



Drivers and Barriers to Household Resilience in Northern Nigeria



Prepared for Catholic Relief Services
by the Keough School of Global Affairs Integration Lab
December 2023

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Acknowledgements

The research team is appreciative of the support received from all individuals and partners who made this study possible. This included faculty and staff of the Pulte Institute for Global Development and the Keough School of Global Affairs, staff from Catholic Relief Services Headquarters, Central Africa Regional Office, and Nigeria Country Offices, and local partners.

Partner and In-Country Support

The research team is appreciative of the guidance and support of the CRS HQ team and Central Africa Regional Office Team including Austen Moore, Beth Shaw, and Jessica Dittmar in developing our research methodology and instruments. Dane Fredenburg, CRS Deputy Country Representative for Nigeria was instrumental in orienting the team to the Nigeria context.

This project would not have been possible without the significant coordination and logistical support of the CRS Nigeria Monitoring and Evaluation team headed by John Ibitoye. Key human resources and security staff supported the enumerator trainings including Christopher Oleabhie, Tolulope Ayoola, Emmanuel Olaoye, Precious Ebhohimen, and Oluwakayode Adeoye. Abdulrasheed Isah Zubairu, John Akakaiye, and Malvis Okoro were critical in training coordination and logistical support as well as enumerator management. The research team would also like to thank the various implementing partner staff who supported our enumerators during data collection by providing key insights into the location of former Feed the Future (FTF) Nigeria Livelihoods beneficiaries. Lastly, the team is deeply appreciative of the financial support from CRS Nigeria whose resources made our significant data collection effort possible.

This study was made possible by the hard work of a large team of local data collection professionals. This included 50 enumerators and 6 transcribers across the six states of study. Our enumerator and transcriber team were highly skilled, professional, resourceful and dedicated to the project. Their cultural awareness, local knowledge, language skills, flexibility and commitment were absolutely critical to collecting the data on which this study relies and achieving data collection goals. Lastly, without the willingness of over 1000 FTF Nigeria Livelihoods Project beneficiaries and control group to dedicate one of their most valuable resources, time, to participate in our surveys, interviews, and focus group discussions, this follow-up study would not have been possible. We are deeply appreciative of participants' willingness to share their experiences and stories with us to inform this study.

University & Integration Lab Support

The research team is grateful for Tracy Kijewski-Correa, the faculty advisor to the research team who provided guidance and support throughout every stage of the project. Likewise, the team is grateful for Alan Medina Hernandez who provided logistical support and Paul Perrin who supported Theory of Change development. In addition, the Lucy Institute provided quantitative and qualitative data analysis guidance and the team is particularly grateful to Yang Xu and Jessica Young. Finally, we are grateful to the Keough School of Global Affairs for funding the i-Lab and providing the resources for this project.



Acronyms

BRACED	Building Resilience and Adaptation for Climate Extremes and Disasters
CARO	Central Africa Regional Office
CoBRA	Community Based Resilience Assessment
CRS	Catholic Relief Service
FAO	Food and Agriculture Organization
FCT	Federal Capital Territory
FIES	Food Insecurity Exposure Scale
FSIN	Food Security Information Network
FTF	Feed the Future
FGD	Focus Group Discussion
HHS	Household Survey
IAI	Intervention Adoption Index
i-Lab	Integration Lab
IPKII	Implementing Partner KII
ISE	Index of Shock Exposure
JDPC	Justice, Development and Peace Commission
KII	Key Informant Interview
KSGA	Keough School of Global Affairs
LLKII	Local Leader KII
LGA	Local Government Area
MEAL	Monitoring, Evaluation, and Learning
MIRA	Monthly Interval Resilience Assessment
MSC	Most Significant Change
NE	Northeast

NW	Northwest
P2P	Pathway to Prosperity
RCI	Resilience Capacity Index
RHKII	Resilient Household KII
RIMA	Resilience Index Measurement and Analysis
SERS	Subjective Evaluation of Resilience Score
SILC	Saving and Internal Lending Community
TANGO	Technical Assistance for NGOs
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WASH	Water, Sanitation, and Hygiene

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Preface

From 2013-2018, Catholic Relief Services (CRS) implemented the FTF Nigeria Livelihoods project. Its aim was to improve economic well-being and reduce poverty of 42,005 households in two states within Northwestern Nigeria, Sokoto and Kebbi, as well as the Federal Capital Territory (FCT). The project was unique for its diverse set of integrated activities; not solely an agriculture project or a health project, the broad range of activities deployed was multi-sectoral and cross-cutting. Therefore, the project is best understood through the lens of resilience: it worked to improve households' ability to withstand shocks and stressors through multiple interventions. While the term resilience was less commonly used in 2013, a decade later it has become a staple concept within the humanitarian lexicon. This study aims to explore both the impacts of the FTF Nigeria Livelihoods project and the state of resilience in Northern Nigeria. This mixed-methodological study was conducted through a collaboration between Catholic Relief Services Nigeria and a team of graduate students from the University of Notre Dame's Keough School of Global Affairs in 2023: Emma Hokoda, Colleen Maher, and Nancy Obonyo, working under the School's Integration Lab (i-Lab).

This report begins with an overview of the project background, learning questions, and study design. This is followed by a brief description of the mixed-methods used for data collection and analysis. Finally, the report concludes with main findings and recommendations for Catholic Relief Services. A full, detailed description of the study methodology including data collection instruments and data analysis can be found in the separate Methods Report.

The findings of this study are most relevant to Catholic Relief Services, particularly CRS' Global Headquarters and the CRS Nigeria Country Program. This report highlights the successes and lessons learned from the FTF Nigeria Livelihoods project. Key findings and recommendations will inform future program development and grant acquisition. The Nigeria Country Program team can use this report to specifically demonstrate the impact of the FTF Nigeria Livelihoods project and use the assembled evidence to inform ongoing and future programming in the region, thus strengthening resilience through other country programs. Lastly, Nigerian government officials and local partners can also benefit from the findings of this study to understand the state of household resilience in Northern Nigeria and the facts which impact it.

1.0 EXECUTIVE SUMMARY

1.0 Executive Summary

In 2018, 40% of Nigerians lived below the poverty line, and another 25% were vulnerable. Rising threats, including climate change, environmental degradation, and conflict, have plagued Northern Nigeria since the 1990s, displacing communities, destroying productive assets, and disrupting markets. Building resilience, the ability to bounce back from and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth, is critical for the households in the region. From 2013-18, Catholic Relief Services (CRS) implemented the USAID-funded FTF Nigeria Livelihoods Project, an agricultural-based livelihoods strengthening project. Five years later, CRS wants to know project activities' long-term impact, their contributions to household resilience, and which factors impact sustainable resilience in a chronically stressed region.

This study deployed quantitative and qualitative resilience measurement frameworks to gather data across 6 northern Nigerian states between May 14th, 2023, and July 22nd, 2023. Data was collected through surveys, focus groups, and interviews involving FTF beneficiaries, CRS staff, community leaders, and partners. In total, 1,160 household surveys, 24 focus group discussions, and 66 KIIs were conducted.

The study revealed that FTF Nigeria Livelihoods had positive, sustainable outcomes for project beneficiaries. Most FTF beneficiaries continue to practice an activity they learned during the project and share learned activities with others. Modest gains in improving household dietary diversity, a key indicator measured throughout the project's lifespan, were lasting. Furthermore, it is evident that FTF Nigeria Livelihoods was integral in achieving these levels of household resilience, according to both subjective and objective measures.

In addition, several FTF Nigeria Livelihoods activities, such as savings groups, hygiene, agriculture, small grants, cash transfers, skill programs, and youth engagement, have proven most sustainable, benefiting communities for up to five years post-project. These interventions often synergized with skills leading to business start-ups, backed by financial support, and culminating in improved economic well-being through participation in savings groups.

Finally, the synthesis of the quantitative and qualitative data gathered from Northern Nigeria suggests that highly contextualized and systems-strengthening interventions are best suited to building resilience. To this end, participants prioritized interventions that increase the functioning of the system, namely peace and security, education, and infrastructure. It may therefore be helpful to think of resilience not only at the household level, but on both the individual and community level.

2.0 OVERVIEW

2.0 Overview

Nestled in the crook of West-Central Africa, Nigeria boasts the second largest economy and the largest population in Africa. Despite this, 4 in 10 Nigerians are below the poverty line. This number is even higher in Nigeria's Northern regions, which have experienced years of climate shocks and protracted conflict¹. This problem is exacerbated as the region largely depends on informal employment and has low levels of education, with only just over half of children in school². Northeastern and Northwestern Nigeria are likewise more vulnerable to climate change induced stressors, such as encroaching desert and diminishing surface water³. The region is doubly vulnerable to climatic impacts due to its dependence on smallholder agriculture. Northern Nigeria is a largely agricultural region, with more than 80% of households in the Northeast and Northwest participating in crop-farming and nearly 70% rearing livestock⁴. However, farmers have been unable to achieve full productive capacity, weakened by lack of agricultural financing, poor farm extension services, and post-harvest losses resulting from failing infrastructure. Reduced agricultural productivity results in low yields, high food prices, and food insecurity as well as a reduction of income⁵, with Northern Nigeria experiencing the most acute food insecurity in the country.

To address these challenges in the region and support vulnerable households, Catholic Relief Services (CRS) implemented the FTF Nigeria Livelihoods project from 2013-2018. This \$17,637,060 USAID-funded project aimed to improve economic well-being and reduce poverty of 42,005 households in two states within Northwestern Nigeria, Sokoto and Kebbi, as well as the Federal Capital Territory (FCT). In 2017, USAID expanded the project to include 12,782 households in three conflict-affected Northeastern Nigerian states: Adamawa, Borno, and Yobe. The goal of the expansion was to move vulnerable households, internally displaced persons, and returnees from relying on humanitarian assistance to engaging in productive, income-generating activities.

¹World Bank. (2022, Mar 22). "Deep Structural Reforms Guided by Evidence Are Urgently Needed to Lift Millions of Nigerians Out of Poverty, says New World Bank Report." Abuja, Nigeria: The World Bank Group. Accessed Oct 13, 2023, from <https://www.worldbank.org/en/news/press-release/2022/03/21/afw-deep-structural-reforms-guided-by-evidence-are-urgently-needed-to-lift-millions-of-nigerians-out-of-poverty>.

² UNICEF. (N.d). "Nigeria: Education." Accessed Oct 13, 2023, from <https://www.unicef.org/nigeria/education>.

³ Haider, H. (2019). Climate change in Nigeria: Impacts and responses. K4D Helpdesk Report 675. Brighton, UK: Institute of Development Studies.

<https://www.preventionweb.net/publication/climate-change-nigeria-impacts-and-responses>

⁴Sasu, D. D. (2022, Feb 1). Share of Households participating in agricultural activities in Nigeria in 2019, by zone. Statista. Accessed Oct 13, 2023, from

<https://www.statista.com/statistics/1119613/households-participating-in-agricultural-activities-in-nigeria-by-zone-and-type/>.

⁵ Lawan, U. (2018). "Why the Future of Farming is Not Farming." Filmed Aug 17, 2018 at TEDxMaitama, Abuja, Nigeria. Video, 17:02. https://www.ted.com/talks/usman_lawan_why_the_future_of_farming_is_not_farming

The foundation of the FTF Nigeria Livelihoods project was agricultural-led growth, with a particular emphasis on diversifying production and incomes, as well as improving nutrition. In line with CRS' global strategy of creating durable change by moving households away from vulnerability along a "Pathway to Prosperity" (P2P) using stabilization and livelihoods support, the project's overarching goal was to reduce poverty for households in the targeted states by increasing agricultural competitiveness⁶. The project was designed to achieve four intermediate results (IR):

- (1) increased agricultural production and productivity
- (2) increased income
- (3) improved nutrition status
- (4) stronger safety nets.

Interestingly, the word "resilience" was not used in any of the original project documents, perhaps since the term was not popular in the humanitarian sector zeitgeist at the time. However, the project's approach, particularly modeled using CRS's P2P, had an obvious, though not explicit, resilience framing. The purpose of this study is to now assess the original FTF Nigeria Livelihoods project through an explicit resilience lens.

Because a household's resilience and agricultural-led growth is manifested in multifaceted dimensions, FTF programming necessarily took a multidimensional approach introducing myriad activities to the region. For the purposes of this study, activities were grouped into four categories which map directly to the four classes of intermediate results: (1) Agricultural production and diversification, (2) Income generation and diversification, (3) Nutrition and behavior change and (4) Local government strengthening. The activities within each category are detailed in Figure 1. Note that during data collection, conditional cash transfer was grouped among Income Generation and Diversification activities.

Unfortunately, the impact of these activities on resilience-building are only apparent as households confront repeated and varied shocks over time, well beyond the program's limited monitoring and evaluation efforts. Thus, this project revisited beneficiary communities five years after the close of FTF Nigeria Livelihoods to (1) evaluate the sustained impact of FTF activities by measuring current resilience levels and (2) identify the primary determinants influencing these observed resilience levels, by (3) first determining what resilience measurement tool or technique is best suited for these aims. The resulting mixed methods study across the northern Nigerian states of Adamawa, Borno, Yobe, the Federal Capital Territory, Kebbi, and Sokoto found that FTF Nigeria Livelihoods was overall successful in increasing resilience and dietary diversity in beneficiaries. However, not all interventions contributed equally to this achievement. Furthermore, there were some notable gaps in FTF Nigeria Livelihoods's response to key threats. By strengthening MEAL approaches, continuing research into the critical subject of

⁶ CRS. (2016). "Pathway to Prosperity". Baltimore, MD: Catholic Relief Services. Accessed Apr 15, 2023, <https://www.crs.org/stories/pathway-prosperity>.

resilience in Northern Nigeria, and incorporating a systems-strengthening strategy in program development, CRS can achieve more sustainable resilience, leading households to be more able to anticipate, absorb, and even overcome the shocks and stressors that inhibit flourishing.

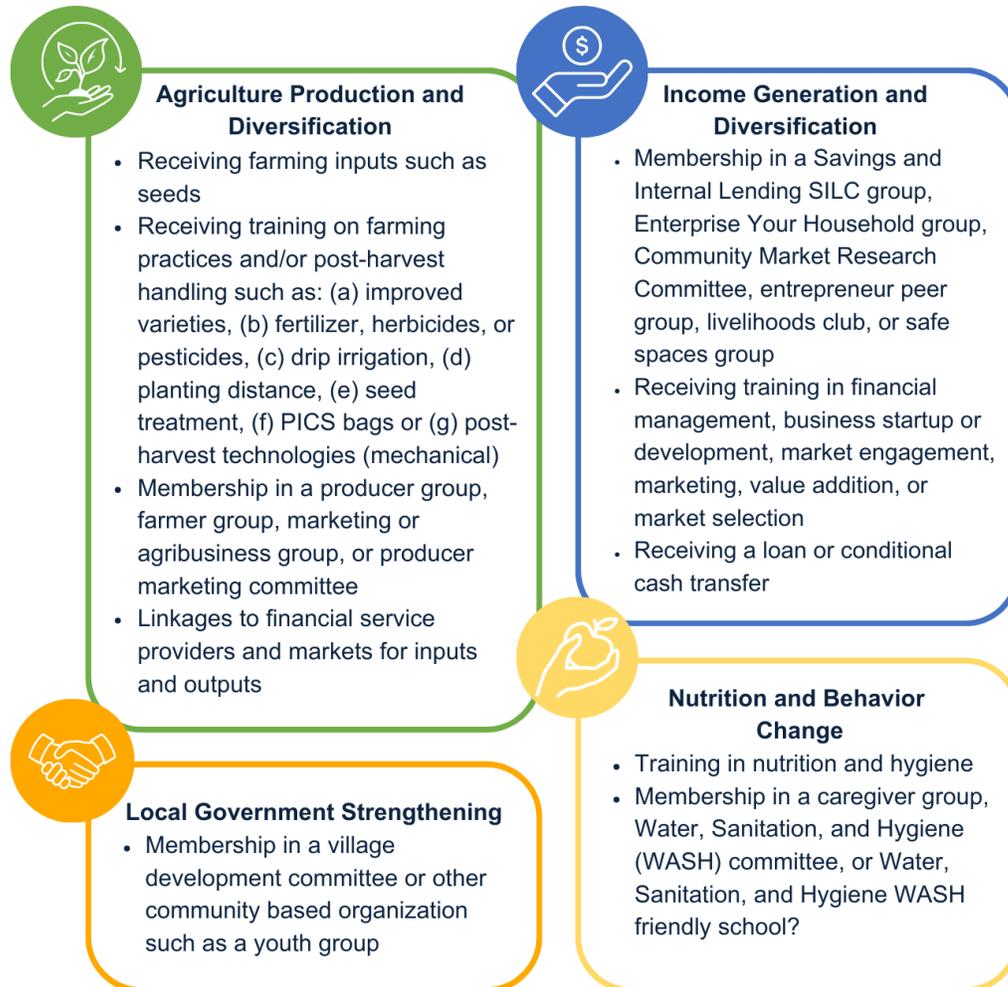


Figure 1: FTF Nigeria Livelihoods Activities, by category, as expressed to beneficiaries during household survey data collection

Learning Questions

1. What existing resilience measurement tools and frameworks are best fit for the Northern Nigeria context to inform future resilience projects?
 - a. What are the strengths and weaknesses of existing tools?
2. What FTF Nigeria Livelihoods interventions have been the most durable, useful, and impactful to beneficiaries since the project ended?
 - a. What does this tell us about the absorptive, adaptive, and transformative capacity of the region?
3. What are the factors which contribute to building, maintaining, or eroding long-term resilience?
 - a. In this specific context, what are the greatest threats to resilience? How might these be mitigated on a household and community level?
 - b. What strategies do households utilize to prepare for, respond to, and recover from shocks? Is there an emphasis on either reactive or anticipatory practices? Where are opportunities for interventions and improved programming?



Figure 2: Enumerators practicing FGDs at training in Sokoto.

3.0 RESEARCH METHODOLOGY

3.0 Research Methodology

In order to answer the above learning questions, the study utilized a mixed methods approach to gather both quantitative and qualitative data on the many dimensions of resilience. The adopted resilience measurement techniques were informed by a desk review of existing tools and frameworks, including those that capture individual resilience perspectives, judgements, and preferences (see inset on Resilience Measurement, page 17).

The study began by collecting Household Surveys (HHSs) across FTF Nigeria beneficiary communities to determine the efficacy and durability of FTF Nigeria activities, measuring households' current resilience levels, and determining which FTF activities were still in use and the depth of their current engagement with these activities. These findings were contextualized by Focus Group Discussions (FGDs) with select beneficiary households. Local Leader Key Informant Interviews (LLKIIs) and Implementing Partner Key Informant Interviews (IPKIIs), as well as interviews with FTF Nigeria staff and activity leads, revealed the sustainability and transformative capacity of these activities.

To further identify the factors contributing to building, maintaining, and eroding resilience in Northern Nigeria, FGDs also explored local conceptualizations of resilience and the factors/interventions enabling it. To this end, each FGD nominated a local Resilient Household, a household from their community that the group determined exemplified the definition of resilience they developed, with which was conducted a Resilient Household Key Informant Interviews (RHKIIs). These RHKIIs revealed the specific strategies “bright spot” households used to build their resilience, with LLKIIs and IPKIIs revealing how the context promoted or impeded household resilience. The full methodological timeline can be found below in Figure 3.



Figure 3: Methodology Timeline

<i>Table 1: Data Collection Methodologies Overview</i>					
	Household Survey	Focus Group Discussion	Resilient Household Interview	Local Leader Interview	Implementing Partner Interview
Resilience Tool(s)	TANGO Resilience Capacity Index (Light Approach) BRACED Subjectively Evaluated Resilience Score	UNDP Community Based Resilience Analysis	UNDP Community Based Resilience Analysis	UNDP Community Based Resilience Analysis	N/A
Number	1,160	24*	24	35	7
*Each focus group had approximately 7-10 individuals					

Data collection took place between June 5th and June 28th 2023. For each state, focus groups were formed 2-3 days after household survey collection initiated, with RHKIIs and LLKIIs following shortly thereafter.

This study targeted the same six states where the original FTF Nigeria Livelihoods project was implemented. This included the two NW states of Sokoto and Kebbi, the three NE states of Borno, Yobe, and Adamawa, and the Federal Capital Territory (see Figure 4). Data collection strategy was influenced by feasibility and security; some local government areas, communities, and villages were excluded from the study due to safety concerns. Community selection worked within these realities to mirror the FTF project’s distribution and spread. Data collection methodologies and their corresponding resilience measurement tools are detailed in Table 1. Details of the components of resilience measurement tools utilized, sampling, training, data collection, and analysis methods are provided in the accompanying Methodology Report.

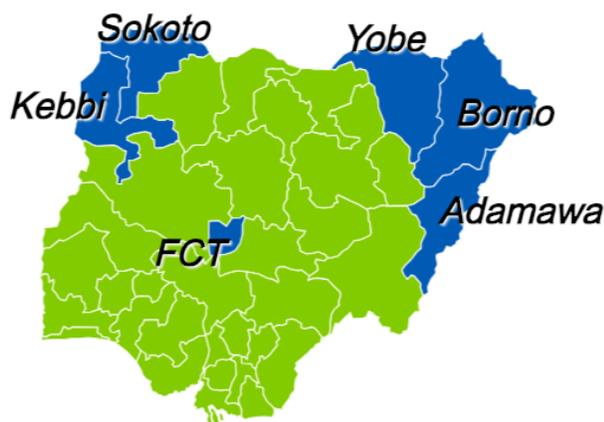


Figure 4: Map of Nigeria detailing states receiving FTF Nigeria Livelihoods

Resilience Measurement

Although resilience can be applicable in many different industries, from engineering to ecology, resilience has become a key facet of global development strategy in recent years and formalized by USAID as “[T]he ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth.” As the climate crisis has worsened, compounded by increasing instability across the globe, there is a growing need for communities to be able to weather the shocks that, more and more, seem inevitable.

Resilience-strengthening activities organize into three main categories (see Table 1) and include systems strengthening and livelihood building activities, as well as disaster risk reduction, allowing communities to better cope with future shocks and stressors.

Absorptive Capacity	Ability to minimize exposure and sensitivity to shocks and stresses through preventative measures and appropriate coping strategies that ensure short-term survival while trying to avoid permanent, negative impacts. For example, DRR, financial services, and health insurance.
Adaptive Capacity	Abilities that enable informed choices and changes in livelihood and/or other strategies in response to longer-term social, economic, and environmental change. For example, income diversification, market information, and trade networks.
Transformative Capacity	Governance mechanisms, policies and regulations, cultural and gender norms, community networks, and formal and informal social protection mechanisms that constitute the enabling environment for systemic change. For example, infrastructure, good governance, and formal safety nets

Because of the multifaceted nature of resilience it can be incredibly difficult to measure resilience. For that reason, productivity, asset measurement and food security status, for example, are often used as a proxy for resilience measurement. Another difficulty in measuring resilience is the dissonance between these conventional, “**objective**” measures and the socio-emotional dimensions of resilience. These contextualized, “**subjective**” resilience are equally critical to absorbing shocks. Thus, this study combines three approaches to achieve a methodology that captures objective resilience measures used by the development community, while also including more subjective measures.

Limitations

Determining Causality and the Presence of Other Humanitarian Projects

This study has acknowledged limitations, beyond those associated with respondent errors, discussed in the Methodology report. The first was that the study is unable to make causal claims about the impact of the FTF Nigeria Livelihoods project on resilience. The control group is not a perfect counterfactual to the FTF group as there are likely many, unobserved and uncontrolled for differences between the two groups that make them systematically different from one another, including the un-identified presences of other humanitarian interventions that have occurred in the study regions. Across these six states there were undoubtedly other humanitarian projects and services provided through local and international organizations during the FTF Nigeria Livelihoods project and throughout the five years since the project ended. The research team heard anecdotal evidence of this from CRS Nigeria staff who shared that states in the NE in particular had been receiving ongoing humanitarian support in recent years.

Comparative Impacts Based on Distinct and Differing Project Interventions

All survey questions regarding the FTF Nigeria Livelihoods project were asked at a high-level to reduce complexity and weight of the survey instrument. In asking each survey participant about their participation in four activity categories, rather than all potential individual interventions they could have received (of which there were more than twenty), this study was unable to collect data on how many households continued practicing or shared specific practices such as new seed inputs or SILC groups. Thus, to be able to survey a large number of households and ask detailed questions regarding resilience, this study sacrificed granularity on the impact of specific project interventions on households. Moreover, the lack of records regarding which interventions were deployed at a community level eliminated any ability of controlling for this in the data analysis.

Limitations to Localization

Data collection instruments could have benefitted from stronger localization. Due to the accelerated project timeline, data collection tools were developed in the United States in consultation with partners at the Baltimore-based CRS headquarters and limited input from Nigeria Country Programs staff. Once in-country, there was little time to make adjustments to the surveys before training and data collection began, requiring enumerators and facilitators to take on greater roles in explaining potentially confusing questions or concepts to participants.

Navigating Multiple Languages

Lastly, this project collected data in multiple languages: English, Nigerian Pidgin, Hausa, and Babur Bura. All data collection tools were developed in English and live-translated into the relevant local language by enumerators and FGDs and KIIs discussions had to be translated and transcribed into English. Although using collectively negotiated terms, this no doubt resulted in variances in translations and interpretations of responses.



Figure 5: Data collection in FCT

Evaluating Resilience, Ex-Post

It is important to note that the original FTF Nigeria Livelihoods project did not have an explicit resilience-building or measurement component. During FTF Nigeria Livelihood's design phase, project staff did not anticipate the occurrence of numerous shocks and stressors, resulting in resilience not being initially integrated into the project. However, once these challenges became apparent, limited resilience measures were subsequently built into the project during its implementation. Still, any improvements to resilience specifically were not the expressed intention of the project, and are instead indirect impacts of the project interventions implemented by CRS. Because the project lacked an explicit resilience focus from its initial design, key resilience measures were not collected at baseline or endline rendering the resilience measures collected in this study static, with no prior point of comparison. This adds to the difficulty in measuring resilience gains for FTF Nigeria Livelihoods beneficiaries.

4.0 FINDINGS

INSIGHTS

Feed the Future Nigeria Livelihoods had a lasting impact on household resilience and wellbeing.



FTF Nigeria Livelihoods Increased Household Resilience

Practices learned during FTF Nigeria Livelihoods continued after the project ended

FTF Nigeria Livelihoods Improved Household Dietary Diversity

Some FTF interventions were more effective than others in fostering resilience.



Government strengthening activities had the most substantial and statistically significant positive effect on observed RCI.

Having diversified sources of income increased household resilience.

During shocks, beneficiaries relied most on agriculture and income activities.

Resilience building requires contextualized, systems-strengthening, capacity-building activities.



The most impactful shocks faced by beneficiaries were not targeted by FTF Nigeria Livelihoods activities

Participants prioritize interventions that strengthen systems.

Household resilience is tied to community resilience.

4.0 Findings

Finding 1: FTF Nigeria Livelihoods had a lasting impact on household resilience and wellbeing

Findings from the HHS demonstrated both the positive impact engagement in the FTF Nigeria Livelihoods project had on household resilience and dietary diversity. Additionally, practices learned during the project were continued to be used by beneficiary households at high rates. IPKII insights further revealed that the project's diversified and holistic intervention suite supporting household wellbeing from multiple dimensions was successful at moving households along the pathway to prosperity.

Subfinding 1.1: FTF Nigeria Livelihoods increased household resilience.



Regression analysis found that FTF Nigeria Livelihoods was associated with an increase in both objective and subjective resilience among beneficiary households. Resilience gains increased as the depth of engagement with FTF Nigeria Livelihoods interventions increased.

FTF Nigeria Livelihoods proved to be integral in building resilience to shocks and stressors. This was found through both regression analysis of engagement in the project and various measures of resilience, as well as through responses to individual questions in the household survey. For example, one survey question asked beneficiary households “Reflecting on the period before, during, and after the FTF Nigeria project, how has your household’s capacity to prepare for, respond to, and adapt to shocks and stressors changed?” As shown in Figure 6, over 80% of beneficiary households said that their capacity to prepare for, respond to, and adapt to shocks and stressors was better than it was prior to participating in the FTF Nigeria Livelihoods project.⁷

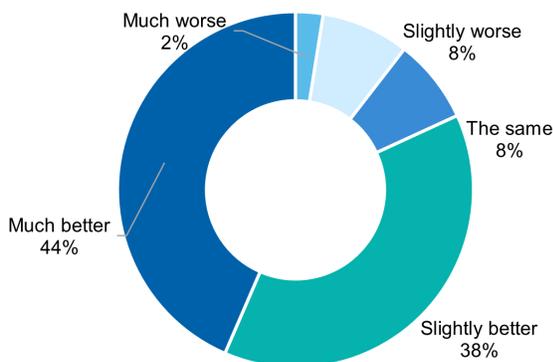


Figure 6: Capacity to Respond to Shocks and Stressors

⁷ This question was asked to all FTF Nigeria Livelihoods beneficiaries in all states, with the exception of FCT (see Methodology Report limitations).

In examining the impact of participation in the FTF Nigeria Livelihoods project between beneficiaries and non-beneficiaries in the control group, regression analysis found that holding state, gender, household size, expansion status, and education constant, participating in the FTF Nigeria Livelihoods project was associated with an increase in RCI by 7.27 points even five years after the FTF Nigeria Livelihoods program ended.⁸ This finding is particularly interesting

“[B]efore the arrival of CRS I was still staying in a rented house. Since they came, I now have a house of my own [sic].” — Resilient Household in Dakfula, Adamawa

considering that in project endline documents, FTF Nigeria Livelihoods was praised for its effective targeting mechanisms identifying the most vulnerable households in the community, suggesting that selected beneficiaries would most likely have had a lower RCI compared to non-beneficiaries.

Moreover, these resilience gains were observed to increase with the beneficiaries degree of engagement with one or more FTF Nigeria Livelihoods activities. The Intervention Adoption Index (IAI) aggregates household survey questions on the number of intervention categories a household participated in (between 0-4), the continued use of learned practices, and the sharing of learned practices with other households. Therefore, IAI indicates a household’s depth of engagement with the FTF Nigeria Livelihoods project. For beneficiary households, holding other factors constant (household size, gender, state, and expansion status), a one-unit increase in the intervention adoption index (IAI) was associated with a 1.034 increase in RCI and a .593 increase in SERS.⁹ SERS is a measure of subjective resilience developed by BRACED that consists of a set of questions asking households to assess their perceived resilience, therefore factoring people’s knowledge of their own resilience into the assessment. In SERS, each question targets a specific resilience-related capacity with standardized answers using a Likert scale.¹⁰ In addition to increased RCI and SERS, a one unit increase in IAI was also associated with a .882 increase in the recovery ability index (RAI), another measure of household resilience, holding the same factors constant.¹¹ RCI, SERS, and RAI all measure household resilience levels though RCI does so

“[W]hen Feed the Future came, we really enjoyed it and benefitted from the program sincerely.”
— Male Focus Group Participant in Bissalam, Sokoto

⁸ FTF participation was a binary variable equal to 1 for beneficiary households and 0 for control households. This regression was significant at the 99% confidence level.

⁹ Both SERS and RCI were rescaled to a 0-100 scale for ease of direct comparison between regressions. Both regressions were significant at the 99% confidence level.

¹⁰ For more information on the SERS, see the Methodology Report.

¹¹ The RAI is based on the estimation of the ability of households to recover from the typical types of shocks that occur in the program areas, based on data regarding the shocks households experienced in the year prior to the survey. It has a minimum value of 2 and a maximum value of 6. Significant at the 99% confidence level.

most holistically (as nine categories of household wellbeing are included in the measure). Therefore, it is intuitive that RCI would be more responsive and increase most significantly with IAI than SERS which measures subjective resilience and RAI which focuses solely on recovery. For more information on how IAI and the resilience indices are calculated, refer to the Methodology Report.

Furthermore, external resilience (RCI) and subjective resilience (SERS) were also found to be moderately positively correlated in this study (correlation coefficient = 0.38). Regression analysis of RCI and SERS revealed that, holding state, gender, household size, education and expansion status constant, a 1 point increase in RCI was associated with a .350 point increase in SERS score.¹² This suggests that bolstering objective resilience (RCI) results in co-benefits of boosted perceived resilience (SERS) but that subjective resilience increases more slowly than objective resilience. In other words, households may be more hesitant to express confidence in their own resilience, even when their objective resilience has risen. Therefore, SERS might be a more conservative estimate of a household's true resilience levels. Average SERS and RCI scores were both higher for FTF beneficiaries than their non-beneficiary counterparts, and this difference in means was significant at the 99% confidence-level for both measures (Table 2).

Additionally, perceived recovery ability measured by both RAI and SERS were weakly positively correlated (correlation coefficient = 0.23). When both RAI and SERS are transformed to a 0-100 scale, regression analysis found that a one unit increase in RAI is associated with a 0.13 increase in SERS.¹³

<i>Table 2: Difference in Means, SERS and RCI</i>		
	FTF Beneficiaries	Non-Beneficiaries
SERS (0-30)	22.37	21.34
RCI (0-100)	54.18	47.07
*difference in means for both SERS and RCI is significant at the 99% confidence level.		

Resilience across Nigeria

The average Resilience Capacity Index (RCI) score for all 1,160 surveyed households was 53.02.¹⁴ When broken down into FTF Nigeria Livelihoods beneficiaries (n = 971) and the non-beneficiary control group (n = 189), average RCI scores were 54.18 and 47.07,

¹² RCI and SERS rescaled to 0-100. Significant at the 99% confidence level.

¹³ Holding household size, gender, state, expansion status, and education constant. Significant at the 99% confidence level.

¹⁴ RCI scores are out of 100

respectively. To understand the context of these RCI scores, a literature review was conducted to search for comparable studies on resilience capacity in Nigeria. Few articles were found.

One study by d’Errico & Bå Sund published in the African Journal of Economic Review conducted a cross-country analysis of RCI and SERS. The study utilized 13 household surveys across ten countries from 2016-2019 by the UN Food and Agriculture Organization (FAO). Therefore, the surveys utilized FAO’s Resilience Index Measurement and Analysis tool (RIMA) to calculate a Resilience Capacity Index. The study found an average RCI of 44.153 for Nigeria (see percentile breakdowns in Table 3)¹⁵. This study was looking at Nigeria nationally, with no specific focus on the northern region.

Table 3: Comparing Resilience Capacity in Nigeria				
Resilience Level	d’Errico & Bå Sund Study (Country-wide)	Menson et. al. Study (Kaduna)	Current Study (FCT, Awamawa, Borno, Yobe, Sokoto, and Kebbi)	
			FTF Nigeria Livelihoods Beneficiaries	Non-Beneficiaries
Very Weak (0-20 percentile)	18.272	N/A	14.775	11.006
Weak (20-40 percentile)	32.857	N/A	31.554	30.700
Moderate (40-60 percentile)	43.013	N/A	51.338	49.446
Strong (60-80 percentile)	54.505	N/A	68.153	67.839
Very Strong (80-100 percentile)	72.115	N/A	86.520	85.825
Average	44.153	42.61	54.18*	47.07*

*difference in means between FTF and Control households is statistically significant at the 99% confidence level

RIMA’s Resilience Capacity Index unfolds resilience into four “pillars”: Assets, Access to Basic Services, Adaptive Capacity, and Social Safety Nets. These pillars are considered latent variables and consist of a minimum of three indicators each which are combined using factor analysis. At the second stage, RCI is calculated through adopting a Structural Equation Model. Another study published in the Journal of Arid Zone Economy in 2023 assessed food security

¹⁵ d’Errico, M., & Bå Sund, K. L. (2022). Subjective and objective measures of household resilience capacity in Sub-Saharan Africa. *African Journal of Economic Review*, 10(5), 1-25.

and resilience of over 400 rural households in the northern Nigerian state of Kaduna (Menson et. al, 2023).¹⁶ This study also utilized RIMA and found an average RCI of 42.61.

TANGO's Light Approach was used to calculate the Resilience Capacity Index in this study. The light approach buckets resilience into three capacities: absorptive, adaptive, and transformative, similarly consisting of a minimum of three indicators each. The Light Approach, unlike the Full Approach, does not perform factor analysis. Rather, all indices are transformed to a 0-10 scale and added together to form a 0-100 scale.¹⁷ RIMA's RCI and the TANGO Light Approach RCI are not perfect substitutes but their related methodology provides an interesting comparison.

Subfinding 1.2: FTF Nigeria Livelihoods improved Household Dietary Diversity Scores



Household Dietary Diversity, a metric tracked during both the baseline and endline of the FTF Nigeria Livelihoods project, is higher than the average baseline score in 2013 but has since fallen from elevated levels achieved at the endline in 2018.

Household dietary diversity was a key metric collected throughout the duration of the FTF Nigeria Livelihoods project. Table 4 suggests that while there may have been some backsliding in HDDS since the project ended, moderate improvements in household dietary diversity have been lasting. Five years after the project ended, HDDS scores for FTF Nigeria Livelihoods beneficiaries are 0.61 higher on average than they were at baseline, a more than 14% increase. This finding suggests that the FTF Nigeria Livelihoods project did have some positive, lasting effects on household dietary diversity as compared to non-FTF households. However, this does not account for potential spillover effects (which would be positive) such as FTF households sharing nutrition practices they learned with others outside of their household, thus raising the HDDS of those who did not participate in the FTF Nigeria Livelihoods project. These spillover effects could explain the nearly 4% increase in average HDDS of non-beneficiary households since the baseline. Furthermore, a t-test showed the difference in means between beneficiaries (4.87) and non-beneficiaries (4.42) to be significant at the 95% confidence level.

¹⁶ Menson, A. E., Hadiza, A., Nkom, J., Dansadau, S. R., & Akpan, O. U. (2023). FOOD SECURITY AND RESILIENCE IN NORTHERN NIGERIA: EVIDENCE FROM KADUNA STATE, NIGERIA. *Journal of Arid Zone Economy*, 1(3), 52-69.

¹⁷ For more details on the calculation of TANGO Light Approach's RCI, see Methodology Report.

Table 4: Household Dietary Diversity Scores (0-12)

	Baseline (2015)	Endline (2018)	Current Study (2023)			
			Beneficiaries		Non-Beneficiaries	
Average HDDS	4.26	7.1	4.87	14.27% increase from baseline	4.42*	3.76% increase from baseline
*Positive spillover effects may account for why the average HDDS for non-FTF households in 2023 was 4.42, a nearly 4% increase from the average baseline HDDS of 4.26 in 2015.						

Regression analysis also revealed that deeper engagement with the FTF Nigeria Livelihoods project (indicated through the IAI) was associated with an increase in HDDS.¹⁸ A one unit increase in IAI was associated with a 0.12 increase in HDDS.¹⁹ Not all FTF Nigeria Livelihoods beneficiaries received nutrition and behavior change trainings and interventions, which may explain the moderate impact of IAI on HDDS.

Shocks and food insecurity were found to be associated with decreasing household dietary diversity. Increased exposure to shocks, accounted for through the Index of Shock Exposure (ISE), had a negative impact on HDDS.²⁰ Regression analysis revealed that a one-unit increase in the ISE, was associated with a 0.06 decrease in HDDS.²¹ Furthermore, as food insecurity increased, household dietary diversity decreased. In this study, food insecurity was measured through the standard Food Insecurity Exposure Scale (FIES) questions.²² A one-unit increase in the FIES was associated with a 0.28 decrease in HDDS.²³ Food insecurity had a greater impact on household dietary diversity than shock exposure, which is intuitive since food insecurity is more directly to dietary diversity than general exposure to shocks.

¹⁸ Holding household size, gender, state, expansion status, and education constant.

¹⁹ Significant at the 99% confidence level.

²⁰ A measure of shock/ stressor exposure and severity is created that takes into account the shocks or stressors to which a household is exposed out of the total number of shocks or stressors, and the perceived severity of the shock on household income and food consumption. The index of shock exposure ranges from 0 to 32. For more on ISE, see the methodology report.

²¹ Holding household size, gender, state, expansion status, and education constant. Significant at the 99% confidence level.

²² For more information on FIES, see the Methodology Report.

²³ Holding household size, gender, state, expansion status, and education constant. Significant at the 99% confidence level.

Subfinding 1.3: Practices learned during FTF Nigeria Livelihoods continued after the project ended.



Findings from the household survey and implementing partner key informant interviews indicate that FTF Nigeria Livelihoods had a lasting, positive impact on beneficiaries. Furthermore, its design enabled key interventions to continue beyond formal project close-out allowing improved practices to spread throughout the community.

The household survey revealed continued use and sharing of practices learned during the project. Over 90% of beneficiary households surveyed continue to practice a skill that they learned during the project at least once or twice per year. Over 50% of beneficiaries continue to practice skills they learned during the FTF Nigeria Livelihoods project on a regular (daily) or frequent (weekly/monthly) basis, when faced with shocks and stressors. In Figure 8 it is clear that, despite their different levels of deployment, all four categories of intervention skills have similar rates of continued use. Furthermore, FTF Nigeria Livelihoods interventions spread beyond those directly involved in the project: over 80% of households who received an FTF intervention shared it with someone else.

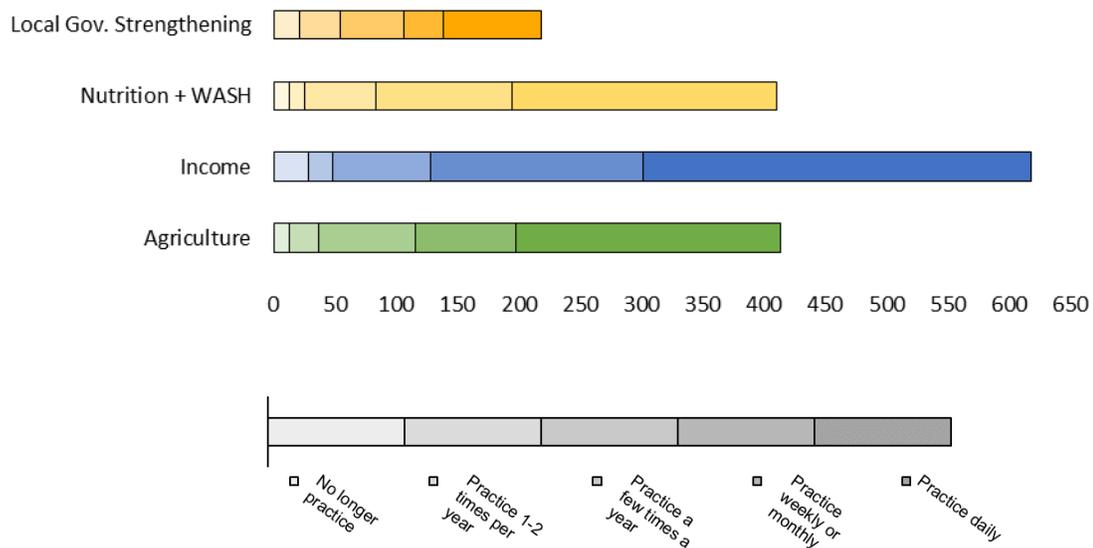


Figure 8: Continued Use of Learned Skills from FTF Nigeria Livelihoods

An ocular scan of the IPKIs conducted revealed that the FTF Nigeria Livelihoods project had a solid sustainability and exit plan. FTF Nigeria Livelihoods staff credit the project’s transition and exit plan for anchoring the project through three pathways: connection with government (local and regional), synergies with the private sector, and community structures developed (SILC

groups, farmer/producer groups, care-givers groups). Advocacy to governmental actors encouraged their adoption of the cash transfer model used in the project for their own program in 14 LGAs in Kebbi. Local governments also adopted the agricultural training given to field agents and extension workers. Private sector involvement continued project activities as well through business-related interventions. However, there were limitations in financial resources, innovation, scalability, market forces, and long-term commitment.

Ultimately, FTF Nigeria Livelihoods had a robust and holistic design that achieved large scale and diversified impact. Integrating a variety of activities (e.g. agricultural productivity, income diversification, WASH and nutrition, and local government strengthening) in the project facilitated CRS's partnerships with organizations who had diverse strengths and expertise. These partnerships created valuable linkages and networks, fostered sustained collaboration, supported future initiatives, and enabled long-term sustainability of their development efforts. The FTF Nigeria Livelihoods project also benefited from access to well-trained and experienced personnel with technical expertise. This expertise enhanced knowledge exchange and resource sharing, ultimately increasing the project's effectiveness and impact.

While the project design resulted in lasting impact for FTF Nigeria Livelihoods beneficiaries, project implementation had its challenges due to high rates of staff turnover. IPKIs revealed that the frequent movement of staff within the organization, including leadership changes, negatively impacted the project's continuity and effectiveness. Additionally, staff transitions were not well-managed, further exacerbating project difficulties. Throughout the project's lifespan, there were four MEAL Managers, three Chiefs of Parties, and numerous component leads. Turnover within the MEAL team was particularly challenging because MEAL efforts require consistency to ensure continuous and reliable monitoring of project goals and the evaluation of related activities to achieve those goals.

Extended Regional Impact: Insights from the IPKIs

From Implementing Partner Key Informant Interviews (IPKIs), project staff and local partners revealed additional insight into the sustainability and continuation of FTF Nigeria Livelihood activities. These interviews revealed that the project's impact extended beyond its immediate scope, serving as a template and pilot for broader regional initiatives. The project successfully demonstrated the humanitarian-development nexus and influenced USAID's launch of similar activities in the Northeast. This recognition highlights the effectiveness and influence of the FTF project in shaping and guiding subsequent projects in the area:

- The Justice, Development, and Peace Commission (JDPC) has tried to sustain the SILC and vocational skills training programs, implementing them in various villages. Evaluations have shown that FCT communities continue to utilize these programs. Still, the same level of sustained adoption has not been observed in Kebbi and Sokoto states.
- State actors alike have adopted and modified activities to align with their goals, including the state-run cash transfer program in Kebbi.
- Many organizations have used the FTF template to launch and operate various humanitarian projects. For example, organizations like FAO and UNDP have implemented the Group Savings and Loans Association (GSLA), a modified version of SILC, in the Northeast. The \$25 million Rural Resilience project awarded to Mercy Corps by USAID in Northern Nigeria replicates the FTF project, with some modifications in its measurement approach. This demonstrates the project's influence in inspiring and guiding subsequent initiatives, furthering the impact and reach of the FTF's successful model.

Finding 2: FTF Nigeria Livelihoods were more effective than others in fostering resilience.

Different practices, particularly those focusing on agriculture, income generation, and government strengthening, played significant roles in fostering resilience within communities. However, their impacts and levels of reliance during shocks or stresses vary.

Subfinding 2.1: Beneficiaries relied most on agriculture and income activities during shocks.



Quantitative analysis of household surveys and content analysis from focus group discussions revealed that beneficiaries relied most on livelihoods interventions, in this case agriculture and income activities, during shocks.

Agriculture and income practices were associated with higher reliance during shocks, particularly climatic shocks.²⁴ This is unsurprising as, during acute shocks, beneficiaries naturally turn to income and livelihoods to weather the storm.

The graph in Figure 9 below presents the participation, reliance during shocks, and sharing rates across various interventions. Practices focusing on income generation and agricultural production exhibit significant participation rates, with a substantial proportion of participants relying on these interventions during shocks. The same interventions stand out for high rates of sharing among households, indicating a perceived value and impact. It is hypothesized that while people may rely on interventions due to their availability, sharing these interventions may be driven by their perceived impact and value based on personal experiences. This is evident in the robust sharing rates despite varying participation levels across different interventions. Income generation and agricultural production interventions emerge as pivotal resilience-building strategies both for their reliance during shocks and as valued practices worth sharing among communities.

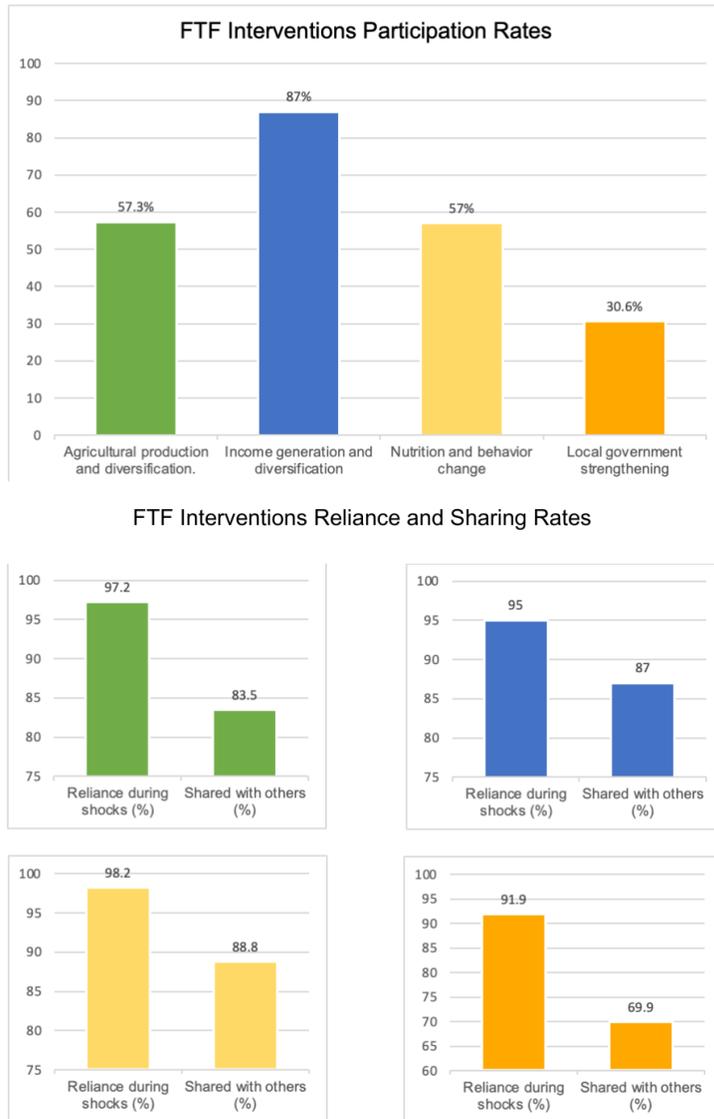


Figure 9: Participation in FTF Nigeria Livelihoods, over reliance and sharing

²⁴ Significant at the 1% level.

The discussion from the FGDs corroborates these findings. Participants consistently highlight income-generating practices, SILC, cash transfers, and productive asset transfers (such as sewing machines), as instrumental in bolstering their household resilience. They attribute the value of cash transfers to their versatility in enabling access to various inputs needed for farming and other livelihood activities.

SILC is notably successful in rural areas and facilitates long-term financial access. Resilient households in the Northwest and Northeast notably engaged in SILC, as expressed by a male FGD participant in Sokoto: “[T]hey gather us together and give themselves loans and because of this, we have gotten progress with this organization for real” (Male Focus Group Participant in Wababe, Sokoto). During shocks, SILC is often the first strategy people turn to because it is easily accessible. By promoting saving habits, SILC provides a financial cushion that can be used to respond to unexpected events. It works particularly well in rural areas because it nurtures social connections. Thus, SILC can potentially help build social capital within the community as it fosters cooperation and trust. Individuals with higher levels of social capital tend to have greater resilience. Additionally, participants develop financial management skills, creating a sustainable impact on their ability to navigate economic challenges. The significant participation rate in income generation and diversification activities demonstrates a strong and collective desire within the community to gain financial empowerment. This eagerness aligns with SILC’s self-reliant approach, which resonates with participants who strive for long-term sustainability and financial independence. During the FGDs, most participants expressed their aspirations to achieve self-sufficiency.

“The reason why we choose cash transfer: money has value against everything because if you don’t have money, you can’t even start farming but if you have the money, you can get all your farm input beginning with seed, labor cost, tractor for cultivation and tools etc. Not necessary you must have either maize or groundnuts seed, you can just use the money to buy the seeds of your choice. This is the reason why cash transfer has the highest choice.” —Female Focus Group Participant in Marama, Borno

Similarly, 97% of those who participated in agricultural production and diversification indicate that they turned to agriculture during shocks; this is likely because agriculture is a major source of livelihood. Additionally, agriculture plays a crucial role in ensuring food security and self-sufficiency. With many households growing their own crops, agriculture becomes an essential means of sustenance, providing a reliable source of food supplies, which is especially important during times of shock. The high sharing rates among participants engaged in agricultural activities (83%) suggest a broader perception of agriculture’s effectiveness in building resilience. It indicates that reliance on agriculture extends beyond mere livelihood dependency or

“
 An FGD participant from Borno noted,
 “JDPC gave us things for farming,
 taught us how to farm, and introduced
 us to contributions of money.” —
 Focus Group Participant in Borno.
 ”

intervention emphasis by the FTF program; it reflects its tangible efficacy in fostering community resilience.

Access to essential inputs and smart farming techniques, supported by JDPC, significantly boosted productivity and income for Borno and Kebbi farmers. Farming cooperatives in Kebbi were also vital as they acted as extension service centers, offering valuable farming information. The emphasis on agricultural

inputs, smart agricultural techniques, and knowledge sharing through the extension centers highlights a deliberate effort by the farmers to elevate their farming practices and secure lasting outcomes. Ultimately, their enthusiastic participation in these initiatives underscores farmers' shared desire for immediate and sustained progress.

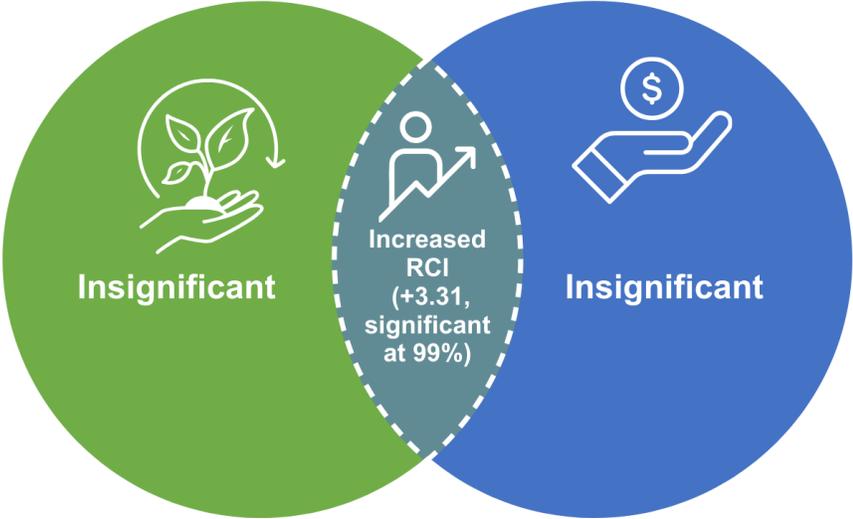


Figure 10: When participation in agriculture activities is interacted with participation in an income activity, it is associated with a significant and substantive increase in RCI.

Subfinding 2.2: Diversification of income streams builds household resilience.



Regression analysis of household surveys and content analysis of focus group discussions reveal that diversifying income sources of income increases household resilience by reducing dependence on a single source of spreading risk.

The ability to diversify income streams is a key factor in building household resilience. This finding underscores the importance of having multiple sources of income to ensure a safety net during shocks.

A regression analysis of the impact of agricultural production intervention and income generation revealed that solely participating in either agricultural production with diversification or income generation with diversification didn't significantly contribute to household resilience.²⁵ However, when households engaged in agricultural and income generation interventions simultaneously, there was a substantive and statistically significant impact.²⁶ This indicates that the combined approach had a meaningful effect on enhancing household resilience compared to individual activities alone.

The role of livelihood diversification in resilience building was affirmed by the uniform consensus surrounding characteristics of resilient households, which included participating in more than one income-generating activity. An FGD question asked participants to think of households in their community who had attained the community's definition of resilience, especially in times of crisis.²⁶ The aim was to determine the distinguishing features of these households they perceived as important in building resilience. Participants across all six states describe these households as involved in both farming and business activities. Therefore, according to community members, the most salient difference between resilient and non-resilient households is a diversification of income streams. More than 80% of Northern Nigerian households depend

on small farms. However, most resilient households practice a combination of farming and business. For example, a focus group from Sokoto named six resilient households and all six practiced business and farming.

“[The distinctive feature of the resilient household] “It is business, not gardening, because there is no one who is not gardening.” — Focus Group Participant in Gwambara, Kebbi.

²⁵ Coefficients of -0.79 and -4.28, respectively

²⁶ Coefficient of 3.31. See Methodology Report.

Models of Resilience Insights from the RHKIs

During FGDs, participants nominated households in their community whom they considered to be models of resilience. Enumerators approached these households to conduct a short interview following up on the practices and perceptions of those households. Due to corruption of audio files, not all RHHKIs were able to be transcribed and coded. Furthermore, not all questions were asked at each interview, and therefore there may be some discrepancies between the number of codes and total number of RHHKIs.

Summary Statistics

- 10 Men and 13 Women were interviewed
- 13 households were between 6-10 people, while 7 had 11+ and 2 had less than 5
- 12 had less than a high school diploma, 6 had graduated high school, and 3 had any tertiary education.
- 11 households agreed that they were resilient, and only 1 responded that they were not resilient.

Findings

- Most resilient households participated in more than one livelihood, such as farming and petty trade or wage labor. Almost half had received some form of cash assistance, but only 4 households received food or non-food items.
- Resilient households did not express that they faced no shocks; on the contrary, they characterized resilience as the ability to persist despite threats.
- Peace and security was a major threat: many households wanted to start a vigilante group, or improve existing vigilante groups.
- When asked what interventions would most help improve resilience in their community, Credit/Loan/Saving and Farm Inputs/Practices tied for most codings. People hoped for capital to start or improve small businesses, and knowledge and access to improved practices, seeds, and other inputs.

By engaging in both farming and business activities, resilient households can mitigate the risk of losing one source of income. This helps them weather shocks and crises and enables them to thrive in normal periods. These households are not only able to survive but also to grow and prosper, even in difficult times.

Sub-finding 2.3: Government strengthening activities had the most substantial and statistically significant positive effect on observed RCI.



Regression analysis revealed that government strengthening activities, presented as belonging to a community development group, had the most substantial and statistically significant positive effect on household resilience.

Regression analysis to determine the effectiveness of FTF interventions revealed that despite having the lowest participation and reliance rates, government strengthening had the most substantial and statistically significant effect on observed RCI of the four interventions.

Figure 11 presents the percentages of households relying on different activities as their primary response across the states during a shock or stressor. Yobe and Borno show similar reliance percentages on agricultural production and livelihood diversification. Adamawa indicates a significant reliance on income diversification compared to other activities. Kebbi and Sokoto display varying reliance percentages across different activities, with notable reliance on income generation and diversification and agricultural production and diversification, respectively. The impact of agricultural production and diversification, income generation and diversification, and nutrition and behavior change were inconclusive as they were not statistically significant.

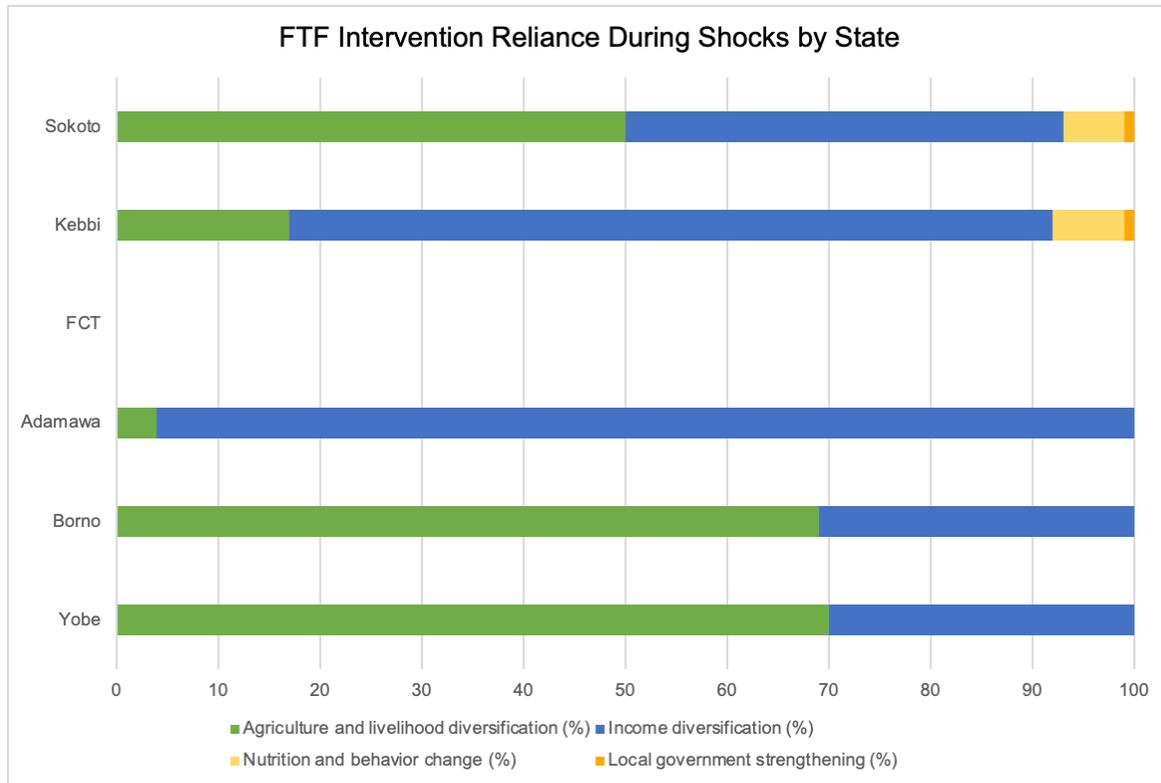


Figure 11: The most relied-on activities during a shock or stressor.

Notes: The variable “what activities households relied on most during a shock or stressor in the past 5 years” was added after the data collection in FCT had ended.

Government strengthening activities, presented in HHS as involvement or membership in a village development committee or other community-based organization, such as a youth group, were associated with nearly a seven-point increase in RCI. This implies that systemic or community-level approaches to resilience-building can be highly impactful despite few beneficiaries, even if fewer people directly participate in such efforts. This is because being part of a group encourages social cohesion, mutual aid, and solidarity, which in turn builds social capital and provides both social and economic benefits. Joining a group can help you establish



**Substantially
significant
effect on RCI**

connections, enhance your life, and contribute to your community. Although some may argue that the individuals who received local government strengthening activities were already leaders in the community and, therefore, had an advantage, this explanation does not fully justify the significant and substantial impacts of government strengthening. Firstly, the activity did not exclusively target established leaders but also included youth and women's groups, with women making up 87% of the participants. Secondly, the model includes controls for education and household size, which could act as proxies for affluent and established households. This disproportionate benefit of gov strengthening proves the importance of building leadership, networks, and capacities to increase RCI.

While government strengthening was associated with increased RCI, it was not regularly relied upon during shocks. The discrepancy between the impact on RCI and the reliance during shocks highlights a key weakness of RCI in measuring real resilience capacity. Resilience is a composite of the capacity both to respond and to recover. Interventions provided by FTF Nigeria seem split on the two components of resilience. Agriculture and income provide immediate relief and stabilization when shocks are faced, but nutrition and behavior change, especially government strengthening, work towards recovery and away from vulnerability.

Finding 3: Resilience building requires contextualized, systems-strengthening, capacity-building activities

The previous two findings detail the gains to resilience by various aspects of the FTF Nigeria Livelihoods project. Using quantitative and qualitative analysis, this finding draws attention back to the contextualization of the activities. Qualitative analysis of the FGDs, as well as RHKIs, paired with quantitative analysis of the HHSs reinforces the importance of contextualizing resilience approaches. Furthermore, it reveals the importance of strengthening systems at both the household and community levels to ensure full benefits of resilience programming.

Subfinding 3.1 FTF Nigeria Livelihoods interventions did not target shocks faced by beneficiaries.



Content analysis of focus group discussions reveals that the most salient shocks faced by beneficiaries in the last five years were insecurity and flooding, both of which were minimally targeted by FTF Nigeria Livelihoods activities.

Shocks are well known to threaten households' wellbeing. Quantitative analysis of the HHSs reveals that an increase in the Index of Shock Exposure (ISE)²⁷ is associated with a significant, albeit not substantive, decrease in household RCI.²⁸ Further HHS analysis finds the majority of participants across all regions responded affirmatively to experiencing shocks in at least one of the four categories presented in the HHS: Climatic, Conflict, Biological, and Economic, as illustrated by Figure 12. It is not surprising that the Northern regions exhibit a high incidence of shock, as it is a chronically poor and hazard-prone region. Biological shocks were equated with human diseases like diarrhea, skin and eye diseases, and complications from pregnancy, and widely felt economic shocks were largely associated with unemployment, inflation, and unstable currency. While these findings were expected, the sources of climatic shocks and conflict shocks were somewhat unexpected. While Northern Nigeria borders the notoriously drought-prone Sahel, drought was not commonly mentioned in the FGDs. Instead, participants named flooding as the most salient threat facing their daily lives.

While these findings were expected, the sources of climatic shocks and conflict shocks were somewhat unexpected. While Northern Nigeria borders the notoriously drought-prone Sahel, drought was not commonly mentioned in the FGDs. Instead, participants named flooding as the most salient threat facing their daily lives.

²⁹ Likewise, the expansion into the Northeast was justified by the conflict crisis in the region. However, based on qualitative data, high profile terrorist groups like Boko Haram and insurgent violence does not seem to impact participants as much as farmer-herdsmen clashes, petty

Percent Reporting Shocks by Shock and State

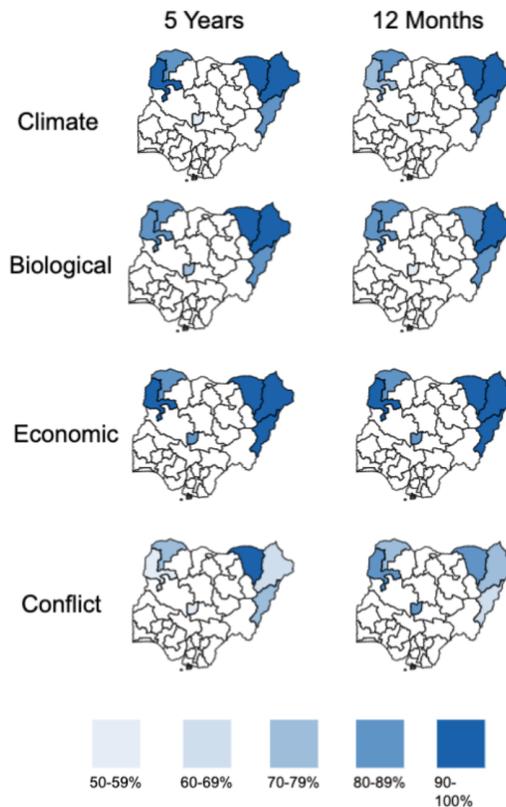


Figure 12: Varying shocks across states

²⁷ ISE is the weighted average of the incidence of experience of each shock, weighted by the perceived severity of the shock, on a scale of 0 to 32. To learn more about the ISE, please visit the Methodology Report.

²⁸ A one point increase in ISE is associated with a 0.16 decrease in RCI, significant at the 5% level, controlling for household size, education level, state, expansion status, and gender.

²⁹ 100% of NE FGDs and 79% of NW FGDs described flooding as a primary shock.

thieves, and kidnapers.³⁰ This could be because the known presence and proximity of Boko Haram and other insurgent groups in the region may foster a general environment of lawlessness that allows small-scale conflict and insecurity to flourish. It is clear that government-led citizen protection systems in Northern Nigeria are weak, as many participants in FGDs turn to locally-organized vigilante groups. Figure 12 furthermore shows that conflict has overall decreased in the Northeast, but increased in the Northwest, where they were regularly mentioned in FGDs, suggesting that emergent shocks, rather than near constant stressors, such as economic stress, demonstrated in Figure 12 to be widespread and substantive but mentioned with less urgency in FGDS, are perceived by households to impede their resilience to a greater degree.

While agricultural-led growth was successful in raising objective and even subjective measures of resilience (namely RCI and SERS, detailed in Subfinding 1.1), the activities did not specifically target the shocks facing the community over the last five years. For example, the agricultural productivity activities focused on drought mitigation and adaptation, such as drip irrigation projects, rather than flood-proofing. While it is possible that the lack of citation of drought as a main shock may be due to the success of these activities in preparing beneficiaries to weather drought conditions, but there is also evidence that incidence of floods has been increasing in the last five years,³¹ while there has not been a significant drought in Nigeria for the past decades.³²

Subfinding 3.2 Focus group participants prioritize systems-strengthening, community level intervention for building resilience.



Schema analysis, combined with other qualitative data analysis strategies, shows that participants prioritize so-called “first order” interventions that strengthen systems-level capacities.

During FGDs and RHKIs, participants were asked to identify those interventions they felt their communities needed most to build resilience. Across regions, participants’ answers to this question demonstrate their sense that their community system is greater than a sum of its parts,

³⁰ Boko Haram is mentioned only once in FGDs (Hema, Borno), but 83% of FGDs mention conflict or thieves.

³¹ Carrington, Damian. (2022, Nov 16). Devastating floods in Nigeria were 80 times more likely because of climate crisis. *The Guardian*.

<https://www.theguardian.com/environment/2022/nov/16/devastating-floods-in-nigeria-were-80-times-more-likely-because-of-climate-crisis>.

³² Shiru, M.S., Shahid, S., Dewan, A. et al. (2020) Projection of meteorological droughts in Nigeria during growing seasons under climate change scenarios. *Sci Rep* 10, 10107. <https://doi.org/10.1038/s41598-020-67146-8>.

“[O]nly if there is peace of mind will education work, because we know of schools that have been closed because of this issue of lack of security... education, business and farming all won't work without peace”
— Female Focus Group Participant in Bissalam, Sokoto

corresponding to systems theory, the theoretical underpinning of resilience thinking³³. Participants then place value on “first order” interventions that would enable impacts by strengthening the system as a whole: peace and security, education, and roads.

Often considered a prerequisite for resilience, peace and security is a foundational intervention identified by FGD participants as laying the foundation for greater development.³⁴ Conflict and displacement

undermine efforts to build assets and resilience capacity. Evidence from FGDs and KIs suggests that, more than simply a lack of conflict incidents, participants center peace of mind in their perception of the process of development.

“Ok, so the adult education will help, like most of our parents that are at home, are business women, that adult education will help in order to know more about their business. The adult education will help the women, you know when you teach the women you teach the whole world, so when you teach the adult women at home, they give birth to children and they will start teaching the children from the house, which will help in school, because the education they have from the house is the education they take to school, so I think the adult education is very important.” — Focus Group Participant in Kawu, FCT.

Consistent with evidence from the HHS, peace and security are high priorities for the Northwest region, although evidence of conflict in the Northwest has grown over the last five years (see Figure 12). Without peace of mind, communities are hesitant or unable to tend their fields, send their children to school, or even stay in their homes. Business or home owners constantly worrying about having their businesses or homes robbed are unwilling to invest in them. Many communities are also forced to devote precious resources to hiring vigilantes, or volunteering their own time to protect their communities. Lack of security, especially farmer-herdsmen conflicts, further increases divisions along ethnic lines.

Education was identified as a priority in the majority of FGDs.³⁵ The interrelated nature of education and peace is highlighted by

participants in focus groups and interviews. “Many are not educated. Even the bandits going

³³ Meadows, Donella H. and Wright, Diana. (2008). *Thinking in Systems : a Primer*. White River Junction, Vermont: Chelsea Green Publishing.

³⁴ 66% of FCT, 43% of Northeast, and 100% of Northwest FGDs identified Peace/Security as a Resilience Characteristic and/or preferred future intervention

³⁵ 66% of FCT, 86% of Northeast, and 78% of Northwest FGDs identified Education as a Resilience Characteristic and/or preferred future intervention

around doing all these things, it is because of lack of education. If they had education they won't do those things" (Resilient Household in Wababe, Sokoto). Overall, community members recognize that education opens greater opportunities not only for those who receive it but the entire community, and is often a necessary prerequisite to other kinds of development. As one focus group participant in Kwaccehuru, Sokoto said, education is a "mirror to the world". Another focus group participant in Sherepe, FCT pointed out that a lack of education means that community members "cannot understand new technologies and innovations brought to them". During a Kawu, FCT RHHKII, a participant's husband chipped in with a similar sentiment, saying, "in this digital and computer age we are [in]. . . if you don't have education, you can waste your energy giving somebody skill acquisition and capital." In other words, without education at all stages of life, from early childhood to adult continuing education, community members cannot maximize the potential of other development interventions. At the same time, education, like many systems-focused interventions, is not a quick fix. Instead, the benefits of education most often come to fruition after initial implementation, rendering education difficult or untenable in relief situations.

The final example of participants' emphasis on systems-strengthening interventions was improvements to roads. In fact, the phrase "want good road" came up verbatim in 21% of focus groups, and roads in general were mentioned in 66% of focus groups.³⁶ This physical expression of connectivity was often unfit for large amounts of traffic, cutting villages off from key resources. The interrelated nature of roads and flood risks was further underscored by concern over the lack of ditches or drainage systems to control flooding, leading to worsening road conditions, as well as a lack of bridges to maintain connectivity during floods, demonstrated by this quote from a FGD in Ruwa Wari, Sokoto: "[W]hen water is much, sand blocks it and there is no bridge for the passage of this water".

“[I]f we have roads, I think 90 percent of our problems will be solved...[W]e are predominantly farmers, so once we have road now we will be able to access or to take out farm produce to the nearest market, secondly if somebody falls sick now, we can easily take him to nearest general hospital or any other thing, thirdly security, if there is any issue of kidnapping, promptly you will see the army or any other people because of the accessibility of our road, they will easily come here and intervene” — Focus Group Participant in Kawu, FCT

³⁶ 100% of FCT, 43% of Northeast, and 57% of Northwest FGDs identified Roads as a Resilience Characteristics and/or future intervention

Subfinding 3.3 Household resilience and community resilience are linked.



Regression analysis found that bridging social capital was associated with an increase in RCI, suggesting strong communities and social support ties increase resilience. Therefore, it may be helpful to think of resilience on a household and community level concurrently.

While household-level resilience interventions are effective, as demonstrated by Finding 1, without community-level, systems-strengthening interventions, they can only go so far in increasing resilience. Consistent with Granovetter’s theory of weak ties,³⁷ bridging social capital is associated with both an increased SERS score as well as an increased RCI score³⁸, whereas the association of bonding social capital with those same measures of resilience was insignificant. Bridging social capital refers to inter-village linkages, demonstrating the importance of strong, community-level networks. Meanwhile, bonding social capital, which refers to close family or neighbor relations, was insignificant, further underscoring the importance of strengthening communities. Furthermore, Subfinding 1.2 found that subjective measures of resilience, namely SERS, lag behind more objective measures of resilience, in this case RCI. This echoes findings of Bené et al.³⁹, which note that psychosocial elements of resilience are critical to overall resilience. That is, despite gains to physical measures of resilience, such as assets, food security status, and income, there are still barriers to participants’ recognizing themselves as resilient and therefore taking actions as such. This may also be attributed to the fact that RCI does not consider community-based resilience measures, such as social capital and peace of mind, as suggested by Subfinding 3.2. Qualitative findings reinforce the quantitative: the priority interventions found in Subfinding 3.2 provide further proof of the interlinkages of community and household resilience. Each intervention, from peace and security to education and roads, is implemented at the community level, and benefits the community as a whole. Finally, this finding supports Subfinding 2.3, which finds government strengthening activities (that is, community level interventions) to have the highest impact on RCI.

“If there is resilience in a community, everything will be fine and the people in the community will progress”
— Female Focus Group Participant in Sukandu, Sokoto

³⁷Granovetter, M. (1983). “The Strength of Weak Ties: A Network Theory Revisited.” *Sociological Theory* 1: 201–33. <https://doi.org/10.2307/202051>.

³⁸ Both significant at the 99% level.

³⁹ Béné, C., T. Frankenberger, T. Griffin, M. Langworthy, M. Mueller, and S. Martin. (2019). “‘Perception Matters’: New Insights into the Subjective Dimension of Resilience in the Context of Humanitarian and Food Security Crises.” *Progress in Development Studies* 19 (3): 186–210. <https://doi.org/10.1177/1464993419850304>.

5.0 RECOMMENDATIONS

1. Strengthen MEAL and HR Systems for Large, Diversified Projects like FTF Nigeria Livelihoods

- Strengthen MEAL systems for targeting and sampling of project beneficiaries and tracking intervention disbursement.
- Strengthen HR systems to reduce staff turnover and improve response and recovery mechanisms when key staff are lost.

2. Include Resilience Measurement in Development Projects and Conduct Further Studies of Resilience in Nigeria

- Measure resilience at all stages of a project.
- Continue to study household resilience in Nigeria using existing, well-known resilience measurement tools.
- Utilize the extensive data collected through this study for further analysis of the factors impacting household resilience in Northern Nigeria.

3. Consider resilience program development from a holistic, systems-strengthening approach, focusing on “first order” interventions that address shocks and enable further development.

- Projects should prioritize “first order,” systems-strengthening interventions that facilitate the success of future interventions.
- Interventions should target both household and community level shocks.
- Involve local actors at every stage of the process.

recruit households who were former FTF Nigeria Livelihoods beneficiaries for this study. Beneficiary household data at the village level could not be recovered in the NE states, only at the state level which complicated accurate targeting per village. Furthermore, across the four main IRs and corresponding intervention categories, dozens of individual activities were implemented with varying dispersion across villages, LGAs, and states. One high-level example of this is that in the NE expansion only interventions which increased agricultural productivity and income were implemented. However, the FTF Nigeria Livelihoods project did not track systematically on an individual household or village basis, which specific intervention activities were deployed where and who received them.

1.1 Strengthen MEAL systems for targeting and sampling of project beneficiaries and tracking intervention disbursement. Future projects should ensure their MEAL teams have developed strong systems for documenting their beneficiary targeting and sampling processes. This is particularly important for large projects with thousands of households/beneficiaries. When possible, contact information such as phone numbers and addresses should be stored (in a secure, confidential manner), to re-engage previously surveyed beneficiaries. In addition, future projects should ensure their MEAL teams have developed strong systems for tracking the disbursement and deployment of project activities and interventions, particularly for projects utilizing a diverse cadre of intervention methodologies. Ideally, the project should track which specific project interventions were received by each beneficiary household for ease of follow up assessments and studies.

1.2 Strengthen HR systems to reduce staff turnover and improve response and recovery mechanisms when key staff are lost. Staff turnover is an undesired yet commonplace occurrence in long-term humanitarian projects. Staff turnover can have a devastating impact on project outcomes, disrupting implementation and coordination systems for delivering key interventions. CRS must make additional efforts to avoid staff turnover before it occurs, such as bolstering HR systems for staff recruitment and retention. Furthermore, CRS should build in adaptive systems that can respond quickly and effectively when key personnel are lost or changes to avoid negative repercussions such as loss of institutional and project knowledge, reduced employee morale, loss of productivity, gaps in service delivery, and accruing additional hiring, training, and onboarding costs.

2.0 Include Resilience Measurement in Development Projects and Conduct Further Studies of Resilience in Nigeria

The original FTF Nigeria Livelihoods project utilized a multi-sectoral approach focused on agricultural-led growth. This study sought to explore the impact of the FTF Nigeria Livelihoods project through a new lens: resilience. The monitoring and evaluation of resilience in development and humanitarian work has existed for more than a decade but has become more commonplace and widespread particularly in the past few years. Today, there are dozens of resilience measurement tools to attempt to understand this complex concept and track resilience levels among households and communities. Yet most resilience measurement tools and frameworks are most useful when resilience of a household is tracked over time, thus providing data to track progress and backsliding. In this study, resilience measures such as RCI, SERS, and RAI were only collected five years after the FTF Nigeria Livelihoods project had ended, meaning that surveyed beneficiary households had no former values to compare these measurements to. Household dietary diversity scores were comparable over time because this metric was collected at both baseline and endline. However, these comparisons are limited to averages over the sampled population of beneficiary households rather than direct comparison of individual household improvement over time because the same households were not surveyed in all three studies.

In addition to a lack of baseline and endline resilience data for this particular project and ex-post study, there was also found to be a lack of related studies on household resilience in Northern Nigeria (and Nigeria as a whole), in particular, studies using household resilience measures commonplace in the international development sector such as TANGO's RCI and BRACED's SERS.

2.1 Measure resilience at all stages of a project. Future projects aimed at improving the resilience levels of beneficiary households should build resilience measurement tools into baseline, midline, and endline assessments, in addition to ex-post impact assessments such as this study. Resilience scores and other key indicators such as household dietary diversity should be measured for the same households over time so that progress on these metrics can be measured for specific households.

2.2 Continue to study household resilience in Nigeria using existing, well-known resilience measurement tools. Future study and analysis of existing resilience measurement tools and their application in Nigeria is recommended. Few studies of household resilience have been conducted in Nigeria using standard and well-known measurement tools. Without additional

studies to provide comparison, it is challenging to contextualize the objective and subjective resilience scores for households found in this study. Furthermore, it is recommended that particular emphasis in future studies be given to subjective measures of resilience. This study found RCI and SERS to be moderately positively correlated suggesting that the subjective measures of resilience may provide a useful substitute for or alternative to objective resilience measures. The descriptive power and utility of subjective resilience measures and other alternative resilience measures is important to ascertain as different tools have different levels of complexity in administration and analysis which have the potential to significantly reduce survey burden on households and data processing burden on staff/researchers.

2.3 Utilize the extensive data collected through this study for further analysis of the factors impacting household resilience in Northern Nigeria.

The research team recommends that CRS continue to analyze the data from the HHS, FGDs, and KIIs to continue exploring the factors building, maintaining, and eroding resilience in Northern Nigeria, as well as the impact of the FTF Nigeria Livelihoods project on beneficiary households. One particular suggestion is the exploration of the impact of marginal effects for beneficiary households through the HHS. Due to the limited timeline of this study, in-depth analysis of the marginal effects between particular groups of interest were not explored. The team recommends analyzing the marginal effects of FTF, IAI, and shock exposure on HDDS, ISE, RAI, FIES, SERS, and RCI for expansion/non-expansion households, the six states, and three regions (NE, NW, and FCT). Preliminary analysis of the marginal effects of FTF participation for expansion vs. non-expansion households were found to be insignificant but further study is necessary. Further analysis of the coping strategies and protective actions utilized by households would also be of interest.

3.0 Consider resilience program development from a holistic, systems-strengthening approach, focusing on “first order” interventions that address shocks and enable further development.

The FTF Nigeria Livelihoods project, although not developed with an explicit resilience lens, nevertheless corresponds to many of the principles of resilience design. The holistic approach to activity implementation, as well as activities that strengthened markets and social safety nets, points to an understanding of the importance systems in development. As the underpinning for the modern conception of resilience, systems theory holds that systems are greater than the sum of their parts, and that they are inextricably linked with their environment, including the shocks and stressors they face. As such, situating household resilience within community

resilience helps to better understand the needs and resources of a household, as well as how the community as a whole may be buoyed. While FTF Nigeria Livelihoods achieved incredible gains to resilience, future projects may be able to build on those achievements by considering the following recommendations.

3.1 Projects should prioritize “first order,” systems-strengthening interventions that facilitate the success of future interventions. FTF Nigeria Livelihoods has had an overall positive reception of their notably broad and varied menu of activities, which underscores the importance of a holistic approach to resilience-building. However, as noted in Subfinding 3.2, beneficiaries identify “first order” interventions as key gaps in their resilience. The ordering of intervention delivery has been found in the literature to impact the success of the intervention, and rolling out interventions too soon could undermine the success of those interventions. Projects that prioritize the systems-strengthening, “first order” interventions could allow households to then gain more self-reliance, and could potentially save time and money for project implementers.

3.2 Interventions should target both household and community level shocks. Strengthening resilience through systems requires both the community and household level intervention. As Subfinding 2.3 reveals, investing in community initiatives that promote social cohesion and build social capital can strengthen communities and improve resilience, even with just a few members involved. Many “first order” interventions are employed on a community level, such as those prioritized in Subfinding 3.2 (peace and security, education, and roads), so targeting these sectors would necessarily involve both household and community.

3.3 Involve local actors at every stage of the process. Local leaders and resilient households alike spoke highly of FTF Nigeria Livelihoods’s practice of involving and training community members as educators or private service providers. However, an even greater involvement could have prevented situations such as in one village, who reported receiving shoemaking training from FTF Nigeria Livelihoods. This led to a glut of shoemakers in one village, and they then had to leave their community to find customers. Having diversified income streams was identified as the key factor defining resilient households, and continued livelihood trainings was requested in both FGDs and RHKIs. As such, after successful implementation of “first order” interventions, future development projects should prioritize livelihood diversification activities in collaboration with local leaders and community members, which would ensure that interventions are locally relevant, more likely to be sustainable, and that there is diversification at both the individual and community levels.

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