August 2017
Issue no. 10

BRACED aims to build the resilience of up to 5 million vulnerable people against climate extremes and disasters. It does so through 15 projects working across 13 countries in East Africa, the Sahel and Asia.

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RESILIENCE INTEL

Evaluating complex programmes: Reflections on realism and resilience

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What works and why in implementing and achieving outcomes in adaptation and resilience-building projects? This paper considers the challenges faced and lessons learned in the mid-term review of BRACED projects to provide insights into using realist principles to evaluate complex, resilience-building programmes in an international development context.

KEY MESSAGES

- There is value in applying a 'realist' way of thinking throughout the programme cycle – not just at evaluation stage. This may be especially relevant for large, complex multi-sectoral programmes that all contribute to common higher-level outcomes and impact.

- Even if outcomes are yet to be realised, achievement of outputs can be viewed with a realist lens as important pathways towards change, allowing us to capture where implementers have put in place or effectively carried out important processes.

- As part of a broader theory of change approach, applying a realist lens forces you to ask important questions of how and why projects arrived at their outcomes, and formalises this.

- Realist approaches allow us to deal with multiple understandings of the term resilience. The process of moving away from rhetoric and asking basic but important questions helps us to improve our understanding of what resilience is in different contexts, and how resilience is built. Moving from rhetoric to realities means the BRACED final evaluation may not measure 'impact' or 'resilience' as defined in project documentation or baseline. Our growing understanding of what matters for building resilience means that some important elements may not be captured in project logframes. We need to be flexible and iterative in our approach.

- Realist framing of pathways to change focuses on context-mechanism-outcome (CMO) configuration, which assumes a linear process of activity to outcome and outcome to result. By allowing our CMOs to contain multiple, detailed steps, complementing this with an analysis of barriers and enablers of change, and unexpected and unintended effects, outcomes or consequence, we found we were able to retain much of the richness and dynamics that help us to tell the story. This strengthened our ability to analyse processes and outcomes that do not fit easily into a CMO 'box'.

WHAT IS BRACED?

The Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme is a 3-year, £110 million programme funded by the UK's DFID. It is one of the largest and most ambitious global initiatives **to strengthen resilience at scale, from local to national level, aiming to improve the ability of 5 million people to withstand the impacts of climate change, extremes and disasters.**

The programme launched in January 2015 and supports 15 projects led by BRACED Implementing Partners (IPs) in consortia working in 13 countries.[1] These consortia include local government and civil society organisations, research organisations and the private sector.

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' (DFID, 2014). This is summarised for the programme as the 3As + Transformation (Bahadur *et al.* 2015). IPs report against project-specific outcome indicators to demonstrate changes in resilience and show progress in International Climate Fund key performance indicator (KPI) 4: *'the number of people whose resilience has been improved as a result of BRACED support'*. These are related directly to the '3As' (see also Box 2).

Each IP has its own project-level theory of change setting out how they believe their activities will lead to impact. They carry out activities towards building local-level resilience using different strategies, modes of implementation, and operating in different contexts. IP-led activities (see Box 1), are intended to scale up proven technologies and practices and to enhance local and national capacity to respond to climate-related shocks and stresses.

BRACED projects are also expected to demonstrate progress towards achieving **transformative change**, moving beyond supporting incremental changes in people's resilience to encouraging a more radical shift in human systems, 'to fundamentally and sustainably

Box 1: BRACED project activities and implementation

The diverse partners and contexts give rise to a variety of ways to implement the projects, ranging from direct non-governmental organisation (NGO) implementation, to supporting the development of markets, private sector providers and value chains, to partnering with governments to establish mechanisms for disbursing resilience-building funds at local level, as well as other approaches.

1 Burkina Faso, Chad, Mali, Senegal, Niger, Mauritania, Sudan, South Sudan, Ethiopia, Uganda, Kenya, Myanmar and Nepal.

improve the resilience of vulnerable citizens to climate impacts' (Silva Villanueva *et al.*, 2016: 62).

Another key element of the BRACED programme is building knowledge and evidence on how best to strengthen resilience in different contexts. This draws on research, routine monitoring and results reporting from projects, and evaluation activities led by the BRACED Knowledge Manager (KM) (BRACED, 2015). This paper focuses on lessons learned from one evaluation activity: investigating *how* and *why* different 'interventions' contribute to resilience building within individual BRACED projects, and synthesising the findings.

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Table 1: Summary of activities and reported outcomes by Implementing Partner

PACKAGE OF INTERVENTIONS	ANUKULAN (IDE – NEPAL)	BRICS (CONCERN – CHAD AND SUDAN)	CIARE (CHRISTIAN AID – ETHIOPIA)	DCF (NEF – MALI AND SENEGAL)	IRISS (CONCERN – SOUTH SUDAN)	MAR-E (FARM AFRICA – ETHIOPIA)	MYANMAR ALLIANCE (PLAN)
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. Natural Resource Management (forest and watershed governance, pasture management, cookstove technology)	•	•		•	•	•	•
5. Financial Inclusion (village savings and loans schemes, linkage to financial service providers)			•		•	•	•
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, early warning systems, hazard mitigation, improved forecasting and climate information)	•	•	•	•	•	•	•
9. Gender and Social Inclusion (organisational change, training, policy influence, self-help and support)	•	•		•			•

Table 1: Continued from page 04

PACKAGE OF INTERVENTIONS	LIVESTOCK MOBILITY (AFL – 5 COUNTRIES*)	PRESENCES (CARE – NIGER)	PROGRESS (MERCYCORPS – KENYA AND UGANDA)	RIC4REC (IRD – MALI)	SUR1M (CRS – NIGER AND MALI)	WHH (BURKINA FASO)	ZAMAN LEBIDI (CHRISTIAN AID – 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. Natural Resource Management (forest and watershed governance, pasture management, cookstove technology)	•		•	•	•	•	•
5. Financial Inclusion (village savings and loans schemes, linkage to financial service providers)	•	•	•	•	•		
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, early warning systems, 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

The evaluation challenge

Several authors have highlighted particular challenges in evaluating multi-faceted programmes that aim to strengthen resilience (see Bené *et al.*, 2015; Bahadur and Pichon, 2016). BRACED, as a programme, poses additional evaluation challenges. First, the interventions are carried out in 13 different countries in East Africa, the Sahel region and Asia. The evaluation approach has to account for the myriad contextual factors within and across these countries and regions, and support rigorous evaluation at both project and programme levels. Second, projects are complicated, each implementing a suite of interventions across a number of different activity areas. They are also complex – activities interact with each other in multiple ways en route to achieving outcomes.

The KM aims to address these challenges by applying a *realist evaluation* approach to both the mid-term and final evaluations of the 15 BRACED projects. Our evaluation team (Jennifer Leavy, Stephen McDowell and Edward Boydell) is tasked with supporting IPs to carry out a coherent set of project-level evaluations. We worked with IP staff (including co-authors Nicola Giordano and Gretta Fitzgerald) as they prepared for and carried out mid-term reviews, and then synthesised the findings (Leavy *et al.* 2017).

The remainder of this paper is dedicated to reflections of our experience implementing a realist approach to evaluating a large and complex resilience-building programme. It starts with a brief overview of our application of realist evaluation, followed by experiences from different stages of the evaluation process: the design and preparation; the project-level evaluations; and the synthesis. It concludes with lessons that will be applied in the final evaluations (at the end of 2017), and recommendations for the design of future resilience-building programmes.

Our challenge

We were challenged to identify across the 15 projects in the BRACED programme, and their range of activities, not just *what* is working, but **how and why an intervention in a particular context works** – and for whom – acknowledging the way that contexts shape results. This is essential learning when it comes to deciding whether or not to scale up or roll out a programme elsewhere. Our overarching evaluation question was: **'How, where, when and why do BRACED interventions work, and what can be learned/how can good practice be replicated?'**

The idea was to apply a 'realist lens' to the BRACED projects at the mid-term and final evaluation stages to help us to answer this question.

What is realist evaluation?

Realist evaluation[2] first identifies theories about how a project or programme is expected to work. They are usually based on the theory of change for the programme (The Common Theory of Change, or CToC) and the theories of change for the individual projects (The Grant Theory of Change, or GToC). These are used to build explanations of why interventions may or may not work in

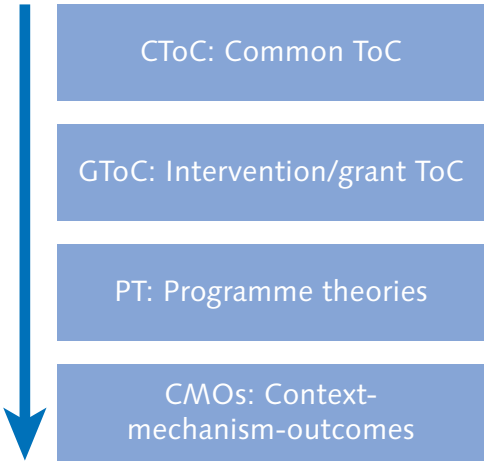
2 For more on realist thinking see Pawson and Tilley, 1997; Westhorp, 2014.

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

In realist evaluation **context**[3] is understood as the most important influence on whether an intervention succeeds in activating a *change process* (often referred to as a '**mechanism**'[4]) that will *cause* an **outcome**. So understanding 'causation' means understanding how context influences '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.

The assumptions we make about the contextual factors or mechanisms that we believe influence whether or not, and how and why, an outcome arises, are embedded in the programme theories, or theories of change. In realist evaluation these are explicitly tested through testing context-mechanism-outcome **(CMO) configurations**. CMOs are detailed or fine-grained programme theories, or hypotheses, depicting how we expect the 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. Figure 1 shows the flow from CToC to CMO configuration.

Figure 1: From theory of change to CMOs



A realist approach and BRACED

By using realist thinking to explore what was done, how and why it was done that way, and the ways in which outcomes have been achieved, the BRACED projects will be able to evidence how, when and why their activities work, (for whom and under what circumstances), as well as if and why things did not work. The realist lens is particularly appropriate in the BRACED programme as the 15 projects have been selected to cover a broad range of contexts. Because realist evaluation pays explicit attention to different contexts, and how these bring about behaviour change when project resources are introduced, this enables the evaluation team to synthesise across the individual findings, allowing us to compare 'apples' with 'pears'.

The realist approach has not been applied widely to evaluations in the field of international development.

3 Examples of context might be something like 'restricted market access' or 'lack of access to formal banking'.
4 Examples of mechanisms include trust.

The size and scale of BRACED presents a variety of challenges. For example, how to holistically evaluate interventions that can involve stakeholders from the community level to national or in some case regional levels. Realist thinking can be applied at higher levels of implementation but also at a very local scale (from factors contributing to uptake of kitchen gardens by women in Chad, to the effectiveness of measures by local government officials to manage decentralised climate funds in Mali). BRACED projects also employ some very different ways of implementing – from direct implementation by the IP to strengthening government capacity to implement – sometimes within a single project. The realist approach allows for evaluators to review all of these various approaches and stakeholders in different contexts.

WHAT WE LEARNED

Establishing a framework for evaluation

Our first task was to develop our evaluation design so that we could achieve our aims of: (1) working together to support IPs to gather the information needed in their mid-term reviews (MTRs) to answer the evaluation question and reflect on where change may be needed in projects to meet resilience objectives ('course correction'); and (2) synthesising project findings.

IP staff, rather than the evaluation team, were responsible for collecting the data for the MTRs – either themselves or using external consultants.[5] This meant that the evaluation activity had to be designed in such a way as to sit alongside and build on an already extensive monitoring and evaluation (M&E) framework that guides IPs. This includes annual reporting against logframes, including key performance indicators (KPI) mandated by the International Climate Fund (ICF). In addition there was qualitative reporting against the BRACED conceptual frameworks (Box 2) and IPs' own internal M&E structures and processes. Project activities were also ongoing. So we had to make sure the MTR process would be as efficient as possible; for example, by providing structured templates for the evaluation matrix, with evaluation questions and sub-questions for IPs to tailor for their own use in the MTR.

Introducing realist thinking

A particular challenge, for both the evaluation team and the IPs, was encouraging and supporting realist thinking by 'non-specialist' (IP) staff with diverse levels of M&E experience.

The way we approached this was to hold one-to-one calls between IPs and the evaluation team throughout the process: from evaluation design through to supporting the IPs to generate the terms of reference (ToRs) and the evaluation matrix for their mid-term review; during data collection; and in 'key informant

5 Of the fourteen MTRs received, six IPs did the MTR themselves and eight IPs commissioned consultants.

Box 2: BRACED conceptual frameworks

As part of their M&E systems, the BRACED projects are guided by two complementing conceptual frameworks.

First, they have been following a common approach to measure the 'outcomes' of resilience-building processes, thought of as a set of interlinked capacities to **absorb, anticipate and adapt** to shocks and stresses (the 3As – Bahadur *et al.*, 2015).

In addition, four *Areas of Change* support project and programme-level lesson learning on the key processes by which resilience is built across contexts, at different scales and over time. The Areas of Change explain how BRACED projects, and the programme as a whole, improve resilience.

The four Areas of Change are:

- **Changes in knowledge and attitude** in relation to resilience building, in order to further strengthen policies and practices;
- **Changes in the capacities and skills** of national and local government, civil society and private sector to manage the risks of climate extremes and disasters;
- Changes in the **quality of partnerships** to deliver interventions;
- Changes in **decision-making processes** through inclusive participation, as one key aspect of a resilient system.

interviews' with IPs following review by the evaluation team of IP MTR reports.

In applying realist thinking, the strategy we took was to start with the outcomes that projects had or hoped to achieve. The rationale was that the projects need to be clear what outcomes have been achieved first before 'layering' on the realist questions. This also enabled the previous data collection and reporting to form the basis of the realist work, as a dataset that the IPs could draw on and complement with further qualitative work, both on outcomes and also on how and why projects got there. Evaluation and routine project monitoring activities need to be sequenced carefully so that by the time the IPs reach the stage of carrying out their MTR (and the final evaluation) they already have data on many of the outcomes achieved and evidence to support this.

Even though it was the *mid-term* review we had to think of this as the baseline for the realist work – starting with the theory of change and working from there, partly because baselines for some projects were not yet finished but also because we needed IPs to articulate precisely how and why they thought their projects would work. Our challenge was to work with the 15 different project implementing partners to guide them through a process of unpicking and understanding their theories of change – how activities can be expected to achieve outcomes and impact and through what steps – and help them to get into a way of thinking that would allow them to interrogate how and why projects, actually got there.

As the evaluation team, we supported and encouraged the IPs to link their theory of change to the actual activities they are implementing and the contribution that these make to a clearer and evolving understanding of resilience. The realist approach helps to drive that understanding 'from the ground up', by challenging IPs to define what resilience looks like in the contexts where they

work, how their activities address it, and benchmarks they are using to measure it. It asks them to examine their roles and actions as implementers and the quality of their own work. It can also reinforce an appreciation of how external factors, or *context*, not only shape the way they implement their projects, the way people respond to project activities (mechanisms) and how outcomes are realised, but also how context shapes the resilience of project participants.

Taking one IP as an example, for the PRESENCES project (Natural resource management and governance, climate-resilient livelihoods and improved climate information services, operating in Niger) the realist approach meant focusing on all relevant steps and operational details leading to a specific change, particularly at the output level, and how they were affected by contextual forces and stakeholders buy-in. For example, how prior relationships with local institutions accelerated formalisation of resilience-focused local accords, compared with the effect of new entry points. Local partners provided operational narratives from an activity angle and the consortia lead guided the mapping of this information to the MTR areas of inquiry.

Translating theory to practice

We found when translating realist ways of thinking into a workable design that we (the evaluation team but especially the IPs) faced an ambiguity as to whether we were talking about *theoretical* (*rhetorical*) resilience – the 'resilience' of proposals and logframes and donors – or '*practical*' resilience – that is, what is perceived or experienced as resilience on the ground. We found that there was a strong tendency for conversations about activities and target outcomes to focus on the language of the proposal and overarching theories of change – 'we are doing financial services' and that 'this will improve resilience'. But we need to unpack exactly what the activity entails (e.g. setting up savings groups, encouraging people to sign up, providing training in budgeting and keeping records) and how this contributes to resilience (e.g. if people have savings they may not have to sell off valuable assets in times of shocks or stresses). To achieve this we started from a very simple premise: let's build the evaluation plan from what you/we as IPs are going to do – start with the individual activities and then work out what the outcomes will be. Move away from rhetorical outcomes and break down what people are actually doing (activities and outputs) and what you actually think that will achieve. Is there a clear pathway from activity to outcome? If not, what needs to change and how?

A particular challenge here is capturing that important progress made in achieving or building valuable processes and relationships, which has a large bearing on the success or otherwise of a project, especially for a multi-faceted one in complex contexts. These types of achievements are not easily translated into measurable outcomes. When we applied the realist lenses to some of these instances we found ourselves asking 'are these outcomes or are they mechanisms?' In reality they could be one or the other depending on the stage of implementation and we found it helpful not to get too hung up on definitions and to focus in the first instance on articulating clear and demonstrated pathways towards change.

Given the number of activity areas each of the projects is implementing in (Box 1), with multiple activities in each, unpacking the theories of change into pathways that could be 'interrogated' during the MTR

resulted in hundreds of different CMOs about how the programmes would work. Within projects, these tended to be linked to each other in line with the way that BRACED projects have been designed intentionally to have different activities complementing and building on each other to achieve outcomes.

The complicated designs of projects with many different components posed an evaluative challenge. Projects can be viewed as collections of 'sectoral' interventions, but together are greater than the sum of their parts. The usual steps in realist evaluation are an iterative process of developing, testing and refining theory. But these theoretical CMOs, generated from project documents and the theories of change as well as the MTR data, prove to be an unwieldy amount of data – for each project and for all 15 in combination when it comes to synthesis. Something we need to address going into the final evaluation is whether or not we are going to directly 'test' the CMOs. And if so, how to prioritise these as we cannot test them all.

Realism in the field – perspectives from projects

The realist approach is mired in concepts. Translating the design into practical application – making it useable – rested for the large part with the IPs. This section focuses on the experiences of the IPs in collecting data with a realist lens for the MTR.

Applying realist thinking

As IPs, we had to ask ourselves: 'What does a realist evaluation look like? And what is the most practical way of approaching it?' We had to go through a process of simplifying the high-level ToRs and evaluation matrix designed with the KM, then used these to inform the design of data collection tools and checklists to ensure we were able to answer the evaluation questions and sub-questions in the matrix. To make this a manageable task there were some common thematic questions kept in mind at all times: What is the problem we are trying to address? How have we gone about addressing it? What do we want to see changing? Where do we want to see these changes? With whom? Are we seeing it? Why did it come about and why did it not come about?

With these common questions we also dug deeper asking more specific questions where necessary to ensure that we can clearly articulate how each mechanism and outcome fits within the context we are working in. At the start and the end of the evaluation we also reflected on how the project and theory of change was originally designed and how it is evolving, and where we think we want to be in a year's time.

The participatory approach taken by one IP was working with the project team to establish what outcomes have been achieved, and then drilling down to establish how and why these have come about. This is something that teams often do not have the space or time to do, which made this exercise particularly challenging. Following this exercise with the project team, field visits were conducted to verify what was discussed. What was seen on the ground was often much more realistic and by asking participants to describe their story as well as demonstrate their new knowledge, skills, equipment/input, a much more nuanced picture evolved. Where activities were not working so well, the team, together with the evaluators, probed into why. This allowed for the team to go through an organic process of establishing the mechanisms, the desired outcome, and the actual outcome, then identifying constraints/facilitators to

change and working together to come up with appropriate adjustments. Applying the realist approach in a participatory way with those implementing the project activities on a day-to-day basis in the context can make the approach highly valuable in helping articulate what IPs are doing, what the outcomes are and what IPs should do more/less of, and what should be tweaked.

Another use of the approach was to revise the project ToC. Often ToCs are designed at the beginning of projects/programme and rarely revisited until the end. The design is often facilitated or done completely by someone that will not be involved in the implementation of the project due to proposal and project start-up timelines, staff moving on after a year or so, capacity/resources available, poor representation of all stakeholders/partners etc. This results in a ToC that is not representative of the reality of the project. The information and insight gained though the MTR evaluation allowed some IPs to review and revise their ToC. Revisions included clarifying change processes with the key change agents clearly defined, and also refining the assumptions that remain valid and removing those that did not hold true.

Looking back on the process of bringing realist thinking to the project implementation and project participant (beneficiary) level, things worth considering are:

Translating **terminology:** It took time to ensure that those facilitating and co-facilitating/translating had a clear understanding of terms such as mechanism, outcome, context and stakeholder as these are common terms but used differently across donors and partners.

Defining '**context**': Especially where multiple realities coexist for different people, and disentangling context and mechanisms and how these affect institutional or social forces.

Defining '**mechanisms**': Many of us saw mechanisms as synonymous with the intervention or activity (for example, describing an activity like establishing savings groups as a mechanism rather than as an intervention), with a tendency to focus on this and not behavioural change as a result of project resources being introduced within a particular context. This had implications for conceptual clarity and for asking the right kinds of questions. From an evaluation point of view, however, the attention paid to what we termed *intervention factors* demonstrated the importance of project resources and the way projects do things in influencing changes in behaviour and reasoning (mechanisms), and that these intervention factors are very much a result of the particular context the IPs are operating in. There are important lessons here for future programming that might have been lost had the projects thought of 'mechanism' only as a change in reasoning or behaviour, and it is for this reason that in analysis we used the term **ICMO (intervention-context-mechanism-outcome)** rather than the conventional CMO for our detailed (so-called 'fine-grained') programme theories.[6]

Establishing the **level of detail** needed: Accepting that defining the context (which can have multiple realities as mentioned above) and the mechanisms, the desired outcomes and actual outcomes to date and all the information that comes with this to answer to why, who and where questions for any project would be a sizeable piece

6 This conceptualisation of two kinds of mechanism is in line with Pawson and Tilley, 1997 and the disaggregation of mechanism into resources and reasoning is explored further in Dalkin *et al.*, 2015.

of work. Applying the realist approach rigidly in the evaluation of a complex multi-sectoral project runs the risk of the body of work becoming unwieldy and the evaluators becoming fatigued by the whole process if not carefully managed. The devil is in the detail, therefore a flexible approach where the parameter that established what is nice to know vs what we need to know are kept in mind.

Identifying **early changes**: Some changes take time to be realised. Given that the evaluation took place 18 months into a 3-year project, where many projects did not begin some activities until 12 months in, some activities are seasonal and some activities simply take longer to realise change meant that it was sometimes difficult to get the more granular information on what is facilitating/ constraining change, for whom, why, etc. Therefore, it is important to apply the realist approach in a flexible way that allows evaluators to articulate where there is, or is not, signs of early change.

Ensuring **local partners** participated in the process provided the opportunity to bring the ToC back to reality based on what was happening on the ground.

Getting the right respondents

Projects had a range of budgets and sets of objectives for their MTRs. Some used external consultants while others took an internal approach, and some IPs have partners dedicated to semi-independent M&E. Using external consultants doesn't immediately guarantee quality but in some cases yielded high-quality results, with consultants offering new perspectives. However, this ran the risk of missing some nuances that may be noticed or captured by people more familiar with the projects. For others, the deeply reflective nature of the MTR meant that they felt their own staff were best placed to carry out the data collection. For some IPs this was through internal workshops with project staff followed by field visits. Even though this might raise questions about independence of the data and the evaluation, it is our view and experience that for realist evaluation what is important is getting the right respondent. That means having an open mind about who participates in the evaluation. The people who have the depth of knowledge to be able to answer the 'how' and 'why' questions about the way change happens in the projects are crucial. This means that project participants, change agents, key stakeholders *and* project staff should be considered.

Realism, reflection and 'course correction' – project perspectives

There was an underlying tension in the MTR process in that we are expected to implement ambitious resilience-building projects within a tight time frame. At the same time, we are carrying out deep, reflective work to fulfil the objectives of the MTR to enable 'course correction'. Working to a ToC and building in reflection and course correction requires a strong focus on change. The way we applied a realist lens to thinking about how change happens demands that we first have rock-solid clarity on what we think that change is (ICMO configuration): Did we do the activities we said we were going to do? And did a given group of activities deliver the demonstrable change that we said it would? Claims of impact have to be grounded in a foundation of evidence, which implies 'measurable' changes. Structuring analysis of outcomes and how projects achieved them around the ICMO approach has proven to be a very powerful construct in defining change and attributing that change to specific activities

while enabling the 'layering in' of how and why change happens.

From the IP perspective, going through this process in the MTR of examining pathways towards change and working out which contexts and mechanisms play a role, and how and why, made us realise we had not at the outset sat together and worked through exactly what precisely different activities really looked like at each stage of implementation (support groups and community-led total sanitation, for example) and what specific changes they were going to bring about and how these contribute to resilience. There were differing understandings of activities between project staff. For some projects, it took several rounds of interactions with separate partners over time to generate ToC-based links within the MTR, which at first were largely activities focused. One interesting and important insight is that we felt that it would be good to do this process at the start, bringing to bear realist thinking right from the project proposal stage. This means asking very direct and deceptively simple but often overlooked questions such as: 'What are we doing?' 'What change are we expecting to bring about?' and 'With whom?' Many IPs felt strongly that there is room for a 'realist' way of thinking, and the methodology used at MTR, throughout the programme cycle, not just at evaluation stage.

The process of 'self-reflection' and course correction, through realist thinking, means that some IPs have realised that for some of their ToC – the way they thought some activities would lead to specific outcomes – are not supported by the kinds of outcomes delivered. The MTR provided space and time to make clear exactly what IPs are doing and wish to do. In some cases this made some parts of some of the baselines redundant and led to the ToCs having to be modified – in line with the 'course correction' function of the MTR. This has enabled project management to respond to the MTR findings ('this is what is actually happening, compared to what we said would happen'), making decisions informed by discussions with project participants and key stakeholders, field observations, and reflection and review as a team. It also highlights where there are differences between what resilience means for local communities compared to what it means to project staff, to partners and to donors (discussed more below).

The attempt to report on a common concept of resilience can be problematic because the low predictability of climate conditions, combined with a lack of readiness at the micro-level in the face of shocks, leads to constantly re-steering project delivery in a consultative way. This is compounded by each of the 15 project having its own measurement approach for resilience. The way donors and implementing partners can better engage is by recognising that resilience is fluid and we need to flip the focus and scale of evidence from centralised accounting/logframe purposes to local needs and perceptions when recognising and facing chronic/sudden shocks.

Allowing projects to make changes to get back on track, rooted in learning from the MTR, means that IPs can also capitalise on positive changes, in line with adaptive or 'results-based management'. One particularly strong example of the power of this approach is the case of one IP who had been assessed as having 'weak' performance on being marked against quantitative indicators, set by the IPs, by the BRACED Fund Manager (FM). These indicators are largely theoretical, and in fact the IP's activities are aiming towards (and are actually achieving) different things.

This poses a tension between BRACED programme manager (FM) awareness of outcomes and what is understood by IPs, which may evolve during implementation. However, IPs have an opportunity to update their logframes each year based of learning during implementation and/or changes in context. The MTR process, by applying a realist lens to activities and outcomes and pathways towards change, contributed to and further stimulated discussions and meant that the IP and the FM could reconcile what was actually going on in reality with the original expectations, especially in light of significant challenges and delays in start-up. The IP is now performing well based on their revised targets and restructured programme as a result of really rethinking the contribution they are making, and what they previously thought was resilience has also evolved through this iterative process.

The use of evidence in this way is the missing picture when it comes to learning from the BRACED programme – a consideration of activities at baseline and those at endline and what happened in between. How was the evidence used to change things and to steer better work-planning? Without people driving that discussion and systematically recording what has happened in terms of course correction, then it is difficult to do any rigorous analysis in this respect. How quickly a project or programme is able to use evidence to respond to change, for example a change of context etc., is about more than just how activities led to an outcome. Things happened along the way and decisions were made in response to evaluation learning.

Analysis and synthesis of findings – perspectives of the braced evaluators

Our analysis and synthesis process is outlined in Box 3. When it came to analysing and synthesising findings from across all of the BRACED project MTR reports, the evaluation team faced a number of challenges. The stage of implementation – in most cases, still relatively early at the time of the MTR – meant that tangible outcomes were

Box 3: Synthesis process

The analysis and synthesis drew on three main sources of data: (i) a desk review of the project and programme documents including annual reporting data; (ii) IP MTR reports; and (iii) transcripts of key informant interviews (KII) carried out by the evaluation team with IPs following review of the MTR reports.

We used a typology of activities to group the projects, clustering and analysing the programme theories and contexts, mechanisms and outcomes, to draw out lessons and implementation experiences across the projects. Under a realist lens, a range of techniques helped us to 'think about evidence and draw conclusions' (Michaelis and Westhorp, 2016: 13):

- juxtaposing ('for instance, when one study provides the data to make sense of the outcome pattern noted in another');
- reconciling (identifying differences which explain apparently contradictory sets of findings);
- adjudicating between studies (quality of research);
- consolidating (multi-faceted explanations of success); and,
- situating (this mechanism in context X, that one in context Y).

anticipated but had yet to be observable. The pathways towards intended outcomes are also not yet well evidenced, and we have mostly individual instances and examples of particular outcomes achieved and ICMO configurations. This means that the necessary volume of data for a full synthesis is not available, although some limited synthesis was possible of implementation factors and mechanisms linked to processes. In order to achieve as much learning as possible from the MTRs, we analysed what works and why by considering the lessons we may learn from individual events as well as from pathways towards outputs achieved as building blocks towards change. This helps to make sense of the complex processes that underlie the projects.

In terms of analysing and making sense of the data, linking 'rhetorical' and 'technical' elements of resilience, we found using ICMOs to be a powerful approach to explain what has been done and what benefits were attributed to those activities. It is particularly useful in the BRACED programme where so much is academic or rhetorical. When it comes to linking to climate extremes and disasters, specifically how the outcomes are supporting people to better manage events and impacts, the realist lens has forced a discipline to go behind the rhetoric to 'lift the bonnet' and understand what it all really means. We discuss this in more detail in the next section. Some of the changes are of a different order to others: with individual stories of 'personal' gains contrasting with widespread outcomes benefiting many people or communities. In addition, there is a distinction between 'one-off' changes and those that are sustainable and transformative. In gathering evidence for specific ICMOs we can get a sense of which mechanisms are important for these transformative, higher level changes.

Realism and resilience – perspectives of evaluators and IPs

We find that realist thinking at the MTR helps us to clarify what we understand to be resilience and transformation, and how BRACED projects contribute to these. It has done so by first demanding clear and measurable outcomes. Second, it demands exploration of attribution between the activities being implemented and those outcomes. Finally, where those outcomes are intended to be complementary (synergistic), the relationships between them should be demonstrated.

Structuring BRACED project activities as ICMOs has clarified many different interpretations of the common BRACED resilience definition and its 3As. All agree that the term is complicated and there are many different understandings, even within BRACED, of what resilience is and how it should be built (especially within 3 years) or measured. Within the projects, 'resilience' is used both rhetorically and technically, as mentioned above. As a rhetorical term it is used to make an emotive argument to address the connection between poverty and crisis. Owing to its many different interpretations, the term itself does not offer technical guidance on the nuts and bolts of how this connection can be addressed. Most notably, it became evident during the MTR that the conceptual and academic language used to guide resilience project design did not provide the technical precision and clarity required for project implementation.

For several IPs, the MTR helped them to ask how the activities they were implementing fit with their project's resilience lens and other conceptual

frameworks (i.e. 3As). They observed that their logframes were conceptual and academic and sometimes not well aligned with the activities and outcomes they were actually implementing. They were also aware that their project-level theory of change was not necessarily well understood by project staff or easy to translate into practical work on the ground.

What has become clear from the MTR is that an IP can only claim project success from the outcomes they can attribute with evidence to the activities they do. It is a bottom-up rather than top-down way to gauge contribution. In this regard a real strength of the ICMO approach is that it challenges many 'resilience' constructs, forcing people to say what they mean and to prove claims of impact. This has been particularly helpful when it comes to IP reporting against resilience indicators. These are embedded in the logframe, which in turn is based on the programme's ToC. It indicates impact level progress. There is considerable pressure on IPs to positively report against these indicators. The realist focus in the MTR, by detailed observations and analyses in progress measured for resilience, suggests that in some cases the indicators may poorly reflect actual activities implemented.

The ICMOs generated during the MTR in particular are very helpful reflections on what we actually mean by resilience. Resilience for many BRACED projects is assumed to be an end state and often described in hard to measure terms. The realist approach has led IPs to reflect what that difficult-to-describe end state looks like in the places they are working. It asks them to compare their evidenced outcomes to that end state. For the MTR, IPs began to translate the rhetoric of their impacts, as described in their proposals and theories of change, into sets of developmental outcomes they expected to see, making 'resilience' a hard reality. It also opens the door to consider alternate understandings of resilience not as an end, but as a means to an end (Bené *et al.*, 2015) as processes needed to achieve developmental objectives. This was a departure from many initial assumptions of resilience programmes about resilience as an outcome or endpoint.

Many BRACED programme theories see 'resilience' as requiring work in multiple sectors as part of a systems approach. Resilience in those cases was often the result of synergies across sectors. The realist approach and MTR have highlighted that, for most of those projects, implementation challenges and the way projects are designed to build on past work, or to lay the foundations for the future, will mean work in some sectors will be ongoing beyond the life of the BRACED programme. Work in some sectors may also serve different, unrelated parts of a population. Without evidenced outcomes in all sectors, and with no evidence of synergy does that mean that 'resilience' will not be built? Rather, it may simply mean that we must re-think our assumptions about resilience, and ask how might we build context-specific definitions of resilience into project design and measurement, and how is THAT resilience built.

The realist approach brings together different world views, understandings and priorities in ways that help us to compare change across different contexts. Outcomes and mechanisms provide us with a common yardstick to compare resilience projects operating in very different contexts and responding to very different priorities. Outcomes were assessed for their magnitude or scale of change and the sustainability of that change. While still a relative comparison,

it provided a benchmark to assess the different changes. For example, we could reflect on the value of an agronomy change intended to increase yields and sales for a number of local farmers to the establishment of a new national insurance product that reduces losses incurred during drought for smallholder livestock producers. This process was particularly helpful to consider change that is claimed to be transformative.

Limitations of the approach

These examples from the MTR illustrate how realist approaches have deepened our understanding of resilience. We must also recognise that clear limitations also emerge: ICMOs assume a linear process of activity to output and outcome to result. That simplicity proved to be a helpful way of giving clarity to programmes but it was also limiting. IPs recognise that with their participatory approaches and efforts to spark behavioural change, a linear approach can be too deterministic. In fact, unforeseen, emergent opportunities – such as: changing gender relations in homes or local government; multiple uses or benefits accruing from access to financial services; influences of a changing political discourse on managing climate change impacts – may be the real contribution of their suite of activities, especially in the long term.

Also, not all outcomes fit so easily into an ICMO 'box'. Some outcomes sought by IPs, such as changing perceptions of women in public life, are difficult to quantify and attribute to project activities. Similarly, there can be non-quantifiable synergies created across activities such as increasing the wealth of poor women through micro-business development which can enhance the acceptance by men of their participation in public life.

In addition, attempting to attribute an outcome to a higher level result becomes increasingly difficult. At these higher, systemic levels, there are simply a greater number of factors at play. Placing value on an outcome at higher levels tends to miss out contributions and perspectives of those directly benefiting or involved, and engenders an inherent bias towards the point of view of programme and project technical and management staff.

Realist approaches may yet add value in addressing these limitations to provide an even more rigorous understanding of resilience-building programmes, and what works and why. The MTR only partially implemented a realist approach. This was the first step in a process culminating in the final evaluation. The challenge of introducing a new approach combined with slower than planned implementation, meant that most IPs were only able to establish ICMOs during the MTR, and were not in a position to conduct the deeper reflections on context and mechanism, 'testing' ICMOs, which is the true heart of realist evaluation. Nonetheless, applying realist thinking at MTR has significant value. Its unpretentious purpose of simply asking how and why a suite of activities leads to specific outcomes, has challenged us to reconcile bottom-up outcomes to high-level, academic and theoretical framings of resilience. In the process of asking these basic questions, this helps us evolve our understanding of what resilience is and how it is built.

KEY REFLECTIONS

Applying a realist approach in the MTR of the BRACED programme leads to the following key messages: for the final evaluation of BRACED projects; for other evaluations of complicated and complex programmes; and for other resilience-building programmes.

Lessons and reflections for the BRACED final evaluation

- **Sequence:** Sequencing is key when it comes to carrying out a realist investigation, especially as part of a suite of M&E and evaluation activities. By the time the IPs reach the stage of carrying out their MTR (and the final evaluation) they need to already have data on many of the outcomes achieved and evidence to support this.
- **Support:** Encouraging and supporting realist thinking by 'non-specialist' (IP) staff with varying levels of M&E experience involves dissecting stripping theories of change right back and making sure there is clarity on what the specific activities are and what exactly are the outcomes (to be) achieved, using layperson, non-technical language as much as possible. The somewhat intuitive nature of a realist way of thinking lends itself well to this 'denuding' of technical language.
- **Simplify:** Using simple, non-technical language was particularly important, if not more so, when it came to posing realist questions on the ground, with participants and communities engaged with the projects. 'How' and 'why' questions were particularly challenging to pose and get meaningful answers, and needed careful facilitation.
- **Delivery:** Consider both intervention package and implementation modality. The same packages (when taken from a sectoral view – i.e. water, sanitation and hygiene (WASH), agriculture) were applied in very different ways; for example, directly by the IP or through the IP awarding grants to other stakeholders to carry out the activity.
- **Coding:** We used an analysis grid in an excel spreadsheet when carrying out the analysis and synthesis across the BRACED project MTR reports, sorting the data into tabular form and coding. We found this to be an inefficient way of managing data. The need to keep blocks of text together to retain the links between context, mechanisms and outcomes meant that the spreadsheet became unwieldy. The team plans to use a robust, proprietary qualitative data analysis package to manage the large volume of complex data (in the form of final evaluation reports) anticipated for the final evaluation.
- **Prioritise:** The usual steps in realist evaluation are an iterative process of developing, testing and refining theory. But projects structured around collections of activities working together across different sectors lead to very many ICMOs for each project. When pooled across all 15 projects this leads to an unmanageable amount for analysis and synthesis, and further testing during the final evaluation. Something we need to address going into the final evaluation is whether or not we are going to directly 'test' the ICMOs. And if so, how are we going prioritise these as we cannot test them all. This will depend in large part on

gaining a solid understanding of the commissioning donor's rationale for the evaluation (their evaluation question).

Lessons and reflections for other complex or complicated programme designs

- **Wider applicability:** Structuring analysis of outcomes, and how projects achieved them, around the ICMO approach has proven to be a very powerful construct in defining change and attributing that change to specific activities. From our experience we believe there is value in applying a 'realist' way of thinking, and the methodology used at MTR, throughout the programme cycle – not just at evaluation stage. This may be especially relevant for large, complex multi-sectoral programmes that all contribute to common higher level outcomes and impact.
- **Timing is key:** Applying realist thinking in evaluation and carrying out a synthesis of findings at mid-term and later implies that projects have achieved outcomes. The stage of implementation was relatively early so we found that insufficient outcomes had been achieved to get beyond describing individual pathways towards change to synthesising across projects. In this respect the MTR might be thought of as a baseline for the realist work, allowing us to make some small adjustments and refinements to the ICMO configurations. But we also took the opportunity to think about achievement of outputs with a realist lens – thinking of these as important pathways towards change and allowing us to capture where IPs had put in place or effectively carried out important processes, which are usually missed in more conventional indicators of performance.
- **Realism as part of a broader theory of change approach:** Applying a realist lens rests on a firm grasp/understanding of a programme or project's underlying theory of change. But taking a realist approach alone does not do all you would expect of an impact evaluation of complicated and complex programmes. However, it forces you to ask important questions of how and why projects arrived at their outcomes, and formalises this.

Lessons for other resilience-building programmes

- **Dealing with multiple understandings:** The term 'resilience' is complicated and there are many different understandings, even within BRACED, of what resilience is and how it should be built. Realist thinking pushed us to move away from rhetorical (resilience) outcomes to break down what projects and participants are actually doing (activities and outputs) and what you actually think that will achieve. The process of asking basic but important questions helps us to improve our understanding what resilience is and to take into account multiple conceptions of resilience, and how these resiliencies are built.
- **Moving from rhetoric to realities:** Using realist thinking in the MTR and by constructing ICMOs, IPs were able to show whether or not the logframe indicators they needed to report for their M&E reflect the activities actually being implemented. This means the final evaluation may not measure 'impact' or 'resilience' as defined in project documentation or baseline, but what the project has **actually** done and outcomes related to those activities. This provides valuable

learning that can help us to re-think what we assumed to be resilience or resilience building through a better understanding of what is meant by resilience on the ground.

- **Flexibly applying the approach:** Realist framing of pathways to change focuses on CMO configuration, which assume a linear process of activity to outcome and outcome to result. While useful for helping to clarify processes of change, we find that this linear approach can be too limiting given the complexity and iterative nature of behavioural change, and the complex nature of the BRACED projects themselves. By allowing our ICMOs to contain multiple, detailed steps, complementing this with an analysis of barriers and enablers of change, and unexpected and unintended effects, outcomes or consequence, we found we were able to retain much of the richness and dynamics that help us to tell the story. This also strengthens our ability to analyse processes and outcomes that do not fit easily into and ICMO 'box'.

REFERENCES

Bahadur, A., Peters, K., Wilkinson, E., Pichon, F., Gray, K. and Tanner, T. (2015) *The 3As: Tracking resilience across BRACED.* BRACED Knowledge Manager Working Paper. London: ODI.

Bahadur, A. and F. Pichon (2016) *Analysis of Resilience Measurement Frameworks and Approaches*. London: ODI.

Bené, C., T. Frankenberger and S. Nelson (2015) *Design, Monitoring and Evaluation of Resilience Interventions: Conceptual and Empirical Consideration*. IDS Working Paper vol. 215 No 459.

BRACED (2015) *DFID BRACED Knowledge Manager Evaluation Plan.*

Dalkin, S. M., Greenhalgh, J., Jones, D., Cunningham, B. and Lhussier, M., 2015. 'What's in a mechanism? Development of a key concept in realist evaluation'. *Implementation Science : IS*, *10*, 49. http://doi.org/10.1186/s13012-015-0237-x

DFID, 2014. *KPI4 Guidance.* U.K.: Department for International Development.

Leavy J., McDowell, S. and E. Boydell (2017) *Making progress: BRACED at the mid-term*. BRACED Knowledge Manager Synthesis Report. Brighton: Itad.

Michaelis, C. and Westhorp, G., 2016. *International Climate Fund Evaluation Evidence Framework*. Final draft, September. Brighton: Itad.

Pawson, R. and Tilley, N., 1997. *Realistic Evaluation*. London: Sage.

Silva Villanueva, P., Gould, C. and Pichon, F. (2016) *Routes to resilience: insights from BRACED year 1*. BRACED Knowledge Manager. Synthesis Report. Brighton: Itad.

Westhorp, G., 2014. *Realist Impact Evaluation: An Introduction.* Methods Lab Working Paper. London: Overseas Development Institute.

The BRACED Knowledge Manager generates evidence and learning on resilience and adaptation in partnership with the BRACED projects and the wider resilience community. It gathers robust evidence of what works to strengthen resilience to climate extremes and disasters, and initiates and supports processes to ensure that evidence is put into use in policy and programmes. The Knowledge Manager also fosters partnerships to amplify the impact of new evidence and learning, in order to significantly improve levels of resilience in poor and vulnerable countries and communities around the world.

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