



# *Tudikolela* Project Research Final Report

October 2024

## I. Introduction

Despite a return to relative political stability, the Kasai Oriental region of the Democratic Republic of the Congo (DRC) remained in a state of fragility due to poor governance structures and a lack of sustained support to local production and economy in 2021. The causes of acute malnutrition observed in this part of the country included poor child feeding practices, high levels of acute food insecurity, and inadequate access to health services, among others<sup>1</sup>. In addition to the food and nutrition insecurity in this part of the DRC, there are challenges to effective cohesion between communities that are underpinned by land conflicts, inter-communal conflicts, and village boundary/border disputes. The exploitation of the country's natural resources, including mineral wealth, has unfortunately often been the cause of corruption and conflict, rather than broad-based economic growth particularly in Kasai Oriental province, once an epicenter of the world's diamond trade.

To provide alternative solutions, Catholic Relief Services (CRS) and its local partners, Caritas Mbuji Mayi and the *Réseau des Femmes et Développement* (REFED), implemented a multi-sectoral intervention in the Mukumbi Health Zone of Lupatapata Territory of Kasai Oriental, a region affected by chronic food insecurity, weak local governance, poor nutritional outcomes, and male-dominated household dynamics. CRS and its partners implemented the SIDA-funded project, *Tudikolela*, which means “we progress” or “we are capable” in Tshiluba, between November 2021 and November 2023 (25 total months of active programming). *Tudikolela* was designed to contribute to greater human security and wellbeing by pursuing two strategic objectives supporting 99 villages to: (1) implement community development actions and maintain social cohesion; and (2) take action to improve their food and nutrition security.

CRS incorporated an operational research component into the project to document the contributions of *Tudikolela's* social cohesion activities to the outcomes of other sectors. The operational research was launched via integration with the project's baseline evaluation in December 2021. A mixed methods approach was implemented including quantitative comparison of key indicator values from the project's baseline, midterm and endline assessments as well as qualitative methods to capture greater understanding of *how* social cohesion programming impacted other sectoral outcomes. The research was designed to contribute to CRS' evidence base on the integration of social cohesion into development programs and specifically the impact on finance (SILC), agricultural production, WASH, gender, and food security outcomes. While the project targeted 99 villages in total, this research focused on a sample of 38 villages – 19 control group villages and 19 treatment group villages. The research focused on midterm results comparing the control and treatment groups' results in other sectors in relation to whether they experienced social cohesion programming. Between the midterm evaluation and project closure, the social cohesion intervention was introduced to the control group and endline results were collected to nuance whether the midterm results were sustained amongst the treatment group through endline *and* whether the intervention's effect on the treatment group was extended to the control group by endline.

## II. Context

**Research Context:** At CRS, we believe that thriving societies begin with social cohesion and justice. When people and communities are empowered to address what divides them, uphold what unites them, and act together for stronger, healthier and more just social ties, then there's a transformative change that enhances results across all sectors. Social cohesion and justice provide the “glue” for successful community development and the foundation for local ownership and sustainable impact. CRS' Strategic Change Platform 1 (SCP1) invests

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<sup>1</sup> DRC IPC, Aperçu de la sécurité alimentaire et de la nutrition | November 2021. [Infographie, Novembre 2021](#).

in more systematic and deliberate integration of social cohesion and justice approaches across all our humanitarian and development work. SCP1 funding was leveraged to support this research with the aim of comparing results in the DRC with those from similar studies in other contexts and develop agency-level evidence for the integration of social cohesion programming.

**Project Context:** Despite a return to relative political stability, the Kasai Oriental region of the Democratic Republic of the Congo (DRC) remained in a state of fragility due to poor governance structures and a lack of sustained support to local production and economy in 2021. The causes of acute malnutrition observed in this part of the country included poor child feeding practices, high levels of acute food insecurity, and inadequate access to health services, among others<sup>2</sup>. In addition to the food and nutrition insecurity in this part of the DRC, there are challenges to effective cohesion between communities that are underpinned by land conflicts, inter-communal conflicts, and village boundary/border disputes. The exploitation of the country’s natural resources, including mineral wealth, has unfortunately often been the cause of corruption and conflict, rather than broad-based economic growth particularly in Kasai Oriental province, once an epicenter of the world’s diamond trade.

**Project Overview:** In response to these challenges, Catholic Relief Services (CRS), Caritas Mbuji Mayi, and REFED designed and executed *Tudikolela*. *Tudikolela* adopted CRS’ Integral Human Development (IHD) approach as its overarching conceptual framework. IHD posits that to empower women, men, girls, and boys to sustainably meet their basic needs, interventions must adopt a holistic approach that accounts for the complex drivers of poverty to equip individuals and communities to shape more just, peaceful, gender-equitable and thriving communities.

Tudikolela Results Framework	
<b>Goal:</b> 99 villages in 12 health areas of Mukumbi Health Zone (HZ) enjoy greater human security and wellbeing	
Strategic Objectives (SO)	Intermediate Results (IR)
<b>SO 1:</b> 99 villages in Mukumbi HZ are implementing community development actions and are equipped to maintain social cohesion	<b>IR 1.1:</b> 99 communities are equipped to maintain social cohesion <b>IR 1.2:</b> Community-level governance structures are strengthened, active, and connected to state services
<b>SO 2:</b> 99 villages in Mukumbi HZ take action to improve their food and nutrition security	<b>IR 2.1:</b> Households adopt improved nutritional practices <b>IR 2.2:</b> Communities produce more food for consumption and sale <b>IR 2.3:</b> Communities mobilize resources to access nutritious food
<b>IR (Cross-Cutting) 3.1:</b> 99 villages prioritize gender inclusion at the community and household level	

The project’s design can also be understood through the following Theory of Change (ToC): If social bonds are strengthened, and if women are active participants in functional and representative community governance structures, and if men and women have the skills and knowledge to make decisions together to improve their households’ food security, then communities will enjoy less conflict and greater human security and wellbeing, because CRS’s experience implementing the 2017-2023 *Budikadidi* project in Kasai Oriental demonstrates that improvements to agricultural production, health and nutrition, and economic well-being are mutually reinforcing and are only sustainable when implemented in a coordinated, complementary fashion, and supported by a environment characterized by active local governance structures, with community involvement, and bonds with government representatives and services.

**Implementation Overview:** The below timeline offers a visual summary of the *Tudikolela* project implementation.

<sup>2</sup> DRC IPC, Aperçu de la sécurité alimentaire et de la nutrition | November 2021. [Infographie, Novembre 2021](#).

Key benchmarks in research timeline	FY21				FY22								FY23				FY24						
	Q3		Q4		Q1		Q2		Q3		Q4		Q1		Q2		Q3		Q4				
	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A
Award timeline																							
Active field programming (all sectors)																							
Social cohesion intervention (treatment zone)																							
Social cohesion intervention (control zone)																							
Baseline evaluation																							
Midterm evaluation																							
Endline evaluation																							

The following descriptions offer a summary of the technical package delivered under each sector:

- **Social Cohesion**
  - 151 community leaders were trained in the prevention and peaceful management of conflicts and CRS’ [3Bs/4Ds approach](#)
  - Community facilitators (FACICOMs) held intra-community social cohesion sessions in each village, cascading the 3B/4D model to community members and planning connector activities such as reforestation, water source maintenance and other development-focused efforts
  - FACICOMs also hosted social cohesion sensitization sessions with 198 producer organizations, 99 community animation cells (CACs, or local governance bodies operating at the village level), and 220 SILC groups to manage obstacles faced within their structures and maintain cohesion and collaboration
  - 187 community celebrations offered a platform for local authorities and youth to jointly promote a culture of peace and social cohesion as well as encourage joint decision-making in place of gender-based violence within the household
  - Integrated into their Village Development Plans, CACs developed village-specific conflict prevention and management plans
  - The project supported the establishment of a Peace Club consisting of local authorities and religious leaders from across the project-targeted health zone who developed a conflict management plan and coordinated 11 community consultations to address specific conflicts
  - In the last year of the project, an early warning system was developed with leaders across the project zone to ready early responses to sudden conflicts and mitigate violence
- **Governance**
  - 99 CACs were established or revitalized and trained to implement and monitor Village Development Plans, including regularly interfacing with local authorities to sustain local development and strengthen village-level linkages with state services
  - CACs, FACICOMS, and POs were trained to develop and use gender-sensitive governance tools
- **Finance**
  - 38 SILC Field Agents were certified to become Private Service Providers and collectively formed and supported 285 SILC groups (7,838 members), 194 of which had finished their first cycle of SILC programming by project closure
  - In addition to classic SILC programming, PSPs were trained to deliver additional services for a fee including financial education and entrepreneurship & marketing
- **Agricultural Production**
  - 198 producer organizations (POs) were established, each bringing 25 households together on a regular basis to develop prioritized agricultural skills (using CRS’ [SMART Skills](#) curriculum)
  - 198 Lead Farmers were trained to accompany POs in promoting improved agricultural practices and use of SMART skills as well as support neighboring households to conduct permagardening

- To support community level access to improved seeds, the project distributed improved seeds to 3,989 vulnerable households and trained 31 agri-multipliers to produce and market quality cowpea, maize, and soybean seeds across the targeted health zone
- Additional livelihood programming included activities in reforestation and animal husbandry
- *Gender*
  - 297 couples' facilitators were trained to deliver the [SMART Couples](#) approach (CRS' couples strengthening program which promotes joint decision-making and equitable sharing of household responsibilities)
  - 198 gender champions led awareness raising events within community structures and local groups to promote female leadership
- *WASH*
  - FACICOMs conducted a total of 1,767 unique WASH sensitization sessions delivered at the household level to promote essential WASH actions related to handwashing, food handling, living environment hygiene, and proper water treatment and conservation. These messages were also incorporated into sensitization sessions held with SILC groups, POs, and CACs.
- *Food Security*
  - The 73 FACICOMs delivered regular programming in the Community-Based Nutrition (CBN) and Young Child and Infant Feeding (IYCF) approaches at the village level, including development and implementation of village-level plans to address localized drivers of malnutrition
  - 402 *relais communautaires* (RECOs, or community health workers) lead nutrition-focused awareness sessions on a weekly basis at the village level, including cooking demonstrations of nutritious meals as well as discussion of key themes (such as complementary feeding, the importance of handwashing, the benefits of permagardening, amongst others) within households as well as amongst community groups such as SILC groups, POs, and CACs

In Annex B, please find a table which details the implementation timeline for each of the interventions described above. This table also describes which activities took place in tandem (i.e., were layered) for consideration of the influence of overall programmatic sequencing and layering on the research results.

**Conceptual Framework:** Annex D provides the detailed research conceptual framework (in French) which outlines the pathways across which social cohesion programming was presumed to positively contribute to improved outcomes in governance, finance, agriculture, gender, WASH, and food security. Across these various sectors, participation in social cohesion programming was hypothesized to encourage greater participation in all project activities, due to greater feelings of trust and willingness to collaborate. Greater participation in project trainings and sensitization efforts is then presumed to result in the regular application of key practices (or behavior change), supporting the overarching hypothesis that social cohesion programming will enhance cross-sectoral results.

### III. Research Methodology

#### Objective & Design

This research was designed as a randomized controlled trial (RCT) to capture the statistical significance of social cohesion programming's effect on other sectoral outcomes. The intent of implementing a RCT was to control for multiple factors influencing outcomes within the complex, multi-sectoral project and remove as much bias as possible. Taking a mixed-methods approach, the research primarily focused on quantitative results from population-based household surveys while also integrating qualitative data from focus group discussions (FGD) and key informant interviews (KII) for additional insights.

## Ethical Considerations

This research complied with all relevant local ethical standards for research including human subjects. CRS data management procedures were followed to protect participants’ privacy: data was anonymized, and no personal identifying information was included in databases or shared with anyone outside of the data collection team and the CRS DRC ICT4D Specialist. The data collection team was also trained on the CRS Code of Conduct and ethics of conducting surveys. Informed consent was obtained and documented for each household or individual. Finally, CRS obtained ethical approval from the Ethics Committee of the University of Kinshasa School of Public Health for this research.

## Evaluation Overview

Evaluation	Data Collection Dates	Methodology Summary
<b>Baseline</b>	December 2021	<ul style="list-style-type: none"> <li>Survey of 1,619 control households and 1,770 treatment households</li> <li>In each village of the 38 villages, 3 FGD were conducted (men, women, mixed) – totaling 114 FGD, and 2 KII were conducted (village leader and CAC member) – totaling 76 KIIs</li> </ul>
<b>Midterm</b>	February-March 2023	<ul style="list-style-type: none"> <li>Survey of 1,249 control households and 1,564 treatment households</li> <li>19 FGD and 16 KII in the control zone; 7 FGD and 5 KII in the treatment zone</li> </ul>
<b>Endline</b>	April 2024	<ul style="list-style-type: none"> <li>Survey of 1,625 control households and 1,679 treatment households</li> <li>No qualitative data was collected at endline due to time constraints</li> </ul>

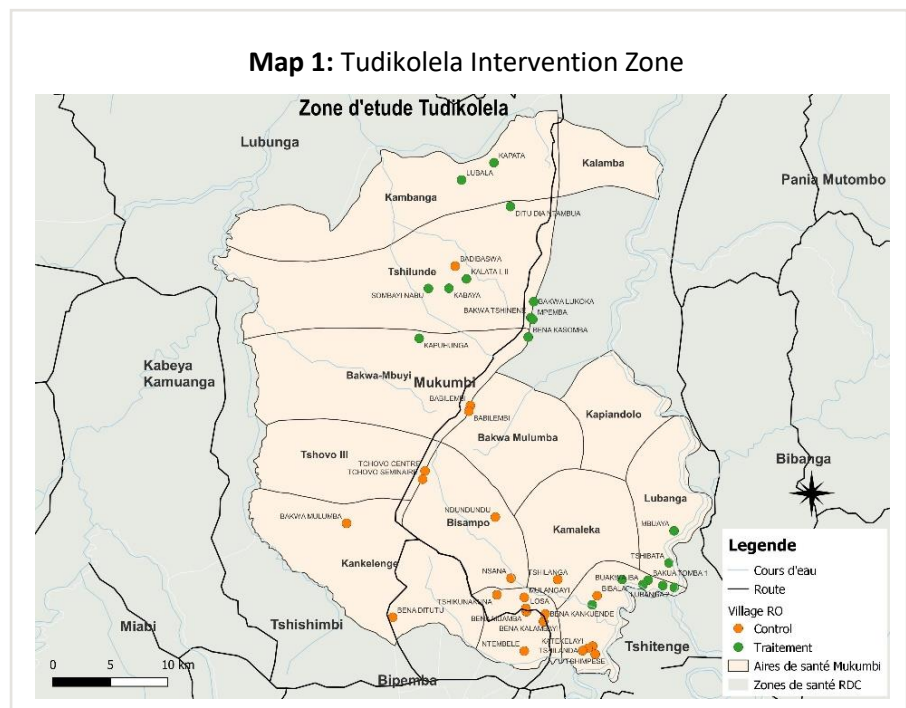
## Sampling Approach

The sampling approach followed the requirements of a RCT – that both the villages and households were randomly assigned and selected, as described below.

CARTOGRAPHY OF ALL PARTICIPATING VILLAGES. A cartography of all 99 project-targeted villages was conducted to gather basic information, such as village location and accessibility. This then served as the sampling frame for the selection of villages for the baseline evaluation.

CLUSTERING OF VILLAGES PRIOR TO RANDOMIZATION. In any RCT, a key consideration to manage is the risk

of “spillover,” or the risk that the treatment would reach control villages. Because of the participating villages’ geographical proximity and their social connectedness, the risk of social cohesion messaging extending to control villages was relevant. To manage this, villages were first grouped based on geographic proximity. In



addition, because one social cohesion activity was conducted prior to the baseline, 21 villages were excluded. The result was a set of nine clusters of 78 villages.

RANDOM ASSIGNMENT OF CLUSTERS TO TREATMENT OR CONTROL GROUPS. Following the clustering process, the nine clusters were then randomly assigned to either the treatment group or control group using the randomize command in Excel.

CALCULATING SAMPLE SIZES. To determine the sample sizes, the project used equation 6 from McConnell and Hernandez (2015).<sup>3</sup> Equation 6 was selected, given that data collection was clustered and with mostly binary indicators. This equation allows the sample size to consider the minimum detectable effect for these binary indicators.

$$\text{Equation 6: } n^* = m \cdot k^* = (p_1(1 - p_1) + p_0(1 - p_0)) \frac{(z_{\beta} + z_{\alpha/2})^2}{\delta^2} (1 + (m - 1)\rho) \quad (4)$$

Where:

- k is the number of clusters (villages) sampled.
- m is the number of people sampled in each cluster.
- ρ is the intra-cluster correlation (ICC) anticipated in the baseline. The ICC is a measure of the share of variability in the indicator due to differences between clusters, relative to individuals within clusters.
- δ (delta) is the targeted change in the indicator attributable to the project. δ is the difference between the reference target values and the Target to be achieved for the life of the project for the indicator.
- z (beta) is a critical value that represents the power of the sample. the critical value chosen for all the indicators is 80% and represents the power of the sample.
- z/(alpha) represents the significance level. The chosen value was 5%. With this value, there is a 5% chance of rejecting the null hypothesis.

The indicator “Female participants in nutrition-sensitive agriculture consuming minimum diversity diet” was selected for the whole, which best balanced these statistical considerations and operational constraints. The resulting target sample size was 38 villages, with 100 households in each, or 3,800 households. The ICC was 0.0141 (Fitzsimons 2016).<sup>4</sup> Fifty percent of this sample was retained for the control group.

RANDOM SELECTION OF HOUSEHOLDS FOR POPULATION-BASED SURVEY. Lacking reliable data on the number of households, supervisors determined the number in each of the 38 villages by meeting with the village chief, writing each household name on a slip of paper, then randomly drawing names until 100 households were selected and surveyed (or until all were surveyed, if fewer than 100 households). The only eligibility criterion for households after random selection was whether or not they engage in agricultural work.

## Data Collection

The data collection was managed by the *Tudikolela* MEAL Team, with the support of 13 surveyors and 2 supervisors recruited specifically for each evaluation with as much consistency as possible. For each evaluation, the data collection team participated in a training to review each data collection tool. During the baseline evaluation training, the team was also introduced to CRS’ Code of Conduct, expectations of the team, a review of the program and its key components, and the sampling methodology. The surveyors and supervisors were not informed that the data collected was part of a RCT. The household survey was digitized via CommCare and the data collected on tablets while findings from the FGD and KII were captured in written notes then summarized in

<sup>3</sup> McConnell, Brendon, and Marcos Vera Hernandez (2015). “Going Beyond Simple Sample Size Calculations: A practitioner’s guide.” Institute for Fiscal Studies.

<sup>4</sup> E. Fitzsimons, B. Malde, A. Mesnard, and M. Vera-Hernández, “Nutrition, information and household behavior: Experimental evidence from Malawi,” *Journal of Development Economics*, vol. 122, pp. 113-126, 2016/09/01 2016, doi: <https://doi.org/10.1016/j.jdeveco.2016.05.002>.

excel. The household survey was not fully field tested prior to baseline use due to time constraints. Similarly, data quality checks during each of the three evaluations were limited due to both time constraints and connectivity issues preventing real-time data synchronization into CommCare which resulted in some data quality concerns and limited sample sizes for some indicators.

### Data Analysis & Interpretation

The household surveys were anonymized, then exported from CommCare into excel. Summary statistic initial data cleaning and restructuring was conducted manually in excel by the *Tudikolela* MEAL Team. Further cleaning and analyses by individual indicator were then done in SPSS, with technical assistance from the CRS/PIQA team.

Data cleaning and restructuring for regression analysis was done in R statistical software by the study PI. Data from the study were categorized by sector and analyzed to determine temporal changes based on treatment status. The dependent variables examined are described in Table 3. Each dependent variable has been placed on the left side of the following equation.

$$Variable_{ivt} = \beta_0 + \beta_1 Treated_v + \tau Time_t + \gamma Treated_v * Time_t + \varepsilon_{ivt}$$

Where

- *Variable* is indexed to individual *i* in village *v* at time *t* ;
- *Treated* takes the value 1 if village *v* was treated, and 0 otherwise;
- *Time* is a vector of 2 binary variables (midline and endline) controlling the 3 time points of the evaluation;
- $\varepsilon$  is the error term that is clustered at the village level.

OLS regressions were used for continuous variables and logistic regressions were used for binary variables.

In addition to examining the marginal effects of treatment and time for each period, linear hypothesis tests were performed to verify significant differences in overall values between and within the treatment and control groups at mid-term and endline. This combined review of marginal effects and hypothesis testing examined the statistical effects of treatment at mid-term and the persistence of treatment effects at endline.

CRS/DRC MEAL leadership summarized and presented midterm qualitative data to the project team in a workshop setting to facilitate group reflection. Final quantitative data was also prepared for a large group interpretation session with key project staff (supported to return following project closure) to validate conclusions that align with the team's field experience.

## IV. Limitations

The findings and recommendations reached at the end of this research should be considered with the following limitations in mind:

- The project MEAL team noted retrospectively that certain baseline results were likely inflated as respondents either did not fully comprehend the questions or were hesitant to report accurate responses. While this deflated midterm results for project reporting, it does not bear significantly on research conclusions as this challenge would have impacted both the control and treatment group. Nonetheless, the limitation is noted as it reflects a common challenge of ensuring respondent comprehension during lengthy surveys.
- Due to challenges locating reference households from the baseline data collection for the midterm evaluation, the team deviated from the original sampling plan and a panel dataset was not used at midterm. This limitation reduced the statistical power to detect changes over time in the regression analyses described above



- This research was integrated into a donor-funded project implemented by the DRC country program. While the original research design entailed no additional data collection (instead layering of regression analyses of existing project data collected for donor reporting), the complexity of this effort was not fully appreciated and staff availability to execute this research proved insufficient. CRS country program (CP), regional, and HQ resources were drawn in at key junctures in the research timeline, but staff changes and an overall lack of leadership likely contributed to less quality results.
- The original project timeline was significantly reduced, due to start-up delays, programming suspensions following initial start-up, as well as early close-out due to budgetary constraints. The overall programming timeline reduction resulted in a shorter treatment period (about 12 months of active social cohesion programming for the treatment group by midterm; about 21 months for the treatment group and 9 months for the control group by close-out). The difference in duration for the treatment group at midline and the control group at endline should be considered when interpreting endline results. Additionally, the overall reduction in programming timeline altered the data collection frequency. The original research protocol described a baseline data collection and three annual data collections; however, these four data collections were reduced to three and leveraged instead the project baseline, midterm, and endline data collections. Early project close-out resulted in less staffing availability and the endline data collection was reduced to quantitative methods alone. This was deemed unfortunate but not highly significant as the primary results for this research were collected during the midterm evaluation (which included both quantitative and qualitative data collection) before the intervention was introduced to the control group.
- The research leveraged existing data pulled from the project M&E system developed to produce donor reports. Retrospectively, some indicators were appropriate to complete activity reporting but were not sufficiently nuanced to adequately capture the type of changes this research was attempting to build evidence for. For example, indicators GC1 and A2 measured participation rates in governance structures and producer organizations, respectively, but each of these local groups had capped membership numbers, rendering an individual's capacity to participate more or less over time limited. These indicators enabled the project team to report to the donor that participation targets were met; however, they were not ideal for capturing whether social cohesion programming influenced individuals' desire to engage in communal activities more over time. Additionally, this research attempted to correlate social cohesion programming with high-level food security outcomes established by the project M&E system indicators; however, indicators which revealed the intermediary influence of the treatment on knowledge, attitudes, or practices which influence household consumption decision-making would have been better suited to produce meaningful insights on more direct causal relationships.
- At research closure, the project team postulated whether the geography of livelihood zones influenced differences between the treatment group (where there is a large mining industry) and the control group (which is a largely agricultural zone). This significant difference could influence the adoption of agricultural practices key to improving food access and may be a source of insignificant or negative results for the treatment group at midterm yet significant and positive results for the control group at endline under the food security sector. The research team carefully ensured that the sampling approach mitigated spillover effect, but the geographic division resulting from a cluster randomization approach may have resulted in group differences that weaken the strength of research conclusions.

## V. Findings & Interpretation

Key research findings are presented and discussed below. Please see Annex A for a complete table including all quantitative results: baseline, midterm, and endline values for the control and treatment groups; the sign and statistical significance of the marginal effect at both midterm and endline; as well as the number of observations for each indicator. The summary tables provided in this narrative highlight the level of statistical significance of:

- The marginal effect of treatment at midterm, compared to the control group at midterm.
- The effect of treatment and time at endline, compared to treatment at midterm (suggesting whether better midterm results were sustained until project end).
- The marginal effect of time on the control group at endline, as compared to midterm (suggesting whether better midterm results for the treatment group were also experienced by the control group after they received the social cohesion intervention).

Note that all results controlled for baseline differences between treatment and control groups. Of primary interest are the midterm results which compare outcomes in various sectors before the social cohesion intervention was introduced to the control group. Relevant qualitative findings are also noted. Please use the following key to interpret all tables:

***	Statistically significant at $p < 0.001$
**	Statistically significant at $p < 0.05$
*	Statistically significant at $p < 0.01$
	No stars signify no statistical significance
*	Results highlighted in red are statistically significant but <i>WORSE</i> (“worse” is contextualized for each indicator as relevant in the below narrative)
1	Statistical significance of the marginal effect of the social cohesion intervention at midterm on the treatment group compared with the control group. Any statistically significant results disprove the null hypothesis that <i>there is no difference between control and treatment at midterm.</i>
2	Statistical significance of the difference of the marginal effect of the social cohesion intervention on the treatment group at endline versus at midterm. Any statistically significant results disprove the null hypothesis that <i>there is no difference between treatment at midterm and treatment at endline.</i>
3	Statistical significance of the difference of the marginal effect of the social cohesion intervention on the control group at endline versus at midterm. Any statistically significant results disprove the null hypothesis that <i>there is no difference between control at midterm and control at endline.</i>

#### SECTOR: SOCIAL COHESION, GOVERNANCE & CONFLICTS

#	Question	Midterm: treatment v. control group <sup>1</sup>	Treatment group: midterm v. endline <sup>2</sup>	Control group: midterm v. endline <sup>3</sup>
SC1	Social cohesion index	***	***	***
SC2	Sociocultural sub-index	***	***	***
SC3	Economic sub-index	***	***	***
SC4	Political sub-index	***	***	***
SC5	Horizontal dimension	***	***	***
SC6	Vertical dimension	***	***	***
SC7	Have you participated in any collective actions in the last 12 months?	***	***	***
SC8	Do you feel that SC between community members and local leaders has improved today?		***	***
SC9	If we compare today's situation to the past 24 months, do you feel that SC between community members and local leaders was better?		***	***

As expected, the social cohesion intervention had a significant positive effect on nearly all social cohesion indicators for the treatment group at midterm, and these results were statistically significant at the higher confidence level ( $p < 0.001$ ). This is true for the aggregated social cohesion index, the three sub-indices (aligned with the socio-cultural, economic, and political spheres of social cohesion), as well as both the horizontal and vertical dimensions. Each of these positive results was sustained until endline (as depicted by the statistical significance of the intervention's marginal effect on the treatment group at endline versus midterm) and were extended to the control group after experiencing the treatment intervention following the midterm. All of these affirmative endline results were also statistically significant at the  $p < 0.001$  level. Please see Annex C for a description of these various measures (indicators SC1-6) drawn from CRS' Social Cohesion Barometer.

At midterm, the social cohesion intervention was associated with greater participation in collective actions over the past year. While less than 30% of both the control and treatment group participated in collective actions before the project, 62% of the treatment group had by midterm compared to 53% of the control group (statistically significant at the highest confidence level). These positive results extended to the control group by endline after they experienced the social cohesion intervention. The positive midline results for the treatment group, however, were not successfully sustained until project close-out. In fact, 74.7% of the control group participated in collective actions during the year before close compared to 74.2% of the treatment group (with the marginal effect of the social cohesion intervention reducing from 10.1% at midline to 1.2% at endline for the treatment group). These results suggest that experiencing the social cohesion intervention may initially encourage community members to participate in collective actions but this effect is not highly sustainable.

Despite these overall positive results, experience with the social cohesion intervention did not have a statistically significant impact on the treatment group's perception of improved social cohesion between community members and their local leaders (captured by neither indicator SC8 nor SC9) by midterm. The association between the social cohesion intervention and indicator SC8 and SC9 results was statistically significant by endline, but these results were mixed and thus inconclusive.

#	Question	Midterm: treatment v. control group <sup>1</sup>	Treatment group: midterm v. endline <sup>2</sup>	Control group: midterm v. endline <sup>3</sup>
GC1	Are you or another member of your household part of a local governance structure, as a member?		***	***
GC2	Are there occasions when you meet with your community leaders for any activity?			
GC3	How often do you meet him?	***	***	***
GC4	Do you feel close to your local leaders?	**	**	**
GC5	Are there conflict resolution structures in your area?	***	***	***
GC6	Are there new structures that have been created or strengthened for conflict resolution in your villages?		***	
GC7	In previous years, have you experienced conflicts in your village that prevented community members from going about their daily tasks?	***	**	*
GC8	When was the last conflict (how many years ago)?		***	

The effect of social cohesion programming on social cohesion sector indicators specifically measuring changes to governance and/or conflict is rather mixed. Midterm results revealed no association between the social cohesion intervention and participation in local governance structures (indicator GC1); however, the total

number of governance structure positions was capped and thus not every individual was capable of experiencing the hypothesized change, rendering this indicator less applicable to the research than originally imagined. While the occurrence of meetings with community leaders (indicator GC2) was not statistically correlated with the treatment intervention, the frequency of meetings was (indicator GC3), implying that introducing social cohesion programming may encourage more frequent interactions between communities and their leaders. This statistically significant result was sustained until endline and extended to the control group following the midterm. Another positive result is the statistically significant association between the social cohesion intervention and the existence of conflict resolution structures (indicator GC5), both at midterm and again at endline for both groups. This result reveals that social cohesion programming filled an important gap in the targeted zone where in its absence, conflict resolution was not formally available.

The results for two indicators – GC4 measuring closeness to local leaders and GC7 capturing the prevalence of conflict – revealed a statistically significant but negative association with the social cohesion intervention. At midterm, the marginal effect of social cohesion programming on the treatment group versus the control group was negative, suggesting that participation in the social cohesion intervention was actually associated with greater feelings of distance from local leaders, perhaps due to raised awareness of the importance of social cohesion and expectations of local leaders to support it. Likewise, the control group reported less conflict at midterm (2.8% compared to 3.2%) while the treatment group reported more (10.7% compared to 9.7%). This result does not imply that the social cohesion intervention spurred greater conflict in the treatment zone; instead, it may suggest that awareness of the importance of social cohesion may result in community members' capacity to identify the negative effects of conflict – a result which could serve as an intermediary step towards greater conflict mitigation.

Overall, results in the social cohesion, governance and conflict sector reveal that the project's social cohesion intervention was quite effective at strengthening horizontal social cohesion (i.e., improving the quality and diversity of social ties amongst communities). Social cohesion barometer results also suggest that vertical social cohesion (i.e., strengthening the accountability of leaders) was also positively influenced; however, governance indicators reveal nuances of missed opportunities. Indeed, the project team retrospectively felt that the intervention actively encouraged leaders to host community-wide events, but they took place infrequently without promoting a more regular process to enhance their relationship with communities, which is reflected in the above results. Additionally, midterm data collection coincided with the voter registration process during which time local leaders actively organized community members, but those gatherings were limited to those aligned with their political party; thus, feelings of closeness to local leaders at this time were deeply aligned with political identity and perhaps were more divisive than normal. While regression analysis accounts for other factors, understanding this context is important when considering the effectiveness of the social cohesion intervention on governance outcomes.

## SECTOR: FINANCE

While the above findings do offer some positive evidence for the impact of the social cohesion intervention on social cohesion results, this research was primarily focused on the impact of the social cohesion intervention on *other* sectors. First, the below table summarizes the significance of the marginal effect of the social cohesion intervention on finance sector outcomes (more specifically, results related to CRS' [SILC](#) programming).

#	Question	Midterm: treatment v. control group <sup>1</sup>	Treatment group: midterm v. endline <sup>2</sup>	Control group: midterm v. endline <sup>3</sup>
F1	Are you or another member of your household part of a SILC group?	*	***	***
F2	Do you regularly participate in SILC group meetings?	**	***	**
F3	During the last 12 months, have you or another member of the household already taken out a loan within the SILC group?		***	***
F4	If yes, have you taken out this cash loan for agricultural purposes during the last 12 months?	*	***	**
F5	I develop or create more income-generating activities.			**
F6	My participation in the SILC group and other activities improves my economic level.			**
F7	Members of my village are making productive investments with the loans they received from SILC.			
F8	During the last 12 months, have you or another member of your household taken out a loan?		**	
F9	During the last 12 months, have you or another member of your household made profits from the marketing of your crops?		**	**
F10	Have you saved any of these profits?		***	***

Overall, the lack of positive statistically significant links between social cohesion programming and improved SILC outcomes is surprising as it was strongly hypothesized (based on similar research in the DRC context), that strengthening social cohesion would improve the trust and collaboration necessary for SILC members to experience improved economic outcomes. At midterm, the social cohesion intervention was found to be negatively associated with SILC group enrollment (indicator F1) at  $p < 0.01$ . More specifically, 38.4% of the control group respondents or their household member were SILC group members by midterm compared to 34.8% of the treatment group. At endline, less treatment group households had enrolled in SILC than the control group (57.8% compared to 60.6%). Similarly, SILC group participation frequency (F2) was worse for the treatment group at midterm (92% versus the control group's 94.8%) and the negative influence of the social cohesion intervention on this result was statistically significant at the  $p < 0.05$  level. This result shifted by endline when the treatment and control groups' participation rates increased and the influence of the treatment intervention was found to be statistically significant for both.

The impact of the social cohesion intervention on borrowing (indicator F3) was not statistically significant at midterm but was significant for both groups at endline. The only statistically significant positive association between social cohesion and SILC programming found at midterm (and sustained until endline) was indicator F4 which measured the specific use of loans for agricultural purposes. SILC programming outcomes – including income-generating activity development (F5), improved economic levels (F6), productive investments (F7), profits (F9), or savings (F10) – had no statistically significant association with the social cohesion intervention at midterm. Overall, these results may reflect the inadequate research timeline to capture impact on SILC programming. Typically, 10 months are required to complete a SILC cycle, thus the duration of SILC programming by midterm may not have been mature enough to reveal differentiated results. Statistically significant positive results were found for many finance indicators for both the control and treatment groups by endline suggesting a potential association between social cohesion and SILC but one that requires time and thus produced less compelling results at the critical midterm juncture.

Qualitative data largely reinforced quantitative findings in the finance sector. Both control and treatment groups associated better SILC participation with compliance with SILC rules and regulations (e.g., fear of fines) without the treatment group mentioning motivations derived from the social cohesion intervention (such as improvements to trust or cooperation). A treatment FGD participant noted that “being together in the [SILC] groups strengthens our bonds and if a member has bad news, we go and console them.” Comments of this nature collectively alluded to the power of SILC programming to develop social cohesion but did not offer evidence for the pathway of social cohesion strengthening SILC outcomes.

#### SECTOR: AGRICULTURAL PRODUCTION

#	Question	Midterm: treatment v. control group <sup>1</sup>	Treatment group: midterm v. endline <sup>2</sup>	Control group: midterm v. endline <sup>3</sup>
A1	Do you or another member of your household have one or more fields where you have grown plants in the last 12 months?	**		
A2	Have you regularly participated in the activities of the agricultural trainings organized by the Tudikolela project over the past year?	**	***	***
A3	Are you or another member of your household part of a farmers' organization with agriculture as your main activity?		***	***
A4	How many people are part of your farmers' organization?	*		
A5	Do you have a common field for your organization?			
A6	Do you ever get help from a member of your organization for an activity related to your field?	*	***	***
A7	Average number of good agricultural practices known		**	***
A8	Average number of good agricultural practices used			
A9	Average number of ag practices (or intentions) on which the household collaborated with others in the past year.	*	***	**

Overall, the association between the social cohesion intervention and agricultural results were mixed at midterm and positive results were not highly statistically significant. The most statistically significant positive result (at  $p < 0.05$ ) at midterm was found in relation to farmland ownership (indicator A1), with 86.6% of the treatment group having one or more fields where they grew plants compared to 83.4% of the control group. The influence of the treatment intervention, however, was not statistically significant for either group between midterm and endline. A project-promoted shift in cultivation of individual parcels to common fields by producer organizations (POs) may have influenced these results overtime, rendering the indicator less relevant to the research.

The only statistically significant and negative association was found between the social cohesion intervention and participation in agricultural programming, with 56.4% of the treatment responding affirmatively to indicator A2 compared to 61.1% of the control group at midterm. This association remained statistically significant but became positive by endline, for both groups. These results may reflect an oversaturation of programming for the treatment group which is discussed in greater detail below.

Experiencing the social cohesion intervention does not appear to have had a significant influence on participants' acquisition or application of project-promoted agricultural practices (indicators A7 and A8). Of

note, however, two indicators which capture the importance of collaboration to agricultural livelihoods did reveal positive results. When asked whether participants received help from another PO member (indicator A6), the percentage of treatment group and control group respondents reduced from baseline to midterm (76.1% to 61.9%, and 82.5% to 66.7%, respectively); however, experiencing the social cohesion intervention was found to have contributed to the treatment group's lesser reduction at the  $p < 0.01$  level. This positive result was sustained for the treatment group and extended to the control group by endline and was significant at a higher confidence level ( $p < 0.001$ ). The treatment group also collaborated to execute more agricultural practices with others than the control group at midterm (2.538 versus 2.480) which was significant at the  $p < 0.01$  level. Again, this positive result was sustained until endline for the treatment group (reaching 2.67 at significant at  $p < 0.001$ ) and the positive influence of the social cohesion intervention was also experienced by the control group between midterm and endline, reaching 2.583 which was significant at the  $p < 0.05$  level. These results suggest that social cohesion programming may result in improved trust and collaboration within producer organizations which ultimately contributes to improved agricultural outcomes.

## SECTOR: GENDER

#	Question	Midterm: treatment v. control group <sup>1</sup>	Treatment group: midterm v. endline <sup>2</sup>	Control group: midterm v. endline <sup>3</sup>
G1	Have you ever heard of gender-based violence (GBV)?	**	***	***
G2	When you hear GBV, what are you referring to?	***	***	***
G3	Average acceptance of the eight positive gender-based norms	**	***	***
G4	Over the past year, have you participated in a training or awareness-raising activities on good practices and positive gender attitudes?		***	***
G5	For married women, average assessment of joint decision-making in six areas.		***	**
G6	For married women, average number of tasks in which they cooperate with their spouse.	**	***	***
G7	For married women, are you responsible for a peasant organization or local governance structure?		***	***

The social cohesion intervention had a significant positive effect on awareness and understanding of GBV (indicators G1 and G2), at the  $p < 0.05$  and  $p < 0.001$  levels respectively. These positive significant results were sustained for the treatment group until endline and extended to the control group between midterm and endline (all at the highest confidence levels). A significant positive association was also found between the social cohesion intervention and the average number of tasks in which married women cooperate with their spouse (indicator G6). Control group married women reported a reduction to 1.96 tasks compared to 3.04 at baseline whereas treatment group married women reported an increase to 3.26 from 2.64 at baseline. This positive association was statistically significant at  $p < 0.001$  for both groups at endline. While a positive association was found to be significant for both groups by endline, no statistically significant correlation was found at the critical midterm juncture between social cohesion programming and participation in gender programming (G4), increased joint decision-making (G5), or female leadership in local governance structures (G7).

While overall results in this sector point to some effective pathways between social cohesion programming and improved gender equity outcomes, the association between the social cohesion intervention and the results for an aggregate indicator of overall gender sensitivity (G3) was significant and negative. In the below table, the

results for the 8 sub-components of the aggregate indicator are detailed for the control and treatment groups for each evaluation and scores which decreased overtime are highlighted in red. This surprising negative association was seen again at endline for both the treatment and control group and was even more statistically significant.

Positive Gender Norms: Sub-Components of Indicator G3 (1 = not at all, 2 = a little, 3 = completely)	Control			Treatment		
	Baseline	Midterm	Endline	Baseline	Midterm	Endline
Would you accept a woman becoming a community leader?	1.00	1.28	1.36	1.00	1.26	1.36
To what extent would you agree with your neighbor accepting that his wife attends the literacy center?	1.02	1.14	1.25	1.00	1.19	1.28
Would you be among those who believe that there is no reason for a man to beat his wife?	1.53	1.68	1.69	1.74	1.63	1.63
Do you think that women have the same rights as men in society?	1.07	1.58	1.58	1.12	1.52	1.41
Do you think that women should have the same level of access to community resources as men?	1.13	1.54	1.56	1.13	1.49	1.40
Ending violence against women and girls?	1.52	2.38	2.03	1.54	2.32	1.83
Provoking action against the marriage of adolescents aged 12-18?	1.30	2.44	2.06	1.23	2.36	1.90
Integrating women and young people into community decision-making processes?	1.49	2.46	2.11	1.64	2.45	1.85

At midterm, qualitative data reinforced the positive results of the first of the 8 sub-components listed above: acceptance of female leadership. Overall, treatment FGD participants noted cases of women’s participation in governance structures and leadership roles more than control groups and suggested that social cohesion programming helped them achieve this. Participants specifically noted the promotion of social cohesion and unity preceded the addition of women representatives within their CAC.

#### SECTOR: WASH

#	Question	Midterm: treatment v. control group <sup>1</sup>	Treatment group: midterm v. endline <sup>2</sup>	Control group: midterm v. endline <sup>3</sup>
W1	What are the critical moments for which we should wash our hands?	**	***	***
W2	What are the good practices for hygiene and environmental sanitation that you are aware of?	***	***	***
W3	Hand washing is an effective way to prevent the transmission of germs.	**	***	***
W4	Handwashing with soap or ash prevents diarrheal diseases.	***	***	
W5	Use of any type of toilet or latrine.			
W6	The toilet is used only by members of your household.	**		
W7	Approximately how many people use this toilet?	***	**	**
W8	Is there a special place in your household to wash your hands?		***	
W9	Does this special handwashing place commonly feature soap or ash?	**		
W10	Does your household have a water treatment system?	**	***	
W11	Have you or another member of your household participated in training or awareness-raising on hygiene promotion in the last year?	**	***	



Overall, the positive significant effect of social cohesion programming was most consistent amongst WASH indicators than any other sector. The intervention was found to have a significant positive association with indicators measuring WASH knowledge and attitudes (W1-4), toilet sharing practices (W6-7), and use of soap/ash for handwashing (W9). The social cohesion intervention was found to have no statistically significant effect upon two WASH indicators: W5 which captured toilet/latrine usage and W8 which captured dedication of a physical space for handwashing. These results may suggest that social cohesion programming is associated with improved WASH knowledge, attitudes, and practices but does not impact the financial investments necessary for households to put certain physical inputs in place to improve their WASH outcomes. This conclusion, however, is not supported by results under indicator W10 which found a significant positive association between the social cohesion intervention and households possessing water treatment systems.

At midterm, the social cohesion intervention was found to have a negative effect only upon WASH participation (indicator W11), a result seen consistently across sectors and discussed in greater detail below. For two knowledge indicators – W2 and W3 – the positive significant effect at midterm was sustained for the treatment group until endline but was significant and negative for the control group at endline, contradicting the otherwise positive results. Overall, the significant positive effect experienced by the treatment group was not extended to the control group after the social cohesion intervention was introduced to them following midterm.

Of note, messaging promoting essential WASH behaviors incorporates social responsibility. While improved sanitation and hygiene is good for an individual or her household’s health outcomes, improvements to the wider environment are also good for the health of the entire community. This is somewhat distinct from other Tudikolela behavior change messaging in finance, agriculture, gender, or food security which largely focused on improving outcomes for the household unit alone. Thus, the link between social cohesion programming and WASH outcomes may be more direct than other sectors as greater feelings of solidarity may influence individuals to commit to improved sanitation and hygiene for both their own and their neighbors’ sake.

## SECTOR: FOOD SECURITY

#	Question	Midterm: treatment v. control group <sup>1</sup>	Treatment group: midterm v. endline <sup>2</sup>	Control group: midterm v. endline <sup>3</sup>
FS1	Household Dietary Diversity Score (HDDS)		***	***
FS2	Food Consumption Score (FCS)	***	***	***
FS3	Dietary diversity score - women (MDD-W)	**	***	***
FS4	% of women with minimum Dietary Diversity (MDD-W)		***	***
FS5	Dietary diversity score - children (MDD-C)		**	
FS6	% of children with minimum Dietary Diversity (MDD-C)	**	***	

At the critical midterm juncture, a significant positive effect of social cohesion programming on early food security outcomes was not present. The intervention was positively associated with improved food consumption scores at the highest confidence level at midterm and again at endline for both groups. The remaining indicators of interest, all measuring different facets of dietary diversity, were either not significant or found to have an unexpected negative association. The average dietary diversity score amongst women (FS3) and the percentage of children achieving minimum dietary diversity (FS6) were negatively associated with the social cohesion intervention at midterm, but these results did reverse and with the marginal effect found to be significant and positive by endline for the treatment group. In fact, the intervention was seen to have a significant positive

effect on all food security indicators for the treatment group by endline. This may suggest the importance of time for the intersection of these two sectors: the logical pathway between strengthened social cohesion and higher level improvements to food security may require a more mature timeline than is necessary for other cross-sectoral effects.

Additionally, the Tudikolela food security intervention largely delivered sensitization and support at the household level. Cooking demonstrations took place in small groups, but these groups were less formal and not structured with the intent of being sustained post-project, unlike SILC groups, CACs, and POs. Thus, the logical pathway from improved social cohesion to better food security outcomes is less direct. While strengthening trust, accountability, and collaboration within a community is expected to improve small group functionality and in turn their outputs, changes to dietary diversity are largely driven by decisions within the household. Additionally, even if households opt to adopt new attitudes and practices, numerous external factors impacting food supply and the food environment may prevent desired improvements to food security. Thus, improved cohesion amongst the community is unlikely to directly influence household food security, particularly across a short timeline.

#### EFFECTS OF MULTISECTORAL LAYERING ON PARTICIPATION RATES

The indicators listed below are pulled from various sectors, but each represent a different measurement of *participation*. At midterm, the social cohesion intervention was found to have a significant and negative effect upon three of the five indicators – participation in SILC, agricultural trainings, and WASH sensitization programming. The effect upon gender activity participation was not significant. The treatment did have a significant positive effect on SC7 but this indicator measures participation in community-designed and led activities intended to strengthen social cohesion as opposed to project activities in other sectors. Collectively, these results do not offer evidence for the pathway described in the research conceptual framework. As opposed to promoting regular participation in project activities, experience of the social cohesion intervention is largely associated instead with less participation. These results may not be a reflection on the specific effect of social cohesion programming but rather the unintended consequence of multi-sectoral programming: programmatic time burden. Social cohesion programming was introduced in the treatment zone within months of the roll-out of activities in agriculture, finance, WASH, and food security. Treatment zone participants, therefore, may have been forced to choose between activities, explaining why targeting for one may negatively influence participation in another.

#	Question	Midterm: treatment v. control group <sup>1</sup>	Treatment group: midterm v. endline <sup>2</sup>	Control group: midterm v. endline <sup>3</sup>
F2	Do you regularly participate in SILC group meetings?	**	***	**
A2	Have you regularly participated in the activities of the agricultural trainings organized by the Tudikolela project over the past year?	**	***	***
W11	Have you or another member of your household participated in training or awareness-raising on hygiene promotion in the last year?	**	***	
SC7	Have you participated in any collective actions in the last 12 months?	***	***	***
G4	Over the past year, have you participated in a training or awareness-raising activities on good practices and positive gender attitudes?		***	***

## VI. Conclusions & Recommendations

### Conclusions:

- Across the multi-sectoral project, the significant positive effect of the social cohesion intervention was most evident upon indicators within its own sector, as presumed. In terms of the cross-cutting power of social cohesion programming, a significant positive effect was most consistent across WASH indicators. Some positive results emerged in the gender sector, including a significant association between the social cohesion intervention and improvements to GBV knowledge and spousal task sharing; however, the statistical significance of a negative association with overall gender sensitivity is surprising and warrants further investigation. The treatment did not have a consistently significant influence on agricultural or finance indicators yet had a significant negative effect on participation in both sectors. Lastly, the positive influence of social cohesion programming at midterm was the least apparent amongst food security indicators.
- While midterm results in the food security sector do not offer a clear story about the positive influence of social cohesion programming, a significant positive correlation was quite consistent for the treatment group by endline. This may suggest the importance of time to detect an effect upon higher-level outcomes within a complex results framework. While this project originally provided a longer than average timeline for this experiment, the total programming duration was significantly reduced. The potential linkage between social cohesion and food security likely warrants a significant research timeline, feasible perhaps within 5-year RFSA's or similar longer-term multi-sectoral projects.
- The difference in the treatment intervention's effect across sectors may also suggest that social cohesion programming influences cross-sectoral outcomes most when the promoted behaviors produce community versus individual gains. For example, greater feelings of solidarity may have laid a foundation for improved WASH outcomes as community members adopted behaviors that contributed to a better environment for all. Similarly, messages of unity may have encouraged greater acceptance of female leadership to improve community development. At the other end of the spectrum, social cohesion programming may be least linked to food security outcomes as strengthened relations in the surrounding community may bear little influence on decisions which impact the household alone.
- While multi-sectoral approaches are critical to sustainably address food security and develop long-term resilience, this research underscores the risk of programmatic oversaturation. It is unlikely that the overarching negative association between the treatment intervention and participation in other sectoral activities is a consequence of improved social cohesion. Instead, it likely reflects the time burden faced by multi-sectoral project participants, particularly during start-up if programming is not carefully sequenced. Beyond sequencing, social cohesion programming can be intentionally integrated and layered with other activities, both to reduce the time asked of communities to participate in numerous siloed interventions but also to maximize the potential cross-sectoral impact of social cohesion programming. If social cohesion programming is intended to enhance communities' participation in other project activities, promoting it during those activities may make this linkage more explicit and effective.

### Recommendations:

Across CRS' programming, there are vast opportunities to capture meaningful learning without additional data collection and instead through greater investment in analysis and interpretation of existing data. Applying regression analysis helps us carefully investigate logical pathways and assumptions within our theories of change and strengthen evidence-based programming. Layering an RCT upon an existing project M&E system, however, introduces a level of complexity that warrants careful consideration of available resources. The following recommendations are intended to help teams weigh the costs and benefits of pursuing this type of research in the future:

- The critical junctures of a RCT are likely to align with project evaluation periods, when project MEAL staff are focused on donor reporting. A CP level staff dedicated to the RCT would ensure that quality analysis and interpretation take place specific to the research questions without compromising the quality of project MEAL outputs. Experience with RCTs should be a priority recruitment factor as this type of research is quite unique from typical project MEAL efforts. While this individual should retain a focus separate from the donor-facing MEAL system, s/he should maintain close collaboration with both MEAL and project management staff to coordinate their critical role of interpreting the RCT results within the context of the project and prioritizing lines of inquiry for qualitative follow-up.
- The above-mentioned staff person would be responsible for mitigating other common RCT challenges, including: a) championing a commitment to preventing spillover between the treatment and control groups; b) regularly reviewing the project DIP and working to retain intervention durations stipulated in the research protocol as changes inevitably occur; c) capturing and documenting unforeseen changes to project implementation which may influence results; d) developing well-crafted qualitative tools and leading carefully disaggregated analysis to capture nuanced insights that contribute to understanding quantitative findings; and e) collaborating with the project MEAL team to ensure that sampling techniques are harmonized across evaluations to retain the intended statistical power of the RCT.
- While investing in the technical human resources necessary to conduct a RCT is important, the role of the project team remains critical to ensuring that conclusions are validated by those closest to the field and that learning is accessible and useful to our programming team. Incorporating a short introductory training on RCTs (for the non-statistician) would help engage the CP and project team from the start. Investing in this effort early would help mitigate time spent during various interpretation workshops or report reviews to ensure understanding of what the experiment is investigating, how, and how we can interpret the results. This capacity strengthening effort may also support the project team in introducing and sharing updates on the RCT with the donor or government, as relevant.
- RCTs embedded in long-term projects are likely to experience staff turnover. To mitigate related consequences, developing a brief SOW (in addition to more formal research protocol) would help articulate the roles and responsibilities of involved parties at the project, CP, regional, and HQ levels so these can be revisited and optimized as changes occur over time.

## Annex A: Detailed Research Results

#	BASELINE		MIDTERM						ENDLINE						No. of observations		
	CON	TREAT	CONTROL		TREATMENT				CONTROL			TREATMENT					
	Value	Value	Value	ME Sign	Value	ME Sign	Significance (treatment v. control at midterm)	Value	ME sign	Significance (control midterm v. control endline)	Value	ME sign	Significance (treatment midterm v. treatment endline)				
<b>SOCIAL COHESION</b>																	
SC1	2.301	2.192	3.301	1.001	3.423	0.231	0.000	***	3.540	1.239	0.000	***	3.612	0.180	0.000	***	7553
SC2	2.730	2.599	3.442	0.712	3.545	0.233	0.000	***	3.618	0.888	0.000	***	3.666	0.179	0.000	***	7657
SC3	2.407	2.498	3.086	0.679	3.283	0.105	0.000	***	3.424	1.017	0.000	***	3.537	0.022	0.000	***	8241
SC4	2.637	2.651	3.341	0.704	3.419	0.063	0.000	***	3.560	0.923	0.000	***	3.621	0.047	0.000	***	8168
SC5	2.329	2.157	3.294	0.965	3.408	0.286	0.000	***	3.543	1.214	0.000	***	3.613	0.241	0.000	***	7564
SC6	2.628	2.654	3.317	0.689	3.451	0.108	0.000	***	3.535	0.907	0.000	***	3.611	0.050	0.000	***	8147
SC7	29.5%	27.8%	53.3%	23.8%	61.7%	10.1%	0.000	***	74.7%	45.2%	0.000	***	74.2%	1.2%	0.000	***	10903
SC8	NA	NA	3.483	NA	3.644	NA	NA		3.593	NA	0.000	***	3.546	NA	0.000	***	7486
SC9	NA	NA	3.067	NA	3.101	NA	NA		3.294	NA	0.000	***	3.252	NA	0.000	***	7486
<b>GOVERNANCE/CONFLICTS</b>																	
GC1	10.1%	9.9%	35.5%	25.5%	37.8%	2.4%	0.225		59.0%	48.9%	0.000	***	52.3%	-6.6%	0.000	***	10903
GC2	69.1%	72.7%	88.7%	19.6%	89.7%	-2.6%	0.392		90.2%	21.1%	0.177		89.9%	-4.0%	0.893		10903
GC3	2.078	2.150	2.310	0.233	2.392	0.010	0.001	***	2.605	0.527	0.000	***	2.620	-0.057	0.000	***	9143
GC4	58.2%	72.2%	66.7%	8.5%	77.5%	-3.2%	0.040	**	55.3%	-2.9%	0.028	**	65.3%	-3.9%	0.008	**	1754
GC5	49.6%	58.1%	60.7%	11.1%	72.6%	3.4%	0.000	***	92.5%	42.9%	0.000	***	87.4%	13.6%	0.000	***	7615
GC6	NA	NA	20.4%	NA	32.4%	NA	NA		48.5%	NA	0.000		45.2%	NA	0.000	***	3154
GC7	3.2%	9.7%	2.8%	-0.4%	10.7%	1.4%	0.000	***	1.7%	-1.5%	0.088	*	13.7%	5.5%	0.048	**	7615
GC8	2.635	3.849	2.200	-0.435	1.962	-1.452	0.579		2.25	-0.39	0.917		4.394	0.93	0.000	***	527
<b>FINANCE</b>																	
F1	NA	NA	38.4%	NA	34.8%	NA	0.059	*	60.6%	NA	0.000	***	57.8%	NA	0.000	***	7317
F2	NA	NA	94.8%	NA	92.0%	NA	0.018	**	96.9%	NA	0.028	**	98.1%	NA	0.000	***	3709
F3	NA	NA	78.3%	NA	75.2%	NA	0.122		92.3%	NA	0.000	***	92.7%	NA	0.000	***	3709

F4	NA	NA	85.1%	NA	80.8%	NA	0.063	*	90.7%	NA	0.003	**	89.6%	NA	0.000	***	3273
F5	NA	NA	3.770	NA	3.809	NA	0.263		3.859	NA	0.016	**	3.815	NA	0.858		1772
F6	NA	NA	3.772	NA	3.797	NA	0.468		3.849	NA	0.035	**	3.828	NA	0.376		1772
F7	NA	NA	3.804	NA	3.834	NA	0.345		3.826	NA	0.524		3.813	NA	0.535		1772
F8	1.3%	1.6%	13.3%	12.1%	11.4%	-2.2%	0.137		11.5%	10.2%	0.255		7.3%	-4.5%	0.002	**	5977
F9	NA	NA	65.2%	NA	64.0%	NA	0.520		70.8%	NA	0.016	**	70.2%	NA	0.004	**	4000
F10	NA	NA	40.4%	NA	41.7%	NA	0.503		52.4%	NA	0.000	***	52.6%	NA	0.000	***	3605
AGRICULTURE																	
A1	NA	NA	83.4%	NA	86.6%	NA	0.019	**	84.8%	NA	0.267		86.6%	NA	0.976		7486
A2	NA	NA	61.1%	NA	56.4%	NA	0.006	**	79.2%	NA	0.000	***	79.0%	NA	0.000	***	6806
A3	20.2%	25.9%	60.1%	39.9%	60.4%	-5.4%	0.880		69.8%	49.7%	0.000	***	68.8%	-6.7%	0.000	***	10217
A4	13.59	9.79	24.02	10.42	24.71	4.50	0.098	*	23.79	10.20	0.428		24.20	4.21	0.180		4834
A5	23.6%	18.0%	98.5%	75.0%	98.6%	5.6%	0.941		99.1%	75.5%	0.301		98.7%	5.2%	0.774		4834
A6	82.5%	76.1%	66.7%	-15.8%	61.9%	1.6%	0.070	*	89.1%	6.7%	0.000	***	88.1%	5.4%	0.000	***	4834
A7	1.72	1.48	2.84	1.12	2.90	0.30	0.319		2.81	1.09	0.760	***	3.08	0.50	0.013	**	10903
A8	3.17	3.02	3.09	-0.08	3.12	0.18	0.699		3.15	-0.02	0.331		3.09	0.09	0.684		10903
A9	NA	NA	2.480	NA	2.538	NA	0.095	*	2.583	NA	0.001	**	2.67	NA	0.000	***	6806
GENDER																	
G1	56.7%	59.9%	53.7%	-3.0%	60.8%	3.8%	0.001	**	80.0%	23.3%	0.000	***	84.9%	1.7%	0.000	***	9842
G2	0.89	0.94	1.13	0.24	1.62	0.45	0.000	***	1.92	1.03	0.000	***	1.99	0.02	0.000	***	9842
G3	11.74	12.26	14.51	2.77	14.21	-0.82	0.029	**	10.80	-0.94	0.000	***	10.60	-0.72	0.000	***	11749
G4	NA	NA	8.4%	NA	11.8%	NA	0.118		18.7%	NA	0.000	***	22.1%	NA	0.000	***	2518
G5	12.38	12.46	15.17	2.79	15.37	0.12	0.764		17.47	5.09	0.002	**	17.08	-0.47	0.000	***	5276
G6	3.039	2.642	1.96	-1.08	3.26	1.70	0.035	**	5.50	2.46	0.000	***	6.16	1.06	0.000	***	5282
G7	2.4%	2.0%	8.3%	5.9%	9.7%	1.8%	0.848		31.5%	29.1%	0.000	***	31.5%	0.4%	0.000	***	5264
WASH																	
W1	2.294	2.022	2.931	0.637	3.068	0.409	0.003	**	3.105	0.811	0.000	***	3.249	0.416	0.000	***	11180
W2	2.831	2.317	3.335	0.504	3.611	0.791	0.000	***	1.112	-1.72	0.000	***	1.083	0.485	0.000	***	11180
W3	2.689	1.823	1.120	-1.569	1.071	0.817	0.005	**	1.269	-1.42	0.000	***	1.359	0.956	0.000	***	4500
W4	2.735	1.923	1.129	-1.606	1.070	0.753	0.000	***	1.139	-1.6	0.642		1.184	0.858	0.000	***	4507
W5	82.8%	74.4%	89.3%	6.5%	90.1%	9.2%	0.461		87.7%	4.9%	0.284		91.8%	12.5%	0.183		7873
W6	34.7%	25.1%	34.5%	-0.2%	28.6%	3.7%	0.001	**	31.2%	-3.5%	0.127		30.1%	8.5%	0.459		7892
W7	2.689	2.977	2.207	-0.482	2.451	-0.043	0.000	***	2.337	-0.35	0.008	**	2.301	-0.32	0.001	**	7892
W8	2.7%	3.5%	12.4%	9.7%	13.0%	-0.2%	0.654		13.6%	10.8%	0.462		24.6%	10.2%	0.000	***	7892
W9	51.0%	56.7%	72.9%	21.9%	83.8%	5.2%	0.016	**	69.4%	18.4%	0.553		80.2%	5.1%	0.371		741
W10	2.2%	2.3%	8.0%	5.8%	9.9%	1.8%	0.080	**	10.2%	8.1%	0.101		22.9%	12.5%	0.000	***	7892

W11	NA	NA	59.4%	NA	53.0%	NA	0.014	**	62.6%	NA	0.222		65.7%	NA	0.000	***	3434
FOOD SECURITY																	
FS1	NA	NA	0.015	NA	0.017	NA	0.572		0.001	NA	0.000	***	0.002	NA	0.000	***	7486
FS2	NA	NA	59.797	NA	57.755	NA	0.039	***	18.89	NA	0.000	***	18.57	NA	0.000	***	7486
FS3	2.980	3.196	4.344	1.365	4.213	-0.348	0.026	**	4.679	1.699	0.000	***	4.618	- 0.277	0.000	***	5392
FS4	14.1%	21.7%	38.9%	24.8%	36.2%	-10.3%	0.160		47.0%	32.9%	0.000	***	45.4%	-9.2%	0.000	***	5392
FS5	2.821	2.917	5.749	2.927	5.008	-0.836	0.178		5.866	3.045	0.866		5.900	- 0.062	0.024	**	981
FS6	3.6%	25.0%	78.7%	75.1%	67.0%	-33.1%	0.006	**	78.4%	74.9%	0.953		86.1%	- 13.8%	0.000	***	981

## Annex B: Detailed Implementation Timeline & Layering Table

L = activity layered with another (detailed in final column)

Activity	FY21				FY22				FY23				FY24		Other activities with which this activity layered/integrated/etc.						
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1	Q2							
	J	J	A	S	O	N	D	J	F	M	A	M	J	J		A	S	O	N	D	J
Strategic Objective (SO) 1: 99 villages are implementing community development actions and equipped to maintain social cohesion.																					
<b>Social Cohesion (IR1.1)</b>																					
<b>TREATMENT</b>																					
Activity 1.1.1.1: SC workshops with local leaders				L																	1.2.1/1.2.1.1/1.2.2.1.1
sub-activity 1.1.1.1.A : 3B4D vision statement and action planning in each village				L																	1.2.1/1.2.1.1/1.2.2.1.1
sub-activity 1.1.1.1.B : Establishment of Peace Club					L	L															1.2.1.3 & 1.2.1.4
Activity 1.1.1.2: SC/conflict management training of FACICOM							L	L									L				2.1.1/1.2.1.1/2/2.1.1/3/2.3.1.2
sub-activity 1.1.1.2.A: FACICOM SC/conflict management sensitization to PDs and SILC groups							L	L	L	L	L	L	L	L	L	L	L	L	L	L	2.1.1/1.2.1.1/2/2.1.1/3/2.3.1.2
Activity 1.1.1.3: Biannual SC community events							L										L	L	L	L	2.1.1/1.2.1.1/2/2.1.1/3/2.3.1.2
Activity 1.1.1.4: CACs develop gender-sensitive conflict prevention plans & actions plans																					
<b>CONTROL</b>																					
Activity 1.1.1.1: SC workshops with local leaders																					
sub-activity 1.1.1.1.A : 3B4D vision statement and action planning in each village																					
sub-activity 1.1.1.1.B : Establishment of Peace Club																					
Activity 1.1.1.2: SC/conflict management training of FACICOM																	L				2.1.1/1.2.1.1/2/2.1.1/3/2.3.1.2
sub-activity 1.1.1.2.A: FACICOM SC/conflict management sensitization to PDs and SILC groups																	L	L	L	L	2.1.1/1.2.1.1/2/2.1.1/3/2.3.1.2
Activity 1.1.1.3: Biannual SC community events																	L	L	L	L	2.1.1/1.2.1.1/2/2.1.1/3/2.3.1.2
Activity 1.1.1.4: CACs develop gender-sensitive conflict prevention plans & actions plans																					
<b>Governance (IR1.2)</b>																					
Activity 1.2.1.1: CACs established				L	L	L															2.1.1.1
Activity 1.2.1.3 & 1.2.1.4: CACs trained							L	L	L	L	L	L	L	L	L	L	L	L	L	L	2.1.1/1.2.1.1/2/2.1.1/3/2.2.1.2-2.2.1.4
Activity 1.2.2.1: CACs conduct bi-annual self-assessments																					
Activity 1.2.2.2: CACs conduct quarterly meetings with local authorities																					
SO2: Villages take steps to improve their food and nutrition security																					
<b>WASH/Nutrition (IR2.1)</b>																					
Activity 2.1.1.1: Community-Based Nutrition (CBN) approach																					
Activity 2.1.1.2: RECO-led awareness sessions																					
Activity 2.1.1.3: FACICOM-led WASH awareness sessions																					2.1.1.3
<b>Agriculture (IR2.2)</b>																					
Activity 2.2.1.1: PDs established using "SMART Skills"																					
Activity 2.2.1.2-2.2.1.4: Lead Farmers promote improved ag practices, SMART Skills, and permagardening																					
Activity 2.2.1.5: Seed multiplication training & support																					
Activity 2.2.1.6: Seed distribution							L	L													2.3.1.2
<b>Financial Resources (IR2.3)</b>																					
Activity 2.3.1.1: PSP training																					
Activity 2.3.1.2: SILC programming																					
XC IR: Villages prioritize gender inclusion at the community and HH level																					
<b>Gender/HH Decision-Making (IR3.1)</b>																					
Activity 3.1.1.1: Gender champions trained to strengthen local leaders' support of gender inclusion																					1.1.1.2.A
Activity 3.2.1.1: Gender Champions and Couple Facilitators to promote SMART Couples approach																					



## Annex C: CRS' The Social Cohesion Barometer

The SCB is a measurement tool consisting of 18 statements that assess the degree to which respondent population(s) agree or disagree with the current state of social cohesion in their communities. These statements are aligned with CRS's Social Cohesion Conceptual Framework assessing perceptions related to sociocultural (P), economic (E) and political spheres (P), as well as two dimensions, horizontal and vertical.

Social cohesion encompasses three broad spheres of society—socio-cultural, economic and political spheres. These spheres also bear a relationship to the categories of assets found in the Integral Human Development (IHD) framework. For example, the social and spiritual assets relate to the socio-cultural sphere, the financial, physical and natural assets to the economic sphere, and the political assets to the political sphere. Human assets (skills, abilities, expertise, talent, etc.) can be associated with all three spheres.

The **socio-cultural sphere** focuses on: social relations across divides such as coexistence, tolerance and acceptance of differences; group identity and belonging within a larger whole; social capital which encompasses mutual trust, reciprocity and other assets that accrue from networks and associational life and facilitate cooperation around shared goals; and norms that moderate and influence socio-cultural life.

The **economic sphere** encompasses: equity in the sharing, distribution and management of resources (financial, natural and physical); and equal opportunity in the access of basic social services, economic and livelihood opportunities and advancement in life (upward social mobility). It also encompasses mutual self-help as well as the norms of the market concerned with fairness in access to markets and the exchange of goods and services, including the labor market.

The **political sphere** concerns: the degree of confidence and trust in state institutions, inclusive civic engagement to influence decision-making processes affecting public life, and effectiveness of state institutions to ensure equal opportunity, reduce inequalities and divisions in society, and provide policy frameworks responsive to the needs of all citizens.

Social cohesion is determined by the strength and quality of horizontal and vertical relations in a society. Both are vitally important for peace, justice and stability.

**Horizontal social cohesion** refers to the quality of relationships between and among equals or near equals<sup>5</sup> for both individuals and diverse groups within a society; that is, to levels of solidarity, trust, acceptance, reciprocity, mutuality, and multiplicity of links. Horizontal social cohesion is important both within identity or affinity groups (bonds) and across multiple groups of diverse identities and characteristics (bridges).

**Vertical social cohesion** refers to linkages that knit relationships across hierarchies, e.g. levels of leadership, authority, power and influence.<sup>6</sup> It concerns the degree to which state and non-state institutions – e.g., the market, cultural/traditional, religious, civil society groupings, NGOs,

etc.— interact with communities and individuals inclusively, equitably, transparently and accountable, with a double aim of strengthening social relations and reducing inequalities, exclusion and divisions in an environment of equal opportunity for all. State and non-state institutions are systems of established and embedded social rules (overt or implicit) that structure much of human interactions, constrain and enable behavior and support or undermine social cohesion. In a civic sense, vertical social cohesion refers to state-society linkages and the social contract between citizens and the state. In the marketplace, it refers to relationships between and among consumers, producers and other market actors including policymakers.<sup>5</sup>

For this research, the tool was contextualized, and the teams adopted statements to fit the local context and used a four-point Likert scale: (1 - Strongly disagree, 2 - Somewhat disagree, 3 - Somewhat agree, 4 - Strongly agree

<i>S1. I have strong social ties across diverse groups in my community.</i>
<i>S2. Members of my community trust each other regardless of identity differences (e.g. ethnicity, religion, culture, race, political affiliation, gender, age, etc.).</i>
<i>S3. Everyone is treated with dignity regardless of who they are.</i>
<i>S4. People belonging to different identity groups (e.g. ethnicity, religion, culture, race, political affiliation, gender, age, etc.) accept and tolerate each other.</i>
<i>S5. There are formal and informal opportunities in my community where people belonging to different identity groups connect and interact.</i>
<i>S6. My community has the capacity to peacefully manage social problems.</i>
<i>E1. I am satisfied with my family's existing living conditions, compared to other community members.</i>
<i>E2. People in my community help one another in times of need.</i>
<i>E3. Public resources are managed fairly for the benefit of all people.</i>
<i>E4: People have equal access to livelihood and employment opportunities regardless of who they are.</i>
<i>E5. Adaptation change. The question is skipped from the original Barometer.</i>
<i>E6. Goods and services are exchanged in a fair environment.</i>
<i>P1. I actively participate in community initiatives to address issue of common concern to all.</i>
<i>P2. All people in my community are treated fairly by public officials.</i>
<i>P3. We share the same civic values as citizens of the same country regardless of which identity groups we belong to.</i>
<i>P4. Everyone has the opportunity to participate in political processes without fear.</i>
<i>P5. People are listened to and their concerns and ideas considered by government structures and institutions</i>
<i>P6. People have confidence and trust in public and government institutions and structures at national and local levels.</i>

<sup>5</sup> Part of the text is adapted from the CRS's earlier publication [The mini-Social Cohesion Barometer.](#)

## Annex D: Research Logical Framework (in French)

