

Fortifying Futures: A Summary of Resilience Evidence in Malawi (2019-2023)

Evidence Summary

SAVING LIVES CHANGING LIVES

December 2023

A Challenging Environment

A predominately agrobased economy, Malawi relies on agricultural production for its macroeconomic growth. Despite a strong policy environment, agricultural productivity is constrained by the highest deforestation rates in Southern Africa.



Over the last 50 years, Malawi has experienced 19 flooding events and seven droughts. Recently the country was hit by cyclone Freddy in 2023, tropical storm Ana and cyclone Gombe in 2022. Due to population growth the arable land per person has declined from 0.35 ha per person in 1961 at 0.2 ha per person in 2020, one of the lowest in Africa.

Breaking the cycle of hunger

WFP's response to immediate humanitarian needs has been enhanced by its strategic shift towards resilience. Considering the heightened vulnerabilities and annual trends of acute response, WFP aims to simultaneously address the structural drivers of food insecurity in areas most-affected by cyclic shocks.

In Malawi, WFP's approach seeks to transition food and nutrition-insecure farming communities from subsistence to surplus-producing livelihoods in line with the government of Malawi's priorities.

An Integrated Package

WFP's resilience-building strategy utilizes its extensive field presence to implement a range of activities through an integrated package. WFP employs a partnership approach – working together with cooperating partners, local authorities, government ministries, academia and the private sector- to design and implement the integrated approach. Central to this is also the community-based participatory planning model, where community members' voices and opinions drive the design of the activities.

WFP's livelihood activities focus predominately across eight priority districts in Southern Malawi (Balaka, Blantyre rural, Chikwawa, Machinga, Mangochi, Phalombe, Nsanje and Zomba).

Through the implementation of an integrated resilience package, WFP has demonstrated that **asset creation is the cornerstone of this approach**. When properly layered with other relevant interventions, the integrated package has shown its potential for increasing participants' wealth, improving their food and nutrition status, enhancing their resilience to shocks and creating positive spill over effects to non-participating communities.



Key Activities



Food Assistance for Assets (**FFA**): Participants build or maintain assets (community gardens, irrigation farming,

reforestation) to improve their livelihoods, creating healthier natural environments, reducing the impacts of shocks and strengthening resilience to natural disasters. WFP provides assistance using food or cash transfers to cover immediate food needs while participants build or boost assets that contribute to strengthening their resilience over time. After a certain period of time - and as their food security improves - participants continue working on asset creation but without transfers.



Crop insurance: WFP provides farmers with the option of crop insurance to safeguard their livelihoods

in times of shock. Farmers either pay for a premium or work for 14 days (over six months during the off-season) to create assets that reduce their vulnerability to hazards over time. This (and/or a contribution in cash from participants) pays for their crop insurance coverage, which triggers a pay-out in the event of a flood or prolonged dry spell. In a good season, even when no pay-out is triggered, farmers are still improving their capacity to cope with weather shocks as a result of the assets created. In the event of a bad season (low yield) a pay-out is triggered, allowing farmers to purchase food or invest in alternative livelihoods despite the reduced harvest.



Climate Services: WFP provides smallholder farmers with access to climate and weather information as well as

agro-advisories (through SMS messages, radio, and/or extension officers) with the aim of improving farmers' decision-making regarding livelihood activities affected by climate variability and extreme weather.



Smallholder Agriculture Market Support (SAMS): WFP works with

smallholder farmers to promote agriculture diversification and entrepreneurship, reduce post-harvest losses, improve quality standards across value chains, and strengthen the governance and business management of farmers organisations and cooperatives to allow for better access to markets.



Village Savings and Loans

(VSLs): WFP offers participants and community members a community-based micro-credit

scheme aimed at increasing smallholder farmers' ability to purchase food and agricultural inputs; invest in incomegenerating activities; cover the cost of education and health-related expenses; and diversify their livelihoods. VSL groups support each other with saving money and offering loans at local levels. Any interest paid on loans goes back into the community. WFP is also offering grants to potential VSL groups in a form of revolving funds to boost the amount of money circulating within these groups and optimise the level of investments made.

Evidence Generation to Support WFP's Integrated Resilience Programme

To foster a culture of innovation and new thinking - as well as striving to continually improve its programming - WFP has undertaken several assessments, studies, monitoring activities, innovation pilots and research to demonstrate evidence-based impact. These findings will be used to enhance the quality of WFP's interventions to achieve maximum success.

The findings presented in this brief have been sourced from assessments, evaluations and surveys conducted between 2019 and 2023. These include:

- Food Assistance for Assets Decentralized Evaluation (2014-2019).
- Integrated Risk Management Programme (IRMP) Malawi Exit Strategy for the Swiss Agency for Development and Cooperation (SDC).
- Integrated Resilience Annual Survey Results (2019 (2019 – 2022, inclusive of some preliminary findings from 2023).
- Food Assistance for Assets (FFA) Cost-Benefit Analysis.
- Integrated Risk Management Programme (IRMP) Desk Review 2021.
- WFP Malawi Transition Strategy 2020.
- Qualitative findings to support integrated resilience transition 2021.
- Soil audit report (sample collection to determine the status of soil nutrient availability) 2020.
- Integrated Resilience Programme Floods Impact Assessment 2022-2023.
- Asset Creation for Resilience Building in the Context of Climate Change in Malawi-Tetra Tech Study 2023.

Key Highlights



of participating households perceiving assets' benefit on increasing crop production and diversification (2023)



of participants reported being able to absorb and bounce back after climatic shocks and better prepared for future shocks (2023)



of participants used the climate information to make livelihood and agricultural decisions (2022)



Participants who accessed loans through village savings and loans increased from **40%** (2019) to **95%** (2022).



Maize harvest production above 200kg increased from **42%** (2022) to **61%** (2023).



Key Findings

» Asset creation is the cornerstone of WFP's integrated resilience package and is yielding great impact and sustainability

- Asset creation (with or without transfers) serves as the foundation for WFP's integrated resilience programming. When layered with complementary activities (integrated risk management and market access, among others), participants are more likely to build back better (and faster) when faced with shocks.
- Community-level participatory planning strengthens ownership by participants, as they have an active say in the design and development of interventions impacting their livelihoods.
- As shown in Figure 1, where participating households received all four support activities to complement asset creation (FFA), they were 34% more likely to be within the highest resilience category (top quintile). While households receiving none of the additional project activities had only a 2% chance of achieving the same level.¹

Figure 1: Projected resilience quintile by interventions

- There is evidence of continued actions in reforestation, soil and water conservation and veggie garden activities by participants no longer receiving cash transfers. Where cash transfers stopped in 2019, 78% of participants are still working on asset creation and maintenance in 2022.
- During field visits, spill-over effects were observed, with some **non-participating communities copying best practices** for asset creation that have proven beneficial to the entire community.
- 80% of participants in climate services indicated a greater ability to make budgetary and investment decisions regarding their agricultural practices after participating in WFP integrated resilience interventions as per Figure 2.



Figure 2: Respondents' perceived value of Climate Services



" My household is now better able to take investment and budgetary decisions related to our livelihoods "

1 Analysis calculated using Resilience Index Measurement Analysis (RIMA).

» Programme participants are experiencing improved food and nutrition security

Between 2019 and 2022 there has been an improvement in the percentage of households 2019 classified as food secure from 55% to 63% as shown in Figure 3. This positive increase has occurred 39% 51% despite many households being adversely affected by floods (2018/2019) pest infestations (yearly), the COVID-19 pandemic (starting in April 2020) and tropical 61% 49% storm Ana and cyclone Gombe in 2022. This illustrates that the benefits of the interventions are lessening the effects of shocks on Ť Ť farmers over time. Food secure

The percentage of households across WFP's eight target districts who reported **harvesting over 200kgs of maize** rose from **43%** in 2019 to **72%** in 2021. In 2022, due to the severity of cyclone Ana, there was a reduction in production rates. However, the programme helped mitigate drastic losses, ensuring that harvest production did not decrease below pre programme levels as might

have happened if the programme was not in place. The latest results from the 2023 survey show that despite persistent cyclones – the production rate has risen again to 61% - showing the positive impact the programme is having on protecting gains and mitigating risk even in the face of shocks.

Cyclone Ana

44%

56%

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2022

30%

70%

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2021

34%

66%

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24%

76%

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Figure 4: Average maize production (kg) reported by participants (2019 - 2023)



Figure 3: Food Security by Gender

2020

52%

48%

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Food insecure

42%

58%

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- In 2020, 95% of households reported they experienced increased crop production thanks in part to best practices from the intervention (informed decision-making from climate smart agriculture and conservation agricultural practices).
- Immediate food requirements during and immediately following shocks (floods and dry spells) were extensively met, reducing the number of individuals, households and communities resorting to negative coping mechanisms to meet their food, income and resilience needs.
- The number of food deficit months experienced by communities during the cyclic lean period has decreased over the intervention period. In districts like Balaka, female-headed households reported having up to a six-month food gap period at the inception of the intervention. They now report this has dropped to less than four months during a bad year, impacted by cyclones.

The Economic Rate of Return (ERR)

The Economic Rate of Return (ERR) of asset creation has been calculated to estimate what can be expected in terms of benefits for a given financial investment. For WFP's integrated resilience approach, an ERR over a tenyear period of **7.3%** has been calculated.

THIS MEANS THAT IF YOU INVEST USD 1 MILLION IN 2020, THE ESTIMATED RETURN ON INVESTMENT WILL BE USD 730,000 IN 2030.

This does not account for other benefits experienced in the community, including spillover effects and enhanced economic opportunity for the next generation.

Approximately **72%** of benefits stem from the increase in agricultural productivity experienced by farmers. ERR calculations consider asset maintenance and inflation, among others.

» WFP's integrated approach has led to an improved environment and increased capacity for communities to manage natural resources and environmental risks

- As per soil testing reports conducted in 2020, **soil quality has improved** in areas with WFP-created watershed management assets and reforestation activities leading to higher crop yields for smallholder farmers.
- An assessment conducted immediately after devastating cyclone Freddy in 2023 showed that for **89%** of integrated resilience participants in the creation of household and/or community assets protected them from natural disasters, allowed for better access to basic services and improved their natural environment).



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87% of the community assets monitored under Asset Impact Monitoring from Space (AIMS) stood strong, undeterred by the cyclone Freddy's impact, while withstanding the impact of cyclone Freddy². The satellite images in Figure 6 show that the community woodlots planted in Chikwawa helped maintain the bank of the river protecting the surrounding communities and agricultural land from the impact of flooding and run-off water in the aftermath of the cyclone.

" WHILE WE HAVE FACED HUGE DAMAGE DUE TO CYCLONE FREDDY, THIS IMPACT COULD HAVE BEEN WORSE IN THE ABSENCE OF WOODLOTS, STONE BANDS AND DEEP TRENCHES IN THIS COMMUNITY "

- participant of community discussion in Msomo GVH, Chikwawa



Stone bund under asset creation activities in Phalombe

Before intervention (2016) (© 2021 Maxar)









² See more information on the AIMS assessment here: Malawi: assets performance assessment post-Cyclone Freddy (arcgis.com)

The Asset Benefit Indicator

The Asset Benefit Indicator (ABI) is intended to measure strengthened protection from shocks, diversification in production, better access to markets and improved natural environment. **Overall, 89% of participants perceive they have attained all the categories of outcomes** which resilience interventions can bring about on production, protection from shocks, natural environment, technical capacity and reduced hardship.



A bank by the porch

VSLS ARE ECONOMICALLY EMPOWERING PARTICIPANTS EXCLUDED FROM THE MAINSTREAM FINANCIAL SECTOR.



Village Savings and Loan Groups (VSLs) play a crucial role in economically empowering individuals who are often excluded from traditional financial systems. These groups provide support to participants who lack access to mainstream financial services, such as banks or microfinance institutions.

In a VSL group, participants come together weekly to contribute shares, and each member maintains a passbook to track their savings. The accumulated savings are securely stored in a communal box with multiple padlocks, each held by different individuals. Additionally, VSL groups extend local-level loans to their members. These loans are sourced from the collective savings, and recipients are given a specific period to repay the loan.

Members who borrow are required to pay a small amount of interest on the loan. At the end of the year, the accrued interest from loans is distributed among all members based on their contribution to the total savings. The more a member invests during the year, the larger the proportion of the total interest they receive. What makes VSLs particularly popular is their community-based nature. Any interest paid on loans is reinvested back into the community. This straightforward model is accessible to individuals with limited education and those living in poverty, making it a practical and inclusive approach to financial engagement.

» Households have improved resilience to mitigate weather and climate shocks/stressors

- 80% of participants reported being able to adapt and bounce back after cyclone Freddy and be fully prepared to manage future climatic shocks.
- Communities who participated in WFP's integrated resilience interventions reported they are better able to recover from the impact of weather and climate shocks. The qualitative results show that participants are now engaging less in negative livelihoods coping strategies e.g., no longer i.e. selling productive assets or withdrawing children from school.
- Farmers believe in the value of crop insurance. Among farmers participating in the insurance activity, **67% indicated they are willing to pay for insurance premiums** for their crops, meaning they understand the value of safety nets.
- 76% of participants stated they received climate services information to make household decisions related to disaster risk reduction, agricultural practices and income-generating activities.

» Households have diversified incomes and a savings buffer to support them in times of shocks

Data reveals a significant uptake in the percentage of households participating in Village Savings and Loans (VSLAs) groups from 32% (2019) to 95% (2022), which allows them to diversify their income sources, which in turn protected them from shocks. In addition, members had access to a social fund, which further cushioned them against emergencies.

- The post-disaster utilization of VSLAs has witnessed a notable surge, particularly highlighted in the aftermath of cyclone Freddy. Households resorting to **borrowing** money through VSLAs increased from 51% of households in 2022 (tropical storm Ana) to 64% in 2023 (cyclone Freddy) - a rise that was an intended outcome of the intervention. A qualitative assessment indicated this trend is contributing to enhance financial independence, particularly among female-headed households. The findings show that 65% of female-headed households are availing themselves of financial support through VSLAs, while 62% of male-headed households are also participating in this borrowing mechanism.
- Alinafe pictured below is a wife and mother of three taking part in the programme in the small village of Chimbalanga, Zomba. She explains that joining the VSL group has not only supported her family's business, but also has increased her sense of self worth and empowered her:

" BEFORE, I HARDLY HAD ANYTHING, BUT MY LIFE AND EVEN MY APPEARANCE HAS CHANGED. I DRESS DIFFERENTLY NOW AND CAN BUY MYSELF NICER CLOTHES "



Learning and evidence priorities

Evidence-based decision making is key to informing WFP's strategies and actions moving forward in order to strengthen and refining our approach and optimise resilience outcomes. Building on lessons learned, Malawi CO has identified five key areas to prioritise moving forward:

- A multifaceted approach to resilience

 is key. Moving forward, a priority is to
 invest in understanding the most effective
 integration package in different contexts.
 WFP is committed to reinforcing and scaling up the integrated model in collaboration
 with our operational partners to reach more
 vulnerable communities.
- 2. Observing geographical variances in resilience has provided valuable insights. Qualitative analyses have proved essential in identifying factors affecting differences in resilience outcomes between communities. Qualitative approaches will continue to be employed to better understand programme impact to better tailor our interventions to the local context and needs.

- 3. Evidence-based adaptation and transition is crucial, especially in the face of climate shocks. WFP will focus on refining strategies to ensure sustainable progress and effective transitions that are tailored to communities that have demonstrated enhanced resilience over time.
- 4. Community-driven processes are essential for sustainability. Engaging communities in various program components leads to greater resilience. This approach not only makes interventions more relevant but also ensures their longevity. WFP will deepen community engagement efforts through continued use of local-level context analysis and planning tools, as well as community feedback mechanisms.
- 5. Collaborations with academic institutions are invaluable. A coalition of partners is essential to integrate activities into a unified investment for transformative change. Moving forward, operational and research partnerships will remain a cornerstone of WFP's strategy, especially in exploring complex areas such as understanding gender dynamics in resilience.



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