitating and incentivising financial service actors to supply relevant services.

Directional support and guidance on how to manage financial capital to ensure a return on investment... were provided to improve financial literacy and capacity to be more engaged with market activities (M). For the first time in several villages, people were able to qualify for a loan and pass screening procedures, through the support of project staff (O). SACCOs were recognised as formal cooperatives to financial institutions and could access greater loan sizes for increased investment in other income generating activities (O).

MAR-X XFE, p. 46

There were more mixed results from directly accessing services linked to the formal banking sector, however. There were considerable regional differences in Ethiopia (MAR-X) in uptake of loans from MFIs. Participants from Afar region were still reluctant to take out loans, expressing concerns over their ability to repay (an issue raised during the BRACED FE). Mistrust of formal banking institutions persisted, particularly among pastoralist communities, and use of mobile banking remained limited. Similar concerns proved a barrier to linking savings and credit groups to MFIs in Mali (WYL). The WYL XFE report identifies two important contextual factors: i) lack of trust in MFIs, as several had previously gone bankrupt; and ii) conditions for loans not being accessible to many project participants. Models such as the village tontine (revolving funds) structures may be a feasible alternative to more formal set-ups: people trust them, and they are 'culturally' appropriate in the local context. In Ethiopia (MAR-X), where VSLAs were linked successfully to formal institutions, the project describes the process of facilitation and training in financial literacy, and support to management of such groups as critical to successful implementation. However, concerns remain over the long-term sustainability of the activities in both regions as support provided to VSLAs by field agents for accounting and tracking of payments will not be available beyond the project's lifespan.⁴⁴ Furthermore, as MAR-X subsidised livestock asset protection and insurance and partial coverage of indemnity insurance, these products are likely to become less affordable to the most vulnerable populations in the future.⁴⁵

In addition to micro-insurance and VSLAs, SUR1M-X (Mali and Niger) and BRES-X (Burkina Faso) set up community/household-level saving instruments to further boost the absorptive capacities of their beneficiaries, building on outcomes of the projects' income-generating activities. However, both projects identified low saving rates of cash boxes/solidarity funds as potential risks to long-term sustainability of income-generating aspects of their interventions. In the case of BRES-X, cash boxes established by beneficiary groups and households in Burkina Faso **did not generate enough savings** to purchase seeds to plant even 1 ha of onions the following season. Savings are crucial for sustained production of market-oriented vegetables, like onions and

⁴⁴ MAR-X XFE, p. 41.

⁴⁵ Ibid., p. 45.

cassavas⁴⁶ – initially supported by the project. This raises a question of whether such community agriculture activities can be sustained beyond the project's lifespan.⁴⁷ A similar barrier was experienced by SUR1M-X, which supported SILC groups to set up a solidarity fund to which members contributed on top of their normal savings, with the aim of using generated funds in the event of crisis. As the amount of savings in the fund by the end of the project equalled about £1 per member, this instrument did not give a substantial boost to absorptive resilience.⁴⁸

The risk of limited capital in circulation of financial products was also identified by PROGRESS-X, which set up a savings and credit cooperative, CTS, as a pilot project only in Wajir. The FE showed that, without raising outside funds, CTS faced a potential reputational risk that could undermine its long-term sustainability. By the same token, in the event that CTS raises the funds to maintain and grow its operations, it is likely to reach a level to make Islamic microfinance sustainable in the arid and semi-arid land (ASAL) counties^{49/50} – boosting absorptive capacities of its clients across the region.

The original ICMO is still relevant but the context of high levels of mistrust in formal banking can be incorporated:

Refined ICMO: Providing incentives and subsidies to encourage participation (1)

In contexts where projects are implementing their activities in remote areas with low population densities so that the commercial viability of private sector operation is low (C):

- By (temporarily) subsidising and supporting private sector actors (I to M) these are incentivised (M) to provide services (e.g. financial services) to populations in such remote areas, thus linking usually marginalised people and communities into (financial) systems, so long as people trust the private sector (C). This means that people can benefit from access to financial institutions where previously there were none, building up a financial history that could eventually improve their access to credit and potentially increase productive investments (O). This potentially contributes to building absorptive and adaptive capacities as incomes increase or people are able to invest in more climate-resilient livelihood activities (5 IPs; strong/some evidence).
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⁴⁶ BRES-X XFE, p. 56.

⁴⁷ BRES-X XFE, p. 18.

⁴⁸ SUR1M XFE, p. 45.

⁴⁹ Mercy Corp Kenya is currently working with CTS and outside potential capital providers to address this sustainability challenge.

⁵⁰ PROGRESS-X XFE, p. 16.

4.1.5 Improving and diversifying income

During BRACED, multiple projects presented evidence of increased income for project participants, and income from a greater range of sources than before the project. There was evidence of project contribution through diversification of agriculture-based livelihoods, enhancement of existing agricultural systems and diversification into non-agricultural livelihoods. Many projects targeted women in income-generating activities, as a way of sharing benefits and changing gender relationships at household level. While there was evidence of some change, a gender gap remained and, in some instances, men's income grew at a higher rate than women's over the BRACED project period.

Income generation tends to have a more meaningful relationship with resilience when it is underpinned by other outcomes related to financial services, access to markets, etc. as described in previous sections. In turn, those other outcomes can be important building blocks to resilient income. During the BRACED-X period, projects that enabled participants to increase and diversify their sources of income did so largely through boosting agricultural productivity and improving access to financial products and services. This contributed to basic absorptive capacities; participants had more disposable income to meet immediate and intermediate needs. People's resilience was also strengthened in the longer term through support to the development of more diverse income-generating activities, a key factor in enhancing adaptive capacities (Table 10), although evidence for increased incomes is still rather thin. This is to be expected when it comes to outcomes from agriculture that rely on natural processes. As noted in the limitations section, because of natural seasonal variation, very long time series are needed to demonstrate non-zero change with confidence, so evidence from short-duration projects such as these will, at best, demonstrate potential rather than outcomes and impact.

Table 10: Increased and diversified income – BRACED-X reported outcomes

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Ethiopia (MAR-X)	Support and training to develop agricultural activities and small agricultural businesses; support to access financial services	<p>Strong evidence to support outcomes that build adaptive capacities:</p> <p>20 small and medium enterprises supported to start green enterprises</p> <p>9 One-Stop Centres supported to train 6,000 jobseekers</p> <p>89% of beneficiaries mentioned increased income as the main benefit of business training</p>
Nepal (Anukulan-X)	Support and training to develop agricultural activities and small agricultural businesses; support to access financial services	<p>Medium evidence to support outcomes that build absorptive capacities:</p> <p>On average, the annual household income increased by £231*</p> <p>Increase in households above the poverty line⁵¹ from 38% (BRACED baseline) to 59% (BRACED-X XFE)*</p>
Mali, Senegal (DCF)	Outreach and training activities to engage in DCF processes	<p>Medium–weak evidence to support outcomes that build adaptive capacities:</p> <p>Modest increases in income over a season from cultivation: estimated income of FCFA 200,000 (£275)⁵² per season for one woman; FCFA 5,000 (£6.88) a month per crop for some others</p>
Burkina Faso (BRES-X)	Support and training to develop agricultural activities and small agricultural businesses	<p>Strong evidence to support outcomes that build absorptive and adaptive capacities:</p> <p>60 people involved in cassava processing earned net revenue of FCFA 234,700 (£320)</p> <p>In Balbo and Biguissi, sales of cassava crops earned FCFA 7.3 million (£10,051) in Q1 of 2019</p> <p>Poultry producers earned FCFA 34,360–47,543 (£47.30–65.46) gross revenue during the last 2 quarters of 2018</p> <p>Average monthly cash income of poor and very poor households tripled from FCFA 10,364 (£14.27) to FCFA 31,807 (£43.79)</p>
Mali, Niger (SUR1M-X)	Support and training to adopt climate-smart practices and time-saving technologies Improved access and availability of financial services	<p>Strong evidence to support outcomes that build absorptive and adaptive capacities:</p> <p>88% of SILC members have used credit or savings generated by SILC to start or reinforce income generating activities in Niger⁵³</p> <p>Reported average return on savings of 16 – 5 percentage points short of SUR1M's target of 21%⁵⁴</p> <p>In Niger, 95% of SMART Skills-trained participants (private service providers, lead farmers, SILC members) reported having put into practice at least 3 business practices promoted by SUR1M. In Mali, this was 83%</p>

⁵¹ Poverty line = \$1.25 PPP a day.

⁵² FCFA 1 equals £0.0014. £1 is equal to FCFA 726.52 (16 July 2019).

⁵³ Reported for Niger only.

⁵⁴ It was reported that this target was not reached because members were busy working in the fields during the lean season, which reduced their capacity to invest in savings. As a result, fewer loans were taken out and the return on savings decreased.

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Mali, Niger (SUR1M-X) <i>continued</i>	Support and training to adopt climate-smart practices and time-saving technologies Improved access and availability of financial services	Percentage of agro-pastoralists that practise at least 2 NRM/climate-smart agriculture practices promoted by SUR1M increased by 26 percentage points in Niger to 76% and by 4 percentage points to 54% in Mali Overall, average household production has increased in both countries from 443 kg/ha (millet), 317 kg/ha (sorghum) and 143 kg/ha (cowpea) at baseline to: • 432.75 kg/ha (millet), ⁵⁵ 393.5 kg/ha (sorghum) and 392.25 kg/ha (cowpea) in Niger • 450 kg/ha (millet), 650 kg/ha (sorghum) and 300kg/ha (cowpea) ⁵⁶ in Mali, where production of 6,000 kg of rice was also reported
Mali (BRACED-X-LM)	New partnerships through fodder supplements (e.g. local conventions between management committees, private sector and suppliers)	Strong evidence to support outcomes that build absorptive capacities: 1 management committee for local conventions and 8 private contracts put in place
(WYL)	Improved access and availability of financial services Support (including funding grants) and training to adopt income-generating activities (fattening, raising of small ruminant, market gardening, and climate smart agriculture practices and technologies)	Medium evidence to support outcomes that build absorptive and adaptive capacities: 1,508 beneficiaries with increased access to saving and credit services for their enterprise activities 98% of surveyed beneficiaries declaring an increase in their revenues owing to project support 89% of beneficiaries applying at least one of the climate-smart agriculture techniques promoted by WYL

* Reporting period encompasses BRACED and BRACED-X.

Seven out of the nine BRACED-X projects report increases in wellbeing, including improved incomes, during the BRACED-X implementation period, stemming directly from participating in diversified agricultural activities supported by the projects. The relevant ICMO from the BRACED evaluation relates to incentivising participation:

The final BRACED evaluation found that:

In contexts where the level of trust in the private sector is low:

- by targeting early adopters and influencers and offering incentives to people to sign other people up to an intervention, the project can piggyback on trust inherent in social networks to improve project reach and uptake leading to diversified livelihood activities and income sources and potentially higher incomes (7/15 IPs).
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⁵⁵ Reduction.

⁵⁶ Reduction.

Pathways towards increased and diversified income reflect effective participation in a range of complementary activities implemented by the projects, discussed above. Notably:

- Accessing financial services to allow investment in productive activities (e.g. loans and warehouse receipt/ warrantage system in Mali and Niger under SUR1M-X; economies of scale in Mali with WYL project participants selling collectively, linked to VSLAs; climate-smart technology leading to more adaptive agricultural practices in Nepal (Anukulan-X);
- Business training, for example in Ethiopia (MAR-X), where it was typically provided alongside other financial services provided (i.e. support for set-up of VSLAs or to recipients of microfinance loans). The 'success' of the business training is related to the greater amount of uptake of financial services, which were also the more cost-effective intervention to implement (i.e. wider reach for lower costs);
- Reinforcing linkages to more resilient, durable markets – for example camel milk value chain support and strengthening in Wajir county, Kenya (PROGRESS-X), which enabled producers, mostly women, to increase their income, prompted investment both from a private sector milk processing company and from the local government, helping ensure the sector remains a long-term, sustainable source of income; in Mali (BRACED-X-LM), a combination of partnership with local banks and investment in a system of animal feed banks strengthened breeders' access to the market, creating a more reliable supply of animal feed in rural areas, particularly during periods of drought, improving absorptive capacities.

Participation in all of these activities was important for changing the context and enabling people to capitalise on project activities and outputs. They operated alongside or were sequenced with complementary activities as part of the programme's packages of activities approach. In Ethiopia (MAR-X), success of informal VSLAs was dependent on trust in group members and existing cooperative behaviour, which then fed into the success of SACCOs – all important elements in the change pathways towards increased incomes.

Evidence from the XFE reports suggests that incentivising participation in the projects is related not so much to a lack of trust in the private sector (although some mistrust remains e.g. Ethiopia, MAR-X), and more to the lack of links and access, especially when it comes to microfinance and insurance.

Making it easier for people to participate is fundamental to project success. This is true of all projects, not just those aiming to build and strengthen resilience – and in the case of BRACED-X projects, this can be seen quite strongly **where outcomes become the context for further change. BRACED-X provides further evidence of the importance of projects carrying out activities that effectively ‘broker’ relationships⁵⁷ – for example encouraging the private sector to be more amenable to markets it perceives to be higher risk while boosting the ability of poor, marginalised people to participate.** Different ways of encouraging participation in activities connected to the private sector can be seen across BRACED-X projects (e.g. PROGRESS-X; MAR-X; BRACED-X-LM). These related to both providing incentives as well as overcoming barriers – sometimes logistical – to participation. They ranged from providing free inputs, to using local leaders in key official roles to make the connections between (remote) communities and financial institutions, to local leaders taking on responsibility on their own initiative to help and support community members by travelling long distances monthly to the MFIs to make loan repayments on their behalf.⁵⁸

The pre-existing relationships meant that there was greater trust in the programme, if the leaders that were implementing the programme [providing microfinance loans] were trustworthy and influential within the community then there was there was a greater acceptance of the advice and instructions given by leaders and IPs.

MAR-X XFE, p. 29

There are **potential sustainability problems when relying on goodwill and/or social obligation in key roles**. This can be illustrated by the BRACED-X-LM case:

The case studies have shown that overall committee members’ personal assessment of their work is a negative one (the small benefits they receive initially or occasionally are not proportional to the personal and individual efforts required of them). There is a lack of recognition [for their role] on the part of the local communities but also of agro-pastoralists and neighbouring dispossessed farmers. Committee members partially continue to undertake monitoring (social obligation) but there is a strong risk that this will stop with time. They hope that their situation will improve and they are still waiting for the next part of the project. It is this uncertain situation which keeps them active. No other stakeholder, especially local, has followed up with or supported them.

BRACED-X-LM XFE, p. 11

⁵⁷ See for example Jones, L. *et al.* (2016); Simonet, C. (2015).

⁵⁸ MAR-X XFE, p. 47.

Increased climate variability was identified as a barrier to income diversification by two of the nine projects (BRES-X and PROGRESS-X), with severe impacts on rural populations, and primarily women (a stark illustration of the need to build resilience and the continued need to provide direct support to cope with shocks and stresses while resilience capacities are being built). In Burkina Faso (BRES-X), serious water shortages resulted in a drop in underground water tables, negatively affecting vegetable cultivation activities – mainly cassava production and composting practices, both of which the project promoted.⁵⁹ The prolonged drought spells added a burden primarily on women and girls, many of whom had to walk for kilometres to fetch drinking water for their households.⁶⁰ Water shortages in Wajir, Kenya (PROGRESS-X), caused many families to take protective measures by selling assets, marrying off daughters or relocating. The resulting reduction in pastoralist practices increased women's workload and economic burden as they had to fetch water and fuel while running households, and in some cases also businesses. The drought-caused settlement trends also exposed female members of pastoralist communities to an increased risk of gender-based violence.⁶¹

MAR-X in Ethiopia identified anecdotal evidence that the more profitable business activities promoted by the project became, the less time their beneficiaries had for other livelihoods activities, such as livestock production.⁶² This unintended trend ultimately undermines the project's objective of income diversification with the view of increasing resilience by boosting absorptive capacity. The net effect depends on how adaptive the new business activities are and the degree to which they ultimately reduce risk and improve coping in relation to climate extremes and disasters.

The original ICMO still stands but can encompass a range of contexts:

Refined ICMO: Providing incentives and subsidies to encourage participation (2)

Across a range of contexts (C):

- By targeting early adopters and influencers (I) and offering incentives (M) to people to sign others up to an intervention, the project can piggyback on trust (M) inherent in social networks, while brokering relationships (I) to make it easier for people to participate (M), and improves project reach and uptake (output) leading to diversified livelihood activities and income sources (O) and potentially higher incomes (O), potentially improving absorptive and adaptive capacities (4 IPs; limited/some evidence).
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⁵⁹ BRES-X XFE, pp. 18 and 65.

⁶⁰ Ibid., p. 45.

⁶¹ PROGRESS-X XFE, p. 3.

⁶² MAR-X XFE, p. 19.

4.2 Institutions and policy change

This section sets out BRACED-X evidence for institutional and policy change. We draw on evidence from across all of the nine BRACED-X projects, to include institutional change such as land reform. Five IPs were funded under the Component D policy window to carry out policy-influencing work: CMESA-E, PROGRESS-X, Anukulan-X, DCF and BRACED-X-LM. BRACED-X helped those IPs broaden and deepen their work at the higher institutional levels, which in turn allowed us to broaden and deepen our analysis of the resilience-building work delivered by the programme extension. To this end, in addition to the two original ICMOs generated during the BRACED FE in the last phase, we analyse and synthesise an additional four policy theories generated during the in-depth case study work with PROGRESS-X and which were further tested during KIIs with the policy window IPs. These additional theories focus on the role of stakeholders' capacity, ownership and collaboration (discussed in Section 5) as well as the analytical rigour of project tools, processes and outputs in increasing political ambition and influencing policy. They help to refine the original ICMOs.

While the evidence remains thin, and longer maturation periods are needed to see tangible outcomes, we learn much from BRACED-X of the processes involved in effecting institutional and policy change to build and strengthen resilience.

All five projects carrying out policy work have a clear link between their work under BRACED and the design of BRACED-X, which forms a crucial foundation for the policy work under BRACED-X. BRACED-X made use of knowledge and relationships from the previous phase while building on its outcomes for extension work at the higher policy and institutional levels. For example, Anukulan-X adapted Local Adaptation Plans for Action (LAPAs), outcomes of its first phase, to new governance structures as part of the extension and by doing so made them more useful for the newly created municipalities. Importantly, BRACED-X IPs took concrete steps to influence policy and/or processes and structures at the institutional level to enable sustained benefit from outcomes of work started under BRACED. For example, CMESA-E in Ethiopia co-created the National Framework for Climate Services (NFCS), now awaiting the government's approval. This vital framework for providing climate information services, including coordinating the production and dissemination of accurate climate information, will benefit stakeholders across different levels, most of whom are beneficiaries of activities started under BRACED, for example community radio listening groups.

4.2.1 Changing national and transnational policy and institutions

The previous phase of BRACED found some IPs had contributed to changing the national policy context, using an active strategy for engagement through 'insider' capacity development and cultivation of 'resilience champions' within government. Despite the emphasis of the BRACED ToC on linking change from local level to national connections, relatively few BRACED IPs provided evidence of outcomes for national-level policy influence. Lack of a coherent strategy linking subnational activities to national policy influence was identified as a potential barrier to sustainability.

Under BRACED-X, projects were able to build on and extend their work in the previous phase (Table 11). XFE reports provide strongly supported evidence for foundations, processes and intermediate outcomes that are crucial to resilience pathways. In particular, evidence suggests that projects focusing on fostering links and relationships between key national stakeholders and institutions forged a more sustainable and enabling environment for resilience policy-making.

Table 11: National institutions – BRACED-X reported outcomes

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Ethiopia (CMESA-E)	Facilitation of multi-stakeholder collaboration process	<p>Strong evidence to support outcomes that build anticipatory capacities, with transformative potential:</p> <p>NFCS completed in draft form and awaiting approval</p> <p>35 <i>woredas</i> fully linked to the national platform (with further 250 planned for the next year)⁶³</p> <p>Sectoral climate change adaptation plans in place in four key ministries – Agriculture, Health, National Disaster Risk Management Commission, Water and Energy</p>
Burkina Faso, Mali, Mauritania, Niger, Senegal (BRACED-X-LM)	Demarcation and consolidation of transnational livestock corridor	<p>Strong evidence to support outcomes that build adaptive capacities:</p> <p>Transnational livestock corridors have been demarcated and secured and are being used by transhumant breeders and agro-pastoralists</p> <p>BRACED-X-LM Annual Report Supplement from year 4 (ARS4) reported that a Land Tenure Policy was adopted in the commune of Liptougou, Burkina Faso</p>
Kenya (PROGRESS-X)	Facilitation of multi-stakeholder collaboration process	<p>Strong evidence to support outcomes that build adaptive capacities, with transformative potential:</p> <p>Ada Consortium work on decentralised climate finance has been scaled up across every county</p> <p>The water governance study was carried out and the government has committed to incorporating its findings in the draft Wajir County Water Management Bill 2019^{64/65}</p> <p>The government has committed to using GIS to carry out spatial planning activities and invested public budget in a GIS laboratory that has been launched⁶⁶</p>
Mali, Senegal (DCF)	<p>Facilitation of multi-stakeholder collaboration process</p> <p>Work with government institutions (capacity-building, etc.)</p>	<p>Strong evidence to support outcomes that build anticipatory capacities:</p> <p>In Senegal, a multi-stakeholder platform was created with the Ministry of Decentralisation, the Ministry of Environment and a number of other stakeholders*</p> <p>National guidance on local development planning was revised to include climate considerations⁶⁷</p> <p>Although multi-stakeholder collaboration processes are less advanced in Mali, the project has been integrated from national to local level⁶⁸</p>

* Reporting period encompasses BRACED and BRACED-X.

⁶³ CMESA-E XFE, p. 11.

⁶⁴ Public announcement made by Deputy Governor of Wajir in a Madaraka Day speech on 1 June 2019.

⁶⁵ Madaraka Day speech by HE Ahmed Muktar Ali, Deputy Governor of Wajir county on 1 June 2019.

⁶⁶ Ibid.

⁶⁷ Ibid.

⁶⁸ Interview with DCF project staff 14 June 2019.

How and why did BRACED-X contribute to change?

The final BRACED evaluation found that:

In contexts where policies discriminate against or are to the detriment of poor, marginalised groups/people and work on these groups is seen as donor-imposed:

- a coordinated advocacy strategy, implemented with partners with capacity, is critical to shifting attitudes among powerholders at national and regional levels in order to achieve effective and sustained change.

In contexts where national policies favour foreign private investment to the detriment of poor, marginalised people and there are gaps in knowledge among decision-makers and other key actors about social and environmental impacts:

- strengthening and raising the capacity of key institutional actors with influence at the national level leads to raised awareness and an increased likelihood of socially responsible investment and policy, thus improving the wellbeing and absorptive capacity of marginalised people.
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We add to these an extra policy theory developed for the XFE that helps further refine the ICMOs:

Policy theory: Capacity (expressed as an ICMO)

Interventions delivered by teams that [I1] are trusted by targeted stakeholders, [I2] understand their needs and [I3] are able to tailor the design of their projects, that are implemented in contexts where [C1] targeted stakeholders are under an imminent time pressure to act and [C2] have power and access to resources, are more likely to [M1] influence key decision-makers and raise their ambition to make changes to policy and implementation process and [M2] take ownership of the project policy activities. As a result, they are more likely to result in the following outcomes: [O1] fast action at cross-departmental scale, [O2] revision of existing policies and strategies, [O3] creation of new partnerships, [O4] reallocation of resources (finance, staff time) towards action to achieve envisaged changes and likely [O5] scale-up of such activities.

BRACED-X provides further evidence of **raised awareness and shifting attitudes** and tells us more about what it takes to influence key decision-makers to motivate them to make desirable, resilience-building changes to policy and implementation process. This helps to generate national and local ownership in these policy processes.

One way projects are achieving this is by building on and using their knowledge of local socio-economic and policy contexts developed during BRACED to mobilise a wider range of stakeholders and at higher institutional levels. Bringing more stakeholders on board has enabled progress towards change at the higher levels within the 18-month extension (PROGRESS-X, CMESA-E, DCF in Senegal). Echoing evidence presented above for outcomes at individual/household levels, interventions that were **informed by local contexts and that spoke directly to stakeholders' needs** were perceived by stakeholders as valid, created new partnerships and enabled changes to existing structures, helping lay solid foundations for further change and sustainability (BRES-X, SUR1M-X, Anukulan-X, PROGRESS-X).

Pressing need for technical assistance, was, in one form or another, manifested in contexts in which four out of the five policy-focused projects were designed and implemented. While DCF and CMESA-E responded to the need to strengthen frameworks for climate finance or climate information services in response to national or local needs, BRACED-X-LM and PROGRESS-X were responding to the issue of cross-border mobility and access to natural resources.⁶⁹ To deliver on this in the timeframe of 18 months required not only knowledge of local contexts, stakeholders and their needs but also an **engagement of the key actors in project design and implementation**. Building on activities and relationships forged under the previous phase of BRACED was an important contributor to successfully achieving processes and outcomes during the extension period. The DCF project, including key national-level partners from the design phase, effectively made them part of the implementation consortium, or what they call the "wider 'We'".

For us, the government is not outside of our project – they are beneficiaries, but also implementing partners from the design stage of the project and in the case of Mali, we have been building on decades of work and relationships with the local government. In the case of Senegal, we are building on strong existing relationships – these were brought along as part of the project design. It wasn't a matter of convincing the government counterparts to do it.

KII with DCF, 14 June 2019

⁶⁹ Anukulan-X used the extension to scale up the work it introduced under BRACED (LAPAs, MUS and commercial pockets) and worked with the government to produce necessary guidelines.

Situational analyses and needs assessments were key tools for stakeholder mobilisation and project sustainability and timely mobilisation of key decision-makers to promote buy-in across scales (e.g. Anukulan-X, CMESA-E, BRACED-X-LM). In PROGRESS-X and BRACED-X-LM, working on improving resilience of pastoralists, **timely engagement of key decision-makers in participatory workshops** brought together stakeholders with diverse views of pastoralism enabling change at multiple levels. Perceptions of pastoralism changed, mobilising diverse stakeholders behind the creation of corridors, formal sub-regional partnerships and inter-governmental bodies to oversee movement of pastoralists and their livestock in West Africa⁷⁰ and initiated changes to county policy in Wajir, Kenya.^{71/72}

Both projects were able to **respond to policies that discriminate against pastoralists and use them as windows of opportunities for mobilising action** to protect pastoralism in policy and government processes. For example, in PROGRESS-X, the results of the water governance study informed draft county policy and also resulted in relocation of boreholes closer to rural communities undertaken by county government staff responsible for management; inclusion of female community representatives on the management board of the water company co-responsible for ensuring water access in rural areas; and plans to build capacity of water users' associations to enable their involvement in management of community boreholes.⁷³ BRACED-X-LM used a community-informed approach to argue for cross-border mobility in Côte d'Ivoire, which denied access to herders from Burkina Faso, by delivering a factual note highlighting the drawbacks of this approach. It also prepared a technical policy brief on ranching, an activity promoted by the government, and proposed an alternative solution informed by local experience and knowledge.⁷⁴

Engaging stakeholders as implementers and international actors as providers of technical assistance and credibility (e.g. the World Meteorological Organization (WMO) in the case of CMESA-E, international research institutions in the case of Anukulan-X) meant IPs were able to take on a brokering role to help guide project implementation through participatory processes and 'co-creation'. In doing so, they created new partnerships and nurtured ownership of the new processes and their outcomes among their stakeholders. Participative approaches to project design and implementation potentially contributes towards sustainability by creating opportunities for further new collaborations and ownership of the new processes and their outcomes. This, in combination with policy change and change in mindsets where required, has laid a solid foundation for transformational change (DCF, CMESA-E, PROGRESS-X).

⁷⁰ KII with BRACED-X-LM, 7 June 2019.

⁷¹ Action has also been taken to influence national policy; however, at the time of data collection, this process was at an early stage and evidence anecdotal (PROGRESS-X Case Study Report 2019).

⁷² PROGRESS-X Case Study Report, p. 30.

⁷³ Ibid., p. 28.

⁷⁴ KII with BRACED-X-LM.

BRACED-X contributes to the evidence of how and why change happens in interventions to influence national and transnational policy and institutions:

Coordinated advocacy strategy shifts attitudes of key decision-makers in cases where projects have the following:

i) Interventions are able to mobilise policy-makers and other key stakeholders in time to turn discriminatory policies into opportunities for action, ii) project designs are informed by local policy and governance contexts as well as stakeholders' needs so they plug gaps in existing policies/practices/processes and bring key stakeholders on board by aligning their needs with the projects' objectives and/or iii) IPs have well-established relationships with and trust of key stakeholders that enable them to mobilise decision-makers with suitable mandates in support of their projects. Evidenced examples of such ICMOs are:

- In contexts where (C) policies discriminate against or work to the detriment of local communities (or poor and/or marginalised groups), interventions that are able to (I) mobilise policy-makers (and other key stakeholders), such as in workshops where evidence is presented and interaction with key beneficiaries, like pastoralists, is enabled, in time to turn those threats into windows of opportunities by (M) improving the stakeholders' knowledge, changing their mindsets on the subject and increasing their ambition and capacity (if needed) to change policy are likely to result in (O) changes to policy and/or governance. For example, changed policy and practice (PROGRESS-X) and new formal and informal village and inter-commune corridor monitoring committees, as well as sub-regional partnerships and inter-governmental bodies (BRACED-X-LM).
 - In contexts where (C) all stakeholders are affected by climate vulnerability, (I) interventions designed to plug gaps in existing policies/practices/processes and align stakeholders' needs with the projects' objectives are likely to (M) motivate stakeholders by the vision of meeting their needs and by doing so (M) create buy-in among key actors in the projects' objectives and mobilise them to use their networks, mandates and resources to achieve the envisaged change. As a result, the key actors (O) take ownership of the project implementation and initiate policy change if required. For example national policy introduced to ensure continuity of collaboration to implement NFCS (CMESA-E) and guide LAPA set-up and implementation (Anukulan-X).
 - In contexts where other actors implement competing projects/activities, (I) well-established relationships and trust of senior government officials and other key stakeholders enable the project to (M) mobilise decision-makers with suitable mandates in support of the intervention and (O) embed its mechanisms within existing governance structures and by doing so build a foundation for the project's sustainability (this particular context applies to DCF and to some extent also to PROGRESS-X) (4 IPs; limited/some evidence).
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4.2.2 Changing regional and local policy and institutions

BRACED projects focused on local and municipal planning processes for disaster risk management and climate change adaptation. This included supporting local agencies to complete plans mandated by government law or developing plans that could be integrated into local planning and budget processes. Planning has tangible benefits in terms of increased local preparedness for climate extremes and disasters (anticipatory capacity). Where plans also assist with mobilising funds, this builds adaptive capacity and has transformative potential.

Local government institutions continued to embed climate-sensitive thinking into their strategic planning, and community-level committees built community leadership and collective capacity to respond to shocks (Table 12). The evidence does not demonstrate how institutions have operationalised their strategic planning; more time is needed to understand how measures will be implemented, and what impact this will have on resilience in the long term.

Table 12: Regional and local institutions – BRACED-X reported outcomes

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Mali, Senegal (DCF)	Support to local government policy and planning; support to community-level organisations	<p>Strong evidence to support outcomes that build adaptive capacities:</p> <p>Communes and adaptation committees' ability to solicit, process and (pre-)select projects requested by villages and community-based organisation consolidated</p> <p>Local funding mechanisms with bottom-up focus strengthened to select appropriate projects</p>
Mali (WYL)	Support to municipal/local climate adaptation planning processes; support to community-level organisations	<p>Medium–weak evidence to support outcomes that build adaptive and anticipatory capacities:</p> <p>Village climate change adaptation communities engaging with local government so their resilience priorities are recognised*</p> <p>Village committees for adaptation to climate change have become more transparent and communities more involved*</p> <p>Communal and village committees for adaptation to climate change have been established*</p> <p>Memorandum of Understanding (MoU) developed with communes*</p>
Kenya (PROGRESS-X)	Support to municipal/local/county government climate adaptation and disaster risk reduction (DRR) and NRM planning processes; study on water management conducted in partnership with local government; support to community-level organisations	<p>Strong–medium evidence to support outcomes that build adaptive and anticipatory capacities:</p> <p>Ward Adaptation Planning Committees have become more sustainable structures, with better community ownership and more ability to mobilise resources</p> <p>Results of water study conducted in partnership with local government incorporated into draft Wajir County Water Management Bill 2019⁷⁵</p>

⁷⁵ Madaraka Day speech by HE Ahmed Muktar Ali, Deputy Governor of Wajir county, 1 June 2019.

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Nepal (Anukulan-X)	Support to municipal/local climate adaptation and DRR planning processes; support to local government policy and planning	Medium evidence to support outputs that build adaptive and anticipatory capacities: A commercial pocket approach is being included in regional and district planning* 41 LAPAs have been set up or reworked, 24 in towns and 17 in rural areas
Mali, Niger (SUR1M-X)	Support to municipal/local climate adaptation and DRR planning processes	Strong–medium evidence to support outcomes that build anticipatory capacities: 19 municipalities supported to include climate-sensitive and DRR measures in strategic planning*
Burkina Faso (BRACED-X-LM)	Support to local government policy and planning	Strong evidence to support outcomes that build adaptive capacities: Convention to support pastoralism signed by 17 municipalities and awaiting ministerial approval

* Reporting period encompasses BRACED and BRACED-X.

How and why did BRACED-X contribute to change?

The final BRACED evaluation found that:

- engaging with the right leaders, at community or higher institutional levels, increases the credibility and the reach of interventions, leading to better uptake and greater sustainability. In other cases, when working with relatively 'closed' marginalised communities, credibility and uptake are enhanced through the trust engendered by combining local knowledge with scientific information (5 IPs).

While many of the BRACED-X outcomes related to national change were new to the extension period, local-level outcomes emerged largely from projects continuing or extending their work under BRACED.

There is strong evidence that agreements were forged with or through local government institutions to promote climate-sensitive planning, but less evidence to help us understand the actual or potential impacts. In Mali (WYL), an MoU was established with municipal-level government. In Nepal (Anukulan-X), newly set up or reformulated LAPAs became a tool for strategic, local-level planning, once roles were properly clarified. A total of 19 municipal-level institutions across the Niger River Basin (SUR1M-X) had begun incorporating climate-sensitive planning into their strategy. In Senegal and Mali (DCF), project work built the capacity of local government institutions to find and channel resources, enabling them to fulfil their existing mandate to fund locally led adaptation activities. Meanwhile, in Kenya and Uganda, PROGRESS-X continued to form sub-county- and district-level community-led governance structures and build their capacity to work with local government to develop resilience action plans to advocate for resilience investments from decentralised climate adaptation

funds. Moreover, project partnerships with local government in Wajir county, Kenya (PROGRESS-X), built capacity to integrate sustainable water and land management into strategic planning.⁷⁶

However, there is not enough evidence emerging from XFEs to assess whether institutions were able to act on their strategic planning and implement climate-adaptive initiatives. More time would be needed to understand the extent and nature of outcomes arising from these interventions. Evidence from west Burkina Faso (BRACED-X-LM) underlines the difficulty of ensuring institutional change becomes embedded and leads to action. Although 17 municipalities were supported to develop a Cascades Region Inter-Communal Accord on Pastoralism during the BRACED-X phase, the XFE highlights the obstacles arising from Burkina Faso's centralised power structures and resulting lack of space for regional differences, and therefore adaptive planning.

Further strong evidence from the policy strand of work confirms what we learned from BRACED about the importance of working with the right people to enhance credibility and trust, for example working with **well-established international research institutions and organisations well connected to local communities** (e.g. BRACED-X-LM, PROGRESS-X, Anukulan-X, BRES-X). This applies across all activities and is not peculiar to resilience-building interventions. For example, PROGRESS-X worked closely with Wajir Community Radio, complementing local and international expertise, which sensitised local communities about its data collection activities and translated and pre-recorded their inputs.

'The radio is a very important tool for information sharing and convincing the community... [the communities] don't speak to the government. They first tell us... we became a centre of information sharing then they trust us. When they need anything from the government, they just give us a call'. Manager, Wajir Community Radio.

PROGRESS-X Policy Case Study, p. 46

This works in both directions. Collaboration with partners that are well networked and trusted by local communities enabled community engagement in project activities and with government staff. Engaging organisations that communities trusted also enabled community inputs into the projects' products like policy briefs, factual notes and resource maps. By bridging the disconnect between rural communities and decision-makers, projects like BRACED-X-LM and PROGRESS-X (and others) have demonstrated the value community knowledge brings to decision-making about policy and governance at higher institutional levels. For example, government officials in Nepal appreciated that Anukulan-X worked so closely with local communities, which in their eyes added credibility to their approach. The project's research on resilience enhancement that informed its policy work was also well regarded, as it was delivered by well-known research organisations, conducted in the field and informed by data from local communities.⁷⁷ Collaboration and credibility are discussed at a more generalisable level in Section 5.2.

⁷⁶ Madaraka Day speech by HE Ahmed Muktar Ali, Deputy Governor of Wajir county, 1 June 2019.

⁷⁷ KII with Anukulan-X.

Refined ICMO: Collaboration and credibility

Evidence from BRACED-X allows a refinement of the ICMO:

- Engaging with the right leaders (I), at community or higher institutional levels, increases the credibility (M) and the reach of interventions (output), leading to better uptake and greater sustainability (O). In other cases, when working with relatively 'closed' marginalised communities (C), credibility and uptake are enhanced (M) through the trust (M) engendered by combining local knowledge with scientific information (I), while working with respected higher-level organisations that are receptive to and value community knowledge makes it more likely that communities can input into project outputs, policy and decision-making (6 IPs; strong evidence).
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4.2.3 Sustaining institutional change

There is strong evidence⁷⁸ that the five 'policy window' IPs successfully bridged the disconnect between local and higher institutional levels (layering and linking plus policy theory: analytical rigour) and creating ownership of the change process itself among stakeholders with appropriate resources and mandates (policy theory: ownership). Linking across institutions from local to national levels demonstrated the importance of local knowledge for decision-making at higher institutional levels, and in some cases changed national policy-maker mindsets about issues like pastoralism and cross-border mobility. But promoting ownership of the process itself increased the likelihood of the mechanisms and processes introduced by the projects being sustained beyond the extension timeframe.

The two policy theories that underpin sustained institutional change are i) analytical rigour and ii) ownership:

Policy theory: Analytical rigour (expressed as an ICMO)

An intervention that [I1] enables collection of reliable, relevant and quality data, [I2] enables collaboration among key stakeholders, [I3] exposes them to the realities of pastoralist communities and puts forward [I3] practical and context-relevant recommendations, where [C1] communities are willing and can participate in data collection, [C2] there is little knowledge about pastoralism and [C3] responsibilities for management of water sources are unclear, can make key stakeholders [M1] change their attitudes towards pastoralism and [M2] take a personal interest in serving pastoralist communities. It [O1] raises political ambition, [O2] initiates changes to management of water sources on the ground, including new partnerships, and [O3] makes the resulting water governance study more credible among key stakeholders.

⁷⁸ Based on KIIs with four IP teams, two XFE reports, a case study report and notes from a government public speech.

Policy theory: Ownership (expressed as an ICMO)

Interventions that [I1] understand interests and needs of key stakeholders, [I2] are well connected to the resilience community and able to make introductions to support key stakeholders and [I3] introduce practical solutions and versatile solutions that are relevant to stakeholders' needs, that are implemented in contexts where [C1] issues targeted by the intervention are not fully realised, [C2] actions by diverse stakeholders are required and [C3] resources to implement solutions exist, make it more likely that stakeholders will [M1] realise the importance of collaboration, [M2] understand the actions required and take ownership of the required change. They are also more likely to [M3] be willing to apply the envisaged solution at a scale that is larger than the project's scope. Based on the new knowledge, capacity and collaborations, stakeholders are likely to [O1] embed aspects of the project in their processes, [O2] allocate resources to achieve the envisaged change, [O3] identify wider application for the tools and approaches introduced by the project, secure external support and [O4] sustain the new practices, partnerships and collaborations established by the project.

Demonstration was used to generate buy-in to scale up project tools, mechanisms or processes by four out of the five policy projects (Anukulan-X, DCF, CMESA-E, PROGRESS-X). This includes exposure to the realities of rural areas, which improved understanding of issues faced by local communities and created interest in community experience and knowledge (Anukulan-X, BRACED-X-LM; PROGRESS-X). This is also discussed in Section 4.1. For example, to bring the challenges experienced by pastoralists to policy-makers' attention, all three policy activities of PROGRESS-X had an 'exposure' component, where either government staff visited rural areas to collect data or evidence was presented to them in a workshop.⁷⁹ Following the project advisory committee's visit to a commercial pocket area in Bansgadhi in Bardiya, one of Nepal's 77 districts, the municipality government committed a sum of NRs 1,400,000 (£10,125) in support of off-season vegetable farming by constructing 20 plastic houses. These have begun to be built.⁸⁰

This approach was particularly effective in contexts where the issue raised by local communities related to policies currently in draft. **Tapping into windows of opportunity or policy 'moments'** increased the likelihood of timely policy changes in favour of local communities. Changes to mindsets, views, perceptions and beliefs are also perceived as one of the pillars of transformational change.⁸¹ Therefore, projects that changed stakeholders' perceptions of pastoralism built a foundation for a long-term change and contributed to transformational resilience-building.

⁷⁹ PROGRESS-X Case Study Report, p. 53.

⁸⁰ Anukulan-X XFE, p. 36.

⁸¹ Francis *et al.* (2003) and Kotter (1995) in Bahadur *et al.* (2015).

Combined experience of the five 'policy window' IPs shows the importance of making connections between the local and higher institutional levels in order to demonstrate the value of local knowledge for decision-making processes.

This wider evidence supports the following parts of the policy theory on analytical rigour:

- In contexts where (C) there is little knowledge about pastoralism, (I) face-to-face interaction with pastoralist communities (M) changes policy-makers' attitudes towards pastoralism and (O) raises political ambition (BRACED-X-LM, PROGRESS-X).
 - In contexts where local communities face immediate threats (e.g. discriminatory policies, climate variability, conflict), (I) informing policy by local knowledge (where necessary with the support of a local partner that is trusted by local communities and/or a well-established research organisation) (M) raises its credibility in the eyes of policy-makers (and likely other stakeholders) (BRACED-X-LM, PROGRESS-X, Anukulan-X).
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Linking between activities was used by all five IPs, which **built on the outcomes of the first activities they implemented as an enabling environment for subsequent activities, taking a bottom-up approach to implementation**. For example, PROGRESS-X, CMESA-E and BRACED-X-LM used the results of an interactive workshop designed to bring all key stakeholder round the same table and secure their buy-in, to engage stakeholders in delivery of the remaining project activities. In the case of CMESA-E, the workshop was combined with the baseline needs assessment conducted with representatives of all key beneficiary groups and ensured maximum alignment of stakeholders' needs with the project's outcome (NFCS) and its consequent usefulness for their work.

The ability to sequence activities to identify stakeholders' needs, generate their buy-in and align their needs with the project's objectives in one activity, and then using the enabling environment it creates (buy-in, motivation) and findings about stakeholders' needs to inform and deliver other project activities, contributed to ownership of the project's tools, processes and products. Linking between activities and across institutions and sequencing of activities are discussed in Section 5.1.

The multi-faceted nature of resilience-building requires interventions to **mobilise a variety of stakeholders across multiple levels**, ensure their shared understanding of targeted issues and secure their buy-in to approaches to achieve envisaged changes (e.g. PROGRESS-X, CMESA-E and BRACED-X-LM participatory workshops).

To sustain the momentum created by findings of the baseline capacity assessment, CMESA-E provided Ethiopia's National Meteorological Agency (NMA) with technical guidance produced by WMO on how to engage stakeholders in NFCS implementation. With this step-by-step guide and stand-by support of the project team, NMA together with government representatives on the national steering committee and sectoral taskforces have led the framework design with the view that, once it is approved by the government, the government will lead its implementation.

To embed resilience within existing structures, PROGRESS-X and DCF **introduced new partnerships, taskforces and platforms to enable collaboration** among key actors. Working within the existing systems and enabling established actors that possess appropriate mandates to **deliver the policy products themselves** (with guidance, quality assurance and inputs by IPs) further strengthened their ownership of the change process and embedded it (or its products) at the higher institutional level. This was the case for development of the water governance study (PROGRESS-X) and guidelines for LAPA set-up and implementation (Anukulan-X) and delivery of the NFCS (CMESA-E).

Working within existing governance structures in Senegal and Mali, DCF introduced a mechanism that promoted social inclusion in decision-making on climate finance investments in both countries. It worked with existing institutional frameworks to reinforce or improve them. In Mali, the National Agency for Local Government Investment (ANICT) was chosen as the entry point for the mechanism. In Senegal, funds were channelled through the National Programme for Local Development (PNDL) and followed the National Treasury rules. The project capitalised on existing technical (planning) mechanisms embedded in each country's national institutions. To oversee the project teams comprising community and government representatives in each of the countries, in Mali the project introduced climate adaptation committees at multiple levels. In Senegal, it worked with departmental adaptation committees and committees that already existed at the community level.⁸² In Mali and Senegal as decentralised countries, by embedding the mechanisms in each country's political and institutional systems this increases the likelihood of their sustainability. However, it also generates the risks of reallocation of resources and/or competencies from those institutions and agencies, changes to the power balance and competition among them and the dismissal of tools and processes introduced by the project to the disadvantage of local communities, primarily rural communities that are relatively young (in Senegal) and prone to conflict (in Mali).⁸³

Direct collaboration at different local and national levels with partners such as ANACIM in Senegal or Mali Météo has also helped build a shared experience that creates a 'bond' and sense of joint progress that helps create and consolidate a dynamic at the national level.

DCF XFE, p. 73

⁸² DCF XFE, pp. 32–33.

⁸³ Ibid., pp. 34–37; KII with DCF.

However, working in highly decentralised contexts also brought its challenges, primarily in terms of project ownership and sustainability. In its XFE, DCF emphasised its concern that the transfer of competencies, finances and powers over the relatively cross-sectoral DCF mechanism (designed to address the multifaceted nature of climate change issues horizontally) to highly decentralised political systems was complicated by the vertical nature of the decentralisation process. Although decentralised, such governance structures are limited by their sectoral realms and therefore unsuited to deliver cross-cutting approaches required to operate the DCF mechanism.⁸⁴

Another concern related to the decentralised context is the risk of co-option by national political elites and newly elected politicians at the expense of local governments' involvement in co-management of the DCF.⁸⁵

This needs to be addressed before moves are made to scale up DCF in either country, as there is a risk that the mechanism will move away from the principles of decentralisation and local government control over DCF.

DCF XFE, p. 52

As well as capitalising on the relationships, trust and networks developed during BRACED, policy-influencing efforts at higher institutional levels (as new activities), also needed to engage new stakeholders, like government officials, whose mandates are determined by the institutional structures they are part of. As a result, four (DCF, PROGRESS-X, CMESA-E, BRACED-LM-X) of the five 'policy window' projects reported the relatively short project extension timeframe as a limitation to fully achieving their objectives. In the case of Burkina Faso (BRACED-LM-X), for example, the processes to register in the public domain secure corridors for livestock mobility are lengthy and require extensive advocacy efforts in politically and legally unstable contexts. The project started these activities but was unable to complete within the set timeframe.⁸⁶ In Ethiopia (CMESA-E), the processes to get stakeholders on board at the regional level took longer than expected as new participants in the project's consultation processes had to be brought up-to-speed on the subject of climate information services and the NFCS. Operating under a national state of emergency imposed after widespread unrest and public demonstrations against the Government of Ethiopia in combination with administration staff changes in the ministries involved further protracted the on-boarding process.⁸⁷ This slowed things down, which in turn could negatively affect stakeholders' inputs into the final NFCS and Action Plans.⁸⁸

⁸⁴ DCF XFE, p. 34.

⁸⁵ KII with DCF.

⁸⁶ BRACED-LM-X XFE, p. 6.

⁸⁷ CMESA-E XFE, pp. 11, 15.

⁸⁸ CMESA-E XFE, p. 14.

The five 'policy window' projects worked to promote ownership by the government, and other key stakeholders, of the tools and processes they introduced through the following pathways (ICMOs):

- (I) Interventions sequenced so that outcomes of one activity become (C) enabling environments of consequent activities were able to leverage stakeholders' pro-intervention mindsets, motivation to participate and in some cases initiative to lead the implementation process itself (all, but primarily PROGRESS-X, CMESA-E and BRACED-X-LM). This in turn created (M) a sense of ownership of the project processes and outputs and increased the value of participants' perceived benefit of those processes/ outputs for policy-making with the aim of using them to inform policy – e.g. PROGRESS-X: Senior government officials called the water governance study they led and co-created 'credible'⁸⁹ and made a public commitment to incorporate its findings in the draft Wajir County Water Management Bill 2019.⁹⁰
 - Interventions that convene diverse stakeholders across multiple levels by (I) introducing new partnerships, taskforces and/or platforms where (C) disconnect exists, and/or by (I) leveraging existing structures and/or taskforces where (I) such structures already exist, (M) build capacity of their participants, (M) improve stakeholders' understanding of one another's needs and (M) create buy-in to the new processes and resulting outputs. Over time, stakeholder participation (M) generates stakeholder ownership of those processes/outcomes and (O) builds foundation to their long-term sustainability, including financial commitments (PROGRESS-X, CMESA-E, DCF) – e.g. CMESA-E: The Ethiopian government has drafted the NFCS and made a substantial financial commitment to implement it. It has also drafted a policy to make collaboration to deliver the NFCS mandatory.⁹¹
 - Interventions that (I) work with policy-makers to co-create practical guidance and/or set out a clear context-informed roadmaps are more likely to (M) generate stakeholders' interest in project implementation, sustain their participation and build their capacity. This in turn (M) creates participants' ownership of those processes/outcomes and (O) builds foundation to their long-term sustainability, including financial commitments (CMESA-E, PROGRESS-X, Anukulan-X) – e.g. Anukulan-X: Based on its experience implementing LAPA harmonisation processes, the Nepalese government drafted regulations and proposals for harmonisation of LAPAs and Disaster Risk Management (DRM), which are awaiting approval.⁹²
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⁸⁹ PROGRESS-X Case Study Report, p. 39.

⁹⁰ Madaraka Day speech by HE Ahmed Muktar Ali, Deputy Governor of Wajir county, 1 June 2019.

⁹¹ KII with CMESA-E.

⁹² KII with Anukulan-X.

4.3 Inclusion: outcomes for women and other marginalised groups

Inclusion is a development outcome that both supports and is supported by resilience. Addressing various forms of social inequality and exclusion was an implicit focus within the BRACED and BRACED-X programme ToC. The majority of BRACED projects had at least some focus on ensuring equitable benefits and reaching vulnerable groups, while a smaller number had specific goals related to tackling the root causes of exclusion. From the BRACED FE, the strongest evidence of change centred around gender and women's empowerment. However, in the previous phase BRACED projects and their evaluations were marked largely by a lack of disaggregation by age, gender, disability and other forms of disadvantage and social exclusion, and this was highlighted as an area of weakness in the FE synthesis of that phase of the programme. The BRACED FEs were also notably blind to disability inclusion, with no projects mentioning deliberate action to promote inclusion for people with disabilities.

From the BRACED extension, most XFE reports included some analysis on how benefits from BRACED-X were shared between women and men, with disaggregation of data (Table 13). However, analysis of more significant shifts, such as changes to institutional structures and power relationships that shape women's lives, was limited. Three projects targeted pastoralist communities specifically (as a marginalised group). In Nepal, Anukulan-X additionally extended implementation during BRACED-X to low-income households excluded in phase 1, as well as specifically focusing on deprived and vulnerable communities and (Dalits and Janajati, considered deprived ethnic groups in Nepal, made up 15% and 43% of beneficiaries, respectively).⁹³

⁹³ Anukulan-X XFE, p. 519.

**Table 13: Change in gender and women's empowerment –
BRACED-X reported outcomes for individuals**

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Mali, Niger (SUR1M-X)	Support to women's income-generating activities; investment in more efficient cooking technology; support to women's access to financial services	<p>Strong evidence to support outcomes that build absorptive and adaptive capacities:</p> <p>Provision of 90 efficient stoves has reduced the time burden of unpaid work</p> <p>51.8% of respondents felt women had increased economic power and improved status and were seen as agents of change</p>
Burkina Faso (BRES-X)	Support to women's income-generating activities	<p>Strong-medium evidence to support outcomes that build absorptive and adaptive capacities:</p> <p>Women's spending power within the household increased</p> <p>Women had increased power over household decision-making around finances and land use</p>
Nepal (Anukulan-X)	Support to women's income-generating activities; investment in water infrastructure; support to women's leadership and involvement in community and local institutions	<p>Medium evidence to support outcomes that build absorptive and adaptive capacities:</p> <p>Women producers improved their access to markets through collection centres*</p> <p>Women had reduced workloads and improved health outcomes*</p> <p>10% of women and 8% of men said women were able to make decisions in agricultural production practices, compared with baseline of 2.7%*</p> <p>Strong evidence to support intermediate outcomes to build absorptive and adaptive capacities:</p> <p>Women represent 40% of MUS management committee members*⁹⁴</p> <p>Approximately 80% of farmers' group members are women*</p>
Mali, Senegal (DCF)	Support to women's leadership and involvement in community and local institutions	<p>Medium evidence to support outcomes that build adaptive capacities:</p> <p>Women were well represented in local committees</p>
Kenya (PROGRESS-X)	Support to women's income-generating activities; investment in more efficient cooking technology	<p>Medium evidence to support outcomes that build absorptive and adaptive capacities:</p> <p>Women involved in the camel milk sector have seen increased economic power, reduced burden of unpaid work and increased profits</p>

* Reporting period encompasses BRACED and BRACED-X.

4.3.1 Women

Evidence from BRACED-X shows that women benefited from project interventions through improved income and more diverse income-generating activities, and that women's participation in community affairs was structurally embedded.

In BRACED-X, six out of the nine projects carried out interventions specifically targeting women as participants, or in agricultural activities traditionally dominated by women (SUR1M-X, BRES-X, PROGRESS-X, BRACED-X-LM, Anukulan-X, MAR-X, WYL). In Nepal, women, children and 'vulnerable communities' made up more than 80% of the beneficiaries' project activities by the end of Anukulan-X, leading to increased income for women from products like vegetables and oils. In Kenya, the camel milk value chain is operated almost entirely by women, and so investments into the value chain supported by PROGRESS-X held the potential to affect the growth of women-owned businesses.⁹⁵

Women's participation in intervention activities in Ethiopia (MAR-X) were seen to be beneficial for increasing income and empowered women to make spending decisions within the household on family expenses and childcare. Women also engaged in their own income-generating activities and gained knowledge of financial concepts and played a more active role in market activities.⁹⁶ Evidence suggests women's involvement and leadership in VSLAs is the route through which they derive higher incomes via subsequent improved access to income-generating activities.⁹⁷ An important contextual factor underlying these outcomes is that existing savings were a precondition for women to participate in VSLAs.⁹⁸

Weaker evidence from Mali and Niger (SUR1M-X) also reported some shifts towards more equal household decision-making. Women's ability to generate extra income through project activities increased their economic power within the household; however, medium-high evidence from Burkina Faso (BRES-X) shows that women's engagement in income generating activities has in some cases also substantially increased their workload.⁹⁹ Women in Burkina Faso (BRES-X), Kenya and Uganda (PROGRESS-X) had control over their increased earnings, which they tended to use to pay for school fees, health care and other household items. Men in Mali and Niger (SUR1M-X) also reported that women who had additional income from VSLAs had higher social status. The positive impact on time burdens associated with women's unpaid work, through reducing time spent fetching water (Anukulan-X, DCF) or firewood (SUR1M-X; PROGRESS-X), is discussed above in Section 4.1.1 on addressing basic needs, where we can see how time and labour saving resulting from other activities underpins (acts as a key mechanism for) women's involvement in project activities. However, the evidence is thin/lacking on how, why and where these work best and it is difficult to link explicitly to resilience outcomes.

⁹⁵ PROGRESS-X XFE, p. 226.

⁹⁶ MAR-X XFE, p. 52.

⁹⁷ E.g. WYL XFE, p. 34.

⁹⁸ Ibid., p. 6.

⁹⁹ BRES-X XFE, p. 62.

However, these shifts do not represent a fundamental change in gendered areas of responsibility within the household; women had control over extra income that they had earned themselves, rather than over household income as a whole. In Burkina Faso (BRES-X), there was some anecdotal evidence of men resenting and pushing back against women's changed status in the household, and stronger qualitative evidence that, when women's income increased, they spent it on their children and other household expenses, in some cases taking on greater responsibility for these expenditures compared with before (BRES and BRES-X). Also in Burkina Faso (BRES-X), women reported much less access to climate information through networks. Designated 'relay' farmers were men, who did not communicate information to women, so women received information later/less frequently.

At institutional level, in Ethiopia CMESA-E found women to be under-represented in groups from which key stakeholders in the policy-making process were drawn. Perspectives from civil service/ministries/technical and research roles were therefore disproportionately male. Overall, there is little evidence of transformational change. The CMESA-E XFE puts the relative lack of participation of women in events at the national and regional level down to the government technical staff being mostly male (there are barriers to women's enrolment in technical degrees/professions). It notes that the gender balance was better in consultations at the community level.¹⁰⁰

In many contexts where women have limited representation in community affairs, BRACED-X projects set clear quotas for participation in local-level institutions that support resilience, building on work started under BRACED (e.g. in WYL at least 30% of participants engaged in decision-making were women (21) but we do not know who these women were).

In Mali (WYL), the project's efforts were challenged by deep-rooted socio-cultural factors that limit women's access to income-generating activities, basic social services and training, and constrain their participation and decision-making in public spaces. By preventing women's access to agricultural land and income-generating activities, these fuel gender inequality, and by hindering women's access to economic opportunities, they keep female populations more vulnerable to poverty. This constraining context was addressed by the project's market gardening activities, which targeted women and engaged them in decision-making as well as problem diagnostics and project implementation.¹⁰¹

¹⁰⁰ CMESA-E XFE, pp. 15–16.

¹⁰¹ WYL XFE, p. 30.

As a result, women played an integral part in the diagnostic process and took part in decision-making. For example, they helped choose the installation or rehabilitation of vegetable gardens complete with solar-powered irrigation.¹⁰² Similar cultural barriers were found in Burkina Faso (BRES-X), where, even when women earned their income, it was culturally difficult for them to make purchase of a bicycle or a goat, for example, without the consent of their husband:

According to the tradition, it is still the man who will purchase the article and in some cases he will even take some money for the favour he is doing for his wife.

BRES-X XFE, p. 56

Further outcomes emerged at institutional level, as BRACED-X allowed time for BRACED interventions aiming to promote women's representation and participation in community decision-making structures to take effect. In Mali and Niger (SUR1M-X), women's savings and loans groups facilitated some access. Leaders of women's groups negotiated access to community committees, so women's views could be represented at local level. In Mali and Senegal (DCF), quotas were established during BRACED to ensure women's participation in community structures. While evaluations of the BRACED-X phase confirm women were well represented in local climate adaptation committees, the DCF XFE notes that *'it is by no means certain that women have the necessary numbers or mandate to influence decisions so that their interests are fairly represented'*.¹⁰³ There is qualitative evidence that pre-existing power structures affected the level of influence they could exert, suggesting these interventions are not sufficient to change underlying social norms and attitudes. Women in Mopti region of Mali found the resilience-based criteria for funding projects through the DCF mechanism did not reflect their priorities for income-generating activities. As such, their projects, and those of youth, were generally rejected in favour of men's priorities. Despite women's representation on local adaptation committees, men's voices remained dominant. This is because women do not have the last say: *'In one cluster of villages, a small bridge-building project to open up the rural area was selected during village consultations. When asked whether women would have chosen the bridges if they had the final say, the men said this was unlikely. They recognised that the main problem was drinking water, but still prioritised bridges.'*¹⁰⁴ Anecdotal evidence from the FM's visit to Senegal (DCF) suggests activities selected by the adaptation committee based on women's priorities (pumping water from a well versus creating a tap system in their village, which women preferred) saved women in one village about 30 hours of labour each a week (personal communication). The inclusion study commissioned by DCF suggests that the way the project has implemented these activities has been well-received by the participants, with strong buy-in that lays the foundations for future success (Djohy 2019).

¹⁰² Ibid.

¹⁰³ DCF XFE, p. 87.

¹⁰⁴ DCF XFE, p. 32.

The BRACED programme overall operated on the premise that gender and other forms of social inclusion are crucial to an equitable climate change response. It is clear that the inclusion of women in adaptation and resilience-building activities is central to effective programming and reaching the whole population. Evidence from the extension suggests some positive impacts on women's absorptive and adaptive capacities, and small shifts in the gender norms that contribute to women's heightened vulnerability. More transformative or systemic changes in gendered power structures require an investment of time far beyond the remit of BRACED and its extension. However, project evaluations continued to struggle to make explicit connections between gender equality and resilience, despite the range of evidence, literature and guidance related to climate change and gender. This is because they did not state/pursue gender equality as an outcome or objective. The main 'inclusion' focus of the BRACED-X projects was that of 'targeting women' – but merely targeting women is not enough. Approaches and designs need to include gender empowerment/social inclusion as an explicit impact pathway.

4.3.2 Pastoralists

The second largest beneficiary sub-group specifically targeted by BRACED-X was members of pastoralist communities, which were served by PROGRESS-X, BRACED-X-LM and MAR-X. Building on existing relationships with pastoralist and agro-pastoralist communities established under BRACED (or as part of other work prior to BRACED), the three projects continued to build adaptive and absorptive resilience capacities of (agro)-pastoralist communities by boosting their incomes and savings, diversifying their livelihoods, engaging them in local decision-making processes about NRM governance and improving their cross-border mobility and access to climate finance. By enabling pastoralist communities to inform decision-making on water governance and management of water sources in rural areas, PROGRESS-X and BRACED-X-LM improved their access to water of a better quality for pastoralists themselves as well as their livestock.¹⁰⁵

In Kenya, PROGRESS-X enabled pastoralists, and other disadvantaged groups within pastoralist communities, to take part in ward-level community-led governance structures (such as Ward Adaptation Planning Committees). This improved their access to information and funds from the Climate Adaptation Fund and engaged them in stakeholder dialogues, including with government, in decision-making about local adaptation planning and NRM.¹⁰⁶ Protecting pastoralist livelihoods, and primarily pastoralists' access to water and grazeland, in policy is expected to contribute to transformational change with likely sustained benefits for pastoralist communities in the long term.¹⁰⁷

¹⁰⁵ PROGRESS-X Case Study Report; BRACED-X-LM XFE, p. 14.

¹⁰⁶ PROGRESS-X Policy Case Study, p. 52; PROGRESS-X XFE, p. 158.

¹⁰⁷ PROGRESS-X Case Study Report, pp. 51–52.

Working with pastoralist and agro-pastoralist households in Afar, SNNPR and Somali regions of Ethiopia, whose where communities are particularly sensitive to rising climate variability, market-based approaches implemented by MAR-X benefited the most vulnerable, primarily women and youth. Engaging women in community savings, MAR-X enabled them to make decisions about VSLA management, set up or expand businesses and participate in the market while improving their knowledge of financial concepts. Women's participation was enabled by the 'culture of trust in women' as more frugal and thrifty household members.¹⁰⁸ This benefited entire households with higher likelihood of avoided stress sales and losses in productive assets, which is expected to boost absorptive capacities to manage climatic shocks, like dry spells.¹⁰⁹ This is particularly relevant to pastoralist areas in Afar, where 93% of all VSLA members were women.¹¹⁰

4.4 Information

The previous phase BRACED projects demonstrated considerable achievement in brokering access to climate information, particularly short-term and seasonal forecasts, increasing anticipatory capacity. The effectiveness of work in this area was underpinned by work linking different institutional levels to address supply and demand for information. Importantly, projects focused on not only technology and information products but also the institutions that shape how information is interpreted, communicated and used, including the relationship between scientific and traditional forecasting. While uptake of short-term and seasonal weather forecasts was strong, the evaluation synthesis found more was needed to integrate longer-term considerations of climate change into planning, project activities and decision-making.

Five BRACED-X projects have enabled climate information frameworks and EWS at regional and local level, building the capacity of institutions to anticipate and respond to climate shocks (Table 14). Strong evidence from multiple projects shows that interventions have improved access to climate information, with community groups and radio being significant tools for dissemination. Four projects reported instances of people altering their behaviour or practices as a result of receiving climate information. More evidence would be needed to understand the extent to which anticipatory and adaptive capacities have improved. Key national-level policy developments in Ethiopia (CMESA-E) have put in place structures needed for climate information services to facilitate transfer and exchange of climate information at scale.

¹⁰⁸ MAR-X XFE, pp. 45–46.

¹⁰⁹ Ibid., p. 52.

¹¹⁰ Ibid., p. 37.

Table 14: Climate information – access and uptake – BRACED-X reported outcomes

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Nepal (Anukulan-X)	Support to community or local-level climate information and early warning networks; building capacity of local government to manage climate information and EWS	<p>Medium evidence to support outcomes that build anticipatory capacities:</p> <p>6 weather (3 rainfall, 3 gauge) stations established to benefit 6 districts¹¹¹</p> <p>12 EWS set up through LAPAs, benefiting 34,560 people or 64% of participants, compared with 5% at baseline</p>
Kenya (PROGRESS-X)	Support to community or local-level climate information and early warning networks; building capacity of local government to manage climate information and EWS	<p>Medium evidence to support outcomes that build anticipatory capacities:</p> <p>Ward Adaptation Planning Committees have become sustainable structures for disseminating climate information*</p> <p>Strong community support noted by Wajir Community Radio, which takes daily calls to report disease outbreaks, track animal deaths from disease, help track lost children and report on rainfall across the county and beyond*</p>
Mali, Niger (SUR1M-X)	Support to development of large-scale or national climate information networks; support to community or local-level climate information and early warning networks; building capacity of local government to manage climate information and EWS	<p>Strong evidence to support outcomes that build anticipatory capacities:</p> <p>330 early warning groups (239 in Niger; 91 in Mali) set up or reworked to collect and analyse data on vulnerability and DRR; equipped with data collection tools and communication systems*</p> <p>19 municipalities (7 in Mali; 12 in Niger) coordinate the collection and analysis of early warning data and share information at local and regional levels*</p> <p>2/3 of participants listen to daily or weekly radio broadcasts giving climate information*</p>
Burkina Faso (BRES-X)	Support to community or local level climate information	<p>Strong-medium evidence to support outcomes that build anticipatory capacities:</p> <p>Informal climate information dissemination networks established by 'relay' farmers, of whom 192 were trained by the National Meteorological Service</p> <p>Participants show a slightly higher rate (55.80%) of access to climate information than non-participants (51.40%)</p>
Ethiopia (CMESA-E)	Support to development of large-scale or national climate information networks; support to community or local level climate information services and early warning networks	<p>Strong evidence to support outcomes that build anticipatory capacities, with transformative potential:</p> <p>Improved climate information services system</p> <p>The NFCS process has approved two research activities, one to prepare/update hazard maps and another to update the NMA user interface/website, with potential for a platform for increased awareness and early warning for catchments that cover 12 river basins and 9 major dams</p> <p>93% of listening group members receive some, most or all climate forecasts through the group</p>
Mali (WYL)	Support to community or local-level climate information	<p>Weak evidence to support outcomes that build anticipatory and adaptive capacities:</p> <p>57% of surveyed farmers used climate information to make livelihood decisions</p>
Burkina Faso, Mali, Mauritania, Niger, Senegal (BRACED-X-LM)	Support to development of large-scale or national climate information networks	<p>Weak evidence to support outcomes that build absorptive and anticipatory capacities:</p> <p>Transhumant Information System's climate information reduced agro-pastoralists' need for reconnaissance trips</p>

¹¹¹ Anukulan-X Year 4 Annual Report Supplement, May 2019.

COUNTRY (PROJECT)	ACTIVITIES	EVIDENCE OF OUTCOME
Mali, Senegal (DCF)	Capacity-building of local governments and specialist committees and make them more responsive to climate variability by using and disseminating climate information	<p>Strong quantitative output-level evidence reported in DCF's Annual Report Supplement from year 4 (ARS4) in support of emerging outcomes that build anticipatory capacities:</p> <p>Farmers use climate information in their agricultural calendar¹¹²</p> <p>In Mali and Senegal and Mali, local planning takes better account of the manifestations of climate change and climate information¹¹³</p> <p>Administrative units of both governments (3 <i>cercles</i> in Mali and 3 <i>départements</i> in Senegal) benefit from an improved access to climate information,¹¹⁴ with the following evidence:</p> <p>At the cercle-level in Mali: Mopti (83.3%), Douentza (100%) and Koro (100%)</p> <p>At the commune-level in Mali:</p> <ul style="list-style-type: none"> • Douentza: Douentza (91.7%), Koubewel Koundia (91.7%) • Mopti: Konna (100%), Sio (100%) • Koro: Koro (100%), Pel Maounde (50%) <p>At the department-level in Senegal: Kaffrine (100%), Birkelane (33.3%), Malem Hodar (75%) and Kounghoul (83.3%)</p> <p>At the commune-level in Senegal:</p> <ul style="list-style-type: none"> • Kaffrine: Boulel (50%), Kahi (50%) • Birkelane: Mabo (58.3%), Keur Mboucky (58.3%) • Malem Hodar: Sagna (66.7%), Diancké Souf (66.7%) • Kounghoul: Lour Escalé (83.3%), Missira Wadene (83.3%)

* Reporting period encompasses BRACED and BRACED-X.

Building anticipatory and adaptive capacities through the collection, dissemination and use of climate information/data continues to be an important component of BRACED-X activities. The BRACED FE identified achievements in projects' ability to facilitate the transfer of climate information, especially for short-term and seasonal forecasting. Work on fostering and multiplying links between institutional levels is a key driver of improved dissemination of information. BRACED-X projects largely continued to

¹¹² DCF XFE, p. 65.

¹¹³ DCF Year 4 Annual Report Supplement. Climate change has been fully integrated into planning in all three cercles in Mali (Mopti, Douentza, Koro) and is largely incorporated into planning of the following communes in those cercles: Douentza: Douentza (83.3%), Koubewel Koundia (91.7%); Mopti: Konna (83.3%), Sio (100%); Koro: Koro (100%), Pel Maounde (83.3%). In Senegal, climate change is largely or fully integrated into planning of the following departments: Kaffrine (100%), Birkelane (66.7%), Malem Hodar (91.7%), Kounghoul (100%). Similar level of integration has been evidenced at the commune-level in: Kaffrine: Boulel (66.7%), Kahi (91.7%); Birkelane: Mabo (83.3%), Keur Mboucky (91.7%) Malem Hodar: Sagna (100%), Diancké Souf (100%); Kounghoul: Lour Escalé (100%), Missira Wadene (83.3%).

¹¹⁴ Ibid.

support structures and systems established during the BRACED phase. The CMESA-E project with funding under the BRACED-X policy window focused solely on institutional development and policy change for climate services, building on work in Ethiopia under the MAR and Climate Information and Assets for Resilience in Ethiopia (CIARE) projects. This section explores outcomes across the projects both at the institutional level and in terms of access, uptake and use of information on the ground.

The most significant tangible outcome at national level was the draft NFCS produced in Ethiopia (CMESA-E). The short timeframe of BRACED-X made it impossible to observe or evaluate the impacts of this policy. In an extensive consultation process, though, stakeholders agreed that the NFCS had put in place the necessary structures to link national-level institutions and technological innovation with local systems. More time will be needed to understand how this system might work effectively, and what its contribution to resilience at a national scale might be, but it is clear that the project has achieved considerable success in laying the foundations for substantial institutional change.

Further outcomes have built on BRACED work that developed local-level climate information systems. There is limited, weak evidence that project interventions contributed to strengthened capacity of local government institutions to disseminate information. Qualitative and quantitative evidence from Mali and Senegal (DCF) suggests that local planning now takes climate information into account and that administrative units (*cercles, départements*) of both governments benefit from an improved access to climate information.¹¹⁵ In Nepal (Anukulan-X), similar evidence shows that EWS have been integrated into LAPAs. Community-level institutions established and supported during BRACED continued to develop into effective networks for disseminating information at the local level. Qualitative evidence from Burkina Faso (BRES-X) and Niger (BRACED-X-LM) shows that designated 'relay' or 'resource' farmers were able to draw on informal networks to share information they had gathered or received. In Ethiopia (CMESA-E), listening groups set up as part of the CIARE project continued to function as efficient conduits for climate information services. Good evidence also emerged that listening group members were more proactive and knowledgeable in seeking out additional sources of climate information services than non-members. This suggests that the use of groups contributed to building anticipatory capacity beyond the life of the project itself. Community groups were not, however, successfully established in Ethiopian pastoralist communities involved in the MAR-X project. SMS and committee warning systems were only piloted during the extension phase, so evidence on the impact, or on the way they were used by early warning committees, had not emerged by the end of the project, suggesting more time would be needed for any impacts to be measured.

¹¹⁵ Ibid.

Overall, BRACED-X projects played an important brokering role, working in partnership with national meteorological agencies, sectoral ministries and departments and private sector providers to ensure women and men could **access, interpret and apply climate services** at appropriate scales. Strong evidence emerged from six out of nine projects that people in project areas had access to climate information, in some cases through the community groups discussed above (CMESA-E, BRES-X), national reporting systems using local knowledge (BRACED-X-LM) or construction of weather stations (Anukulan-X). Working in Ethiopia, in contexts where many people used traditional forecasting, CMESA-E built on the model of listening groups supported by CIARE, which continued to be a successful and important forum for people to **interpret the scientific forecasts alongside traditional knowledge and build trust**. Radio was an important means for disseminating information across contexts, given people's high levels of trust in radio programmes as a source of information, and therefore highly credible. This was the main conduit in the Niger River Basin (SUR1M-X) and in Kenya/Uganda (PROGRESS-X).

PROGRESS-X partnered with Wajir Community Radio, which was trusted by pastoralist communities, and worked through existing structures like Ward Adaptation Planning Committees, which were set up by members of the implementation team under PROGRESS and other projects before PROGRESS-X started. This provided an effective and crucial 'communication bridge' between communities and county government and a channel for communities to air grievances and share their priority needs.¹¹⁶ Not only was the radio station credible, but also it spoke their language and was perceived by community members as being on their side. The radio station effectively became a 'champion' for the project at the community level.

Evidence for people acting on information received to prepare for anticipated shocks was more mixed and overall it remains unclear how many IPs used climate information in their own planning and implementation. This relates directly to questions of sustainability. Good qualitative evidence from implementation of the Transhumant Information System in Niger (BRACED-X-LM) found that access to information reduced the need for reconnaissance trips by transhumant pastoralists, saving them both time and expenses incurred. Some qualitative evidence from Burkina Faso (BRES-X) suggests that farmers altered agricultural practices based on the climate information they received, for example using higher or lower areas for cropping according to rainfall predictions. Weaker evidence found that participants used climate information to influence livelihood decisions (Mali – WYL). Evidence from Ethiopia (MAR-X) suggests participants who received warnings were more likely to sell livestock. More detail would be needed, however, to understand if these sales represent an effective use of information to ensure higher market prices, or if households engaged in sale of productive assets.

¹¹⁶ PROGRESS-X Realist Case Study, p. 40.

Specific barriers to effective uptake and use of climate information were highlighted in three projects. In the Niger river basin, SUR1M-X experienced challenges related to funding of community-based early warning bodies, which collect data on monthly basis. Although these groups are recognised for their role in EWS and disaster risk mapping, they do not have sufficient financial resources and equipment to respond or transport (motorbikes) to report the information to municipalities (SUR1M XFE). In addition, both mobile phone coverage (Mali, WYL) and the coverage of climate stations, especially in drought-prone areas (Ethiopia, CMESA-E), were found to be insufficient in the intervention areas. This undermines efforts to improve beneficiaries' anticipatory capacity.



5. IMPLEMENTING TO BUILD RESILIENCE

Image:
Stephan Gladieu/
World Bank

The main resilience-building achievements of the nine BRACED-X projects, reported at the XFE, are discussed in the previous section. Further data on these is available in the Annual Reporting Supplement Reports and Routes to Resilience 2019. The outcomes demonstrate how BRACED-X achievements can be considered to be 'resilience' guided by the framing set out in Section 2.3 linked to the 3As and T, and the underlying change pathways.

This section focuses further on **how and why change happens at a more generalised level**, synthesising across the activities and outcomes of the individual projects to examine **overarching process hypotheses to guide implementation design**.

Continuing the approach taken throughout the BRACED programme, during the extension period positive outcomes were observed where projects responded to context when implementing. This is reflected not only in overall project design but also within projects. For example, working across five countries, BRACED-X-LM describes IPs favouring **different interventions dependent on the context and location**.¹¹⁷ **Familiarity with and experience of working within particular contexts, and bringing this to bear in designing and carrying out activities, is good practice and means that interventions are more likely to be appropriate,**

¹¹⁷ BRACED-X-LM XFE, p. 9.

relevant and credible. These are important factors in ensuring uptake, behavioural and/or systemic change and sustainability. The flexibility and opportunity to adapt offered by the overall BRACED programme design and the opportunity for IPs to recast projects for the second (extension) phase lend themselves well to enabling this fundamental mechanism.

The implementation team knew the political landscape and recent policy developments and correctly assessed what support is needed by the county government and how to provide it while promoting a policy change to protect pastoralism. The implementation team had trust of key stakeholders, knew their needs and challenges, and was able to identify best ways to support them while changing their opinion on pastoralism.

PROGRESS-X Realist Case Study, p. 32

It is important to note that BRACED-X projects highlighted specific barriers related to political emergencies/insecurity that affected implementation. In particular:

- CMESA-E was implemented in a year of transition in Ethiopia and therefore operated within a context of widespread unrest, public anti-government demonstrations and violent inter-ethnic conflicts. This affected travel to collect data to inform a strategy to deliver the national framework for climate services. It was also affected negatively by administration staff changes in the ministries involved.¹¹⁸
- The DCF project was affected by insecurity in the region of Mopti and Dogon-Fulani communal violence in central Mali.¹¹⁹
- PROGRESS-X: In Kenya, the election cycle of August 2017 not only created political uncertainty and threat of violence but also affected disbursement of drought relief funding, exacerbating the situation for pastoralists and households, which persisted. Building relationships with newly elected county government leaders was time-consuming and added to the project team's workload in 2018.¹²⁰

5.1 Linking, layering and sequencing

The extension period evaluation has provided further evidence to confirm the continued relevance of **layering and linking** in resilience-building interventions (activities and outcomes, and across institutions) in order to successfully achieve resilience processes and outcomes. This has been a key feature of the BRACED programme design – projects address multiple

¹¹⁸ CMESA-E XFE, pp. 11, 12 and 15.

¹¹⁹ DCF XFE, p. 40.

¹²⁰ PROGRESS-X XFE, p. 3.

challenges in building and strengthening resilience at different levels using a range of strategies. Combining several activities (project packages of activities) may act as an adaptation mechanism in itself in that it potentially diversifies livelihood strategies among groups of participants. Projects implement packages of activities in ways that ensure complementarity between them as well as making important links across different institutions at various levels ('bridging' links), along with effective **sequencing** of activities in order to achieve desired outcomes.

The BRACED FE found that:

In contexts where there are weak or non-existent market and institutional linkages:

- linking and bridging between existing local institutions (e.g. savings groups and farmer groups) and activities means that projects can build on existing processes and actions and create links between different parts of the system. Linking project activities to income generation acts as an incentive for people to participate (15/15 IPs).
 - sequencing activities appropriately and providing information in a timely manner, with people supported to apply new information, means that participants can make informed decisions about how they invest resources provided by the programme in ways that are more likely to lead to resilient outcomes (15/15 IPs).
-

In contexts of multiple, systemic gaps, projects need to carry out a range of activities, moving everything forward on several fronts in a timely manner and often simultaneously to fill those gaps. Failing to do so means risking implementation failure. For example, support to diversify into other crops without also addressing supply and demand market constraints means activities will fall at the first hurdle. Different ways of layering and linking include training plus agricultural inputs/equipment, plus access to markets/finance or value chain investments, plus access to information, leading to increased yields, income, improvements in basic needs, etc. (Anukulan-X, BRES-X, WYL, SUR1M-X, MAR-X, PROGRESS-X); and investing in individuals/communities, plus investing in institutions and/or national-level policy change (individuals + institutions: Anukulan-X, BRES-X, BRACED-X-LM, SUR1M-X, WYL, MAR-X, with national-level policy changes too: DCF, PROGRESS-X). Sustainability comes through in different ways depending on the model: through increased income allowing farmers to continue new practices (e.g. under BRES-X in Burkina Faso: increased income from more effective poultry production allowed women producers to continue new practices); through strengthened institutions continuing to provide support to individuals/households (PROGRESS-X, Kenya: institutional changes to CTS governance structures (Sharia compliance) meant it could continue to provide culturally appropriate loans; DCF, Mali and Senegal: institutional capacity-building (local and national government levels) enabled funding flows

to communities); and through strengthened value chains/markets/private sector actors (PROGRESS-X, Wajir county, Kenya: development of the camel milk value chain filled a gap in the local market and attracted investment beyond project end from private sector actors/government).

There is strong evidence across all nine projects of how different ways of layering and linking activities and linking across institutions have been a key element of change pathways leading to resilience, supporting the 'packages of activities' approach to resilience programming. For example, in Mali, building on work started under BRACED's Ric4Rec project, WYL combined formation of micro-enterprises within communities, the establishment of a cereal bank and the improvement of communities' knowledge. In Nepal, farmers were supported throughout the entire cycle from production to sales in the vegetable and essential oil sub-sectors (Anukulan-X). In PROGRESS-X in Kenya and Uganda, participating households were involved in multiple activities, from VSLAs to agriculture and safe spaces.

Working with structures that communities already trust, and that have buy-in from local communities, supports projects' efforts to implement multiple activities on multiple levels, so everything is ready when it needs to be (strong evidence, all IPs). For example, in Ethiopia, MAR-X found that:

Bringing together members of the community and government officials in PNRM, resulted in governance structures that considered local knowledge, access to rights whilst at the same time supported inclusive decision-making.

MAR-X XFE, p. 16

It is important to note that **fostering and cementing 'bridging' links takes time**. For example, DCF prioritised establishing the funding mechanism at community and communal levels, aiming to deal with short-, medium- and long-term goals simultaneously by combining several levels of intervention from the local (family farms, villages) to the communal, departmental and national.

The needs expressed at the communal level, which is the closest level of government to people, have been and probably still are immediate. Their stated priorities strengthen the strategies local people already use to respond to current climate shocks and variability.

DCF XFE, p. 36

At XFE (March 2019), DCF's work at the intermediate local government level (*cercles/départements*, regions) was relatively under-developed. However, during March 2019 in Mali, DCF worked with existing national agency ANICT, developing awareness of climate issues, and building capacity to seek out and channel decentralised funding. This allowed ANICT to apply for Green Climate Fund accreditation, which will, if successful, unlock a significant source of climate funding.¹²¹

¹²¹ KII with DCF.

Data on sequencing shows the projects are still **timing and sequencing their activities in ways that enable people to take best advantage of those activities** (strong evidence) (MAR-X, Anukulan-X, WYL, PROGRESS-X, BRES-X, SUR1M-X), signalling good practice across the projects: for example timing livestock purchase with harvest time so livestock feed is readily available;¹²² or building capacities of VSLAs before a new loan organisation comes to town, so people are ready for the arrival of a new institution, as in the case of PROGRESS-X and the arrival of CTS in Wajir. PROGRESS-X worked with the existing VSLAs to train them in leadership, governance, record-keeping, group formation and business development skills. Participants were incentivised by the prospect of better access to finance: '*access to larger loans and a secure location for cash*'.¹²³ Sequencing activities in the right way proves to be important not only for timely provision of information but also in other areas of implementation. We can see this particularly in the 'bottom-up' processes projects followed – from demonstrating results and addressing basic needs, to engaging with policy.

In some cases, timing of activities did not consider fully the potential impacts on markets and the implications for prices and incomes. For example, market 'distortion' was created in the instance of the livestock fattening activities under WYL. The system was based on a cycle whereby those initially granted livestock would, following the sale of the fattened animal, reimburse the Village Committee for Adaptation to Climate Change (CVACC), with a small amount of interest, while keeping the profit. The amount collected by the CVACC would be used to purchase new heads of livestock for new beneficiaries. However, the sudden, increased demand for livestock led to price hikes:

... group purchase where different villages are on the same market at the same time has contributed to considerably increased purchase prices. With a rising market demand and traders' knowledge that it is the project that finances these purchases, they have increased prices. In some cases, the market could not cope with the demand from which the purchase was calibrated over several days. ... To contain this price spike, a market study must be done beforehand to see the capacity of the market to cope with such a demand. And it will stagger the purchase over time, that is to say that purchases will be made in several stages so as not to cause a price surge. This may have a negative impact on neighboring villages that have not received these subsidies and therefore make them more vulnerable.

WYL XFE, p. 22

¹²² WYL XFE, p. 22.

¹²³ PROGRESS-X XFE, p. 14.

In a similar vein, taking seasonality into account when timing loans makes all the difference to how far the money goes:

The timing in relation to market activity and price of livestock and other goods when the loan was received also impacted whether (agro) pastoralist were able to make greater returns on their investments and pay their loan back in time (C).

MAR-X XFE, p. 5

We find with BRACED-X that the contextual factors related to timing and sequencing tend to be broader than just weak or non-existent market and institutional linkages. From the BRACED-X data, there are many similar instances across the projects of sequencing so that **the outcome of one activity becomes the context for the next one** (see, for example, PROGRESS-X work on the camel milk value chain, as well as SUR1M-X, BRES-X, MAR-X). In addition, there is strong evidence that **sequencing is important for creating champions, so these become the mechanisms for change, creating buy-in and initiating action at different levels**, as illustrated by PROGRESS-X:

People who have taken part in the P&P training course and trainings on GIS mapping became real champions – promoting change to enable both bottom-up data collection and pastoralism. The message promoted by the project has been shared on social media and by the radio with positive response from the communities as well as the key decision-makers in the county, like the CEC for Lands that coordinates action to reflect the needs of pastoralists in national policy.

PROGRESS-X Case Study, p. 49

Evidence from BRACED-X allows us to further refine the 'layering, linking and sequencing' process hypothesis to guide intervention design:

Process hypothesis: Layering, linking and sequencing

In contexts where there are weak or non-existent market and institutional linkages, with multiple gaps across all systems:

- Linking and bridging between existing local institutions (e.g. savings groups and farmer groups), leveraging structures that communities already trust, ensuring enough time is available to forge important links, linking between activities and timing and sequencing activities in ways that enable people to take best advantage of those activities mean that projects can build on existing processes and actions and create links between different parts of the system, leading to successful implementation and take-up and, subsequently, desired resilience outcomes (9/9 IPs; strong evidence).
-

5.2 Collaboration and credibility

BRACED-X projects continue to work collaboratively with communities to ensure their needs and priorities are identified bottom-up. For example, in WYL, communities formed village-level resilience plans based on a 'participatory diagnosis' with Communal Committee for Adaptation to Climate Change:

This diagnosis has further improved their awareness of how aspects of Climate Change affected them, how it continues to affect them, and how it will affect them if nothing is done.

WYL XFE, p. 21

One important action arising from the 'diagnosis' was relocating grain banks to protect them from flooding, improving the absorptive capacity of the whole community. The IP believes that **activities chosen by the communities themselves contribute more to improving their resilience in relation to their context.**

However, in the context of climate resilience, communities' decisions need to be informed by future climate scenarios (not just 'needs'); the XFE lacks evidence of this happening in the projects.

The BRACED FE found that:

Across a range of contexts:

- by working collaboratively, participating with communities ensures community buy-in. This means that interventions are more likely to address beneficiary needs and expectations, uptake is higher and people will actually carry out activities that will improve their absorptive and adaptive capacities. Interventions and results are more likely to be sustainable after direct project involvement ends.
 - given the time it takes to effect tangible change and build resilience, this means that projects are more likely in the medium to long term to successfully result in resilient outcomes, because the processes through which these are generated are also resilient (10/15 IPs).
-

BRACED-X FE data also provides further evidence (six of nine IPs: BRES-X, SUR1M-X, MAR-X, DCF, PROGRESS-X, WYL) to confirm the importance of aligning project activities with participants' immediate needs, which collaborative working contributes importantly to. This helps ensure buy-in and credibility, as well as a sense of ownership, which is believed to increase the chances of sustainability post-project. This is illustrated by WYL's 'participatory diagnosis' work in Mali, mentioned earlier, and work in Mali and Niger by SUR1M-X, as well as work with pastoralists in Ethiopia under MAR-X:

*If the design and implementation of the project are **aligned to the immediate needs of (agro) pastoralists** (C), then there will be a greater chance the programme will be more widely accepted (O) and create more effective and efficient use of project resources, because **pastoralists are intrinsically motivated to change behaviour when it is understood that it is a solution to the challenges they are currently facing** (M).*

MAR-X XFE, pp. 6 and 51

And:

The leadership from the community that was required from the intervention issued more accountability on the locals for the management of water and rangeland (M), which enabled greater uptake of the practice and has incentivised greater attention and management toward scarce resources (O). Indigenous knowledge regarding natural resource management during both dry and wet season of grazing areas and utilisation of water to prevent land degradation meant that pre-existing knowledge was better able to support the uptake on new practices, given their initial understanding of importance of sustainable natural resource management (C).

MAR-X XFE, p. 40

In the case of DCF, the project extension introduced new structures for collaboration among key stakeholders. National and local stakeholders are part of the climate finance mechanism itself. While climate finance is managed by national development agencies, the initiatives it funds are selected by local committees according to pre-defined criteria. This process channels finance to local communities through existing national development finance frameworks in both countries:

The wider 'we' includes local communities and authorities that are part of the whole mechanism. ... There is no point in us saying 'they want this'... it's 'us' all together who are doing the advocacy so if the local communities are demanding a voice in decision-making and the local authorities asking for a more open governance and more linkages, that really works.

KII with DCF, 14 June 2019

In SUR1M-X's EWS work in Mali and Niger, by actively combining community engagement and ownership of activities with involvement of municipal, *département/cercle* and national technical structures, including the private sector, and ensuring the system was integrated at all levels and in line with national strategies, the IP demonstrates how collaboration across multiple institutional levels can improve resilience (anticipatory capacity):

*The SUR1M project has ensured GAP-RU/SCAP-RU members' training on DRR-risk mapping, data collection of key risks and contextual variables such as prices, river levels, and crop pests (I1); **communities' engagement and ownership of activities (M1)**, the involvement of municipal, 'departement' level/circle, national technical structures and private actors (communications technologies, rural radio broadcasters) (M2), and the full integration of the early warning system at all levels that 'fits' within national strategies (M3), as well as debates/dialogues between RRC experts being broadcast on local radios (M4). Information collected at village level and key disaster warning messages are sent to communities in the event of a disaster (O1). Data on key risks and contextual variables such as prices, river levels and crop pests are also provided to communities on a regular basis (O2). As a result, communities respond more rapidly and more shrewdly to disasters (better organised, first to respond, faster and more comprehensive response) (O3).*

SUR1M-X XFE, p. 4

While choice of intervention can be described as meeting priority or immediate needs because ideas for projects originated from user and producer groups, which subsequently oversaw and monitored their implementation (drinking water supplies under the DCF project in Mali), the project XFE report also highlights instances where 'community priority' is not necessarily inclusive or representative, with the risk of 'elite capture':

Some agricultural investments could work against spaces that were previously reserved for fishing or pastures, and there are instances of the customary authorities looking out for the interests of certain user groups. This shows the drawbacks of an approach that is mainly based on needs expressed by 'communities' – a generic term that can mask divergent interests – and where customary authorities or networks of influence (local elites) have the final say on which projects are selected. These kinds of risk cannot be mitigated by a mechanism, even if it does involve participatory procedures; in this political sphere they can only be mitigated by strengthening the capacities and voices of different user groups.

DCF XFE, p. 95

Process hypothesis: Collaboration and credibility

Across a range of contexts:

- By working collaboratively, participating with communities ensures community buy-in and community leadership ensures greater accountability, ownership and uptake. This means that interventions are more likely to address beneficiary needs and expectations, uptake is higher and people will actually carry out activities that will improve their absorptive and adaptive capacities. Interventions and results are more likely to be sustainable after direct project involvement ends (9/9 IPs; strong evidence).
-

5.3 Getting the right people on board

Getting the right people on board, at all levels, featured prominently during the previous BRACED FE. **BRACED-X contributes further strong evidence of the role of this mechanism in advancing policy and advocacy work, especially at higher institutional levels.**

The BRACED FE found that:

- working with credible and respected higher-level formal institutions (such as meteorological services, academic institutions) with recognised expertise and a 'presence' can provide important political champions for the project activities and increase the credibility and the reach of interventions, leading to better uptake and greater sustainability.
 - getting the right people on board at the community level can enhance the credibility of the activities in the eyes of participants and potentially mitigate the risk of further entrenching social and cultural norms that exclude certain groups (10/15 IPs).
-

The XFE provides (strong) evidence to further support the importance of 'getting the right people on board' (stakeholders) in ensuring and enhancing the credibility of the projects, so that communities (individuals and households) participate (e.g. PROGRESS-X, MAR-X, DCF). This links strongly to the previous discussion about the importance of contexts of trust, and the need for projects to build and capitalise on this. In terms of guarding against further entrenching social norms that may exclude marginalised groups, there is little evidence of this in the XFE.

Projects do well and are more likely to be sustainable when working through channels – community representatives, partners, communication modes – that people already have confidence in. For all nine BRACED-X projects, this has involved building on pre-existing relationships and other opportunities presented by their contexts, across all institutional levels. In the case of MAR-X, the project XFE highlights the importance of appointing project staff who already had links with and knowledge of the communities for engendering trust.¹²⁴ Working with a trusted and well-established local partner in Senegal and having decades of experience working in Mali, both decentralised countries, DCF was able to identify and respond to existing power dynamics and make decision-making about climate finance more locally or socially inclusive. This benefited primarily women, young people and marginalised groups who were represented in local decision-making bodies and participated in selected projects.¹²⁵ Despite the presence of other international climate finance mechanisms, DCF was able to engage key authorities and support them in the process of obtaining accreditation to access financial resources from international climate funds, like the Green Climate Fund (in Mali), and national development budgets to fund projects to meet adaptation and development needs of local populations, **integrating the mechanism within existing governance structures.**¹²⁶ The DCF model (Senegal) is based on a previously established institutional mechanism (PNDL) and to a certain extent benefited from stakeholders' trust in PNDL, **'gaining a certain credit and kind of "brand" guarantee from the fact that it houses the fund'**. Further:

Relations with institutions such as [the meteorological agency] ANACIM, which already intervened in the region of Kaffrine, also helped consolidate the programme's institutional credibility and future institutionalisation. The collaboration helped build a shared experience, creating a 'bond' and sense of joint progress that facilitated the construction and consolidation of a dynamic at the national level.

DCF XFE, p. 35

During BRACED-X, LM formed a formal partnership with the Permanent Interstate Committee for Drought Control in the Sahel, which allowed it to reach a level that BRACED alone would never have achieved. This was very much a strategic partnership that provided a 'way in'. The IP had been working with it informally for many years, including during BRACED, and used BRACED-X to do work together more formally. Reaching across institutional levels, there is strong evidence that taking care to do this the right way, once again building on existing relationships and capitalising on pre-existing contexts of trust, is an important mechanism in change pathways towards building resilience:

¹²⁴ MAR-X XFE, p. 38.

¹²⁵ Djohy (2019).

¹²⁶ DCF KII, 14 June 2019.

The proactiveness of local leaders and government officials in supporting the project in bridging relationships with (hard to reach) communities (M), was critical to the long-term institutional linkages that formed at multiple levels (O). This effectively exploits the existing relationships and trust between local leaders and community members when local leaders needed bridge connection with local communities and higher-level stakeholders (C). At the same time, the increased involvement and participation of local leaders (M), enhanced local-level initiatives and actions and initiated dialogue between locals and both regional and national level actors (O).

MAR-X XFE, p. 41

By recognising important contextual factors that make issues pastoralists face so complex, and which require action from across several government departments and county and national governments as well as pastoralists themselves, PROGRESS-X was able to explicitly address the need to identify the right stakeholders and structures (in this case community radio combined with targeting key influencers among political appointees within the county government) in order to gain traction and momentum with its activities. This meant *'the project needed to tap into existing relationships and networks to spread the message of pro-pastoralism from the P&P training course to decision-makers at the national government, various county departments as well as rural communities'*.¹²⁷

To promote ownership of the change process by key actors at multiple institutional levels, CMESA-E worked closely with a '**champion of change**' who was seconded to the IP team from NMA. This well-networked technical member of NMA staff with 20 years of experience was able to advance NFCS development through his relationships with key organisations. It was his commitment to see the change happen and the technical knowledge and connections he has made working across a number of departments within NMA that enabled action towards a shared objective (development of the NFCS) at multiple and primarily higher institutional levels. He was well accepted by his colleagues within the agency, including the director general and a senior staff member there:

[His] presence has made the life easier for us. Whenever we were stranded, e.g. dealing with the government which isn't easy as the country has been unstable for the past two to three years... we could call the government from his mobile to get things done. The team would have been challenged by much bureaucracy otherwise.

KII with CMESA-E

¹²⁷ PROGRESS-X Realist Case Study, p. 50.

In contexts where change required simultaneous action by multiple stakeholders, having a technically strong and experienced 'champion of change' with connections and trust of key actors helped bring down the silos, leading to NFCS development and transferring ownership of the policy from the IP to relevant agencies:

This collaborative approach to intervention design and implementation to co-produce the framework, was appreciated by stakeholders and increased their interest and cooperation and by doing so leveraged their knowledge and skills specific to their subject areas to inform the framework. Well-informed NFCS was a crucial pre-condition to its successful implementation once approved by the national government.

CMESA-E XFE, p. 2

Process hypothesis: getting the right people on board

Working with credible and respected higher-level formal institutions (such as meteorological services, academic institutions) with recognised expertise and a 'presence', including secondments between projects and relevant institutions, can provide important political champions for the project, who recognise the complexity of problems faced by marginalised groups.

Building on pre-existing relationships, leveraging channels that people already have confidence in, working with and across multiple levels and institutions, increases the credibility and the reach of interventions, leading to better uptake and greater likelihood of sustainability (9/9 IPs; strong evidence).

5.4 Summary and reflections

The BRACED extension has seen further achievements by the projects in building resilience and valuable learning where things have not worked so well. The XFEs and synthesis contribute evidence to support theories about how change happens in resilience-building programmes and we are able to refine the findings (ICMOs) from the FE of the previous BRACED phase, adding to the existing evidence base about building and strengthening resilience. Specifically, BRACED-X provides more results: more people brought on board (beneficiaries), more time for activities to come to fruition and opportunities to build on BRACED experiences and successes. It also extends and deepens data on how change happens at higher institutional levels thanks to the greater focus on policy work through the BRACED-X policy window-funded projects. In expanding the ICMOs from the FE of the previous BRACED phase, we are able to see how the same mechanisms play out at different levels, notably demonstration effects, as well as getting the right people on board. BRACED-X's XFE also finds that projects continue to work hard to influence or create contexts that foster change.

The packages of activities approach continues to be relevant and effective; resilience should be understood as both process and outcome

BRACED-X projects were most effective where they implemented at the right time and in the right sequence, a range of interventions designed to promote individuals' or households' anticipatory, absorptive and adaptive capacities. Multiple projects focused on strengthening participants' ability to meet basic needs through a combined focus on agricultural activities, increases in disposable income and improved water infrastructure. This occurred in tandem with support to diversifying people's income sources and activities. Access to appropriate financial services remained a crucial factor across contexts. Shifts to more climate-adaptive agricultural and land management practices lent weight to the conclusion drawn from BRACED that resilience should be understood as both process and outcome. Successful adoption of climate-smart agricultural practices represents both a resilience outcome for producers – increasing their productivity and income – and a building block in the process of achieving more resilient management of land and resources.

Collaborative processes lead to an enabling policy-making environment; layering activities and linking across systems are key for institutional change

BRACED-X achieved outcomes at scale in Ethiopia (CMESA-E) through strategic engagement with government stakeholders and institutions, resulting in a national policy framework. Important progress was made towards successfully scaling up climate financing initiatives (PROGRESS-X, DCF). Policy work under BRACED-X was on the whole founded on projects investing in understanding political economy and power. The collaborative processes involved in reaching outcomes created a more enabling policy-making environment, with greater awareness of the need for 'resilience thinking'. Projects demonstrated that layering and linking activities at systemic level, identified during BRACED as a successful mechanism, can be effective in transforming value chains and local markets. Outcomes at local institutional levels showed progress towards resilience, with climate-sensitive measures integrated into planning. Future work would need to consider more closely how this translates into actions and activities that enable communities to become more resilient to climate extremes.

Building capacities of women can improve their status, but we are not yet seeing transformational change

Where projects increased women's income, women also gained control over some elements of household decision-making, resulting in small shifts to gendered norms at household level. This implies that a focus on building women's absorptive and adaptive capacities through a range of income-generating activities can also be an effective means to promote positive changes in women's status within households and communities. A considerable investment of time would be needed to begin to see more transformative change in gendered power structures. Echoing the findings of the previous evaluation, success in gender and inclusion requires strategic approaches to shift power.

Developing and strengthening institutions for climate information has great potential to build resilience, but this takes time

Developing and strengthening regional and local networks, both formal and informal, led to better provision and access across a range of contexts. While clear achievements were made in establishing national structures for disseminating climate information, the impacts of this on resilience will emerge only over time. The mixed evidence on the uptake of and response to climate information, however, again highlights the need to see resilience as a process. Developing structures, awareness and knowledge represents fundamental and necessary progress towards anticipatory capacities. This rests on users trusting forecasts and using them consistently over time if information is to inform and influence decision-making in ways that lead to greater resilience. Access to information needs to be sustained beyond the life of the project both to engender trust and to ensure resilience in the longer term. This points to the importance of ensuring both ownership and capacity of both local and national actors so that services may be sustained without direct project support.

Changing beliefs and perceptions form a foundation for long-term-change

Changes to mindsets, views, perceptions and beliefs are perceived to be a pillar of transformational change.¹²⁸ Therefore, projects that have changed stakeholders' perceptions of pastoralism have potentially built a foundation for a long-term change. The processes by means of which established actors with relevant capacities and mandates acquire ownership of new tools and approaches that accommodate wider and sustained change at multiple levels are particularly important for achieving a transformational change.¹²⁹

¹²⁸ Francis *et al.* (2003) and Kotter (1995) in Bahadur *et al.* (2015).

¹²⁹ Bahadur *et al.* (2015).



6. WHAT DIFFERENCE HAS BRACED-X MADE?

Image: CTA ACP-EU

This synthesis of BRACED project FEs used a realist lens to address the overarching evaluation question:

What difference did BRACED-X make, how, why, for whom and in what circumstances?

As with previous evaluations of the BRACED projects, our focus is on what can be learned from across the BRACED-X portfolio about future resilience-strengthening programming, aiming to build community resilience at scale. This section sets out these key lessons emerging from the synthesis – about resilience itself and about projects to build resilience – before discussing what the BRACED extension period has contributed.

6.1 Learning about resilience

The BRACED XFEs offer a number of further insights into how and why resilience is built and strengthened. The synthesis provides evidence for conditions and mechanisms (and enablers and barriers to change) important in building and strengthening resilience and that should be taken into account when designing future resilience-strengthening programmes.

Reflecting on our resilience dimensions (Section 2.2), how do the processes, outcomes and underlying change pathways we observe during the XFE embody resilience?

Projects target marginalised people, but it is difficult to say who might have been excluded and why

Projects continued to successfully implement activities that were risk-informed (they reduced risk and increased coping) and inclusive insofar as they targeted the most vulnerable people, including women (notwithstanding the acknowledgement that targeting alone is not enough – see Section 4.3). However, it is **difficult to say who was excluded, how and why, as the data does not provide sufficient detail**. The outcomes and activities have a high degree of interconnectedness, with changes embedded vertically and horizontally in systems, including connections between activities, actors and institutions, and there is strong evidence for this. A key resilience outcome is increased incomes (medium–weak evidence in the XFE), which is directly related to agricultural or livestock livelihoods activities. Important interventions implemented in combination helped achieve this, with strong evidence of BRACED-X project contribution: access to finance, market development/support/strengthening, business training. But what people do with these incomes matters.

Responding to need mobilises stakeholders, but it is not always clear whether 'needs' match what is required to build resilience

Policy work shows strong evidence for filling gaps and responding to 'pressing need', demonstrating that there is already a policy space for BRACED-X processes and outcomes. Situational analyses and needs assessments were key tools for stakeholder mobilisation and project sustainability and timely mobilisation of key decision-makers promoted buy-in across scales. This **bodes well for political will/commitment**, which is further strengthened by engaging key actors (national and local government stakeholders) in project design and implementation. But this raises **questions about needs versus climate considerations**. Is a 'need' actually what is required in terms of adapting to climate risk, extremes and disasters, bringing about transformational change and resilience in the long term? This relates to the resilience dimension of outcomes being 'future-proofed' – how are changes able to stand up to extreme events as well as future scenarios such as a global temperature change exceeding 1.5° C? No scenario analyses were carried out under BRACED-X to be able to 'stress test' outcomes. Overall, it remains unclear how many IPs used climate information in their own planning and implementation. This relates directly to questions of sustainability. Interventions at the community level largely work to shore up and improve strategies reliant on natural resources and therefore subject to the vagaries of the climate. It is not evident how sustainable outcomes would be in the face of longer-term, changing climate-related risks and opportunities. Sustainability cannot be fully assessed without follow-up evaluation several years after the end of BRACED implementation.

Institutional change points to change significant enough to make a difference at scale

In the resilience considerations, we highlight five elements of transformative change (Annex 1). When it comes to the **nature (depth) of the change**, there is some evidence of fundamental differences to the way people are earning incomes, through diversified livelihood activities in sectors with much improved market connections, thanks to value chain support from some projects (e.g. essential oil in Nepal; camel milk in Kenya). Local and national institutional change sees greater inclusion of local-level knowledge and voices in policy processes in some instances (e.g. PROGRESS-X). BRACED-X project coverage also offers evidence of change at a scale significant enough to make a difference to whole communities and many thousands of people, especially in the case of institutional change, although in some cases the evidence base remains thin (**magnitude – scale and scope – of the change**). Most evidence of innovation is in the higher institutional and policy-related work carried out under BRACED-X, especially work by CMESA-E and DCF, while interventions at the community level are mainly tried-and-tested climate-smart agriculture interventions (improved seeds, etc.), conventional approaches to improve livestock livelihoods (water and pasture access; veterinary services), value chains and marketing, etc.

There is some evidence of inclusion in decision-making processes, and engagement with strategic planning processes, pointing to potentially transformative change in terms of **leadership and empowerment**, but not enough to say definitively that it IS transformative. The building blocks seem to be in place. We see in the various barriers and contextual factor that projects were unable to circumvent that there remain prominent systemic bottlenecks to resilient change (discussed in the next section). Examples are social norms that continue to exclude women from important decision-making and priority-setting processes and continued mistrust in formal institutions by marginalised people (and vice versa), preventing systemic change in marginalised people's access to the financial sector.

Long-standing, trusted relationships will endure beyond the life of projects, but to capitalise on progress already made some activities need to continue

When considering **sustainability**, we tend to ask if changes will be sustained, independent of project actions or subsidies. If it is not sustainable – that is, it is unlikely to continue without direct project support – then it is not building resilience. For example, is income realised from the sale of a horticulture crop, introduced by the project, likely to continue after the project? Are improved practices likely to continue without direct support from project staff? Are (micro)-insurance products introduced by the project to be sustained beyond its timeframe? There is evidence of partnerships between IPs and other organisations that are rooted in long-standing relationships and high levels of trust, which are highly likely to endure beyond the life of BRACED and

BRACED-X. Projects approached implementation with sustainability in mind – for example in designing activities to strengthen private sector linkages/market access, grounded in **thorough understanding of the market, its gaps and the potential for sustainability**. Similarly, with policy change, **situational analyses and needs assessments were key tools for stakeholder mobilisation and project sustainability**. CMESA-E, Anukulan-X, DCF and PROGRESS-X all set out **clear roadmaps** and enabled **stakeholders to assume the driver's seat in the envisaged change processes**. Evaluating outcomes and impacts further into the future would help understand how activities have fared without direct IP involvement as well as the degree to which knowledge has been transferred, as intended, from IPs to other stakeholders.

Resilience processes and outcomes need to be adaptive and 'future-proofed' to be transformative. Transformation is essential for sustainability and long-term resilience

Evidence from the BRACED FE suggested change needed to be adaptive for it to be transformative. There is some evidence of adaptive capacities being built, for example diversifying livelihoods and income sources. But, in light of future-proofing considerations, how adaptive is it? Are projects doing enough to bring about (or laying the foundations for) transformative change, which is necessary for change to be sustainable and resilient in the long term? What does sustainability mean in the face of uncertainty? What needs to be sustained and what does not? Is this the 'right' definition in the resilience context? What if the outcomes and practices being sustained are actually not the 'right' things? Resilience processes and outcomes need to be adaptive and 'future-proofed' to be transformative in order, in turn, to be resilient in the longer term.

6.2 Lessons about designing and implementing resilience-building programmes

Timeframes during the previous BRACED FE proved to be important for aligning expectations and designing performance targets. We also found that, not surprisingly, project starting points and contexts determine project 'performance', and, across the board, projects, through their activities, were changing contexts to lay foundations for adaptation. This was supported by the programmes adaptive and flexible management and implementation approach, to allow for 'course correction'. This continued during BRACED-X.

The way projects do things (intervention factors) is still a prominent feature of change pathways and of the story of how resilience is built through the BRACED programme, often through responding to and creating contexts for participant involvement. Projects continue to strive to provide the right incentives to enable participation of a wide range of key stakeholders across multiple institutional levels, and there is strong evidence for this even if thinking and reasoning

are not explained. 'Overarching' process theories cut across all activities and outcomes, providing important learning for guiding design and implementation, and we have been able to refine these theories with BRACED-X evidence: 'layering, linking and sequencing'; 'collaboration and credibility'; 'getting the right people on board'.

More opportunity to appropriately sequence activities

Timeframes are still prominent in BRACED-X change pathways. For example, there is also some evidence that the additional time offered by BRACED-X allowed for absorptive capacities to be more securely built. For example, in Burkina Faso (BRES-X), improvements in household hunger measures for the most vulnerable did not appear until the end of the extension period.

A strong contribution of BRACED-X to learning about implementing resilience-building projects is that we find that 'timeframes' are more about having the **space and time to sequence effectively**. Overall, projects were able to sequence activities to identify stakeholders' needs, generate their buy-in and align their needs with the project's objectives in one activity. Subsequently, they were able to build on the enabling environment it created (buy-in, motivation) and the findings about stakeholders' needs to inform and deliver other project activities, which contributed to ownership of the project's tools, processes and products. **Linking between and sequencing activities** was used by all five policy IPs, which capitalised on and added value to the outcomes of the first activities they implemented as an enabling environment for the consequent activities, providing strong evidence for this mechanism and how crucial it is at all levels of implementation.

Strong foundations provided by past successes

BRACED-X projects successfully contributed to resilience outcomes by building on work from the previous phase of BRACED and learning from experience – for example recognising how important it is to cater to/address basic needs, and especially time-saving, which are important factors in inclusion, in enabling participation in project activities and in continuing to support activities to achieve this. There is also evidence that access to financial services needs to go hand-in-hand with interventions directly supporting productive activities (e.g. Anukulan-X and MAR-X). This relates to the need to change the context within which projects are operating – creating an 'enabling environment' for change to happen. We also see this in the **outcomes that act as mechanisms for further change**. For example, a number of projects dealt with basic needs before moving on to more commercially oriented concerns; there were also many examples of effective sequencing. So, we can see resilience is about creating the key elements in the change pathways, as well as the links between them: the outputs, intermediate outcomes and processes that take us closer towards resilience outcomes.

Where things did not work so well, this tended to be where projects were not able to fully overcome or circumvent contextual factors and these continued to act as barriers to project success. Examples include the persistent mistrust of formal banking institutions encountered in Ethiopia, where MAR-X was working with pastoralist communities; insufficient coverage of existing climate stations, especially in drought-prone areas (CMESA-E XFE); lack of mobile phone coverage coupled with low literacy in intervention areas preventing improvements in access to meteorological and agronomic information using mobile phones (WYL XFE); and the continued underlying lack of skills and low education levels preventing people from applying techniques successfully (BRES-X XFE). The transformation of underlying contextual factors that act as barriers to implementation requires systemic change and/or change in social norms and behaviour. This raises important questions: Are these within the sphere of influence or control of the projects? Is there a potential role (responsibility?) for the private sector to work to build trust? Is there enough incentive for private sector actors to do so?

Working with 'champions' and policy moments to get resilience on the agenda

With work at the higher institutional level to bring about policy change, we also see more emphasis on the **importance of champions**, to gain access and a 'space at the table'. As discussed in Section 5.3, this is not peculiar to resilience-building programmes. Nevertheless, it is important to highlight here. Projects need to identify and work with the right change agents – those with the mandate and resources to deliver change. Influencing and advocacy play a strong role in creating action, especially at higher institutional levels, working to align climate concerns with existing policy needs and demands to generate/internalise the need for change among the key actors (e.g. the LAPA harmonisation work under Anukulan-X; water access work by PROGRESS-X).

An effective implementation factor and mechanism seen during BRACED-X was using **demonstration** (at various institutional levels) to generate buy-in to scale up project tools, mechanisms or processes (WYL plus four out of the five policy projects: Anukulan-X, DCF; CMESA-E; PROGRESS-X). This included **exposing decision-makers to the climate realities of rural areas**, improving understanding of issues faced by local communities because of climate extremes and disasters and creating interest in community experience and knowledge (BRACED-X-LM; PROGRESS-X), which makes marginalised groups more visible and their needs more likely to be included. **Tapping into windows of opportunity or policy 'moments'** increased the likelihood of timely policy changes in favour of local community resilience. A synthesis of the experience of the five policy IPs shows the importance of making connections between the local and higher institutional levels in order to demonstrate the value of local knowledge for decision-making processes. BRACED-X offered the opportunity to invest more time in building relationships with key regional and national actors, as an important springboard for further change. The example of scaling-up of the decentralised climate finance model adopted in Wajir county (PROGRESS-X) demonstrates the need for time to capitalise on these relationships when the right window of opportunity appears, especially for policy-making.

6.3 Summary: what difference has BRACED-X made?

Overall, BRACED-X projects took on board lessons from previous rounds of BRACED evaluation (MTR and FE) in their design and implementation. BRACED-X projects were able to build on the efforts made, relationships developed and knowledge gained from BRACED projects when working at the higher policy and institutional levels under BRACED-X. Projects were also able to add value to the work done under BRACED. For example, Anukulan-X adapted LAPAs, outcomes of its first phase, to new governance structures as part of the project's extension and by doing so made them more useful for the newly created municipalities.

The extra time available for implementation meant that, crucially, projects were able to sequence effectively – not just in terms of doing things at the right time, like providing timely information, but also in following a 'bottom-up' process: from demonstrating results to get people on board, to engaging with policy. This very much built on groundwork laid in BRACED, especially on the policy side, forming important foundations for the work during the extension period. Relationships take time. Policy 'moments' happen when they happen. Projects need to be ready to act.

The shift in the balance of project orientation during the extension towards more policy-focused work meant there were more outcomes at this level, enriching our evidence base on how to build and strengthen resilience. This also owed partly to the maturation effect of institutional and policy change interventions begun in the previous phase of BRACED, which allowed important processes for systemic change to be put in place. There is still some way to go, but the foundations are there (e.g. CMESA-E, DCF, etc).

The extension period seemed particularly significant for projects working at national or transnational level, largely because it allowed for consolidation of interventions that were ambitious in scope. Establishing and securing livestock corridors in the Sahel (BRACED-X-LM) and the DCF funding mechanism in Mali and Senegal required time to navigate institutions, both formal and informal, and to build consensus among relevant groups of stakeholders. While all nine BRACED-X projects worked hard and achieved good outcomes, there are notable 'stand-out' achievements. First is CMESA-E's work in Ethiopia to co-create and push through the policy processes the NFCS, which is awaiting government approval. This vital framework for climate information services, coordinating the production, dissemination and uptake of accurate climate information, will benefit stakeholders across different levels, most of whom are beneficiaries of activities started under BRACED (e.g. community radio listening groups). Second, we see DCF's achievements in establishing a climate fund mechanism, navigating complicated contexts and working to support and strengthen local capacities to run the fund, against a backdrop of decentralisation and a context of no national climate legislation in either Mali or Senegal. Given the scale and scope of the work by BRACED-X-LM, we should also note their achievements in securing livestock corridors in building national-level understanding

and support for pastoralist/transhumant communities across the region, in a context, of high insecurity, spreading violence and seriously deteriorating security situations. Finally, working with county government officials in Wajir, PROGRESS-X embedded effective channels for their collaboration with pastoralist communities and increased the likelihood that pastoralism would become enshrined in county-level policy. It is anticipated that the envisaged policy change will boost the momentum of the project's non-policy activities implemented in Wajir and contribute to transformational change by improving engagement among actors at the local and higher institutional levels.

BRACED-X provides further evidence of raised awareness and shifting attitudes and tells us more about what it takes to influence key decision-makers to motivate them to make desirable, resilience-building changes to policy and implementation process, generating ownership in these policy processes. In the context of climate resilience, communities' decisions need to be informed by future climate scenarios (not just 'needs') but the XFE lacks evidence of this happening in the projects.

Bringing about systemic and transformational change relies on resilience-building actions instigated by the projects being embedded and internalised within local and national-level processes. Impressive progress has been made during BRACED-X to secure the foundations for this. These foundations lie with changes in mindset, political will and commitment to taking the actions necessary to build and support adaptation and resilience. It also needs sustained capabilities and resources to see things through.

Challenges remain. We see various barriers and contextual factors that projects have been unable to circumvent, and that there remain prominent systemic bottlenecks to resilient change. For example, social norms continue to exclude women from important decision-making and priority-setting processes; and there is continued mistrust in formal institutions by marginalised people (and vice versa) that prevent systemic change in marginalised people's access and inclusion, which ultimately hinder resilience.

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Annex 1. Resilience in the BRACED projects

Within BRACED, resilience is understood as the *'ability to anticipate, avoid, plan for, cope with, recover from and adapt to (climate-related) shocks and stresses'*.¹³⁰ As part of their M&E systems, the BRACED projects have followed a common approach to measure the 'outcomes' of resilience-building processes, conceptualised as **a set of interlinked capacities to absorb, anticipate and adapt to shocks and stresses**, as well as **laying foundations for transformation and transformative change** ('the 3As and T').¹³¹ The capacities making up the 3As are:

- Anticipatory: before a shock or stress – ability to undertake proactive actions to avoid upheaval, e.g. heeding early warnings, changing the way houses are built, reducing landslide risk, targeting by radio announcements.
- Absorptive: after a shock or stress – ability to buffer shocks in the short term, e.g. access to savings and finance, disaster preparedness, social protection.
- Adaptive: before, during and after a shock or stress – able to react to evolving/dynamic risk of disturbance to reduce likelihood of harmful outcomes, e.g. growing drought resistant crops, diversifying livelihoods, irrigating agricultural production.

These capacities, in turn, are seen to ensure that the wellbeing and human development of communities carry on in spite of shocks.¹³²

In addition, BRACED projects are expected to demonstrate progress towards achieving transformative change, moving beyond supporting incremental changes in people's resilience towards a more radical shift in human systems, *'to fundamentally and sustainably improve the resilience of vulnerable citizens to climate impacts'*.¹³³ What evidence is there that the interventions and the mechanisms that support them have the potential to deliver 'amplified results' and/or 'transformational impact'?

Evaluating outcomes that demonstrate resilience requires us to differentiate between those outcomes that signify that resilience has been built or strengthened, and those that do not. Our starting point is acknowledging that the resilience objectives sought by BRACED projects are strongly linked to the development outcomes that the projects have achieved. Projects may also be building and strengthening resilience in different ways. Resilience is also about the processes involved in realising those outcomes, for example in bridging institutional 'gaps' or in changing underlying social norms and beliefs to make the intervention work. This evaluation **recognises resilience as an intermediate outcome**, not an end in itself but a step towards improving wellbeing.¹³⁴

¹³⁰ DFID (2014) cited in *The 3As: tracking resilience across BRACED*, p. 11.

¹³¹ Badahur *et al.* (2015).

¹³² BRACED M&E guidance notes: Note 4 on *Measuring resilience outcomes – the 3As approach*; and also Note 7.

¹³³ Silva Villanueva, P. *et al.* (2016), p. 62.

¹³⁴ Bene *et al.* (2015).

We also recognise that the BRACED programme plays a contributory role in what, for many people, will be an intergenerational process of building resilience. In other words, the changes (outcomes or results) of project activities should be intermediary steps in a longer-term, (strategic) process of transformation.

The importance of thinking about resilience as processes as well as outcomes is highlighted in *Routes to Resilience: Insights from BRACED Year 2*:

...Multi-faceted programmes may ... still fall short of delivering resilience programming if focus remains on the 'elements' of resilience rather than also on the processes needed to facilitate and support change.

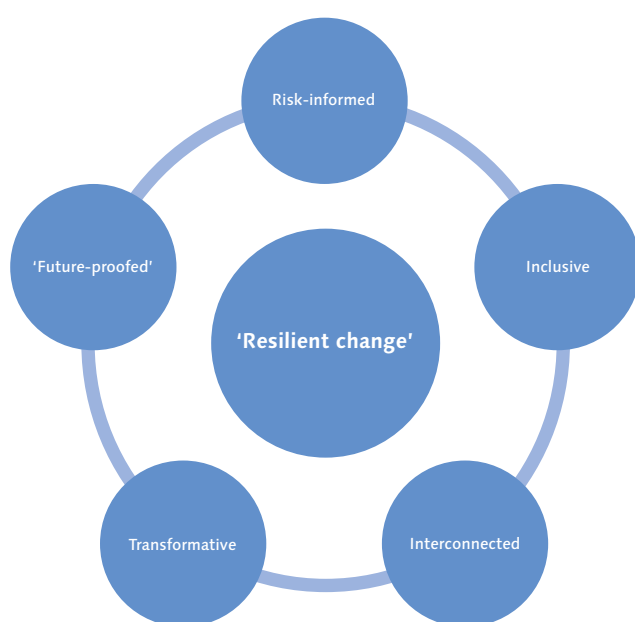
This points to the need for integrated resilience programmes that balance what is essential in resilience programming with what is feasible in practice and the most effective approaches and processes within each context to achieve meaningful change.

Silva Villanueva, P. and V. Sword-Daniels (2017), p. 12

Resilience considerations

Absorptive, anticipatory and adaptive capacities largely refer to outcomes that contribute to resilience. In order to also consider whether the underlying processes in change pathways embody resilience, we expand on these so that we have resilience 'considerations'. These include features of processes and outcomes (including 3As and T) clustered under the headings risk-informed, inclusive and interconnected, to provide a way of thinking about resilience as *both* the set of characteristics that make an outcome 'resilient' *and* how the outcomes themselves contribute to resilience.

The overarching components of our resilience dimensions are set out in Figure 1. In 'assessing' whether or not the reported results of BRACED projects are indeed 'resilient', we need to exercise a certain degree of professional judgment. These are not formal, quantifiable indicators, and an outcome or process may not 'score' well in one dimension but could still be considered to be resilient because it scores highly elsewhere. The dimensions of resilience are essentially a guide for examining the nature of the relationship between outcomes and resilience in a systematic and comprehensive way so that we can avoid inadvertently favouring some kinds of context or intervention over others, for example, projects focusing on easy-to-reach people starting from a higher base, compared to those implementing activities in fragile and/or crisis contexts.

Figure 1: Resilience dimensions

Transformation

- Nature (depth) of the change – For example: Has the outcome made a fundamental difference to how income is earned? Or affected beneficiaries' standing in the community? Has there been a policy change? Have embedded power structures been addressed?
- Magnitude (scale and scope) of the change – We need to differentiate significant changes from incremental changes. For example, a 50% increase in yield may significantly change a household's financial and food situation whereas 5% may make little difference. Is it just happening in one household, one community, an entire district, or at national level?
- Sustainability – Will changes be sustained, independent of project actions or subsidies? For example, is income realised from the sale of a horticulture crop, introduced by the project, likely to continue after the project? Are improved practices likely to continue without direct support from project staff?
- Leadership and empowerment – Does the change shift the way that power is held in decision-making process, to make them more inclusive? Does it involve engagement with strategic-planning processes?
- Innovation and disruption – Is the project something that disrupts the status quo or brings about a likely technical innovation that will have broadscale impact?

Risk-informed

Resilience-building is designed to address likely climate risks faced by project participants. This can be through activities that lead to:

- Reduced exposure – Do the changes help to meaningfully reduce exposure to a climate hazard? Examples might be creating commercial opportunity for someone who was previously dependent on farming (adaptive capacity) or the construction of water-management infrastructure that reduces likelihood of flooding.
- Increased coping – Does the change mean that an individual, household or community is better able to manage a period of crisis without incurring loss, such as through the purchase of an insurance product or by having savings in a bank (absorptive capacity)?

Interconnected

Resilience literature often emphasises the role of systems to drive opportunity or improve coping. It is the opposite of perceiving an individual or community as an island. We looked at how changes were embedded vertically or horizontally in systems, including connections between activities, actors, institutions, and their likelihood of contributing to resilience:

- Vertical linkages (operating at scale) – Vertical linkages relate to connections within a system, such as how a change or outcome is linked to different levels of a value chain, institution, government or health system.
- Horizontal linkages – Horizontal linkages refer to connections that the activity or change brought about by the project has established across geography, sectors, institutions, services providers.

Inclusiveness: whose resilience?

Once identified, resilient changes were then analysed to understand who may have benefitted and who did not. We looked at factors such as age, sex, rural/urban, wealth group to see who participated in a given package of activities and who had likely benefitted from changes made (and who did not). Were the outcomes socially differentiated? Why, for whom and in what ways? Are the opportunities and benefits presented by the project inclusive, accessible by the most vulnerable people?

"Future proofing"

One important consideration is whether and how the changes seen may be able to stand up, not only to extreme events, but to scenarios such as a global temperature change exceeding 1.5 degrees Celsius. Will the outcome itself be able to continue? Will the outcome enable people to better manage these future conditions? Modelling of future climate impacts was beyond the scope of the evaluation. However, as a 'sense-checking' exercise we considered whether or not IPs had considered how sustainable outcomes would be in the face of longer-term, changing climate-related risks and opportunities, for example through scenario analysis, in order to link the analysis of resilience outcomes to the climate change mandate of BRACED.

Annex 2. Realist evaluation approach

The BRACED-X FE synthesis is grounded in the methodological approach of realist evaluation. This approach identifies theories about how a project or programme is expected to work. These are used to build explanations of *why* interventions may or may not work in practice (Box 1).

BRACED is implementing a range of activities at programme level, as well as the project-level interventions carried out by IPs. This synthesis is primarily concerned with what is happening at intervention level in BRACED projects.

We have supported IPs in using **a realist 'lens'** (described in more detail below) during their XFE data collection and analysis to help us to answer the EA2 Synthesis question:

What difference did BRACED-X make, how, why, for whom
and in what circumstances?

Box 1: Realist evaluation

Realist evaluation identifies theories about how a project or programme is expected to work. These are used to build explanations of *why* interventions may or may not work in practice. Both implicit or explicit theories may have informed the design of the programme interventions, as well as other relevant theories that offer alternative explanations. These are referred to as 'programme theories'.

Realist evaluation then focuses on understanding how contextual factors, such as changes to the climate, political structures, cultural norms, location and participants, shape and influence how the programme theories play out in practice.

Context is understood as the most important influence on whether an intervention succeeds in activating a change process (often referred to as a '**mechanism**') that will cause an outcome. Causation in realist evaluation therefore rests on understanding the influence of context on 'mechanisms' and **outcomes**.

Interventions interact with a series of mechanisms that might operate in different ways in different contexts. This is because people respond to the intervention according to their context.

Assumptions are embedded in the programme theory, as contextual factors or mechanisms that are thought to influence whether or not an outcome arises. These are explicitly tested through testing CMO configurations (Punton, 2016).

Source: Evaluation Support and Synthesis Design Report, January 2016.

What does it mean to take a realist lens?

The core idea behind realist evaluation is that different mechanisms (or change processes) can lead to a variety of outcomes in different contexts. Realist evaluation researches how this might work in practice by identifying context-mechanism-outcome configurations (CMOs).

CMOs are theories depicting how we expect the BRACED programme to work: the mechanisms we think will be operating, the contextual factors that will need to be in place to allow them to operate, and the outcomes that will be observed if they operate as expected. These are the fine-grained programme theories.

We separate out features inherent in (or under the control of) the programme as intervention factors or intervention mechanisms (I), from other contextual factors or mechanisms that are not, to give the formulation I+C+M=O (ICMOs).¹³⁵ Some examples of ICMOs are provided in Box 2.

Box 2: ICMO examples

'By providing access to and training in the use of improved seeds (*intervention*), in a context where output markets are functioning and accessible (*context*) this results in reducing farmer risk and increasing their confidence in using improved seeds (*mechanism*), leading to improved yields and productivity (*outcomes*).'

'By supporting access to savings and loans groups and providing financial training, e.g. budgeting (*intervention*) in a context where women have poor access to financial services and depend on high interest, informal loans during times of stress (*context*) women recognise the value of savings and loans (*mechanism*), are actively saving and providing loans to one another (*output*), and are able to accumulate assets, invest and reduce stress in times of crisis (*outcomes*).'

The realist approach therefore provides us with useful concepts and framework to guide the evaluation activity. The focus on contexts and the mechanisms that result, leading to particular outcomes helps us to ask the right questions to address the 'why?' and the 'how?'. The idea of layering (or, in effect, sequencing) the theories and ICMO configurations means that we can more easily reflect the realities of project activities on the ground. This all contributes to a detailed analysis of the implementation of the BRACED programme through the projects, generating insights for further exploration and 'testing' at the final evaluation.

¹³⁵ Building on learning from the BCURE evaluation experience with realist evaluation (Itad is conducting a three-year realist impact evaluation of DFID's programme Building Capacity to Use Research Evidence (BCURE): www.itad.com/projects/evaluation-of-approaches-to-build-capacity-for-use-of-research-evidence-bcure/

Annex 3. BRACED-X FE Evaluation Framework

1	2	3	4	5
EVALUATION QUESTION (EQ)	KEY SUB-QUESTIONS WHAT WORKS, FOR WHOM, IN WHAT CIRCUMSTANCES, AND WHY?	PROJECT SUB-QUESTIONS (FOR EACH OUTCOME) EXAMPLES INCLUDE...	DATA SOURCE AND COLLECTION APPROACH	DATA ANALYSIS APPROACH
What are the main outcomes arising from your activities during BRACED X?	C1 Please describe the main outcomes and impacts the project seeks/sought to achieve.		e.g. • Project theory of change and logframe • Annual Reporting data – years 1 and 2 ARS and data reported in the Final Report Supplement	e.g. • Document review
	C2 How are these outcomes described within the project theory of change?	<ul style="list-style-type: none"> • What changes do/did you anticipate delivering? At midpoint? At endpoint? • What are the pathways between activities, outputs and outcomes, including any mechanisms ('how?' and 'why?') that you believe would cause change to happen. 	e.g. • Annual Reporting data including the Final Report Supplement • MTR/FE	e.g. • Document Review • KII with key project staff
	C3 What is (are) the context(s) of this project and its outcomes?	<ul style="list-style-type: none"> • Conditions that influence whether mechanisms operate, for different groups of people, such as social, economic, cultural, institutional setting: Individuals – their own behaviour, biases; Interpersonal – how different people relate to each other; Institutional – policies of an NGO; Wider external factors (political, security) and weather and climate factors (drought, El Nino). Link these to how and why things have happened the way they have, for whom and in what circumstances. 	e.g. • Baseline data	
EQ1 – To what extent have packages of interventions delivered in terms of strengthened resilience? (Reflect on the evidence for results delivered against the results/changes anticipated in the project theory of change)	1.1 What are the main changes and results seen from project activities? <i>(including outcomes and processes? This will be important for policy work)</i>	<ul style="list-style-type: none"> • Are we seeing people using the seeds, advice, credit? • Is there a change in yield? In income? • Are there things that will allow people to manage "crisis" in place? • Are you seeing changes in the social standing of the women involved? • What have been unexpected changes and results of this package of activities? 	e.g. • Key informant interviews with programme staff/ project beneficiaries • Annual Reporting Data including Final Report Supplement • Baseline-endline comparison	e.g. • Analysis of interview transcripts • Document review
	1.2 To what extent have project activities led to the expected changes and results?	<ul style="list-style-type: none"> • Summary narrative description of emerging changes or pathways, expected and unexpected, explanation of intervention contribution • What synergies are there between activities leading to the observed outcomes? 		

1	2	3	4	5
EVALUATION QUESTION (EQ)	KEY SUB-QUESTIONS WHAT WORKS, FOR WHOM, IN WHAT CIRCUMSTANCES, AND WHY?	PROJECT SUB-QUESTIONS (FOR EACH OUTCOME) EXAMPLES INCLUDE...	DATA SOURCE AND COLLECTION APPROACH	DATA ANALYSIS APPROACH
EQ2 – Specifically focusing on understanding 'mechanisms', how and why have particular intervention packages led to observed results and changes?	2.1 How and why have the changes you've seen come about? [for each outcome or process , focus on the causal forces or powers that explain why a change happens and the context that influences this, and for whom this change has happened]	<ul style="list-style-type: none"> • Was it what you provided? The right seeds? Agronomic advice? Access to Credit? • Was it how you did it? The right people were selected to participate? Your trainers were excellent? Your organisations relationship to other local institutions? Government? Other NGOs? • Was it external factors? Good prices? Support from traditional leadership? Support from key local government people? • Timing? People were simply ready for change? • Behavioural or attitude change by participants? Change in participant belief or understanding? 	e.g. <ul style="list-style-type: none"> • Key informant interviews • Annual Reporting Data including Final Report Supplement 	e.g. <ul style="list-style-type: none"> • Analysis of interview transcripts • Document review
	2.2 What has the project learned about delivering these packages of activities?	<ul style="list-style-type: none"> • What have you learned from this process about your work? About resilience? About your theory of change? (focus on how and why change happens)? 		
	2.3 What evidence is there that the interventions and the mechanisms that support them have the potential, within specified contexts, to deliver 'amplified results' and/or 'transformational impact'?	<ul style="list-style-type: none"> • What are the actual pathways between each package and activity and results i.e. strengthened resilience? • Do you have easily measured benchmarks of progress towards resilience to make for a better quality final evaluation? 		
	2.4 Who benefits most from your activities? How and Why?	<ul style="list-style-type: none"> • Men? Women? Older people? Younger people? Certain ethnic groups? Certain livelihood or occupational groups? Certain political alliances? Does this change during periods of crisis? How and why? • If different groups of people are represented in your activities, do they participate equally? Why/Why Not? What are the consequences – anticipated or unanticipated? How and why? 		

1	2	3	4	5
EVALUATION QUESTION (EQ)	KEY SUB-QUESTIONS WHAT WORKS, FOR WHOM, IN WHAT CIRCUMSTANCES, AND WHY?	PROJECT SUB-QUESTIONS (FOR EACH OUTCOME) EXAMPLES INCLUDE...	DATA SOURCE AND COLLECTION APPROACH	DATA ANALYSIS APPROACH
EQ3 – Based on your accumulated knowledge and understanding, what key resilience strengthening lessons can be learned and replicated from your project?	3.1 What unanticipated, positive or negative, enablers or constraints have you encountered?	<ul style="list-style-type: none"> What has helped the package of activities to work and/or bring about change; What has got in the way of the activities working and/or bringing about change? 	e.g. <ul style="list-style-type: none"> Key informant interviews project staff KII project beneficiaries 	e.g. <ul style="list-style-type: none"> Analysis of interview transcripts
	3.2 What key risks do you face in achieving your intended outcomes and impacts?	<ul style="list-style-type: none"> Did anything need to change to make the implementation operate better? To better deliver its outcomes? Are you clear on whose resilience you are building and whose you are not? Did that require any modification to the intended outcome? How and why? 	<ul style="list-style-type: none"> Focus Group Discussion project staff reflections Annual Reporting Data 	<ul style="list-style-type: none"> Analysis of interview transcripts Document review
	3.3 Reflect on the intervention-level learning you have accumulated over the life of the project and during BRACED X and distil this learning into a set of evidence-based lessons, defining which of these can potentially be replicated elsewhere? What difference did BRACED-X make? How, why, for whom and in what circumstances?	<ul style="list-style-type: none"> What should be scaled up/intensified/dropped in the future? Why? If you did this again, would it be done the same? Why/ Why not? How? etc 		

Annex 4. BRACED Programme Theories

A BRACED change proposition for the resilience-building projects (Components A and B) was derived by the Evaluation team from the BRACED ToC:

By investing in 15 projects directly targeting households and communities, working with a whole variety of stakeholders, BRACED will support changes along seven themes: Climate and weather information; basic services, including social protection; gender and social equality; technology and innovation; markets and local economic development; governance and natural resource management; resilience metrics and concepts. This, in turn, will enable change to happen in four areas: knowledge and attitude; capacities and skills; quality of partnerships and decision-making processes. It will lead, at different scales via a set of four outputs, to the BRACED outcome of poor people in developing countries having improved levels of resilience – measured along three dimensions: anticipatory, adaptive and absorptive capacity – to climate-related shocks and stresses.

An overarching programme theory reads as:

Investing in directly supporting poor people to become more resilient to climate extremes and disasters, improving the capacity of developing countries and regional organisations to plan for (un)expected frequency and severity of climate extremes and disasters, and generating learning and evidence from this support means that **improved knowledge and capacity will lead to changes in practice and action**. Targeted communities will be more resilient, *and* there will be a better understanding of what works and what does not work in building climate resilience. This will result in improved policies and institutions at the national, subnational and local levels and a better integration of disaster risk reduction, climate adaptation and development programmes. This will lead, in the long term, to improving the wellbeing of millions of people despite exposure to climate extremes and disasters.

Programme theories for BRACED projects' main activity areas

For the different activity areas, the Evaluation team derived specific programme theories, drawing on BRACED project documents (project proposals, annual reports, MTR reports). We do not necessarily know what mechanisms will be in effect, but by intervening in response to local context our ToC anticipates that farmers'/project participants' behaviour will be successfully changed.

Agriculture and livestock management (e.g. agro-pastoralist field schools; training in vegetable growing; poultry rearing; provision of improved seeds): By offering support to farmers in ways that respond to their context, they will change their behaviour to learn new approaches, develop their skills in a range of agricultural production activities including livestock and animal husbandry, leading to both diversify enterprises and increase productivity and production, which could lead to increased food consumption (volumes and varieties) and/or sales. Such improved livelihoods are expected to be more resilient to (climate) shocks and stresses and will minimise farmers' vulnerability to the effects of climate change and climate extremes.

Health and nutrition (e.g. traditional birth attendant training; support to health centres; support groups for mothers; training volunteer community health workers): By offering support to project participants in ways that respond to their context, they will change their behaviour to learn about, understand and carry out improved health and nutrition practices, contributing to improved health and nutrition outcomes. This is expected to improve overall wellbeing, reduce vulnerability to shocks and stresses, and contribute to people's reduced vulnerability to the effects of climate change and climate extremes.

Water supply (e.g. watershed management; latrine construction; provision of boreholes): Providing technical and other support for the supply of water in ways that respond to their context will support farmers to change their behaviour to improve watershed management. This will ensure households have access to sufficient amounts of clean water. This, in turn, will contribute to improved health and nutrition as well as water for productive needs, improving welfare and resilience to climate shocks and stresses.

Natural resource management (e.g. run-off management; regeneration training; cookstove technology training): By supporting participant households and individuals in a range of aspects of natural resource management in ways that respond to their context, they will change their behaviour to manage natural resources more effectively. This will, in turn, support rural production, contributing to strengthened and diversified livelihoods activities, increased incomes and enhanced resilience to climate shocks and stresses through sustaining the resource base that provides ecosystem services.

Financial services (e.g. establishing and supporting savings and loans groups; training savings groups in bookkeeping and business planning): By helping poor, rural people, particularly women, to access loans and savings products in ways that respond to their context, it is expected that they will establish micro-businesses or have an increased ability to manage daily financial demands. Training is given to interested, poor individuals to form groups and/or on basic financial or business skills. With this support, people are expected to form saving groups and the savings would be loaned to members. Anticipated behavioural change includes loans used to manage household expenses such as school fees or health fees or to finance micro-business start-up. Savings and loans are also used to manage shocks and unexpected events such as illness and bereavement. In the longer term, IPs hope to facilitate sustained access to financial services, business development as well as household stability or developmental growth through increased incomes, savings or expenditures on the education of children.

Entrepreneurship and small business development (e.g. women's networking training; connecting clean energy suppliers with retailers): By providing participants with business skills or support to develop a new market or product in ways that respond to their context, it is anticipated that behaviour will change, with moves from farming or livestock activities to other businesses. As a result, small, sustainable business will develop. These businesses are assumed to help insulate incomes from climatic shocks by providing alternative sources that are not as susceptible to climate impacts.

Planning and government capacity building and policy influence

(e.g. establishing climate adaptation committees; training government officials on climate proofing; supporting township development planning): By supporting community organising, local planning processes, and building the knowledge and skills of local and subnational governments in ways that respond to the context, BRACED project support will influence national policy and practice related to managing the impacts of climate extremes and disasters. This will lead key government actors to: (i) change their behaviour to integrate climate and disaster risk, and community priorities into local planning and budgeting process; (ii) improve local capacity and stimulate action to plan and manage climate extremes and disasters; and (iii) change government behaviour, increasing responsiveness and accountability.

Disaster risk management and early warning (e.g. setting up early warning systems (EWS); strengthening quality and accessibility of climate forecasts): By working with women and men in communities, local and national institutions, to reduce losses (agricultural and property) from climate hazards in ways that respond to their context, the project will strengthen local and regional disaster risk management institutions, improving knowledge and provision of climate information. This will change behaviour towards the safeguarding of assets and livelihoods, leading to reduced loss from hazard events.

Gender and inclusion (e.g. gender equality training; gender-responsive budgeting processes; women's empowerment training; community-level gender analysis): By strategically targeting activities to ensure that they address the practical needs of women and men, working with women and men and working with staff and partners to build organisational capacity for change in ways that respond to context, the BRACED programme seeks to effect behavioural change that will in turn change gender stereotypes and norms, strengthen women's voice and decision-making power within households, communities and government institutions. By recognising that vulnerability and resilience are shaped by social norms and power relations, transforming inequality is an important part of the broader process of building resilience.

Annex 5. ICMOs from the BRACED FE

Linking – between activities and across institutions

In contexts where there are weak or non-existent market and institutional linkages:

- Linking and bridging between existing local institutions (e.g. savings groups and farmer groups) and activities means that projects can build on existing processes and actions and create links between different parts of the system. Linking project activities to income generation acts as an incentive for people to participate.
- Sequencing activities appropriately and providing information in a timely manner, with people supported to apply new information, means that participants can make informed decisions about how they invest resources provided by the programme in ways that are more likely to lead to resilient outcomes (15 IPs).

Influencing context to create conditions for change

In contexts with high levels of food insecurity:

- by carrying out activities that provide resources to address people's food security concerns, this changes the context so that participants are better placed to subsequently invest in technical change that contributes directly towards building their resilience (9 IPs).

Meeting basic needs as an underlying condition for further participation

In contexts where poverty levels are high and people struggle to meet their basic needs:

- addressing basic needs first (including access to food and water) means that, not only are people likely to buy in to an intervention because it is seen to be responding to their needs and priorities, but also that they are subsequently more confident that their needs are met and they are better able to take risks. Improved confidence in food availability means that the sale of surplus yield is more likely, potentially leading to increased income, and improved absorptive capacity (9 IPs).

Collaboration and credibility

Across a range of contexts:

- by working collaboratively, participating with communities ensures community buy-in. This means that interventions are more likely to address beneficiary needs and expectations, uptake is higher and people will actually carry out activities that will improve their absorptive and adaptive capacities. Interventions and results are more likely to be sustainable after direct project involvement ends.

Given the time it takes to effect tangible change and build resilience, this means that projects are more likely in the medium-long term to successfully result in resilient outcomes, because the processes through which these are generated are also resilient.

Getting the right people on board at the community level can enhance the credibility of the activities in the eyes of participants and potentially mitigate the risk of further entrenching social and cultural norms that exclude certain groups (10 IPs).

- Working with credible and respected higher-level formal institutions (such as meteorological services, academic institutions) with recognised expertise and a 'presence' can provide important political champions for the project activities, increase the credibility and the reach of interventions, leading to better uptake and greater sustainability.

And:

- Engaging with the right leaders, at community or higher institutional levels, also increases the credibility and the reach of interventions, leading to better uptake and greater sustainability. In other cases, when working with relatively 'closed' marginalised communities, credibility and uptake are enhanced through the trust engendered by combining local knowledge with scientific information (5 IPs; medium evidence).

Regular involvement of project staff and partners in communities

In contexts where literacy levels are low and if the security situation allows it:

- ongoing involvement of project staff and follow-up with communities, emphasising practical demonstration, helps to build trust of communities in project staff. This creates the right conditions for the project to flourish: participants are more likely to take up project activities and apply new practices and techniques, and this is more likely to be sustained. This contributes to the likelihood of resilience being built and strengthened (5 IPs).

Providing incentives and subsidies to encourage participation

In contexts where the level of trust in the private sector is low:

- by targeting early adopters and influencers and offering incentives to people to sign other people up to an intervention means the project can piggyback on trust inherent in social networks to improve project reach and uptake (7 IPs).

Where projects are implementing their activities in remote areas with low population densities so that the commercial viability of private sector operation is low:

- by (temporarily) subsidising and supporting private sector actors these are incentivised to provide services (e.g. financial services) to populations in these remote areas, thus linking usually marginalised people and communities into (financial) systems.

This means that people can benefit from access to financial institutions where previously there were none, building up a financial history that could eventually improve their access to credit and potentially increase productive investments.

This potentially contributes to building absorptive and adaptive capacities as incomes increase or people are able to invest in more climate-resilient livelihood activities (1 IP).

Systemic focus: strengthening institutions and linking across levels

- In contexts where national policies favour foreign private investment to the detriment of poor, marginalised people and there are gaps in knowledge among decisions makers and other key actors and social and environmental impacts, then strengthening and raising the capacity of key institutional actors with influence at the national level leads to raised awareness and an increased likelihood of socially responsible investment and policy, thus improving the wellbeing and absorptive capacity of marginalised people.
- In contexts where policies work against or are openly hostile to poor, marginalised groups/people and work on these groups is seen as donor imposed, a coordinated advocacy strategy, implemented with partners with capacity is critical to shifting attitudes among powerholders at national and regional levels in order to achieve effective and sustained change (4 IPs; weak evidence).

Systemic focus: Working with the private sector and public–private linkages

In contexts where participants have poor access to markets and information:

- Strengthening market linkages and working with the private sector to provide services in ways that are appropriate and sensitive to needs and the context, at the same time as implementing activities to enhance productivity and production, means that project participants will be confident to engage with private sector actors to amplify the benefits of productive activities, leading to improved absorptive capacity and more sustainable and systemic change (seven IPs; medium evidence).

Annex 6. BRACED-X Policy Key Informant Interview Topic Guide

Project and country

Interviewee names

Position and organisation

Interviewer name(s)

Date of interview

Consent given? (Y/N)

General notes and observations

The aim of the key informant interviews with implementing partners is to dig deeper into the policy work you have been carrying out so that we can enhance our understanding of how and why change happens in resilience building programmes with respect to policy- related activities. Do you have any questions before we start?

During the interview, we're hoping to learn more about the outcomes and test out some ideas of the contexts in which policy influencing happened and how. We'll use your feedback to test and refine the theories.

We're planning to record our conversation so that we can make sure we don't miss anything. We may also include anonymised quotes in our report, is that OK with you?

1. First, can you please describe the policy work you have been doing?
2. What have been the main outcomes (probe for: unanticipated outcomes and impacts; things that have not worked so well)

To what extent have particular interventions led to anticipated changes and results?

What other actors have been involved?

3. We would now like to know a bit more about the change pathways. How and why the project led to the observed/ evidenced change.

Specifically focussing on understanding 'mechanisms' (the causal forces or powers that explain why a change happens), and the contexts or conditions that affect or create mechanisms, how and why have particular intervention packages led to observed results and changes? Eg:

- *What has the project learned about delivering these packages of interventions?*
- *What evidence is there that the interventions and the mechanisms that support them have the potential to deliver 'transformational outcomes'?*

What are important contextual factors – conditions that cause the mechanisms to occur that lead to outcomes?

NOTES for Interviewer: Use the policy CMOS for individual IPs and the following policy programme theories generated through the case study to probe the change pathways described by the implementing partner, selecting relevant theories to test based on their activities and intended/unintended outcomes:

Theory 1: Exposing national ministries to communities on the ground enables them to better understand the needs of communities. They may already have resources to do XYZ in communities, but didn't know where the need was. This exposure enabled them to improve efficiency of resource allocation.

[I was told that the XX policy has now changed wording so it better reflects XX communities and their needs. Would you agree? How do you think the change happen and who do you think will be the main beneficiaries?]

Theory 2: Where communities have trust in the project, technical knowledge and exposure to the realities of XX Communities improve understanding of the needs of XX Groups and increased motivation to adjust policies and practices to better work for XX Groups.

From the document review we have done, we think that the technical knowledge and relevance of finding to local contexts and the actors they target themselves, and exposure to realities of XX Groups/communities has improved understanding of the needs of XX Groups/Communities and increased motivation to adjust policies and practices to better work for communities. Would you agree and/or add any nuances? Any practical examples?

Theory 3: Where existing relationships between the project and stakeholders exist, work across departments results in long-term policy change

Theory 6: Existing relationship and trust of key stakeholders enables the project to work with multiple actors simultaneously which creates shared understanding across the key players (individuals, organisational), trust and new relationships which combined are likely to contribute to transformational change.

[We think that inclusion of all relevant actors in the process of data collection and formulation of findings and recommendations promotes shared understanding and improves communication among key players which results in new collaborations and increased likelihood of the recommendations being adopted by all actors and sustained over long-term.]

Theory 4: In contexts where resources (financial budgets, decision-making power) are available, new tools and skills gained to inform policy (if considered useful), mobilize support of the new tools and/or approach and result in allocation of the government's resources (like finance, time, commitment) to enable their wider/long-term rollout.

[We think that the training on participatory data collection and the process of collecting data has increased ownership of the finding of the study by the government officials and the Water Company that participated in the training. We think it's likely that the training mobilized their support of the approach and resulted in re-allocation of the government's resources towards measures that support pastoralism. Would you agree with this, are there any nuances you'd add?]

CONTEXTS (probes):

Existing influence and connections and positive reputation

Financial resources available

(G') ... because they have a **budget to work with**.

(I') Any messages that the program wants to be taken up must be delivered through **multiple channels** many times over – public forums, radio dramas, policy changes, and group discussions.

Stable economic and political environment

(J') **Regime type**: More open participatory democracy regimes are more likely to provide opportunities for a wider range of actors to pursue a change.

(K') **Social, political and economic stability**.

Climate resilience (EG XXXX) already prioritised by national/county governments

Local or national political priorities

(II') Local governance structures have the **skills and capacity** to represent communities, are linked to decision-makers, and have selected water governance as an issue to be addressed.

Positive attitude, capacity, motivation of county officials/local communities

(V') **Better-informed community** with a stake in the process are more likely to hold the county government accountable for the implementation of the resulting policies and legislation.

(V.I') **Capacity and motivation** of responsible government staff.

(XII') **Will to learn**: Organisational capacity/learning/culture which enables the individual/group to change in response to changing circumstances and new opportunities.

(XI') The presence or absence of **champions** who influence, persuade and build support for change.

Annex 7. Synthesis approach

Coding

To analyse data reported by BRACED-X IPs, we used MaxQDA, a software programme for computer-assisted qualitative data analysis. The IP XFE reports, KII notes and PROGRESS-X policy case study report were loaded into MaxQDA where they were coded using the list of codes presented in Table A6. The foundation of the coding system was informed by programme-level and project-level BRACED-X ToCs as well as ICMOs identified in BRACED FE synthesis report delivered in June 2018 and project-level BRACED-X inception reports submitted by IPs in December 2018. These were used to generate an initial list of codes. Further codes were added iteratively as part of the initial data analysis and coding process. The team used outcomes and mechanisms as the primary unit of analysis, where possible keeping data related to each ICMO configuration together.

To allow for further interrogation, the team also coded important intervention factors like beneficiaries ('for whom'), barriers and evidence of sustainability. This meant that one text excerpt was often coded against multiple codes. This process also meant that the coded segments could be readily interrogated in more advanced stages of data analysis.

Documents logged, analysed and coded in MaxQDA were:

- 9 x project-level FE reports, each including a project-level evaluation matrix
- 1 x project-level policy case study
- 4 x supplementary project-level KII on policy window work

The documents were analysed and coded by a team of four researchers (the lead author and co-authors of this report), who identified, examined and recorded patterns (or 'themes') within the data, which guided the analysis of the pathways toward achieving strengthened resilience.

Results of the initial data analysis were summarised and shared by team members in a synthesis workshop that took place in Brighton on 30 May 2019. Discussing their initial findings, the team was able to identify similarities across evidence reported by IPs as well differences and patterns across cases that share common outcomes, focus and/or goals.

The patterns, synergies and differences identified in the workshop enabled the team to move onto further stages of data analysis to produce generalisable knowledge responding to the synthesis evaluation question of *what difference BRACED-X has made*, supported by evidence on how, why and for whom BRACED projects work (or not) in building and strengthening resilience in particular contexts.

Initial codes generated in advance and as part of the initial data analysis phase are presented in Table A6. Based on their role in data analysis and synthesis, the head codes, and respective child codes where relevant, were organised into the following code groupings:

- **Mechanism cluster codes** were the primary unit of analysis. Where possible, we linked evidence nuggets with whole ICMOs to respective ICMO child codes and ICMO groupings (head codes). Those codes were also applied to evidence nuggets, which contained information on only parts of a given ICMO, e.g. intervention and mechanism, or mechanism and outcome.
- **Programme theory codes** were used to identify new programme theories (PTs) as well as PTs identified by IPs. We used such evidence nuggets to refine BRACED-X PT, respective pathways and ICMOs that underpin them.
- **Policy codes** were used to collect evidence on policy theories 1–6, which were identified by a policy case study on PROGRESS-X delivered by the KM in May 2019. Policy codes were also used to identify evidence on new policy theories, specific policy-influencing outcomes and barriers to policy-influencing.
- **Reflection codes** were used to take stock of evidence on enablers and barriers as well as aspects and/or components of ICMOs that were specific to BRACED-X only. A specific 'resilience' code was also added to take note of any new insights on how resilience was built and/or strengthened.
- The team also applied **beneficiaries 'for whom' codes** to collect data on the scale and characteristics of BRACED-X beneficiaries.
- **Codes on resilience capacities** were used to identify changes to resilience capacities as a result of resilience building activities delivered by BRACED-X projects.
- **Specific I, C, M, O codes** were used to take stock of evidence on specific interventions, contexts, mechanisms and outcomes. This approach was later identified as duplication and resumed owing to substantial overlap between the results of coding by these codes and coding by mechanism cluster codes.
- **Follow-up codes** were used to take note of evidence that needed to be clarified and/or further explored with IPs.
- Applying **strength of evidence codes** the team took stock of information indicating quality of available evidence.

Table A7: List of codes

CODE GROUPING	HEAD-CODE(S)	CHILD-CODES(S)
ICMO codes	Working with the private sector to create public–private links	ICMO13
	Strengthening institutions and linking across levels	ICMO11 ICMO12
	Collaboration and credibility	ICMO5 ICMO6 ICMO7
	Providing incentives and subsidies to encourage participation	ICMO9 ICMO10
	Layering and linking: between activities, institutions, scales	ICMO1 ICMO2
	Meeting basic needs as an underlying condition for further part	ICMO4
	Influencing context to create conditions for change	ICMO3
	Implementation responds to context	ICMO8
Programme theory codes	<ul style="list-style-type: none"> • New theories • PT 	None
Policy codes – core	Policy	<ul style="list-style-type: none"> • Theory 1: Capacity • Theory 2: Analytical rigour • Theory 3: Cross-departmental working • Theory 4: Ownership • Theory 5: Incentives • Theory 6: Collaboration
Policy codes – other	<ul style="list-style-type: none"> • New policy theory • Policy – barriers • Policy – outcomes 	None
Reflection codes	Reflections	<ul style="list-style-type: none"> • Enablers • Barriers • BRACED extension
Beneficiaries	For whom?	<ul style="list-style-type: none"> • Poorest people • Ethnic groups • Disabled people • Rural people • Urban people • Older people • Youth • Children • Women • Men • Marginalised groups

CODE GROUPING	HEAD-CODE(S)	CHILD-CODES(S)
Resilience capacities	Capacities	<ul style="list-style-type: none"> • Transformation • Adaptive • Anticipatory • Absorptive
ICMO components	<ul style="list-style-type: none"> • Intervention • Context • Mechanism • Outcome 	<i>None</i>
Follow-up codes	<ul style="list-style-type: none"> • Follow-up • Unclear 	<i>None</i>
Strength of evidence codes	<ul style="list-style-type: none"> • Strength of evidence • Quality of evidence 	<i>None</i>

Thematic analysis

The FE synthesis is based on a thematic analysis of patterns identified during the initial data analysis and coding phase. This involved identifying, examining and recording patterns (or 'themes') within the data, which informed the team's understanding of pathways toward achieving strengthened resilience.

Guided by the realist approach, the identified themes focused on clusters of outcomes and specific mechanisms that helped achieve them. Other intervention factors, like contexts in which those mechanisms were able to contribute to the evidenced changes and specific aspects and/or characteristics of intervention components that initiated those change processes, were also taken note of.

Applying a comparative case study analysis approach (Goodrick, 2014), the team analysed and synthesised similarities in those patterns. Available evidence was used to refine the patterns and support them with details on specific contexts and relevant intervention characteristics.

These refined and evidenced patterns across cases that share common outcomes, focus and/or goals, as well as the differences among those patterns, guided the synthesis process to generate generalisable knowledge in response to the synthesis evaluation question. Organising those patterns by outcomes allowed the team to compare relevant pathways and thematically analyse them drawing on evidence collected on the underlying ICMOs.

This light content analysis identified emerging outcome-specific themes and underlying evidence on relevant mechanisms and contexts that helped achieve change.

As part of the thematic analysis, the team paid specific attention to lessons learnt. IPs' reflections on what they learnt in terms of designing and implementing resilience-building activities was analysed separately using evidence excerpts from Evaluation Matrices, where IPs set out key resilience strengthening lessons learnt from their project. Evaluation Matrices were submitted by IPs as part of their FE reports.

Annex 8. Quality of data and strength of evidence in FE reports

Table A8a shows the scoring and Table A8b the narrative notes used to assess the quality of data/strength of underlying evidence given in the IP XFE reports, considering both evidence for outcomes and contribution by the project.

The 'rating' for each project depends on the following:

- Implementation (and are the outcomes 'resilience'?)
 - Scale and scope of outcomes/findings (reaches high numbers of individuals, communities, etc. and/or effects widespread institutional change)
- Methodology
 - Scale and scope of XFE – sample sizes, selection process. Does the scale and scope of the XFE data collection reflect/do justice to the scale and scope of the project?
 - Draws on full range of up-to-date secondary data (M&E data; FE report, etc.)
 - Mixed methods are used
 - Data is valid (measures what it is supposed to measure)
 - Data is sufficiently disaggregated
- Analysis
 - Quality of report in evidencing outcomes (specific, stepping away from rhetoric; the right metrics; plausible and robust attribution or contribution story)
 - Plausible and robust attribution or contribution story
 - Triangulation of data sources
 - Overall strength of report – richness, how reflective and critical
 - Synthesis dataset supplemented by KII or case study to increase the quality and improve triangulation?

The IPs' XFEs should draw on the M&E data they collected and reported in their annual report supplements. The overall M&E system is high in quality and impact-oriented, tying in closely with functioning and dynamic ToCs (in line with BRACED's adaptive programming approach). This means that, in general, the quality of the underlying M&E data is high with respect to the following dimensions, which boosts the quality of project evaluations:

1. Validity: M&E measures what it is supposed to measure
2. Reliability of M&E data is high (collected in the same way over time)
3. Completeness
4. Timely/most up-to-date data is used
5. Data is precise and has depth – sufficient disaggregation, etc.
6. Integrity/lacks bias
7. M&E system links up to the ToC
8. Indicators are sufficient/appropriate for measuring the key dimensions of the ToC
9. M&E framework is impact-oriented, generating resilience-learning

Table A8a: Quality of data scores and rating

Scoring Criteria: 0=Low/No; 0.5=Medium/Some; 1=High/Yes

PROJECT	IMPLEMENTATION (ARE THE OUTCOMES 'RESILIENCE'?)	METHODOLOGY				
	Sufficient scale and scope of outcomes/ findings (reaches high numbers of individuals, communities etc and/or effects widespread institutional change)	Scale and scope of xfe – sample sizes, selection process. Reflects scale and scope of the project	Fe report draws on full range of up-to-date secondary data (m&e data; fe report etc)	Mixed methods are used	Data is valid (measures what it is supposed to measure)	Data is sufficiently disaggregated
Anukulan-X	1	0.5	1	1	1	0.5
CMESA-E	1	1	1	1	1	0.5
DCF	1	0	0.5	0.5	1	1
MAR-X	1	1	1	1	1	1
BRACED-X-LM	1	0	1	1	1	0.5
PROGRESS-X*	1	0.5	1	0	1	1
WYL	1	0.5	1	1	1	1
SUR1M-X	1	1	1	1	1	1
BRES-X	1	0.5	1	1	1	1

* Scoring for PROGRESS-X encompasses the XFE report plus the case study which was designed to complement the XFE work and as such the two are considered as a package.

ANALYSIS				SUPPLEMENTED BY KII OR CASE STUDY	TOTAL (MAX=11)	RATING
Quality of report in evidencing outcomes (specific, stepping away from rhetoric; the right metrics)	Plausible and robust attribution or contribution story	Triangulation of data sources	Overall strength of report – richness, how reflective and critical			Low=0–5 Med=6–8 High=9+
0.5	0.5	0	0.5	0.5	7	M
1	1	1	1	1	10.5	H
1	0.5	1	1	1	8.5	M–H
1	1	1	1	0	10	H
1	0.5	1	1	1	9	H
1	0.5	0.5	1	1	8.5	M–H
0.5	0.5	1	0.5	0	8	M
1	1	1	1	0	10	H
0.5	1	1	0.5	0	8.5	M–H

Table A8b: Quality of data narrative notes

PROJECT	DESCRIPTION	XFE QUALITY OF DATA RATING
BRACED-X-LM	<p>Implementation: Facilitate trans-border livestock mobility to improve resilience to climate shocks and stresses of 1,154,800 women, men and children pastors and agro-pastoralists in Burkina Faso, Mali, Mauritania, Niger and Senegal. Same ToC as BRACED, consolidate processes, allow maturation period, improve sustainability.</p> <p>Methodology: Desk study of background data and reports, monitoring database of key indicators, updated throughout LM and LM-X. Focus on depth rather than breadth. Quantitative field survey relatively small sample size. In Burkina Faso 84 men and 1 woman responded to the surveys in 7 communes in 3 regions and on 14 sites along all the tracks arranged and secured by the project. In Mali 81 men and 2 women answered (all validated) in 7 towns of Nioro around 13 sites surveyed along all tracks arranged and secured by the project. A total of 165 responses completed (162 men and 3 women). Qualitative: FGDs and semi-structured interviews with local actors. 33 different sessions (FGDs and working meetings, interviews) encompassed 143 people (including 7 women). In Burkina Faso 13 FGDs with 66 men and 2 women (68 people). In Mali 17 FGDs with 68 men and 4 women (72 people). 20 telephone interviews with women (of limited value). 13 semi-structured interviews (including 11 men and 2 women) with broad range of stakeholders across multiple levels. TOTAL 342 people consulted in qualitative interviews and FGDs: 309 men, 33 women.</p> <p>Analysis: Good triangulation of data sources. Thoughtful analysis of underlying change pathways and barriers to change. Contribution story and alternative plausible explanations could be strengthened.</p> <p>Dataset supplemented by KII with evaluation team.</p>	High
DCF	<p>Implementation: Extension phase focused on i) consolidating the model and institutionalising devolved climate finance; ii) intensifying political and institutional engagement to scale up the mechanisms.</p> <p>Methodology: January 2018 to February 2019, and also considers the years 2015–2017 to deepen understanding of three areas: the institutionalisation and localisation of mechanisms for accessing and allocating climate funds (through decentralisation and de-concentration, A.1.); the inclusion of different groups that use investments and natural resources, considering their needs and interests in interventions and their political voice in decision-making; and the relevance of DCF project guidelines on local development, resilience and adaption to (climate) shocks and trends, its long- and short-term guidelines and the distinctions between them.</p> <p>Not realist; does not use most recent underlying monitoring data so the evaluation findings have no assessment of strength of evidence and may appear anecdotal or speculative in places. XFE built on the previous phase realist FE, but did not provide additional ICMO analysis although it was expected in the XFE ToRs. All other available secondary sources consulted; however, delays in data collection owing to payment delays from DFID meant some sources not available at the time of the XFE. Some triangulation, although limited by time constraints: 1 or 2 FGDs or resource persons interviewed per site, and discussions focused on the political and institutional aspects of the mechanism rather than the technical aspects of the intervention(s).</p> <p>The team visited two <i>cercles</i> or <i>départements</i> in each country, and chose one or two villages from one or two selected communes in each. Some villages in Senegal were in remote areas, but it was not possible to visit remote areas of Mali owing to the security situation. In the villages, the team led discussions with the communal and village authorities and groups that use the investments. Where possible, they interviewed secondary rights holders such as women and agro-pastoralists. TOTAL 11 villages: Mali/Mopti 6 villages; Senegal/Kaffrine 5 villages.</p>	Medium-high

PROJECT	DESCRIPTION	XFE QUALITY OF DATA RATING
DCF <i>continued</i>	<p>Excellent realist KII with the project staff yielded valuable data.</p> <p>Consulted Annual Report Supplement 4 M&E data to supplement the report.</p> <p>Analysis: ToC. Consultant questions the links between DCF's activities and BRACED objectives. Discusses DCF contributions but does not specifically detail contribution analysis or how attribution/contribution has been considered/addressed.</p> <p>Dataset supplemented by KII with evaluation team.</p>	Medium–high
WYL	<p>Implementation: Project implemented in 10 communes and 30 villages in the regions of Mopti, Segou and Koulikoro. Aimed to reach 26,000 beneficiaries, including 4,000 women, through the creation of 100 companies and savings groups. Unlike other BRACED projects that continued to operate in the same areas as in the previous phase, WYL was involved in new villages in 10 Ric4Rec implementation communes.</p> <p>Methodology: M&E data consulted, interviews conducted with a range of stakeholders across multiple 'institutional' levels. Realist approach. Combined quantitative and qualitative methods. Representative sample (with the exception of the lower sample size in a region with high security concerns). Pre-testing of data collection tools. Sex-disaggregated data. Seems to be well designed and well conducted. 4 FGDs with an average 6 persons per group in Koulikoro region and 12 FGDs with an average 8 persons per group in Mopti region. KII with members of the following organisations: WYL staff, ICRISAT staff, DGCT, AMASSA Afrique Verte, village chief in Dosorola (Koulikoro), Farmer Mpebougou, (Koulikoro).</p> <p>Analysis: Contribution/ attribution – asked stakeholders directly about link between tech provided by project and wellbeing outcomes. Difficult to know what was effective.</p>	Medium
Anukulan-X	<p>Implementation: Implemented in 6 districts (Western Nepal): Kailali, Kanchanpur, Dadeldhura, and Doti of Province 7, Bardiya of Province 5 and Surkhet of Province 6. primarily focusing on vegetables, essential oils, nutrition and cereals. The project i) has formulated and reformulated 41 DRR-harmonised LAPAs; ii) over the total implementation period (January 2015–April 2019), reached out to 122,570 households benefiting 612,850 vulnerable poor people in Provinces 5, 6 and 7.</p> <p>Methodology: Data includes impact evaluation carried out by IDE to obtain rigorous estimates of impact and outcome-level indicator results for ongoing logframe reporting. Large amount of project monitoring data collected throughout the course of implementation. XFE prioritises qualitative data collection and detailed document reviews as the primary methods to be used for the XFE. <i>Quantitative:</i> 600 households (300 treatment households and 300 control households) selected from 8 municipalities and 13 rural municipalities spread over the 6 project districts. Sample size based on the Anukulan baseline and final evaluation. The FE of the interventions on additional 20,000 households includes selection of 1 rural municipality and a municipality in all 6 districts. This gives a total of 6 rural municipalities and 6 municipalities with a total of 12 survey units. The total sample size of 300 households, equally distributed among 6 project districts, 25 households per rural municipalities and municipalities, making a total of 50 households per district.</p> <p><i>Qualitative:</i> FGDs and KIIs in the same sampled municipalities and rural municipalities as quantitative data collection. At least 2 FGDs in each sample municipalities and rural municipalities. FGDs: 2 types of farmer groups – vegetable and essential oil – were selected. FGDs with members of Marketing and Planning Committees, Distillation Unit, Nutrition Group, Microfinance Group and Crop Insurance Groups. Inclusion of both core household groups and value chain household groups ensured in the FGD. Both female only and mixed FGDs. KIIs conducted with municipality executive officers, district forest officers, chairpersons of various committees, private sector, CBFs, MFEs, challenge fund implementers, crop insurance institutions and other stakeholders.</p>	Medium

PROJECT	DESCRIPTION	XFE QUALITY OF DATA RATING
Anukulan-X <i>continued</i>	<p>Analysis: Attribution determined through treatment and control analysis; realistic approaches meant 'the context is not extracted from the effect of the intervention'. In some cases qualitative data not used effectively enough to substantiated statements of findings. No analysis of contribution.</p> <p>Dataset supplemented by KII with evaluation team.</p>	Medium
SUR1M-X	<p>Implementation: SUR1M-X covers the same 19 target communes during the BRACED phase, including 12 in Niger and 7 in Mali. The full package of interventions was carried out only in the 10 communes classified as 'high impact' by the SUR1M project (6 in Niger; 4 in Mali), all in the Niger River Basin. The FE focuses on the BRACED-X phase: January 2018–June 2019. Scale of cookstoves relatively small (pilot).</p> <p>Methodology: Examination of existing project data, data for indicator KP14, quarterly and annual reports. Primary data collection used a mix of qualitative and quantitative methods, with a focus on qualitative (FGDs). The FE was conducted in 60 villages in the intervention area. These villages (36 in Niger; 24 in Mali) were selected by the level of activities implemented. Questionnaires were administered in approximately 300 face-to-face interviews in beneficiary and non-beneficiary communities, with community leaders and with project coordinators. Quantitative data was first gathered and analysed, then qualitative methods were used to explore and understand patterns found. Key resilience indicators (KPI4) measured in 60 high-impact villages, 12 from each of 5 zones, representing a different means of subsistence (36 from Niger; 24 from Mali). Households within each village were then sampled using the Household Economic Approach (participatory income and vulnerability ranking based on locally relevant criteria determined by the community). 8 representatives (4M 4F) were then randomly selected from each level; 32 respondents per village (1,152 total respondents in Niger; 768 total respondents in Mali).</p> <p>Analysis: Attribution evaluated through qualitative interviews, by asking respondents precise questions about the extent to which observed changes owed to interventions, in their opinion. Realist approach followed. In terms of establishing counterfactuals, respondents were asked what would have happened without any interventions, what their situation was prior to the interventions and how outcomes for them differ from others not involved in the project, or those from other villages. A qualitative evaluation was conducted of each ICMO identified, to establish the extent to which the outcomes are attributable to project interventions. The majority of results from ICMOs presented strong arguments for attributing results to project activities, but this owes largely to the fact that the interventions are fairly new to the region. The results (access to financial services, strengthened institutional response to adaptation, improvement in climate information access) were therefore easy to link to SUR1M interventions. Long-term impacts, such as increase in income and agricultural productivity, are harder to attribute in this way. In some places, it is unclear what is BRACED and what is BRACED X outcome and change pathways implicit</p>	High
MAR-X	<p>Implementation: Evaluation focus on the lowland regions (Afar and Somali) where pastoralism is the main livelihood approach and people are the most vulnerable to climate extremes and disasters. Worked across 20 <i>woredas</i>. The extension phase of the project (MAR-X) began in January 2018 and ended in March 2019. The extension phase worked on all intervention packages except for the partnership-building work.</p> <p>Methodology: Monitoring data used. Qualitative interviews used to understand how and why changes occurred and for whom. Focus on rural-based pastoralists and agro-pastoralists in 6 <i>woredas</i> in 2 of the 4 project study regions (Afar and Somali). 17 KIIs in Afar and 20 in Somali of IPs (cooperative leaders, field agents and registration officers, community development facilitators and private sector partners), staff, local government officials and <i>kebele</i> leaders. 10 FGDs conducted in Afar and 11 in Somali of VSLAs. The selection of interviewees was purposeful and aimed to maximise learning on the ToC pathways (CMOs).</p>	High

PROJECT	DESCRIPTION	XFE QUALITY OF DATA RATING
MAR-X <i>continued</i>	<p>Quantitative: A 2-stage sampling approach was used, first at the <i>kebele</i> (village) level and then at beneficiary level. 21 different <i>kebeles</i> were selected among 6 <i>woredas</i> based on the maturity of the interventions, combination of interviews and contextual characteristics including historical exposure to climate shocks. Within each <i>kebele</i>, at least 25 beneficiaries were selected representing MFI clients, VSLA members, weather data users and people who received various training (e.g. livestock and crop production and/or business training). A total of 594 beneficiaries were surveyed across both regions. Annex 3 lists all surveyed <i>kebeles</i> and <i>woredas</i> in each region (Afar and Somali).</p> <p>Analysis: Highly skilled evaluation team, realist experts, robust demonstration of contribution of activities to observed changes in attitude and behaviour. Drew on extensive evaluation literature to both ensure methods of impact measurement and causal attribution were robust and identify proxy evidence on how such activities do/ do not affect attitudes and behaviour. Questions focused on mechanisms and contexts in which these outcomes hold true. 3-phased interview process to eliminate error in assumptions and findings.</p>	High
BRES-X	<p>Implementation: Project objective to strengthen resilience of more than 620,000 women, children and men so they are able to minimise their vulnerability to the effects of climate change and climate extremes. From January 2018 until May 2019 the project was extended as BRES-X with some changes in its work packages and a new coverage of 24 instead of 36 communes in the 4 provinces, with a total of 192 supported villages. This BRES Participatory Outcome Mapping Exercise (BPOME) report covers the entire period from January 2015 (as the starting/baseline point) until March 2019, with a special focus on the extension period of BRES-X from January 2018 until the date of the report (April 2019).</p> <p>Methodology: Mixed methods across evaluation sub-activities. Outcome mapping (qualitative); individual household method end-line survey in different locations to outcome mapping = FGDs with project beneficiaries in the 5 villages; quantitative HH survey: to attain an interval of confidence of 95% and a non-sampling error of 10%, 843 households from the 4 provinces were selected. 838 households of beneficiaries and non-beneficiaries from all 4 provinces interviewed: well-balanced sample across all 4 provinces. Out of these households 618 belonged to the group of beneficiaries and 220 to non-beneficiary households. Stakeholder interviews were carried out mainly with representatives and collaborators of WHOUSEHOLDS, the partner organisations and the provincial structure of the Ministry of Agriculture and Water Works, including extension workers, 'plant doctors'. Document analysis: evaluation of early 2018, the BPOME of 2018 and various reports and tables on the activities carried out. Somewhat low on realist analysis so can lack depth on 'how' and 'why' change happens in some instances.</p> <p>Analysis: Attribution/contribution addressed, especially in outcome mapping.</p>	Medium-high
CMESA-E	<p>Implementation: Development of a National Framework for Climate Services, based on guidance provided by WMO's Global Framework for Climate Services, building on both CIARE and the FARM-Africa BRACED interventions (MAR), which harmonised their practical support to increasing uptake of climate services with the NMA. Includes all 8 regions, 48 <i>woredas</i> from across Ethiopia's 8 rainfall climatologies, so 6 per rainfall area.</p> <p>Methodology: About 500 KIIs generated largely qualitative results. Each <i>woreda</i> carried out 4 FGDs (1 with DRR/EW committee at <i>kebele</i> level, one with DRR/EW committee at district level and 2 with community groups (1 M 1 F)). 12 commercial farms responded across different regions. KIIs conducted in Addis Ababa and involved collecting responses on the process, content and impact of the project. Feedback forms: stakeholder consultation workshop (13–14 March); sample survey of end users (listening groups/ comparison group): FGDs at <i>kebele</i> level carried out in 47 <i>woredas</i> across all regions of the country as part of the NFCS consultation process. Kobo Collect survey of 300 listening group members and non-members (roughly 150 of each) in</p>	High

PROJECT	DESCRIPTION	XFE QUALITY OF DATA RATING
CMESA-E <i>continued</i>	<p>Konso, Benatsemai and Hammer <i>woredas</i>. The sample frame used was the CIARE baseline survey, with non-members interviewed to provide a degree of comparison with members. The 3 <i>woredas</i> selected provide a cross-section of pastoralist and small-scale farmer climate service users.</p> <p>Review of project M&E and evaluation documents produced to date and interviewed the project team involved in managing CMESA-E.</p> <p>Analysis: Realist approach... outcomes are processes – directly attributable to activities (co-production). Well written. Small-N intervention so contribution and attribution are clear.</p> <p>Dataset supplemented by KII with evaluation team.</p>	High
PROGRESS-X	<p>Implementation: FE covers activities that originated under the first phase of PROGRESS and continued into the cost extension, PROGRESS-X. Under this, packages reduced from the original 6 to 4, to reflect the prioritised intervention areas</p> <p>Methodology: Purely qualitative interviews and FGDs, relatively small number. FGDs: in Wajir county, Kenya, 8 FGDs covering WAPCs, VSLA group, camel milk traders and camel milk vendors. In all, 32 women and 7 men participated. In Karamoja, 7 FGDs covering RACs, agriculture groups, junior farmer field schools, community land associations and livestock groups. In total, 36 males and 28 females participated. Between Wajir and Karamoja, a total of 60 women and 43 men participated in FGDs. 58% of respondents were women and 42% were men. A total of 8 KIIs were conducted with stakeholders, and 10 with staff. Across the 18 KIIs, 2 were conducted with Mercy Corps female staff. This highlights a serious underrepresentation of women, which points to fewer females in leadership roles that affect the PROGRESS X work, especially in government.</p> <p>Analysis: Attribution: operating under the assumption that 'activities were implemented the same under PROGRESS and PROGRESS X, and therefore evaluating PROGRESS activities will provide an insight into the impacts of PROGRESS X activities one year after the program closes. The evaluation's purposeful sampling method involved groups that were engaged with PROGRESS and received limited or no support under PROGRESS X. This sampling method was deployed because of the short implementation period between the end of PROGRESS and PROGRESS X (between 10 and 11 months), would make attribution extremely difficult. In the case of groups engaged in new activities under PROGRESS X, these groups were sampled fresh.'</p> <p>Dataset supplemented by in-depth policy case study report.</p>	Medium-high

BRACED aims to build the resilience of up to 5 million vulnerable people against climate extremes and disasters. It does so through a three year, UK Government funded programme, which supports over 120 organisations, working in 15 consortiums, across 13 countries in East Africa, the Sahel and Southeast Asia. Uniquely, BRACED also has a Knowledge Manager consortium.

The Knowledge Manager consortium is led by the Overseas Development Institute and includes the Red Cross Red Crescent Climate Centre, the Asian Disaster Preparedness Centre, ENDA Energie, ITAD and Thomson Reuters Foundation.

The views presented in this paper are those of the author(s) and do not necessarily represent the views of BRACED, its partners or donor.

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