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Concern's  
Knowledge  
Quarterly  
Review

# KNOWLEDGE MATTERS

Improving Resilience in South Sudan:  
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:** Watering Guava seedlings planted in August 2017, left to right Rosa Adut Deng, Mary Arai Uguak, Rebecca Awien Zacharia, Gentano Nyipen Chan – Babcock School Environment Club, BRACED Programme Tonj South, Warrap, South Sudan. Photographer: Michael Mulpeter / Concern Worldwide

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## From the Issue editor

Welcome to the latest edition of Knowledge Matters which focuses on Concern's Improving Resilience in South Sudan Project (IRISS).

The Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme is a three-year, £110 million programme funded by the UK Department for International Development (DFID). The programme launched in January 2015. It supported over 140 organisations in 15 consortia to implement 15 projects across 13 countries in East Africa, the Sahel and Asia. These consortia include local government and civil society organisations, research organisations and the private sector.

BRACED sought to increase resilience to drought and floods for targeted communities, especially women and girls, while also contributing to Evidence-based learning related to developing climate change resilience in complex and conflict prone environments. After just over three years in operation, the project came to an end on 30<sup>th</sup> June, 2018. This edition of Knowledge Matters summarizes the main lessons which the project generated.

The BRACED-IRISS programme was implemented by a consortium led by Concern Worldwide, and including ACTED (formerly known as the Agency for Technical Cooperation and Development), The Food and Agriculture Organization of the United Nations (FAO), the Netherlands Development Organisation (SNV), the Sudd Institute (a national South Sudanese independent research and advocacy body), and UN Environment (UNEP). ACTED and Concern were the main implementing partners, with other organisations providing technical, research or local expertise where appropriate, and where they had comparative advantage. SNV withdrew from South Sudan in 2016 as a result of the conflict.

In keeping with the spirit of organisational learning, the various articles in this collection highlight both the success and challenges that the project encountered. For example, the article that focuses on the Self-Evaluation and Holistic Assessment of Climate Resilience of Farmers and Pastoralist (SHARP) tool looks at how the tool was utilized and what lessons should be learned to improve future iterations of it. Similarly, the article on the Community Animal Health Workers model seeks to improve the viability of the model through the incorporation of a market systems approach. This modification of the model is based on the experiences of project staff.

BRACED in South Sudan was a programme that applied climate-smart approaches across a range of adaptation and livelihoods activities which were implemented through established or new community institutions and governance structures; and linked to sub-national and national institutions. The focus on processes of trust-building and cooperation were critical in a conflict affected setting such as South Sudan. The scope and depth of the programme were important in exploring what worked and what did not work so well to improve resilience to shocks and stresses.

The diversity of issues addressed in this collection illustrates how inherently complex it can be when seeking to effectively improve resilience outcomes in a context like South Sudan. As I conclude, I want to thank all those who have made the current issue of Knowledge Matters a reality. I hope you enjoy reading the articles and that they give you a better insight into Concern's approach to resilience.

**Nellie Kingston**

# A synthesis of lessons from the Improving Resilience in South Sudan Project



By Nellie Kingston

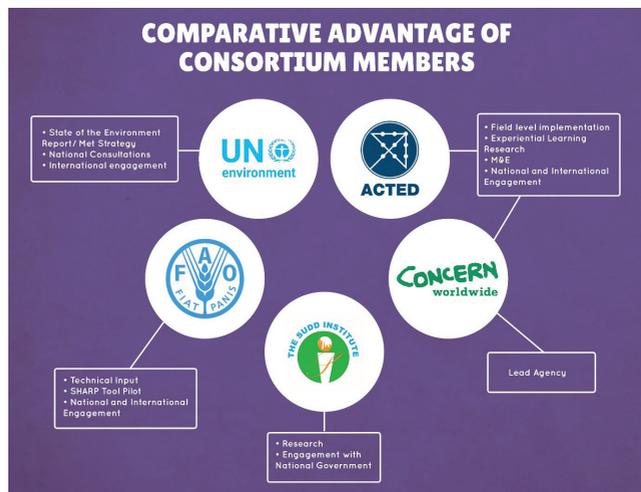
## Introduction

The Improving Resilience in South Sudan (IRISS) project – funded by DFID’s Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme – sought to increase resilience to drought and floods for targeted communities, especially women and girls, while also contributing to evidence-based learning related to developing climate change resilience in complex and conflict contexts. After just over three years in operation, the BRACED-IRISS project came to an end on 30 June, 2018. This article summarises the main lessons from the project.

## Structure and locations of BRACED-IRISS

The BRACED-IRISS project was implemented by a consortium led by Concern Worldwide, and including ACTED (formerly known as the Agency for Technical Cooperation and Development), The Food and Agriculture Organization of the United Nations (FAO), the Netherlands Development Organisation (SNV), the Sudd Institute (a national South Sudanese independent research and advocacy body), and UN Environment (UNEP). ACTED and Concern were the main implementing partners, with other organisations providing technical, research or local expertise where appropriate, and where they had comparative advantage. SNV withdrew from of South Sudan in 2016 as a result of the conflict.

**Figure 1:**  
How ACED-IRISS works  
as a consortium



## BRACED-IRISS activities

### 1. Improved agriculture and diversified livelihoods

#### *Agro-pastoral field schools (APFS)*

BRACED-IRISS used the **agro-pastoral field school (APFS)** model to transfer skills and technologies to support more resilient agricultural and livestock production. The schools used demonstration plots to showcase a range of improved practices, including row planting, animal traction, soil and water conservation measures, etc.

#### *Learning*

The APFS model emerges as one of the key factors in improving resilience to shocks, as well as increasing food security for the community. Row planting and animal traction in particular were often cited as practices that members of the targeted communities valued and would continue to use after the conclusion of this project.

#### *Community animal health workers (CAHW)*

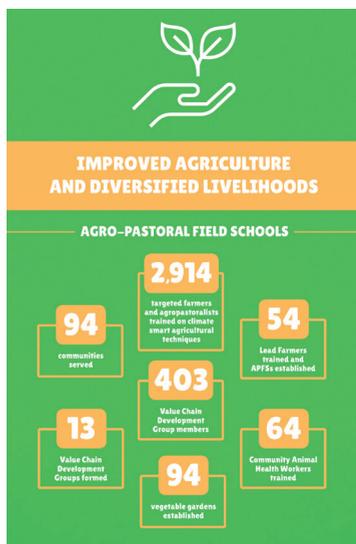
Selected members from each APFS group were trained on animal health (diagnosing and treating pests and diseases affecting livestock) in order to operate as a **community animal health worker (CAHW)** – providing animal health services to the other group members and wider community. The CAHW model was developed for basic veterinary and livestock support service provision in rural areas with a lack of access to such services. CAHWs are generally male or female individuals who are interested in or have experience of livestock raising.

#### *Learning*

The introduction of CAHWs was, as noted in the final evaluation report, effective to a point. The limited geographical reach of the workers, and issues around regular and affordable access to the necessary drugs, did affect the service. However, given the central role of livestock in the target communities, having access to veterinary services, and disseminating learning on preventative animal health care and husbandry has improved resilience and food security.

#### *Value chain development (VCD)*

**Value chain development (VCD)** activities were intended to help the target communities derive more value from their existing work and agricultural produce. This included support with developing dry-season vegetable production as a business, adding value to groundnuts through shelling and grinding, and joint marketing. Those involved were taught business skills, better post-harvest processing and value-addition activities, which enabled them to run small-scale businesses.



### Learning

The effectiveness of VCD activities was mixed. Adding value through introducing improved, short-season hardy varieties of seeds and other inputs, and demonstrating improved agricultural techniques was successful. Increasing instability – both economic and conflict-related – played a part in disrupting VCD activities during implementation.

## 2. Social protection mechanisms

### Village savings and loan associations (VSLAs)

#### Village savings and loan associations (VSLAs)

were a core component of social protection mechanisms. VSLAs were, in some cases, integrated into the APFS activities to enable farmers and pastoralists to invest in business opportunities and maximise their incomes. Members were trained on the VSLA approach, administrators were identified from within the group, and cash boxes and other materials were provided to members.

### Learning

VSLAs proved to be well-suited to the context, and were one of the major successes of the intervention. Even though South Sudan was in a period hyper-inflation, rapid turnover of savings into income generating activities by members mitigated potential losses to an extent. For example, the proportion of the Self-Evaluation and Holistic Assessment of Climate Resilience of Farmers and Pastoralists (SHARP) survey respondents who reported having **any savings** rose by 34 percentage points between the baseline and endline: from 22 to 56 per cent. With even a modest investment, members were in a stronger position to absorb and respond to shocks.

VSLAs also plugged a gap and gave communities a means of accessing affordable credit and in doing so encouraged the growth of **income generating activities** such as making and selling bread, tea and alcohol, or buying livestock or produce and selling in town for a profit (selling for around double the price was common).

These benefits were felt most profoundly by women. The VSLAs enabled women – in many cases, for the first time – to decide how and how much to save, when to withdraw savings, and how to spend or invest newly-available credit, without the approval of their husband.

## 3. Adaptation and disaster management planning

From this package of interventions, two were designed to be mechanisms for raising awareness of the problems communities were facing – or might face in future – and of potential solutions and adaptations to mitigate these. **Community Resilience Planning Committees (CRPCs)** and **School Environment Clubs (SECs)** both sought to educate communities – adults and children – about climate change and promote adaptive actions.



### Community resilience planning committees (CRPCs) and Cash-for-assets (CfA)

CRPCs were the main mechanism for introducing adaptation and disaster management planning. They were made up of community members and local leaders, all of whom received training – including on **community managed disaster risk reduction (CMDRR)**.

#### Learning

Although CRPCs often lacked the resources to enforce their action plans, the engagement of traditional and local government leadership was a positive model for future structures of this type. Also, when the economic situation deteriorated in South Sudan during the BRACED-IRISS interventions, the **Cash-for-Assets (CfA)** scheme ultimately added resources to households and communities and strengthened the legitimacy of the CRPCs, boosting their mandate.

### School Environment Clubs (SECs)

The programme established 19 **School Environment Clubs** as a pilot in 17 selected primary schools as a way of introducing environmental and climate-change topics to students. SECs were also supported to do practical activities including tree planting and vegetable growing. A trainer's guide, complete with teaching modules, information and educational materials was produced as part of the SEC pilot. Following a Ministerial Order in November 2017, school environment clubs were to be established in all schools in the Republic of South Sudan.

#### Learning

The School Environment Clubs demonstrate that well-designed interventions can generate their own momentum within and beyond the initial target community, and be sustained into the future.

The SEC model is not without its challenges. These include, the high turnover of teachers in South Sudan – some trained teachers have moved on, taking the capacity with them – and theft of SEC trees, plants and tools. Continued support for activities is required as the education system adopts school environment clubs nationally.

### Community led total sanitation (CLTS)

Improving water, sanitation and hygiene practices are key elements of the **Community led total sanitation (CLTS) approach**. By educating people on the risks and hazards of poor sanitation, the community assumed responsibility for long-term behaviour change. As a result, most sites under the BRACED-IRISS CLTS schemes became open defecation free (ODF).



### Learning

A positive outcome of the CLTS activity was that the local government adopted the CLTS method in discussions with other NGOs in the area, preferring WASH activities to be community-led. This augurs well for the long-term sustainability of the CLTS initiatives.

### Climate forecasting

One important assumption that informed the selection of activities for BRACED-IRISS was that the lack of access for farmers and agro-pastoralists to accurate weather forecasts was restricting their ability to anticipate – and adapt to – changing climate patterns and adverse weather events. Therefore a pilot of the **climate forecast model** was a key plank in the Disaster Risk Management (DRM) package. It provided farmers and agro-pastoralists with practical weather forecast and early warning information, and related advice on interpreting this information.

### Learning

Following extensive consultation and analysis based on the climate forecast model pilot, a “Strategic Plan for the South Sudan Meteorological Department (SSMD) 2018–2023” was produced. The plan recommends the maintenance of effective meteorological data collection points, and dissemination of high-quality weather information in ways that are relevant to the local populace.

## 4. Advocacy and policy-influencing on climate change, DRR and agriculture

South Sudan is a new country with an emerging policy framework. There is a dearth of evidence from research to inform policy development. Senior government figures at national and state level acknowledged that the lack of data on the nation’s resources presented challenges for progressing the climate change resilience agenda and that there was scope for programmes such as BRACED-IRISS to make a real and valuable contribution.

		
ADDITIONAL TARGETED IMPACTS	ADDITIONAL TARGETED IMPACTS	ADDITIONAL TARGETED IMPACTS
RESEARCH	POLICY AND STRATEGY	COORDINATION & BUILDING LINKAGES
<p>ETHNOGRAPHIC RESEARCH</p> <p>FLOOD MODELLING AT STATE LEVEL</p> <p>GENDER AND CLIMATE CHANGE IN SOUTH SUDAN</p> <p>CONFLICT AND CLIMATE CHANGE IN SOUTH SUDAN</p> <p>WEATHER FORECAST MODEL RESEARCH REPORT</p> <p>CONFLICT AND LAND TENURE TO BUILD RESILIENCE IN SOUTH SUDAN</p> <p>SEED SYSTEM STUDY FOR RESILIENCE TO CLIMATE CHANGE IN SOUTH SUDAN</p>	<p>PRODUCTION OF POLICY BRIEFS AND A DIGEST OF RESEARCH</p> <p>STATE OF ENVIRONMENT (SOE) REPORT</p> <p>DRAFT METEOROLOGY STRATEGY 2018–2023</p> <p>CONTRIBUTION TO THE UN ENVIRONMENT PROGRAMME ACTIVITIES TO ASSIST THE GOVERNMENT OF SOUTH SUDAN (GOSS) TO FULFIL COMMITMENTS AND OBLIGATIONS UNDER THE UNFCCC TO BECOME A FULL MEMBER OF THE GLOBAL ENVIRONMENT FACILITY (GEF)</p> <p>DEVELOPMENT OF THE NATIONAL CURRICULUM FOR SCHOOL ENVIRONMENT CLUBS WITH THE MINISTRY OF GENERAL EDUCATION AND INSTRUCTION</p>	<p>LAUNCH OF THE RESILIENCE EXCHANGE NETWORK FOR NATIONAL AND INTERNATIONAL NGOS OPERATING IN SOUTH SUDAN AND MEMBERS OF THE SOUTH SUDAN NGO FORUM</p> <p>ATTENDANCE AT THE CONFERENCE OF PARTIES TO THE UN FRAMEWORK CONVENTION ON CLIMATE CHANGE (COP) 21 AND 23</p> <p>ATTENDANCE AT THE GLOBAL PLATFORM</p> <p>ATTENDANCE AT THE UNITED NATIONS ENVIRONMENT ASSEMBLY</p>

The activities described above show some of the core outputs of the BRACED-IRISS's research work, most of which was led by the Sudd institute, alongside the University of Juba, and involving local experts and organisations. The consortium produced reports focusing on subjects unexplored in the literature. Each report contributed a number of important key findings to the climate change and resilience policy debates in South Sudan.

Two outputs were particularly noteworthy. First, the South Sudan's *State of the Environment and Outlook* report 2018 was one of the most important single research outputs of the programme.

Second, the National Adaptation Programme of Action (NAPA) to climate change was a major step in the Government of South Sudan (GoSS) efforts to access Least Developed Countries Funds (LDCF) from the Global Environment Facility and other climate finance mechanisms such as Green Climate Funds.

A number of the programme's research outputs were delayed, meaning they arrived too late to inform the BRACED-IRISS programme (or policy landscape). Despite this, having a national partner leading on some research components, makes it more likely the programme's research will be used in future policy and programming.

One final, but important, measure in the advocacy arena was the establishment of the **Resilience Exchange Network (REN)**. The latter was established in South Sudan and hosted by the NGO Forum. This made it a platform for all national and international NGOs operating in the country. It is already recognised by major stakeholders as an important channel for communications on the growing dialogue on resilience in South Sudan. The network comes together to discuss issues around resilience programming, financing, and delivery of humanitarian and development assistance to populations in need in South Sudan.

## 5. Climate-smart technologies

Cutting of trees for charcoal production was known to be a key driver of deforestation in and around the target communities, which is why **energy-saving stoves** were a relevant intervention. Training and ready-made stoves were given to community-based facilitators and lead farmers.

Some groups with access to water sources that could be used for irrigation also received **treadle pump irrigation kits**. **Climate-smart agricultural practices** – including use of drought or waterlogging tolerant seeds, quick maturing crop varieties, land rotation, inter-cropping, mulching and use of cover crops – were promoted through APFS training/demonstrations, highlighting the overlap and interplay between the packages of interventions.

### *Learning*

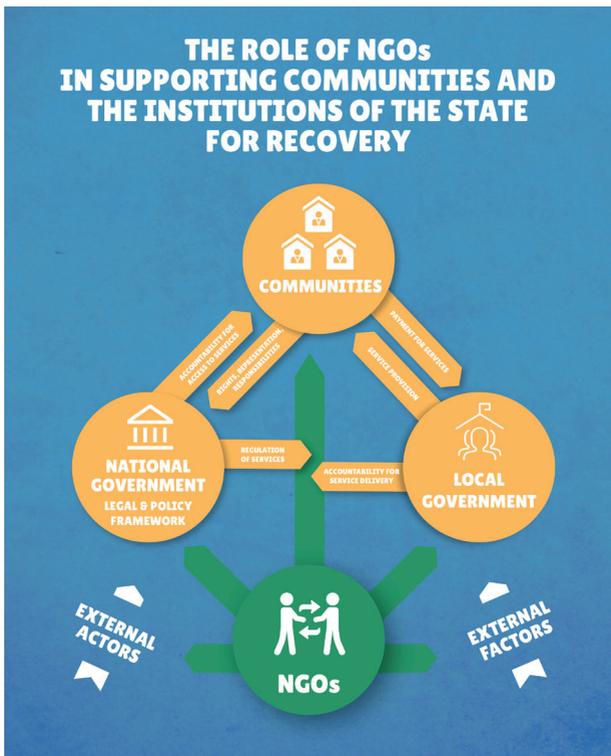
Follow-up training and targeting of women in particular for the introduction of the stoves was a critical element. Some households successfully adapted the design to their own situations (larger cooking pots, for example) demonstrating ownership of the technology.

## Conclusions

BRACED-IRISS was a highly innovative intervention for South Sudan. Aid actors have often focused on short-term humanitarian interventions in contexts like South Sudan. Although there is now a move towards resilience-related programming, and ‘good development’, IRISS was one of the first projects in this area; and certainly the first climate change programme in South Sudan. The fact that it began its work while South Sudanese membership of the Global Environment Facility was a distant dream (resilience work usually begins after GEF membership) was considered particularly forward thinking.

Because the outcomes sought are wide-ranging, the inputs have had to be similarly broad. While the interventions were significant in their own right, the power of the BRACED-IRISS project was in successfully integrating many of these interventions across levels of society and government, and creating connections and mutually-reinforcing structures that support and deliver multiple impacts.

Through joined-up programming, strong and effective partnerships, and culturally sensitive interventions, the BRACED-IRISS project has made significant contributions to new ways of delivering positive change in the lives of the people of South Sudan.



# Routes to Resilience: Insights From BRACED



By Paula Silva Villanueva, Ruth Phillips Itty, Vicky Sword-Daniels

Building Resilience to Climate Extremes and Disasters (BRACED) is the biggest global effort to build resilience locally, in highly vulnerable places, yet at scale. After three years of implementation, the BRACED Knowledge Manager has collated and synthesised evidence from project monitoring reports, to understand how resilience is being built on the ground<sup>1</sup>.

## **Resilience building is not just determined by what you do but how you do it.**

Programmes need to think beyond activities and begin by considering the key processes that underpin resilient outcomes. Project designs need to clearly show the pathway for identifying and assessing the logic, sequencing and integration of the right combinations of activities and actors, in addition to a clear understanding of the processes that will lead to change.

## **Adaptive and flexible programming approaches are essential to deal with potential trade-offs and mitigate the risks of future maladaptation.**

Such approaches are essential to manage the potential trade-offs of addressing short and long-term resilience capacities, maintain the relevance and appropriateness of project activities, and to ensure that communities are not 'locked in' to one pathway that may become obsolete in the future.

## **Addressing climate variability is more important than providing long-term climate information.**

Long-term climate information does not need to be an essential element of building resilience. Projects should make sure that people are able to make choices based on short-term weather information while planning over the longer-term.

## **Building resilience requires equality – projects must move beyond participation of the most vulnerable towards addressing the root causes of exclusion.**

Future projects and programmes should tackle the root causes of social exclusion and reflect realistic timeframes to achieve change from the start.

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<sup>1</sup> For anyone interested the paper on which this article is based is available from the authors.

## **Building resilience is not enough – change also needs to be sustainable and transformational.**

Adaptive, anticipatory and absorptive capacity can be built in ways that are or are not transformational. This depends on whether they affect social and political structural changes, are catalytic, impacting at scale and sustainable. Programmes need to combine community-based projects with national and regional engagements to effectively influence policy and decision making.

## **Going forward: what does this mean for future resilience programmes?**

### **The level of achievement depends on the context.**

BRACED has shown that progress towards results is relative to the starting point. There are different trajectories of change, and projects operating in enabling contexts may see more 'results'. A more nuanced understanding of progress relative to the starting point is needed.

### **There are certain things projects cannot achieve within three years.**

While assessments of progress should be relative to the starting point, there are certain things that projects cannot achieve within three years – some questions require longer time frames to be tested. Future investments should build in and consider these questions from the start:

- How can flexible and adaptive approaches support resilience building?
- Do climate information services lead to better decisions that enhance anticipatory and adaptive capacity?
- How are different capacities drawn upon to tackle different types, magnitudes and recurrences of shocks and stresses?
- How can we track and manage the trade-offs between resilience capacities?
- What does it take to build resilience in ways that are most sustainable? What approaches can influence structural processes towards greater downward accountability, changing broader social norms, and/or sector-wide resilience?

### **Phased delivery would help match design to context.**

To overcome the challenges related to trade-offs of achieving both short and long-term objectives, as well as ensuring sustainable and transformational resilience is built, future programmes should consider phased delivery approaches. This should include longer lead in times for design and allow for a deeper analysis of the context in which the project is working; an extended inception phase to build relationships and trial new ways of working; and several phases of implementation without assuming that full results can be delivered in one project period.

# Building Climate Resilience in South Sudan: Summary of research findings



By Kai Mattturi

Since 2013 South Sudan has been in a protracted crisis brought about by conflict. It is within this context that the UK Aid funded Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme became operational. BRACED supported building national climate resilience at multiple levels within South Sudan.

Climate change is already visible in South Sudan. Farmers, pastoralists, and fishing communities have already noticed increased extreme weather events, increased temperatures, increases in the frequency and severity of drought and flood events and shifting seasonality affecting all aspects of food security within the country.

Research is critical to understanding the full impact of climate change on the lives of people in South Sudan. This article is a synthesis of the research that was undertaken within the BRACED Programme. The research took place between 2016 and 2017. The research covered a number of areas, including:

1. A literature review of existing studies on climate change and gender relevant to South Sudan, as well as, a review of available datasets to determine suitability for understanding associations between gender and climate.
2. A short-term ethnographic research study on perceptions of climate change at local level. This was undertaken using a series of focus group discussions and key informant interviews and observations in Aweil West and Tonj South.
3. A literature review on climate change and conflict and linkages to existing datasets that demonstrated correlation.
4. A quantitative survey of climate information services in South Sudan and how local people react to their dissemination.
5. An analysis of flood risk and people's adaptive capacity to these conditions in the chosen implementation sites.
6. A literature review of the connections between land tenure and climate change.
7. An analysis of seed systems and climate change in South Sudan, with a particular focus on drought and flood resistant Sorghum varieties.

The research uncovered a number of findings.

- Firstly, that climate change and conflict are poorly correlated in South Sudan.
- Secondly, that there is an extensive knowledge of drought and flood resistant sorghum at the local level.
- Thirdly, many communities believe that flood and drought is God-sent and they have low levels of power to tackle it.
- Fourthly, that women are deeply affected by changing climate patterns given their dependence on natural resources.
- Finally, land tenure and the management of commons areas may offer opportunities for peace dividends and conflict resolution.

The above findings offer an opportunity for various stakeholders in South Sudan to work together to bring about meaningful change. These changes will need to occur at micro, meso and macro levels in order to be transformative in nature.

### **Going forward: significance of research findings**

The BRACED intervention has undertaken climate change research under difficult circumstances. However, they have been able to garner valuable insights into climate change resilience in South Sudan.

The capacity to adapt is dynamic and influenced by economic and natural resources, social networks, entitlements, institutions and governance, human resources, and technology. The majority of individuals and groups within South Sudanese society currently have insufficient capacity to adapt to climate change. A greater research agenda around these key areas needs to grow over the next number of years in South Sudan.

There are opportunities to identify local best practice and integrate more modern science and engineering. Research on the design and implementation of these practices, plans and the lessons that can be extracted is needed. Further analysis of underlying stressors of hazards, the drivers of vulnerability, and opportunities for connecting sectoral pressures and climate change can lead to better humanitarian and development outcomes.

Ultimately, research of this nature is to inform better adaptation planning (including for defensive infrastructures) and at the same time incorporating other actions seeking to reduce social vulnerability.

Adaptation planning and implementation can ultimately benefit from holistic approaches afforded by linking adaptation to development; by coupling adaptive improvements in infrastructure with ecosystem services, governance, and community welfare; by improving community resilience through enhancing local ownership; and by creating organisations able to respond to climate change issues through increased adaptive capacity. All of these offer up potentially significant areas of research in the years ahead.

Finally, for anyone interested in reading more about the research, the report can be found at the following URL: **[www.concern.net/insights/building-climate-resilience-fragile-contexts](http://www.concern.net/insights/building-climate-resilience-fragile-contexts)**

# Drivers of conflict in Aweil North, Aweil West and Tonj South: Insights from BRACED-IRISS



By Alan Boswell, Zoé Maugère Ciupa, Nellie Kingston with input by Caitriona Dowd

## Introduction

Building Resilience to Climate Extremes and Disasters (BRACED) is the biggest global effort to build resilience, in highly vulnerable places, yet at scale. As part of this initiative, Concern along with other consortium partners in South Sudan, commissioned research to explore the drivers of conflict in Aweil North and West and Tonj South. In this article, the authors have synthesized the evidence captured, to better understand how conflict-sensitive programming can be implemented successfully.

## Key findings

### Access to and Use of Water Points

Conflict over water resources is an issue common to all areas, and a majority of communities point to an increase in such conflict in recent years. However, the frequency and intensity of it varies. All communities involved in the research (with the exception of Angol in Aweil West) reported experiencing physical violence as a result of limited water access and availability.

### Access to and Use of Products from Woodlands and Pastures

When households lose their assets (such as farming land), they compensate by collecting natural resources, especially firewood for use or sale. As this coping strategy is used by more community members it forces others to migrate in search of resources. The increase in households relying on natural resources, the movement of household members in search of resources, and the reduction of resources available all combine to increase tensions and the likelihood of conflict. This problem is evident in the Tonj area bordering Gok, a neighboring rival area. In Malualdit, it was reported that rival community members detain household members found in their area, hoping to retrieve information on the location of cattle. Extreme incidences of violence were reported, including the use of torture and rape, to extract information.

### Access to and Use of Products from Rivers

Conflict over fish and fishing territory follows a similar pattern to conflict over other natural resources. In Northern Bahr el Ghazal, communities highlighted that climate change is having an effect on fish stocks; while in Tonj South, communities reported attacks from members of rival communities at the river.



The photo shows women taking firewood back to their homesteads, Aweil West, South Sudan. Photo by BRACED, 2017

## **Access to and Use of Land**

There are various types of disputes related to land access and use in both Tonj South County and Northern Bahr el Ghazal. The two main categories of conflict are disputes within or between communities; and disputes between ethnic groups. Land disputes within communities are mainly due to conflict over arable lands, and are often of low intensity. Land disputes outside of the immediate community have various causes and are more difficult to resolve due to power struggles between different actors and community leaders. These cases are usually of higher intensity and can result in serious injuries or death.

## **Access to and Use of Land for Different Livelihood Systems (Pastoralism and Farming)**

Conflicts related to crop destruction are of concern to populations in both Northern Bahr el Ghazal and Tonj South alike. These occur in the rainy season during cultivation, and also during the dry season, when women grow vegetables. In Tonj South, disputes over crop destruction are reported to be more intense than in Northern Bahr el Ghazal, with some exceptions. The decrease of pasture and agricultural land, combined with an increase of people relying on these, leads to increased conflict and tension between pastoralists and farmers.



This photo shows a protection of civilian site in Juba, South Sudan. Photo by Steve De Neef, 2018.

## **Power Dynamics**

Four of the main conflicts identified by respondents can be categorised under the power dynamics theme. These conflicts are 1) power struggles between community leaders, 2) conflict over border closures, and inflation, 3) migration to Sudan, and 4) depletion of commercial assets and erosion of coping strategies.

### **Power Struggles between Community Leaders**

Power struggles between community leaders is a problem that every community is familiar with, although they appear to occur relatively infrequently. Existing mechanisms to settle power struggles generally prevent escalation to widespread violence. When a case escalates, the power struggle is not a major concern for the community as it is limited to community leaders in competition. Escalation seems to be more common in Tonj South County than in Northern Bahr el Ghazal, where communities did not report issues around power struggles.

### **Conflict over Border Closures and Inflation**

Since March 2018, the border between Sudan and South Sudan - located in Aweil North - was closed, preventing traders from Sudan from crossing the border. Traders from Sudan are the major suppliers to the markets in these areas. Communities reported that their wellbeing and food consumption are linked to the availability of goods, inflation and price fluctuations. This exacerbates tensions over markets as poverty and community members experienced heightened levels of hunger.

## Migration to Sudan

Migration to Sudan has recently increased sharply. Some community leaders and chiefs reported half of the households in their community have left. Chiefs are not being informed when households plan to leave, as they fear negative reactions. Households that decide to cross the border are desperate and view migration as a last resort. Within communities, almost every household considers migrating to Sudan due to poverty and hunger.

## Depletion of Commercial Assets and Erosion of Coping Strategies

### Cattle Raiding

Cattle are perhaps the most important commercial asset of rural households. Cattle raiding is a major issue in South Sudan and has a severe impact on the household economy. Cattle raiding was reported as a major issue in Tonj South; however less pronounced in Northern Bahr el Ghazal, where the population is largely spared from cattle raiding. In Tonj South, cattle raiding is considered the most important conflict affecting the population with the exception of the community in Kuanja, who are mainly from the Bongo and Luo ethnic groups and do not keep cattle.

### Conflict over Bride Wealth

Conflict over pregnancy outside of marriage is a very frequent problem raised by every community encountered in Tonj South, Aweil West and Aweil North. It is one of the most prevalent sources of conflict along with conflicts over water and cattle raiding in Tonj South. Households consider their daughters as having an economic value because the family expect a dowry in return for her marriage. A pregnant daughter is often viewed as a loss of family income, as the bride wealth transferred through the dowry is lost or reduced.



**When hostile relationships are reified and lines of division between communities harden, communities may begin to identify ethnic difference itself as a cause of violence, rather than the underlying power relationships and issues of dispute between groups**

### Going forward: what does the research mean for conflict-sensitive programming?

First, the research shows that Aweil North and West, and Tonj South all face similar ecological problems, but differ in terms of their governance and political contexts. This research identified stronger institutional and coercive power in Aweil North and West to prevent, adjudicate and resolve conflicts. Those interviewed also reported less perceived communal conflict, which could correspond to its relative ethnic homogeneity, and potentially, to higher levels of social capital. This leads to much greater violence at communal levels in Tonj South, while in Aweil North and West, levels of violence are generally contained. Instead, the same tensions in Aweil North and West manifest primarily as increased interpersonal strife and household stresses that do not trigger large-scale conflict.



This finding is significant because it underscores the importance of social, political and economic factors in the relationship between climate change and conflict. For example, scarcity of natural resources can be both a trigger, and a more underlying driver, of conflict, but this alone does not adequately explain the extreme levels of insecurity in Tonj South, in particular. Instead, insecurity appears to stem from institutional deficits, political factors, and power struggles. Scarcity may drive interpersonal conflict and strife within communities, but wider rates of conflict in Tonj appear to stem from other factors that are primarily political.

Second, the research highlights the inter-relationship between conflict at different levels in South Sudan, and how this has been transformed in recent years since the onset of the civil war. For example, communities reported that they have no effective means of mitigating the power struggle between leaders. This speaks to the changing nature of conflicts after South Sudan's state formation, in which power struggles for state rents, positions, and boundaries often overlap with or fuel communal conflicts. The shifts in local power structures since South Sudan's independent rule, and correlated surges and declines in state rents, has strained and often overwhelmed existing formal and informal mitigation strategies.

Relationships between communities at the local level that might otherwise have been reasonably positive, or at least not deteriorate to large-scale violence, can also be transformed by conflict. When hostile relationships are reified and lines of division between communities harden, communities may begin to identify ethnic difference *itself* as a cause of violence, rather than the underlying power relationships and issues of dispute between groups. The consistent challenges reported with effectively resolving and mediating violence *between* communities should refocus attention on mitigation and resolution efforts, and provide an opening for actions that can contribute to breaking this cycle.

# Experiences with using the Community Resilience Planning Committees



By Nellie Kingston with input from Kai Matturi

## Introduction

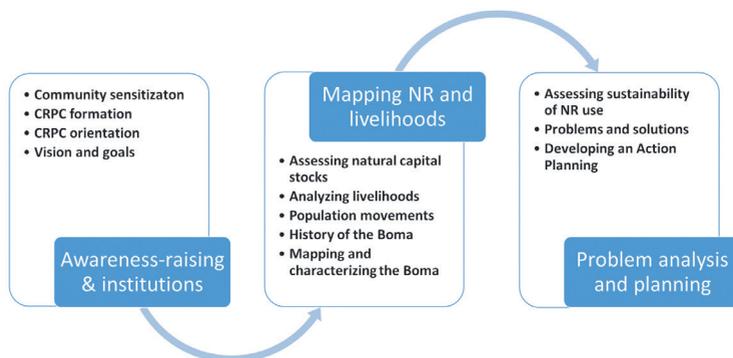
As part of the drive to generate evidence under the Improving Resilience in South Sudan (IRISS) project, Concern commissioned a study to consider the role of the Community Resilience Planning Committees (CRPCs) in building resilience. The aim was to analyse the issues and attributes relating to this project. The study compared high-performing and low-performing CRPCs, identified during the final evaluation of the project.

County and community level CRPCs were established and supported in the IRISS project areas to manage the natural resource base and to plan disaster risk management (DRM) activities. This activity was part of the wider implementation of *Adaptation and Disaster Management Planning* – which also included Community Led Total Sanitation (CLTS); the Weather Forecast Model pilot; and School Environment Clubs (SECs).

## Functions of a Community Resilience Planning Committee

The set of core activities that all CRPCs conduct are as follows: **Awareness raising** on natural resources in the community, disasters and climate change; **controlling bush fires**; **controlling tree cutting**; and **identifying, helping design and implementing flood control measures (dykes)**.

Depending on the CRPC, other activities include: flood-proofing road **access**; identifying, helping design and implement water storage measures (valley **dams/ponds**); **tree** planting; community problem solving and **conflict resolution**; addressing unsustainable **resource** use; **income** generation; and being the **"eyes and ears"** of the community". All CRPCs were established using the process illustrated below.



**Figure 1:**  
The process for establishing CRPCs

A total of 19 CRPCs were established under the intervention with 324 members. CRPCs developed Boma-level <sup>1</sup>Committee Action Plans in 49 Bomas. Community assets established under the Cash-for-Assets components enabled the construction of a number of community assets.

The management of Cash-for-Assets is particularly important given its potential as a safety net for communities in times of stress. The management of community assets and their design require technical solutions, potentially beyond the capacity of communities. Linking the CRPCs to such technical capacity; and also to the structures envisaged in existing policy documents (e.g. the South Sudan Land Act (2009) ensure that the approach is fit for purpose and can be readily adopted as a successful working model as capacity within state institutions develops to assume their mandate for natural resource management, early warning systems and weather forecasting activities.

## **Findings and Conclusions**

The study indicated, that the high-performing CRPCs appear less aid-dependent or more self-reliant, and are even self-initiating activities that are not directly supported (such as attempts to control over-fishing, or engaging in tree planting). Reinforcing a culture of self-reliance is hugely important in South Sudan where the capacity of government is weak.

Clear economic benefits from CRPC activities (such as controlling fire) helps attain community buy-in, alongside effective awareness raising and support from traditional leadership. The CRPC model has the potential to be instrumental in supporting stronger resilience programming. Economic benefits were reported from the control of bushfire and deforestation including significant increases in thatch harvested for sale, better access to pasture, and better availability of wild foods and fruits, both for consumption and sale. Burning and tree cutting were reduced but not stopped – burning to control pests and encourage fresh grass growth for cattle still continues in some areas.

An important Disaster Risk Reduction (DRR) measure is the construction of dykes. The experience during the project raised questions as to whether the dykes actually reduce flooding enough to protect production during the main growing season; without deflecting floodwater from one community into another, exacerbating flooding elsewhere. Designing community assets as part of a watershed approach would yield better results.

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<sup>1</sup> This is the lowest level administrative division.

The study also highlighted the factors that contribute to **operational constraints**:

- Firstly, CRPCs are a mechanism for bringing together government administration with traditional leadership and stakeholders as a risk-focused governance body. The CRPCs were established largely independently of government administration structures, mainly because of changes to the States in South Sudan during the early stages of the implementation of the CRPC component of the project. The changes in the local administrative structure (going from 10 States to 28, and subsequently to 32) affected the effectiveness of the CRPCs and its ability to drive change in the programme, although this is an issue that can be addressed with time.
- The second factor is that, in the absence of strong local governance structures in South Sudan, the effectiveness of the CRPCs was compromised, and also led to more difficulties in embedding the structure into local administrative processes than previously planned.
- A further issue lay in the set-up of the CRPCs: the roles identified above overlapped with other structures such as the Agro Pastoral Field Schools (APFS). While both of these had different member-selection criteria, some programme participants were members of both.

## **Recommendations**

- A **governance review of the CRPCs** as they pertain to the APFSs and Local Authorities, ensuring that CRPCs are **sufficiently capacitated at the right level** to execute key duties.
- The CRPCs need sufficient resources to carry out **essential advocacy work** to strengthen National Level commitment to local resilience building in Aweil and Warrap States.
- Focusing on a stronger **integrated Disaster Risk Reduction strategy** considering **catchment based approaches** for flooding and drought risk. This strategy will need to address amongst others land management practices.

# Experiences with using the Community Animal Health Workers Model



By Nellie Kingston with input from Kai Matturi

## Introduction

Raising livestock is one of the main livelihood activities in South Sudan. Access to animal health services is a key requirement in supporting improved livestock health, and therefore improved resilience. The Improving Resilience in South Sudan (IRISS) project aimed to improve community access to animal health services through identifying selected individuals in Agro-Pastoral Field Schools to be trained as Community Animal Health Workers. There were two main objectives: improving access to animal health care services; and establishing an income generating opportunity for the selected community member.

## The Community Animal Health Worker Model

The Community Animal Health Worker (CAHW) model was developed for front line basic veterinary and livestock support service provision in rural areas underserved by formally qualified public or private veterinarians.

Community Animal Health Workers are generally male or female individuals who are interested in or have experience in livestock raising. They often have a basic level of education and are respected members of the community. They are generally physically fit and potentially have access to transport such as a bicycle. They are trained on the skills to diagnose and treat basic livestock diseases or refer livestock owners to veterinarians. Community Animal Health Workers are often provided with basic tools and pharmaceutical supplies. They are generally not formally accredited and the duration and the content of training provided varies.

The roles and responsibilities of Community Animal Health Workers differ depending on the context: in some countries they are not permitted to inject drugs into animals while this is permitted in other countries, including South Sudan. They can also be linked to a system of animal health service provision usually the district local government with which they can be registered. This enables them to access further support in terms of training, supervision and stipends for undertaking specific, periodic tasks such as disease surveillance or vaccinations.

The financial viability of the CAHW model is an ongoing challenge. Often governments or NGOs work with Community Animal Health Workers over a number of years, helping them to develop their business skills and gradually reducing the level of support (e.g. provision of free drugs) each year. The ability of Community Animal Health Workers to continue working is often related to the strength of the system and relationships with other components of the animal welfare system, for example public or private veterinarians, and district animal or livestock departments.

## Why adopt the Community Animal Health Worker Model?

The Community Animal Health Worker model was adopted in the IRISS project for a number of reasons:

- The target area is remote, marginalised and generally poorly serviced by public and private animal health care services.
- The model is appropriate for the context. It is not new to South Sudan and was historically used in previous programmes.
- The South Sudanese government supports this model and district local governments, with donor funding, have used Community Animal Health Workers to undertake vaccination campaigns in response to disease outbreaks.
- Raising livestock is a key livelihood activity in the target locations of Aweil North and West, and Tonj South.

A total of 64 community members participating in Agro-Pastoral Field Schools were trained as Community Animal Health Workers (56 men and 8 women). Training included general information on livestock health, basic anatomy and physiology, common diseases, steps in diagnosis and drugs administration and storage. The total duration of the training was 15 days.

The training package was designed and delivered by the State Ministry of Agriculture, Animal Resources and Fisheries. The aim of the training was to improve access to livestock health services. Livestock morbidity and mortality were identified as key household and community risks using participatory risk analysis. The project aimed to mitigate these using a package of support that included improving access to preventative and therapeutic animal health care services.

The results of implementing the Community Animal Health Workers model were mixed due to the challenges of the context; as well as design and implementation issues. The reasons for this stem from supply and demand challenges:

- On the supply side, many Community Animal Health Workers were not accessible to livestock owners due to lack of transport and distance; they were unable to access and supply veterinary drugs (high levels of inflation rendered drugs prohibitively expensive); and finally, connections to suppliers and traders were also difficult.
- On the demand side, there was poor demand for animal health care services as agro-pastoralists did not prioritise animal health care services. In some cases, the members of the Agro-Pastoral Field School did not raise livestock and their activities were entirely agricultural. Households were not willing to pay for animal health care services as other NGO projects were providing these services for free. Some households did not trust the Community Animal Health Workers, nor consider the individual suitably qualified to provide the service based on the amount of training provided.





The photo shows an Agro-Pastoral Field Schools session in Warcueli Aweil 2017. Photo by Concern Worldwide.

### Success factors in relation to the model

From the experience of implementing the CAHW model five key factors for success are disused below. Not all of these interrelated conditions need to be met, however together they increase the likelihood of success.

1. **The human factor** comprises such qualities as status and level of the community member involved in the design and selection process. Community Animal Health workers should be recruited from trusted, respected and competent community members who have a minimum level of education. They should possess entrepreneurial ability and already operate a successful business. This is critical as Community Animal Health Workers would need to provide services to a wide client base to ensure financial sustainability. There are implications for using poverty based targeting criteria as the conditions that cause and maintain poverty also impact on ability to perform the role. The key consideration and emphasis when targeting individuals for training is enabling access to animal health services to the broader community.
2. **Skills and Level of Training** refers to levels of skills required for the model to generate demand. Key to this is the length and quality of training which is linked to accreditation. Community Animal Health Workers should be trained locally with input from communities; local veterinarians and qualified experts; and government services feeding into curriculum design. Community Animal Health Workers need to be trained in vaccinating against or responding appropriately to the diseases that occur in animals that most people own in the area. Given the demand issues associated with uptake of CAHW activities, involving traditional authorities in some of the training sessions lends weight to this aspect of livestock husbandry.
3. **Connections** refer to the degree to which Community Animal Health Workers are part of a broader system of animal health service provision by the state, public and private sectors. Factors include whether they are supported politically or by the policy framework; the degree to which they are supervised or managed by public authorities or supported by the private sector; linked to drug supply chains and referral systems; or supported through membership of an association.

4. **Financial Sustainability** is key if the model is to be successful. If Community Animal Health Workers have the entrepreneurial ability, other factors for financial sustainability need to be considered, for example, being part of a wider system and provided with supervision, further training or stipends by the state, private sector and NGOs. Providing services at a profit, or at least that the returns are sufficient to justify the activity, requires a high level of demand for services and a sufficient market.
5. **Roles and Responsibilities** is related to the types of services provided by the Community Animal Health Workers. The role for Community Animal Health Workers should not be limited to front line health service provision and should include other potential roles, such as disease surveillance and provision of information. The networks or connections the Community Animal Health Workers have with broader animal support service provision should be reflected in their role and responsibilities.

In a fragile context like South Sudan, none of the necessary systems and connections were in place in any meaningful sense. These include weak market development (constraining access to drugs and veterinary supplies, private veterinarians to provide support) and weak or non-existent capacity at the local government level (lack of or inability of public livestock and other veterinary services to provide support and supervision). Sufficient local demand for services; willingness or ability to pay; and the perceived quality of service relative to local knowledge are additional factors to gauge in order to assess the likelihood of success of adopting the Community Animal Health Workers model.



**The provision of animal health services through Community Animal Health Workers benefits from taking a systemic view in terms of the design and implementation of interventions from a market perspective**

### **Going forward: A Systemic Approach to the design of the Community Animal Health Worker Model**

The provision of animal health services through Community Animal Health Workers benefits from taking a systemic view in terms of the design and implementation of interventions from a market perspective. Supporting functions and enabling environmental factors identified through a market system analysis considerably increase the probability of success and sustainability.

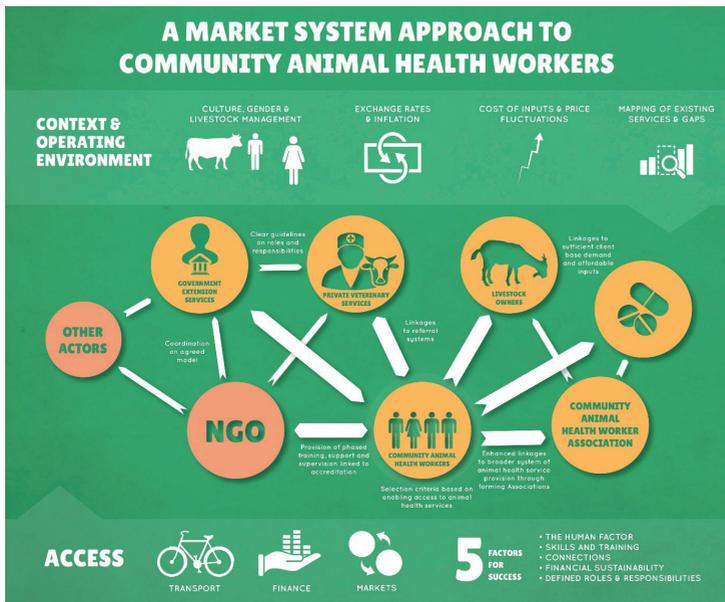
A successful Community Animal Health Worker Model should consider which market conditions are required for an objective to be achieved (such as establishing self-sustaining community-based vendors of veterinary drugs); and to assess the extent to which these are in place and, if they are not, how the programme could support the missing link(s) in the value chain to be put in place. Market system analysis would begin with an analysis of:

- Animal health care goods and services available or potentially in demand;
- Main chain of actors involved;
- Supporting functions; and
- Enabling environmental factors.

A decision tree answering the question “Should we use the CAHW approach?” considering the above factors would engage the communities in a process to ensure their commitment to investing in this service over another. This would be complemented with design considerations answering the questions “Who should be CAHWs? What should they be trained in? How do we involve the community? etc.”

Strategies to build the kind of supporting networks in terms of public and private veterinarian supervision, and more effective livestock services at the local government level can be built with sustained funding and support which should be factored into the programme from the start. The exit or transition strategy, depending on an agencies planned presence in an area, is critical to ensuring medium- to longer-term support. Community Animal Health Workers should be able to operate as independently as possible; and have access to veterinary supplies as a key enabling factor to operate; have access to the main towns and traders.

Forming an association offers an opportunity to address the lack of access to drugs by enabling greater efficiencies in terms of economies of scale through bulk purchases. It also enables all the members to benefit from better connected Community Animal Health Workers within the association. The association offers a medium for peer support as well as being a central point of contact for local government and future NGO projects. As the provision of animal health care services is unlikely to provide sufficient income for a single household it makes sense that it is approached as an additional income source ideally for individuals already operating a small trading business as this enables access to traders from larger towns where animal drugs are available. This is critical as access to drugs, and the ability to trade successfully, rather than skills and knowledge, are a key factor in the success of the model in the context of South Sudan.



**Figure 1:** Market System Approach for a Sustainable Community Animal Health Worker Model

# South Sudan: first state of the environment and outlook report 2018



By Nellie Kingston with input from Kai Matturi

## Introduction

On the 5th of June, 2018 (World Environment Day), the Government of South Sudan presided over the launch of South Sudan's first State of Environment and Outlook Report. 'State of the Environment' reports are critical publications produced by environmental agencies around the world to set the environmental agenda, communicate relevant information about current trends and pressures and develop actions to address environmental challenges. They are important mechanisms to mainstream environmental action across government and raise awareness among government, the private sector, civil society and the general public.

The publication, supported by BRACED-IRISS is the result of a joint study by the United Nations Environment Programme and the Ministry of Environment and Forestry (MoEF). The report acknowledges that the conflict is the major impediment to good governance, the productive use of natural resources and the protection of the country's environmental assets. It highlights the lack of effective institutions to resolve disputes over ownership of natural resources peacefully and the challenges of millions of refugees, returnees and internally displaced persons. It also notes that climate change and natural hazards have further complicated the environmental situation facing the country. The report recommends strengthening of institutions, especially the Ministry of Environment and Forestry, to ensure the protection of the country's natural resources. It also urges the use of the natural resources as a platform for peacebuilding through better accountability, community participation and provision of stronger dispute resolution mechanisms.

## Significance of the report

The State of Environment (SoE) report will help the Government of South Sudan to make informed decisions about its environmental resources and to maintain a sustainable environment in the most effective way possible. It provides baseline information for planners, researchers, developers, etc. The report illustrates the inter-relationship between people, resources, environment and development; and demonstrates the importance of including the environment as an integral part of socio-economic planning and policy processes at the national level.

It provides information for Evidence-based policies and also early warning of environmental problems facing South Sudan, analyses key environmental issues and trends; and identifies the environmental challenges South Sudan can expect in the future. The analysis and

benchmarking of environmental issues assists government, non-government organisations, civil society, media and other stakeholders to monitor progress towards the achievement of national environmental objectives as well as towards international targets such as Multilateral Environmental Agreements (MEAs) and Sustainable Development Goals (SDGs).

The production of the report was approached as a ‘learning-by-doing’ exercise for the Government of South Sudan. The Government worked closely with international experts to build their capacity for environmental analysis and data gathering. The report is expected to serve as an awareness raising and educational tool for planners and decision makers; and as an important strategic tool to disseminate environmental and climate change concerns to a wider audience both locally and nationally.

### **Scope of the report**

The report provides a brief introduction to South Sudan, its environmental features and characteristics, followed by a summary of the major driving forces of environmental change in the country, to set the context and provide background. Thematic chapters describe the major pressures on the environment in South Sudan and assessment of their impacts on ecosystem goods and services, and human well-being. Human activity exerts pressures on these ecosystem goods and services. Examples include farming, grazing, fishing, timber and non-timber harvesting, mining, as well as constructing roads, settlements, energy and other infrastructure. In turn, these pressures usually have detrimental impacts on land, water, air and biodiversity, ranging from the loss and degradation of land and water resources, to air and water pollution.

The report provides data on the status of the country’s environmental assets, showing their present distribution, and analysing the trends in their quantity and quality over time. The report makes a major contribution to building a baseline of information about the state of South Sudan’s environment against which to measure future change. The information contained in the report provides the foundational environmental knowledge upon which to build, as the country increasingly develops the infrastructure and capacity to monitor and measure the state of its natural resources. The final chapter provides the outlook and recommendations for South Sudan to address its environmental challenges and achieve the Sustainable Development Goals.

### **Key takeaway**

The overall message emanating from the report is that South Sudan’s natural environment provides abundant environmental goods and services that offer multiple opportunities for economic development and improved livelihoods; it is a fragile endowment, however, that must be managed sustainably to support the livelihoods of present and future generations.

The full report can be read at the following URL:

**[www.unenvironment.org/resources/report/south-sudan-first-state-environment-and-outlook-report-2018](http://www.unenvironment.org/resources/report/south-sudan-first-state-environment-and-outlook-report-2018)**

# Experiences with using the SHARP tool



By Nellie Kingston with input from Kai Matturi

The **S**elf-Evaluation and **H**olistic **A**ssessment of Climate **R**esilience of Farmers and **P**astoralists (SHARP) is a digital evaluation tool developed by the Food and Agriculture Organization of the United Nations (FAO) to assess the climate resilience of vulnerable farmer and pastoralist households. The tool is based on Cabell and Oelofse's<sup>1</sup> 13 agroecosystem indicators of resilience, from which SHARP provides a set of 54 scientific questions for participants in the survey. These questions can be tailored to each unique use case – in this instance, to the South Sudan context.

The Improving Resilience in South Sudan (IRISS) project used the SHARP tool in a study for baseline and endline data collection and analysis to identify the areas of greatest need in improving the resilience of vulnerable farmers and pastoralists. A community consultation exercise was carried out to validate the study's findings and to explore the experience of using the tool, providing useful learning on how best to monitor and evaluate future climate resilience programmes<sup>2</sup>.

## Key findings

The SHARP data shows that the BRACED-IRISS project has been effective in increasing resilience. The composite **resilience scores of all resilience components increased** (except for 'access to market information'), with **the average of all composite resilience scores increasing 15%** – from baseline to endline.

**Gender was a key cross-cutting plank** of the BRACED-IRISS theory of change, with improvements in resilience for women and girls seen to be particularly necessary *and* beneficial. **Both female and male respondents increased their composite resilience score** between baseline and endline. The composite resilience score for women was lower at the beginning and overtook the score of men by the end of the project.

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1. Cabell, J. F., & Oelofse, M. (2012) An Indicator Framework for Assessing Agroecosystem Resilience. *Ecology and Society*, 17(1), 18.

2. For anyone interested the paper on which this article is based is available from the authors.

**Table 1:** Areas of climate resilience

Areas of Climate Resilience	% Change between baseline and endline (NBEG)	% Change between baseline and endline (Warrap)	% Change Overall
Area 1: Agricultural practices	16.73%	1.21 %	9.47%
Area 2: Environmental factors	38.61%	18.06%	20.40%
Area 3: Social factors	19.06%	46.42%	17.68%
Area 4: Economic factors	67.56%	12.99%	20.06%
Overall resilience score	27.52%	14.11%	15.04%

## Advantages of using the SHARP tool

### Adaptability

Whilst the tool in its original form is made up of 54 question sets covering five key areas of climate resilience,<sup>3</sup> the tool can be easily adapted for specific use cases. Its modular design, with some questions marked as mandatory and some as optional, means that questions can be removed from the tool in cases where they are not relevant or applicable, as was the case in the pilot study.

The tool can be further modified and streamlined by selectively measuring only one or two of the three SHARP scores, if this is more suitable for a particular study. The newly released SHARP+ tool is designed to address issues that arose during the pilot of the tool during the IRISS project. It measures the academic and adequacy scores to give stronger, more objective weighting to the data and to reduce the time required for interviews.

### Direct Evidence

As the tool is based on one-on-one interviews with the people being targeted for assistance, it identifies the activities that are prioritised by them in building resilience and is the basis for discussion when decisions need to be made on selecting one activity over another.

This change of viewpoint (from a researcher's perspective to a participant's) can highlight issues or challenges in the target community that could not be identified from a purely academic standpoint. For example, within the baseline sample of environment factors 'access to water' is rated as a fourth priority by the academic score but as first priority by importance score. This means that, while access is sufficient, participants still see this as a pressing issue in improving their own resilience (see Table 2).

<sup>3</sup> These areas are agricultural practices, governance, environmental, social and economic.

**Table 2:** SHARP scores related to environmental factors

Factor	Ranked Score (Actual)			
	Academic	Adequacy	Importance	Resilience Priority
Access to water	4 (3.47)	2 (4.41)	1 (2.07)	4 (9.95)
Access to land/ ownership	1 (6.24)	1 (4.79)	2 (2.37)	1 (13.39)
Leguminous plants	2 (4.68)	3 (2.78)	3 (3.88)	2 (11.32)
Fertilisers	3 (3.60)	5 (2.11)	5 (4.85)	3 (10.54)
Land management practices	5 (3.22)	4 (2.65)	4 (4.10)	5 (9.94)

### Easy Comparison

Data collection using the SHARP tool returns a wide range of information across many areas of climate resilience. However, as a person's demographic information (such as age, sex and social status) is also noted alongside their answers to SHARP questions, the data returned can be easily grouped in a number of different ways for further analysis. This includes people from different areas, members of either sex or groups with different livelihoods.

This range of associated demographic data allows multiple analyses to be carried out from just one round of data collection. In the pilot study, for example, endline resilience priorities among men and women differed considerably, with the first resilience priority for men, 'market information access', only scoring as the sixth priority for women. This suggests that interventions and support for these groups may need to be targeted differently according to their particular needs.

### Potential Challenges in the use of the tool

#### Data Collection and Analysis

The length of time taken to complete a SHARP interview session was reported to be excessive by some staff and participants (at 1–3 hours)<sup>4</sup>. The length and technical nature of the tool also means extensive training is needed for any staff involved in its use.

#### Technical Support

Problems with local and remote IT components caused some issues during the pilot study. This included software errors, data corruption and incorrect writing of save files. The tool uses relatively complex software and FAO have simplified the digital management to make the software more user friendly.

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<sup>4</sup> Although most reported the session lengths to be fine.

## **Translation Problems**

Difficulties in accurately translating and interpreting questions for both staff and community members were also noted as an issue during the pilot study. This led to some misunderstanding between both parties as to what questions were being asked and what answers were required, in some cases leading to inaccurate data recording. A number of female participants also noted that some questions were perceived as too personal.

## **Community Feedback**

In addition to the baseline, midline and endline data collections, a community consultation exercise was also carried out to discuss the study's findings and how the staff and programme participants found their experience of using the tool.

## **Interview Accessibility**

Broadly speaking, programme participants found that the SHARP interview questions were relevant and appropriate to their livelihoods. They found the discussions useful as it allowed them to voice their concerns. It also widened their knowledge base around key issues that could improve the resilience of both their household and the wider community.

## **Lack of Action and Reaction**

Community members noted one issue in particular as being of utmost importance: the lack of perceived or real action on the feedback they gave. The tool commonly asks participants to comment on their access to essential resources and learning, which is often perceived as an offering of future support or promised action by the implementing agencies. In some cases, participants even raised specific issues (such as a lack of local health services) to staff and queried what could be done to address that issue in particular.

## **Recommendations for future use of the SHARP tool**

1. Better integration of SHARP data and findings from SHARP studies is needed with intervention programmes, particularly during the planning and development phases to ensure that programmes can be dynamically adapted to best suit the needs of the target community and therefore have the greatest impact.
2. Reliable expert technical support must be available throughout the study, both in the field and remotely – particularly from FAO for SHARP-specific issues – to ensure correct and accurate data collection and collation.
3. Interview questions should be translated clearly and simply, with extra care taken to ensure the correct local interpretation and cultural context. The use of local staff who are already established within the community would aid this.
4. SHARP interview sessions, especially if conducted in one single block, should be kept as short as possible to retain relevance to the study.
5. Qualitative data should be considered alongside statistically significant quantitative findings to enhance learning.
6. Care should be taken to manage the expectations of community members in terms of positive action on the issues they raise during the interview process.

# What we now know about building resilience: 10 lessons from BRACED and beyond



By Alan Brouder

As the first significant investment on resilience by the UK's Department for International Development (DFID), a key objective of the BRACED programme was to generate learning on what works and what doesn't in building resilience. However, BRACED is just one of many initiatives on resilience and involves several actors who are engaged in resilience programming beyond BRACED. The summary of lessons outlined in this article is therefore a synthesis of the learning that has emerged directly from BRACED as well as through Concern's experiences in other resilience initiatives, and conversations with resilience actors, advocates, and critics. The lessons outlined are an attempt to reflect the current state of thinking on resilience programming, and to provide some guidance on key considerations when designing a resilience programme.

## 1. Focus on the drivers of vulnerability (not the hazard)

A common flaw in many resilience programmes is a disproportionate emphasis on the hazards that vulnerable people are exposed to. In focusing on the hazard, programme interventions sometimes become heavily skewed towards traditional Disaster Risk Reduction (DRR) activities. While these are an important element of resilience programmes, they are not usually designed to address the underlying causes of vulnerability that lead to negative outcomes during and after a crisis. DRR interventions aim to reduce exposure to hazards and mitigate their impact when they do occur, but they don't usually involve a holistic package of interventions focused on reducing vulnerabilities. Exposure to hazards and vulnerability in the face of hazards are two different things. Affluent communities with low levels of inequality, strong social networks, access to reliable services, a culture of risk management, and trust in public institutions may be highly exposed to hazards, but can continue to maintain or improve their wellbeing after a shock due to their low vulnerability.

## 2. Focus on systems

Many resilience programmes in rural areas go beyond DRR activities by focusing on climate smart agriculture (CSA) or similar interventions that aim to manage risk and improve livelihoods at the same time. However, this approach is often limited by an assumption that vulnerability may be reduced by a change in agricultural practices, an increase in knowledge and new techniques, and access to certain types of inputs. This may often be true, but the absence of these inputs, techniques, and knowledge might explain only a part of a person's vulnerability. In some cases, they may be symptoms rather than drivers of vulnerability. A contextual analysis

should examine the underlying causes of vulnerability from the household back up through the community, the local area, and up to the national level, attempting to understand the political economy that maintains the status quo. Programmes should be designed to address the obstacles and opportunities identified in the analysis. Some of these will be on-farm activities; some will be at the level of the community; some will involve challenging relations of power; some will involve the private sector; some will require governance reform or legislative change; some will have straightforward technocratic or administrative solutions. Subjective judgements will need to be applied in deciding where the primary drivers of vulnerability are located, and how broadly or narrowly to define the system that maintains that vulnerability.

### **3. Policy and advocacy are core elements of programming**

Adopting a systems approach to resilience building means addressing the obstacles that vulnerable people face. Some of these obstacles can be addressed quickly and locally, e.g. through the provision of relevant information on markets, prices, weather, agricultural practices, etc. Others are rooted in dysfunctional, inefficient, or unequal governance arrangements and need more time to be addressed. The BRACED programme was made up of four components, one of which was focused on policy and advocacy. This component was delayed and only began at the end of the three-year implementation phase. Separating implementation and policy makes no sense if we adopt a systems approach. The change that is required to create an enabling environment must be tailored to address the obstacles to vulnerability identified in the contextual analysis. If it is not, the policy and advocacy component is often too generic and lacks a specific link to the problem that is being addressed. For example, the analysis may show that the primary driver of vulnerability relates to governance arrangements, dysfunctional markets, or land tenure, while the policy and advocacy component may seek to pass a new environmental protection bill into law. We need to influence change in specific and relevant ways; new laws or policies may sometimes provide the solution, but in other cases, the 'advocacy' component may look very different; it may mean finding ways to change the incentives of powerful actors in a manner that benefits the most vulnerable.

### **4. All activities should be aimed at finding sustainable solutions**

A good litmus test of whether a project or programme is properly designed to build resilience is an analysis of the extent to which all of its interventions are focused on lasting solutions. We must be able to describe the system that a particular intervention is designed to change, and to articulate how that change will come about and be maintained. If there are too many elements in the system or exogenous factors that are not addressed, then our interventions are unlikely to achieve lasting change. If, for example, the majority of our activities are directed at the level of the household or farm, it is unlikely that we are addressing all the relevant components of the systems within which people's vulnerabilities lie. In this context, the BRACED report 'Routes to Resilience: Insights from BRACED Year 3' calls for a process of 'scaling and embedding' approaches 'through participatory platforms and inputs to local policy development and planning processes, as well as promoting multi-stakeholder engagement and building strong relationships with communities'.

## 5. Manage risk and protect development gains

The concept of resilience was borne out of the need for regular and costly humanitarian assistance in places that suffered from cyclical crises. Development gains were being lost to floods, drought, and increasingly erratic seasonal patterns. The fragility of these gains can reduce the motivation of vulnerable people to adapt traditional livelihood practices, which are required to build resilience, but which may be seen as actually increasing risk and vulnerability. Incentives must be provided for people to adapt their practices, giving them confidence that they can continue to improve their wellbeing in the face of future threats. In some cases, strengthening traditional savings and insurance models like seed banking and warrantage schemes (especially in West Africa) have shown positive results. A range of innovative insurance models have also been tested in recent years, such as linking crop insurance to funeral insurance in Malawi. While index-based insurance and catastrophe bonds have been common for a number of years, newer 'resilience bonds' are emerging that fund and incentivize disaster risk management to protect against losses – and therefore payouts.

## 6. Build in contingency funds and plans

Despite attempts to manage risk, building resilience takes time, and inevitably crises will occur, in some places on a cyclical basis. This means that a core element of any resilience programme must be to plan for setbacks identified in advance through risk analysis, and monitored through effective early warning systems. The financial element of this component of a resilience programme, often called a 'crisis modifier,' should be flexible and easily accessible, and should be employed as early as possible to protect development gains and prevent a minor crisis evolving into a major one. 'Early warning, early action' has become a mantra in the field of resilience, but effective methods of integrating this have not yet become uniform across resilience programmes.

## 7. Humanitarian interventions can provide an entry point

To date, the majority of resilience programmes have been designed and implemented in the context of long-term development, but the resilience agenda provides an opportunity to reinvigorate the 'Linking Relief, Rehabilitation, and Development' (LRRD) initiative of a decade ago. Humanitarian actors have adapted their modalities over that period, working more closely with local authorities and implementing the requirements of the Core Humanitarian Standard and the Grand Bargain. Large scale displacements of people and the need to increasingly operate in urban areas have forced the sector to become involved in livelihoods strategies, to examine the need for more permanent services and infrastructure, to broaden partnerships with the state and market actors, and more generally to consider the long-term implications of decisions made in the acute phase of a crisis. This provides an opportunity for emergency and development actors to collaborate on resilience-building efforts.



**Generating robust and empirical evidence on the types of programmatic interventions most likely to build resilience is an elusive challenge**

## 8. Layer, link, and sequence interventions

The complexity of addressing vulnerability through a systems approach means that there needs to be a logical and coherent set of intervention packages that relate to each other. For example, meteorological information must be available before early warning systems can be put in place. When designing resilience programmes, thought should be given to the relationship between activities, and the sequence in which they will be implemented. This has implications for programme management and the types of partnerships that may be required. Some partners may contribute intensively at the outset, but then have no role in further activities. In this scenario, such partners would be contracted for their services, rather than being a formal partner for the duration of the programme.

## 9. Resilience can be built in places with weak governance

As demonstrated throughout this issue of Knowledge Matters, the example of IRISS in South Sudan shows that resilience programmes can be implemented in the most challenging environments. The emphasis on a systems approach in current resilience thinking often leads to the erroneous conclusion that resilience cannot be built in weak states. This is because the term 'system' is often mistakenly understood as referring solely to a set of public institutions holding a form of legitimate authority under relative stability. As outlined above, however, a system will usually be made up of both formal and informal actors, rules, and institutions. In fragile contexts, imbalances of power exist, as they do in less fragile contexts. Sound contextual analyses will identify entry points and opportunities to influence changes in power and in systems that involve a range of actors. These may be different in fragile contexts, and locally specific strategies may be required, but there should be no assumption that resilience building is impossible in these contexts – just that the starting point may be different and that it may take longer to demonstrate results. This was acknowledged by the BRACED Final Evaluation: '[B]ecause these projects start from a lower base and implementation is more challenging, their achievements on paper may appear to be less impressive than projects operating in relatively easier circumstances. There is therefore a risk that they may be penalised for this.'

## 10. Don't let the indicators determine the activities

Generating robust and empirical evidence on the types of programmatic interventions most likely to build resilience is an elusive challenge for two primary reasons. First, there is no universal agreement on how to measure resilience, or even what kind of vocabulary to use when describing the key features of a resilient person, household, or community. Some approaches ask community members to provide their own definitions and indicators of resilience, while others employ more familiar proxy indicators based on assets, access to services, and a basket of other indicators on health, education, etc. A third approach is to attempt to measure capacities, such as the capacities to anticipate, absorb, or adapt to shocks or a changing environment. This last approach also attempts to assess the extent to which programmatic interventions have 'transformative potential,' i.e. resulting in a fundamental shift in the capacities of individuals and households to continuously improve their well-being, despite shocks and stresses.



Second, there are too many independent and confounding variables at play in complex systems to design a robust system for assigning attributive power to one or more interventions. Some ambitious resilience Monitoring, Evaluation and Learning (MEAL) systems attempt to list a comprehensive set of indicators to monitor changes in resilience. The increased reliability of these systems must be traded off against the burden of data collection and the knowledge that independent variables remain and may be having an impact on outcomes.

This is not to suggest that monitoring and evaluation is impossible; it is merely a cautionary note on the increasing requests to demonstrate what works and provide evidence to support this (especially in proposals). Common sense and subjective analysis will always contribute to decision-making around programme interventions. In many cases, it will be obvious that a particular strategy is not working to effect the desired change within a system. For that reason, programmes should be adaptive, within broadly defined parameters, and be flexible enough to change course based on an evolving understanding of context-specific systems and processes.

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- 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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