

2019 NURU NIGERIA BASELINE REPORT



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OCTOBER 2019

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This report is commissioned by Nuru International



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EXECUTIVE SUMMARY

Introduction

This report documents the resilience analysis of the baseline data collected for the four-year impact evaluation of Nuru International’s programming in Nigeria¹ (Nuru Nigeria). The overarching goal of Nuru Nigeria is to equip rural, vulnerable households to improve livelihoods and build resilience capacities to cope with conflict, environmental, economic, and social shocks and stressors for stability and prosperity. The project is being implemented in one Local Government Area (LGA) of northern Adamawa State, Nigeria.

Methodology

The goal of this impact evaluation is to provide insight into how Nuru programming in Nigeria impacts (1) household resilience, (2) household resilience capacities, and (3) well-being outcomes. This report sets out the baseline status of the objectives above. The impact evaluation utilizes a mixed-method approach with both quantitative and qualitative components. Baseline data were collected between June 2019 and July 2019 from a representative sample of 1,634 households residing in four wards of one Local Government Area in northern Adamawa State. Quantitative data collection included the administration of the baseline household survey. Qualitative data collection included focus group discussions (FGDs) and key informant interviews (KIIs).

Following the evaluation design, statistical techniques designed for improving inter-group comparability were applied to the baseline data to bring the intervention and comparison groups as closely into balance as possible. Indicators of resilience and indexes of resilience capacities were calculated following the methodology outlined by the Resilience Evaluation, Analysis and Learning (REAL) Consortium. For the descriptive analysis of quantitative data, indicators of resilience, resilience capacities, wellbeing outcomes, and shock exposure are reported by intervention status. Qualitative data were analyzed using constant comparison analysis. The qualitative findings were triangulated and integrated with the quantitative findings.

¹ Due to security concerns, the exact location of Nuru Nigeria’s project has been intentionally anonymized.

Findings

Demographics

All baseline survey respondents are female. Only a tenth of respondents reported practicing Islam. Three-quarters of respondents reported that they are married. Only a third reported having no education. A small proportion of respondents reported having a disabled household member. Nearly half of all respondents reported that their household is without a major source of livelihood in the past six months. Nearly three-quarters of respondents reported that the woman decide jointly with her husband how household income was used. The vast majority of households reported a two-room dwelling and tin roofing material. The main livelihood in the Nuru Nigeria program area is farming, reported as a main source of livelihood by the vast majority of respondents. A third of respondents also engage in livestock production.

Shocks and stressors

In the baseline survey, unemployment for youths was the most commonly reported shock/stressors in the past 12 months, reported by more than three-quarters of respondents, followed by crop pests, livestock disease, crop disease, and trauma associated with insurgency. Overall, the shocks with the strongest impact on household income and household food consumption were trauma associated with insurgency, unemployment for youth, and loss of land. FGD and KII participants report that the shock of conflict is still felt several years later as infrastructure such as markets and schools remain demolished after the 2014 Boko Haram attack on the community. The effects of trauma from the 2014 insurgency and recent attacks by armed groups are also considered a major challenge by FGD and KII participants, who report that the community is tense and is concerned that the armed groups will return to the area.

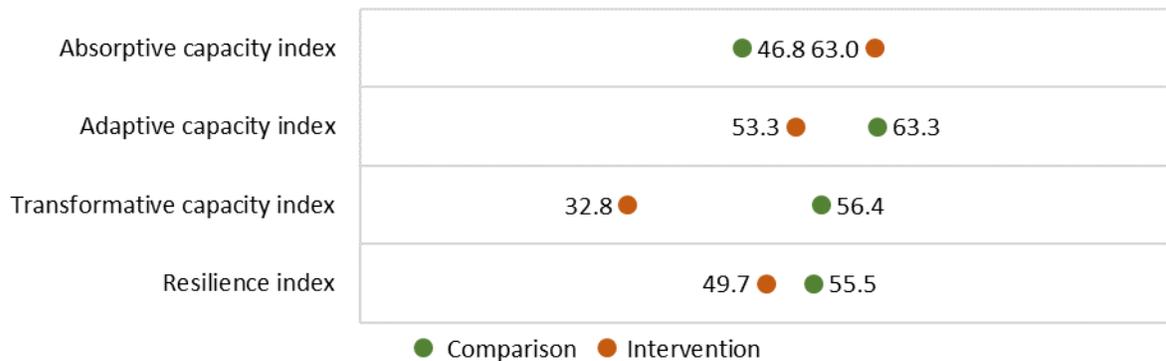
“People still live in fear. Little sound can frighten the whole community. They run on hearing little sound. This has been a challenging issue in the community. We always say, ‘number one priority of the government should be security’. The government should forget about building houses. Forget about where someone will sleep. The government should be able to secure her people. If there is security, you will be able to eat fruit when they are ripe and sleep at peace. Even if the government gives you good food and meat, you will eat and then still have to run for refuge.”

Nearly half of all respondents said that their ability to meet basic needs was worse than it was before the shocks and stressors experienced in the past 12 months. However, more than a third said that they believed their ability to meet basic needs in the next year will be better than before the shock. The most commonly reported strategies were: using in-kind (livestock) savings, selling protective assets, selling productive assets, taking out a loan within the community, and using cash savings.

Resilience

Overall, the treatment group reported a lower household resilience index, as well as lower absorptive, adaptive, and transformative resilience capacities. Impact analyses at midline and endline will use the difference-in-differences (DID) approach to measure the impacts of Nuru’s intervention on outcomes including overall resilience and resilience capacities. The DID approach will compare change in these index scores for the intervention group and comparison group.

Baseline household resilience capacities



In general, respondents reported low access to cash savings, very low availability of and access to insurance, low availability of financial resources (such as places in the village to save money or borrow money), and low availability of formal safety nets (such as government or disaster response program, places to get food assistance, places to get housing materials and other non-food items, places to get assistance due to losses in livestock). However, respondents reported high availability of informal safety nets (such as savings groups, mutual help groups, religious groups, mothers groups, and women’s groups).

Measures of bonding social capital, bridging social capital and social cohesion were low among all respondents. Nearly two-thirds of respondents reported being able to get help from relatives in their village as well as relatives outside their village, while nearly half of respondents reported being able to

give help to relatives in their village as well as relatives outside their village. However, very few respondents reported being able to get help from, or give help to, non-relatives or neighbors within their ethnic group or clan, as well as outside their ethnic group or clan, within their village as well as outside their village.

Aspiration, confidence to adapt, and locus of control are measures of adaptive resilience capacity. The resilience questionnaire includes indicators about the underlying concepts around people's aspirations, confidence to adapt, and a sense of control over one's life. In general, respondents reported robust scores for aspirations and confidence to adapt but low locus of control. FGD and KII participants also reported a more externally focused locus of control, through the discussion of relying on "God's will" over mitigation strategies for coping with shocks.

Respondents reported low levels of livelihood diversification (a measure of adaptive resilience capacity), reporting engaging in an average of two livelihood activities in the past year. Respondents also reported low levels of shock preparedness and mitigation (a measure of adaptive resilience capacity), with only a fifth reporting having engaged in ways to protect their household from the impact of future shocks.

Respondents reported that the local government was addressing needs related to security, schools, health centers, and piped waters or wells. However, respondents noted that needs related to roads, public transportation, irrigation systems, and natural resource conservations were not being addressed.

Next steps

Statistical methods designed for improving inter-group comparability were applied to the baseline data to bring the intervention and comparison groups as closely into balance as possible. Some statistically significant differences remain between the groups. However, the difference-in-differences statistical technique used to estimate program impact will net out the existing differences at baseline. The DID approach removes biases in comparisons between the treatment and control group that could be the result from permanent differences between those groups, as well as biases from comparisons over time in the treatment group that could be the result of trends. The evaluation design, baseline data, and the balancing methods applied to the baseline data place the project on a solid footing for rigorous impact analyses at midline and endline.

CHAPTER 1. INTRODUCTION

OVERVIEW

Nuru International's mission is to eradicate extreme poverty in fragile rural areas to build communities resilient to violent extremism. Nuru International considers fragile states to continue to be a source of instability and relative deprivation in the world. Vulnerabilities in marginalized communities are ripe for exploitation by violent extremist groups and ideologies. Nuru International envisions a world in which all people live in an enabled environment with lasting, meaningful choices. Free of the burdens and vulnerabilities that threaten the stability and resilience of households and communities, people will be able to thrive and to exercise their agency.

Nuru International believes that building resilient communities is best done by local leaders with the temporary scaffolding support of expatriate experience and resources. The national Nuru-NGO (Nuru Nigeria) produces and manages livelihood and income-generating interventions through farmer-owned cooperatives, or farmer organizations (FOs). With the aim of building strong FOs, Nuru International is committed to eliminating extreme poverty through investments in self-sustaining and scalable entities.

The Ray Marshall Center (RMC), an organized research unit in the LBJ School of Public Affairs at The University of Texas, is providing technical assistance to support Nuru's monitoring and evaluation (M&E) efforts. The RMC's experience and expertise supports Nuru's work by demonstrating the effectiveness and robustness of its integrated approach to addressing resilience-building interventions.

The RMC has been at the forefront of pro-poor education, workforce, and social policy research since its creation in 1970. The RMC identifies and fosters creative solutions to challenging problems through a variety of applied research activities, including policy research analysis, state-level consulting on capacity development, program monitoring and evaluation, and impact evaluations, using both quantitative and qualitative methods. The RMC research staff is composed of a core of PhD and master's level researchers with highly competitive quantitative and qualitative research and evaluation skills, from a wide range of disciplines, including international development, economics, education, social policy, public affairs, public health, sociology, and geography.

CONTEXT

The next phase of Nuru's work will take place in one Local Government Area (LGA) of northern Adamawa State, Nigeria. The LGA is located in eastern Nigeria and bordered on the east by the Republic of Cameroon. The Boko Haram terrorist group seized the LGA in September 2014 in its efforts to create an Islamic state. The area was recaptured by the Nigerian military in January 2015. However, locals who fled the area returned to find burned-out houses, blown-up bridges, ransacked banks, ruined schools and hospitals, and desecrated Christian churches and cemeteries. The community is also struggling with the challenge of Boko Haram fighters or sympathizers in the local population.

With a mission based in eradicating extreme poverty, Nuru is approaching the Nigeria country project with an open mind towards the types of outcomes that will be needed in this new context. Nuru's monitoring and evaluation work has involved the application of customized poverty measurement systems, implementation of the M-PAT and the MPI, as well as variations on measuring program outcomes and local leadership sustainability. In this next phase, Nuru is addressing the necessities that arise in a fragile state context, particularly with regard to creating and fostering resilience to shocks in conflict-affected communities.

ORGANIZATION OF THE REPORT

The objective of this report is to document the baseline measures of key variables important to studying resilience: shocks, household coping strategies, household resilience, and household resilience capacities. The remainder of this document proceeds as follows: Chapter 2 describes the evaluation methodology in detail, including the qualitative and quantitative data collection, sampling design, data collection instruments, data analysis, timeline, work plan, and deliverables. Chapters 3 through 8 describe baseline results. Finally, Chapter 9 provides a summary of results and discusses next steps.

CHAPTER 2. METHODOLOGY

The baseline study utilized a mixed-method approach with both quantitative and qualitative components. The purpose of the quantitative component was to collect information on the current situation of the community before Nuru's programs were implemented. The information will serve as a yardstick to measure the impact and effectiveness of Nuru Nigeria programs when compared to midpoint and end line assessments. The purpose of the qualitative component was to understand better how resilience and CVE were perceived locally, as well as attitudes and behavior that reflected gender norms. Baseline qualitative data was also used to inform and refine the baseline survey instruments for the quantitative data collection. The sections below outline the methodologies used for collecting and analyzing the Nuru Nigeria quantitative and qualitative baseline data.

QUANTITATIVE DATA COLLECTION AND ANALYSIS

Sample design

Nuru Nigeria (NN) will contend with many of the typical problems facing development interventions, including the need to account for selection bias when program participants will self-select, the potential for sample contamination, as well as, the need for precision in the representativeness of the sample in light of limited resources. Given that communities are somewhat split along certain cleavages, e.g. rural/peri-urban/urban, Christian/ Muslim, ethnic groups, crop farmers/livestock grazers/pastoralists/business people, political affiliation, etc., they permit a useful identification strategy.

- One set of wards is characterized as being 90% Christian/10% Muslim and almost entirely rural;
- Another set of wards are 70% Christian/30% Muslim and include peri-urban populations around the town. These peri-urban fringes contain the Muslim population, and the Christian farmers are more dispersed.

Based on this, NN used a cluster randomization approach to randomly assign two wards to the 2019 intervention, two wards to comparison, and two wards to future scaling, for each of these groups, to the effect that the six wards are all assigned one of the three treatments or non-treatments. Only the intervention and comparison groups were included in the evaluation. The list of six wards was generated based on an operational assessment that Nuru Nigeria would be able to work in any of the areas. This

randomization is further justified in the limitation that the NGO did not have funding to fully saturate the area with interventions either, thus justifying maintaining a control group.

496 treatment households in the two intervention wards were included in the study; 1,136 households from the comparison wards were randomly selected, prior to project implementation, to be included in the study. This sampling design facilitates the use of an inverse probability weighting approach to balance covariates, and a difference-in-differences approach to measuring NN’s impact across several outcomes, including those related to resilience, vulnerabilities, and CVE.

Table 1. Sampling design

Assignment type	Ward 1	Ward 2	Ward 3	Ward 4
Treatment	248 households	248 households	-	-
Control	-	-	568 households	568 households

Household survey design

A household questionnaire was developed that adapted modules from multiple sources:

- existing Nuru household surveys;
- the resilience-focused household questionnaire developed by the Resilience Evaluation, Analysis and Learning (REAL) Consortium (funded by the USAID Center for Resilience and led by Save the Children with Food for the Hungry, Mercy Corps, and TANGO International as partners)²;
- the women’s empowerment focused BRIDGE household questionnaire, developed by Mercy Corps;
- the CVE focused Vulnerability and Resilience Assessment Initiative (VRAI) household questionnaire, developed by Mercy Corps³.

Elements of the resilience capacity components and responses were adapted to the local context, with the final resilience instrument reflecting context-specific programming and goals, as well as

² <http://www.fsnnetwork.org/resilience-evaluation-analysis-and-learning-real-award>

³ Mercy Corps. (2018, March). Vulnerability and Resilience Assessment Initiative to counter violent extremism (VRAI) Final Synthesis Report.

contextualized language and terminology. Preliminary findings from the qualitative data collection were also used to refine the survey instruments.

The instrument allows the evaluation team to measure shock exposure, resilience capacities, responses, and recovery. Specifically, the instrument allows for the measurement of resilience capacities as a set of indices, one for each of the three dimensions of resilience capacity—absorptive capacity, adaptive capacity, and transformative capacity—and one overall index combining these three indices.

Training, piloting, and pre-testing

Thirty-two research assistants (RAs) were trained for three days prior to the start of the survey. The training consisted of research ethics, Do No Harm, the survey tool, interviewing skills, and logistics. Nuru staff went into an adjacent community and piloted the survey by administering the survey to 20 people.

Incentives

The intervention group was not compensated. Comparison group participants were given 1,000 naira (\$2.75) for their time (approximately three hours). The compensation amount was intended to compensate the participants' time however, not to be coercive. One can earn approximately 1,000 naira per day of wage labor in a field.

Household survey administration

Baseline surveys were administered in June 2019 and July 2019⁴.

Intervention group

The intervention group is comprised of 500 registered female farmers in two wards. However, only 496 farmers were reached during the survey, as a few were not available due to farming activities, inconvenience, and other personal reasons. All of the participating farmers were asked to come to centralized locations in groups in order to complete the baseline survey. RAs were assigned a semi-

⁴ The timing of the survey made it difficult to get respondents in their houses because June-July is a period when people engaged in farming activities.

private space in the area to conduct the interview with the women, where they could be seen by others, but not easily heard.

Comparison group

The comparison group comprised 1,136 households randomly spread across communities in two wards, separate from the intervention group. Nuru International's M&E director used GIS analysis to identify all household structures in the LGA intervention and comparison wards. Clusters of households were identified using spatial random sampling based on a random number generation technique. For each survey day, a delineated section of household clusters was asked to stay home for the morning (or afternoon) in order for RAs to come to their homes for the survey. RA group leaders used the "throw the pen in the air" method to identify the houses that the RAs would go to before each survey.

Data entry and processing

QuickTapSurvey (QTS), a real-time, data collection tool, was used by enumerators. The translated survey was entered into QTS by Nuru International and Nuru Nigeria staff. The survey was then downloaded from the QTS server. Hausa translations were removed. Identification numbers were assigned to comparison group cases. Cross tabs were done on several variables to spot errors.

Quantitative data analysis

As data were received, it was inspected for anomalies and missing data. Necessary data cleaning was completed in order to prepare it for analysis. RMC maintained the data on a secure server, housed at the University of Texas, Austin, and access to the data was limited to University of Texas, Austin evaluators, and Nuru staff.

Using the intermediate approach and methodology shared by the REAL Consortium, we calculated the individual components of resilience capacity as well as the three resilience capacity indices—absorptive, adaptive, and transformative capacities—and an overall resilience index. The indices will be compared from baseline to end line for both the treatment and the control groups to measure the change in resilience.

Indicators are reported by intervention status. Tests for statistically significant differences in the indicators across the groups were undertaken, and differences are considered significant if statistically significant at the five percent level. Statistically significant differences between the treatment and the

control group are noted in the last column for all tables. Bold colored bars in charts indicate statistically significant differences between the treatment and the control group.

QUALITATIVE DATA COLLECTION AND ANALYSIS

Qualitative data collection tools

Approaches to collect qualitative data included focus groups (FGDs) and key informant interviews (KIIs). Nuru started with general guiding questions from the Resilience Baseline study tool. Nuru then conducted pilot focus groups to get a local definition of resilience to further inform the survey tool. The FGD and KII tools were then piloted in a different community with two groups (FGDs) and three individuals (KIIs). The tool was translated into Hausa, a common local language, by an external contractor. The FGD/KII tool was then back-translated into English and compared to ensure accuracy and consistency of translation. FGDs were administered by Hausa speakers after undergoing a two-day training on the tool itself, general interviewing skills, and research ethics.

Training, piloting, and pretesting

Four RAs were trained over the course of two days on interviewing skills, research ethics, and the qualitative tool. RAs piloted the tool with four individuals and eight participants in a focus group in an adjacent community.

Incentives

The intervention group was not compensated. FGD comparison group participants were given 1,000 naira (\$2.75 USD) for their time (approximately three hours). The compensation amount was intended to compensate the participants' time however, not to be coercive. One can earn approximately 1,000 naira per day of wage labor in a field.

KII implementation

First, through stakeholder mapping, Nuru identified the groups and organizations from which key informants should be drawn: local village leaders, religious leaders, women's association leaders, hunter/vigilante members, and government officials. Second, Nuru selected a few people from each category after consulting with local leaders. In each of the four wards, the following were selected:

- 1 religious leader from the two major religions ward (total 8)

- 1 government leader from each ward (total 4)
- 1 women's group leader (total 4)
- 2 health workers, 2 teachers (4 total)
- 2-4 vigilantes or hunters

In all, 26 KIIs were carried out across the four wards.

FGD implementation

NN conducted FGDs in the two intervention communities and in four communities in the comparison wards. In the intervention communities, 20 names were randomly selected from the list of registered farmers to participate in each focus group. In the comparison ward, NN asked the village leader to provide the names of 40 people that are between the ages of 18-70, have lived in the LGA for five or more years, and to aim for a mix of more rural and peri-urban than urban. NN used a random number generator to select 20 to invite for two separate FGDs. Three FGDs were conducted in each ward resulting in eight female FGDS and four male FGDS.

FGD participants were separated by gender. In Nuru's previous mixed-gender group discussions, women were unwilling to speak out. When they did speak, they simply stated agreement with the men's ideas.

Qualitative data analysis

Qualitative data analysis methods included constant comparison analysis of the FGDs and KIIs, additional Comparative Analysis by type of stakeholder, and pulling exemplary quotes for discussion and results.

Two individuals used grounded theory to develop codes in English that captured the concepts in the data. Two others used grounded theory to develop codes in Hausa. Both the original Hausa translation and the English translated versions were used to ensure that themes were not lost in the translation. The team discussed and merged their codes to create a common understanding of the concepts occurring in the data. The team quickly verified within-group saturation and across-group saturation on all topics after five interviews. All transcripts were then coded using the newly created framework. Each coded quote was placed in an excel sheet. Multiple codes were allowed. Using the sheet, comparisons were made by KII and FGD.

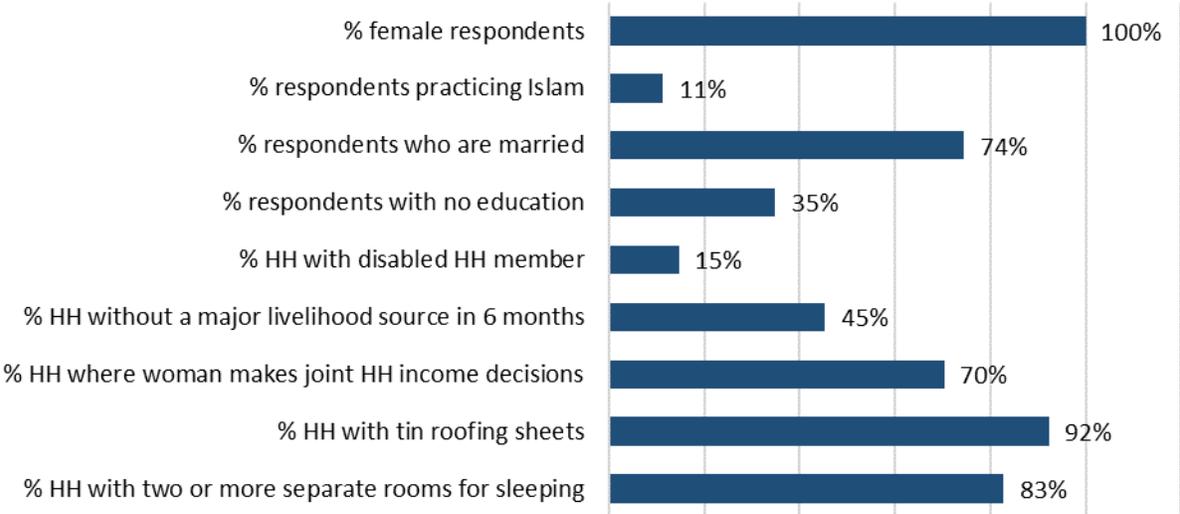
CHAPTER 3. HOUSEHOLD DEMOGRAPHICS & LIVELIHOODS

This chapter provides an overall profile of households related to their demographics and livelihoods.

DEMOGRAPHICS

A total of 496 households from the intervention group and 1,136 households from the comparison group were surveyed at baseline. Figure 1 presents household demographic information for all households surveyed at baseline.

Figure 1. Demographic characteristics for all households (HH)



All respondents were female. Only a tenth of respondents reported practicing Islam. Three-quarters of respondents reported that they were married. Only a third reported having no education. A small proportion of respondents reported having a disabled household member (15 percent). Nearly half of all respondents (45 percent) reported that their household was without a major source of livelihood in the past six months. Nearly three-quarters of respondents reported that the woman decided jointly with her husband how household income was used.

Housing characteristics can provide important insight into the wealth and health status of families in NN program areas. The vast majority of households reported a two-room dwelling (83 percent) and tin roofing material (92 percent).

Table 2. Demographic characteristics by intervention status

	Comparison	Intervention	Difference	Statistically significant
Count of respondents	1136	496		
Average age of respondent	43.0	41.3	1.7	Yes
Average household size	7.2	7.5	-0.3	
Average number of children in HH	1.2	1.3	-0.1	
% female respondents	100%	100%	0%	
% respondents practicing Islam	10%	15%	-5%	Yes
% respondents who are married	72%	79%	-7%	Yes
% respondents with no education	36%	32%	5%	Yes
% HH with disabled HH member	13%	18%	-4%	Yes
% HH without a major source of livelihood in the past 6 months	49%	37%	11%	Yes
% HH where the woman decides jointly with her husband how HH income is used	70%	70%	0%	
% HH with tin roofing sheets	93%	91%	2%	
% HH with two or more separate rooms just for sleeping	84%	81%	3%	

It is important to identify any differences between the intervention group and comparison group because any baseline differences will need to be accounted for in evaluating program impact. Table 2 presents household demographic information by intervention status. The intervention and comparison groups differed on a number of demographic characteristics. The average respondent age was significantly smaller for the intervention group. The intervention group had a significantly lower proportion of respondents reporting that they had no education and that their household was without a major source of income in the past six months. However, the intervention group had a significantly higher proportion of respondents reporting that they were married, that they practiced Islam, and that their household had a disabled member.

As these indicators constitute important predictors for the impact evaluation, the evaluators employed a variation of existing methods designed to bring covariates into closer balance⁵ (see, e.g., “covariate

⁵ Imai, Kosuke and Marc Ratkovic. (2014). “Covariate Balancing Propensity Score.” *Journal of the Royal Statistical Society, Series B (Statistical Methodology)*, Vol. 76, No. 1 (January), pp. 243-246

balancing for propensity scores” method). This process involved matching treatment group participants with their one or two closest matches from the comparison group, based on similarity in propensity scores (using a caliper width of 0.2 of the score’s standard deviation) derived from an identification model composed of those indicators used to calculate the various resilience indices (see Table 7 below for the list of indicators). Relatively weak matches were excluded from the analysis. Covariate balance was reexamined and found to be somewhat improved.

Table 3 presents demographic characteristics for all 496 intervention households surveyed at baseline as well as the 440 comparison households identified after matching. The tables in the remainder of this report follow the same template—comparison group members are compared to intervention group members, and any differences are analyzed to determine whether they are real or are due to chance.

Table 3. Demographic characteristics after matching

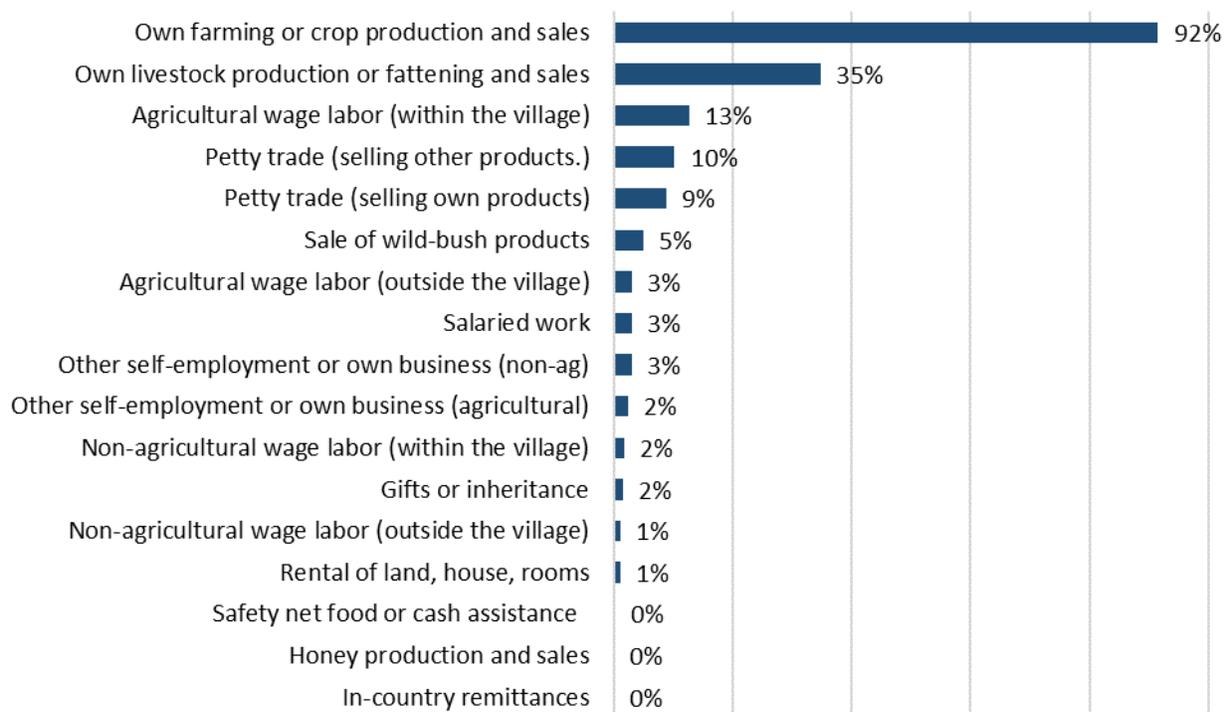
	Comparison	Intervention	Difference	Statistically significant
Count of respondents	440	496		
Average age of respondents	42.5	41.3	1.2	
Average household size	7.4	7.5	-0.1	
Average number of children in HH	1.3	1.3	0.0	
% female respondents	100%	100%	0%	
% respondents practicing Islam	9%	15%	-6%	Yes
% respondents who are married	73%	79%	-6%	Yes
% respondents with no education	35%	32%	3%	
% HH with disabled HH member	13%	18%	-5%	Yes
% HH without a major source of livelihood in the past 6 months	46%	37%	8%	Yes
% HH where the woman decides jointly with her husband how HH income is used	71%	70%	1%	
% HH with tin roofing sheets	93%	91%	2%	
% HH with two or more separate rooms just for sleeping	85%	81%	4%	Yes

LIVELIHOODS

Figure 2 reports on the livelihood activities households engage in and the main sources of income and food. The main livelihood in the Nuru Nigeria program area is farming, reported as a main source of livelihood by 93 percent of respondents. A third of respondents also engage in livestock production.

The intervention group and the matched comparison group differ on some livelihood indicators. A significantly higher proportion of the intervention group reports engaging in agricultural wage labor outside the village, non-agricultural wage labor outside the village, and agricultural self-employment. However, a significantly lower proportion of the intervention group reports engaging in salaried work and non-agricultural self-employment. A significantly lower proportion of the intervention group also reports gifts or inheritance and safety net food or cash assistance as sources of income in the past year.

Figure 2. Livelihoods



CHAPTER 4. WELL-BEING OUTCOMES

COPING STRATEGIES INDEX

Food security, as defined by the United Nations' Committee on World Food Security⁶, means that “*all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life*”. Food security is measured through the Coping Strategies Index (CSI), an experiential indicator. It is a scale taking into account the frequency and severity of coping strategies employed to deal with food insecurity. The CSI is computed following methods developed by Maxwell, Caldwell, and Langworthy⁷. For Nuru Nigeria, the CSI can range from zero to one hundred and seventy five. Higher scores correspond to worse conditions, that is, the use of more negative strategies to deal with food shortages. The intervention group reported a significantly higher average coping strategies index score than the comparison group.

Table 4. Coping Strategies Index

Index (means)	Comparison	Intervention	Difference	Statistically significant
Coping Strategies Index	9.9	13.0	-3.18	Yes

A close examination of coping strategies utilized by households shows that relying on less preferred and less expensive foods was the most commonly reported strategy - on average, respondents reported using this strategy twice in the past 7 days. Two other commonly reported strategies were limiting portion size at mealtimes and reducing the number of meals eaten in a day. The intervention group reported using the following strategies more frequently than the comparison group:

- Rely on less preferred and less expensive foods;
- Gather wild food, hunt, or harvest immature crops
- Consume seed stock held for next season

⁶ Food and Agriculture Organization of the United Nations. *Trade Reforms and Food Security: Conceptualizing the Linkages*. Food and Agriculture Organization of the United Nations; Rome, Italy: 2003. p. 313.

⁷ Maxwell, D., Caldwell, R., & Langworthy, M. (2008). Measuring food insecurity: Can an indicator based on localized coping behaviors be used to compare across contexts? *Food Policy*, 33(6), 533-540.

- Limit portion size at mealtimes
- Restrict consumption by adults in order for small children to eat
- Skip entire days without eating

Figure 3. Coping strategies indicators⁸



⁸ Each indicator in the Coping Strategies Index can range from zero to seven. Higher scores correspond to more frequent use of the negative strategy to deal with food shortages.

CHAPTER 5. SHOCK EXPOSURE AND IMPACTS

This chapter first describes the exposure of households to shocks in the Nuru Nigeria program area during the year preceding the baseline survey, including climate shocks, conflict shocks, and economic shocks. The quantitative baseline data is used to report on all three types of shocks as well as to create a perception-based shock exposure measure. Qualitative data is triangulated with quantitative findings.

SHOCK EXPOSURE

Resilience is essentially about being able to prepare for, withstand, and recover from shocks and stressors. Thus, measuring the exposure of households to shocks is important for understanding resilience. The shock exposure index measures the overall degree of shock exposure for each household. The index is based on household data regarding: (1) number of shocks to which a household is exposed in the past 12 months, and (2) perceived severity of the shocks. In Nigeria, Nuru surveyed households about 21 shocks/stressors and the shock exposure index could thus range from one to one hundred and sixty eight.

Figure 4. Shock exposure

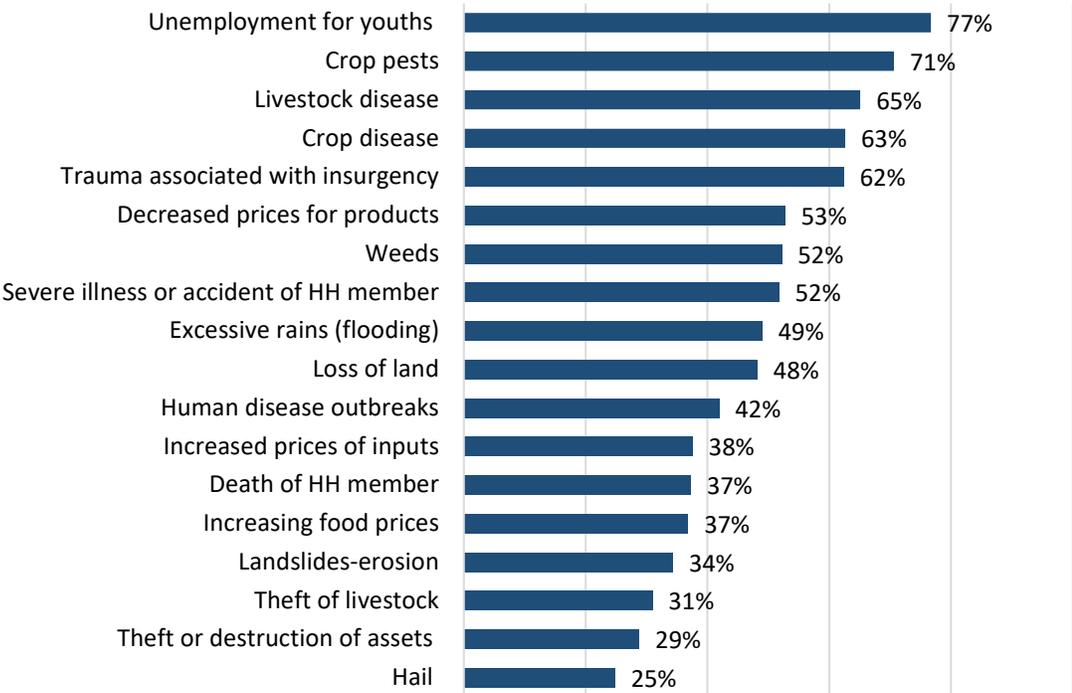


Figure 4 reports shocks and stressors experienced by all households in the intervention group and the matched comparison group in the year prior to the baseline survey. A close examination of shocks experienced by households shows that unemployment for youths was the most commonly reported shock/stressor (77 percent), followed by crop pests (71 percent), livestock disease (65 percent), crop disease (62 percent), and trauma associated with insurgency (62 percent).

We found no significant differences between the intervention group and the comparison group on the overall shock exposure index. A close examination of the sub-indicators reveals that compared to the comparison group, a significantly lower proportion of the intervention group reported that they experienced landslides/erosion (30 percent, vs. 38 percent for the comparison group) and loss of land (46 percent, vs. 53 percent for the comparison group). In contrast, a significantly higher proportion of the intervention group reported that they experienced human disease outbreaks (46 percent, vs. 39 percent for the comparison group) and death of a household member (41 percent, vs. 32 percent for the comparison group).

Table 5. Shock exposure index

Index (means)	Comparison	Intervention	Difference	Statistically significant
Exposure to shocks	52.2	47.5	4.7	

In FGDs and KIIs, participants reported that in the past year, flooding and pests have destroyed many people’s crops, leaving them with very little income for the following year. The effects of floods and pests were considered severe by all respondents. Animal-rearers have also not gone unscathed. They have lost large investments of animals to sudden disease, death, and raids by armed groups.

“Last year’s rainy season there were houses that had problems. Some houses were destroyed by the rain. Some people incurred loss of their farm due to flooding and were not able to harvest their farm produce. They sank their money into it [the farm] but the flood washed away everything. Those are the ones [shocks] I know to the best of my knowledge. ”

“There was an outbreak of poultry disease, the two of us in our household lost all our poultry to death.”

The instability of the market has also led to farmers’ decreased income and sense of agency. After harvesting the little they can, farmers have found a drastic fall in prices for their farm products.

“The price of farm produce has depreciated. Seriously, it really hurt a lot of people. Something they are selling [for] twenty thousand [naira] dropped to six thousand [naira].”

“You will have to buy fertilizer and maybe your farm is large. You have to employ laborers and to worsen the situation the produce prices have decreased in the market. You must sell large farm product in order to have money to buy fertilizer. Honestly, it was a challenge for people to meet their basic needs.”

The shock of conflict is still felt several years after the attack. Infrastructure, such as markets and schools, remained demolished after the 2014 Boko Haram attack on the community. Recent herder/farmer clashes were also a commonly reported shock experienced by the community. The word “conflict” was referenced an average of 50 times in focus group discussions and 13 times in key informant interviews.

“One of the challenges in this community is the problem the community farmers constantly have with the Fulanis [herdsmen]. There was a woman in this community that couldn't harvest one measure of beans because the Fulani's cattle ate all her farm products.”

The effects of trauma from the 2014 insurgency and recent attacks by armed groups are also considered a major challenge by key informants. Respondents report that the community is tense and is concerned that the armed groups will return to the community.

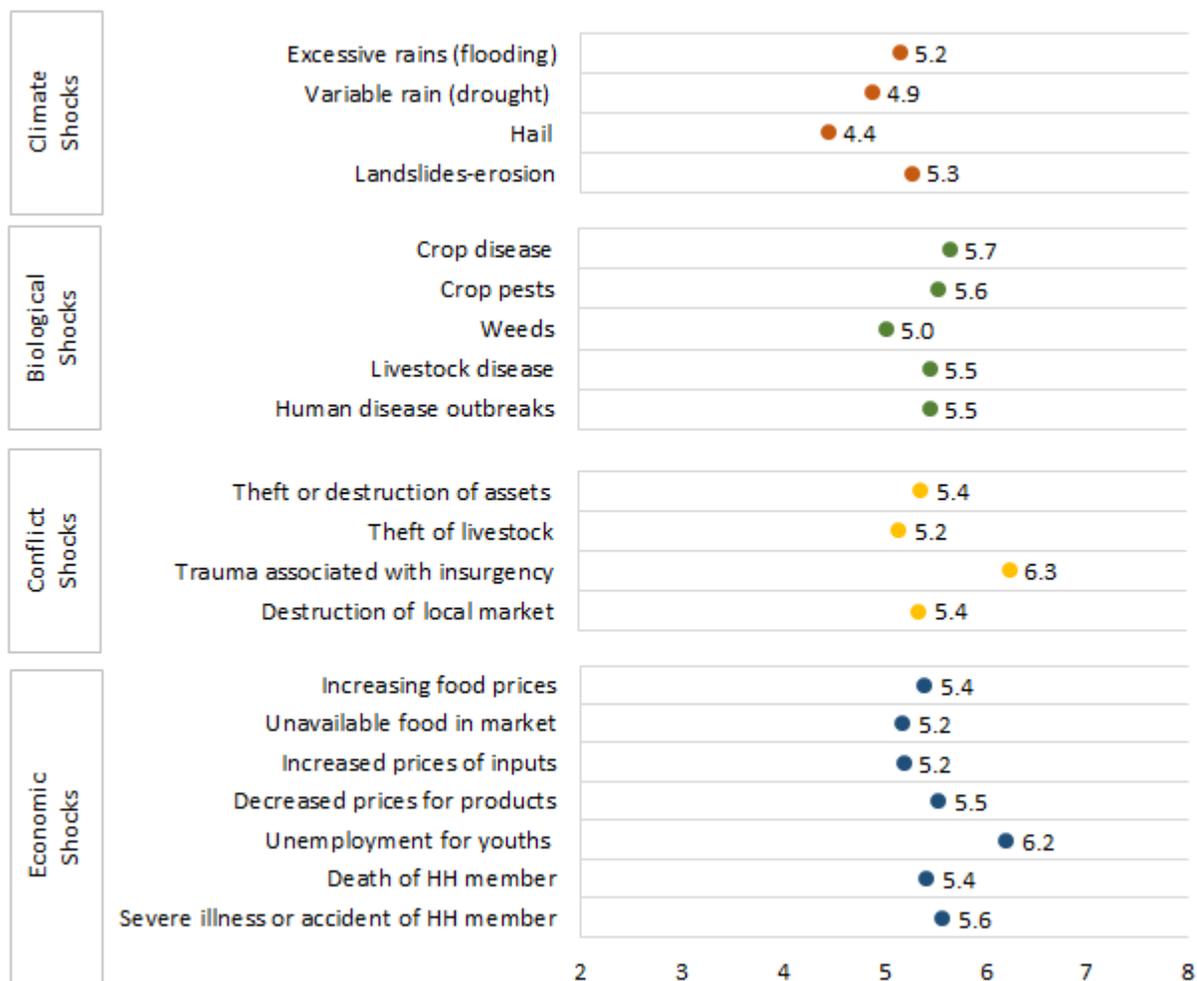
“People still live in fear. Little sound can frighten the whole community. They run on hearing little sound. This has been a challenging issue in the community. We always say, ‘number one priority of the government should be security’. The government should forget about building houses. Forget about where someone will sleep. The government should be able to secure her people. If there is security, you will be able to eat fruit when they are ripe and sleep at peace. Even if the government gives you good food and meat, you will eat and then still have to run for refuge.”

SHOCK IMPACTS

As part of the household survey, respondents who reported that their household experienced a shock were subsequently asked about the severity of the shock. Perceived severity is measured using two variables: the impact on income security and impact on food consumption. The variables are based on respondents' answers to the questions, “How severe was the impact on your income?” and “How severe was the impact on household food consumption?” which are asked of each shock or stressor

experienced. The responses to the two questions are combined into one variable that has a minimum value of two and a maximum value of eight. Overall, the shocks with the strongest impact were trauma associated with insurgency, unemployment for youth, and loss of land.

Figure 5. Shock impacts⁹



The intervention group reported a significantly higher impact for hail, but a significantly lower impact for landslides, crop disease, weeds, livestock disease, theft of livestock, trauma associated with insurgency, destruction of local market, increased prices of input, decreased prices for products, loss of land, unemployment for youths, and death of a household member.

⁹ Each impact score in the chart below can range from two to eight. Higher scores correspond to a higher impact on household income and food consumption.

CHAPTER 6. HOUSEHOLD RESILIENCE

ABILITY TO RECOVER

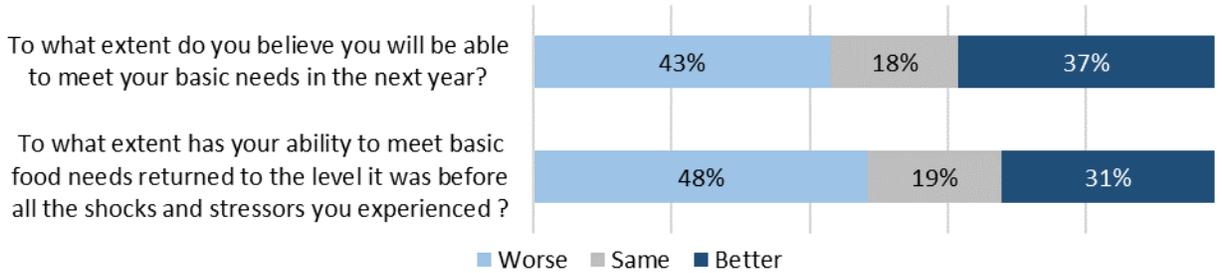
Household resilience is the ability of a household to manage or recover from shocks and stresses. One way to measure household resilience is a subjective, or “experiential,” indicator and is based on households’ own reports of their ability to recover from the shocks they experienced. The ability to recover index is based on an 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 that households experienced in the year prior to the survey. The index can range from two to six.

Table 6. Ability to recover index

Index (means)	Comparison	Intervention	Difference	Statistically significant
Ability to recover index	3.77	3.76	0.01	

We found that both the intervention group and the comparison group had an average ability to recover index of about 3.8, with no significant differences between the two groups. Nearly half (48 percent) of all respondents said that their ability to meet basic needs was worse than it was before the shocks and stressors experienced in the past 12 months. However, more than a third (37 percent) said that they believed their ability to meet basic needs in the next year will be better than before the shock.

Figure 6. Ability to recover sub-indicators



SHOCK COPING STRATEGIES

Figure 7 presents information on the strategies households used in response to shocks/stressors in the past 12 months. The most commonly reported strategies were: using in-kind (livestock) savings, selling protective assets, selling productive assets, taking out a loan within the community, and using cash

savings. A close examination of the sub-indicators reveals that compared to the comparison group, a significantly lower proportion of the intervention group reported that they took out a loan outside of the community (19 percent, vs. 25 percent for the comparison group).

Figure 7. Dealing with shocks sub-indicators



CHAPTER 7. HOUSEHOLD RESILIENCE CAPACITIES

While resilience itself is an ability to manage or recover from shocks, resilience capacities are a set of conditions, attributes, or skills that enable households and communities to achieve such resilience. Household resilience capacities can be classified into three categories: absorptive capacity, adaptive capacity, and transformative capacity. Figure 1 lays out the indicators of the three capacities that are used to measure them in this report. These indicators are combined into indices of the three capacities and an overall index of resilience capacity using factor analysis.

Figure 8. Household resilience capacities and indicators

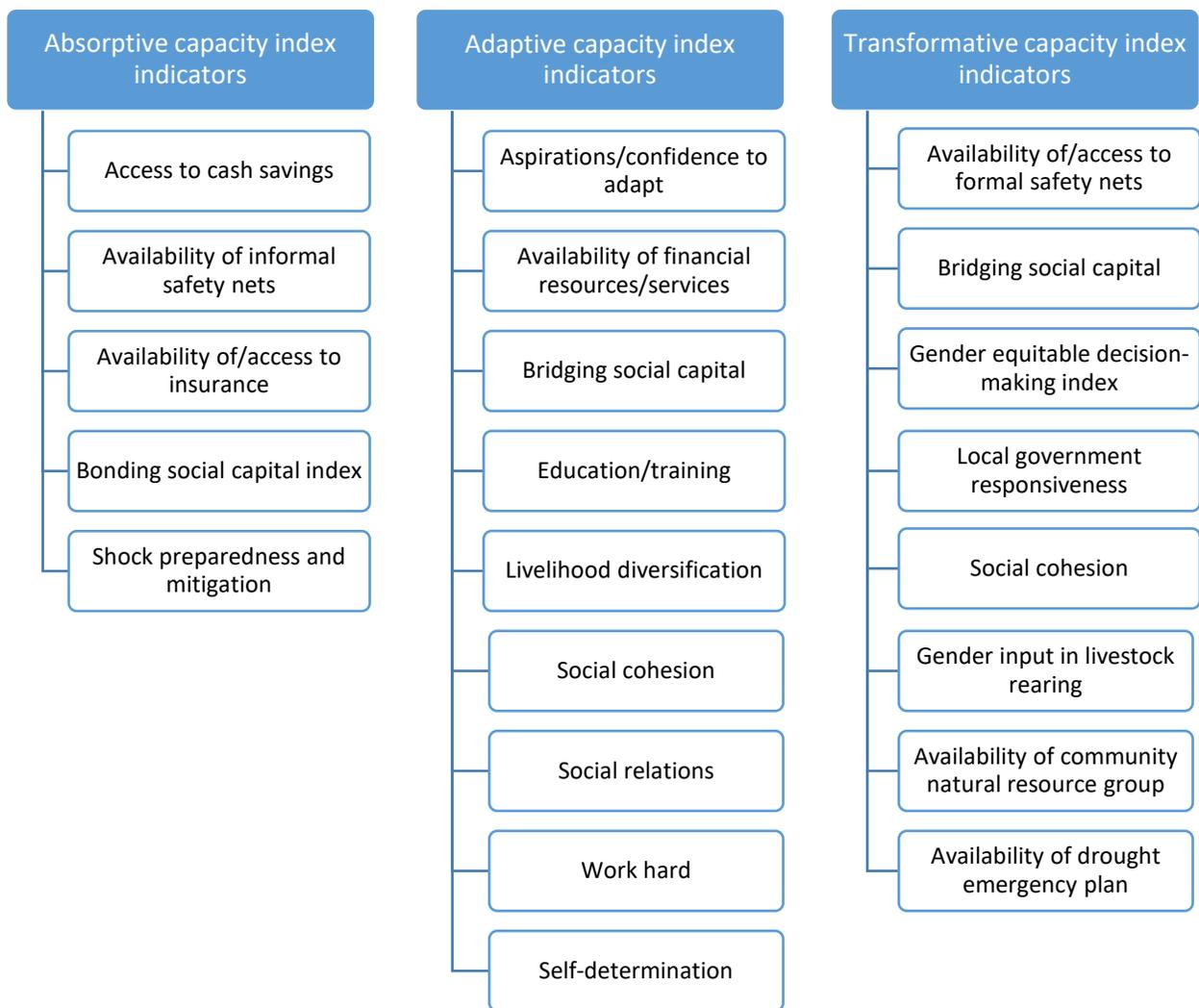


Table 7 reports the baseline values of the household resilience index capacity indicators across intervention status. The intervention group and comparison group are quite similar across many of the

indicators but differ significantly on the bonding social capital index, shock preparedness and mitigation indicator, aspirations-confidence-locus indicator, bridging social capital, and social cohesion.

The values in the “comparison” and “intervention” columns in Table 7 below represent the normalized weights, or level of importance, that each indicator contributes to each individual factor (i.e., each one of the three resilience capacity indices). Larger weights indicate larger roles played in defining the factor. Whether or not the difference shown between comparison and intervention data points is statistically significant is indicated in the last column (e.g., “yes” means that the differences between comparison and intervention groups for any given indicator are real and not due to chance; therefore, statistically significant differences indicate an imbalance between the two groups for that particular indicator). Outside of the factor analysis method used for these calculations, these data points have little meaning. Within this context, however, they provide us with a means to, at baseline, establish how and to what degree these indicators contribute to the larger indices serve as metrics for measuring program impact over time. Each of these indicators is examined in greater detail in the sections below.

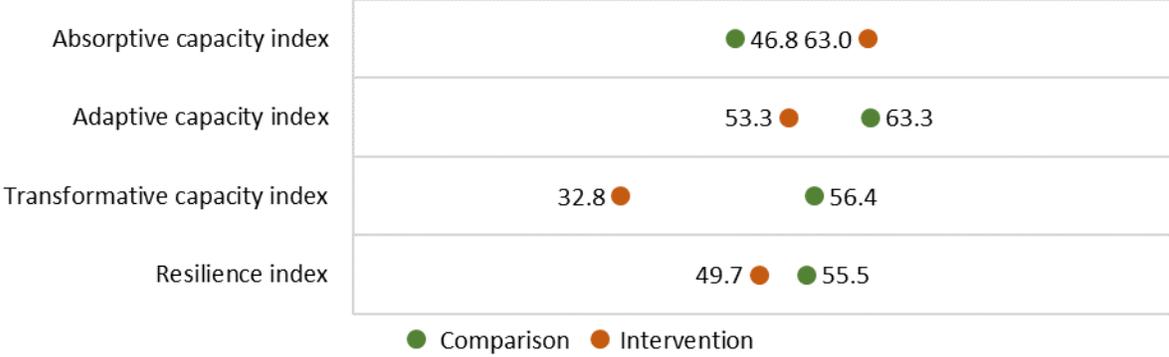
Table 7. Resilience capacity index indicators

Absorptive capacity index indicators	Comparison	Intervention	Difference	Statistically significant
Access to cash savings	0.306	0.324	-0.018	No
Bonding social capital index	1.530	1.580	0.050	No
Availability of informal safety nets	2.800	3.000	-0.250	Yes
Availability of/access to insurance	0.031	0.029	-0.030	No
Shock preparedness and mitigation	1.500	1.530	0.151	Yes
Adaptive capacity index indicators	Comparison	Intervention	Difference	Statistically significant
Aspirations/confidence to adapt	9.4	9.5	-.1	No
Availability of financial resources/services	.326	.331	.328	No
Bridging social capital	1.95	1.82	.137	No
Education/training	2.27	2.28	-.006	No
Livelihood diversification	1.76	1.92	-.15	Yes
Social cohesion	2.89	2.8	.094	No
Social relations	1.682	1.689	-.007	No
Work hard	.804	.726	.078	Yes
Self-determination	.676	.580	.095	Yes

Transformative capacity index indicators	Comparison	Intervention	Difference	Statistically significant
Availability of/access to formal safety nets	.997	.910	-.079	No
Bridging social capital	1.95	1.82	.137	No
Gender equitable decision-making index	13.51	13.52	-.017	No
Social cohesion	2.89	2.80	.094	No
Gender input livestock rearing	2.53	2.72	-.185	Yes
Local government responsiveness	.456	.426	.030	No
Community natural resources group exists (informal safety net proxy)	1.03	1.08	-.050	No
Drought emergency plan exists	1.12	1.22	-.105	Yes

Figure 9 below provides the overall Household Resilience indices for treatment and control groups using a simple average of the three individual resilience indices. The impact for NN will be determined, in part, by changes in these index scores.

Figure 9. Baseline household resilience capacities



ACCESS TO CASH SAVINGS

Access to cash savings is a measure of absorptive resilience capacity. Access to cash savings is measured as a binary variable equal to 1 if the respondent reported that a household member regularly saves cash. In general, respondents reported very little access to cash savings, reporting an average score of 0.3 for this indicator. Both the intervention and comparison groups reported saving cash at similarly low rates of about 31 percent.

Table 8. Access to cash savings

Index (means)	Comparison	Intervention	Difference	Statistically significant
Access to cash savings	0.31	0.31	-0.01	

AVAILABILITY OF INFORMAL SAFETY NETS

The availability of informal safety nets is a measure of absorptive resilience capacity. The availability of informal safety nets indicator is measured by the total number of community organizations that typically serve as informal safety nets that are available in a community and have been active in the 12 months prior to the survey. For Nuru Nigeria, five community organizations are studied and thus the indicator can range from zero to five.

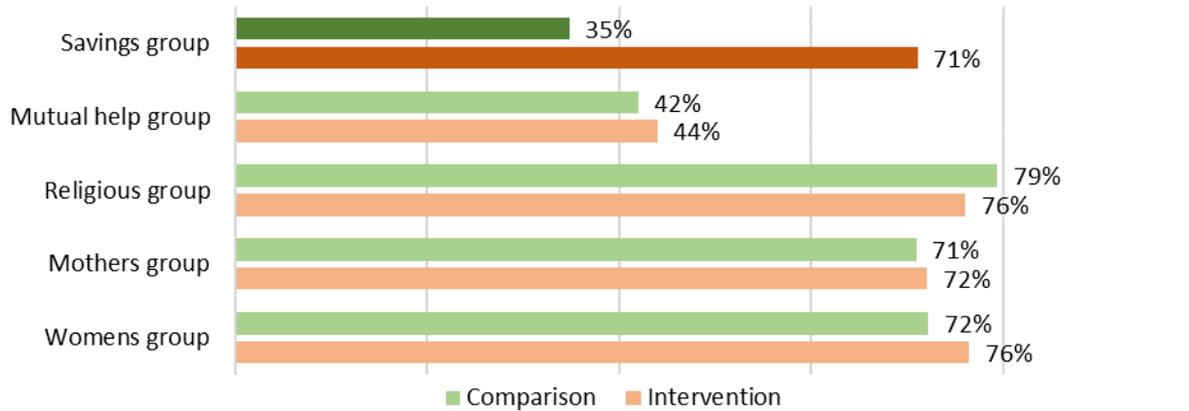
Table 9. Availability of informal safety nets

Index (means)	Comparison	Intervention	Difference	Statistically significant
Availability of informal safety nets	2.85	3.03	-0.18	Yes

In general, respondents reported a high availability of informal safety nets (such as savings groups, mutual help groups, religious groups, mothers' groups, and women's groups), reporting an average score of 2.9 for this indicator. The intervention group had a significantly higher average than the comparison group.

A close examination of the sub-indicators reveals that compared to the comparison group, a significantly higher proportion of the intervention group reported savings groups existing and being active in the past year (71 percent, vs. 35 percent for the comparison group).

Figure 10. Availability of informal safety nets sub-indicators



AVAILABILITY OF/ACCESS TO INSURANCE

The availability of/access to insurance is a measure of absorptive resilience capacity. The availability of/access to insurance is measured as a binary variable equal to one if crop, livestock, health, or another type of insurance is available in the respondent’s village or the respondent’s household reports having crop, livestock, health, or any other type of insurance.

Table 10. Availability of/access to insurance

Index (means)	Comparison	Intervention	Difference	Statistically significant
Availability of/access to insurance	0.03	0.03	0.00	

In general, respondents reported very low availability of and access to insurance, reporting an average score of just 0.03 for this indicator. A close examination of the sub-indicators reveals that both the intervention group and the comparison group reported similar and very low rates of insurance availability (3 percent) and usage (1 percent).

Figure 11. Availability of/access to insurance sub-indicators



BONDING SOCIAL CAPITAL

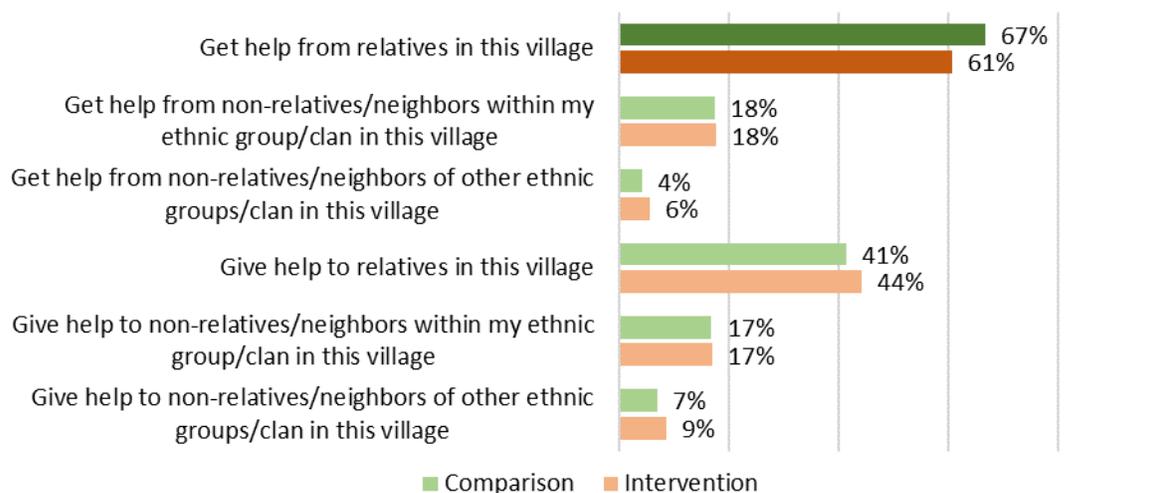
Bonding social capital is a measure of absorptive resilience capacity and refers to relationships or associations within a group or community. The bonding social capital index ranges from zero to six and is based on responses to two questions: (1) whether the household indicates it would be able to get help from various categories of people living within their community if they needed it, and (2) whether the household indicates it would be able to give help to people living within their community who needed it. In general, respondents reported a very low bonding social capital index, reporting an average score of just 1.5 for this indicator.

Table 11. Bonding social capital

Index (means)	Comparison	Intervention	Difference	Statistically significant
Bonding social capital index	1.54	1.54	0.00	

Overall, two-thirds of all respondents report being able to get help from relatives in their village and nearly half reported being able to give help to a relative in this village. Only a fifth reported being able to receive help from, or being able to give help to, non-relatives or neighbors from within their ethnic group in their village. Very small proportions of respondents reported being able to receive help from, or being able to give help to, non-relatives or neighbors of other ethnic groups in their village.

Figure 12. Bonding social capital sub-indicators



A close examination of the sub-indicators reveals that compared to the comparison group, a significantly lower proportion of the intervention group reported getting help from relatives in their village (61 percent, vs. 67 percent for the comparison group).

SHOCK PREPAREDNESS

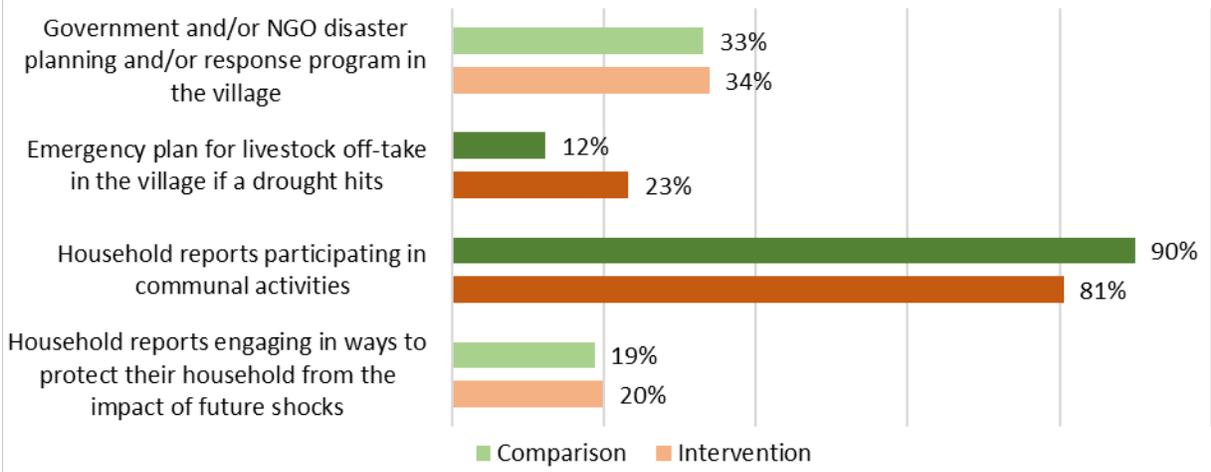
Shock preparedness and mitigation is a measure of absorptive resilience capacity. The shock preparedness and mitigation indicator is measured as a summary variable that can range from zero to four. In general, households reported low levels of shock preparedness, reporting an average score of just 1.5 for this indicator.

Table 12. Shock preparedness and mitigation

Index (means)	Comparison	Intervention	Difference	Statistically significant
Shock preparedness & mitigation	1.50	1.48	0.03	

A close examination of the sub-indicators reveals that significantly higher proportions of the intervention group reported the presence of an emergency plan for livestock off-take in the village if a drought hits, but significantly lower proportions of the intervention group reported participating in any of the following activities: soil conservation activities, flood diversion structures, planting trees on communal land, or improving access to health services

Figure 13. Shock preparedness and mitigation sub-indicators



ASPIRATION, CONFIDENCE TO ADAPT, AND LOCUS OF CONTROL

Aspiration, confidence to adapt, and locus of control are measures of adaptive resilience capacity. The resilience questionnaire includes indicators about the underlying concepts around people’s aspirations, confidence to adapt, and a sense of control over one’s life. The aspirations index is based on the absence of fatalism and belief in the future and can range from zero to six. The confidence to adapt indicator is based on the degree to which the respondent is exposed to alternatives and can range from zero to six. The locus of control indicator is constructed from a 6-point agreement scale of four questions and can range from zero to four. The aspirations-confidence to adapt-locus of control index is calculated by combining these three indices into an additive index that ranges from zero to 16.

Both the intervention group and the comparison group reported a similar aspirations-confidence to adapt-locus of control index of about 9.4. While both groups had a similar average for the confidence to adapt index, the intervention group had a significantly higher aspirations index but a significantly lower locus of control index, compared to the comparison group.

Table 13. Aspiration, confidence to adapt and locus of control indexes

Index (means)	Comparison	Intervention	Difference	Statistically significant
Aspirations/confidence/locus index	9.41	9.34	0.07	
Aspirations index	3.59	3.87	-0.28	Yes
Confidence to adapt index	3.20	3.15	0.05	
Locus of control index	2.61	2.32	0.30	Yes

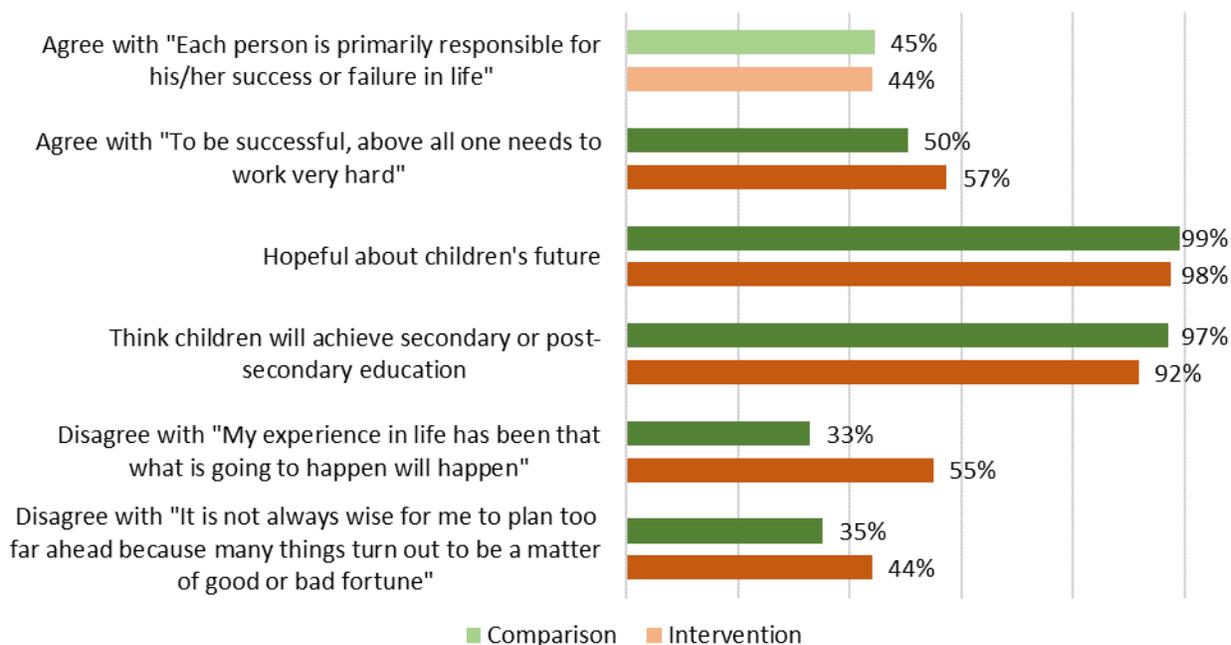
After a close examination of the aspiration index sub-indicators, we found that the intervention group had a significantly higher absence of fatalism. A significantly higher proportion of the intervention group agreed with the statement, *“To be successful, above all one needs to work very hard”* (57 percent, vs. 50 percent for the comparison group), disagreed with the statement, *“My experience in life has been that what is going to happen will happen”* (55 percent, vs. 33 percent for the comparison group), and disagreed with, *“It is not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune”* (44 percent, vs. 35 percent for the comparison group).

In FGDs and KIIs, agriculture appears to be both a point of pride and a pathway to agency. When people recognize that they have a need, they feel that through their own actions of crop farming and animal rearing, they can meet their needs and their family’s needs.

“Things are tough. If one is lazy he will suffer. If you struggle, you will get a little to help yourself... If you are a lazy type you will have yourself to pity but if you struggle and farm, you will get something.”

Although belief in the future was high across both groups, a significantly lower proportion of the intervention group felt hopeful about their children’s futures and thought that their children could achieve secondary or post-secondary education (92 percent, vs. 97 percent for the comparison group).

Figure 14. Aspirations index sub-indicators



After a close examination of the confidence to adapt index sub-indicators, we found that a significantly lower proportion of the intervention group was willing to move somewhere else to improve life (40 percent, vs. 47 percent for the comparison group).

After a close examination of the locus of control index sub-indicators, we found that a significantly lower proportion of the intervention group agreed with, "I can mostly determine what will happen in my life" (25 percent, vs. 35 percent for the comparison group), agreed with, "When I get what I want, it is usually

because I worked hard for it" (72 percent, vs. 80 percent for the comparison group) and agreed with, "My life is determined by my own actions" (57 percent, vs. 68 percent for the comparison group)

In general, FGD and KII participants reported a more externally focused locus of control. Typically, people exhibited this through the discussion of relying on "God's will" over mitigation strategies for coping with shocks.

"I've not applied any strategy [to deal with shocks]. I just surrender all to God."

Figure 15. Confidence to adapt index sub-indicators

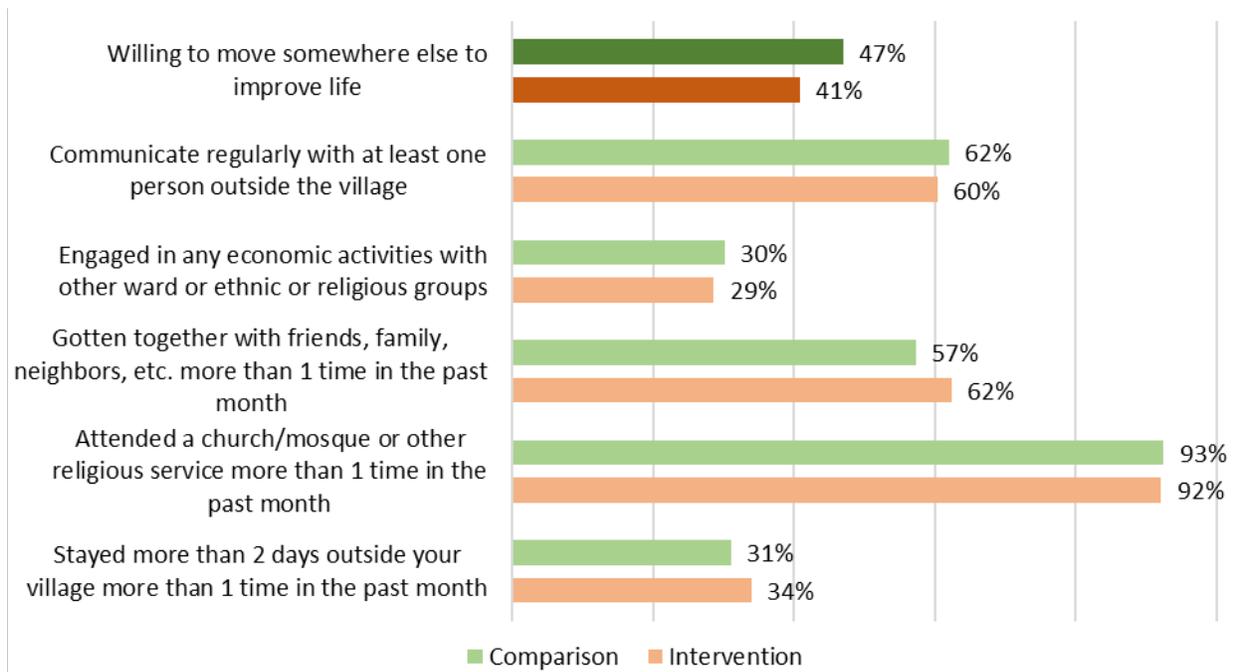
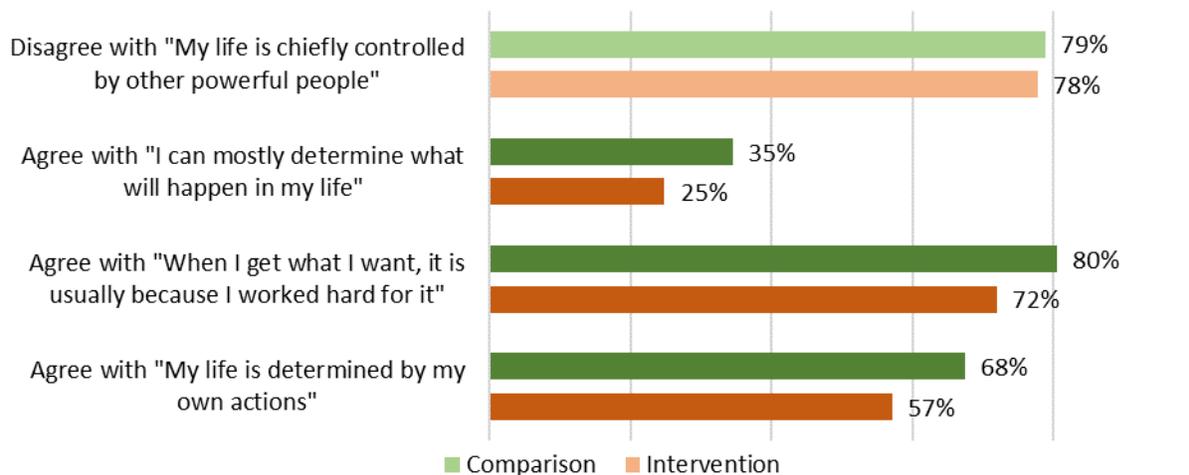


Figure 16. Locus of control index sub-indicators



AVAILABILITY OF FINANCIAL RESOURCES

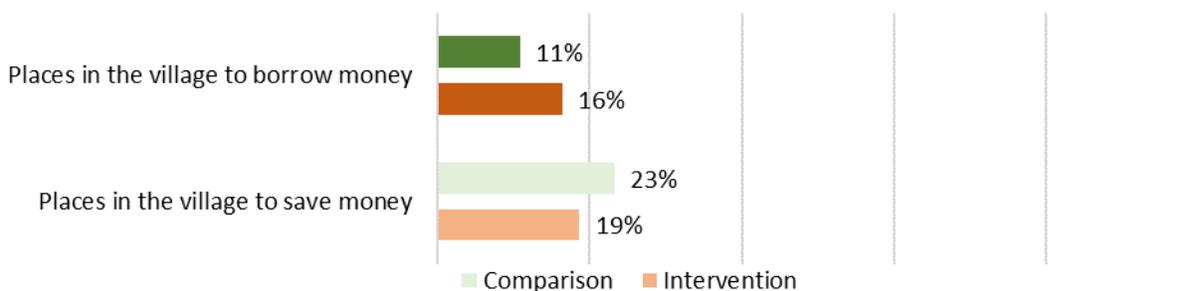
The availability of financial resources is a measure of adaptive resilience capacity. The availability of financial resources indicator is equal to zero if there is no institution in a village that provides credit or savings support, to one if there is only one type of support, and to two if there are both types of support.

Table 14. Availability of financial resources

Index (means)	Comparison	Intervention	Difference	Statistically significant
Availability of financial resources	0.33	0.32	0.01	

In general, respondents reported low availability of financial resources, reporting an average score of just 0.3 for this indicator. A close examination of the sub-indicators reveals that compared to the comparison group, a significantly higher proportion of the intervention group reported places in the village to borrow money.

Table 15. Availability of financial resources



BRIDGING SOCIAL CAPITAL INDEX

Bridging social capital is a measure of adaptive resilience capacity as well as transformative resilience capacity. Bridging social capital refers to relationships or associations between social groups, social class, race, religion, or other important sociodemographic or socioeconomic characteristics. The bridging social capital index ranges from zero to six and is based on responses to two questions: (1) Whether the household indicated it would be able to get help from various categories of people living outside of their community if they needed it, and (2) whether the household indicated it would be able to give help to

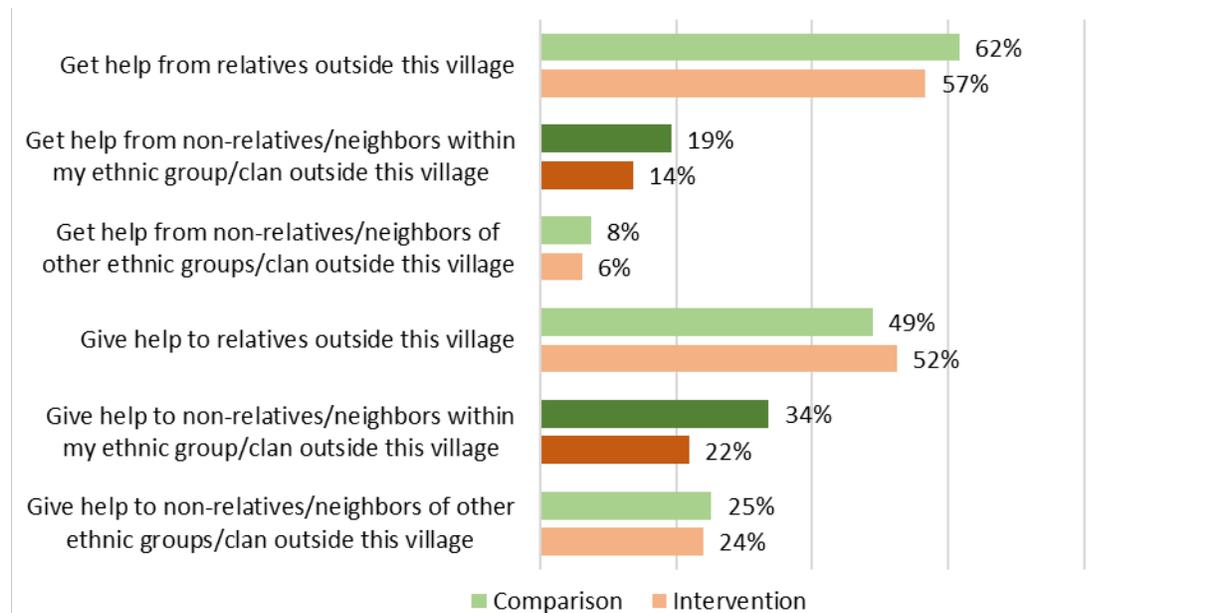
people living outside of their community who needed it. In general, respondents reported a very low bonding social capital index, reporting an average score of just 1.9 for this indicator.

Table 16. Bridging social capital

Index (means)	Comparison	Intervention	Difference	Statistically significant
Bridging social capital	1.96	1.75	0.21	Yes

The intervention group reported a significantly lower bridging social capital index. A close examination of the sub-indicators reveals that compared to the comparison group, a significantly lower proportion of the intervention group reported being able to get help from non-relatives/neighbors within their ethnic group/clan outside this village (13 percent, vs. 19 percent for the comparison group), and give help to non-relatives/neighbors within their ethnic group outside the village (22 percent, vs. 33 percent for the comparison group).

Figure 17. Bridging social capital sub-indicators



EDUCATION & TRAINING

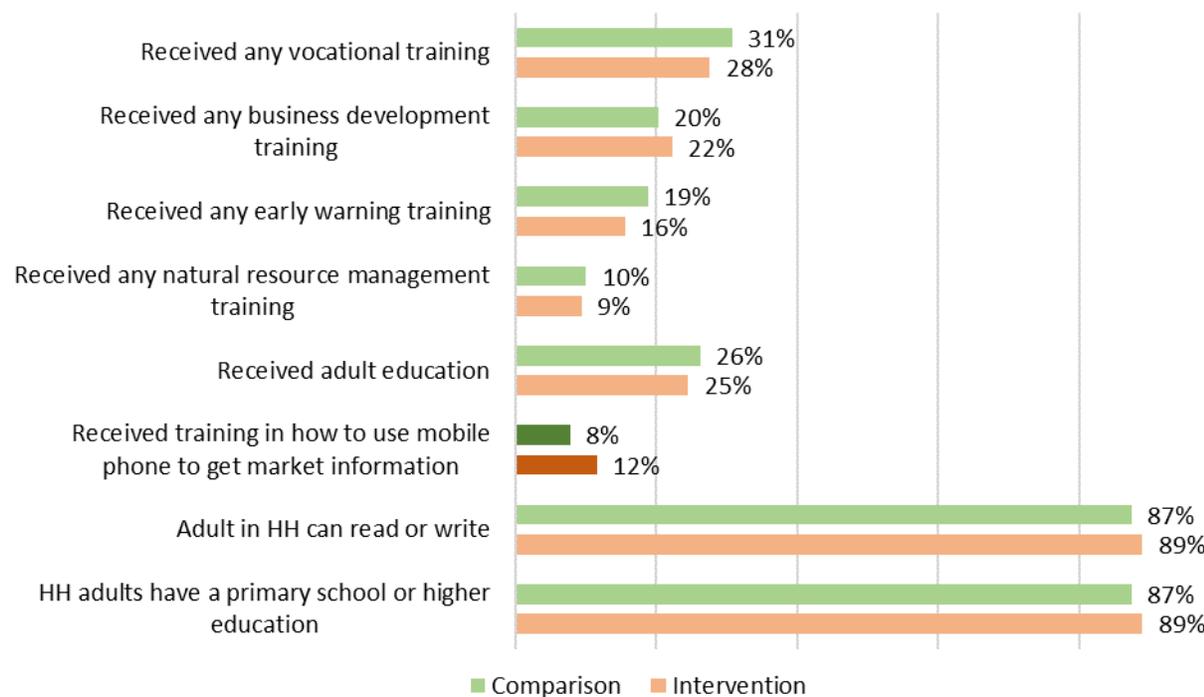
Education and training are a measure of adaptive resilience capacity. Education and training are measured as an additive index that can range from zero to three. In general, respondents reported robust education and training, reporting an average score of 2.2 for this indicator. A close examination

of the sub-indicators reveals that compared to the comparison group, a significantly higher proportion of the intervention group reported receiving training in how to use their mobile phone to get market information.

Table 17. Education & training

Index (means)	Comparison	Intervention	Difference	Statistically significant
Education & training	2.28	2.17	0.11	

Figure 18. Education & training sub-indicators



LIVELIHOOD DIVERSIFICATION

Livelihood diversification is a measure of adaptive resilience capacity. Livelihood diversification is measured as the total number of livelihood activities engaged in over the last year. In general, respondents reported low levels of livelihood diversification, reporting an average score of just 1.8 for this indicator.

Table 18. Livelihood diversification

Index (means)	Comparison	Intervention	Difference	Statistically significant
Livelihood diversification	1.77	1.83	-0.07	

AVAILABILITY OF FORMAL SAFETY NETS

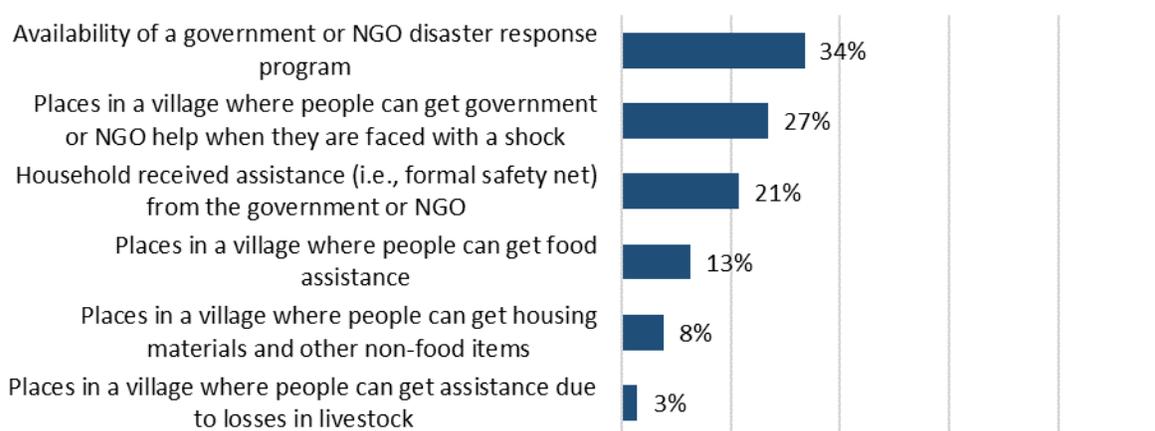
The availability of formal safety nets is a measure of transformative resilience capacity. This indicator measures the number of formal safety nets available in a household’s village and can range from zero to six. In general, respondents reported low availability of formal safety nets, reporting an average of just 1.0 for this indicator.

Table 19. Availability of formal safety nets index

Index (means)	Comparison	Intervention	Difference	Statistically significant
Availability of formal safety nets	1.00	0.93	0.07	

A close examination of the sub-indicators reveals that a third of respondents reported the availability of government or NGO disaster response programs and a fifth reported receiving assistance from the government. However, only a tenth of respondents reported the presence of places in the village where they could get good assistance or housing material and other non-food items. Only three percent reported the availability of places in their village where people could get assistance due to losses in livestock.

Figure 19. Availability of formal safety nets sub-indicators



GENDER EQUITABLE DECISION-MAKING INDEX

Gender equitable decision-making is a measure of transformative resilience capacity. Gender equitable decision-making is based on four types of decision-making control within households: control of income, control over health and nutrition decisions, control over household purchases, and control over children’s education. The summary variable is constructed using a five-point scale and ranges from zero to 20. In general, respondents reported high levels of gender-equitable decision making, reporting an average of 13.5 for this indicator.

Table 20. Gender equitable decision-making index

Index (means)	Comparison	Intervention	Difference	Statistically significant
Gender-equitable decision making	13.5	13.5	0.0	

A close examination of the sub-indicators reveals that the vast majority of female respondents report having joint say, final say, or sole say on decisions related to household income, healthcare, purchases, and children’s education.

Figure 20. Gender equitable decision-making index sub-indicators



Qualitative findings from the FGDs and KIIs provide more context and nuanced detail to the quantitative findings. FGDs and KIIs find that women’s area of influence in the household is limited to nutrition, household health, children’s education, and some aspects of household livelihoods. In the home, women are unable to influence matters of use of earned income and joint livelihood efforts. In the community, women are only able to influence decisions related to other women and women’s groups’ activities in the church. In the interviews, women influencing decisions in the mosque were not mentioned, noting a religious difference.

Decision-making in the household

The role of breadwinner and HH decision-maker has traditionally been ascribed to men. Based on interviews, the traditional expectations and reality are diverging in the LGA. Traditionally, men are the head of the house, or “mian gida,” while women are the “mian daki,” head of the room or helper. However, women feel like they are earning most of the money that meets the family’s basic needs.

“They [men] think they are the head of the house while they are not...They have sold their position to the women. They are supposed to receive the lion share [of income], but up to now [they] still claim to be the head of the family or the breadwinner while [they] are not. Women should get the highest share and men [should] get the small share because...they contribute nothing.”

Despite the common perception in the community that women are now the breadwinners, men are deciding on expenditure decisions and farm produce sales, which is mostly cultivated by women.

“Honestly, we women don’t have a voice because men have stopped like the way they stop the car. At home, if there is farm produce, they bring it home, and before you know, they will sell it. If they sell it and you talk back, they will beat you. Honestly, women don’t have liberty because men are stopping us.”

“We, the women..., feel we are suffering. This is because the men do not take care of us. We are the ones that pay fees [and] farm. In fact, most of the women that stay at home at the moment are in one way or the other ill. If not, most of the women are on the farm despite the rain.”

The effects of trauma should be noted here. In other qualitative data, we have seen that men feel very disempowered with the high unemployment rate and the conflict. The men felt were the “protectors” and felt they were unable to fulfill their duty.

Decision-making in the Community

Key informants agreed that women are excluded from decision making in the community. Traditional roles and hierarchies dictate that men discuss and make decisions that affect the whole community. Some instances were recorded when female community members were collectively informed of decisions after they were made by male community members; however, typically women were excluded entirely.

“Well, that is because we don’t want women to be in the forefront when it comes to decision making.”

Women are, however, able to influence decisions that affect other women within women's groups or women's church groups. Women's advice and opinions are welcomed among other women in times of marital disputes, household health concerns, and child-raising.

Women in leadership

The majority of women interviewed showed a positive perception of women in leadership. Men interviewed, however, more frequently discussed a negative perception of women in leadership roles.

Women and men perceived different barriers for women rising into leadership roles.

"It will be important if we women... have the chance, so that they [women] too can uphold their rights."

"Because some women... if they enter politics, they are spoiling their marriage and life at home."

"In my own opinion, women cannot hold such position because even our tradition prohibits women from holding such positions..., except if they want to join the police."

"The women want to equally participate, but our culture doesn't allow that."

Respondents reported zero instances, in their memory, of women ruling within their community as traditional leaders. However, many discussed with pride, a female Nigerian former politician from the LGA. Despite this potential role model for female leadership, women in the LGA continue to face many barriers, as revealed in the interviews: lack of funding, stigma, disempowerment, lack of education, perception of women's inferiority, and lack of support, particularly by men. Additionally, both men and women respondents discussed that although the government has mobilized and allowed women to run for political office, the women feel disempowered to contest for leadership roles, particularly against men.

"Mostly, women are being oppressed by men; they refer to them as inferior which is why they are neglected [in leadership roles]."

"The men often discourage the women from joining politics. They keep emphasizing, 'politics is not meant for women; a woman is not fit for politics; this and that'. Once the women hear it, they feel reluctant to participate in politics."

When women in the community gather the courage to run for political offices, they are often met with stigmas, according to the interviewees. The female candidates' morals are publicly questioned by both men and women in the community. They are considered to be neglectful mothers and wives and called "whores" and "prostitutes". The words 'prostitute' and 'whore' were referenced by half of all interviewees.

"People think that all women that are in politics are prostitutes. That is our people's views here."

"Definitely, she will be dating other men if she engages in politics."

Girls Education

FGDs and KIIs found that the young girls are dropping out of school, although the age of drop out that people reported varied (9-22 years). Although the numerical age varied, all FGD and KII participants discussed the "age of puberty" as the age that most girls dropped out. FGD and KII participants agreed on the following barriers affecting girls' continuing education.

1. The financial constraint of girl's families was the major reason for young girls dropping out before completing their secondary school-grade 12 equivalent as reported in FGDs and KIIs. One respondent reported the cost of school fees at \$450 USD per year per child.

"Among the reasons why girls leave school, the first one is poverty because there is nothing to pay school fees by parents."

"Parents don't have enough to pay for the children's fees because the fees are expensive. I have a son who just graduated from junior secondary school...Each term (every 4 months), I pay about 54,000N (\$150 USD) ... Imagine you have three children. You pay such a huge amount of money just for fees when your only source of income is farming and you end up harvesting five bags for the whole year. It is not possible to sponsor them. So, poverty is also the one of the major reasons why they drop out."

2. FGD and KII participants reported that young girls are marrying before they are able to complete their secondary education. In a 2018 report, UNICEF states that Nigeria has 23 million girls and women that were married as children. Nearly half (43 percent) of girls are married before they reach 18 years in Nigeria. FGD and KII participants described how

"While some are saying their children should not exceed Class 3, these girls should get married the moment [they] can write their names well and address."

many tribes, including Fulani, Margi, and Higgi, all prefer to push girls to wed for fear that their girls will become pregnant before marriage if they are not wed early. Many that were interviewed believed that the Margi and Fulani did not value the education of girls and therefore preferred for their girls to be married over attending school.

3. Pregnancy was also a major reason for female students dropping out of school before the completion of secondary school. Girls are unable to stay or resume school due to social pressures at home and official school policies.

“Some parents don't sponsor girl's education. They say women are not to be educated and conclude once the girl is sent to school, she will get pregnant out of wedlock... The girl is not pregnant, but they have concluded that the girl will be pregnant. “

“Gradually, you will find out that your daughter becomes pregnant, and you know they don't tolerate pregnancy in secondary school. From there she even knows that after she is pregnant the next step is to drop out of school.”

Children's education is a paramount concern for women. All FGD and KII participants discussed using their income to pay for their children's school fees while only a few men discussed school fees at all. Women also discussed the barriers to children's education at greater length and detail than male respondents.

LOCAL GOVERNMENT RESPONSIVENESS

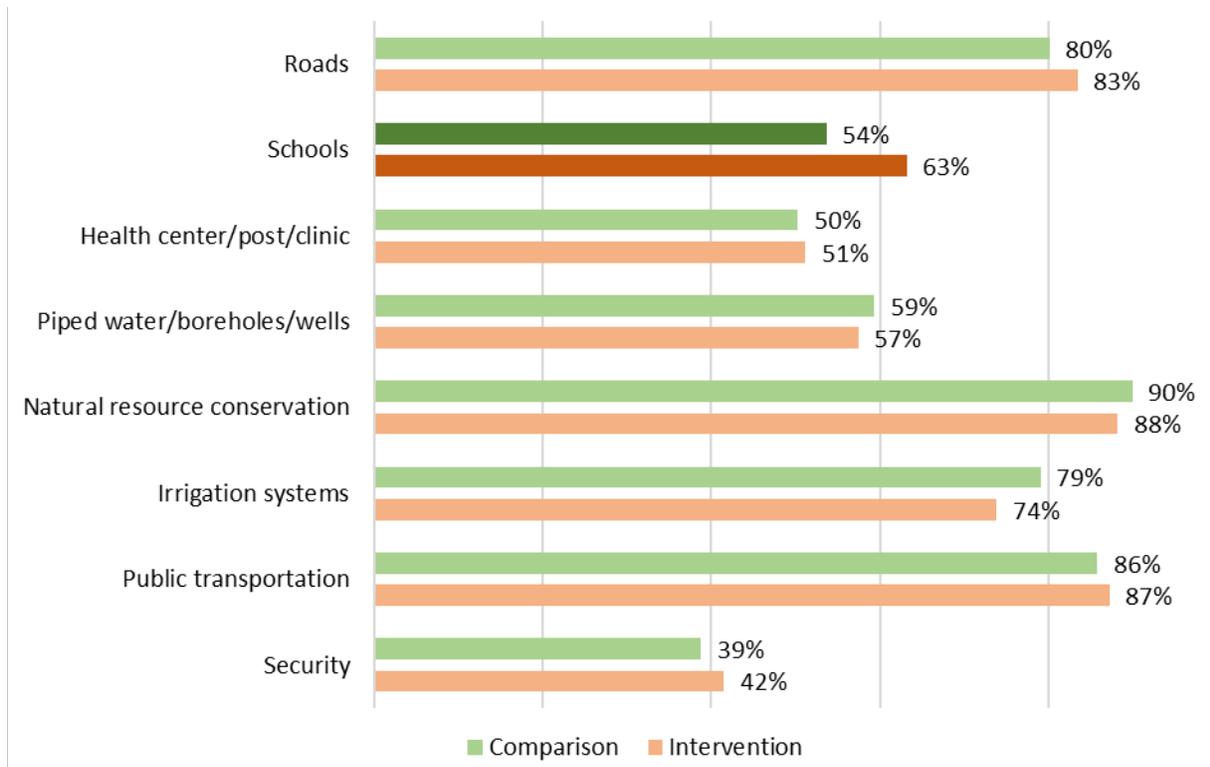
Local government responsiveness is a measure of transformative resilience capacity. Local government responsiveness is based on whether and how the local government responded to community requests for improving community assets or services over the five years prior to the survey. Local government responsiveness is measured in a mean score, calculated as the sum of the response value for identified community asset/service needs divided by the total number of community asset/service needs for which any community member requested assistance from the local government. The mean score ranges from zero to three. In general, respondents reported low local government responsiveness, reporting an average of just 0.5 for this indicator.

Table 21. Local government responsiveness

Index (means)	Comparison	Intervention	Difference	Statistically significant
Local government responsiveness	0.46	0.44	0.02	

A close examination of the sub-indicators reveals respondents reported that the local government was addressing needs related to security, schools, health centers, and piped waters or wells. However, respondents noted that needs related to roads, public transportation, irrigation systems, and natural resource conservations were not being addressed. Both the intervention group and the comparison group reported a similar average local government responsiveness score of 0.4. A significantly higher proportion of the intervention group reported that needs related to schools were not addressed.

Figure 21. Local government responsiveness sub-indicators



SOCIAL COHESION

Social cohesion is a measure of transformative resilience capacity and is a key intervening variable between social capital and violent conflict. Social cohesion refers to the norms and networks that enable

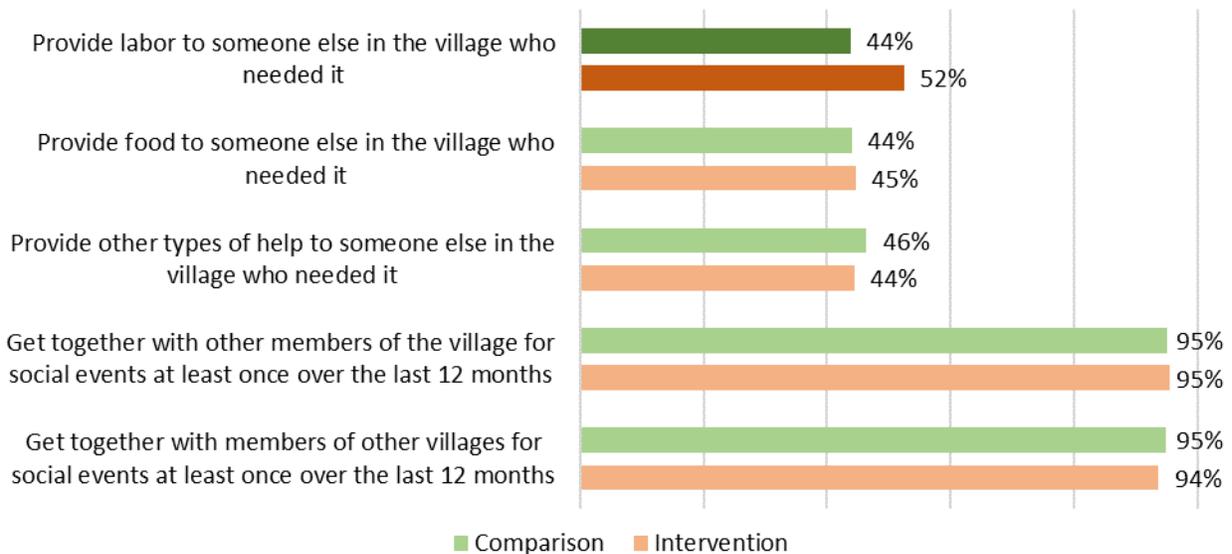
collective action; greater social cohesion is believed to lead to or produce greater resilience. Weak social cohesion increases the risk of social disorganization, fragmentation, and exclusion, potentially manifesting itself in violent conflict¹⁰. Social cohesion is measured with items focusing on whether groups come together either socially or to help others. Social cohesion is an additive index ranging from zero to five.

Table 22. Social cohesion index

Index (means)	Comparison	Intervention	Difference	Statistically significant
Social cohesion	2.90	2.75	0.15	

Both the intervention group and the comparison group reported a similar average social cohesion index of about 2.8. A close examination of sub-indicators shows a significantly higher proportion of the intervention group reported providing labor to someone else in the village who needed it (52 percent, vs. 44 percent for the comparison group).

Figure 22. Social cohesion sub-indicators



¹⁰ Colletta, N. J. and M. L. Cullen (2000). *The nexus between violent conflict, social capital and social cohesion: Case studies from Cambodia and Rwanda*. World Bank, Social Development Family, Environmentally and Socially Sustainable Development Network.

Qualitative findings from the FGDS and KIIs support the quantitative findings of robust social cohesion, but also provide more context and nuanced detail. In FGDS and KIIS, most communities reported that they are more socially cohesive than before the insurgency. In years past, community members would quarrel and enable divides based on tribal and religious identities. However, during the insurgency, the whole community fled together and protected and supported each other in return. They report a feeling of a shared experience, albeit a negative one, that binds them together.

“When Boko Haram invades our community, no matter how you do not get on well with someone, if accidentally meet on your way while fleeing, you definitely will like each other. In those times, when we’re feeling, if we meet with someone’s child whom we keep malice with, we put everything behind us and embrace the child and flee together. We assist each other even with food while on run. If any of us do not have any money, we can assist him or her since we all knew we were in a difficult situation together.”

Search for Common Ground describes three categories of social cohesion: social relationships, connectedness, and orientation towards the common good¹¹. In the community, FGD and KII participants noted that there are close social relationships and a deep social network within the

“In this village, we get on well. We do things together. If one person is in trouble, we make sure we tackle the problem. We help each other. We attend weddings and the rest.”

community. FGD and KII participants repeatedly described instances in the community where people are helping each other, advising each other, and spending time together.

Although FGD and KII participants express how they feel connected to the land and their community, they struggle to trust people outside their small communities. A “lack of trust” was the most commonly mentioned problem regarding the cohesiveness of the community among all groups.

I feel the problem is from the fact that we are yet to understand each other. As well, [there is] distrust among us leading to fear among ourselves. As a Christian, I may not trust the Muslims...People that displaced us...are the Muslims. We all assume that all Muslims are the same but if we are meant to understand that our assumptions are wrong, I think we will understand and harmonize ourselves

¹¹ Search for Common Ground. (2017). *Social Cohesion Framework*.

FGD and KII participants described communal dedication to upholding traditional roles and social order above their own interests. It appears that a major bond that ties the community together is an orientation and actions towards the common good.

FGD and KII participants reported that inequity is a major threat to social cohesion in the community. NGO interventions have been distributed unevenly in many cases and have exacerbated the feelings of inequity on religious lines. Additionally, women also reported inequity in decision making and access to resources.

QUALITATIVE FINDINGS ABOUT RESILIENCE

During the interviews, respondents were asked about their coping strategies for shocks. Families appear to be ill-prepared for potential shocks, as they reported limited resilience capacities.

“If you do not have the money, will you be able to do anything to cope with these things [shocks]? [It] is only those that have money that will buy pesticides and the like, but we are poor.”

“The problem is that even if there is food in the houses, it is not as expected. Once the crops are harvested, they are sold immediately to settle children's school fees, for treatment, [or] to buy some soup ingredients. The remnant is kept at home for eating. Looking at the way things are presently, people are living from hand to mouth.”

When action is taken to cope with shocks, communities are using absorptive capacities in dealing with experienced shocks and stressors. Commonly reported absorptive capacities were: use of informal safety nets (receiving housing support or gifts from family and friends), bonding social capital (relationships with family and friends), and use of mitigation strategies. Some reported using preventative strategies to mitigate shocks in the coming years; however, they were very few. For example, several respondents discussed planting later in the year and planting flowers and bushes to mitigate the effect of excessive rainfall and flooding. The use of cash savings, humanitarian assistance, and insurance were notably absent from the discussions. Not a single respondent reported using savings or insurance as a way that they have coped with shocks, while few reported assistance from humanitarian organizations.

“I didn't apply any strategy [to cope with shocks]. I pleaded with the community members for their help and they help me to repair my house.”

“Those that are near you are your relatives. In case if you have problem, they are ones that you will meet before your family. You will knock the door of your neighbor. If a woman wants to deliver [give birth], she will not wait for her family. You will call those that are near you to help. Sickness or some other problems, they are the ones to help. If you don't have something to eat, you will not wait for your family that are far away from you. Those that are near you are the ones that will help you in emergency situations.”

There were fewer instances noted of adaptive resilience capacities being used. Most respondents showed an external locus of control, believing that there was little they could do as individuals or as a community to improve their situation or prevent future shocks.

The vast majority of interviews did not discuss sufficient income or assets to overcome the reported shocks with one exception: government workers. Each of the government workers that were interviewed mentioned their government salaries as a source of adaptive resilience, enabling them to buy new assets and plant new crops the following year.

All respondents referenced religious—both Christian and Muslim—women’s groups that help community members in times of need by providing advice, money, and food items.

A few participants discussed diversifying their livelihood from crop farming to petty trading and animal rearing. Many relied on neighbors and family within the village to contribute time or money to help them after a shock.

Lastly, transformative resilience capacities were notably lacking in discussions. No respondent reported formal safety nets or government responses available to assist when faced with a shock.

CHAPTER 8. CVE INDICATORS

CONFIDENCE IN GOVERNMENT

RMC is measuring certain indicators related to countering violent extremism as informative contextual variables around Nuru Nigeria’s intervention, and is not necessarily anticipating the intervention to have a targeted impact on citizen perceptions of governance per se. Respondents reported that both the federal and state governments were doing a good job at security, education, and healthcare. In contrast, very small proportions reported that the governments were doing a good job at addressing basic services, unemployment, government corruption, and decent wages and salary. Notably, a significantly lower proportion of the intervention group reported that the federal and state governments were doing a good job at security, education, and healthcare.

Figure 23. Confidence in federal government indicators

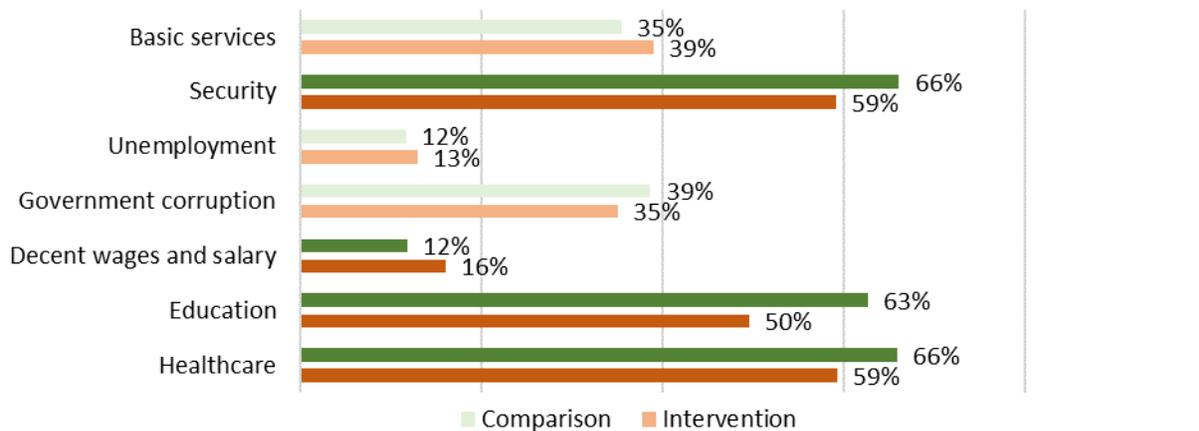
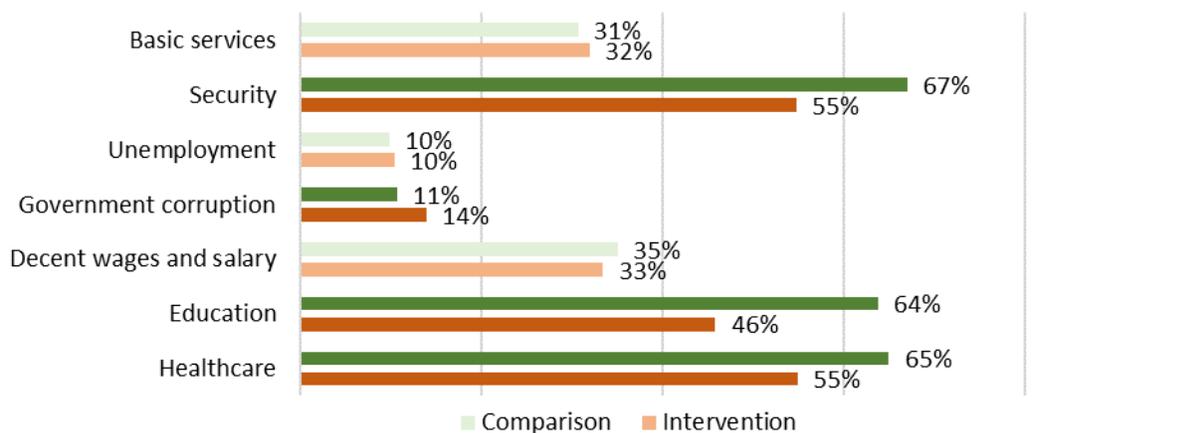


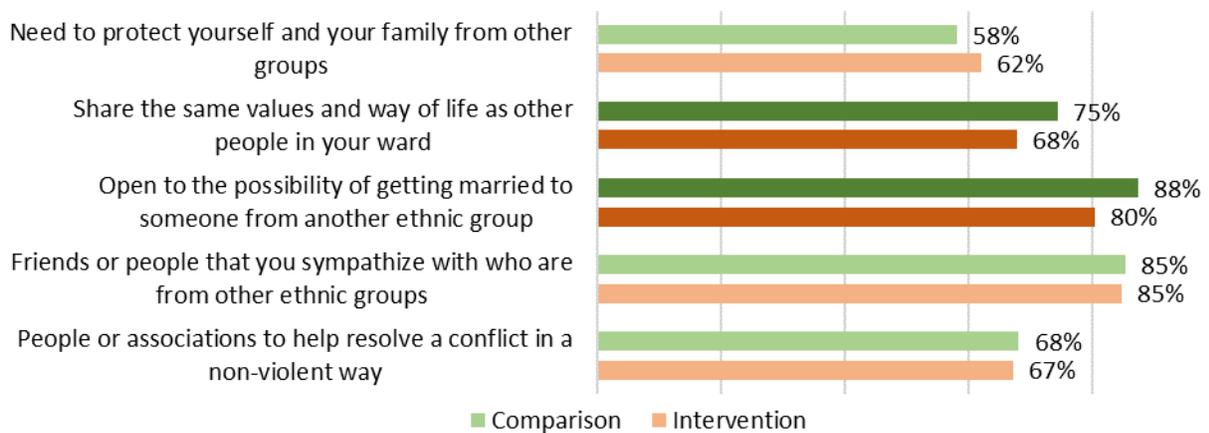
Figure 24. Confidence in state government indicators



SOCIAL RELATIONS

Overall, social relations appear to be generally strong across both groups. A vast majority reported having friends or people that they sympathize with who are from other ethnic groups, and being open to the possibility of getting married to someone from another ethnic group. A significantly lower proportion of the intervention group reported sharing the same values and way of life as other people in their ward. A significantly lower proportion of the intervention group also reported being open to the possibility of getting married to someone from another ethnic group.

Figure 25. Social relations indicators



While the quantitative findings from the baseline survey suggest robust social relations, qualitative findings from the FGDs and KIIs provide more nuanced detail. Analysis of FGDs and KIIs participants report that newcomers to the community do not have the binding shared experience, and they are perceived to have different beliefs, traditions, and attitudes that conflict with the majority of residents.

“Because of the selfish interest, some people think that [this community] is just their own... Before, to be sincere, there are no strangers and the rest, and we are all together.... You see, before we eat the same food. We all bring our food and eat together in front of our houses. Now, everybody will enter their house and eat their own food.”

Analysis of FGDs and KIIs suggests that the LGA is experiencing “negative peace”. Negative peace, as defined by Johan Galtung¹², is the absence of violent conflict as opposed to positive peace, where

¹² Galtung, J. (1964). Peace: Research. *Journal of Peace research*, 1(1), 1-4.

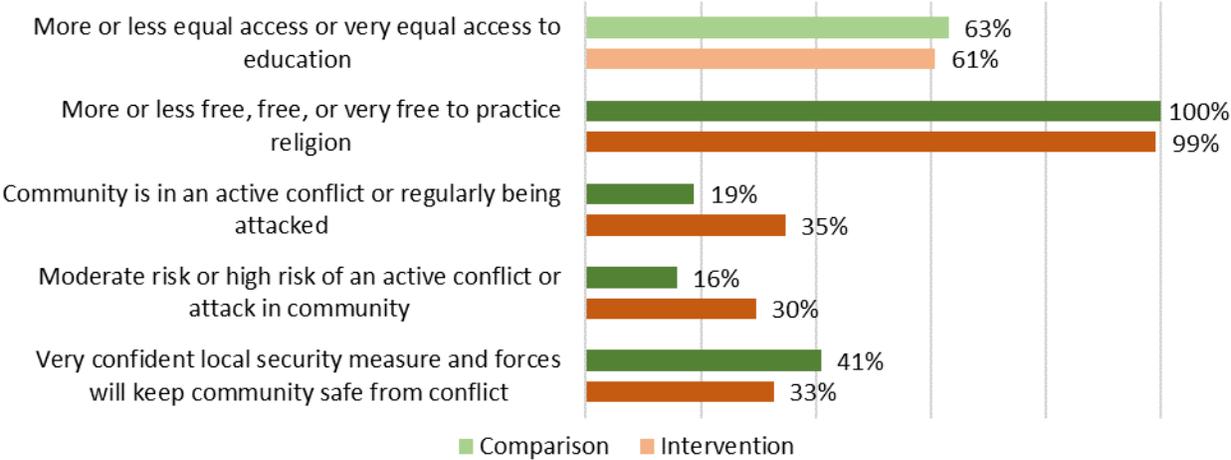
groups have positive and supportive relationships with each other. All respondents reported that their communities experienced “harmony” or a lack of violence within the community. However, our interviews provide little evidence that the community has strong, supportive, and positive relationships with other religious or tribal groups in the community. Most respondents advised that, to have a peaceful community, they should show patience and tolerance; however, few mentioned forging positive relationships and collaborations with other religious or tribal groups.

“You see, there are communities [comprised] of people from different tribes just as Mama said, but everyone is concentrating on his activities without giving attention to others. That is why peace will prevail. Since everyone is concentrating on his/her activities ... if we all come together, we get on well. ”

OTHER ITEMS

Nearly all respondents reported feeling free to practice their religions. Two-thirds of all respondents reported having equal access to education. A significantly higher proportion of the intervention group reported that their community was in active conflict or regularly being attacked. A significantly higher proportion of the intervention group also reported feeling that there was a moderate to high risk of active conflict in their community. Notably, a significantly lower proportion of the intervention group reported feeling very confident that local security measures and forces would keep their community free from conflict.

Figure 26. Other indicators



CHAPTER 9. CONCLUSION

This baseline report describes household demographics and livelihoods, shock exposure and impacts, well-being outcomes, and resilience capacity indicators and indexes for both the comparison group and intervention group. Following the evaluation design, impact analyses at midline and endline will use the difference-in-differences approach to measure the impacts of Nuru's intervention on key outcomes. The DID approach will compare the change in these outcomes for the intervention group and comparison group.

Statistical techniques designed for improving inter-group comparability were applied to the baseline data to bring the intervention and comparison groups as closely into balance as possible. Some statistically significant differences remain between the groups. However, the difference-in-differences statistical technique used to estimate program impact will net out the existing differences at baseline. The DID approach removes biases in comparisons between the treatment and control group that could be the result of permanent differences between those groups, as well as biases from comparisons over time in the treatment group that could be the result of trends.

The evaluation design, baseline data, and the balancing methods applied to the baseline data place the project on a solid footing for rigorous impact analyses at midline and endline. As the project progresses, and multiple rounds of data are collected, we anticipate applying statistical and econometric methods to attempt to identify causal relationships between outcomes and the various components of the intervention.