

Issue 20 | December 2017

Concern's  
Knowledge  
Quarterly  
Review

# KNOWLEDGE MATTERS

Community Resilience: experiences  
and learning



**CONCERN**  
worldwide

**Any contributions, ideas or topics for future issues of knowledge matters. Contact the editorial team on email: [knowledgematters@concern.net](mailto:knowledgematters@concern.net)**

**The views expressed are the author's and do not necessarily coincide with those of Concern Worldwide or its partners.**

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## **Knowledge Matters basics**

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**Knowledge Matters** offers practice-relevant analysis relating to the development and humanitarian work of Concern Worldwide. It provides a forum for staff and partners to exchange ideas and experiences. The publication is committed to encouraging high quality analysis in the understanding of Concern's work. Concern staff and partners document their ideas and experiences through articles. Articles are very short – 500 – 1,500 words. Usually you only have space to make two or three interesting points. Here are some tips on writing a short feature article:

- Start by imagining your audience – a Concern colleague. Why are they interested – why do they want to read what you have to say? When you identify what your most important point is, say it straight away, in the title or first sentence.
- What can others learn from your story? Focus on this. Remember to back up your story with evidence. This can be got from evaluations.
- It's easier to get people reading if you start with the human perspective – mentioning real people and real-life events. (You don't have to give names).
- Use short sentences. Use Concern's style guide to help you.
- Keep paragraphs to a maximum of six lines long.
- Use clear language. Many of the readers of Knowledge Matters are non-native English speakers, so think carefully about using idioms or colloquial language that might not be easily understood by others.
- Always avoid assuming too high a level of knowledge of the topic you are writing about, on the part of the reader.
- Use active sentences ('we held a workshop' not 'a workshop was held by us')
- Use short and clear expressions.
- Keep your title short - no more than eight words.
- Where necessary use photos to accompany the narrative but ensure that you follow the Dochas Code of Conduct on Images and Messages.

**Cover image:** Tcharow Comite Communautaire d'Action discuss the results of the vote on impact and frequency of hazards in order to prioritise the most important ones in Tcharow, Goz Beida, Sila Region, Chad. Photo by Dom Hunt, 2014.

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## From the Issue editor

Welcome to the latest edition of Knowledge Matters. This edition focuses on Concern's experience in building the resilience of vulnerable people across some of our most challenging programme contexts. Building community resilience is central to Concern's core mission to save lives and end extreme poverty, and we have committed to scale up our community resilience programming significantly by 2020. To do this, we have had to more clearly define what Concern means by community resilience, decide where we will focus our efforts, and identify what learning we can build on and share. This 20th edition of Knowledge Matters attempts to do just that.

The issue starts with an overview of how Concern Understands Community Resilience and goes on to share learnings emerging from our programmes across the drylands of the Sahel and East Africa including Chad, Sudan, Niger, Kenya and Somalia as well as the more flood and earthquake-affected areas of Pakistan and Afghanistan. It shares new programme models and tools being used by Concern such as the Community-based Management of Acute Malnutrition Surge Approach and the Flood Resilience Measurement Tool. Please also see a summary of the findings from our Community Resilience to Acute Malnutrition programme in a separate Evaluation Brief.<sup>1</sup> Finally, our approach to influencing overarching political systems and stakeholders to build resilience of the most vulnerable is outlined.

Water – ensuring enough not only for basic needs and hygiene but for essential agricultural and other livelihood activities – emerges as a critical theme from our experience supporting agroforestry and other climate smart agriculture techniques in Chad, Sudan, Niger and Somaliland. The central role of women in building the resilience of their families and communities and the need to protect and engage theme more in key disaster management decisions also comes through clearly.

The diversity of issues covered in this collection illustrates how inherently complex building community resilience can be, and while we don't have all the answers, Concern does have much to share on the topic. I would like to thank all the contributors to this Knowledge Matters for their honest and extremely valuable reflections over the following pages and above, all the Concern staff, partners and communities who continue to work tirelessly to build better lives for the most vulnerable. Please get in touch if you have any ideas you'd like to share.

**Kate Golden**

<sup>1</sup> <https://concern2com.sharepoint.com/sites/KEExchange/Publications/%20Evaluation%20Brief%20of%20the%20Community%20Resilience%20to%20Acute%20Malnutrition%20Programme%20in%20Chad.pdf#search=cram%20evaluation%20brief>

# How Concern Understands Community Resilience



By Kate Golden

## Introduction

This article provides a short overview of How Concern Understands Community Resilience and our approach to building it. It outlines Concern's commitments in this area, the contexts and countries where we plan to focus this work over the next three years, the essential elements of a Concern Community Resilience programme; and how we hope to measure impact. More detail is available in the full Community Resilience Guidance Note available.<sup>1</sup>

## How does Concern define Community Resilience?

Concern defines Community Resilience as *'the ability of all vulnerable households or individuals that make up a community, to anticipate, respond to, cope with, and recover from the effects of shocks, and to adapt to stresses in a timely and effective manner without compromising their long-term prospects of moving out of poverty.'* Concern's definition is very similar to those used by others, but, Concern has chosen to explicitly focus on **community** resilience. This is due to our strong and often unique presence at the community level and our belief that collective, community-informed action is essential to making the most vulnerable more resilient to future shocks and stresses. To be clear, however, Concern's focus is not solely on the "community" as a single, static unit. The definition deliberately reflects Concern's deep organisational commitment to equality by stating that we will work to improve the resilience of *all* of the vulnerable households and individuals that make up that community.<sup>2</sup>

## What is Concern's vision for scaling up Community Resilience Programmes?

Concern's Community Resilience mini-strategy (2016 – 2020) outlines broadly how we will scale up our Community Resilience. By 2020, Concern will have:

- 1. Implemented high quality Community Resilience programmes in at least six of the most vulnerable countries** in which we work.
- 2. Improved the resilience of at least 500,000 vulnerable individuals** living in the most vulnerable contexts in which we work, using a robust index of individual resilience.

- 3. Produced at least five papers summarising evidence of what works in Community Resilience programming** in different contexts, including approaches that are most cost effective.
- 4. Produced at least five practical guides on specific aspects of Community Resilience programmes.**
- 5. Seen its evidence and guidance on Community Resilience practice taken up** by governments, agencies and donors.

More specific deliverables under each of these is outlined in the Community Resilience strategy, and this Knowledge Matters edition contributes to several of them. A small Resilience Managers group follows the implementation of this strategy and will provide an update on progress against targets at the end of 2017.

### **Where does Concern do Community Resilience programming?**

Concern focuses its community resilience programming in fragile contexts – generally, where the environment presents extreme challenges to productive livelihoods, where the government's ability to provide services is weak, and where there is an ongoing threat of conflict. On top of these underlying stresses, communities in fragile contexts are regularly affected by natural and human-derived shocks, such as floods, rain failures, cyclones, or disease outbreaks. While an argument could be made for the fragility of nearly all of Concern's working contexts, over the next three years, we feel it is most constructive to focus our Community Resilience efforts on what we consider to be our 12 *most* fragile country programmes. As outlined in Table 1, these 12 Community Resilience focal countries fall within three broad contexts, which are distinguished by the predominant shocks and stresses faced in each. They are 1) the drylands of East Africa and the Sahel, 2) the mountains and flood plains of South Asia, and 3) conflict-affected Central Africa.<sup>3</sup>

We recognise that this categorisation isn't perfect, that each context will have its own unique set of hazards and that many characteristics, such as conflict and water stress, are common to all the three contexts. But, focusing on these 12 countries, we feel we will be better able to generate, document, and share context-relevant learning. To date, most of our resilience programming has been in the drylands of Africa and the mountains and floodplains of Asia. Our experience working on conflict has been limited, but we are developing our capacity in this area, starting with an organisational conflict strategy to be shared in 2018. Please also note, that, at present, we are not including urban settings or the Syrian crisis under the umbrella of Community Resilience.

Context	Main shocks faced	Common stresses	Specific stresses	Concern countries
<b>Drylands of East Africa and the Sahel</b>	<b>Drought</b> Also: seasonal flooding (particularly South Sudan)	Environmental degradation  Population pressure  Climate change/variability	Insufficient water Malaria, diarrhoea Livestock diseases, competition for pasture Intense seasonality	Ethiopia (highlands less so) Kenya Somalia Sudan South Sudan (+ flood risk) Chad Niger
<b>Mountains and flood plains of South Asia</b>	<b>Floods</b> <b>Earthquakes</b> <b>Cyclones</b> Also: conflict (Afghanistan)	Threat of conflict  Weak, authoritarian or highly discriminatory governance	Land tenure issues	Afghanistan Bangladesh Pakistan
<b>Conflict-affected Central Africa</b>	<b>Active conflict</b> Disease outbreaks (e.g. cholera)		Competition for resources e.g. minerals Corruption	CAR DRC

**Table 1:** Three broad contexts and 12 countries where Concern Community Resilience work is focused

## What elements are essential to Community Resilience programming?

We believe that Concern Community Resilience Programmes should include *six essential elements*, as outlined below. This means that they should be implementing relevant activities and indicators supporting each or ensure that another actor (e.g. the government, another NGO or UN agency) is doing so to a minimum standard. The six elements are based on Concern's original Key Principles for Community Resilience Programming<sup>4</sup> and, taken together, they can be seen as a set of minimum criteria for Concern Community Resilience programmes. For further detail on the specific activities that may be appropriate under each of the six elements please see the full Community Resilience Guidance Note and specifically Concern's Community Resilience Framework.

The essential elements of a Concern Community Resilience programme are as follows:

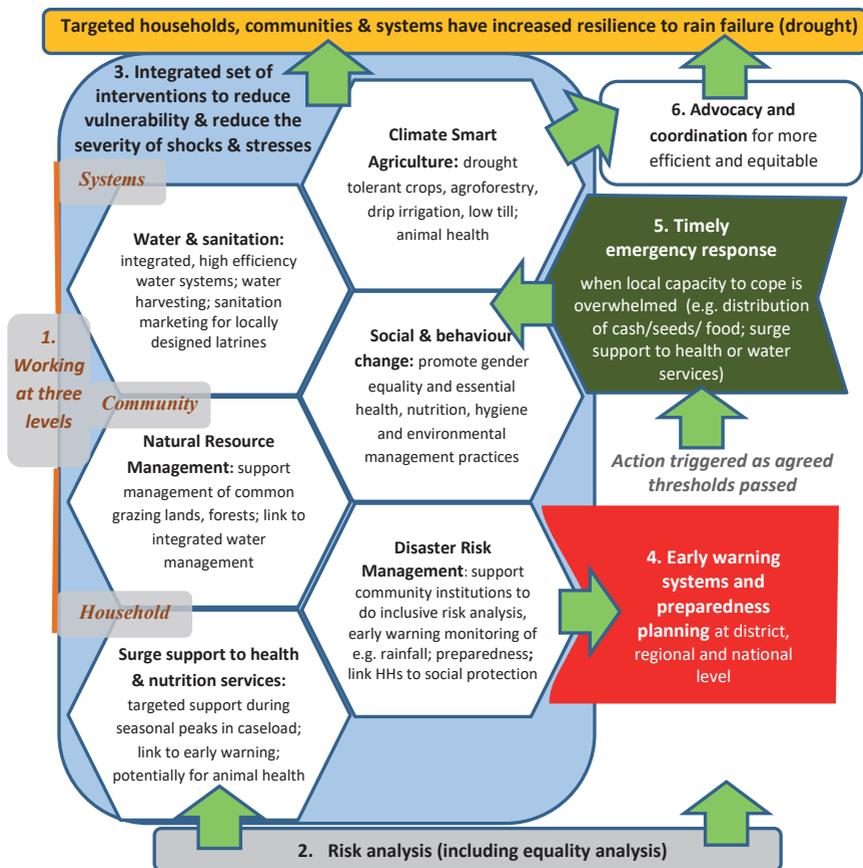
- 1. Work at three levels: household, community and systems.** Despite our deliberate focus on 'Community' Resilience, we know that working at household, community and the broader 'systems' level is essential to build resilience to any type of shock. The systems level is what Concern generally refers to as the 'meso' level (District / Regional) or 'macro' level (National). It includes the largely government-led service delivery systems for e.g. health services, education, social protection; political structures and processes; the humanitarian system; and the wider ecological, livelihood and market systems on which people depend.
- 2. Conduct a thorough risk analysis.** This should be carried out with stakeholders at all levels but first and foremost with community members at the design stage of the project. Throughout this process, the important question to ask is: which specific shocks and

stresses are creating the greatest obstacles to survival with dignity, productive livelihoods and wellbeing in this context and what can be done to minimise their impact? The analysis should include a strong gender lens. Please see Concern's Risk Analysis Guidelines<sup>5</sup> as a starting point.

- 3. Help people reduce their vulnerability to priority shocks and stresses with an integrated set of interventions.** Reducing people's vulnerability is and should remain a cornerstone of all Concern programming. It is central to How Concern Understands Extreme Poverty<sup>6</sup>, and Concern programmes are traditionally very skilled at building assets as a path to reducing vulnerability over the long run. This, however, will almost certainly not be enough in fragile contexts, where change and unpredictability are the norm and sudden destruction of assets a very real risk. Community Resilience programmes must therefore plan activities that are themselves flexible and that support people's own capacity to adapt to changing circumstances. This is often referred to as building 'adaptive capacity' and many consider it a core aspect of resilience programming.
- 4. Help people better anticipate and prepare for shocks.** While some shocks such as rain failure are easier to anticipate than others such as tsunamis, a large amount of information can still be leveraged to help predict these events, ranging from local knowledge to market prices to satellite imagery of rainfall. Concern's first priority should be to understand what early warning systems are in place and undertake activities required to strengthen them. Second, Concern must help people and systems better prepare for the anticipated shocks. This may include specific trainings (e.g. on first aid) as well as establishing thresholds and flexible funding mechanisms to trigger an early and appropriate response. Preparedness activities should be clearly laid out in Disaster Risk Management plans at Local, District and National level.
- 5. Deliver timely, emergency response when local capacity is overwhelmed.** Despite our best efforts to build capacity in the areas above, we know that the potential for local capacity to be overwhelmed is significant, and a rapid response may still be required. The nature of the response will need to be tailored to each context and based on rapid assessments, but a clear Disaster Risk Management plan should provide a rough blueprint for likely priorities (e.g. cash, food, non-food items, and nutrition services). Ideally work done under the preparedness phase will make early funding of response activities possible.
- 6. Advocate for systems that can support the 'full community resilience package.'** In addition to building capacity, community resilience programmes must also a) critically analyse where aspects of the broader system are 'broken' or undermining people's ability to cope with shocks and stresses and b) undertake activities that positively influence policies and practices so these systems can deliver the 'full community resilience package' to our target groups. The policies, practices and stakeholders each programme should target will differ by context, but may include: investing in social protection and safety net programmes; investing in early warning systems; establishing flexible funding mechanisms; or promoting more equitable management of water, land and forest resources. Many of our target countries have made commitments to global frameworks including the Sendai Framework for Disaster Risk Reduction, the Paris Climate Agreement and the Sustainable Development Goals, which can be used to leverage action at country level.

## What does a Community Resilience Programme look like in practice?

Figure 1 provides an example of how the above six essential elements might look when brought together to improve Community Resilience to rain failure, leading to drought. Note, this would look considerably different if the priority shock was a flood, cyclone, conflict, or a combination of several potential shocks. Concern has also developed a Community Resilience Framework to help programmes determine if their planned activities and indicators reflect the six essential components representing Concern's 'full Community Resilience package'. (Please see the framework in the full Guidance Note) The framework is essentially a 3 x 3 table which teams planning to develop a Community Resilience programme are encouraged to fill in. The template includes guidance on potential activities and indicators to consider for each of the six elements, and Community Resilience programmes would be expected to plan context-specific activities and indicators in all the cells in this framework.



**Figure 1:** Example of the core elements in a programme building community resilience to rain failure

## How can we measure Community Resilience?

For now, we believe the best resources for measuring Community Resilience in our programmes can be found in our standard indicator list in Concern's Programme Quality Guide. A new page has been developed focusing specifically on M&E for Resilience which will evolve over time. The choice of indicators will, of course, be driven by the programme context and activities, and the Concern Programme Quality guide provides a comprehensive and tested list of indicators to choose from, covering the main sectors and approaches of nutrition, health, WASH, livelihoods, DRR, education, advocacy, and equality. There are also a number of new indicators particularly relevant to Community Resilience Programmes, including the Household Livelihoods Coping Capacity Index, functionality scores for Community Disaster Risk Management, the Agricultural Livelihoods Protection Index, and the CMAM Surge approach, which is discussed in this edition. We are also developing further tools to measure Flood Resilience based on a collaboration in our Afghanistan and Haiti programmes, and soon in Bangladesh.<sup>7 8</sup>

## Is Concern only concerned with building resilience to malnutrition?

No. Our Community Resilience programmes should be designed to address the specific shocks and stresses identified in the risk analysis – not just those related to malnutrition. However, many of these shocks and stresses are likely contributing to malnutrition in a major way by increasing food insecurity, creating a poor health and hygiene environment, restricting access to health services; and negatively affecting caring practices for children and women. We expect, therefore, that there will be a considerable overlap between actions taken to improve Community Resilience and those taken to improve nutrition, but this is not the case in all contexts and it is certainly not a requirement.



**We can dismiss resilience as just the newest buzzword and repackage what we are already doing with new terminology, but that would be a missed opportunity**

## Conclusion

As you can see from the above, many aspects of the Community Resilience approach are not different from the good development and humanitarian response that we already do. The approach is firmly rooted in How Concern Understands Extreme Poverty. It embeds the logic of Disaster Risk Reduction within our development programmes and links them more directly with our emergency work. However, as we pursue our strategic commitment to work in more fragile contexts where unpredictability, particularly in the face of climate change, is becoming the 'new normal', a shift in approach is needed.

While the bulk of the interventions in a Community Resilience programme will be the same or similar to our normal sectoral activities, how we combine and deliver them in an increasingly integrated fashion, and help people adapt to the 'new normal' of unpredictability may differ from our traditional programming. A Community Resilience approach requires us to sharpen our awareness of risk in each context and move more nimbly between a development and an

emergency mode as a situation changes. It also forces us to better understand wider systems, particularly ecosystems, and help people innovate and adapt to utilise dwindling natural resources more efficiently. We can dismiss resilience as just the newest buzzword and repackage what we are already doing with new terminology, but that would be a missed opportunity. There is much we can learn from and contribute to the evolving area of resilience-building if we commit to honestly assessing and sharing our experience.

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## References and Content Notes

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1. The full note can be found here: [https://concern2com.sharepoint.com/sites/KExchange/Publications/How Concern Understands Community Resilience.pdf](https://concern2com.sharepoint.com/sites/KExchange/Publications/How%20Concern%20Understands%20Community%20Resilience.pdf)
2. The focus on community resilience also reflects Concern's decision not to engage in some of the inherently politicised aspects of 'resilience building' at state, region or international levels, which is more focused on ensuring international security and linked to furthering geo-political positions that we don't or can't subscribe to.
3. Note these three categories are similar to those used for DRR Documentation Exercise, but based on learning from that are focused more on the predominant shocks in each context rather than simply their geographical or topographical characteristics.
4. <https://www.concern.net/insights/key-principles-programming-community-resilience>
5. Within Disaster Risk Reduction, 'risk' encompasses both the hazard and the vulnerability of the person who could experience that event. While in HCUER, we tend to talk about risk *and* vulnerability, they are referring to the same thing. <https://www.concern.net/insights/risk-analysis-guidelines>
6. See the following: <https://www.concern.net/insights/how-concern-understands-extreme-poverty>
7. Concern also has its own Community Risk Indexing System, which can be a useful tool for context analysis.
8. In the BRACED programme, Concern has also piloted the The Self-evaluation and Holistic Assessment of the Resilience of Farmers and Pastoralists (SHARP) with FAO in South Sudan and the 'Key Programme Impact Indicator 4' (or 'KPI4' for short), in Chad and Sudan as required by DFID. We would currently not recommend either for use in other programmes, but we have taken the best aspects of both and incorporated them into the other resilience indicators on the PQ guide.

# Climate Smart Agriculture in the Drylands: Building resilient food systems in Chad and Sudan



By Cecilia Benda, David Traynor, Friday Mwaba and Ann Degrande

## What is CSA and why is it important for resilience in dryland contexts?

Most livelihoods in the Sahel are highly dependent on rain-fed agriculture and pasture for livestock. Increasingly erratic climate patterns, a rise in temperatures, and more frequent extreme weather events have been witnessed across the Sahel with some spatial and temporal variations.<sup>1</sup> Increasing people's capacity to adapt their food production systems to these effects of climate change is vital to increasing their food security and resilience. Promoting Climate Smart Agriculture (CSA) is one way to help people do this. CSA is a set of farming practices contextualised to the specific climate risks of a given agroecological context, focusing on sustainably increasing agricultural productivity and incomes while adapting and building resilience to climate change.<sup>2</sup> Concern is now promoting CSA in most of its rural country programmes as a core element of its resilience strategy,<sup>3</sup> and it figures prominently in Concern's BRACED programme in Chad and Sudan (see Box 1). The following three case studies present some of the CSA technologies promoted in these two countries along with key successes, challenges and lessons learnt.

### **BOX 1: The Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) Programme**

The BRACED programme, funded by the Department for International Development (DFID) of the UK government, aims to build the resilience of more than five million vulnerable people to climate extremes and disasters in 13 countries in the Sahel, East Africa and Asia. The wider BRACED profile is made up of 15 project consortia, and Concern leads the BRICS (Building Resilience in Chad and Sudan) programme in partnership with World Agroforestry Center (ICRAF, in Chad), the Feinstein International Center of Tufts University (Chad and Sudan), and the Almassar Charity Organisation (a sub-partner) in Sudan. Concern also leads the BRACED consortium in South Sudan, known as the Improving Resilience in South Sudan (IRISS). More information and resources can be found at <http://www.braced.org/>

## Drought resistant varieties in West Darfur – Sudan

Rural households in Sudan's West Darfur State depend primarily on sorghum and millet production for their food security together with mixed livestock. The grains are processed into flour and are used in the preparation of *asida*, the national dish. Climate change has in the last few decades

negatively impacted the performance of these cereal crops as local varieties grown by farmers usually take between 90 and 120 days to mature and perform poorly when the season becomes hotter and falls short of rain. The Sudan Agricultural Research Corporation (SARC) has conducted substantial research primarily on sorghum and millet to develop improved varieties able to mature within a shorter period of time and to withstand dry-spells and hotter climate. *Ashana* and *Butana* are such improved varieties of millet and sorghum, respectively. They are drought resistant and mature in 70 days and are developed by cross-breeding local varieties.

### **Drought resistance crops: a CSA technology to adapt to climate change**

Within BRACED, Concern is partnering with SARC's West Darfur branch to promote and increase access to these varieties. A seed bank system was established in Bangadeed community and, through it, seeds of Butana and Ashana were distributed to 50 farmers to test and multiply seeds for further distribution. Farmers were told about the importance of growing varieties that are adapted to the changing climate and having a range of different crops in the farm to enhance the resilience of the farming system. Trainings on seed multiplication and cooking demonstrations were organised to familiarise people with the taste and texture of new varieties. After the first season farmers brought back a certain amount of seeds to the Seed Bank to ensure other farmers could benefit from further distributions. The following season, Concern bought Ashana and Butana seeds from the seeds bank and distributed to vulnerable farmers in other villages through seed fairs. This approach was deemed successful for its timely procurement and stimulation of the local economy.



Friday Mwaba (Concern Programme Director in Sudan) discussing with the lead farmer Ishaq Juma about the benefits of improved sorghum variety. Bangadeed village Geneina, West Darfur (Sudan)- (September 2016). Photo taken by Noraldin Hassan

### **Emerging lessons: food security and income opportunity**

Despite initial reluctance, the seed replenishment rate has been very high at 97 percent, showing farmers' commitment to the seed bank system. After two years of promoting new varieties, farmers' adoption of the initiative is increasing. People appreciate the taste, the colour and the overall quality of the flour obtained from their grains. Farmers have witnessed higher yields with the new varieties, especially after the 2016 El Nino event that caused rains to stop earlier. Only farmers who used improved seeds managed to have a decent harvest, whereas local varieties failed almost completely. Having recently increased their cereal production, farmers feel more food secure. During focus group discussions, farmers reported a longer period during which they have enough food at home. Many households even managed to sell surplus production, providing households with valuable incomes.

There was a surge in popularity for sorghum, and the revived interest is promoting household diet diversification. Many other villages are aware of the new varieties. They have visited the seed bank to request seeds and those unable to pay managed to exchange grains for seeds. Butana and Ashana grains have started to appear in nearby markets, though in small quantities considering

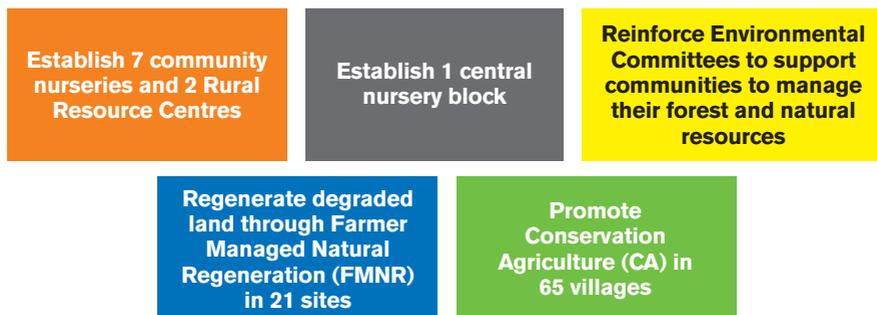
the limited supply. However, they fetch high prices and are sold very quickly as their popularity grows. Also, the United Nations Food and Agriculture Organisation (FAO), after witnessing the success of the intervention, has started to promote the two new varieties in other communities.

One of the main challenges the intervention is facing is that of sustainability as the seed bank is still dependent on Concern's support, mainly for selling their seeds. Farmers also often rely on "normal" grains bought in the market rather than high quality seeds for planting. The programme is currently working to obtain quality certification for seeds produced by farmers and to develop a packaging system for seeds with appropriate logos, batch and certification numbers. This will improve visibility and provide quality assurance to farmers -thus encouraging them to access improved seeds, along with expanding access to market channels like local agro-dealers and traders.

### Promoting Climate Smart Agriculture in Chad

Concern has worked in the Sila region in eastern Chad since 2007. Beginning in 2012, as a fragile calm returned to the region, Concern began to move away from emergency interventions and to address the underlying causes of food insecurity and malnutrition with the Community Resilience to Acute Malnutrition (CRAM) programme integrating interventions to promote health and nutrition; water, sanitation and hygiene (WASH); food security, disaster risk reduction and gender equality. CRAM was found to have a positive impact on child malnutrition but the need for stronger agricultural interventions was noted.<sup>4</sup> Following on from CRAM in 2015, the BRACED programme has continued to promote resilience and reinforced the Climate Smart Agriculture component to help people better adapt to the effects of climate change outlined above.

The CSA activities primarily included agroforestry and conservation agriculture as outlined in Figure 1, covering 65 villages.



**Figure 1:** CSA activities in the BRACED programme in Chad

### The agroforestry approach

Agroforestry was introduced in the BRACED programme through a partnership with the World Agroforestry Centre (ICRAF). Agroforestry is an agro-ecosystem approach where trees are integrated into farmland to provide social, environmental and economic benefits to the community<sup>5</sup>. Trees are perennial "crops" that, once established, have a better chance to withstand erratic rainfall and yearly climatic variations, compared to annual crops, thus promoting

more stable production and diversified incomes from the sale of their produce. Agroforestry is therefore considered part of Climate-Smart Agriculture (CSA).

Concern and ICRAF introduced agroforestry in the 65 target villages in the Sila region with the aim of promoting fruit tree production while regenerating the wider ecosystems in relation to land. ICRAF's technical know-how has been key to establishing community nurseries, train Concern staff and community members on agroforestry techniques, access improved tree genetic materials, (e.g. trees with increased resistance to pests and diseases or short-maturing fruits), and for the domestication of indigenous tree species already adapted to the local environment. A wide range of exotic and indigenous fruit trees were raised in community nurseries including: *Moringa olifera* (moringa); *Citrus* spp.; *Mangifera indica* (mango), *Psidium guajava* (guava); *Carica papaya* (papaya); *Balanites aegyptiaca*; *Ziziphus mauritiana* (pomme du Sahel), *Tamarindus indica* (tamarind), *Acacia senegal*, *Acacia nilotica*; *Acacia melifera*; *Sclerocarya birrea* (marula tree). The Rural Resources Centres (RRCs) that developed from community nurseries have a critical role on leading community-based initiatives like the training and testing of climate smart agriculture practices, promoting tree plantation and Farmer Managed Natural Regeneration (FMNR) and, overall, bringing the various components - agroforestry, conservation agriculture, nutrition, water and sanitation and gender equality - together.



Above: Abakar Hassab (Concern field staff) delivering training on agroforestry to the Environmental Committee members in Karo village, Sila Region (Chad)- (August 2016). Photo taken by Ann Degrand



Right: Nursery and Resource Center in Djedidé, Sila Region (Chad) - (May 2017) Photo taken by Cecilia Benda (these two are for the second piece on agroforestry)

## Emerging lessons

Community nurseries have produced over 5,000 tree seedlings in the first year, and Concern has been purchasing them to support the nurseries and also for distribution to community members. The tangible benefits that agroforestry can bring to vulnerable households are yet to materialise as trees are still young. Nonetheless, some positive results have emerged already.



## The main challenge for ensuring the success of agroforestry is water

Concern has promoted moringa, a fast growing tree producing highly nutritious seeds and leaves in less than one year of planting, through the “Arboloos” initiative. This foresaw one moringa per household where fruit trees are planted on closed latrines as part of the Community-Led Total Sanitation (CLTS) approach with the aim to combine sanitation and nutrition outcomes. Cooking demonstrations were carried out with mother support groups to promote its consumption and now women have started to use moringa leaves in meal preparation. FMNR, as the practice of protecting and pro-actively regenerating trees by selecting tree stumps that are re-sprouting, is also spreading quickly amongst farmers. FMNR entails tree pruning and cutting of unproductive tree branches. Therefore besides the long-term benefits on food security and environmental protection, farmers have started to realise the value of protecting trees in their farmland to obtain biomass and firewood from regenerated trees.

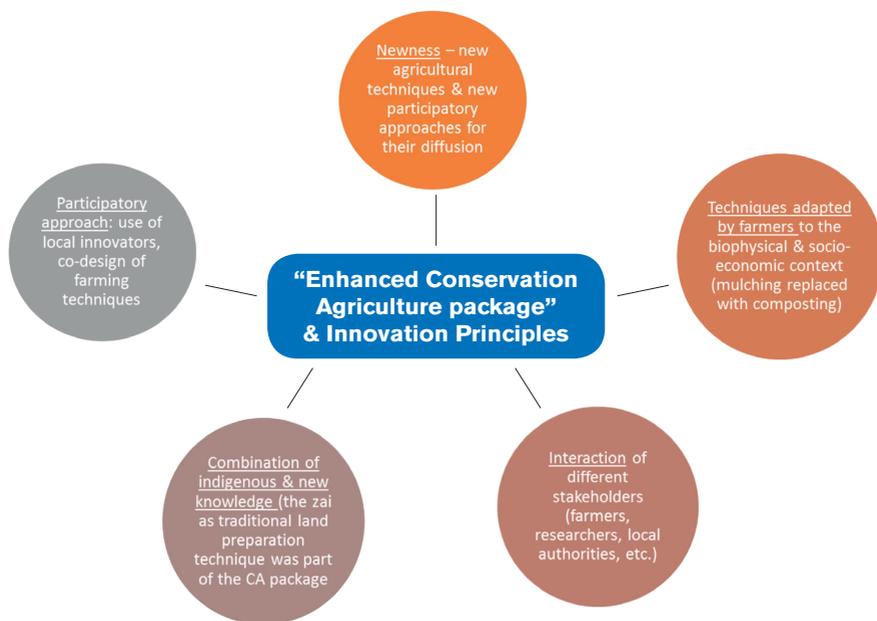
BRACED worked with local innovators and lead farmers, recognised experts in farming, with good capacity to teach others and willing to take risks by embarking in new practices, also called early adopters. Having them involved in training sessions and participatory on-farm research trials is ensuring knowledge transfer and innovation.

However, the main challenge for ensuring the success of agroforestry is water. Farmers constantly cite accessing water as limiting their ability to continue or expand agroforestry, and investments need to be considered in water infrastructure, such as improved wells or rain water harvesting systems (for more on this see the article from Somaliland in this edition). Concern has established protected wells at each community nursery and is currently working on promoting other simple water infrastructure.

## Promoting Conservation Agriculture

Conservation Agriculture (CA) is a farming practice based on minimum tillage/soil disturbance; mulching/soil cover and crop rotation and associations. CA has been mainly promoted in the sub-tropical regions of Africa and South America where the climate and rainfall patterns facilitate the accumulation of its agro-ecological benefits such as: improved soil fertility, increased retention of soil moisture, reduced water run-off and soil erosion, increased organic matter, improved soil structure, stabilised soil temperatures, reduced soil compactions and reduced labour. However, more recently, CA has started to be encouraged in dryer regions too as a climate smart agriculture practice able to mitigate the impact of recurrent droughts and erratic rains thanks to its potential to build up soil organic matter in the soil and retain moisture.

Concern introduced CA in Chad in 2013 through collaborations with the district office of the Ministry of Agriculture and the training of lead farmers on CA practices. The training topics included CA techniques but also other good farming practices, like line sowing (as opposed to scatter planting for easier weeding) and integrated pest management. The approach was quite top-down with limited participation of local farmers in the design of the farming technology, resulting in very low levels of appropriation of these techniques by farmers.



**Figure 2:** BRACED approach to innovation for the conservation agriculture package according to Cozzens and Sutz (2012)

From 2015 onwards under the BRACED programme, Concern expanded the main technologies and techniques promoted to better fit the local agro-ecological context, namely soil and water conservation techniques (e.g. zaï, half-moons), integrated soil fertility management, use of improved crop varieties, micro-dosing of manure and fertilizer, and Farmer Managed Natural Regeneration (FMNR). These were integrated into an “enhanced CA package”. In fact, the FMNR technology discussed above, when applied in agricultural fields together with the other CA principles, is also known as *Conservation Agriculture with Trees*

The BRACED programme also worked with farmers to test the technologies through participatory on-farm research trials and demonstration plots, to verify their appropriateness to the local farming context. The BRACED approach to promoting CA was designed to reflect the five characteristics of an innovation according to Cozzens and Sutz (2012), outlined in figure 2.

### Emerging lessons

The impact of the “enhanced CA package” on the production of crops is not yet clear due to the lack of quantitative data and more resources are being invested going forward to collect such data. However, anecdotal feedback from farmers suggests increased crop yields, crop diversification and more fertile soil in their fields, as farmers’ adoption of manure application, line sowing, crop rotation and associations with improved varieties is growing. Mulching with crop residues remains the main constraint for CA, due to the competing demands for crop residues, such as feed for livestock and fuel. However, the introduction of FMNR aims to increase biomass

production at field level for mulching and to improve soil fertility. Lead farmers and farmers involved in the management of demo-plots and on-farm research trials have gained recognition for their dedication and commitment to promote best farming practices in their villages. For this reason most pilot farmers are willing to continue to train their fellow farmers beyond the duration of the project. This is an early indicator of the sustainability of the project.

## **Next steps in the promotion of CSA**

As Concern continues to encourage farmers to adopt CSA practices as a mitigation strategy against climate change, we will need to reinforce our evidence base on the actual benefits of CSA for farmers. Ways to do that are measuring and comparing productivity levels between CSA and conventional practices through quantitative data gathering of crop yields, and assessing the economic returns of CSA technologies.

Capacity building, new and innovative ways to transfer knowledge to farmers and building networks of different stakeholders will all be necessary interventions to capitalise on what has been achieved so far. This will ensure that positive outcomes on food and livelihood security that have emerged already for resource-poor households can be sustained in the future. The CA project in Chad has demonstrated the impact of bottom-up approaches for co-designing and adapting new technologies that rely on local innovators as well as the benefits of having researchers, farmers and local institutions working together.

The sustainability, financial or technical, of the institutions established in the process of promoting CSA is also critical for the long-term success and uptake of CSA, as the cases of the seed bank in West Darfur or the environmental committees in Sila Region (Chad) have amply demonstrated. For instance communities in Chad have raised worries on the financial sustainability of the community nurseries and in order to address this issue, Concern is planning to conduct a value chain analysis and a market survey to identify opportunities for income generation. Moreover, Concern and ICRAF have conducted research on how the policy environment could impact or reduce the success of the agroforestry activities. Based on this research Concern has initiated conversations with relevant public institutions to ensure agroforestry will be included in future environmental and agricultural policies.

A gender lens is necessary in the next generation of interventions focusing on CSA, and Concern hopes to conduct further research on the potential for CSA to be adapted and better serve women. This will allow us to better understand the links between women's empowerment, climate smart practices and resilience building, and adapt our approach accordingly.

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## **References and Content Notes**

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1. <http://sdwebx.worldbank.org/climateportal/countryprofile/home>
2. <http://www.fao.org/climate-smart-agriculture/en/>
3. Concern 2017, *Community Resilience: A Concern Guidance Note*
4. <https://concern2com.sharepoint.com/sites/KEExchange/Publications/%20Evaluation%20Brief%20of%20the%20Community%20Resilience%20to%20Acute%20Malnutrition%20Programme%20in%20Chad.pdf#search=cram%20evaluation%20brief>
5. <http://www.worldagroforestry.org/about/agroforestry-our-role>

# Early Warning for Early Action: Delivering a rapid response to drought in Somalia



By Dustin Caniglia and Alexander Carnwath

## Introduction

An effective Early Warning Early Action (EWEA) system plays a key role in building the resilience of disaster-affected people. Helping people anticipate and prepare for shocks, including through mechanisms such as early warning systems (EWS), is central to Concern's resilience approach. So too is delivering a timely emergency response when circumstances require it and local capacity is overwhelmed. Effective EWEA brings these two essential elements together to ensure we act quickly in response to warning signs, reducing the potential impact of a disaster. This saves lives, prevents suffering, and protects the livelihood assets of vulnerable people, so that their ability to cope and their prospects for development are not destroyed each time a disaster occurs.

Since 2013, Concern's Building Resilient Communities in Somalia (BRCiS) programme has been operating in vulnerable communities in southern parts of the country to help people withstand disasters, particularly drought, flood and localised conflict. The recent history of Somalia is marked by a collective failure of EWEA by the humanitarian community. In the 2010-2012 Somalia famine, donor money and international action arrived too late to prevent an estimated 260,000 people losing their lives, as a combination of drought and conflict caused a devastating famine.<sup>1</sup> EWEA is therefore a central part of the BRCiS programme which systematically monitors conditions in its programme areas and includes a mechanism to trigger a rapid, localised response when signs of a potential crisis emerge.

The BRCiS EWEA system is founded on a 'no regrets' approach, with action based on probabilities rather than certainties. Our experience suggests that waiting for a fully developed picture of the needs and situation risks missing the vital lead-time to mobilise a response and mitigate the impact of a coming disaster. While this may, in some cases, mean responding early to the signs of a crisis which never materialises, Concern Somalia feels strongly that launching an early response that is proportionate to the probability that the disaster will occur, is significantly more cost-effective over the long term than launching a later but necessarily more intensive response. The simple equation for determining when early action is appropriate is outlined in Box 1.

### BOX 1: BRCiS formula for triggering early action

Concern's BRCiS programme developed a simple formula to rationalizing when to respond early and when not to. While these details are always complicated estimates, the process of attempting this calculation leads to deeper analysis in choosing when and what to invest in when faced with the prospects of a disaster occurring. The process requires determining three data points: Probability of Disaster Occurring, Cost of Early Action that would mitigate the disaster, and the Cost of Response to the disaster if it occurred. These data points can be estimated using disaster probability modelling and by estimating actual programmatic options of both feasible mitigating action and response (Concern, Added Value of Resilience, March 2017).

IF:  $\left( \frac{\text{Cost of Early Action}}{\text{Cost of Response}} \right) < (\text{the Probability of Disaster Occuring}) = \text{True}$

THEN: *Early Action has higher VfM than Response*

Early Warning for Early Action: Delivering a rapid response to drought in Somalia

In 2016, the BRCiS programme began to activate its EWEA approach. Most of Somalia depends on two annual rainy seasons for agriculture and livestock production. In June 2016, there were signs that the Gu rains (April-June) were not performing well. As the previous 2015 Deyr (Oct-Dec) rains had been relatively strong, the prevailing thinking within the aid community was to wait to see how the 2016 Deyr rains (Oct-Dec) performed before responding. However, the BRCiS programme began to use precipitation data produced by the Africa Flood and Drought Monitor<sup>2</sup> to identify areas most affected by poor Gu rainfall. The BRCiS team then began to apply its 'Red-flagging' approach to identify areas most at risk by combining the precipitation data with other seasonal monitoring data and the history of any previous shocks and/or signs of vulnerability (i.e. poor access to water or likelihood of conflict). Communities with lowered resilience due to overlapping risk factors or shocks in consecutive years were conceptually marked with a 'red flag'.

BRCiS began responding (primarily with cash and other items, as outlined below) in these red-flagged communities in June 2016. In November 2016, Concern updated its red-flag list and expanded its response based on the satellite-based remote sensing data reflecting the performance of the Deyr rains. This EWEA approach meant that by the time the Food Security and Nutrition Analysis Unit (FSNAU) - the leading source of food security and nutrition surveillance in Somalia- indicated the possibility of famine in Somalia for the first time in a report published on January 16<sup>th</sup>, 2017 Concern's BRCiS Programme staff had already been responding in half of its target communities for seven months.<sup>3</sup>

### The BRCiS Early Response

Our response built on BRCiS' community-centred resilience activities which began in 2014. The BRCiS programme uses an iterative participatory development approach, supporting communities and staff to plan location-specific activities each year, and to go back over and adapt these plans regularly to incorporate learning and address changing circumstances. Hundreds of activities and projects were therefore already in place by 2016: improved water sources, diversified livelihoods, DRR plans and a strong working relationship between staff and communities provided a good foundation for further support when the situation began to deteriorate in Somalia midway through 2016.

Our additional response in red-flagged communities involved action in three key areas: cash, fodder production and addressing additional hazards such as conflict.

Cash transfers began in June 2016 with an initial delivery of USD 30 per month to 803 of the poorest households – the poorest 10 percent identified via the Community Disaster Management Committees- in red-flagged communities in Gedo. In November, as the subsequent Deyr rains appeared to be failing and the probability of disaster had therefore increased, Concern increased the amount to USD 50 per month and doubled the number of recipient households to 1606, now including the poorest 20 percent of households. By January, with the failure of the rains confirmed, Concern was able to increase the cash transfers to USD60 per month with newly accessed emergency funds from the United Kingdom's Department of International Development (DFID) and the European Civil Protection and Humanitarian Operations (ECHO). Despite the crisis, markets continued to function and food remained available for purchase, minimising displacement to urban centres.

Fodder is essential to prolonging the productivity of milk animals during drought and therefore protects the nutritional status of the entire family, particularly children. Through the pre-established BRCiS Farmer Field Schools in communities near rivers - a total of 217 acres of short-maturing fodder crops were already being cultivated for local sale. In response to rising fodder prices, Concern worked with the same farmer field schools to contract and cultivate an additional 50 acres of fodder which was then distributed to roughly 6,000 of the poorest households who would not otherwise have been able to afford it and maintain their household milk animals. The cost for Concern of all fodder activities from 2014 through the 2016 response was only 60,000 USD but resulted in an estimated 2016 retail profit of 350,000 USD for local farmers and fodder access for approximately 22,500 people.

In addition to the failed rains, most of the BRCiS target villages have experienced a long history of conflict and displacement and live with the risk that such conflicts might erupt at any time and further erode their capacity to cope with the worsening drought. Dhamasa, a village on the border with Kenya that had been red-flagged and was receiving cash transfers is one such village. In late June, an outbreak of fighting between Al Shabaab and the Kenyan defence forces caused the displacement of most of Dhamasa's 1,200 households. The BRCiS programme responded with shelter kits and daily water trucking to nearby areas, and increased the value of cash transfers and the numbers of households receiving them, providing support to roughly 5,600 people, two-thirds of the village population. These activities prevented community members from having to displace too far from their homes and from losing their productive assets, and five months after the initial fighting, they were able to negotiate a full return.

In response to signs of a growing crisis Concern also increased its strategic engagement with climate experts such as the Red Cross Climate Centre and Columbia University's International Research Institute (IRI) and early action-focused groups such as the UK-based Start Network and the Forewarn group. Concern had developed many of these relationships through its BRCiS programme, which we were able to leverage as the situation deteriorated to become a credible voice early on in the crisis. Concern was therefore in a good position to influence key decision makers and donors. As the failure of the Deyr rains started to look more likely in late 2016, Concern and the wider Somalia NGO consortium developed a call to action with an accompanying press release and programmatic guidelines, expressing the urgent need for a re-allocation of funding to avert a crisis.

Due to the complex nature of the Somalia context, the unfolding crisis, and the BRCiS programme itself, it is difficult to provide robust evidence of the impact of our EWEA activities

on BRCiS communities. However, based on more qualitative observations by Concern field staff and ongoing discussions with the BRCiS target communities and other stakeholders, it appears that while over 900,000 households have been displaced across the country since November 2016, the villages in which BRCiS operates are faring considerably better. According to bi-monthly displacement tracking by village disaster management committee members, none have experienced significant numbers of people leaving due to the drought. In fact, despite BRCiS communities having been originally targeted as the most vulnerable in their respective areas, most have actually become hosts to IDPs from nearby and previously “better off” villages.

In Afgoye District, Shally village is considered one of the worst off among BRCiS programme villages due to its positioning near the grey border of Al Shabab-controlled territory and not able to access the urban opportunities and government aid in nearby Afgoye Town. Despite this, a village elder, when asked how the current crisis is different than that of 2011, said “We are now hosting the displaced because of our capacity”. Since the failure of the 2016 Deyr rains, an estimated 2,100 IDPs have arrived in the village, and most were from neighbouring villages, meaning that, like Dhamsa village above, many of these displaced were able to remain relatively close to their home village, meaning the wider community as a whole has a better chance of maintaining their homes and livelihoods and therefore their resilience to future shocks over the long term.



**An important lesson for Concern, is that we may need to restructure our own organisational processes and programme strategies to be more adaptive and nimble in the face of an evolving emergency**

## **Lessons**

### **The threat of famine is still real**

What then have we learned from our experience of the last year and a half and what are the prospects for 2018? With the arrival of the relatively better 2017 Gu rains and the combined impact of humanitarian and resilience programming over the last 18 months, the situation in Somalia has temporarily stabilised, but the number of IDPs in the country is now almost double what it was this time last year. The widespread famine that was feared by many at the start of 2017 has not materialised. Nevertheless, half the population of Somalia continues to be in need of assistance.<sup>4</sup> The humanitarian needs for 2018 will depend on the performance of the upcoming 2017 Deyr rains and the capacity of the government, community groups and the international community to provide opportunities for the 2 million internally displaced people across the country.

### **Early Warning Early Action systems must be well resourced**

Large-scale, well-informed and well-resourced EWEA systems remain crucial for Somalia. They require the support and buy-in of a range of actors to operate effectively. In particular, donors and implementers must work together to expand the integration of ‘crisis modifiers’ within the programmes they support. Good crisis modifiers allow for the rapid transfer of funds between long term development activities to short term humanitarian or disaster mitigation activities in response to the evolving needs on the ground. This mechanism within the DFID-funded BRCiS programme was key to Concern’s ability to deliver tailored and timely support to vulnerable communities as the recent crisis unfolded.

## Adopt adaptive management techniques

An important lesson for Concern, however, is that we may need to restructure our own organisational processes and programme strategies to be more adaptive and nimble in the face of an evolving emergency. As we continue to advocate for donors to provide more flexible funding, in reality, we ourselves are often not planning for and optimising the flexibility in funding we are already afforded by a number of donors. Areas where Concern could and should increase its own adaptive programme management capacity in complex environments like Somalia include: more flexible budgeting techniques, more iterative project design processes, process-focused innovation and more iterative and flexible approaches to programme M&E and learning.

## Early Warning Early Action systems need to be adapted for specific purposes

There is an ongoing recognition amongst governments, agencies, policy makers and international donors of the need to improve EWEA systems in the Horn of Africa. Concern has been contributing to these in-country discussions and continues to try and drive innovation through our own programming. One of the key challenges we have encountered is a poor understanding of the importance of adapting early warning information and messages according to who will be using it and what specific actions it is intended to inform. EWEA systems have multiple levels and users ranging from the grassroots community users (many of whom don't need a satellite image to tell them the rains are failing but would like to have short-term flood warning) to district-level disaster management committees to national and international humanitarian actors to donors.

### **BOX 2: Applying a humanitarian perspective to seasonal performance monitoring and measurement is a crucial step in improving early warning and enabling cost-effective early action in the Horn of Africa.**

While a range of satellite-based "remote sensing" products exist, they are often not tailored to evaluating the complex ways in which climate interacts with different livelihoods in different locations. As a result, these products have often been left unused or misused by aid organizations. Concern recently formalized its relationship with Columbia University's IRI in order to better apply seasonal monitoring and measurement – or "scoring" – at three key decision-points:

- 1) Providing a seasonal performance scoring system to more accurately predict probabilities of disaster within donor-level forecast based action systems;
- 2) Provide livelihood zone specific seasonal performance scores on maps to help inform in-country prioritization of funding by location; and
- 3) Accurately measure seasonal performance of specific areas in order to measure climate-related shocks and stressors within wider resilience measurement systems.

We have begun the partnership by building a roadmap to inform these key decision-points and creating short videos to help improve practitioner understanding of existing remote-sensing climate products.

## Concluding thoughts

Going forward, Concern Somalia is working to address this challenge by attempting to advance the accuracy of predictive data such as seasonal performance analysis, while improving mechanisms to distil that complex information into simple, streamlined decision-making tools built to

provide probabilities of disasters and thresholds for early actions. Put simply, we wish to better identify the moment when we can say with a high degree of certainty that an early response represents better value for money than waiting for confirmation that a disaster has arrived. We are doing this by advocating for the advancement of disaster probability modelling and applying basic return on investment analyses to pinpoint 'Value for Money' thresholds that trigger mitigating actions rather than response. For more information on these, see Concerns' full Learning Brief on The Added Value of Resilience<sup>5</sup> and the forthcoming paper on 'Value for Money' Triggers.

There's much that can be learned from the BRCiS programme early response in 2016, but this learning must be put in context. Concern's BRCiS resilience programme was a pilot that supported fewer than 30 villages, while most other communities benefited only from traditional humanitarian responses or no humanitarian intervention at all. The fact of the matter is that the vast majority of larger scale responses by the humanitarian community in Somalia only began in 2017, meaning that 900,000 people were forced to leave their homes and seek refuge in urban centres.<sup>6</sup> In these terms, the humanitarian response of 2016 – while not as disastrously late as 2011 – can in no way be regarded as having responded quickly enough.

At the same time as building on and refining our approach to EWEA through the BRCiS programme, Concern must continue advocate to the wider humanitarian system to centre its investments on Early Action. The BRCiS resilience programme is structured to replicate the perspectives of the communities it serves and we hope it will provide the foundation for further progress of the community-centred EWEA agenda in Somalia. But as a humanitarian community, we need to move beyond foundations and pilots to deliver changes at scale, and reach a recognition that in contexts such as Somalia, Early Action represents timely action, and that humanitarian activities that respond after the point at which mitigation was still possible, can only be regarded as late.

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## References and Content Notes

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1. Maxwell, D., Majid, N. (2016) *Famine in Somalia: Competing Imperatives Collective Failures*, 2011-2012. London, UK: C. Hurst & Co.
2. Princeton University. (2017). [Interactive interface for remote sensing products]. *African Flood and Drought Monitor*. Retrieved from Princeton University <http://stream.princeton.edu/AWCM/WEBPAGE/interface.php>
3. FSNAU (2017) *Joint FEWS NET-FSNAU Somalia Alert - January 16, 2017*. Retrieved from <http://www.fsnau.org/publications>
4. FSNAU (2017) *SOMALIA Food Security Outlook: October 2017 to May 2018*. Retrieved from <http://www.fsnau.org/in-focus/somalia-food-security-outlook-october-2017-may-2018>
5. Caniglia, D., & Baran, S. (2017). *Added Value of Resilience Programming to the Ongoing 2017 Drought Response*, Concern Worldwide. Retrieved from <https://www.concern.net/in-sights/added-value-resilience-programming>
6. FSNAU (2017) *SOMALIA Food Security Outlook: October 2017 to May 2018*. Retrieved from <http://www.fsnau.org/in-focus/somalia-food-security-outlook-october-2017-may-2018>

# Integrated Water systems in the Drylands: Using a multiple-use water services approach in Niger



By Franck Flachenberg, Marie Dunka Rabiou and Nico Amini Tsongo

## Introduction

The Multiple-Use Services Approach (MUS) is a relatively recent initiative within the development field. It is particularly pertinent for our resilience programme participants who are often faced with restricted access to water resources, or in some cases drought conditions. MUS is an innovative approach in the sense that it brings together actors who wouldn't normally work together (e.g. water management committees, farmers, medical centre staff) and encourages them to undertake a consultative approach to managing water resources.

MUS allows a more holistic approach to understanding the systems for water management as well as the multiple uses of, and needs for, water in any given community. It is a participative approach which aims to establish a joint action plan between all water users. This action plan defines the priorities in terms of renovation/construction of watering holes with multiple uses, and setting up and reinforcing capacities for the delivery of services linked to water. Every option presented is costed and jointly prioritised.

The approach recognises the fact that people need water, not just to survive and for their personal hygiene, but also to successfully engage in income generating activities.

Although, they were initially constructed to respond to domestic needs, most hydraulic works are used for agriculture, livestock farming or other sources of revenue. These multiple uses can put a lot of pressure on available water resources and can therefore threaten the long-term sustainability of those activities.

As well as increasing the availability of water, the MUS approach can lead to a decrease in conflict linked to competition for water (typically between livestock farmers and sedentary people), a reduction in the risks affecting human health, an increase in life expectancy of hydraulic works (by allowing better regulation of their use and better management in the long term), and it can offer new opportunities for economic development.

The approach is generally composed of six stages, similar to the project cycle, but it places more emphasis on the two initial phases: consultation and diagnosis. For a detailed explanation of the approach and the implementation tools, click on the following link: <https://www.musgroup.net/><sup>1</sup>

Currently, the MUS approach is used in very different contexts, from mountainous regions where water from lakes on the slopes flows with force like in Nepal, to arid lands which only see brief periods of intense rain followed by long dry periods, such as the countries of sub-Saharan Africa.



In Tahoua, a region of Niger, Concern initiated an approach like this by carrying out a brief survey centred on the multiple uses of water. This study included a household survey, a discussion in relation to water points, analysis of water samples, and other discussion groups. The discussions included classic questions regarding water for human consumption, sanitation, promotion of good-hygiene but also questions related to other uses of water.



### **The study confirms that a high level of contamination of water sources exists**

Thus, although the team didn't strictly follow the different stages of the MUS approach, it marks the start of a long-term effort to consider the multiple uses of water. To do this, the team will continue to borrow certain tools in the 'resource' section of the MUS website in programme design.

### **Initial results/lessons learned**

Firstly, the study offered confirmation that multiple uses of water is already a reality. When an organisation redevelops or constructs a watering hole for human consumption, this source serves other purposes too, most notably to water the herds of the pastoral population. Consequently, understanding the multiple uses of water is a necessity for effective programming.

Secondly, the study confirms that a high risk of contamination of water sources exists. A large majority of people (over 70 percent) rely on wells, and each of the samples tested (24 out of 24) revealed a high level of bacterial contamination. These results corroborate the observations made at water points: non-enclosed wells (73 percent); presence of waste around the source (44 percent); no drinking troughs for the animals (67 percent); location less than thirty metres away from a source of contamination (39 percent). These results underline the importance of adopting a holistic approach to the use of water in order to minimise contamination at communal water points.

Thirdly, the potential for developing home gardens emerged from the diagnosis. When asked the question *'do you think that you have a sufficient quantity of water for different uses'*, 75 percent of people responded that they do, with the notable exception of watering the garden at home (and water for cleaning the house). When asked whether they would be prepared to pay more to have more water available, 75 percent said that they would be prepared to do so.

## Lessons learned while carrying out the initial diagnosis

A certain number of valuable lessons can be taken from this first MUS:

- **The difficulty of taking into account the needs and desires of everybody who use the water:** the household survey obviously focused on interviewing with the sedentary population. Additional enquiries regarding watering points were put in place but did not allow for contact to be made with nomadic livestock farmers who were not present at the time the survey was being carried out. Consequently, we will need to adapt evaluation methods to engage the pastoral population in a more proactive manner.<sup>2</sup>
- **The complex situations encountered:** by taking into account the multiple uses of water, we were obliged to include many factors such as hydrology, the nature of the soil for market gardening, economic opportunities, etc. Large disparities were observed between villages in the intervention zone which the averages calculated don't fully capture. In particular, it was noted that the bigger villages were over represented as they were often more prosperous and less constrained than the smaller villages in terms of their water resources.
- **It may be useful to establish maps permitting colour coded clarification of the variety of agroecological and economic conditions present:** this would show zones where the rough depth of an underground reservoir, transhumance corridors, existence of local markets which allow for market gardening products to be sold, etc. These variations could then be taken into account during the planning of assessments and in prioritising interventions in each location.
- **Seasonal variations:** Rainfall climatology and the general manner of accessing water is a phenomenon which fluctuates according to the seasons. The study took place during the rainy season and although a certain number of the questions posed concerned seasonality, it appears that people had difficulty in recalling and/or articulating their experiences during the dry season. If this is true, then it is recommended to plan another enquiry during the rainy season or, at the very least, to revise the way questions are asked in the future to help people better recall the realities of the previous season.

## The next steps

First, the diagnosis must be refined, and maps established. Simultaneously, discussions must be started with the technical services of the state - the Departmental Hydraulic Directorate and Regional Hydraulic Directorate (DDH and DRH respectively) and exchanges organised to clarify the advantages and disadvantages of the various options which could be proposed during the prioritisation exercises in the villages. These will be organised in the form of plenary sessions in all the villages where Concern is supporting this multi-use water assessment and planning exercise.

During these sessions, the results of the study as well as the technical options (see below) will be presented to the different water users in order to prioritise a list of actions to submit to the local authorities, who in turn will submit to and advocate for support from the DDH and DRH. It is therefore, above all, an advocacy initiative and its success will be evaluated according to the number of requests from the two communes to the DDH and the DRH.



An example of a small covered reservoir in Somaliland, an idea which is being considered by the team in Niger for presentation at the upcoming discussions with the various communities of water users, Niger. Cecilia Benda/2017

### **Principal options to be presented during the upcoming prioritisation exercises with communities**

In villages where there is little or no surface water, systems which permit the retention of rain water will be emphasized. The programme has already proposed a number of systems for the retention of rain water: Zai, small semi-circular embankments surrounding the fields. Based on Concern's experience in Somaliland, the construction of small reservoirs will be considered.

Finally, the team would like to look further into the potential for constructing big dams made of sand to capture run-off water from the watershed but as of yet, we do not have the expertise to identify suitable sites.

All of these options will be discussed with the community during the prioritisation exercise.

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### **References and Content Notes**

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1. See also the FAO site : <http://www.fao.org/land-water/water/watergovernance/multiple-use-of-water/en/>
2. To adapt the household enquiry to the pastoral population, follow this link.

# Systeme integré de gestion de l'eau: Utilisation d'approche des multiples usages de l'eau au Niger



Par Franck Flachenberg, Marie Dunka Rabiou et Nico Amini Tsongo

L'approche des Multiples Usages de l'eau est une initiative relativement récente dans le domaine du développement. Elle est particulièrement pertinente pour nos programmes de résilience qui se caractérisent souvent par un accès restreint aux ressources en eau, voire des sécheresses affectant les populations les plus vulnérables avec lesquelles nous travaillons. Il s'agit d'une approche innovante dans le sens où elle amène des acteurs qui n'ont pas l'habitude de travailler ensemble (ex : comités de gestion de l'eau, agriculteurs, personnel des centres de santé) à entreprendre une démarche de concertation pour définir une politique de gestion des ressources en eau.

L'approche MUSE permet une approche plus holistique pour appréhender les systèmes de gestion de l'eau et les multiples utilisations et besoins en eau d'une communauté donnée. Il s'agit d'une démarche participative qui vise à établir un plan d'action concertée entre tous les usagers de l'eau. Ce plan d'action permet de définir des priorités en termes de réhabilitation/construction de points d'eau à usages multiples et la mise en place, le renforcement des capacités, des services liées à l'eau. Chaque option présentée est budgétisée.

L'approche permet d'entériner le fait que les gens ont besoin d'eau pour survivre et leur hygiène corporelle mais également pour mener à bien des activités génératrices de revenus : bien qu'initialement construit pour répondre aux besoins domestiques, la plupart des ouvrages hydrauliques sont utilisés pour d'autres usages tels que l'agriculture, l'élevage ou d'autres sources de revenus. Ces multiples usages peuvent générer une forte pression sur les ressources aquifères disponibles et menacer la gestion à long terme de ces services.

En plus d'augmenter la disponibilité en eau, l'approche MUSE peut permettre de réduire les conflits liés aux multiples usages de l'eau (typiquement entre éleveurs et sédentaires), diminuer les risques affectant la santé humaine, augmenter l'espérance de vie des ouvrages hydrauliques (en permettant une meilleure régulation de leurs usages et une meilleure gestion sur le long terme), et offrir de nouvelles opportunités de développement économique.

Ainsi que le rapporte le site du groupe MUS, l'approche se compose globalement de 6 étapes, assez semblables aux étapes du cycle de projet habituel mais en insistant davantage sur les deux phases initiales de concertation et de diagnostic. Pour une explication détaillée de l'approche et des outils de mises en œuvre, se rapporter au site : <https://www.musgroup.net/>

Actuellement, l'approche MUSE est utilisée dans des contextes très variés comme les régions montagneuses où l'eau des bassins versants se déversent avec force comme au Népal, ou les terres arides ne connaissant qu'une brève période de pluie intense suivi de longues périodes d'assèchement, comme les pays de l'Afrique subsaharienne.

Au Niger, région de Tahoua, Concern Worldwide a initié une démarche de ce type à travers la réalisation d'une petite étude centrée sur les multiples usages de l'eau. Cette étude comprenait une enquête ménage, une enquête au niveau des points d'eau, des analyses d'échantillons d'eau et des groupes de discussion. Les enquêtes comportaient des questions classiques portant sur l'utilisation de l'eau de boisson humaine, l'assainissement, la promotion de l'hygiène mais également d'autres questions sur les multiples usages de l'eau.

Ainsi, bien que l'équipe n'ait pas suivi *stricto sensu* les différentes étapes de l'approche MUSE, - normalement l'étude intervient lors de l'étape deux et non en premier lieu - elle marque le début d'un effort sur le long terme pour prendre en compte les multiples usages de l'eau. Pour se faire, l'équipe de Concern Niger continuera à emprunter certains outils dans la partie « ressource » du site du groupe MUS.

### **Premiers résultats/leçons apprises suite à la réalisation de la petite enquête MUSE**

Cette étude a tout d'abord permis de confirmer que les multiples usages de l'eau sont déjà une réalité: lorsqu'une organisation réhabilite ou construit un point d'eau pour l'eau de boisson humaine, ce point d'eau sert à d'autres usages, notamment pour abreuver les troupeaux des populations pastorales. De ce fait, la mise en place d'une gestion planifiée des MUS apparaît bien comme une nécessité.

Cette étude confirme un haut niveau de contamination des sources d'eau. Une large majorité des gens (>70%) a principalement recours à des puits, et la totalité des échantillons testés (24/24) a révélé une forte contamination bactériologique. Ces résultats corroborent les observations effectuées au niveau des points d'eau: points d'eau non clôturés (73 %) ; présence de déchets autour de la source (44%) ; Pas d'abreuvoirs pour animaux (67 %) ; à moins de trente mètres d'une source de contamination (39%). Ces résultats soulignent l'importance d'adopter une approche holistique de l'utilisation de l'eau pour minimiser la contamination des points d'eau communautaires.

Il ressort du diagnostic un potentiel pour le développement des jardins de case : à la question, estimez-vous que vous avez une quantité d'eau suffisante pour les différentes utilisations, les gens répondent oui à 75 %, à l'exception notable de l'arrosage du jardin de case (et de l'eau pour nettoyer la maison). A la question, seriez-vous prêt à payer plus pour avoir davantage d'eau disponible, 75 % des personnes interrogées répondent par l'affirmative et parmi ces 75%, 48 % sont prêt à payer plus pour augmenter la quantité d'eau accessible.

### **Leçons apprises lors de la réalisation du diagnostic initiale**

Un certain nombre de leçons peuvent être tirés de ce premier diagnostic MUS comprenant une enquête ménage, une enquête aux différents points d'eau, une analyse bactériologique d'échantillons d'eau pris soit au niveau du point d'eau, soit à domicile, une série de discussions de groupes :

- la difficulté à prendre en compte les désirs et besoins de l'ensemble des usagers de l'eau - en particulier les populations pastoralistes: l'enquête ménage n'a évidemment permis de toucher que les populations sédentaires. Des enquêtes complémentaires au niveau des points d'eau ont été mises en place mais n'ont pas permis de discuter avec les éleveurs nomades qui n'étaient pas

présent au moment du passage des enquêteurs. Par conséquent, il sera nécessaire d'adapter les méthodes d'évaluation pour engager plus activement les populations pastorales<sup>2</sup>.

- la complexité des situations rencontrées : la prise en compte des multiples usagers de l'eau oblige à intégrer un grand nombre de facteurs tels que l'hydrogéologie, la nature des sols pour les cultures maraichères, les débouchés économiques, etc. De grandes disparités de situation ont été observées entre les villages de la zone d'intervention que les calculs de moyennes ne permettent pas d'appréhender. En particulier, on note une surreprésentation de la situation des gros villages, souvent mieux lotis et moins contraints que les petits villages en termes de ressources en eau.

A partir des résultats du diagnostic MUS, il pourra être utile d'établir des cartes permettant de clarifier par des codes couleurs la variété des situations rencontrées : zone où la nappe aquifère n'est pas profonde, couloirs de transhumance, existence de marché locaux pouvant écouler les produits de la culture maraichère, etc.

- les variations saisonnières : La pluviométrie et de manière générale l'accès à l'eau est un phénomène fluctuant selon les saisons. L'enquête a eu lieu pendant la saison des pluies et bien qu'un certain nombre de questions posées traitent de la saisonnalité, il semble que les gens aient eu du mal à se projeter plus avant pour décrire les situations de pénuries lors de la saison sèche. Si cela est confirmé, une recommandation pourrait être de planifier une autre enquête durant la saison des pluies ou, tout du moins, de revoir les questionnaires utilisés pour traiter de la saisonnalité.

### **Suite de la démarche : les prochaines étapes**

En premier lieu le diagnostic doit être affiné et des cartes établies. En parallèle, des discussions sont engagées avec les services techniques de l'état - Direction Départementale et Régionale de l'Hydraulique (respectivement DDH et DRH) et des visites d'échange organisées pour clarifier les avantages et désavantages des différentes options qui pourront être proposées lors des différents exercices de priorisation dans les villages. Ces derniers seront organisés sous la forme de séances plénières dans tous les villages d'intervention.

Au cours de ces séances, les résultats de l'enquête ainsi que les options techniques – voir ci-dessous - seront présentés aux différents usagers de l'eau afin de construire avec elle un argumentaire (plan d'action) à soumettre aux services concernés des communes, lesquelles seront appuyées à leur tour pour consolider les différentes demandes des villages et déposer un dossier à DDH et DRH . Il s'agit donc avant tout d'une action de plaidoyer dont L'indicateur de suivi sera le nombre de requêtes déposées par les deux communes auprès de la DDH et DRH.

### **Les principales options retenues pour le futur exercice de priorisation auprès des multiples usagers de l'eau**

*Pour le développement des activités de production maraichères et vivrières*

Dans les villages où il n'y a pas ou peu d'eau de surface, les systèmes permettant la rétention de l'eau de pluie seront mis en avant. Le programme propose déjà un certain nombre de système de rétentions d'eau : Zai, demi-lunes, petites digues entourant les champs. Basée sur l'expérience de Concern au Somaliland, la construction de petits réservoirs sera également envisagée.

Enfin, l'équipe est également intéressée pour creuser la question des grands barrages de sable pour capter les eaux de ruissèlements sur les bassins versants mais n'a pas encore l'expertise pour identifier les sites potentiels.

Toutes ces options seront discutées avec les communautés lors de l'exercice de priorisation.



*Exemple de petits réservoirs recouverts au Somaliland, idée reprise par l'équipe Niger pour les discussions à venir avec les différentes communautés d'usagers de l'eau. Cecilia Benda/2017*

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## Références et notes de contenu

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1. Voir également le site de la FAO : <http://www.fao.org/land-water/water/watergovernance/multiple-use-of-water/en/>
2. Pour adapter les enquêtes ménages aux populations pastoralistes, voir ici

# Promoting Gender Equality: A cornerstone of community resilience programming



By Sara Caggiati, Gretta Fitzgerald, Isaac Gahungu and Cardinal Uwishaka

## Introduction

Women are drivers of community resilience. In the Sila region in eastern Chad, where Concern is implementing the *Building resilience in Chad and Sudan<sup>1</sup> programme (BRICS)*, women make important contributions to livelihood activities, are largely responsible for the care of children and other dependents, and are often left to manage the household as a large number of men migrate in search of work.

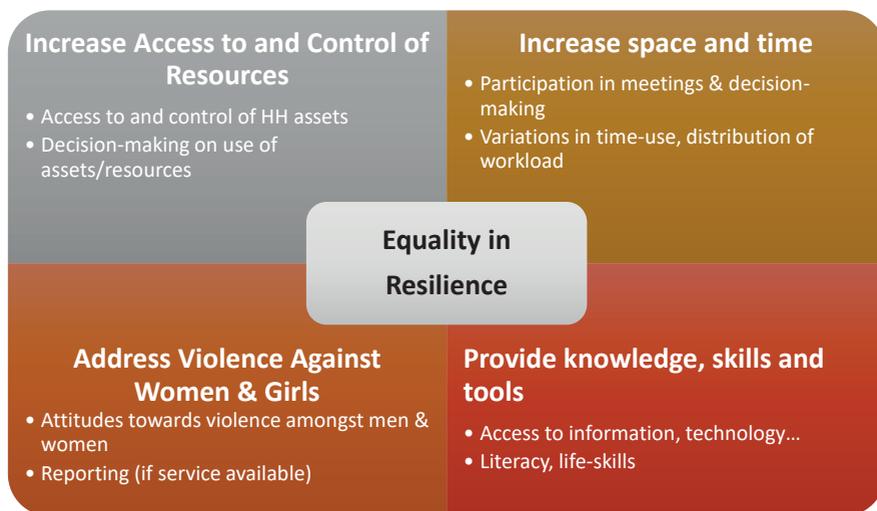
At the same time, women are exceptionally vulnerable in disasters and the subsequent pressure on survival and livelihoods due to climate change. This undermines their ability to anticipate and prepare for major disasters and shapes their susceptibility and exposure to climate extremes<sup>2</sup>. Therefore, to build community resilience to climate related shocks and stresses we must support women to build new skills and assets, whilst also engaging with men and the wider community, in order to increase women's participation in household and community decision making.

Unfortunately, this is easier said than done. Gender inequality and the norms that come with this, often act as a barrier to successful implementation of programme activities. This is especially the case for activities that involve increasing women's access to assets and resources through the likes of income generating activities, training sessions to learn new skills, and provision of productive assets such as agriculture inputs. Without addressing the underlying gender norms, women will not be fully free to participate and gain from these activities. This results in women not being able to, for example, influence decisions on how to spend income from their new income generating activities, which may limit their effect on food and nutrition security for the whole household<sup>3</sup>. Community resilience programmes should therefore include a strong gender analysis, and findings should inform the design of the programme activities and particularly guide the design of social & behavioural change activities to foster gender equality.

This article gives a snapshot of the BRICS approach to addressing gender inequality with the aim of contributing to overall household and community resilience outcomes in targeted communities in Chad and Sudan. It then provides an overview of the key gender equality activities implemented in Chad, and findings from a survey conducted in Chad using Concern's Gender Equality for Resilience Index (GERI).

## Gender Equality in BRICS

The design of the BRICS gender equality interventions in both countries was premised on the *Equality in Resilience Framework* which was developed in 2015 by the BRICS Consortia (Figure 1). The BRICS community level activities were designed to achieve each of the four aspects outlined in the framework, and in so doing to unlock the very real potential of women to help build resilience of themselves, and their households and communities as a whole.



**Figure 1:** BRICS Equality in Resilience Framework

### Increase access and control of resources

Increasing women's access to resources allows individuals to increase and diversify their income sources, and it, ideally, leads to more autonomy in determining priorities within the household including preparing for potential shocks or times of stress. Women, particularly female-headed households, are targeted for a number of agricultural training activities, including dry season gardening.

### Increase space and time

Women's workloads tend to be significantly heavier than men's and includes both productive and care work. The lack of time results in missed opportunities to participate in important community activities. The programme has developed a set of tools to understand and engage with men and women to strike a better balance of workload. The Gender Analysis and Dialogue Toolkit is composed of three Participatory Rural Appraisal (PRA) tools: 1) Daily Activity Clock, 2) Access and Control Matrix and 3) Community Mapping<sup>4</sup>. Through use of these specific gender tools, the programme has worked with communities to start to identify practices that would create a more equitable environment.

## Provide knowledge, skills and tools

It is essential for women to develop the relevant life-skills they need to meaningfully engage in discussions, to take full advantage of newly opened spaces for negotiation, or things like climate or market price information. The main activity under this aspect was the Life Skills Curriculum outlined below.

## Address violence against women and girls (VAWG)

Violence against women and girls is one of the most significant barriers to women's participation, however this component within the current programme needs to be further developed.

## Life Skills Curriculum

According to one of the BRICS Hypothesis: *"Social participation and inclusion of the most vulnerable in decision making is the foundation for effective implementation of resilience-building policies and strategies."* Therefore in order for women to take advantage of spaces for negotiation and decision-making, it is essential for them to develop the relevant life-skills and access information they need to meaningfully engage in discussions.

"Life skills" are defined as psychosocial abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. They are loosely grouped into three broad categories of skills<sup>5</sup> (see Figure 2 below):



- Communication and Interpersonal Skills
- Decision-Making and Critical Thinking Skills
- Coping and Self-Management Skills

**Figure 2:** Life Skills Overview

Due to social and cultural norms, girls in the BRICS programme are less likely to develop important life-skills such as public speaking, negotiation and decision-making. The curriculum addresses this gap by giving women the opportunity to learn and practice key life skills which can enhance their ability to participate as members of their households and of their communities. The curriculum is also designed to engage men. The curriculum comprises five specific life skills sessions as outlined in Figure 3: three are used with both women and men in separate but parallel sessions and two are used with just women. The women targeted for the sessions are also taking part in other programme activities.

The curriculum differs slightly between men and women due to the content and the number of sessions. Although a number contain the same subject matter, the intention is to help the men understand the needs of the women and prepare themselves to support the women in their lives once they put their new Life Skills into practice. It takes an average of six weeks to complete the entire curriculum for men and women, depending on the season, logistics and availability of the participants.



**Figure 3:** BRICS Life Skills Curriculum

## The Gender Empowerment for Resilience Index

The GERI was designed to measure change in the level of women's empowerment that may have been brought about by the Life Skills and other BRICS programme activities. The design was largely informed by the International Food Policy Research Institute (IFPRI) *Women's Empowerment in Agriculture Index*<sup>6</sup> (WEAI), which is used to measure the empowerment, agency, and inclusion of women in agriculture. The adapted tool assesses the degree to which women and men are empowered across eight specific components (Table 1, below). Each component has a series of questions that together determine the score for that component (a higher score means more empowered). A respondent is defined as 'empowered' if they have achieved adequacy in 80 percent or more for each of the components. The results presented below are still preliminary and further analysis is planned with a full report due in early 2018 with the results of the BRICS programme endline and evaluation.

**Table 1:** GERI Indicators

Component	Overview
1. Input in productive decisions	Sole or joint decision making over food and cash crop farming, livestock, non-agricultural IGA
2. Ownership of assets	Sole or joint ownership of major household assets
3. Purchase, sale, or transfer of assets	Whether respondent participates in decisions to buy, sell, or transfer assets
4. Access to and decisions on credit	Access to and participation in decision making concerning credit
5. Group membership	Whether respondent is an active member in at least one economic or social group
6. Group Participation	If the respondent is an active member of the group, do they feel like the participate more/the same/less than others
7. Control over use of income	Sole or joint control over income and expenditures
8. Workload	Allocation of time to productive and domestic tasks

The GERI baseline was conducted in March 2016 across 25 villages of the BRICS programme area in the Goz Beida area of the Sila region. The 25 villages were selected because they had been identified for future gender equality activities, but the Life Skills curriculum had not yet started. At the time of the baseline, these villages would have been participating for one to three years in a mixture of the following: climate smart agriculture (CSA) training and support; water, sanitation and hygiene (WASH) support; women's care groups to promote improved health and nutrition practices; and disaster risk management activities. In each village, approximately 10 women and 10 men were randomly selected for a total baseline sample of 265 women and 234 men. The sample size was calculated to be representative of female and male programme participants at a minimum confidence level of 90 percent and margin of error of 6 percent for each group.

The end line was carried out in September 2017. At that stage, the Life Skills curriculum had been initiated in 14 of the baseline villages. The endline sample was drawn from these 14 villages in order to represent four specific groups as follows. Women and men who had participated in the Life Skills sessions and may have also participated in the other programme activities listed above (referred to as the Women's Life Skills group and Male Life Skills Group, respectively). Women and men who had participated in the CSA training and support but did *not* participate in the Life Skills curriculum but may have participated in the various other project activities listed above (referred to as the Woman's CSA-only group and Men's CSA-only group). The total endline sample size was 550 (283 female and 247 male project participants), which was calculated to represent the above four groups at a minimum confidence level of 90 percent and margin of error of 6 percent.

Though not a perfect comparison and participation in other programme activities was not controlled for, the intention was to look for any marked difference in women's empowerment between those who received the dedicated women's empowerment activities versus those who only received climate smart agriculture training and support.

**CSA Sample**

Participated in some Climart Smart Agriculture activites  
(167 female, 129 male)

**AND/OR:**

- WASH
- DRR
- Health & Nutrtn

**BUT NOT** Life Skills

**Life Skills Sample**

Participated in Life Skills  
(133 female, 121 female)

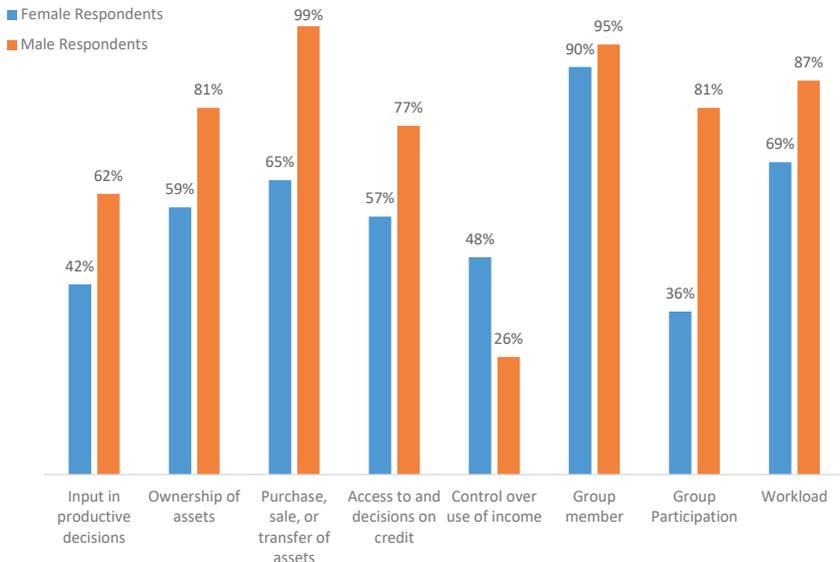
**AND/OR:**

- WASH
- DRR
- Health & Nutrtn
- Climate Smart Agriculture

**Figure 3:** GERI End Line Sub-Samples

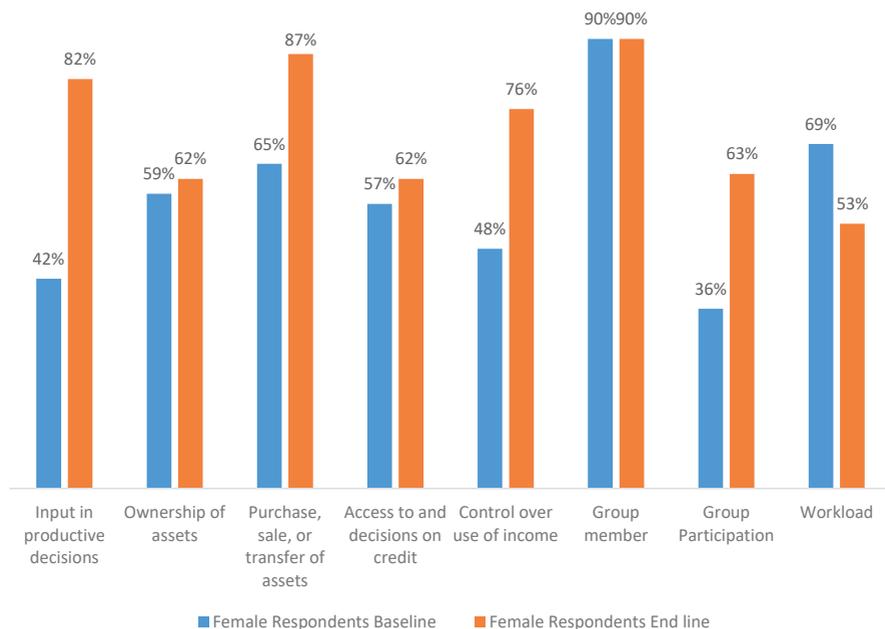
**Results of the GERI study**

At baseline, taking data from both groups and disaggregating by gender, there were clear disparities according to the eight components of the GERI in comparison to women (Figure 4), with men being generally more 'empowered'. There is one anomaly which is "Control over use of income" for which more women (48 percent) appear empowered than men (25 percent). This is misleading, however, and should largely be discounted because it only includes in its denominator those who have a shared input into the decisions (it excludes those who reported having sole control over the income generating activity and the income derived from it – largely men).

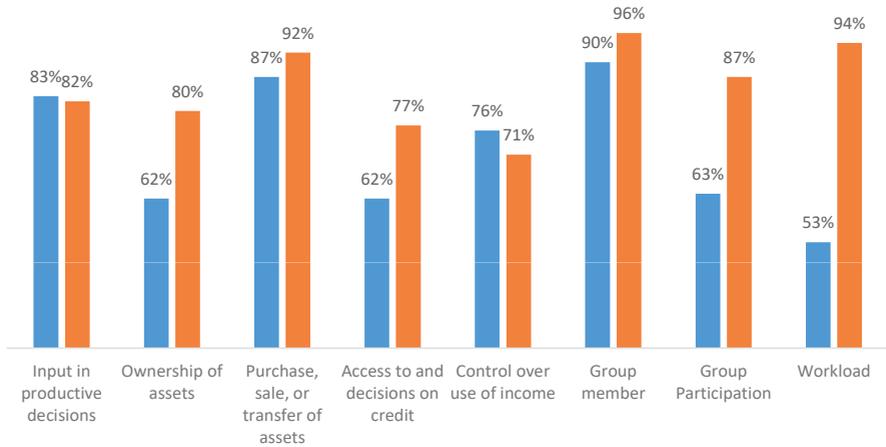


**Figure 4:** Percentage of respondents at the BASELINE who are qualifying as 'empowered' in the eight GERI indicators (By gender of respondent)

At end line we can see positive increases in women's empowerment across all indicators, apart from workload (Figure 5). The decline in women's empowerment related to workload (i.e. they had higher workloads) could be seasonal, as the baseline was conducted in March typically when agricultural labour demands are lower compared to the September end line just before the harvest. We also see that the differences in the percentage of men and women who were 'empowered' had narrowed for some indicators by end line. (Figure 6) Additionally, at end line, a greater proportion (82 percent) of both men and women reported increased "input in productive decisions". Interestingly, however, there is a much more even distribution between men and women on the "Control over use of income" at end line, though this may be skewed for the reason explained above.

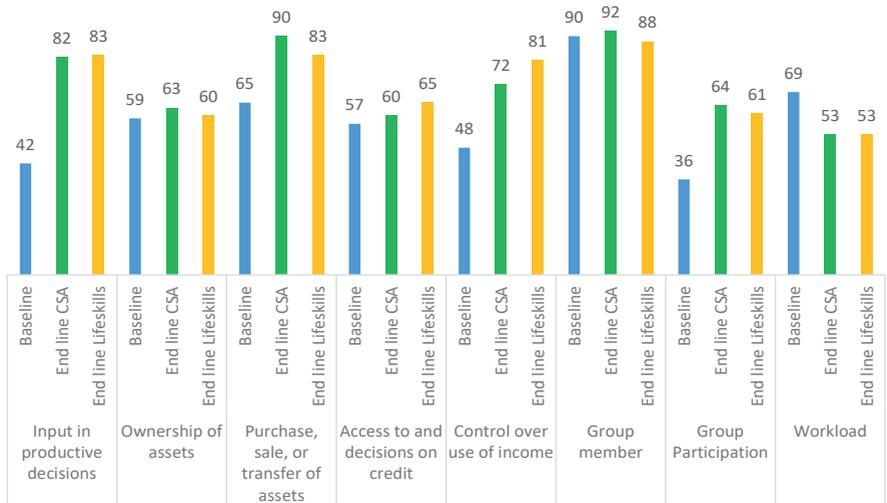


**Figure 5:** Baseline and endline figures for women overall (both groups combined)



**Figure 6:** Percentage of respondents at the END LINE who are qualifying as 'empowered' in the eight GERI indicators (By gender of respondent)

When looking at end line results for women across the two groups (CSA-only participants versus Life Skills participants), all indicators showed an increasing trend from the levels seen in the combined baseline group - all except for workload (Figure 6) which could be due to seasonality, as explained above. Most interestingly, the female CSA participants appear to be marginally more empowered or the same in all other indicators as compared to the Life Skills group, with the exception of the control over the use of income.



**Figure 7:** Percentage of female respondents who are 'empowered' across the 8 GERI indicators at baseline

## Emerging Learning

The results from the GERI baseline and endline suggest that both the Life Skills curriculum and CSA activities may be contributing to women's empowerment in the BRICS programme area to some degree and likely via different pathways. The results are not entirely conclusive as the study itself was opportunistic and not designed to compare outcomes between groups. Nonetheless, the results offer some ideas to shape future studies and programmes planning a gender equality component to improve resilience to climate extremes and disasters.

It appears that targeting women for CSA training, seeds, and tools and expanding their livelihoods options (including dry-season market gardening) may have at least as much effect on women's empowerment as a dedicated Life Skills curriculum (with or without participating in CSA activities). This, in fact, reflects the expressed interest of many Life Skills participants to be able to engage in CSA activities as well. It also confirms a growing realisation by Concern that women's empowerment activities are best embedded in a sectoral activity and strategy. This helps allow women to apply their new life skills while engaging in a productive livelihood activity, creating new opportunities in a relatively short period.

Future studies should ensure that the main programme groups they wish to compare are clear from the outset. Based on the findings here, an interesting question might be how empowerment outcomes for men and women differ between those who receive CSA support and participate in Life Skills activities compared to each component on its own.

## Conclusions and Next Steps

We know from experience that changing long standing gender attitudes and norms takes time and effort, but gender equality must nonetheless be a central component of a community resilience programme. A practical Life Skills curriculum offers a way to do this, but it is important to combine this with activities to empower women economically such as was done in this programme with agriculture support. Concern will finalise the analysis of the GERI survey and share the full results in early 2018.

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## References and Content Notes

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1. Building Resilience in Chad and Sudan (BRICS) is one of the two DIFD funded Building Resilience and Adaption to Climate Extremes and Disasters (BRACED) consortiums that Concern is leading.
2. Gender and Resilience, Virginie Le Masson, Andrew Norton and Emily Wilkinson, BRACED KM, 2015.
3. "When women have economic power - defined as control of income and capital (land, livestock, etc.)- they gain more equality and control over their own lives, while contributing directly to their children's development (nutrition, health and education) and thereby indirectly to their nation's income growth. From Economic Empowerment of Women by Almaz Negash, Santa Clara University, 2006: <https://www.scu.edu/ethics/focus-areas/more/resources/economic-empowerment-of-women/>
4. These were developed from a number of existing toolkits, including ICRAF/CARE Gender and Inclusion Toolbox, but adapted for the BRICS programme context. The tools have been translated in French and Arabic.
5. UNICEF (2003), Definition of Terms. Available at: [http://www.unicef.org/lifeskills/index\\_7308.html](http://www.unicef.org/lifeskills/index_7308.html)
6. For more information on the WEAL please see here <http://www.ifpri.org/topic/weal-resource-center>

# Building Resilience to Floods: Using the Flood Resilience Measurement Tool in Afghanistan



By Abdul Razzaq Razi, Kate Golden and Paul McGrath

## Introduction

Concern is active in the Badakshan and Takhar Provinces of Afghanistan. These areas form a major part of the mountain livelihood zones, and where flooding and earthquakes present serious hazards. Concern's programmes in these provinces support communities to improve their livelihoods, access to water and sanitation, education and promoting disaster risk reduction. In 2015, Concern applied to join the Zurich Flood Resilience Alliance and received funding to start a new project to promote resilience to floods among communities in two districts.<sup>1</sup> As part of this project, Concern piloted a Flood Resilience Measurement Tool developed by the Alliance, and has used the insights generated by the tool to design and implement flood-resilience interventions. This article describes the tool and discusses Concern's experience of its application in Afghanistan.

## The Zurich Flood Resilience Alliance ('the Alliance') and Measurement Tool ('FRMT')

The FRMT has been developed by the Alliance<sup>2</sup>, a consortium of six NGOs, two research partners, and the Zurich insurance group. This group of organisations has been working together to build flood resilience in eight countries (Nepal, Peru, Indonesia, East Timor, Mexico, Afghanistan, Haiti, and the USA) and to better understand which strategic areas should be invested in *ex-ante* to build flood resilience.<sup>3</sup>

The FRMT is used to direct the collection and analysis of data at community level on a range of factors thought to be potential 'sources of flood resilience'. When Concern joined the Alliance in September 2015, version 1 of the FRMT (which is currently in use) had already been largely developed. Since 2016, the Alliance partners have employed the FRMT to collect and analyse data from 75 communities, and have used the insights generated to inform the design of numerous flood resilience interventions. At a consortium level, the data is being pooled and analysed to explore the linkages (if any) between these potential sources of resilience and how communities cope in the event of flooding. By understanding such linkages, it is expected that communities will be better equipped to decide where strategic investments can be made to help them become more resilient to flooding.

The FRMT (and software) are organised across five 'capitals': human, social, physical, natural, and financial. You will notice these are nearly the same as the six 'assets' that are central to How Concern Understands Extreme Poverty (HCUEP).<sup>4</sup> The latter adds political capital as a sixth asset/capital because both are based on the Sustainable Livelihoods Framework. The

FMRT further outlines 88 potential sources of resilience organised within those five capitals, which range from, for example, flood protective behavior and knowledge (human capital, total 16 sources), to mutual assistance systems and safety nets (social, total 33 sources), to water supply (physical, 16 sources) to sustainable use of natural resources (natural, 6 sources), to household budget management (financial, 17 sources).

### **How does the FRMT work?**

The FRMT works in a similar way to Concern's Digital Data Gathering System. A survey is set up (using the FRMT's software platform) and then 'synced' to field-workers for completion using digital data-gathering devices. The person setting up the survey, usually the Programme Manager, tailors the questions that are to be asked by selecting the information point(s) (households, key informants, community groups, focus groups, or 3<sup>rd</sup> party/secondary sources) to provide details around the sources of resilience. Once the information points have been selected, the system automatically generates a list of questions and it is these that are synced to the field workers for data collection.

Currently, it is not possible to delete or adapt any of the standard questions because each dataset is combined to enable wider multi-country analysis. However, the person setting up the survey can reduce the volume of data to be collected by the field-workers by reducing the number of questions to be asked directly to households, though here are some questions for which it is absolutely required. Increasing the flexibility and reducing the data collection burden associated with the FRMT is currently underway for version 2 of the tool.

Once collected by the field-workers, the data is synced back to the software for 'grading' by the programme team. This process involves grading each of the community's potential sources of resilience (using A, B, C, or D) based on responses to the questions under each source. The software then allows the team to present the results and display graphs to show where capacity is stronger (A or B) or requires strengthening (C or D). In addition, the grading team is asked to assign a score of confidence and relevance for each grade assigned. Once grading is completed, the software organises the data in a digestible format for review. The information can be viewed through different lenses (referred to as the Capital view, the Theme view, the 4R view<sup>5</sup>, the DRM Cycle view<sup>6</sup>, and the Context view).



**The insights generated by the FRMT are rich in detail and scope**

### **How often is data collected in individual communities?**

Data need to be collected from the community at least once in order to understand where it stands in relation to the potential sources of resilience, and the insights generated from this data can be used to inform the design of flood resilience projects. This data collection point is sometimes referred to in the Alliance as a 'baseline', though not a project baseline in the sense that Concern would understand it because it is quite broad and not linked to a set of actual project activities. In addition to the baseline, each of the Alliance partners have committed to carrying out an endline (generally using the same survey set-up as in the baseline) once they have completed flood intervention projects in the community. By comparing the baseline and endline surveys, it will be possible to see any changes in the community's 'sources of flood resilience'.

In addition, a shorter survey can be undertaken after any significant flood event to assess how the community coped. The data collected through these 'post-event surveys' is different from that collected through the baseline. As already noted, collecting data after a flood event will allow the researchers to identify if there are any linkages between how well communities cope in the event of a flood and individual sources of resilience.

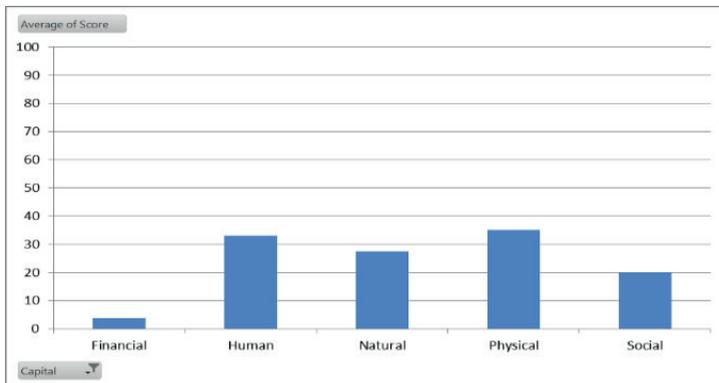
### Using the FRMT in Afghanistan

Concern Afghanistan selected the communities for application of the FRMT based on (i) the level of need for building flood resilience, and (ii) the existence of certain conditions at a local level to enable a successful flood resilience intervention. The selection criteria we used included: the magnitude of the risk of natural hazards; the level of extreme poverty and social vulnerability; the extent to which there is high community acceptance and support of the government institutions; the quality of access to the communities; and the extent to which resilience programming is already happening locally, with preference given to villages where resilience programming is minimal.

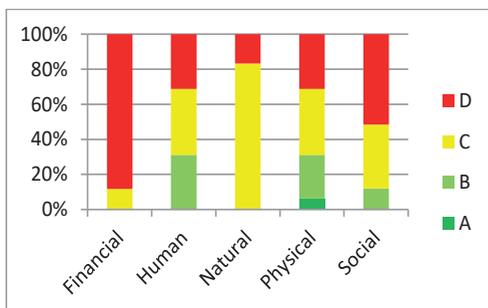
Before commencing our 'baseline' in the 12 selected communities, staff were trained using the FMRT training material. This training helped staff become more familiar with resilience as a concept and what may contribute towards building resilience in communities. Data were collected for all 88 potential sources of resilience from 545 households as well as a series of key informants and focus group participants. The data were graded following the process described above. In order to reduce the level of subjectivity in the grading, experienced staff were involved in the process and a grading guidance documentation was used. All grading was grounded in the survey data.

### Baseline survey results and programme design

The graphs below show the results of the grading process (looking through the 'capital' lens) for one particular community, Dahasti Chanar in Rustaq district. The table shows the individual grading for each of the sources of resilience in the Human capital category.



**Figure 1:** Dahasti Chanar (Rustaq) – overall grading result by capital



**Figure 2:** Dahasti Chanar (Rustaq) – grading analysis by capital

Human	Educational attainment	D
	First aid knowledge	D
	Flood exposure management knowledge	B
	Flood exposure perception	C
	Flood protective behaviour and knowledge	C
	Flood provisioning ecosystem services awareness	B
	Flood vulnerability perception and management knowledge	D
	Flood water and sanitation (WASH) knowledge	D
	Flood Water Control Knowledge	C
	Non-erosive flood recovery knowledge	B
	Personal safety	B
	Political awareness	D
	Population health status	C
	Understanding of future flood risk	C
	Value of education	B
	Waste management awareness	C

**Figure 3:** Dahasti Chanar (Rustaq) – grading of each source of resilience within 'Human Capital'

The insights generated by the FRMT are rich in detail and scope (the above are examples only), and can be viewed in many different ways. This information provides a strong basis on which to plan for interventions in the communities in question.

At a 'macro' level the survey found that financial, social, and physical capitals were the lowest. Financial capital, which was particularly low, includes things such as household income and savings, household access to credit, and flood insurance. It is important to look behind the top-level results for a community, in order to understand what factors are affecting overall scoring. For example, we found that within Physical capital some sources (such as access to school facilities, transportation, and water) scored relatively better than others (such as access to waste services and health care).

The results were discussed with the community in a sensitive and structured manner. This approach was important in order to avoid the risk of communities feeling they were personally being ranked or scored in some way. These discussions set the context for the Concern

team to lead each community in a Participatory Cost Benefit Analysis (PCBA) to determine priority interventions. This process was preceded by in-house training for Concern staff on how to conduct PCBA sessions. The PCBA process was found to be invaluable for generating community engagement.

Based on the results of this analysis, activities were undertaken to support the 12 communities to establish Disaster Risk Management Committees (DRMCs) and flood management plans, including social and hazard mapping, and seasonal calendars. These committees include women and members of more marginalised groups. Hygiene and first aid kits were provided to the committees for use in a flood event, and training and mock drills for life-saving activities, in the event of a significant flood, were carried out with community members via the DRMCs. The project also constructed a number of mitigation structures, chiefly protection walls and gabion walls<sup>7</sup> in all 12 villages.

Post flood surveys were conducted in two communities which revealed how the communities coped in the event of significant flooding. The data that were collected during the post-event survey relates to the impact of the flood and behaviour/response of the community to the flood. This revealed a number of significant findings, such as the number of fatalities and injuries, how the flood affected access to schools and clinics, and its impact on assets, food, and drinking water.

### Emerging lessons<sup>8</sup>

- The FRMT provides an effective means of organising and 'scoring' factors potentially linked to flood resilience, and providing solid data for a contextual analysis process such as that undertaken by Concern Afghanistan in a new project area.
- Training in and use of the FRMT has helped deepen the staff's understanding of the concept of resilience.
- Partnership with the private sector (Zurich Insurance Group) has been very positive. Zurich engaged strategically, bringing much more than just funding to the table. Their approach to programme design and budget management has been very pragmatic.
- A set of stronger participatory tools to be used in the process of data collection with communities would be useful.
- The scoring process currently does not involve the community. While involving the community would likely raise practical challenges and increase the amount of time required for the grading process, it could increase the validity and credibility of the tool.
- To date, the research has not been focused on measuring the impact of interventions. For this, we feel we need a more practical set of Monitoring and Evaluation tools linked to interventions. Concern hopes to contribute to this more in Phase 2.
- The tool and software may have potential for use in scoring resilience to other shocks, such as earthquakes or droughts, but we will hold off investigating until 2018 when we hope to pilot version 2, in Bangladesh.
- Analysis of the multi-country baselines has already yielded some important learning for the refinement of the FRMT going forward.<sup>9</sup> For example, it highlights the need to simplify data collection questions and improve translation.

## Conclusions and Next steps

The FMRT and the Alliance has significant potential to better understand what inherent resources and characteristics within a community make them more resilient in the face of floods. Some lessons have already emerged from analysis of the baseline findings, and Concern Afghanistan has gained a deeper understanding of its new programme area.

Phase 1 of the Zurich Flood Resilience Alliance will be completed by 2018. Before that, all partner programmes will conduct their 'endlines', including Concern Afghanistan and Haiti. The Alliance is currently developing version 2 of the FRMT which will be more flexible and adaptable to different contexts, and streamlined to focus on the sources of resilience that are considered to be most relevant to building resilience. Analysis of the full baseline, endline, and post-flood surveys will be completed in the first half of 2018.

Phase 2 of the Alliance is scheduled to start in July 2018 and run until June 2023. Phase 2 will continue to focus on generating evidence regarding the key sources of flood resilience through continued data collection and analysis as well as focusing on more strategic advocacy at national and international levels to increase investment in key areas pre-flood. The first six months of 2018 will be used to prepare the groundwork for the second phase. Concern will be a more central partner in phase 2, rolling out the FRMT and framework in our programmes in Bangladesh, as well as working closely with Practical Action. We will also lead the development of a set of flood resilience M&E tools to complement the FRMT and help assess more practically which project interventions may have the most potential impact on flood resilience. Unfortunately, due to Zurich's strategic interests, only small aspects may continue in Concern Afghanistan's project area, and will not continue in Haiti due to a shift in our project area. That said, Concern intends to use aspects of the FRMT and framework to inform flood-resilience interventions across a number of countries/contexts during phase 2, and we will engage in the advocacy initiatives of the Alliance.

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## References and Content Notes

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1. Concern also has had a similar programme with the Zurich Flood Alliance in Port au Prince Haiti over the same timeframe
2. Note the Flood Resilience Alliance is different to the Alliance 2015, in which Concern is also a member and in fact none of the members overlap.
3. For more on the Alliance see here: <https://www.zurich.com/flood-resilience>
4. See: <https://www.concern.net/insights/how-concern-understands-extreme-poverty>
5. The 4R view refers to four separate properties related to community resilience, those being Robustness (ability to withstand a shock), Redundancy (functional diversity), Resourcefulness (ability to mobilise when threatened), and Rapidity (ability to contain losses and recover in a timely manner)
6. The DRM (Disaster Risk Management) cycle view explores where resilience is strong and weak in relation to pre-event risk reduction, preparedness, coping and reconstruction.
7. For more information on gabion wells see here: <https://en.wikipedia.org/wiki/Gabion>
8. Please note some of these are specific to Afghanistan while others are general in nature
9. A report summarising the baseline analysis and results is available from any of the authors of this article

# Strengthening Community-based Disaster Risk Management: Working at multiple levels in Pakistan



By Syed Sulaiman and Kai Matturi

## Introduction

Pakistan has an extensive history of disasters—from large-scale earthquakes such as the one in Kashmir in 2005 and widespread floods such those seen in 2010, which both left hundreds of thousands dead and millions homeless, to the numerous smaller scale floods, disease outbreaks, conflict, and localised rain failures that occur regularly and have a substantial collective impact.

In Pakistan, Concern addresses Disaster Risk Reduction (DRR) directly through its Community-Based Disaster Risk Management Programme (CBDRM), which is designed to increase local capacity for risk assessment, mitigation, preparedness, and advocacy. The programme focuses on establishing, training, and supporting community level institutions and the local government bodies responsible for disaster risk management (DRM) and engage them in various DRM activities including risk assessments, disseminating early warning information, and risk-reducing structural measures such as constructing bunds, canal clearing, and repairing transportation networks. It also networks and connects these bodies together for collective advocacy and support. Lastly, it works to specifically improve preparedness in schools by training teachers in the fundamentals of DRR and developing school based contingency plans. The programme is the largest of its kind in the country, spanning 1,320 villages in 150 Union Councils across 6 districts in Balochistan, Sindh and Punjab provinces of Pakistan. The programme has been supported by the USAID/ Office of U.S. foreign Disaster Assistance operational since 2011 and is currently in its second iteration.

In this article, some of the results of the programme will be discussed, as well as the challenges, good practice and lessons to date. This article draws heavily on a 2014 paper, entitled, 'Concern's Approach to Disaster Risk Reduction in Pakistan', which was part of a series examining Concern's DRR initiatives across the world<sup>1</sup>.

## Supporting Disaster Risk Management Committees

Concern works to support Disaster Management Committees (DMCs) in mitigation activities as part of its CBDRM programme. Concern's support is intensive and includes formation, governance, capacity building, and activity support.

Concern works mainly through five national NGOs. It trains CBDRM facilitators of these NGOs who in turn support DMCs at the village and Union Council level. Concern trains these facilitators in a two-week course. The course curriculum covers establishing committees, assessing and reducing priority risk, and how to replicate the training sessions effectively (training of trainers).

In most cases DMCs do not exist before Concern's support, so the first step for facilitators is to establish committee structures. Per government regulations, facilitators ensure Village Disaster Management Committees (VDMCs) and Union Council Disaster Management Committee (UCDMCs) have 15 members, made up of key community leaders, women, men, and marginal groups.

Next the CBDRM facilitators train each newly-formed committee. Training focuses on DRM in general (including understanding disasters and risk, assessment, preparedness, mitigation, and response) and DRM in Pakistan (including roles of respective DRM bodies in the country and the hazards specific to Pakistan and respective regions and why) and is designed to give a sense of what the risks are, how to reduce them, and how to link with higher levels for concerted action and support. Training takes a few days. As part of the training communities produce a risk map and a risk reduction plan, which outlines specific risk reduction activities relevant to their areas. Higher-level trainings focuses on the respective roles and mandates of committees, including how to liaise with other stakeholders, coordination, and advocacy.

After these initial activities VDMCs and UCDMCs in conjunction with Emergency Response Teams (ERTs) work to implement risk reduction plans. Activities in the plans are generally tailored to the priority needs of each village or Union Council but some are included to ensure committees meet government standards, including, monitoring and disseminating Early Warning System (EWS) information, search and rescue, first aid, firefighting, district level advocacy, small scale structural mitigation, and risk sensitisation campaigns with district government officials, schools teachers, communities and locally elected members. Concern currently provides these committees with the specific training, equipment, and financial resources to implement activities, but is working towards a more sustainable model for financial support. UCDMCs coordinate and support the activities, working with tehsil<sup>2</sup> and district level committees when extra support is needed. This high level of collaboration and commitment is producing tangible results. Community members have noted that during the 2015 floods, ERT and DMC members were closely involved in the assessment, search and rescue activities, and provision of first aid to thousands of families.

Concern takes a staged approach to establishing and supporting DRM structures, starting first with VDMCs then working with union council, tehsil, district, and province levels over the course of a few years. Committee members state this bottom up approach helps build ownership over activities and means that lower levels drive and guide higher level plans and priorities. They also note a phased approach allows for an incremental increase in responsibility in line with capacity development, with members taking on more tasks as capacity increases. Finally, members state the approach is necessary because structures are built only when there is enough social capital to do so: building trust and establishing working relationships within committees takes time, and lower level relationships must be built first before they can be established at higher levels.

Communities describe Concern's approach to supporting these committees in very positive terms. Communities have noted that "their vulnerability is now reduced and their capacity increased. This enables them to resist and cope with disasters. For example, the flood mitigation schemes protected their shelters, WASH facilities, livestock's and household assets when floods occur. Community members also state that the 'soft' benefits—the increase in knowledge, increase in modes of organisation and advocacy, and prominent position of women—are much more valuable than the 'hard' benefits of improved physical infrastructure and livelihood support. The work also complements higher-level DRM as it is based on government CBDRM policy (e.g. ERRA and NDMA policy) and the One UN programme<sup>3</sup>.

The programme also worked closely with the Department of Education on initiatives such as better school safety plans, with an emphasis on girl's schools, wherein teachers were trained on disaster preparedness and helped them to work with children and develop schools disaster preparedness plans.



**In order to respect local norms and cultures, the Concern team conducts separate meetings with men and women in the communities**

### **Learning to date**

#### **Gradually scaling up support from village to higher levels builds social capital but takes time**

Concern's experience shows that developing a multi-tiered DRM system requires first building village level capacity and social networks before working upwards to union council, tehsil, and district. This sequencing helped build buy in and improved functionality of committees all the way up the chain.

#### **Embedding gender across programmes**

Concern's focus on gender meant that women were in key positions in the CBDRM programme at all levels. Including women in the project led to changes in attitudes, behaviours, and practices toward women—not just in relation to DRR.

In this programme women play important roles in decision making as community leaders at VDMCs level. It is the first time at community level that women and other vulnerable groups are specifically engaged not only at VDMCs level but at UC and district level. Men and boys are sensitized on gender equality and learned the importance of women empowerment, as a result there is equal participation and contribution in every activity. In order to respect local norms and cultures, the Concern team conducts separate meetings with men and women in the communities.

#### **Combining traditional and technical knowledge is essential for effective DRM**

Concern, uses both technical and traditional knowledge for all components of its work—from its risk assessment to its structural measures. The two forms of knowledge complement each other by providing different perspectives on risk reduction and different tools for reducing risk.

#### **Engagement at micro, meso, and macro levels is crucial for effective DRM**

The ability of communities to reduce risk is dependent not only on their technical capacity but also the broader enabling environment to provide the material necessary for risk reduction. Likewise, some risks are created by meso- and macro- level activities (such as ill-conceived dams, or weak natural resource management policies) so can only be reduced by addressing policies, institutions, and processes operating at that level. The sustainability of financing essential DRM activities across the board also rests on this multi-level engagement.

#### **Improving the financial sustainability of DMCs is essential but we aren't there yet**

Concern is working to connect DMCs with higher level structures to establish their longer term financial sustainability, and has made progress in garnering support from a number of

governmental and non-governmental stakeholders, yet DMCs still face financial challenges that makes their financial viability questionable. Stockpiles, for example, are funded through personal donations by members themselves—a very strong indication of buy-in and commitment to the activities—but an equally strong indicator of the broader weaknesses in financial support.

### **DRR requires structural and non-structural measures**

Concern found that combining structural and non-structural interventions helped in addressing risks comprehensively and that such measures both need to be included in DRR. As outlined above, many stakeholders were strong supporters of the development of social capital in the form of increased trust among community members working together, greater organisational capacity, and the greater inclusion of women's voices. While structural measures will continue to be needed in a country affected by such large scale, rapid-onset earthquakes and floods, the value of building this 'softer' foundation should not be underestimated.

### **Conclusion and Next steps**

Concern is working with the government of Pakistan to leverage their commitment and forward-thinking policies and structures for disaster risk management. Concern is leading in the largest CBDRM programme in Pakistan with the government. DRR is increasingly being prioritised in the country and much progress has been made to increase DRM capacity. Yet the current level of work is not enough to address the scale of DRR needs. For example, only five percent of areas that need bunds<sup>4</sup> in Punjab currently have them, indicating the massive scale-up necessary to effectively reduce risk. Concern acknowledges these systemic gaps and mitigates this constraint by providing activities only to those in greatest need<sup>5</sup>.

Based on the experiences and learning from CBDRM, Concern has been awarded a large scale resilience building programme (Building Disaster Resilience in Pakistan). The latter employs the CBDRM approach, working closely with the communities in disaster prone areas in Punjab and Sindh provinces to build their resilience to future disasters. Based on CBDRM programme lessons Concern is adopting a multi sectoral inclusive and phased approach to resilience strengthening.

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### **References and Content Notes**

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1. For anyone that wants the paper contact the authors.
2. This refers to an administrative sub-division of a district and is the next level up from a Union Council
3. The Joint Programme for Disaster Risk Management provided substantial support to relevant institutions, notably Earthquake Reconstruction and Rehabilitation Authority (ERRS) National, Provincial and District Disaster Management Authority (NDMA). This took the form of policy and technical support, as well as 'material' assistance (e.g. equipment). Institutional strengthening entailed capacity building; the Joint Programme also supported educational/ training institutes to ensure sustained and effective provision of DRM training.
4. These flood-proofing measures (berms, evacuation roads, and raised ground/platforms) are aimed at providing vulnerable communities with increased protection against low-to-medium-level floods to save human lives and vital assets (such as shelter, livestock, crops, agricultural fields, etc.) in flood prone areas.
5. Concern's Approach to DRR in Pakistan, 2015:35.

# Sustaining livelihoods in drought: fruit trees and water harvesting in Somaliland



By Cecilia Benda and Erin Wolgamuth

## Background

The 2016-2017 Horn of Africa drought was the most severe in Somaliland memory. It followed four consecutive weak or failed rainy seasons. As a result, livestock herd sizes reduced substantially, and food security among farmers worsened significantly.<sup>1</sup> Recovery is expected to take at least two consecutive seasons of good rainfall, but current food security predictions for the first quarter of 2018 suggest most regions in Somaliland and South-Central Somalia will be crisis or emergency zones.<sup>2</sup>

Located in a warm, arid, tropical zone, Somaliland has a predominantly dryland agro-ecosystem featuring a bi-modal rainfall pattern: a long April-July rainy season (Gu') and a short September-November season (Deyr). In the north-east, where the main livelihood is pastoralism, rainfall ranges between 100-300 mm/year (too dry for agriculture), while in the southwest rainfall ranges between 400-600 mm/year and farming is practiced together with livestock rearing as a mixed livelihood strategy. In the southwest, there is one main harvest of sorghum or maize around October/November and a smaller harvest of leguminous crops (cowpea and groundnuts) just after the Gu' rains.

Effects of the 2016-2017 drought were strongest in eastern and coastal regions, forcing around 160,000 pastoralist and agro-pastoralists to migrate in search of food and livestock fodder.<sup>3</sup> Sorghum and other staple crop harvests failed, even in Maroodi-Jeeh Region, considered the "bread basket" of Somaliland. Located near the capital, Hargeisa, this region received the majority of Internally Displaced Person (IDPs) seeking pasture and support. Gabiley District, where Concern works, received an influx of thousands of pastoralist IDPs. This worsened the food security status of host communities, who shared their minimal resources with desperate, arriving households.

Water is essential to sustainable livelihoods and resilience in Somaliland. Groundwater and surface water resources are scarce due to issues such as very low water tables, sandy soils that do not hold water, and the naturally dry climate, which means that there are limited opportunities for rainwater catchment and storage. As such, access to water for domestic use, hygiene and sanitation, and productive activities is extremely limited. Since 2012, Concern has implemented an integrated programme in agro-pastoral communities in Gabiley District, focusing on increasing water access, developing Climate-Smart Agricultural (CSA) techniques, and improving natural resource management.

## Concern's Livelihoods/Resilience Programme: An Integrated Approach to Climate Change

Concern's Somaliland programme, in particular activities funded by Irish Aid 2012-2016, used an integrated, multi-pronged approach to improve water access. One component introduces increased access to drinking water and promotion of sanitation and hygiene practices. This was achieved by constructing new boreholes and concrete reservoirs with iron sheet roofs to collect rain water. These activities were coupled with hygiene promotion activities at the household level.

Another component of the programme focused on natural resource management through a range of soil and water conservation practices. One of these was the excavation of earth ponds to collect rain water for livestock. Other interventions aimed to maintain soil fertility and land productivity by halting land degradation and water run-off. It also aimed to increase soil absorption so that water is available for grass regeneration and crop production.

Finally, the programme features the promotion of improved agriculture practices such as line sowing, pest management, and crop diversification by introducing vegetable and fruit tree cultivation, combined with an irrigation system given the short and limited rainy seasons. Farmers in the area had previously been introduced to simple rain water harvesting basins excavated near their fields and were confident in their effectiveness to supply water for fruit trees and vegetable production.

The programme was designed in a participatory manner, engaging farmers to share their knowledge of what agricultural and water harvesting methods would work in this context. A few had developed fruit tree orchards before Concern began work in their communities, but after several years, water sources for irrigation had dried up and fruit cultivation largely ceased. These farmers were particularly keen to continue fruit tree cultivation for several reasons. First, fruit trees are permanent crops that, once established, provide produce for years. Second, demand for fruits was expanding in urban and peri-urban Somaliland - reflected in the high prices of fruits in local markets with many imported from Ethiopia. This meant there was definitely a market for locally-grown and cheaper fruit.<sup>4</sup> Finally, different varieties of seedlings were accessible from privately-run businesses in the area. Farmers felt that if the project was committed to developing basic irrigation systems, they could dramatically increase the survival rate of young seedlings and improve yields, making fruit production a worthwhile investment despite erratic rainfall and long dry spells.

Fruit tree production and irrigation are climate-smart practices because they stabilise or increase farm productivity in unreliable, rain-fed production systems, supporting farmers' adaptation to climate change. Since 2012, Concern's intervention has provided 90 farmers in 10 villages with fruit tree seedlings, namely, papaya, citrus, and guava. Farmers were selected to participate by the Village Development Committee and Concern programme staff based on two criteria: vulnerability and the their demonstrated initiative within their community, meaning they would be more likely to make the most of the opportunity and share skills with others in the future.

Each farmer received approximately 90 seedlings (30 of each type) and established a small rain water harvesting basin (7m by 3m with a depth of 1.8m). The basin was excavated by the target household beside the farmer's own orchard and subsequently managed by the household. The programme also provided farmers with polythene sheets to line the basins and ensure water retention, representing the most expensive component of the intervention and costing approximately USD 250 each. During the rainy season, farmers used a simple surface irrigation system whereby small earth channels directed captured rain water from the basin towards the various tree basins via gravity. Alternatively, farmers used buckets and watering cans to irrigate trees.

## Key successes and lessons: An upward livelihood spiral

The intervention was successful in most targeted villages where high rates of adoption were observed, including expansion of existing orchards. These findings are based on programme evaluations and focus group discussions, including an internal review conducted by the country team and Concern's global Agriculture and Natural Resources Adviser in August 2017. These evaluations indicate that target farmers have an average of 200 papaya trees, 100 orange trees, 12 guava trees, 15 lemon trees, and a few mango trees. Compared to the 30 seedlings originally provided, this suggests an expansion both in the number of trees per type (seven-fold increase for papaya and four-fold for citrus) and in the types of trees grown all through the initiative of farmers following successful outcomes.

Farmers reported producing an average of 13 bags per year per fruit type, and kept one-third of their production for consumption to supplement household diet. All interviewed farmers sell produce directly from their farms with a farm gate price of USD 8 for smaller bags of guava, papaya, and mango, and USD 28 for bigger containers of oranges and lemons. Middlemen, who receive a 10 percent commission, generally organise the sale via retailers in the main market of Hargeisa, which absorbs most of the production, as well as smaller markets. Obtaining accurate income figures is difficult, but it is clear farmers are able to make substantial profit from their aggregate sales. This, together with the expansion of tree varieties and quantity, suggests economic viability. Money earned from the sale of fruits is used for basic household needs such as child school fees, health care, and clothes or utensils, or to settle community debts. A portion is reportedly reinvested in agriculture, including rented tractor hours, labour, and other farming inputs. A few farmers reported that they were able to build new houses and send their children to university with their farming income.

Spontaneous adoption of these technologies has emerged as news of success among Concern's farmers has spread within and beyond their communities. Other interested farmers have visited project participants' farms and interacted with Lead Farmers (see below) in events organized by Concern. Farmer Abdi Cumar, from Gedabeera Village, proudly presented a small tree nursery he had established. He explained that some seedlings were reserved for farmers in neighbouring villages, where he planned to distribute them for free and deliver practical training sessions on how to establish an orchard, independent of the Concern programme.



## A spirit of cooperation and mutual support among farmers has furthered an upward positive spiral of livelihoods development and increased resilience in target communities

One key lesson emerging from this intervention is the importance of participatory design and implementation, which it is believed led to the high degree of uptake by target farmers and independent replication by others. That the original concept came from farmers who had some experience with fruit orchards but needed better water access, meant they were familiar with and motivated by the potential benefits.



Papaya orchard of Abdi Cumar, Lead Farmer in Gedabeera village, Gabiley District, Somaliland. Photo by Cecilia Benda, 2017.

Concern worked with farmers to adapt and improve their production by providing the critical resources that they couldn't otherwise access – like the costly polyethylene sheets – which enabled their agricultural initiative to flourish.

Some participants became Lead Farmers, taking an active role in mentoring other farmers and raising awareness of the benefits of water harvesting, especially in the face of climate change. Some have also established nurseries on their own farms and even organised training sessions to help new farmers access the seedlings and technical skills required in areas such as transplanting and grafting. Many farmers already involved in fruit production are keen for others to produce to facilitate bulking and marketing and reduce transaction costs. Their successes encouraged other more vulnerable farmers, who may not have had the resources to take livelihoods risks required to replicate the approach, including women who have also been active in adopting the innovative technologies. Furthermore, the benefits of trees for the wider community, such as biodiversity and water retention among others, are well documented.<sup>5</sup> This spirit of cooperation and mutual support among farmers has furthered an upward spiral of positive livelihoods development.

### **Resilience Outcome: A 'Shield' Against Drought**

The innovative farming practices promoted in Somaliland have proved instrumental in increasing productivity and crop diversification, with signs of far-reaching benefits at household and community levels. Adaptive farmers now rely on the stable production of a range of fruits. Fruits are consumed and sold to purchase other foods such as meat or oil as well as to meet other household needs, suggesting improved diet diversity and nutrition within the household. One female farmer explained, "During last year's drought, we used money [from] the products we sold to purchase water, fodder, straw for lactating cows as well as family foods, and re-invested in the farms." Another farmer said "Now we [are] able to support our family, livestock, neighbours, and relatives to survive and adapt during the lean period when the availability of food is insufficient."

Water harvesting helps farmers not only protect fruit trees but also better cope with the risks of increasingly unpredictable rainfall patterns on other crops. Many adaptive farmers report that they are now able to plant vegetables in nurseries one month before the rains are expected. They do this by exploiting the small amounts of water captured in the basins from previous seasons or collected from early rains. Once both the vegetable seedlings and the rains are established, they transplant them to their fields, reducing the risk of failure and leading to earlier harvests and cash earnings from timely sales. One farmer reported that access to water helped him initiate a nursery, establish vegetable seedlings, and successfully transplant only once rains were well underway, whereas previously he was obliged to wait to directly plant seeds at the onset of the rains which, if delayed or erratic, jeopardised the entire production cycle.

One female farmer explained the impact succinctly: "Fruit trees are the shield against drought" Another farmer added, "Previously we believed that goats and camels were as resistant to drought as fruit trees, but as a result of the lingering drought last year we realised that fruit trees have stronger drought tolerance, because the goat and camel started to deteriorate and die as the shrubs from which they feed on withered, while fruit trees survived until the rains!"

#### **BOX 1: What is rain water harvesting?**

Rain water harvesting can be defined as all technologies that capture and store seasonal excess rainwater and divert it for household and agricultural use (Hatibu and Mahoo, 1999 and Liniger et al, 2006). It is considered the single most important means of increasing agricultural productivity and

providing a source of domestic water supply in drought-prone areas (Getaneh and Tsigae, 2013). In some contexts, rainwater harvesting makes possible the cultivation of crops twice or more in a year, as well supplementary irrigation when rains stop early. Rainwater harvesting includes roof water harvesting, *in situ* water conservation practices (such as basins, pits, bunds, ridges), run-off harvesting (small catchments and roadsides ditches), flood water harvesting and subsurface water harvesting (Finkle and Sergerros, 1995).

## Future Plans and Conclusions

The success of fruit tree production and water harvesting systems for irrigation seen in Concern's Somaliland project in Gabiley District shows the enormous potential such interventions can have on promoting resilience to drought in dryland regions. The Horn of Africa is experiencing temperature increases, shorter growing seasons, and erratic rainfall with extreme rain events more common. The last two years of drought in the region indicate that this is a 'new normal.' Increased water access for irrigation together with diversification of crop types to include drought tolerant cereals and perennials crops such as fruit trees will be critical to ensure farmers have alternatives in the case of rain and crop failure.

These successful agricultural technologies are a mainstay of Concern's new programme cycle in Somaliland. In 2017, the programme aims to increase its reach and enable a new round of agro-pastoral households to access the knowledge, skills and necessary resources for climate change resilience. The programme is looking to bring this to scale by, for instance, exploring the potential to provide cheaper materials for lining the basin or the introduction of more efficient irrigation and water distribution systems. Furthermore, Concern hopes to establish collaborations with local and regional agriculture research institutions to improve the genetic material of the trees. These are important steps to capitalise on what has been achieved so far. In the next iteration of the programme, Concern will work to make the intervention even more accessible to vulnerable households while continuing to leverage the ingenuity of the more experienced fruit tree farmers. The establishment of community-managed tree nurseries and the introduction of solar pumps and drip irrigation systems, are just some of the ideas that have been proposed by innovative farmers and are currently under discussion. The results to date and these new ideas show the great will of community members to innovate and improve the agricultural production systems in Somaliland.

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## References and Content Notes

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1. OCHA 2017, *Operational plan for pre-famine scale up of humanitarian assistance*.
2. FSNAU 2017. *Somalia Food Security Outlook – October 2017 to May 2018*
3. Overall in South-Central Somalia and Somaliland, the timing and distribution of rainfall in late 2016 and early 2017 was very poor compared to normal. The 2016 Gu' and 2017 Deyr rains either started late or had mid-season dry spells, or both.
4. Concern 2013. *Market Assessment and Rapid Value Chain Analysis Country: Somaliland Technical Adviser Report*
5. World Agroforestry Centre. 2013. *Strategy 2013-2022: Transforming lives and landscapes with trees*.

# The Community-based Management of Acute Malnutrition Surge Approach: Helping health systems cope with peaks in service demand



By Kate Golden and Weldon Ngetich

## Introduction

Building resilience to drought and other emergencies means ensuring essential services - particularly health and nutrition services - can scale up to meet demand quickly and efficiently and scale back down as demand diminishes. Supporting this 'accordion' approach to service provision is a critical element of Community Resilience, particularly in contexts where regular peaks in demand can be largely predicted. The *Community-based Management of Acute Malnutrition Surge Approach (CMAM Surge Approach)* was developed for this purpose. It provides a smarter way to deliver services for the community-based management of acute malnutrition (CMAM) in contexts prone to periodic surges in caseloads of malnourished children, such as during the hunger gap in the Sahel and East Africa. The CMAM Surge Approach provides a stepped process and a set of practical tools to help government health managers and supporting agencies better anticipate, plan for and deliver life-saving services during these peak periods, precisely when the need is greatest.

This paper provides an overview of the CMAM Surge approach as developed by Concern in collaboration with government health staff in Uganda, Kenya and Niger and in consultation with other actors.<sup>1</sup> It shares learning that has emerged during the first few years of implementation and future plans to further evaluate and develop the approach.

## What is Community-based Management of Acute Malnutrition (CMAM)?

CMAM itself is an approach designed to treat children with acute malnutrition as close to their homes as possible and has been in use since 2000. CMAM has revolutionized the management of acute malnutrition, particularly severe acute malnutrition, by simplifying protocols, emphasising community involvement, and introducing a ready-to-use therapeutic food (RUTF), thus making it possible for most children to be treated on an outpatient basis at their local health facility.<sup>2</sup> Since its introduction, CMAM has been endorsed as best practice for the management of severe acute malnutrition in children by the United Nations and has been recognised as one of the ten most cost-effective nutrition interventions.<sup>3,4</sup>

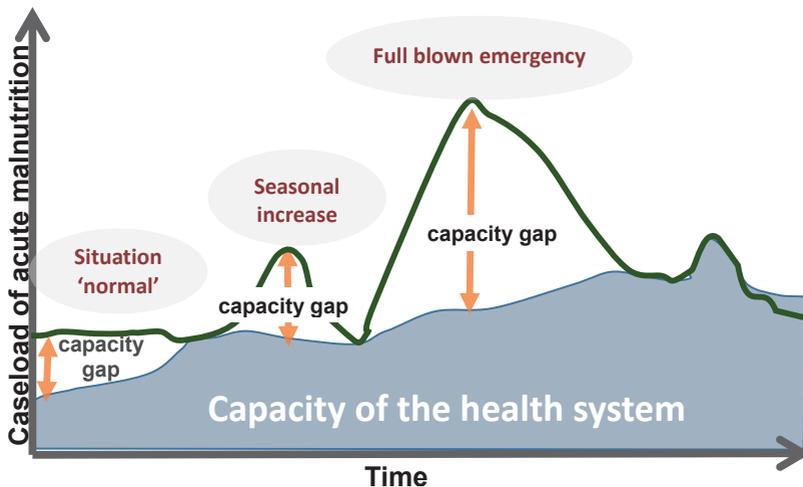
CMAM has now become an integrated component of routine health services in approximately 75 countries.<sup>5</sup>

Despite CMAM's dramatic expansion over the last 16 years, treatment coverage remains unacceptably low with less than 20 percent of children with severe acute malnutrition currently accessing the treatment they need.<sup>6</sup> Increasing treatment coverage will undoubtedly require concerted actions at community level. However, many of the leading access barriers still point to failures in the health system, including distance to health facilities as well as unreliable and/or poor quality services.<sup>7</sup>

## The seasonality of acute malnutrition

The CMAM Surge approach is based on the observation that in many contexts acute malnutrition follows a highly seasonal - and, therefore, largely predictable - pattern. These peaks occur when the main drivers of acute malnutrition, namely food insecurity, illness, and poor caring practices, converge in time and in space. In much of the Sahel and East Africa, these peaks occur during the annual hunger gap when food is scarce and the risk of malaria and/or diarrhoea is also heightened due to the onset of the rainy season. Other seasonal factors such as livestock movements, flooding, or increased demand for women's time for weeding or water collection will also influence both the number of children suffering from acute malnutrition and the ability of parents and other caretakers to seek treatment for them. This, in turn, determines the number of children arriving at health facilities requiring services, also known as caseload. The aim of the CMAM Surge approach is to help health actors understand and take account of all these factors in their health service planning.

Figure 1, shows a typical trend in admissions or caseloads of acute malnutrition (the y axis) over time (the x axis) at a health facility or across a health district in contexts with seasonal trends. In 'situation normal' capacity can generally meet the demand for services, but many facilities and districts will experience a 'seasonal increase' for at least a few months in a normal year and potentially a 'full-blown emergency' in more exceptional years, during which service demand will often outstrip a facility or district's capacity to deliver.



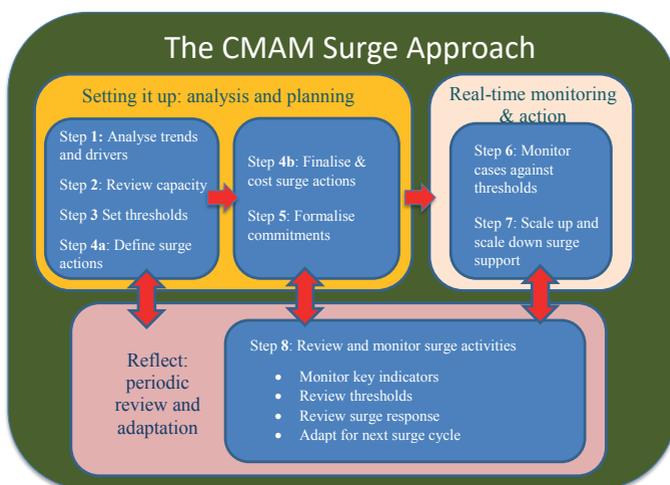
*Adapted from P. Hailey and D. Tewoldeberha, ENN, 2010*

**Figure 1:** Caseload surges over time and capacity of health system to deliver services.

## The CMAM Surge Approach

The CMAM Surge approach is outlined in detail in Concern's CMAM Surge Operational Guide, toolkit and facilitators guide, available in English and French.<sup>8</sup> The guide leads health facility staff and district health managers through a series of steps (see Figure 2 below) beginning with an analysis of the local factors that drive caseloads and a review of caseload trends from previous years to identify in which months caseloads are expected to peak (Step 1).<sup>9</sup>

Next, each health facility team assesses its own capacity to cope with these caseload surges and identify any gaps (Step 2). They then set their own caseload thresholds, above which the health facility's capacity to deliver quality services would be compromised (Step 3). The management team of the Health District and health facility staff prioritise preparatory actions to be taken before admissions begin to increase and agree a costed support package that the District team will deliver to the health facility if and when their caseload thresholds have been crossed (Steps 4 and 5).



**Figure 2:** Overview of the eight basic steps of the CMAM Surge approach

The next stage involves real-time monitoring of caseloads at each facility and the District delivering the agreed support as thresholds are passed (Step 6), and then scaling down that support gradually once caseloads return to normal (Steps 7). To complete the annual cycle, periodic reviews help staff reflect on what was done well and where improvement can be made to thresholds, surge activities, and support packages before the next surge cycle (Step 8). All of these steps can and should also be broadly followed as well by the Health District to determine thresholds and mechanisms for triggering support from higher levels of the government and humanitarian system when the District's own response capacity is exceeded, although this aspect of the approach remains less developed.

The eight steps outlined in the global Operational Guide should be seen as a starting point. Adaptation to specific country contexts is essential and through this, regular revisions to the global guide and tools are also very much expected over the coming years.

## Experience to date

Most of Concern's experience with the approach to date has been in Kenya, Uganda, and Niger and to a lesser degree in Chad with plans to initiate the approach in Ethiopia, Pakistan, Burundi and Sudan in with our government partners in 2018. Other partners, meanwhile, have shown interest in the approach and we don't have full site of all those activities but would like to hear about them as much as possible.

### Kenya

Marsabit County, situated in the drought-prone northeast of Kenya was the first place the CMAM Surge Approach was formally piloted.<sup>10</sup> In 2012, Concern, in partnership with government staff at the National, County, Sub-county and health facility level, adapted the basic approach to the Kenyan context and trialed it at a few health facilities. After some further refinements, a more comprehensive CMAM Surge approach was scaled up to 14 health facilities in the County in early 2014, and in November of that year an external evaluation was conducted by the Centre for Humanitarian Change<sup>11</sup>.

The evaluation found the approach to be effective, acceptable, relevant and largely sustainable, but it should be noted that no dramatic surges occurred during 2014 – or indeed in 2012 or 2013. Nonetheless, the evaluator saw significant potential in the approach and concluded that the pilot “has contributed to strengthening the health system to cope with increased caseloads of acute malnutrition during predictable emergencies without undermining ongoing health system strengthening efforts.”<sup>12</sup> It also observed that the approach's effectiveness lies as much in its ability to help health systems respond to more localised small to medium surges as it does in its support for large to extraordinary ones.

Key recommendations included 1) consolidating the tools used in Kenya into a comprehensive guide and training package 2) strengthening ownership of the approach at higher levels of government 3) exploring the potential for a broader health system surge approach not just restricted to acute malnutrition and 4) including cost-effectiveness analysis in the next implementation cycle.

Since the evaluation, the Kenyan government has largely embraced the CMAM Surge approach and, with the help of Concern and other partners, has acted on many of the evaluation's recommendations. By mid-2016, Kenya had developed its own CMAM Surge Operational Guide (which was developed in tandem with the Global Operational Guide) and had begun rolling it out.

Unfortunately, in late 2016, as the CMAM Surge rollout was underway, many of the target areas were hit by drought and an extremely poor harvest. This led to dramatic increases in CMAM caseloads as early as December – at least four months prior to the expected start of the surge period in May 2017. As the situation deteriorated, a full emergency response was launched which largely overshadowed efforts to establish the CMAM Surge approach. Nonetheless, CMAM Surge is now established in roughly 30 percent of the health facilities in the affected districts, and a recent review concluded that the analysis and preparedness measures taken under CMAM Surge helped guide the emergency response to a considerable degree.<sup>13</sup> The 2016/ 2017 drought experience has also strengthened the government's commitment to fully embed CMAM Surge across the area before the next emergency.

## Uganda

Concern has implemented some elements of the CMAM Surge approach in the southern districts of the Karamoja sub-region of Uganda on and off since 2009. In 2015, Concern, in partnership with the Ugandan health authorities, began to pilot a more comprehensive version of the CMAM Surge approach (known in Uganda also as IMAM Surge) in Karamoja with longer term funding. The full pilot was implemented under the leadership of the sub-regional, national and district health authorities in 51 health facilities across the districts of Amudat, Moroto, Nakapiripirit, and Napak.

A scoping exercise carried out in 2016 found that the CMAM Surge approach was highly acceptable to most actors in Uganda, particularly the government, and was seen as an important contribution to health system strengthening.<sup>14</sup> Key recommendations were similar to the Kenya evaluation and included involving communities and the District and Regional level more directly in all steps; clarifying the mechanism for triggering a response; and securing longer term funding for the approach to allow the preparedness steps to take place. In 2016, the CMAM Surge approach was included in the revised national CMAM guidelines.<sup>15</sup> This has paved the way for the potential scale up of CMAM Surge in Uganda beyond Karamoja. Unfortunately, Concern is now closing its operations in Uganda but the government has now taken on responsibility for CMAM Surge scale up.<sup>16</sup>

## Niger

Concern began using a simplified version of the CMAM Surge Approach in Tahoua Health Department in Niger in 2011, following the nutritional crisis that saw more than 10,000 children with SAM admitted for treatment in the Department in 2010 alone. Since that time, Concern has been gradually phasing in aspects of the approach, and after hosting a CMAM Surge workshop in Niamey in May 2016, Concern and the Tahoua Health Department began to introduce a more comprehensive CMAM Surge approach using the global CMAM Surge Operational Guide in French as a basis. By the start of the 2017 surge period in June, CMAM Surge had been established at 21 health facilities across the Department and it will be extended to Tahoua's remaining 13 health facilities by early 2018.

There has been enormous interest in the approach from partners in Niger and neighbouring countries. A critical adaptation to the approach in Niger has been the inclusion of support for malaria treatment of children alongside CMAM services, given that malaria is a known driver of malnutrition and annual spikes in malaria and acute malnutrition caseloads in Niger closely mirror each other. Concern is planning a strong evaluation of the CMAM Surge approach in 2018 with lessons relevant for a large number of countries across the Sahel.

## Emerging lessons

- **Adapt the global guide to each country context and plan for update to the global guide itself based on experience.** The global guide was never meant to be an off-the-shelf toolkit but a starting point for adaptation to the health systems of different countries. Tools such as the one provided for capacity assessment for health facilities should be kept simple and build on what already exists in each country. Concern encourages such adaptations and will work to better consolidate learning across countries and actors in the near future (see below)

- **Move beyond exclusively 'CMAM' Surge.** The approach is already showing significant potential for application to predictable surges in other illnesses alongside acute malnutrition. This has always been Concern's vision, and links to wider public health approaches to disease surveillance and control. Learning from Niger's experience incorporating surge support for malaria treatment into the approach will be shared in 2018 as part of the planned evaluation.
- **Incorporate more community mobilisation and referral into the approach.** Maximising access and coverage is fundamental to CMAM and good coverage is a pre-requisite for the CMAM Surge approach to be effective. To date, however, the CMAM Surge approach has not explicitly prioritised increasing coverage. Instead, it has focused on ensuring the health system can cope with the cases actually arriving at health facilities, thereby contributing to coverage by motivating users to return. In Kenya, however, stakeholders concluded that the CMAM Surge approach should include a stronger set of community mobilisation activities and are currently defining what these will be.
- **Establishing alert thresholds for entire districts and linking with national emergency bodies to trigger support is proving feasible.** During the 2017 emergency in Kenya, two districts were able to trigger support from the government's National Drought Management Authority when the number of health facilities at alert level had passed agreed thresholds. These promising results bode well for the sustainability of the approach and the Kenyan government's commitment to bring early response systems to scale and improve links between CMAM Surge and national early warning systems.
- **Review and update thresholds more regularly and whenever there is a significant change to a health facility's capacity.** This recommendation arose from both Uganda and Kenya. As thresholds are based in part on the assessed capacity of a given health facility, it is critical that they are reviewed at least quarterly and any time there is a sudden change to the facility's capacity, as even the loss of a single staff for an extended period can greatly affect service quality. Kenya has also suggested that while thresholds to trigger scale up of surge support should continue to be based on new admissions, thresholds for scaling down should be based on total children still receiving treatment to promote a more gradual scaling down process, given children stay in the programme for an average of two months.
- **Engage District-level partners from the beginning and budget for regular exchange visits and learning events.** While it may be tempting for NGOs to work directly with health facilities, the evaluation and reviews in Kenya and Uganda underscored the surge support function directly within the government's health district management structure is critical for the approach to be sustained year on year. Exchange visits between facilities, Districts and National stakeholders have also proven to be extremely valuable as the approach evolves in each context.
- **Cost-effectiveness is likely to be a key metric to assess the value of CMAM Surge over the traditional emergency approach and therefore a priority for future evaluations.** There is a strong economic argument for supporting early action that is based on real-time analysis and builds existing local capacity if an equal or larger number of lives can be saved at a lower cost than the more traditional, often delayed, emergency nutrition response. Cost effectiveness analysis is therefore being included in the impact evaluation of Concern's CMAM Surge programmes in Ethiopia and Niger in 2018.<sup>17</sup>

## Conclusion and next steps

The CMAM Surge approach has been largely embraced by governments and practitioners in Kenya, Uganda and Niger and interest is growing among stakeholders in Ethiopia, Chad, Burundi, Pakistan, Mali and Sudan, among other countries.<sup>18</sup> Its appeal lies mostly in its simplicity, its commitment to working within government health systems, and its emphasis on learning from past experience to build resilience within the health system and prevent it from reaching breaking point year after year. The approach has demonstrated its significant potential to improve the management of acute malnutrition in contexts where nutritional risk factors follow a reasonably predictable pattern, making it highly relevant for much of East Africa and the Sahel where the burden of malnutrition is high and health systems are chronically overstretched.

More work, however, is needed to evaluate the impact of the approach, including its cost effectiveness, and to capture, share and apply learning from the experience of different partners as scale up continues in Kenya, Niger, Uganda, Ethiopia and elsewhere. Concern is collaborating with several partners to conduct an impact evaluation of the CMAM Surge approach in Ethiopia and Niger in 2018 and to conduct an experience-sharing workshop in 2018. Concern is eager to engage with any partners thinking of implementing the approach, and we are working to expand our capacity to provide technical assistance and coordinate learning on the CMAM Surge approach across contexts and implementers.

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## References and Content Notes

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1. Regional consultation workshops held in Nairobi and Niamey in 2016 included more than 50 participants from 11 countries representing government health staff and NGOs. Concern is particularly grateful to the UK Government's Department for International Development (DFID) for funding the workshops and CMAM Surge Operational Guide, to the European Civil Protection and Humanitarian Aid Operations (ECHO), the Office of US Foreign Disaster Assistance (OFDA) and Irish Aid for supporting the approach in several countries and to the Centre for Humanitarian Change, Action Contre La Faim and Save the Children International for their contributions to the development of the approach. Please see the Operational Guide for a full list of acknowledgements.
2. Note CMAM was developed to address both moderate and severe acute malnutrition, which follow different protocols and use different nutritional supplements to bring a child to recovery, in an integrated fashion. However, the degree to which moderate acute malnutrition is addressed, particularly when CMAM services are integrated into the health system varies by context.
3. WHO, UNSCN, UNICEF. Community-based management of severe acute malnutrition. A joint statement by the World Health Organization, the World Food Programme, the United Nations System Standing Committee on Nutrition 2007. [http://www.unicef.org/publications/files/Community\\_Based\\_Management\\_of\\_Sever\\_Acute\\_Malnutrition.pdf](http://www.unicef.org/publications/files/Community_Based_Management_of_Sever_Acute_Malnutrition.pdf)
4. Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?; Bhutta, Zulfiqar A et al.; *The Lancet*, Volume 382, Issue 9890, 452 - 477 [http://dx.doi.org/10.1016/S0140-6736\(13\)60996-4](http://dx.doi.org/10.1016/S0140-6736(13)60996-4)

5. UNICEF. Nutridash 2013: Global report on the pilot year. New York: UNICEF, 2014. [http://www.sightandlife.org/fileadmin/data/News/2015/2\\_Feb/UNICEF\\_Global\\_NutriDash\\_report\\_2013.pdf](http://www.sightandlife.org/fileadmin/data/News/2015/2_Feb/UNICEF_Global_NutriDash_report_2013.pdf)
6. Ibid.
7. Puett, C., Hauenstein Swan, S. & Guerrero, S. (2013). Access for All, Volume 2: What factors influence access to community-based treatment of severe acute malnutrition? (Coverage Monitoring Network, London, November 2013 <http://www.coverage-monitoring.org/wp-content/uploads/2013/11/Access-for-All-Volume-2.pdf>
8. CMAM Surge Operational Guide by Concern Worldwide 2016. <https://www.concern.net/resources/cmam-surge-toolkit>
9. There are currently eight steps in the global CMAM Surge Guidelines, but these should be and are already being adapted at country level to fit with existing processes.
10. In Kenya, CMAM is referred to as the Integrated Management of Acute Malnutrition (IMAM) and therefore use the term 'IMAM-Surge', but for simplicity in this paper, we continue to call it CMAM Surge.
11. Centre for Humanitarian Change is an independent consultancy firm <http://www.whatworks.co.ke/> The full evaluation report can be found on Concern's website: <https://www.concern.net/insights/evaluation-cmam-model-surge-pilot>
12. Hailey P Evaluation of the CMAM Surge Approach in Kenya 2014
13. A Synthesis of lessons from: Kenyan IMAM Surge Approach Review Workshop. August, 2017. MoH of Kenya, UNICEF, Concern. Full report available from the MoH, UNICEF or Concern.
14. Surge Programme Review for Karamoja: Consultancy report, Centre for Humanitarian Change, 2016
15. Guidelines for Integrated Management of Acute Malnutrition Guidelines in Uganda, Government of Uganda, January 2016
16. Please see the detailed report on Uganda IMAM Surge learning based partly on a national stakeholders' workshop hosted in March 2017 will be made available on Concern's website.
17. The Ethiopia programme and the impact evaluation in both countries is being funded by OFDA 2017 – 2018, while
18. In collaboration with Concern Action Contre le Faim has included a surge aspect in its new Health System Strengthening Guide based on the CMAM Surge Guide [http://www.actioncontrelafaim.org/sites/default/files/publications/fichiers/aah\\_hss\\_guide\\_2017\\_compressed.pdf](http://www.actioncontrelafaim.org/sites/default/files/publications/fichiers/aah_hss_guide_2017_compressed.pdf)

# Why Advocacy is Crucial for Building Resilience



By Alexander Carnwath

## Introduction

The phrase ‘natural disaster’ is a contradiction in terms. A drought in Somalia, a flood in Bangladesh or an earthquake in Nepal, may arise from natural phenomena. But many of the factors that cause such natural events to become disasters - the political, economic and cultural rules and systems that govern people’s lives and leave them vulnerable to risk are manmade.

This is one of the reasons advocacy is so crucial to building resilience. If people are vulnerable to disasters due to failures in the wider systems, then these systems must be changed. Our Community Resilience programmes must analyse where aspects of the broader system are ‘broken’ or undermining people’s capacity to overcome shocks and stresses, and advocate to positively influence these aspects of the system. Unless they do so, any success they have in helping people tackle shocks and stresses at community level represents only a partial solution to a much bigger problem. The sixth essential element for a Concern Community Resilience programme is therefore to advocate for systems that can support and deliver the ‘full community resilience package.’

Concern advocates, or supports our partners or communities themselves to advocate, at different levels and with a variety of objectives. Successful advocacy by community members towards local government (such as district administrations) may seek to bring about immediate changes on the ground. National level advocacy by Concern country teams may be crucial for influencing national budgetary decisions on how money is spent for resilience. Advocacy on global level policy processes can drive greater investment from international donors, and secure a collective approach to resilience through policy commitments. Any one of these can represent an important step forward for disaster-affected people. But if we can engage in all of them, we stand a much better chance of reforming the systems that contribute to vulnerability from top to bottom, and building resilience in a sustainable way.

## Influencing at local level

A good example of Concern’s work on advocacy at local level comes from the Paribartan<sup>1</sup> programme, a five year climate resilience project targeting coastal communities in the Bay of Bengal in India and Bangladesh. As well as linking grassroots advocacy to national and sub-regional levels to amplify the issues and concerns of disaster-affected people, it has delivered tangible successes on the ground by helping communities influence local government plans and strategies.

In the early stages of the programme, Concern supported community members to organise into disaster risk management committees, at hamlet, village, Panchayat and UpaZilla<sup>2</sup> levels, and

to undertake Community Risk and Vulnerability Assessments (CRVAs), to identify the key issues contributing to their vulnerability. Once programme participants had discussed the risks they faced, Concern helped them better understand the opportunities to address these through advocacy, by providing explanations of government budgeting processes and resilience-related policies. Concern also worked with local level government officials to explain the benefits of engaging systematically with communities in the creation of development plans.



### **Paribartan is one of a number of Concern programmes which demonstrates that governments can be receptive to organised advocacy by local communities**

As a result of advocacy meetings between government officials and community committees, key priorities emerging from community plans were incorporated into the local government development plans, which have budget allocated to them. The local government has subsequently provided financing for activities to address priority needs identified by the community themselves, such as the rehabilitation of embankments to prevent flooding and Climate Smart Agriculture (CSA) activities such as rice-fish cultivation and rainwater harvesting.

Paribartan is one of a number of Concern programmes which demonstrates that governments can be receptive to organised advocacy by local communities. Whereas there is sometimes a perception that government officials are hostile to advocacy, the opposite is often true - they may welcome this support to tailor their plans more effectively to the needs of the people they represent and to gain their continued support, particularly at local level where capacity and resources are often scarce.

'Paribartan is a community-led project and that is why I feel it will sustain,' explained Khageshwar Lenka, a local government head in Odisha, India. 'Now the horticultural department, the forest department, all the departments are involved.'

### **Influencing at national level**

At national level, the benefits that advocacy can have for vulnerable communities may be less targeted or immediate, but can have much wider impacts for vulnerable people across an affected country. In our national and global level advocacy, we aim to draw up messaging and priorities from the community level into broader principles, to ensure that policies at these levels are not detached from the realities of life on the ground.

For some years, Concern's Chad team has been advocating towards the national government on issues related to resilience. Building strong relationships and credibility with the government has been key to opening up wider advocacy opportunities. The team has achieved this in part through Concern's long-term presence in Chad and our technical support of the government in a number of initiatives, including meeting commitments under the Global Alliance for Resilience (AGIR<sup>3</sup>). Concern has also developed a good reputation for convening resilience learning discussions: in 2013 the Chad team hosted a resilience roundtable, bringing together ministerial figures and civil society for a discussion of how resilience could be built in Chad. And in early 2017, the team organised a resilience workshop, attended by senior government figures, to share emerging findings from the BRACED<sup>4</sup> programme. Thanks to relationships built up through these and other activities, the Chadian government recently invited Concern to submit inputs into the consultation on its new environmental policy.

Senior Chad staff and the BRACED advocacy coordinator examined the draft policy and worked together to produce recommendations in four areas, reflecting key needs that Concern had identified as crucial to resilience in Chad, based on our programme experience at local level. They proposed:

- a section devoted to gender to recognize the way in which environmental conditions have different impacts on the lives of men and women due to existing gender inequality.
- a section on renewable energy, recognising that this is a key area for the mitigation of climate change but that resources to support it have been lacking.
- strengthening the sections on Disaster Risk Management to include support to community-centred early warning systems, in keeping with Concern's focus on the importance of involving communities in resilience planning.
- Including a greater focus on agroforestry's role in protecting natural resources and contributing to nutrition health and the income of rural populations

Although the process is not yet complete, there are encouraging signs that these areas will be well represented in the final environmental policy. The messaging Concern shared has been included in the draft document and the Chadian Ministry of Environment has asked for further feedback on this.

The way Concern responded to this opportunity, drawing on agroforestry research from our consortium partners ICRAF and as a collaborative piece of work between the Chad team and the BRACED advocacy adviser, who works across resilience advocacy for Chad, Sudan and South Sudan, provides an important lesson for our wider organisational approach. Influencing policy is not just the job of Concern's advocacy team - in fact, those at country and ground level may be most effective in advocating as they understand the context best. Advocacy staff, meanwhile, have the skills to analyse how to navigate and influence the policy environment. Working together is therefore essential to achieve crucial policy outcomes.

In this case, our team in Chad provided insights from our programming and understanding of Chad's policy landscape, while the BRACED advisor drew from our wider organisational resilience messaging and ICRAF research and helped distil and consolidate the different elements into a strong submission.

## **Working at global level to ensure implementation of major resilience frameworks**

At global level, resilience has featured prominently in a number of major policy processes in recent years, including the Sustainable Development Goals and the Paris Climate Agreement. The policy framework with the greatest focus and most detailed commitments on resilience however is the Sendai Framework for Disaster Risk Reduction (SFDRR). Concern has engaged in a number of Regional Platforms where the implementation of SFDRR is discussed. The most important advocacy opportunity on SFDRR however is the Global Platform for DRR, which takes place every two years and which members of Concern's advocacy team and programme staff attended in May 2017.

Global policy events such as this risk being detached from realities of life on the ground. This makes the involvement of Concern, and other civil society organisations, all the more crucial. Our role is to advocate on behalf of communities, using our programme experience to ensure international policy frameworks address the lived experience of disaster-affected people.

Our objective in engaging in the Global Platform was to ensure our messaging around the involvement of disaster-affected people in the development of resilience policies and strategies was well represented in the Chair's Summary, providing a strong basis for our future advocacy on this issue. This message is central to all of our resilience advocacy, but it was particularly relevant for the 2017 Global Platform, with discussions focusing on increasing the number of countries with national and local disaster risk reduction strategies by 2020: one of the seven SFDRR global targets. The Global Platform therefore provided a good opportunity to emphasise the importance of community engagement in the development of these strategies.



### **Over the next few years, the advocacy activities of our resilience programmes and the demands we make will differ from context to context**

Because of the scale of the event, with governments and civil society from across the world, Concern was unlikely to exert much influence on its own. We therefore used our role as chair of the UK DRR coalition group to coordinate the development of joint messages with other UK actors, ensuring that Concern's priority points were prominent within these. We then used contacts developed through BRACED and our broader advocacy work to share these messages widely with national governments, including the governments of Chad and Sudan who incorporated these messages into their national statements which were delivered at a prominent session during the Global Platform. We complemented this by raising key points supporting our joint messages, wherever possible, during plenary discussions.

When the Global Platform's Chair's Summary was published, it included positive statements on community involvement, a successful outcome for Concern's advocacy. In particular, under Priority 2: 'Strengthening disaster risk governance to manage disaster risk', the document states: 'Community participation, ownership and buy-in is important to build sustainability and long-term community resilience. Local governments are encouraged to base their disaster risk reduction strategies and plans on local communities' needs, knowledge and engagement.' This represents a clear statement of the need to involve community members in the development of strategies, strengthening our advocacy on this at local and national levels.

#### **BOX 1: UK-led Resilience Advocacy Initiatives**

Our UK-led resilience advocacy initiative sets out to deliver changes in funding, policy and practice to support resilience-building for those most vulnerable to disasters. We have identified three priority areas for this.

- Increased delivery of long term flexible funding for DRR and resilience programmes, especially in fragile states.
- Increased funding and support from donors and national governments to strengthen governance structures at all levels, to support resilience-building of the poorest and most vulnerable.
- Effective implementation at national and local level of global policy commitments to support resilience-building of the poorest and most vulnerable.

## Concluding thoughts

These examples taken from Concern's recent advocacy work demonstrate the kinds of impact we can achieve to strengthen resilience in policy processes at all levels. Though it is always difficult to attribute changes in policy to our own work, it is reasonable to assume in each of these cases that our advocacy made a contribution.

But the work does not end there. Advocacy is a long-term enterprise which requires regular monitoring and frequent follow-up to ensure agreed changes are carried through, policies are implemented, practical strategies are developed, actions are costed and budgets and activities are delivered.

Our advocacy work must also contend with a range of challenges related to working with governments: these include government reshuffles, which lead to key contacts being moved out of positions of power, or policy processes stalling and commitments being deprioritised. We must also regularly re-examine our relationship with those in power. These examples from Chad, India and Bangladesh demonstrate the benefits of close contact and good relations with government whether at local or national level. Yet there will also be times where advocacy may involve taking a critical stance even if this risks damaging relationships we have carefully nurtured.

Over the next few years, the advocacy activities of our resilience programmes and the demands we make will differ from context to context, depending on how disasters are experienced by vulnerable people and who holds the power within the wider systems to reduce the impact of shocks and stresses. But a consistent thread running through our resilience advocacy will be a push for the involvement of disaster-affected communities in policy and planning and amplifying their voice upwards to local and national government and other influencers, including at the global level. Disaster-affected people have the best understanding of how vulnerability manifests itself on the ground, and where disasters arise as the consequence of a broken system, they will have some of the best ideas of how to mend it.

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## References and Content Notes

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- 1 Paribartan means transformation in the Oriya and Bangla languages in the project areas.
- 2 The Gram Panchayats are the basic units of governance of the local Government administration in India. The Upazilas (Sub District) are the second lowest tier of regional administration in Bangladesh.
- 3 AGIR is a framework that helps to foster improved synergy, coherence and effectiveness in support of resilience initiatives in 17 West African and Sahelian countries. It is a regional framework with implementing bodies at national level.
- 4 'Building Resilience and Adaptation to Climate Extremes and Disasters – Concern's DFID-funded programme in Chad, see above'

# Résumés en français

## Comment Concern Comprend la Résilience Communautaire

✍ Par Kate Golden

Cet article fournit un bref aperçu de la compréhension de la résilience communautaire par Concern et notre approche en vue de son renforcement. Il décrit les engagements de Concern dans ce domaine, les contextes et les pays où nous prévoyons de concentrer ce travail au cours des trois prochaines années. Par ailleurs, les composantes essentiels d'un programme « Résilience Communautaire de Concern » ; et la façon dont nous espérons en mesurer l'impact, y sont soulignés. Vous trouverez de plus amples détails dans la note d'orientation sur la résilience communautaire.

## L'agriculture intelligente face au climat dans les zones arides: Construire des systèmes alimentaires résilients au Tchad et au Soudan

✍ Par Cecilia Benda, David Traynor, Friday Mwaba et Ann Degrande

Concern fait désormais la promotion de l'agriculture intelligente face au climat dans la plupart de ses programmes nationaux comme élément important de sa stratégie de résilience, et **cela** figure en bonne place dans le programme Renforcement de la Résilience et de l'Adaptation face aux Extrémités Climatiques et aux Catastrophes (BRACED). Cet article présente certaines technologies d'agriculture intelligente face au climat, promues dans ces deux pays ainsi que de grandes réussites, défis et leçons apprises.

## Alerte précoce pour une action rapide: apporter une réponse rapide à la sécheresse en Somalie

✍ Par Dustin Caniglia et Alexander Carnwath

Un système efficace d'alerte précoce - action précoce (EWEA) joue un rôle important dans le renforcement de la résilience des personnes touchées par les catastrophes. Aider les populations **à anticiper et à se préparer aux chocs, y compris à travers des mécanismes tels que les systèmes d'alerte précoce**, est au cœur de l'approche de résilience de Concern. Il en va de même pour une intervention d'urgence en temps opportun lorsque les circonstances l'exigent et que la capacité locale se trouve dépassée. Un système « Alerte précoce - Action précoce » **efficace réunit ces deux** composantes essentielles afin de s'assurer que nous agissons rapidement en réponse aux signaux d'alerte, réduisant ainsi l'impact potentiel d'une catastrophe. Cela sauve des vies, empêche la souffrance et protège les moyens de subsistance des populations vulnérables, de sorte que leur capacité de réaction et leurs perspectives de développement ne soient pas détruites chaque fois qu'une catastrophe se produit. Cet article explique donc la manière dont Concern a utilisé le système EWEA en Somalie.

## Promouvoir l'égalité des sexes: pierre angulaire de la programmation de la résilience communautaire

✍ Par Sara Caggiati, Gretta Fitzgerald, Isaac Gahunhu et Cardinal Uwishaka

Les femmes sont les moteurs de la résilience communautaire. Dans la région du Sila, dans l'est du Tchad, où Concern met en œuvre le programme de renforcement de la résilience au Tchad et au Soudan (BRICS), les femmes apportent une contribution importante aux activités de subsistance ; Elles sont en grande partie responsables des enfants et se retrouvent souvent à gérer le ménage, une bonne partie des hommes étant partis à la recherche de travail. Cet article donne un aperçu de l'approche du programme BRICS pour aborder la question des inégalités du genre dans le but de contribuer à atteindre la résilience domestique et communautaire dans les communautés ciblées au Tchad et au Soudan. Il donne ensuite un aperçu des principales activités d'égalité du genre mises en œuvre au Tchad ainsi que les résultats d'une enquête menée au Tchad à l'aide de l'indice d'égalité du genre pour la résilience de Concern (GERI).

## **Building Resilience to Floods: Using the Flood Resilience Measurement Tool in Afghanistan**

✍ Par Abdul Razzaq RAzi, Kate Golden et Paul McGrath

Concern est active dans les provinces de Badakshan et de Takhar en Afghanistan. Ces zones constituent une partie importante des zones de subsistance en montagne, et où les inondations et les tremblements de terre présentent des risques sérieux. Les programmes de Concern dans ces provinces aident donc les communautés à améliorer leurs moyens de subsistance, l'accès à l'eau et à l'assainissement, l'éducation et la promotion de la réduction des risques de catastrophe. En 2015, Concern a postulé pour rejoindre Zurich Flood Resilience Alliance et a reçu un financement lui permettant de lancer un nouveau projet visant à promouvoir la résilience aux inondations dans les communautés des deux districts. Dans le cadre de ce projet, Concern a piloté un outil de mesure de la résilience aux inondations élaboré par l'Alliance et a utilisé les renseignements générés par celui-ci pour concevoir et mettre en œuvre des interventions de résilience aux inondations. Cet article décrit l'outil et discute de l'expérience de Concern sur son utilisation en Afghanistan.

## **Renforcement de la gestion communautaire des risques de catastrophe: travailler à plusieurs niveaux au Pakistan**

✍ Par Syed Sulaiman et Kai Matturi

Au Pakistan, Concern œuvre pour la réduction des risques de catastrophes directement par le biais de son programme communautaire de gestion des risques de catastrophe (CBDRM), conçu pour accroître la capacité locale d'évaluation des risques, d'atténuation, de préparation et de plaidoyer. Le programme est ainsi axé sur la création, la formation et l'appui des institutions communautaires et des organismes gouvernementaux locaux responsables de la gestion des risques de catastrophes et les engage dans diverses activités de gestion des risques de catastrophe, notamment l'évaluation des risques, la diffusion d'informations précoces et des mesures structurelles de réduction des risques telles que la construction de diguettes, le déblayage des canaux et la relance des réseaux de transport. Dans cet article, certains résultats du programme seront examinés, ainsi que les défis, les bonnes pratiques et les leçons apprises à ce jour.

## **Maintenir les moyens de subsistance en période de sécheresse: arbres fruitiers et collecte des eaux pluviales au Somaliland**

✍ Par Cecilia Benda et Erin Wolgamuth

L'eau est essentielle à la soutenabilité des moyens de subsistance et de la résilience au Somaliland. Depuis 2012, Concern a mis en œuvre un programme intégré au sein des communautés agro-pastorales du district de Gabiley, axé sur le développement de techniques agricoles intelligentes face au climat, l'augmentation de l'accès à l'eau et l'amélioration de la gestion des ressources naturelles. Les ressources en eau souterraine et en eau de surface sont rares en raison de problèmes tels que les nappes phréatiques très basses, les sols sablonneux qui ne retiennent pas l'eau et le climat naturellement sec. Ce manque de pluie signifie que les possibilités de captage et de stockage des eaux pluviales sont limitées. En tant que tel, l'accès à l'eau à usage domestique, à l'hygiène et à l'assainissement et aux activités de production est limité. Cet article explique comment la production d'arbres fruitiers et la récupération de l'eau de pluie ont été déterminantes pour maintenir les moyens de subsistance face à la sécheresse.

## **L'approche communautaire de la prise en charge de la malnutrition aiguë: aider les systèmes de santé à faire face aux pics de la demande de services**

✍ Par Kate Golden et Weldon Ngetich

Renforcer la résilience à la sécheresse et à d'autres situations d'urgence signifie s'assurer que les services, en particulier les services de santé et de nutrition, peuvent évoluer pour répondre à la demande de manière rapide et efficace et décroître à mesure que la demande diminue. Soutenir cette approche « accordéon » de la fourniture de services est un élément essentiel de la résilience communautaire, en particulier dans les contextes où les pics réguliers de la demande peuvent être largement prédits. C'est à cet effet que l'approche de la gestion communautaire de la malnutrition aiguë (CMAM Surge Approach) a été élaborée.

Cet article donne un aperçu de l'approche de gestion communautaire de la malnutrition aiguë développée par Concern en collaboration avec le personnel de santé du gouvernement en Ouganda, au Kenya et au Niger ainsi que d'autres acteurs.

## Pourquoi le plaidoyer est crucial pour renforcer la résilience

✍ Par Alexander Carnwath

Concern plaide pour, ou apporte un appui à nos partenaires ou communautés afin de leur permettre de plaider pour eux-mêmes, à différents niveaux et avec des objectifs variés. Le plaidoyer réussi par des membres de la communauté auprès des gouvernements locaux (tels que les administrations du district), peut chercher à provoquer des changements immédiats sur le terrain. Pour sa part, le plaidoyer au niveau national par les équipes-pays de Concern, peut être déterminant pour influencer les décisions budgétaires nationales sur la façon dont l'argent est dépensé pour la résilience. Par ailleurs le plaidoyer sur les processus politiques au niveau mondial peut générer des investissements plus importants de la part des donateurs internationaux et garantir une approche collective de la résilience à travers des engagements politiques. Chacun de ces facteurs peut représenter une étape importante pour les personnes touchées par une catastrophe. Cependant, si nous pouvons tous les impliquer, nous avons une bien meilleure chance de réformer les systèmes qui contribuent à la vulnérabilité du haut vers le bas et de renforcer durablement la résilience.

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All staff involved in designing, implementing, managing, monitoring, evaluating and communicating Concern's work. This publication should also be shared with partners.

## What this publication includes

- Promising practice
- Organisational learning
- Promotion of multi-sectoral and integrated approaches to programming
- Links to full reports

## What it doesn't include

- Targeted recommendations
- Additional evidence not included in the papers cited
- Detailed descriptions of interventions or their implementation

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