

A photograph of an elderly Black woman with a warm smile, wearing a headwrap and a vibrant, patterned dress. She is holding a wooden staff and standing in a lush, green outdoor setting. The image is the background for the entire page, with a solid green bar at the bottom containing the title and logo.

Resilience Programming Framework



Self Help
Africa

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Africa

Resilience Programming Framework

pending peer review



1. Introduction

This paper presents Self Help Africa's Resilience Programming Framework – an approach aimed at enhancing the ability of vulnerable communities to overcome multiple threats to food and nutrition security and address the fragility of current food production systems.

The framework provides a holistic and integrated approach to implementing livelihood programmes. It is designed to help vulnerable communities, and the organisations working with them, to understand and manage risk – from immediate shocks, such as floods or crop failure, to long-term stresses, such as climate change or social exclusion. It also aims at empowering poor women and men to move beyond mere survival, seizing new opportunities to improve their livelihoods while, at the same time, safeguarding past gains. We believe that combining resilience and livelihood initiatives will foster communities that are both thriving and sustainable. What is proposed is a set of programming principles and methods to empower smallholder farmers, pastoralists and forest-dwellers, and their communities to intervene in, and alter, the structural causes of vulnerability to natural and anthropogenic shocks and stresses. We are committed to using this framework as the basis for developing staff and partner skills, capacity, understanding and confidence in this approach.

Our Resilience Programming Framework has three types of integrated and complementary outcomes: a) food and economic; b) ecological; and c) organisational. We are already engaging in resilience-led initiatives through our work with some of the most vulnerable communities in Africa, where the focus is on developing sustainable solutions to long-term drivers of vulnerability. However, it is necessary to clearly identify what characterises resilient livelihood systems, and to define the best way in which to measure the impact of successful interventions. The final test of adaptation success relates to securing improvements in the material wellbeing of human populations and reducing losses and damages from climate-related stresses.

Our current research will contribute to the identification of appropriate indicators and measurement tools to be used in tracking trajectories of households or communities coping with threats and crisis in relation to food security in various programmes, locations, population groups, etc., which will facilitate comparison across contexts. The approach outlined aims at opening up opportunities for poor women and men to assess and analyse their situation, take action to improve it, work with decision makers and, ultimately, be empowered to make choices and regain control over their lives. This will take time and perseverance, but as communities develop increasingly resilient livelihoods, we hope that they will take ownership of this approach, share their experiences with others and thus build resilient and thriving societies.

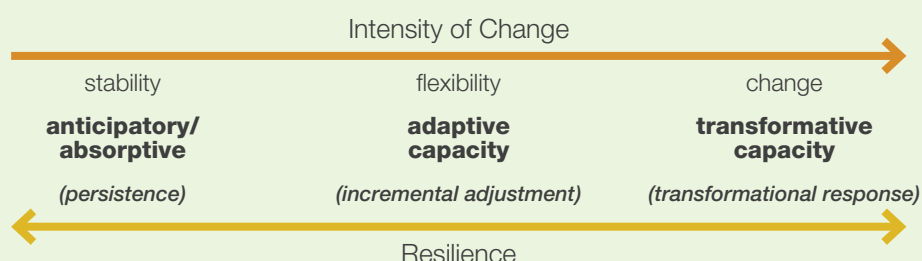
2. Background

The growing frequency and magnitude of environmental and economic crises over the past decade has had a severe impact on the food security and livelihoods of agriculture-dependent populations in vulnerable regions of the world, further increasing the fragility of food systems in developing countriesⁱ. Consequently, it is imperative for development work to invest in initiatives aimed at strengthening communities' capabilities to absorb the impact of, and recover from, disruptive events and secure sustainable gains for the futureⁱⁱ. Over its five-decade history, Self Help Africa has funded small and large-scale agricultural development projects in close to 50 countries across Africa, Asia, South and Central America, helping poor people to improve their means of earning a living. In recent years most of the projects have been focused on Sub-Saharan Africa, where we have invested in building our experience and understanding as to the best manner in which to support people in strengthening their livelihoods while, at the same time, managing the shocks and stresses that threaten them. This led to the development of this Resilience Programming Framework. This framework forms a central part of Self Help Africa's new strategy for 2016-2020 which sets out the organisation's goal of building resilient and thriving societies.

3. Defining Resilience

Considerable research has gone into defining the properties, principles, and processes that strengthen resilience at the individual, household, community, institutional and ecosystem levels. Self Help Africa has been closely involved in policy dialogue with the UK Government and other stakeholders on better defining the characteristics of a resilient system, and identifying innovative programme design to build such a systemⁱⁱⁱ. As a result of this dialogue and ongoing programming experience (including the Malawi case study discussed in section five), we have adopted the following definition of 'resilience': **Resilience is “the ability of a system (countries, communities, and households) to anticipate, adapt to, and/or recover from the effects of shocks and stresses in a manner that protects livelihoods, accelerates and sustains recovery, and supports economic and social development.”**

The concept of resilience is very similar to that of sustainability of livelihoods, but with a greater emphasis on the ability to anticipate, cope with and recover from, shocks or disasters. This reflects its broader, more elaborate focus - embracing the ability not only to bounce back but also to transform. The more salient point is that for Self Help Africa, resilience emerges as the result of interaction between three readily recognisable capacities: anticipatory/absorptive, adaptive and transformative (AAT)^{iv}.



Anticipatory/Absorptive Capacity: anticipatory capacity is the ability to minimize exposure / buffer the impacts of shock through preparedness and planning **prior to** a shock or stress; absorptive capacity is exercised both during and after a disturbance has occurred, so as to reduce the immediate impact on people's livelihoods and basic needs, and recover quickly when exposed.

Adaptive Capacity: the ability to effectively respond to changing conditions and take advantage of opportunities. This ability to recover in such a way as to reduce vulnerability to future events is vital to the notion of adaptive capacity.

Transformative Capacity: this refers to the systemic changes that improve governance and enabling conditions in crisis management, as well as government structures (be it at national scale or at lower scales of governance) and support. These changes require a combination of technological innovations, institutional reforms, behaviour shifts, and cultural changes among relevant stakeholders.

4. Self Help Africa Resilience Programming Framework

This programming framework is aimed at enhancing the ability of vulnerable communities to overcome multiple threats to food and nutrition security and address the fragility of current food production systems. Self Help Africa is primarily a development organisation, working at the intersection between sustainable agriculture and natural resource management, and building market approaches with a strong emphasis on community capacity. At the heart of our Resilience Programming Framework are three integrated, complementary and mutually reinforcing outcomes: a) food and economic resilience; b) ecological resilience; and c) organisational resilience (see Figure 1).

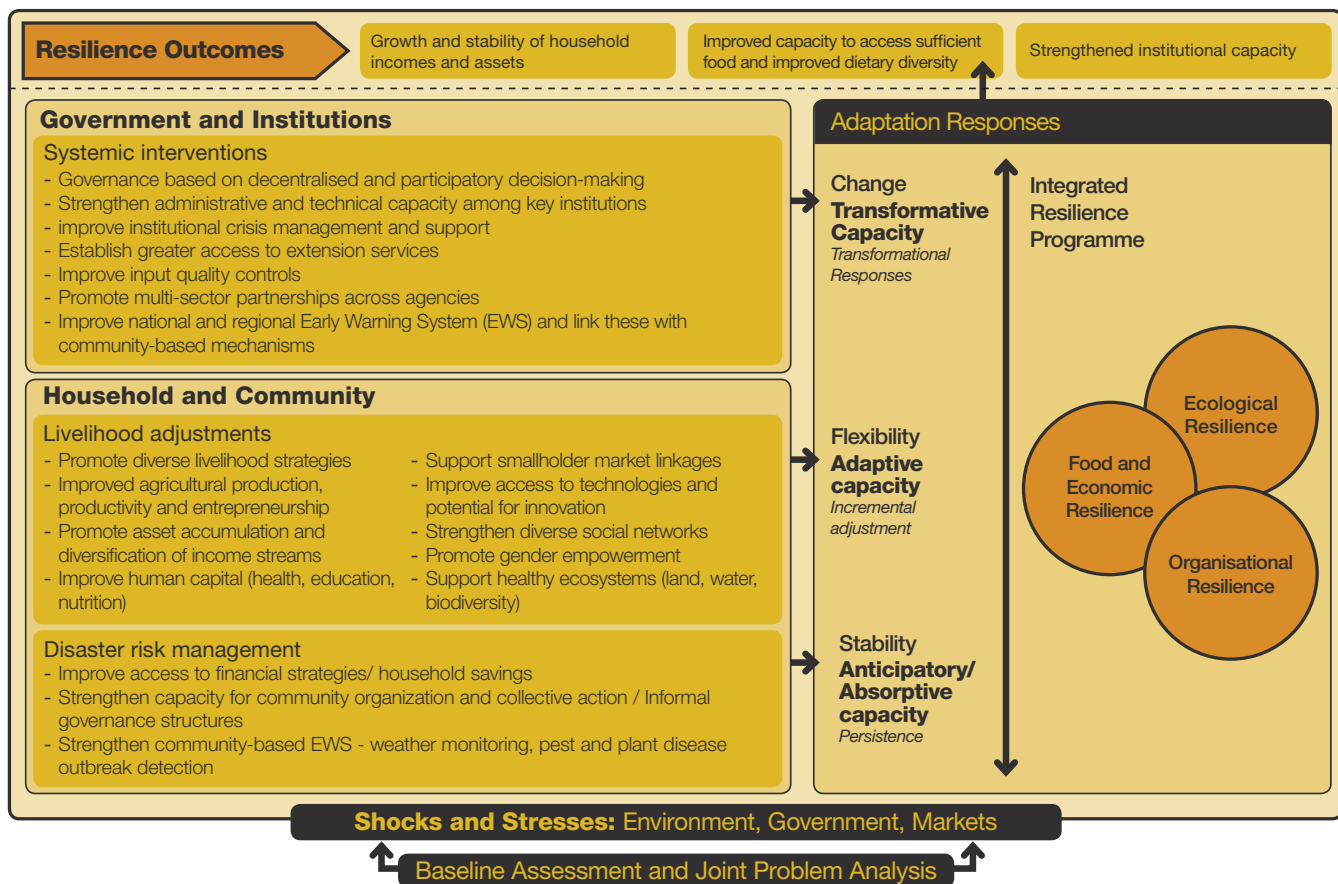
1. **Food and economic resilience:** Promotion of diversified sources of income streams to increase the potential profitability of existing livelihood strategies (productivity and income) as well as the ability to invest in new ones. This is critical if we are to aim at helping households better manage risk by spreading investments across more than one type of livelihood strategy. Income growth through agricultural development and nutrition-sensitive programs will also contribute to the reduction of undernutrition and the lasting impact this has on people reaching their full development potential.
2. **Ecological resilience:** Maintain the capacity of social-ecological systems to produce and sustain a diverse set of ecosystem services (ES), including provisioning (e.g., food, freshwater, fibres, wood); regulating (e.g., flood and climate regulation, water purification); supporting (nutrient cycle, soil formation) and promoting (e.g., cultural, recreational and spiritual values) in the face of the large and growing demand for provisioning services such as the large-scale conversion of natural ecosystems to cropland/ rangeland. Such endeavours are all focused on increasing the productivity of the land to optimise production through a more efficient use of all inputs in such a way as to protect and enhance the natural environment^v.
3. **Organisational resilience:** Improve support structures to create an enabling environment for farming communities. This involves building the capacity of farming communities to self-identify priorities, resources, needs and solutions in such a way as to promote representative participation, good governance and accountability. Mobilising and organising communities will lead to changing attitudes, norms, practices and behaviours of individuals as well as groups, a critical transformation that supports lasting change.

Building on the definition of resilience provided earlier, Self Help Africa's resilience-centred programming framework is intended to guide the design and execution of resilience programmes. Adoption of the framework at the analytic and formative stages of an initiative ensures that:

- a. a broader range of interventions and possibilities are considered between the three dimensions of resilience (AAT capacities), instead of simply focusing on one of these, possibly to the detriment of the others; and
- a. the impacts of shocks are also considered, as well as the impact of interventions across the different groups and components of the system, at different scales (household community and support structure and governance) and wherever possible across different sectors.

Depending on the needs and priorities of the various communities at the baseline assessment risk and problem analysis stage, key specific short-term and long-term development activities highlighted in the three areas on the right of the diagram (disaster risk management (DRM), livelihood adjustment interventions, governance and enabling conditions interventions) are selected and integrated to enable households and communities to proceed down a resilient pathway. The interventions selected therefore encompass an integrated resilience program for the designated geographical area or population. Success in the three mutually reinforcing resilience outcomes will be measured using three types of outcome measures: adaptive capacity indicators (growth and stability of households' income and assets); development indicators (food security, improved dietary diversity, natural resource management); and indicators that capture strengthened communities and institutional capacity to prepare, lead and manage response to risks.

Figure 1



The resilience lens represents more than just a concept: it denotes a series of principles for development practice. The implications of thinking through what the framework means, when applied to development programming, has led Self Help Africa to research specific methods and capacities that could be used to operationalise resilience thinking and deliver sustained, measurable results for communities within the three dimensions of resilience.

The organisation recognises that the goal of building resilient systems is characterised and affected by issues involving a variety of sectors, such as healthcare and other basic services, including, good governance and active citizenship. Where Self Help Africa does not have expertise or financial resources to contribute in other sectors, it plays a brokering role, facilitating new relationships between vulnerable communities and other sources of support. These may include other civil society organisations, government, private sector or technical expertise.

4.1. Hypothesis

Our premise is that through the use of specific principles, approaches and processes supporting the development of anticipatory/ absorptive, adaptive and transformative (AAT) capacities at individual, household and community levels, we can better manage environmental, governmental, and market-based shocks and stresses, with positive results in the well-being food, nutrition and income security of rural communities. Such process articulation stems from evidence observed in our recent work in Malawi.

Our Impact Pathway outlines a two-pronged approach, whereby technical interventions address both **capacity needs** and **policy constraints**, with the aim of achieving improved livelihoods within a conducive institutional environment.



The **major assumption** underlying the programme intervention is as follows: If we invest in disseminating agricultural techniques & technologies to strengthen productive assets and invest in an early warning system, the project will, on the one hand, improve the knowledge and capacity of communities to plan their activities according to the expected occurrence and severity of climate extremes and disasters and, on the other, generate lessons learned and factual data.

- **Outputs:** not only will productive assets, knowledge and capacity of targeted communities be reinforced, but the project will also strengthen organizational and institutional capacities at local, regional and national levels (taking into account the Disaster Risk Reduction).
- **Outcomes:** Results, in the medium term, will be (i) improved policies and decision-making at national, regional and local levels, for a better integration / adoption of DRM practices (e.g. strengthened capacity to analyse early warning data) in development programs, and (ii) increased incomes and agricultural production.
- **Impact:** Leading, in the long term, to improving the wellbeing of the targeted communities, despite their exposure to climate extremes, natural disasters and other shocks; improving food security & nutrition for vulnerable households; and developing thriving rural communities.

4.2. Approaches and Methodologies – Areas of Change

The success of Self Help Africa's framework is the ability to lead to positive changes in the resilience to shocks and stresses associated with climate extremes and disasters and other shocks at different levels. **Participation and inclusive decision-making** is one of three key area of change (AOC). Beginning with analysis and developing solutions, our role is to empower poor women and men to articulate their own priorities and make their own decisions. A resilient livelihood depends on households' ability to anticipate change, make plans to deal with the change and alter their actions in response, on an ongoing basis. It is a process that sees communities taking control of their development through inclusive decision-making.

When carried out successfully, participatory planning processes have an empowering effect by reinforcing **changes in people's capacity and skills**. In Self Help Africa, capacity is viewed not only as supporting the development of key skills but also shaping new attitudes and behaviours, shifting institutional relationships, and supporting new, locally-driven policies and practices.

The second AOC refers to change in **knowledge and attitudes**. One way of thinking about knowledge is in terms of its (1) instrumental use; (2) conceptual use; and (3) symbolic use.

1. **Instrumental use** involves applying knowledge in specific and direct ways – e.g. a new technology is adopted by a community.
2. **Conceptual use** involves using knowledge for general enlightenment – e.g. the project generates new knowledge on how a particular technology can contribute to resilience building
3. **Symbolic use** involves using knowledge to legitimatise and sustain predetermined positions – e.g. a project provides the evidence base upon which policy makers and planners can justify their decisions.

The final AOC relates to changes in the quality of **partnerships** to deliver interventions. We see a major role for SHA in building constructive partnerships among all those who can promote resilient livelihoods. Consequently, we need to understand the distinctive value that communities, partners, government, private sector and technical experts can contribute.'

5. Learning from Malawi

5.1. Context and programme characteristics – the ECRP

The Enhancing Community Resilience Programme (ECRP), funded jointly by the United Kingdom Department for International Development (DFID), Irish Aid and the Norwegian Embassy, is a five-year programme 2013-2017 that aims to contribute to reducing extreme poverty and hunger in Malawi. ECRP works towards this goal by addressing the climate vulnerabilities that are causing current poverty and food insecurity levels, with the understanding that such vulnerabilities will become more critical as the anticipated future effects of climate change take place. The programme aims to support over 1 million vulnerable Malawians to improve their resilience. In partnership with other NGOs (the Foundation for Community Support Services (FOCUS), Foundation for Irrigation and Sustainable Development – FISD, and Small Scale Livestock Promotion Programme -SSLPP) and local stakeholders including government institutions, Self Help Africa is implementing a component of ECRP in Karonga District in the Northern Province of Malawi, called DISCOVER¹, with the aim of increasing resilience to climate change of over 65,000 people from approximately 13,000 households.

5.2. Resilience Pathways

Based on the overarching hypothesis described earlier, and through the findings of the participatory planning process, an integrated set of development strategies were defined, including tailored approaches to meet the individual needs of different types of farming communities in the Karonga district. Responses were tailored to the specific types of environmental, governmental, and market-based shocks and stresses impacting farming communities and how these affect different groups of vulnerable people, since no single intervention will enhance everyone's resilience and wellbeing in equal measure. Climate change may increase the vulnerabilities identified by a community, as well as bring new threats, therefore a climate analysis must inform the planning process. Self Help Africa's planning process also supports communities to put in place community-based monitoring tools to track climate conditions.

Shocks and Stresses

The following is a general overview of the types of environmental, governmental, and market-based shocks and stresses impacting farming communities in Karonga:

Environmental issues

1. Productivity of agricultural land is declining - Soils are generally sensitive to degradation due to a combination of low base fertility, high acidity, low organic content, exposure to brief periods of intense rainfall, and low annual rainfall totals. The primary drivers are deforestation and erosion. Rapidly increasing deforestation is largely attributed to the demand for fuelwood and agricultural land. Soil erosion, particularly severe in upland areas, is largely the result of high intensity rainfall and rapid surface runoff. In addition, the absence of effective watershed management results in poor protection of the vital ecosystem services on which farming communities rely.
2. Highly variable rainfall - 90% of smallholder farmers rely on rain for their crop and both household food security and incomes are highly susceptible to droughts and floods.
3. Erratic Rain is a significant cause of stress to farming, which is primarily rainfed. As a result, farmers are highly susceptible to climatic variability, particularly at the beginning and the end of the rainy season. The result is recurring shocks in the form of both drought and floods. Low seasonal rainfall totals limit crop selection, production yields, and quality. In recent years, a significant delay in December rainfall totals

¹Developing Innovative Solutions with Communities to Overcome Vulnerability through Enhanced Resilience, a consortia led by Concern Universal with Self Help Africa, Cooperazione Internazionale and Goal. Other implementing partners are Solar Aid, Clioma, CUMO Microfinance Limited and Centre for Environmental Policy and Advocacy (CEPA). The initiative is funded by DFID (85%), Irish Aid (10%) and the Norwegian Embassy (5%).

has also occurred, which has increased the risk of drought conditions during the planting season. Exacerbating the situation is insufficient crop water management. At present, the volume of water used for irrigation in the dry months is low. Moreover, the management of existing irrigation water systems is inadequate, with little capacity to provide water to farmers in an equitable, sustainable and efficient manner. As a result, few farmers take advantage of small-scale supplemental irrigation techniques and technologies, and existing large-scale irrigation systems in the area either reach a small number of intended users only, or are non-functioning.

4. Pests and Plant Disease - in this area farmers experience several types of plant diseases and pest infestations, both in the field and in storage, which can reduce or completely destroy a season's worth of income. As a result, farmers use pesticides and fertilizer, which can be challenging to access, increase input costs, and reduce profits.



Governmental issues

1. Restrictive Agricultural Policies - Agriculture support in Malawi has been narrowly focused on maximizing the production of maize through intensification in order to keep the price and availability of maize low. Other important staple crops such as cassava or sorghum have received little attention
2. Weak agricultural extension services - offices still frequently instruct farmers to follow the central government's annual agricultural production plans; consequently, crop selection remains constricted, thus limiting farmers' flexibility and choice.

Markets

1. Poor Access to Quality Inputs - Irregular farm incomes limit the purchase and effective use of quality inputs, including seed, fertilizer, pesticide, and labour. Although good quality products are obtainable, the widespread availability of pesticides and fertilizers of unknown and likely poor chemical composition contribute to short- and long-term production deficiencies. Moreover, due to a lack of extension services, many farmers lack the ability to effectively apply inputs such as fertilizer and pesticides. Incorrect (unsystematic) use of pesticides, particularly those of poor chemical composition, can degrade soil quality and increase the impact of infestations by killing predatory insects, such as wasps and spiders. In addition, there is reduced availability of certified seed varieties for many crops. This is the result of a restrictive certification process, low production capacity of public seed multipliers, and undeveloped and inadequate private-sector import markets. Many farmers plant grain saved from the previous harvest rather than invest in alternative improved seed options. The resulting production is less than that of certified seed because it does not respond quite as well to inputs or improved water control and is less resistant to pests and disease. There is also a farm labour shortage at present, particularly during the peak season, which is exacerbated by regionalization, urbanization, and low crop profitability. This, in turn, places a low ceiling on farm wages.
2. Price Variability - In Karonga, as in many areas of Malawi, crop prices are exposed to price instability. Around the harvest cycle, all crops are exposed to significant intra-annual price fluctuations.
3. Indebtedness - Access to credit is a vital coping mechanism available to most Dry Zone farming households. However, access varies, based on location and socio-economic status. In the context of low profitability, undiversified production, and repeated exposure to environmental and market shocks, many households are experiencing a growing cycle of debt, which results in further reducing their ability to cope and adapt.

5.3. Areas of Change

In the case of Malawi, the project was designed using a participatory planning approach geared to help communities:

- Identify and prioritise vulnerability to shocks and stresses; how these affect the community as a whole (and also specific groups); and why they do so.
- Understand how community members perceive risks and threats to their lives and livelihoods
- Analyse the resources (capacities) and strategies/ opportunities available to them to address or reduce these risks. The discussion on capacities covers the full range of assets: natural (water, land, rivers, forests, minerals) as well as the range of ecosystem services provided by natural assets; physical (infrastructure, shelter, tools, transport, water and sanitation, energy); financial (income, savings, remittances, pensions, credit, state transfers); social (relationships, networks, religious faith, affiliations, reciprocity, trust, mutual exchange); human (knowledge, education, skills, health, physical ability).
- Help develop community-led action plans to deliver interventions.

Some of the major areas of change addressed by the project and picked up by the community and the mid-term evaluation can be summarised as follows

Area of change	Description
Inclusive decision making	The project has mainstreamed gender in the implementation of project activities for all capacities/output areas, in order to ensure that women get more opportunities and that they have a voice both at home and in local level decision-making processes.
Knowledge	By piloting the plant clinic approach and community-based early warning systems, complemented by formal seasonal and short term weather forecasting, the project is building the evidence to convince policy makers to integrate these approaches in local and national development plans
Capacity	The project works on the capacity of poor and vulnerable farmers, enabling them to adopt improved technology and methods which strengthen agricultural production and natural resource management
Partnerships	The project works on strengthening partnerships between the Meteorological Service, the Ministry of Agriculture at provincial level, community radio stations and private sector ICT service providers in order to disseminate weather forecasts and early warning messages to farmers

5.4. Anticipatory, Adaptive and Transformative Capacities (AATs)

Based on the results from the vulnerability and capacity assessment during the impact analysis, a number of development strategies were designed with communities to address the three interlinked resilience outcomes: a) food and economic; b) ecological; and c) organisational. To help us better appreciate the drivers of resilience and set up related measuring tools, the implementation of programme activities was articulated within the ***interrelated set of capacities (Anticipatory/Absorptive, Adaptive, Transformative)***. A brief overview of the work carried out with Karonga communities is contained in the summary below.

(i) Anticipatory/ Absorptive capacity

Risk fluctuates throughout the crop cycle, but peaks during the early growth period. Pests and disease, fluctuations in rainfall and temperature, and extreme events such as droughts and floods all threaten productivity once the season begins. When harvest time arrives, fluctuating market conditions - including dips in commodity prices - create potential shocks to income.

In order to assist farming communities to better anticipate shocks, we put a number of initiatives in place to build communities' ability to access, understand and integrate climate information in risk management and adaptation planning. In particular, we helped communities to make use of climate information and tools, such as meteorological measurements (rainfall, temperature, wind, etc.) at the local level and/ or satellite rainfall early warning systems, obtained at national level. By accessing reliable meteorological information (likely starting date of rains, likely finishing date, whether rainfall is likely to be above normal, below normal or normal, amount of rainfall resulting from a storm, storm density and duration, wind speed and direction) and receiving early warning alerts on severe weather events/ forecasts (floods, dry spells, strong winds) farming communities were able to better respond to adverse rainfall events in the 2013/14 and 2014/15 cropping season.

In a separate initiative also in Malawi, Self Help Africa has reached important success in collaboration with the Centre for Agricultural Bioscience International (CABI), Self Help Africa has reaped important successes with the establishment of 'plant clinics' - an approach for the early detection of pests and diseases. Results from 2013 have shown that plant clinics have markedly increased farmers' access to up-to-date knowledge and supplied them with practical, relevant plant health information. By providing the most appropriate pest preventive measures and prompt curative management options, plant clinics have reduced crop loss resulting from pests and diseases. They have also contributed to increased crop productivity and food and nutrition security for the farming communities benefitting from this innovative advisory service approach. Plant clinics also provide complementary good agricultural practices (correct planting time and spacing, timely weeding, crop rotation, water management and application of fertilizer (both organic and inorganic) at the right time, in the right quantity and in the right manner. SHA is considering introducing this approach also in the Karonga programme in the future.

Absorptive capacity is the ability of systems to buffer the impacts of natural hazards in the short term, so as to avoid collapse. More specifically, this refers to the degree to which people's livelihoods and basic needs suffer as a result of specific disturbances. As such, absorptive capacity is centrally concerned with the 'persistence' of communities, it is vital to their survival and is the foundation of longer-term adaptation and resilience.

When climate- and market-related shocks impact communities, mechanisms such as increased access to crop insurance, cash savings and loans schemes, emergency credit options and emergency food stocks increase a household's ability to buffer/absorb those impacts while minimizing their long-term damage (such as possession of productive assets). Access to credit has long been recognised as a major stumbling block for smallholders. Self Help Africa placed a particular focus on promoting savings throughout the project in Malawi, with significant achievements. While many savings and credit programmes are geared to work almost solely with women, Self Help Africa has been conscious that in order to address gender barriers more effectively, it is necessary to promote equity across our programmes.

Moreover, a number of initiatives and actions that are traditionally part of 'disaster preparedness' activities - including the advance placement of seed stocks, veterinary medicine, quality pesticides and fertilizer, and other inputs such as farm implements - enable communities to absorb shocks and avoid catastrophe.



Tchaka Zulu (37) and Linisi Chiumya (35), making a fuel efficient stove, Malawi. 2015

(ii) Adaptive capacity

Adaptive capacity is the ability to take deliberate and planned decisions based on an awareness that conditions have changed or are about to change and that action is required to achieve a desired goal. This includes the ability to “...react to evolving hazards and stresses so as to reduce the likelihood of the occurrence and/or the magnitude of harmful outcomes resulting from climate-related hazards.”

Following communities’ awareness of their changing conditions, Self Help Africa placed an increased focus on supporting farming households to better adapt to low agricultural productivity with improved access to and use of quality inputs. They were also encouraged to adopt improved technical agricultural and animal husbandry extension advice (conservation agriculture, soil improvement measures, dosage of inputs, mitigation of pests and diseases, potential grazing zones, forage and water availability and actions to overcome the high mortality of animals). In addition to producing increased outputs with a more efficient use of all inputs, Self Help Africa placed parallel emphasis on the promotion of effective management of natural resources to redress environmental damage and the root causes and drivers of vulnerability and risks, and also promote ecological resilience.

Production option strategies included activities reinforcing agricultural value chains through the creation of sustainable linkages between producers and buyers. Activities included upgraded post-harvest processing and storage facilities, strengthening communications with buyers, and improving coordination between farmers to give them access to better prices and the ability to deliver more products to markets. Diversification strategies included the adoption of multi-crop production strategies and engagement in a more diverse array of on- and off-farm income-generating activities and community-level livelihood pathways. Improved access to diversification pathways will enable households to manage financial risk more effectively, thus leading to income growth.

In addition to improving available income streams, another important element of the work on diversification is ‘nutritional diversification’. Self Help Africa believes in the importance of promoting a variety of nutrition streams at household level, so that households are reliant on a broader basket of foods: this is likely to ensure continued nutrition during disturbances (absorptive) and, in turn, promote improved nutrition security.

(iii) Transformative Capacity



Transformational capacity relates to the systemic changes that are required in the social structures responsible for influencing decision-making (in units that could include households, communities, businesses, government departments, non-governmental organisations) as well as changes in individual values, capabilities and choices. Many of the transformational changes therefore depend on altering existing power relations (such as gender dynamics). This involves recognising the social and political processes that both undermine and constrain institutional crisis management and government structures

and support. This area needs to consider fostering greater transparency and the inclusion of marginalised groups in formal and informal governance systems, policies/regulations and decision-making spaces.

Self Help Africa recognizes that local community-based institutions, such as Village Development Committees (VDCs) and the Village Civil Protection Committee (VCPC), have an important role to play in bringing about adaptation and adjustment to socio-economic and environmental change, stresses and shocks. Working within and alongside these local communities, Self Help Africa was able to introduce interventions, coordinate awareness building sessions and facilitate selection and implementation of district and community level contingency plans in relation to climate change, natural resource management problems and disaster risk management.

Members of the District Civil Protection Committee (DCPC) and the VCPC were trained in various aspects of Climate Change (CC) and Disaster Risk Management (DRM) related policies. The session included a review of the international Hyogo framework of action 2010-2015 and also the 2010-2015 National DRM framework and its relation/ link to the District of Karonga. The project also set up a self-sufficiency revolving seed fund at VCPC level to help villagers maintain seed security for a number of diverse seed crops. As a result, it is expected that VCPCs will be able to respond to disasters occurring within their communities before seeking outside support/ interventions.

Experience from the work of Self Help Africa in Malawi has shown that local institutions can also be instrumental in promoting agreed rules for sustainable resource management. In Karonga, wetlands play an important role in sustaining the livelihoods and improving the food security of the rural poor. However, as more and more people recognise the development benefits associated with wetland use, an emerging challenge is to develop wetland management techniques that are both economically and environmentally sustainable. This is because wetlands require coordination of land use, both within the wetland and between the catchment and the wetland. Self Help Africa's work focused on the development of Village Natural Resource Management Committees, equally represented by both men and women, to work under VDCs and coordinate and support the sustainable and inclusive use of water resources during the dry season.

Finally, Self Help Africa has placed substantial project focus on promoting 'low cost' community-based extension (CBE) approaches that facilitate the access of farmers, their organizations and other market actors to knowledge, information and technologies that are both sustainable and replicable. The key aspect of this approach is building the capacity of a few people (variously known as Lead Farmers, Model Farmers, Community Development Agents) to reach out to the wider community.

5.5. Programme success

Structuring the implementation of a project within the framework of the three capacities discussed above allowed us to address a range of risks, including climatic and economic shocks, whilst also protecting existing assets and developing people's ability to identify and manage risks over the longer term through tailored training and good agricultural practices. After two full years of data collection and implementation, a mid-term evaluation (MTE) of the ECRP was carried out^{iv}. Several positive results were picked up by MTE, through a 'mixed-methods' evaluation, using both qualitative and quantitative approaches to assess programme progress and performance from inception up to June 2015. These include:

- Village Savings and Loans (VSL) has a high uptake with beneficiaries and a strong benefit-cost ratio, which is derived from its consumption smoothing effects as well as investment in small businesses. Approximately 80% of beneficiary households are now reporting the existence of a VSL in their village and over 80% of the participants are women. Beneficiaries use VSL in particular, in combination with other interventions, to purchase farming inputs and assets, or to meet other household needs.
- With regard to interventions that promote a suite of adaptive livelihood practices, the data and analysis collected by the MTE revealed that, overall, the use of specific climate smart farming strategies, both individually and in combination with others, was prevalent among the beneficiaries. Over 60% of beneficiary households were using a combination of 3 or more adaptive strategies to protect/improve crop yields in low moisture conditions (In the survey in question, strategies covered those: owning livestock; planting 3 or more crops; practicing conservation agriculture (min tillage residues +intercropping); using irrigation this year; agro-forestry; VSL in the village; and a Functional DRM plan in the community).
- Over 70% of households are now using drought-tolerant seeds, 70% use improved post-harvest management, and nearly 30% include agroforestry practices on their farm. The use of diversified seeds is an intervention valued by beneficiaries, with positive improvements in food security. Post-harvest management is being practiced in a number of forms: from larger, community-level storage facilities to the promotion of smaller, household granaries, as well as improved household storage techniques using chemicals and bags.
- Household survey data and interviews from the MTE show that dryland farming technologies, such as permanent planting basins, resulted in increased access to and availability of food, reducing the duration of food scarce months. Conservation agriculture has high participation and relatively good adoption. Half way through the programme implementation, the MTE found that nearly 50% of beneficiary households had adopted CA practices.
- Two cost-benefit case studies were also provided by MTE to investigate the benefits accruing to beneficiaries as a result of the investments made by the programme. Over a ten-year period, assuming that the benefits identified in the case study sites are similar across the programme, for every £1 invested in establishing VSL groups, approximately £10 worth of benefits were generated for beneficiaries.
- For a combination of three interventions intended to increase incomes from crop production, each £1 invested could generate a further £3 across the Discover programme; furthermore, assuming the continued distribution of seed for a further year and a 60% success rate for the pass-on programme, the benefits could double to £6.
- Civil Protection Committees were established, both at district and village level, most of which developed community level plans.
- Some beneficiaries clearly articulated the benefits of receiving early warning information in relation to protecting assets from floods and could explain how yields benefitted by using weather forecast data to guide decisions in relation to planting and fertiliser application.

5.6 Ongoing Challenges/ Recommendations

- While the uptake of CA has been positive in terms of the percentage of smallholders applying the practices, it is being applied to relatively small areas of farmers' total cultivated land. Constraints in the availability of mulching material have been offset in some areas through the use of discarded roofing grass. In some places, however, techniques were not being adopted due to the perception that they were not compatible with the need to harvest cereals early and re-plant the area. We are exploring opportunities to share lessons on how to overcome such constraints.
- Interviews conducted during the MTE show that the implementation of community level plans established within Civil Protection Committees in relation to climate change and disaster risk management varied within the district. Not all the established CPCs were operational at that time. More efforts need to be invested in supporting the functioning of these local committees.
- The MTE Assessment noted that while the benefits of agricultural interventions have been significant in past 'moderate' drought years, they could decline substantially in future years when hazards become more 'severe'. This suggests that several years of severe hazards during the programme lifetime or immediately afterwards could wipe out income gains, especially if households only invest savings in inputs such as seeds and fertilisers so there is a need for further diversification of revenue sources.
- Several issues relating to sustainability were highlighted by the MTE and discussed with implementing partners and DFID. These include i) the long-term sustainability of seed supply systems, since the seeds provided by the programme for pass-on deliver improved characteristics for three seasons only, making it necessary to consider more long term solutions for seed supply, and ii) continued Government of Malawi support in terms of probable levels of sustained training and extension- related linked to interventions.
- This assessment also noted that, to date, some VSL groups have focused more on consumption smoothing in relation to shocks than on new productive investments in diversified livelihoods. Such choices play an important role in protecting assets already obtained by households as a result of distress sales. Whilst some beneficiaries will be able to absorb risks associated with the failure of a business initiative, others may prefer to continue to use their savings on consumption smoothing.
- Sustained Government support to district development activities is vital in order to ensure the successful implementation of ECRP and the scale-up of its successful interventions. Whilst financing for DRR and Contingency Plans was achieved, there is concern that the withdrawal of donor support may result in reallocation and reductions in government budgets which would further limit the Government's ability to sustain and replicate project activities.
- The VfM assessment also indicated that conservation agriculture reduces the overall labour demand on farming households, especially for weeding. This may be of particular value for women. The household survey data indicates that female headed households are less likely to own land than male headed households and therefore may be less able to invest in agricultural and forestry activities on rented land.



Filimoni Malekano (77) in his field in the village of Matembera, district of Balaka District, Malawi. 2015

6. Concluding Observations

We recognize that addressing recurrent crises and building resilience requires an **integrated systems approach**. We operate in complex contexts where emerging issues, such as climate change, pose new challenges and opportunities all the time. By understanding the root causes of vulnerability, our work can better support the capacity of both communities and organizations working with them to **cope with disturbances, adapt to changing conditions, and promote learning, innovation and transformation**. The proposed Resilience Programming Framework will help SHA's country programmes and partners – and above all, poor communities themselves – to **prioritise and manage** the interaction between different issues, enhancing the effectiveness and value for money of our work. It will empower them to improve their livelihoods and protect these achievements from immediate threats, while also guarding them against longer-term pressures. SHA's impact will be greater now, and more sustainable in the future, creating a **continued 'return'** on our initial support over many years.

Building resilient livelihoods is an ongoing process, and SHA continues to explore it. **Articulating resilience as an interrelated set of capacities** (Anticipatory/ Absorptive; Adaptive; Transformative) has greatly helped SHA to appreciate the key aspects that are enhancing the resilience of communities, and outline the best way to measure same. Understanding and tracking resilience into these three readily recognizable capacities or abilities has been very effective in helping SHA: i) develop practical programme activities or processes within these 3 capacities on the ground, giving due considerations to the many intertwined actions and processes that overlap and interact within capacities; ii) acquire an ex-ante perspective on the likelihood of climate extremes and disasters disrupting a system. More importantly, understanding resilience as a set of capacities is gaining substantial traction beyond the UK, which means that the insights and lessons learned generated across this and other programmes will inform thinking across the wider humanitarian and development sectors, and have a wider influence on global resilience policies and programmes.

¹FAO, The State of Food Insecurity in the World 2015; UNISDR, Global Assessment Report on Disaster Risk Reduction (GAR11), 2011.

²UNISDR, Global Assessment Report on Disaster Risk Reduction (GAR15), 2015, Intergovernmental Panel on Climate Change, Climate Change 2014: Synthesis Report

³DFID, Defining Disaster Resilience. A DFID Approach paper. 2012; TANGO, Enhancing Resilience to Food Security Shocks in Africa: Discussion Paper; 2012; Interagency Resilience Working Group (PPA Resilience Learning Partnership Group; Bond Disaster Risk Reduction Group; Bond Development and Environment Group), The Characteristics of Resilience Building': Discussion Paper, 2012.

⁴Béné et al. Resilience; New Utopia or New Tyranny? IDS Working paper No 405, 2012; Bahadur et al., the 3As: Tracking Resilience across BRACED (Building Resilience and Adaptation to Climate Extremes and Disasters), 2015.

⁵Biggs et al., Towards Principles for Enhancing the Resilience of Ecosystem Services, 2012.

⁶Enhancing Community Resilience Programme - Mid-term Evaluation Final Report Submitted to DFID by LTS International, Le Groupe-conseil Baastel (Baastel), the Centre for Development Management (CDM) and Training Support Partners (2014)



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