BRACC
BUILDING RESILIENCE AND ADAPTING TO CLIMATE CHANGE

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BUILDING RESILIENCE AND ADAPTING TO CLIMATE CHANGE

Synthesis of the 2021 BRACC evaluation

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LEARNING BRIEF

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Acronyms

AP	African Parks
BRACC	Building Resilience and Adapting to Climate Change
CDM	Centre for Development Management
CEPA	Centre for Environmental Policy and Advocacy
CUMO	Concern Universal Microfinance Operations
FAO	Food and Agriculture Organisation
FCDO	Foreign, Commonwealth and Development Office
FFA	Food for Assets
FGD	Focus Group Discussion
GESI	Gender Equality and Social Inclusion
GIZ	Gesellschaft für Internationale Zusammenarbeit (German Agency for International Cooperation)
HDDS	Household Dietary Diversity Score
HI	Hanging In
KII	Key Informant Interview
MCHF	Modern Cooking for Healthy Forests
MEAL	Monitoring, Evaluation and Adaptive Learning
ODA	Official Development Assistance
ODI	Overseas Development
PICS (bags)	Purdue Improved Crop Storage (bags)
PICSA	Participatory Integrated Climate Services for Agriculture
PROSPER	Promoting Sustainable Partnerships for Empowered Resilience
SAMS	Smallholder agricultural market systems
SO	Stepping Out
SSI	Semi-Structured Interview
SU	Stepping Up
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
VSLA	Village Savings and Loan Association
WFP	World Food Programme

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Key messages

- At this stage – just over 2.5 years into a five-year programme – there is stronger evidence for household-level resilience outcomes (such as intensified and diversified agricultural production and improved nutrition) and weaker evidence for system-wide changes (such as inclusive access to markets, reduced exposure to drought and floods, and strengthened governance capacity to prepare for, plan, monitor and respond to shocks, and develop a more shock-sensitive social protection system).
- Layering interventions, working with local leaders, ownership by participants and the wealth-category targeting approach are key enablers of success. Lack of resources to participate was a major barrier – particularly for the 'hanging in' wealth category, and ongoing environmental and climate shocks and stresses have the potential to undermine gains.
- Training and knowledge-based approaches (as opposed to asset transfer) increase the likelihood of sustainability – but the short duration to date impedes behaviour change becoming embedded.
- Targeting different wealth categories allows tailoring of support to meet needs. However, with consumption support only given to the 'hanging in' group (as defined on page 6), marginalised groups (including female-headed households) were under-targeted, especially considering that they often had the strongest impact on agricultural and nutrition outputs.
- Resilience is context-specific and needs to be adaptive in the context of changing climate conditions. Resilience measurement also needs to take this context into account. Reducing poverty or building wealth alone do not necessarily increase resilience to climate stresses, so integrated approaches are crucial.

The BRACC programme

The Building Resilience and Adaptation to Climate Extremes and Disasters (BRACC) programme is a five-year, £90.6 million programme funded by the UK Foreign, Commonwealth and Development Office (FCDO). It provides targeted support in the most vulnerable districts, communities and high priority catchments in Malawi, to strengthen the resilience of poor and vulnerable households to shocks and reduce their annual dependence on humanitarian aid.

The programme aims to do this through market-based approaches to improving people's livelihoods, including supporting climate-smart agriculture and developing scalable social safety-net systems that respond more predictably and efficiently to weather and climate-related shocks. BRACC also addresses environmental degradation, a key long-term risk facing Malawi, by reducing urban demand for charcoal, the most significant driver of deforestation and degradation, and supporting the protection of key national parks across Malawi.

The programme has five components:

- **Component 1:** Climate-resilient livelihoods (PROSPER)
- **Component 2:** Provision of a scalable safety net or 'crisis modifier' (PROSPER)
- **Component 3:** Strengthening social protection systems (GIZ)
- **Component 4:** Natural resource management (AP and MCHF)
- **Component 5:** Evidence, knowledge and policy influence (BRACC Hub).

BRACC is being implemented at various levels and locations: (See Table 1)

- Promoting Sustainable Partnerships for Empowered Resilience (PROSPER) focuses on Balaka, Chikwawa, Mangochi, and Phalombe.
- African Parks (AP) focuses on Nkhotakota, Ntchisi, Kasungu, Mangochi, and Chikwawa.
- Gesellschaft für Internationale Zusammenarbeit (GIZ) is working nationally and through 11 priority districts with training in 15 districts.
- Modern Cooking for Healthy Forests (MCHF) is working nationally.

Recent ODA cuts have led to several parts of the BRACC programme being closed early in 2021. The UN-led activities under PROSPER, targeting the most vulnerable families, will be continued in Balaka and Phalombe until 2023. This will cover climate services, disaster risk reduction, market support, access to finance, watershed management and agricultural training – but without accompanying cash transfers.

Table 1: Summary of the characteristics of the BRACC components

Component/ characteristics		Climate-resilient livelihoods and provision of a scalable safety net ('crisis modifier')	Natural resource management	Strengthening social protection systems	Natural resource management	Knowledge, policy and implementation support manager
Implementing lead		PROSPER (consortium)	AP (organisation)	GIZ (organisation)	MCHF (consortium)	BRACC Knowledge and Policy Hub (consortium)
Consortium members		Concern Worldwide, CUMO, FAO, GOAL, Kadale Consultants, UNDP, UNICEF, UN Resident Coordinator's Office, United Purpose, WFP	N/a	N/a	TetraTech, CEPA, Lilongwe Wildlife Trust, Winrock International, World Resources Institute, mHub	CDM, CEPA, Kulima Integrated Development Solutions, NIRAS-LTS International, ODI
Timeline of operation (contract period including inception)		December 2018–August 2021 (NGO consortium) July 2018–March 2023 (UN consortium)	August 2019– July 2021	November 2018– July 2021	September 2019– March 2023	March 2020– December 2021
Target level of operation	National	Yes	N/a	Yes	Yes	Yes
	District	Balaka, Mangochi, Phalombe, Chikwawa	Nkhotakota, Ntchisi, Kasungu, Mangochi, Chikwawa	N/a	Mzuzu, Nkhata Bay, Mzimba, Salima, Lilongwe, Dedza, Zomba, Blantyre	N/a

Component/ characteristics	Climate-resilient livelihoods and provision of a scalable safety net ('crisis modifier')	Natural resource management	Strengthening social protection systems	Natural resource management	Knowledge, policy and implementation support manager
Key activities	Climate-smart agriculture, nutrition-sensitive interventions, integrated watershed management, disaster risk reduction and climate services, market system development and inclusive business models, micro-finance and micro-insurance, lean season response	Supporting protection of national parks	Shock-responsive social protection, district and national systems strengthening and coordination	Forest landscape restoration, promotion of modern cookstoves	Programme-wide Monitoring, Evaluation and Adaptive Learning (MEAL), policy advocacy, research, knowledge management and communications

The BRACC partners define 'resilience' as the capacity to withstand and recover from shocks and stresses. Based on this definition, the 3As explanatory conceptual framework breaks resilience down into a set of inter-related capacities to anticipate, absorb, and/or adapt (the 3As) to climate extremes and disasters, and transformation:

- *Absorptive capacity* is the ability, using available skills and resources, to face and manage adverse conditions, emergencies or disasters.
- *Anticipatory capacity* is the ability to anticipate and reduce the impact of climate variability and extremes through preparedness and planning.
- *Adaptive capacity* is the ability to adapt to multiple, long-term and future risks, and also to learn and adjust after a disaster. It is the capacity to take deliberate and planned decisions to achieve a desired state even when conditions have changed or are about to change.
- *Transformation* refers to improvements in the underlying drivers of vulnerability to shocks and stressors and can occur when the 'rules of the game' are altered, for example when power dynamics, policies or regulations and/or the conditions of inequality are improved for people exposed to risk. Transformational approaches are fundamental to strengthening resilience, particularly at systems level.

In terms of approach, BRACC's target groups are defined in line with Malawi's National Resilience Strategy, along three broad types of strategy pursued by poor people: 'hanging in (HI)', 'stepping up (SU)', and 'stepping out (SO)'; with the implicit assumption that there is a graduation pathway, and the understanding that all categories need to have labour capacity to participate in resilience-building activities.

1 INTRODUCTION TO THE EVALUATION

This brief summarises the synthesis of quantitative and qualitative evaluation of the BRACC programme, carried out after just over 2.5 years of implementation.[1] It mainly examines this midline evaluation question:

TO WHAT EXTENT ARE THE BRACC PROGRAMME OBJECTIVES LIKELY TO BE ACHIEVED? HOW, WHY, FOR WHOM, AND IN WHICH CONTEXTS?

To answer this question, the evaluation focuses on the PROSPER and African Parks components: the former because it comprises the largest share of BRACC funding; and the latter because this component was due to end in 2021, even prior to the budget cuts. It draws on quantitative data generated through household surveys following two approaches: in treatment and control communities in PROSPER districts (1953 households in 152 communities in Balaka and Phalombe linked to the programme baseline survey for the impact evaluation, together with 1967 households in Balaka, Phalombe, Chikwawa and Mangochi for the 2021 annual monitoring survey, linked to the 2020 annual survey sample); as well as qualitative data collected through key informant (KI) and case study interviews and focus group discussions (FGDs). Qualitative data collection took place in communities across the four PROSPER districts and in Nkhotakota and Ntchisi where the African Parks component was implemented, as well as with programme implementing staff across all components. A total of 858 people participated in these interviews and focus group discussions. Other data sources drawn upon include the recent BRACC process evaluation report (July 2021), the PROSPER annual survey (2020) and resilience measurement findings.

2 FINDINGS

The impact and outcomes of BRACC at the midline are greater than expected just over 2.5 years into a five-year programme. This is the case despite contextual challenges to implementation, including the impacts of the Covid-19 pandemic and its effects on funding availability. This section addresses findings related to each evaluation question, presenting quantitative and qualitative data.

HOW THE PROGRAMME HAS BEEN IMPLEMENTED

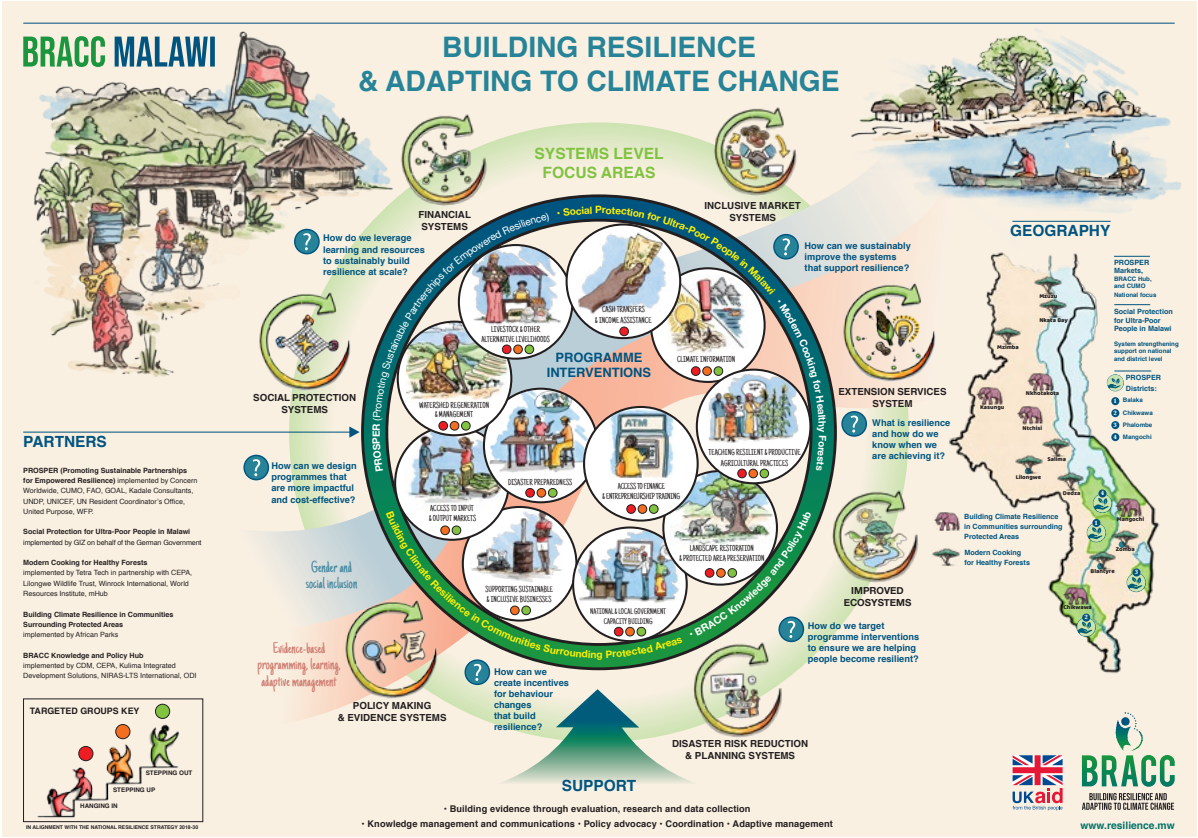
BRACC's programme design, with different components implemented by various consortia and organisations, enabled capitalising on the contextual knowledge and networks of the implementing partners, while effectively delivering the layered interventions.

Internally, the different start dates of projects, and the request from the funder for the UN and NGO consortia of PROSPER to merge their proposals following submission, meant that coordination was not optimised from the beginning. However, within PROSPER, proactive coordinators and standard operating procedures supported within-consortium learning and leveraging of comparative advantage of different partners. Ideally, the Knowledge and Policy Hub role should be available from the start to support programme-wide coordination.

In terms of implementation, partnership with government was integral to design and worked well at district level, although national level coordination was more problematic. The combination of elections and Covid-19 meant government partnership did not happen as intended with PROSPER. Challenges in this regard led to an early end of GIZ's work on strengthening government social protection systems. Implementation design at community level was very participatory, with inclusive exercises to identify wealth categories and then target the interventions, the selection of which was linked to community planning processes that had identified grassroots needs and priorities. Considering the pillars of value for money, there was good awareness of input costs and ensuring efficient procurement but less awareness of the costs of delivery. Whilst greater efficiencies could have been enabled through coordinating procurement across implementing partners, this did not always happen. Similarly, the fairly rigid financial management obligations, while important for accountability, were at odds with the stated commitment to enable adaptive management of programming activities. Further information on the programme design aspects[2] and value for money[3] are available in dedicated briefs.

> *'The key to getting [a] large programme design right is making sure that there is plenty of flexibility and loose connections so that we [implementing partners] are able to achieve our individual commitments while, at the same time, we are able to learn from and share with each other.'* KII BRACC programme staff

Figure 1: Building resilience & adapting to climate change



INTERVENTION TARGETING AND PARTICIPATION

Overall, PROSPER interventions reached 73% of households in targeted communities, in line with the programme design (TABLE 2). Nearly half of households reported participating in three or more interventions, in keeping with the programme's approach of bundling activities to target different dimensions of resilience building. However, relatively few households were reached by some interventions, including those that distributed assets such as cash for inputs or livestock pass-on. In addition, the 'hanging in' category appears to have been targeted for a relatively low number of activities and had low participation rates for activities that were broadly targeted.

Female-headed households participated in fewer interventions on average, although there were some particular examples where their participation rates were on par with those of male-headed households. This appears to reflect two factors. Firstly, female-headed households are more likely to be in the 'hanging in' category, whose lower participation rates reflected targeting, as well as additional barriers to participation. Secondly, female-headed households can face additional challenges with programme participation due to lower labour capacity, as well as societal norms which limit women's behaviours.

Analysis of the impact evaluation data showed that – contrary to expectations as they were not targeted by the programme – many households in control communities also reported participating in interventions of the same type run by PROSPER. For activities such as village savings and loans association (VSLA) groups and farmer groups, which are common in Malawi, households may have participated in activities sponsored by other stakeholders. However, some PROSPER activities such as cash for inputs are quite unique, so this suggests there may have been some contamination of activities to communities other than those targeted. While problematic for the impact evaluation methodology, this suggests that the reach of PROSPER went beyond the population of target villages.

Many examples of such spillover effects, which amplify the impact of the programme, were also reported in the qualitative data. Types of spillovers documented included the following:

- **Temporal effects:** for example, positive impacts on income from PROSPER activities enabling investment in additional livelihood activities
- **Externalities:** for example, community-wide decreases in water-borne diseases due to PROSPER programme participants' investments in hygiene
- **Social interaction effects:** for example, neighbours taking up bee-keeping after observing African Parks participants having success with it
- **Context equilibrium effects** related to social norms: for example, other community members changing hygiene behaviour in response to shifting social norms around hygiene due to training conducted as part of PROSPER
- **General equilibrium effects** related to the wider economy: for example, increased income among programme participants resulting in increased spending and hiring of labour and services in communities
- **Programmatic spillover effects:** for example, with less food insecurity, local government programmes are able to focus on other activities to build long-term resilience and development.

'*Whenever people have received their savings or loans, we take it also as an opportunity to start up or top up businesses in the community. If you can go around our community, you will realise that there are shops, groceries and different businesses being conducted. All these were generated from savings and loans from our VSLA groups. We have seen that now there is sustainability of most of the small-scale businesses because we boost these from the savings and loans.*' FGD, Female, SU, PROSPER, Phalombe

'*Through community meetings conducted by GOAL officials, extension workers, healthy workers and chiefs, where sanitation and hygiene practices were being encouraged, most people in the area are now practising these activities. As a result of this, we have seen a decline in cholera cases. In the past, when most households did not practise sanitation and hygiene, cholera incidences were rampant every year, especially during the rainy season*.' FGD, Female, SU, PROSPER, Chikwawa

'*Communities that were not targeted in the programme have adopted these activities and [they] are being implemented in their communities, especially on environmental conservation, which has led to [the] forest's restoration*.' SSI, District-level stakeholder, Ntchisi

'*The rise in income levels has led to a reduction in the school dropout rate because they get food, school uniforms and school fees, thereby reducing the main issues that were causing children to drop out of school*.' SSI, District-level stakeholder, PROSPER, Chikwawa

'*We are able to hire casual labourers to do some piecework for us because we have money. In the past, it was hard because we didn't have money to hire and pay a person. We have created a source of livelihood for other people*.' FGD, Male, SU, PROSPER, Chikwawa

'*As a district, we are mostly hit by dry spells or floods. So now these farmers are able to get food from other sources after getting money from the sales of honey, and after investing in VSLAs, and engaging themselves in small-scale business. The people are becoming more food secure, and their nutrition is improving. As a district, we are now able to invest in other development activities rather than just providing food to the communities. We can now invest in other sectors. Previously, if you go to the communities and tell them to produce their village action plans, all they could think were activities to do with public works like constructing roads, bridges and school blocks. But now they are able to realise that even issues to do with nutrition, VSLAs and engagement in small-scale business is also development. So they are able to incorporate them in their village-level action plan and subsequently into the district development plan.*' SSI, District-level stakeholder, PROSPER, Balaka

Further information on the implementation experience and impacts of different interventions are available in dedicated briefs on livestock pass-on,[4] area and yield agricultural insurance,[5] cash for inputs,[6] access to finance,[7] as well as a brief on spillover effects.[8]

Table 2: Participation rates by programme and demographic group

PARTICIPATION MATRIX													
PROSPER activities	Overall participation rate	Hanging in	Stepping up	Stepping out	Female-headed households	Single-headed households	Youth-headed households	Elderly-headed households	Households with a member with a disability	Balaka	Chikwawa	Mangochi	Phalombe
Hanging in targeted													
Food for Assets (FFA)	24%	33%	25%	20%	23%	22%	25%	21%	23%	10%	6%	24%	42%
Membership in a care group	4%	2%	7%	7%	4%	3%	7%	2%	4%	5%	3%	3%	6%
Participation in care group activities	4%	2%	6%	7%	3%	2%	6%	1%	3%	3%	3%	3%	6%
Participation in a mother's group	3%	3%	3%	3%	3%	3%	1%	2%	2%	1%	4%	3%	2%
Smallholder agricultural market systems (SAMS)	1%	0%	2%	1%	0%	0%	1%	0%	1%	0%	0%	2%	1%
Stepping up/Stepping out targeted													
Received livestock in the first round of a livestock pass-on programme	7%	5%	13%	13%	5%	5%	6%	7%	7%	3%	3%	11%	9%
Received livestock passed on from another household in a livestock pass-on programme	5%	3%	8%	7%	3%	3%	5%	3%	4%	3%	2%	6%	6%
Accessed services from a Community Animal Health Worker	5%	4%	10%	8%	4%	4%	5%	4%	6%	1%	2%	8%	6%
Attended an input fair	6%	4%	11%	9%	7%	7%	3%	3%	5%	1%	8%	9%	5%
Received cash for inputs	19%	18%	28%	18%	18%	17%	15%	15%	19%	17%	21%	24%	12%
Access microfinance loans	6%	5%	8%	11%	4%	4%	6%	6%	4%	0%	1%	7%	12%
Purchased or received a treadle pump or rope and water pump	1%	1%	2%	3%	1%	0%	2%	0%	1%	0%	1%	1%	2%
Received training or equipment for bee-keeping	1%	1%	1%	2%	1%	0%	1%	1%	1%	1%	1%	1%	1%
Received training on PICS bags	16%	12%	27%	28%	15%	13%	12%	15%	17%	13%	14%	26%	9%
Received a free PICS bag	17%	13%	28%	29%	16%	15%	14%	15%	18%	15%	15%	26%	9%
Targeted to all groups													
Farmer group	36%	32%	54%	46%	29%	28%	33%	30%	35%	22%	36%	41%	39%
Extension/technical training with your lead farmer or extension worker in the last three months	17%	17%	24%	30%	14%	15%	12%	18%	15%	4%	7%	26%	23%
Extension/technical training with your lead farmer or extension worker during the last growing season	26%	25%	36%	42%	22%	22%	24%	26%	25%	6%	14%	37%	34%
Accessed crop yield or weather insurance	2%	3%	3%	3%	1%	1%	5%	1%	3%	0%	0%	4%	3%
Participation in an irrigation scheme	14%	13%	21%	18%	10%	10%	14%	12%	14%	4%	10%	12%	23%
VSL groups bank	35%	30%	42%	43%	28%	26%	32%	27%	32%	34%	38%	32%	36%
Marketing club	4%	4%	8%	6%	4%	4%	4%	3%	4%	2%	2%	7%	5%
Received information about nutrition or sanitation	14%	14%	20%	19%	11%	11%	20%	8%	14%	5%	7%	12%	27%
Watershed activities	16%	16%	22%	24%	12%	13%	16%	15%	15%	9%	11%	15%	24%
Participated in tree planting	28%	27%	39%	31%	22%	21%	25%	23%	26%	16%	33%	27%	32%
Radio clubs/PICSA	2%	2%	2%	5%	1%	1%	1%	2%	1%	1%	1%	3%	2%
Integrated Climate Services	11%	11%	17%	15%	7%	8%	9%	9%	12%	1%	11%	11%	18%

ADOPTION OF PRACTICES AND TECHNOLOGIES

The impact evaluation found positive adoption impacts across almost all practices and technologies that PROSPER promoted (Figure 2). While we found relatively high adoption impacts for households who participated in PROSPER-related interventions (boxes in the figure), the impacts in terms of number of households adopting the practices were relatively modest given the limited number of households participating in the interventions by the midline stage (circles in the figure).

For uptake of improved agricultural practices, the impact evaluation study found high adoption impacts for households who participated in PROSPER-related interventions. These included irrigation use, crop storage, accessing of agricultural inputs and livestock practices. Smaller participator impacts were found on the adoption of widely-promoted conservation agriculture practices, while no, or inconclusive, evidence was found for the adoption of natural resource management practices and agricultural market access.

The impact evaluation found positive adoption impacts on the accessibility and use of financial services, along with the building savings and taking loans for households who participated in VSLA and microfinance-related interventions (over 35% of households). However, insurance uptake was low, at less than 2%.

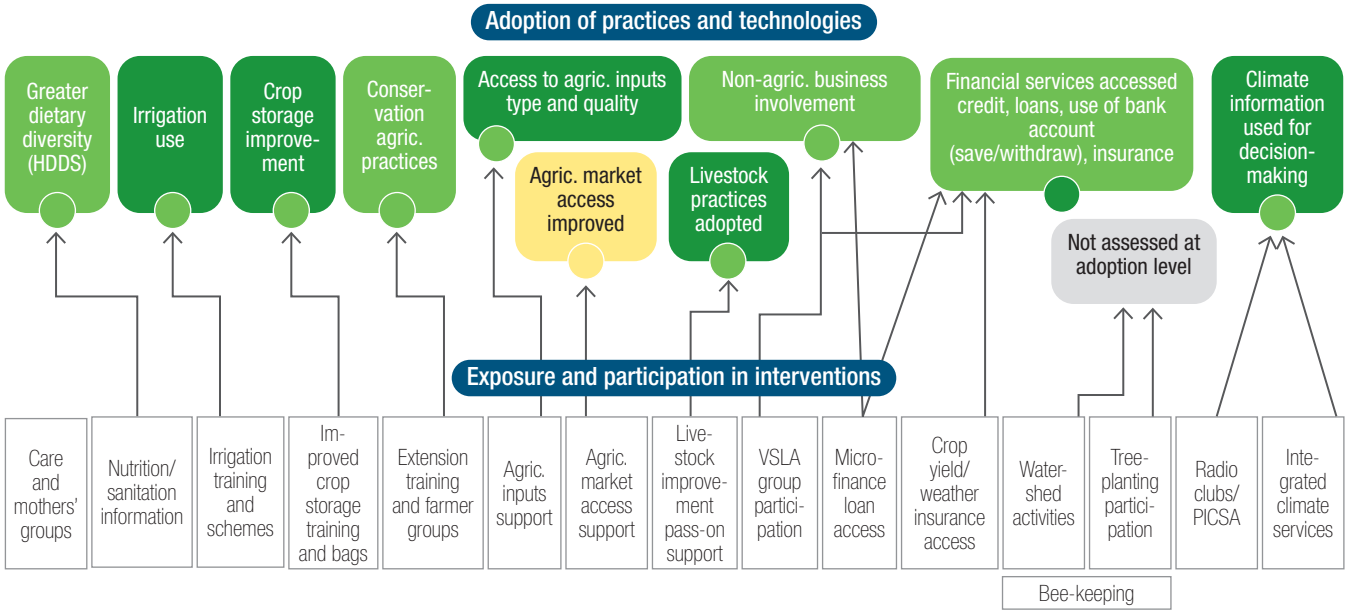
For interventions that promoted the access and good use of climate information, the impact evaluation found that participant households (14%) reported higher improvements in the accessibility, quality and use of climate information, compared to similar non-participants.

'Farming practices like manure making has helped us greatly. We mix goat droppings with maize bran and ashes to make manure. Manure increases soil fertility and maintains soil moisture, which results in high yields … Mulching also increases soil fertility.' FGD, Female, SU, PROSPER, Balaka

'We have seen improved cash flow and consistency in our community because of VSLA group's initiative … Since we started these interventions under PROSPER, we have seen that at least cash is available almost all the time … Now we are able to have money even during lean season when all our agricultural activities are not so active. The same loans are also easily accessed to those who are in these groups, in times when there is an immediate need of money.' FGD, Male, SU & SO, PROSPER, Phalombe

'As rural people, it is hard for us to understand why we need to buy insurance, that is why there are very few of us in this community that have ever bought insurance. We have also had a bad experience with insurance which discourages other people from participating. It has been three years now since people under FFA bought crop insurance, but they are still suffering since they were not compensated.' FGD, Male, SU, PROSPER, Chikwawa

Figure 2: Summary of impact evaluation findings: Adoption of practices and technologies



The boxes represent impacts for households directly participating in the interventions, while the circles indicate number of households reached within the treatment villages (scale of impact).

OUTCOMES AND IMPACT: WHAT THE BRACC PROGRAMME HAS ACHIEVED

In the area of intermediate outcomes, which contribute to resilience capacities, the impact evaluation and qualitative data showed evidence of positive impact of BRACC intervention participation on crop diversification, increased crop sales, increased livestock assets, and reduced use of negative coping strategies (Figure 3). Areas with no, or inconclusive, evidence of impact included: crop yields, women's decision-making, and erosion and soil control as a result of natural resource management. In the case of yields, there was a high degree of dissonance between the qualitative and quantitative data, with respondents in qualitative focus groups often reporting yield improvements. However, the impact evaluation found no significant impact on yield, even when comparing results for participants to similar non-participants in the control group. This may reflect non-representativeness of the qualitative respondents, as well as high variation in quantitative crop data, making it harder to detect an impact.

For high-level impacts, such as nutrition and food security, incomes, and resilience of outcomes in the face of climate shocks, less impact was expected, given the modest time the programme had been ongoing at the time of the evaluation (Figure 2). However, both qualitative and quantitative data showed evidence of positive impact on income. Some evidence of impact on food security and nutrition was found, particularly from qualitative sources. There was also evidence of improved outcomes in the face of drought shocks for a few outcome indicators.

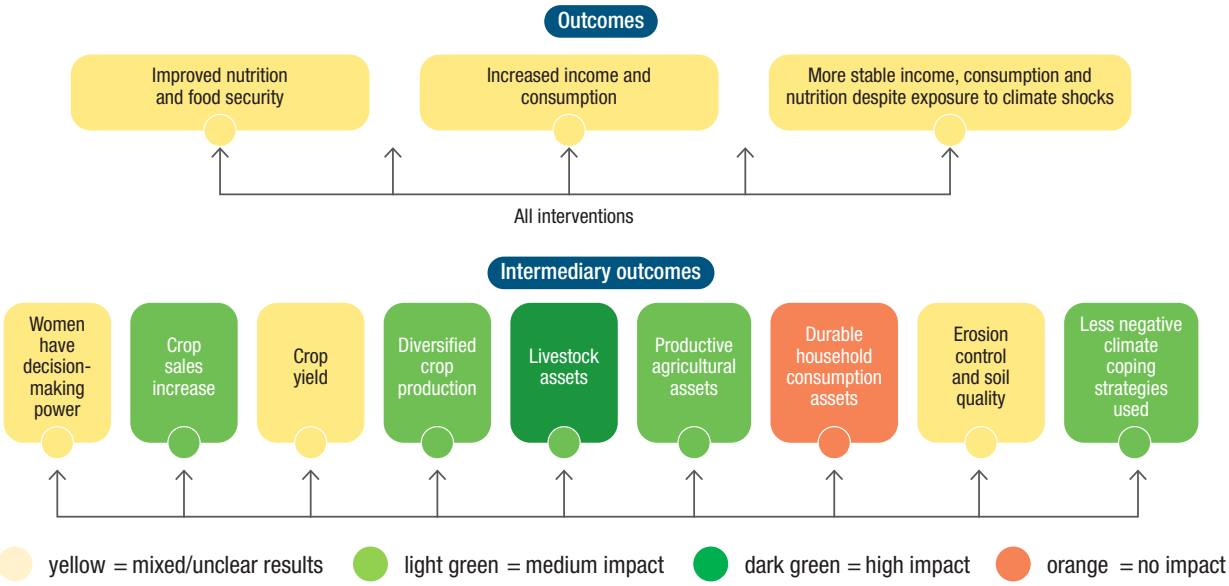
> *'Every beneficiary of the cash for inputs programme has witnessed an increase in their crop yields, which has improved food security.'* FGD, Male, SU, PROSPER, Chikwawa

'After being taught on irrigation farming, we now harvest twice a year, and when we combine with early maturing crops, we can even harvest three times. We now have enough food, and our children are happier.' FGD, Female, SU, PROSPER, Phalombe

'*Things have absolutely changed because now there is food security in the entire community.'* FGD, Male, SU, PROSPER, Phalombe

'The project has helped me to start irrigation farming, specifically tomato farming, something that I was not doing before the project as I was sorely dependent on rain-fed agriculture … My independence has also increased as I can fend for my own needs without asking for money from anyone. Having a large family of 8 children, this increase in livelihood practices has helped me a lot in managing to feed and educate them … My happiness and self-image and aspirations have also improved. Initially, I used to think people with MKW15 000 in cash were rich but now I find that money at once when I sell my tomatoes.' FGD, Male, SU, PROSPER, Mangochi

Figure 3: Summary of impact evaluation results for intermediate and final outcomes and impact



The boxes represent impacts for households directly participating in the interventions/adopting practices, while the circles indicate number of households reached within the treatment villages (scale of impact).

Evidence shows that barriers related to gender and poverty continue to affect intermediate outcomes and high-level resilience impacts (Box 1). Large gaps in yield outcomes remained for female-headed households, and households in the lowest wealth categories. Female-headed households also had worse outcomes across a number of resilience-related indicators. However, participation in at least three PROSPER interventions had a significant positive impact on consumption expenditures for female-headed (and 'hanging in') households who participated in PROSPER interventions. Female-headed households who participated in PROSPER interventions also reported a larger positive difference in reporting improvements in access to inputs, improved access to markets, crop diversification and sales, increasing investment in kraals and having a non-agricultural business.

Resilience strengthening to withstand climate shocks

There is strong evidence that BRACC supported its participants to build their adaptive capacity to climate-related shocks and stressors. There are also initial signs of participants' absorptive capacity having been built, although this varied across the different participant households – both in terms of their confidence that this was the case, but also in the way that they had experienced (the same) shocks and stressors during the programme's lifetime. There is limited evidence that anticipatory capacity has been built by BRACC. This is not surprising, given that most programme activities did not focus on preparedness and planning.

Sustainability

Interventions within the BRACC programme were designed with sustainability in mind, focusing on training and building skills more than asset transfers, and working in partnership with government staff who can encourage post-programme sustainability. The evaluation found a stated commitment by participants to continue, and even expand, practices across a wide range of interventions. Overall, the transfer of skills for managing different interventions and the establishment of new compliance systems bode well for continuation of the practices, as long as people have access to the necessary resources. However, the early stopping of support for interventions runs the risk of behaviour and system change not being sufficiently embedded.

> '*As long as we continue with modern agricultural practices, we will continue harvesting more, thereby having excess to sell. The alternative sources of income that we have now are long-lasting. Even when the programme ends, we will continue with the backyard farming which provides us with a source of income. We will also continue using manure as an alternative to fertiliser. There we will be saving some money, enabling us to have extra cash. In future, when goats start multiplying, owners of goats will be able to have income from selling some of the goats*.' FGD, Female SU, PROSPER, Balaka
>
> '*Some have changed their ways of farming after seeing how we are benefiting, but some are still continuing with old farming because they say* sasakawa (farming method) *requires a lot of fertiliser*.' FGD, Female, SU, PROSPER, Phalombe

HOW AND WHY CHANGE HAPPENS IN THE BRACC PROGRAMME TO BUILD RESILIENCE

The evaluation provided evidence for a number of mechanisms (enablers and barriers) that allow change to happen in the programme, or that potentially impede implementation or achieving results.

Summary of enablers

- The programme is perceived to be relevant to, and by, participants. Interventions and activities meet local needs, which fosters high levels of participant interest and commitment to the programme.
- The targeting categories were perceived to be useful in matching participant capabilities to the 'right' activities.
- Demonstration effects provide important proof of concept for take-up, by both BRACC participants and non-participants.
- Participants found BRACC to be credible, rooted in positive previous experiences working with the implementers, as well as early involvement of local leaders, leading to high levels of trust and good community coordination.
- Participant buy-in is enhanced by high levels of motivation to carry out project interventions, underpinned by a strong sense of ownership over the activities rooted in BRACC's participatory and inclusive approach. Participants were also encouraged by the commitment demonstrated by programme staff.
- The underlying programme design – emphasising training and support and embedding this within communities through the lead farmer approach – was seen to be foundational to stimulating participant behaviour change and adoption of interventions and enhancing potential for sustainability.
- Widespread and continued uptake, including compliance with programme procedures, have been supported through community-level institutional structures that encourage cooperation.
- Access to start-up resources such as inputs, as well as cash payments, are crucial to enable people to start participating, putting training into practice. This is especially important in a context where people find it challenging to meet their basic needs.
- Participating in a range of linked and/or appropriately sequenced interventions amplifies results.

> *'Combination of livestock, cash for inputs and village savings and loans was really good. We received goats, and we use the droppings to make manure for crops. We harvest crops, and we sell in order to save in village banks. We borrow money from village banks and invest in farming to buy inputs like fertiliser, chemicals and hire labour to pump water with treadle pump resulting in high yields. The integration was really good.'* FGD, Female, SU, PROSPER, Chikwawa
>
> *'We also noticed positive and active involvement of our local leaders. Our Village Headman welcomed the programme when officials from Concern Worldwide and District Council came here to introduce it. He has been so supportive from the very first day of inception. This gave community members extra energy to participate and also believe that the programme would really improve our livelihoods. So, as time passed, even those who were not willing to take part got motivated because of the Chief.'* FGD, Female, HI, PROSPER, Phalombe

'*[The programme] has taken an initiative to encourage people to work hard and be healthy … Other programmes were teaching us less information but PROSPER has supplemented from where others stopped. That's why we are now liberated … We can say it is a success because it has imparted knowledge in us.*' SSI, Female, HI, PROSPER, Balaka

Summary of barriers

- Lack of resources and capital impede the adoption of livelihood activities, with meeting basic needs taking precedence. This also impacted on the ability to carry out BRACC programme activities. A number of contextual factors come into play, related to the underlying root causes of vulnerability, including climate-related shocks and stressors and systemic challenges such as poor market access, high costs of inputs and low prices for outputs.
- Multiple, negative knock-on effects arise from lack of funds, extending across many areas of life. Inability to purchase affordable inputs directly impacts production and, in turn, incomes, as well as the ability to deal with pests and other shocks and stressors, and the ability to recover after a shock.
- Lack of access to funds meant that some participants needed to continue to do piecework, which further affected investment in their own farms and other livelihood activities. Other negative coping strategies included taking out high interest loans.
- For a small subset of participants, issues with project delivery, including perceptions of inadequate coverage and continued misunderstanding of the programme approach, reduced their interest and commitment and discouraged participation. There were some reports of lack of compliance.
- Participants acknowledged that early closure would limit the benefits of the programme as many of the activities needed a longer time frame of support to come to fruition.
- Market access and low prices continue to restrict programme potential, compounded by lack of market power of smallholder farmers.
- Participants continue to be affected by environmental shocks and stressors. In combination with contextual (including economic) factors, this erodes gains made through the programme.

'*I would love to participate in village banks, but I do not have money or capital for any business that can help me sustain my membership in the village banks. So, if maybe we were given some sort of start-up shares in village banks, then the village banks would be successful*.' SSI, Female, HI, PROSPER, Balaka

'*Some projects only target a few people in the community, and others fail to benefit from the project activities because they feel left out and so don't have an interest to participate*.' FGD, Male, SU, PROSPER, Mangochi

3 LESSONS LEARNED

Lessons learned from the BRACC programme evaluation can be divided into lessons about resilience and lessons for resilience and adaptation programming.

LESSONS ABOUT RESILIENCE

Learnings about resilience capacities and outcomes from the programmes is limited so far, but an extra year or two of full BRACC implementation could make a huge difference in embedding new practices and providing the opportunity to test against shocks. After just over 2.5 years out of a five-year programme, it is to be expected that there is little evidence of transformational change. There are lessons about measuring resilience, including:

- Resilience is context-specific and needs to be adaptive and forward-looking in the context of changing climate conditions.
- Indicators may be more reliable if categorised and relationships between the categories are examined. This evaluation divided indicators into those that:
  1. represent households' attributes, behaviours and capacities
  2. capture households' experiences of, and responses to, stresses and shocks
  3. represent factors that influence how well households can manage and recover from shocks.

In addition, indicators that capture the effects of climate hazards can help to track resilience outcomes but need to be interpreted in the context of climate information. Over shorter timescales more sophisticated approaches may be needed, such as development of counterfactual scenarios considering observed and projected climate, or qualitative assessment of resilience improvements. Further information on resilience measurement is available in a synthesis paper[9] and brief.[10]

LESSONS FOR RESILIENCE AND ADAPTATION PROGRAMMING

The evaluation generated lessons around both designing and implementing resilience programmes.

Designing:

- The layering approach with participants adopting multiple, linked interventions is more effective.
- Integrated approaches to market development are key.
- In the Malawian context, the crisis modifier feature is essential.[11]
- Time frames are key: resilience strengthening relies on systems change, and this takes time.
- Poverty reduction and resilience building should not be conflated; one does not necessarily result in the other.
- Programmes designed to be adaptive may need to consider financial management systems to enable adaptation.
- Larger programmes need adequate budget for a high level of coordination activity.

Implementing:

- There is value in implementing a 'whole community' approach.
- Start-up resources are vital to complement training.
- Demonstration effects are crucial to take-up.
- Participation relies on access to resources beyond those required to meet household needs.
- Gender roles and norms persist and act as barriers to women's participation (Box 1); a dedicated Gender Equality and Social Inclusion (GESI) strategy should underpin all activities.

BOX 1 Gender and social inclusion in BRACC[12]

In keeping with PROSPER's Gender Equality and Social Inclusion Strategy, there were proactive attempts to include women and other marginalised population groups in interventions. Women were particularly targeted for Village Savings and Loan Associations and asset transfer activities, based on evidence that women tend to spend cash for whole household benefit. Although some women reported needing to ask permission from their husbands to participate, this was largely granted. Other enablers of positive impacts for women were capacity to benefit and, in some cases, successful participation in previous related initiatives.

Female-headed households participated in PROSPER interventions at a significantly lower rate than male-headed households: participating in an average of 4.6 activities compared to 5.5 activities in male-headed households, a difference that was statistically significant at the 5% level. Some of the activities where female-headed households participated at notably lower rates than male-headed household included VSLAs (28% for female-headed households, compared to 35% for male-headed households) – although women's participation in VSLA groups was higher than men – farmer groups (29% compared to 36%), tree planting (22% compared to 28%), and irrigation schemes (10% compared to 14%). For other activities, participation was more comparable: cash for inputs (18% compared to 19%), participation in care groups (4% for both), and participation in PICS bag training (16% compared to 15%).

Reasons for lower participation and different outcomes are often linked to the fact that female-headed households were more likely to be categorised in the HI category. Female-headed households also typically face barriers related to time and labour scarcity or having fewer productive adults (85% of female-headed households are single-headed, compared with only 5% of male-headed households). Once geographic area and wealth group were controlled for, only one demographic group had significantly different adoption of agricultural practices: elderly-headed households were less likely to report growing improved varieties, but were more likely to adopt early planting.

There were a number of examples of improvements for female-headed households who participated in PROSPER interventions in terms of outcomes. Participation in at least three PROSPER interventions had a significant positive impact on consumption expenditures for female-headed (and 'hanging in') households. Female-headed households also reported a larger positive difference in reporting improvements in access to inputs, improved access to markets, crop diversification and sales, and increasing investment in kraals and having a non-agricultural business.

That said, female-headed households in PROSPER-targeted communities tended to have lower resilience index scores compared to their male-headed counterparts. The distribution of scores differed as well, although many of the differences in outcomes were explained by female-headed households' lower wealth ranking. However, even controlling for wealth ranking, district and other demographic factors, being a female-headed household was still associated with worse outcomes, suggesting additional challenges that may be faced by this group.

There was limited evidence for improved incomes giving women some independence and helping them gain confidence from learning new skills, as well as helping them experience less anxiety as a result of improved food security. However, while improved income can contribute to decreased food security and improved well-being, it can also contribute to changing intra-household dynamics. There was widespread acknowledgement of domestic conflict and failed marriages following spousal disagreements over unpaid loans, or arguments over how money from share-outs should be spent, as well as indications that some husbands disapproved of wives' newfound economic independence following their participation in the VSLAs.

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