



McGovern-Dole International Food for Education and Child Nutrition III Project in Mali Midline Evaluation Report



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Authors:

Elnaz Safarha, M.S.

Kajal Gulati, Ph.D.

Marc Masson, B.S.

Maria DiFuccia, M.A.

Sakari Deichsel, M.A.

Edoxi Kindané, M.S.

Submitted to:



Chief of Party: Eliane Kouton
Catholic Relief Services – Mali

Submitted by:



Project Director: Elnaz Safarha
IMPAQ International, LLC

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ACRONYM LIST

ANPECTP	Government Agency in Charge of Early Childhood Development
APE	l'Association des Parents d'Elèves (Parent Association)
ATE	Average Treatment Effect
EDC	Education Development Center
EGRA	Early Grade Reading Assessment
ASER	Annual Status of Education Report
BLA	Balanced Literacy Approach
CGE	Comité de Gestion d'Ecole (School Management Committee)
CRS	Catholic Relief Services
DAP	Development activity proposal
ECOM	Ecole Communautaire
EDC	Education Development Center
EGRA	Early Grade Reading Assessment
FAS	Foreign Agricultural Service
FGD	Focus group discussion
IDEN	Departmental Inspector of National Education
IFM	Institut de Formation des Maîtres
IR	Interactive Radio Technique
ITE	Indirect treatment effect
KII	Key informant interview
M&E	Monitoring and evaluation
MDE	Minimum Detectable Effect
MDMS	Midday Meal Scheme
MGD	McGovern-Dole
MONE	Ministry of National Education
PA	Parent associations
PMP	Performance evaluation plan
PTA	Parent-teacher association
SARPE	Strategy Alternative de Recrutement du Personnel Enseignant
SILC	Savings and internal lending community
SMC	School management committee
SO	Strategic objective
TATE	Total average treatment effect
THR	Take-home rations
USDA	United States Department of Agriculture
WASH	Water, Sanitation, and Hygiene

EXECUTIVE SUMMARY

Overview

The United States Department of Agriculture (USDA) has funded Catholic Relief Services (CRS) for three project phases through the McGovern-Dole (MGD) International Food for Education and Child Nutrition Program. The third phase, which is a five-year intervention (FY2016–FY2020), with a budget of \$29,899,945, extends and expands on the previously implemented McGovern-Dole projects (MGD projects I and II). The project activities in this third phase, which aims to improve literacy of school-aged children for 77,104 children in 264 primary schools in the Mopti and Koulikoro regions in Mali, include school meals, take-home rations (THR) and vitamin A and deworming medications distribution, school management committees (SMC) members capacity building, formation of savings and internal lending community (SILC) groups, expansion of illustrated report cards, and teachers as well as school administrators training on the balanced literacy approach (BLA).

CRS selected IMPAQ International, LLC (IMPAQ) in 2015–2016 to design impact and performance evaluations of MGD III at baseline. The performance evaluation was designed to measure changes in outcomes over the life of the project with regards to USDA's two strategic objectives (SO): (1) SO1 with a focus on students' reading proficiency, attendance, participation in classroom activities, and teachers' motivation, as well as parent/community engagement; and (2) SO2 with a focus on three key areas, including safe food preparation knowledge and storage practices, accessibility to preventive health interventions, and reducing health-related absences. Moreover, IMPAQ designed the impact evaluation to identify the causal effect of the BLA teacher training intervention on the literacy of primary-school-aged children. At baseline, IMPAQ used quantitative and qualitative methods to establish baseline values for outcome indicators required by USDA, generated data to be used for comparative analysis, and validated project strategies and assumptions at baseline.

In March 2018, CRS re-selected IMPAQ for the midline performance and impact evaluation of MGD III to assess progress in implementation, relevance of interventions, and appropriateness of strategies, management structures, and/or activities for improved project effectiveness, efficiency, impact, and sustainability. To evaluate the key outcome indicators and research questions, which outlined in detail in Section 2.1, as well as measure progress toward achieving them, IMPAQ collected survey data (students, the Annual Status of Education Report (ASER)¹, parents/caregivers, teachers/principals, and SMCs) using the same instruments used at baseline, as well as qualitative key informant interviews (KII), and focus group discussions (FGD) data.

The purpose of this report is to assess the progress of MGD III in achieving the desired outcomes up to the midpoint of the project. In this report, we also discuss the impact of the two and three years of BLA intervention on literacy levels of both girls and boys in the targeted schools. The statistically significant gains in literacy associated with the program intervention is the main critical finding of this report. In addition, this report describes potential additional questions to be asked at endline evaluation and provides recommendations about the implementation of MGD III.

¹ The Annual Status of Education Report (ASER) Center pioneered in 2005 a nationwide survey, composed of a reading and math test, to measure the achievements of children in primary school in rural India in reading and math. Since their inception, adapted versions of the tests have been implemented in Pakistan, Kenya, Mali, Senegal, Tanzania, Uganda, Ghana, and Burkina Faso (Pratham 2015; USAID 2012).

Key Evaluation Outcomes

Below is a snapshot of the key outcomes for midline performance evaluation. More details are provided in Section 5 and Section 6.

Key Performance Outcomes

Students' Outcomes

We find an overall improvement in the reading ability of children across all grades, with no significant regional or gender differences. A significantly greater proportion of students in first grade (13 and 9 percentage points for girls and boys, respectively) could read simple sounds; second grade (12 and 14 percentage points for girls and boys, respectively) could decode simple words; third grade (20 and 23 percentage points for girls and boys, respectively) could read simple sentences, all statistically significant at the 1 percent level, with no big changes for girls and boys in fourth grade students. Moreover, the program interventions also seem to be related to children's reported reasons for liking to attend school. Children in Koulikoro reported liking school and their classroom because of the useful skills they acquired and the ease of understanding lessons. In Mopti, children mentioned having access to food and the ease of understanding as their key reasons for liking to attend school.

While the findings reveal an improvement in literacy and school attendance outcomes at midline, the progress on hygiene practices, which was the focus of MGD I and II activities, appears to be mixed, with wide variation across the two program sites. Progress on hygiene practices, such as washing hands, seems to be even slower. The average proportion of students who reported washing hands at critical moments is lower as compared to baseline. Moreover, the analysis also reveals that knowledge about handwashing practices, on average, did not change at midline as compared to baseline. While the actual reported washing of hands is lower possibly due to lack of proper infrastructure and facilities in the school, the lack of change in knowledge about handwashing practices is worth noting for strengthening program efforts. In the endline evaluation, we will also focus our efforts in understanding the reasons behind these changes in hygiene practices among students.

Parents Outcomes

At midline, we find an improved engagement of parents in their children's education. Improved participation of parents for their children's education is evidenced in several ways. First, parents' awareness about the school notice boards increased and a higher proportion of parents received colored report cards. Moreover, the average number of caretakers who attended a school general assembly increased in Koulikoro but not in Mopti. Presumably, other concerns such as safety prevented caregivers from going to the school for general assemblies in Mopti.

In contrast to the progress on improved engagement by parents for their children's education, the analysis suggests a lack of change in the involvement of parents in their children's preventative healthcare activities, such as providing iron and vitamin A supplementation. It is noteworthy that the data collection was conducted before the distribution of the mineral supplements, which is scheduled in November and May of each project year. Many parents cited that healthcare activities were too expensive or were not available or accessible. Lack of progress on these healthcare outcomes suggests that deeper, structural financial and geographical constraints might be contributing to a lack of progress on these outcomes. However, the project was not designed to focus on health care structures. MGD III aims to facilitate the distribution of the mineral supplements (e.g., vitamin A, iron, and deworming medications). The project

also supports raising parents' awareness about preventive health services by inviting local community health center staff in school to provide the communities with the appropriate health information. At midline we also investigated decision-making within households and found differences in perceptions on decision-making for children's education within the household. A majority of men reported themselves as being the primary decision-maker for children's education. However, women suggested a relatively lower role of men in their children's education. Women felt that they play a relatively higher role vis-à-vis men's role in their children's education – this is indicative of women exercising some say in their children's education. However, both reports confirm that men tend to dominate the decision when it pertains to their children's education. We also find no changes in parents' aspirations for their children's future between midline and baseline, suggesting the long period of time it takes to alter these deep-seated preferences of individuals.

Teachers and Principals' Outcomes

Our survey results suggest that one of the key program interventions – providing BLA training to teachers – was administered as planned. Almost 100 percent of 1st to 3rd grade teachers in Koulikoro and 93.3 percent of teachers in Mopti received BLA teacher training. Moreover, over half the number of these teachers had received approximately 2-3 BLA trainings. These trainings also appear to have translated into actual application in the classroom, based on self-reported data by the teachers. Most teachers mentioned that they used at least one BLA technique in the classroom, and almost all teachers also reported using BLA equipment in the previous month in their classroom.

Our results also suggest there were no key differences in handwashing practices by teachers between baseline and midline. However, this difference is being driven by the already high knowledge and reported practice of handwashing among teachers during both baseline and midline.

SMCs' Outcomes

Improvements in the performance of SMCs were notable across several dimensions. First, almost all SMC members managed school canteens at midline. Many of these SMC members had also received training and many different kinds of trainings. Second, a higher proportion of SMCs monitored the practices of teachers, especially through classroom observations. Third, these SMCs also followed student progress through monitoring the colored bulletins. However, one of the key outcomes where our SMC outcomes showed mixed results were the deployment of school action plans. While in Koulikoro, there was a 20 percentage point increase in the SMCs that prepared a school action plan, there was a 12 percentage point reduction in Mopti. It is quite possible that political instability and strife in Mopti diminished the continuous operation of SMCs. As revealed in the interviews in Mopti with SMC members, illiteracy and challenges in filling forms for the plans was mentioned as one of the key constraining factors.

Key Impact Outcomes

Our cohort comparison quasi-experimental design shows a clear proof of program impact: children's literacy outcomes improved by one level due to 2 years of exposure to a BLA-trained teacher and these outcomes increased by more than 1 level and a half due to 3 years of exposure to BLA-trained teachers. These findings are robust to adding other covariates. However, we do not find any evidence of spillover effects indicating that the program is successful in improving reading abilities of children due to intensive, prolonged exposure to more effective and well-trained teachers.

Key Qualitative Outcomes

Below is a summary of the main findings by the qualitative research domain. Each domain is described in more detail in Section 6.

Summary of Main Qualitative Findings	
Relevance	- Local stakeholders (parents, SMC members, and local administration officials) agreed that the project aligned with the priorities of their communities. They noted that food and take-home rations addressed food insecurity, as parents do not have to provide food (or money for food) and student attendance, as students are motivated to attend school because of the lunch and/or THR. - Elements of the original MGD project were found to be overly ambitious, including the responsibilities of local implementing partners and the scope of the SMC training. As a result, some activities were delayed and/or adjusted to better align with local capacity. - External factors affected the original design of the MGD project in terms of the planned objectives, outcomes, targets, and timeframe. The most prevalent factor out of the project team's control was the closing of schools due to political insecurity. Other factors include MONE's decision to promote syllabic teaching approach across the country, including the project areas with BLA training, frequent teacher strikes, and students moving from public schools to Koranic schools.
Effectiveness	<i>Successes:</i> - Parents and local education and administrative officials confirmed that the literacy of school-aged children is improving. Parents appreciate having the color-coded reports to monitor their children's progress. - Program staff and partners attributed improved literacy to the BLA pedagogical techniques, including the training and involvement of teachers, principals, pedagogical advisors, and local education offices. <i>Challenges:</i> - Teacher turnover, low attendance, and lack of motivation have negatively affected the implementation of the BLA pedagogical techniques. Also, teachers seemed overwhelmed by the additional work due to the project, especially when they are tasked with assisting illiterate SMCs. - Immigration affects student enrollment, as in some communities, boys leave their villages to pursue opportunities abroad where they can send money home, while girls find work in big cities to support their wedding trousseaus. - Lack of water on school grounds prevents full effectiveness of the health and dietary objectives. No or limited water sources do not allow for handwashing, and also prevent SMC members from growing vegetables to supplement the canteen.
Efficiency	- While overall program staff and partners reported that the project resources are being used efficiently, school closures and some adjustments to the project activities in response to changes in beneficiaries' need have caused minor impediments in allocating budget resources. - Local administrative officials reported that in some communities, political differences within the local education sector, specifically between the mayors and community leaders led to conflicts around the management of the schools. In other communities, the mayors often relocated teachers who were active in program schools without consideration for the needs of those schools. - External factors such as school closure and teachers' strike, combined with the expiration of some of the commodities such as vegetable oil, made the food distribution difficult for the program.
Impact	

Summary of Main Qualitative Findings

Activities with the greatest impact:

- Local and national stakeholders agreed that the BLA has a positive impact on improving children's literacy.
- Parents and SMC members found that school lunches and THR have a positive impact in their communities, as they address both hunger and school attendance.
- Project staff said that creating SILC groups is having a positive impact for communities, as participants are able to financially manage canteens.

Activities with the least impact:

- Parents and SMC members said that activities requiring water are not impactful, as they are not able to grow school gardens with the limited water supply.
- Community contributions to the canteens are less impactful than hoped for, as many families are too financially insecure to provide food or money.

Sustainability

- The knowledge gained through BLA trainings and SILC/SMC groups will last longer than the program. However, transient teachers and community members means that this knowledge may not stay in targeted communities.
- Although local stakeholders said that they will continue the canteens after the program leaves, they acknowledged that they will not be able to provide the same quantity and quality of food.
- Program staff expressed concern that local stakeholders lack capacity to take over the activities when CRS leaves. However, they are taking steps to revise the sustainability plan with a particular focus on the active support and involvement of the mayors' offices, who are mandated to support school development under Malian decentralization law.

Source: KII and FGDs

Recommendations for the Project

Below is a summary of our recommendations to CRS based on both lessons learned from our experience in the field and our findings after analyzing the collected data. Section 8 of the full report provides additional detail.

- **Improve awareness among parents and children about basic hygiene practices.** As the performance evaluation revealed, there is little progress on the adoption of hygiene practices by all the respondents, including children, parents, teachers, and SMC members. Although water, sanitation, and hygiene (WASH) related activities were only part of MGD II and the changes in these outcomes can be attributable to external factors such as lack of water sources, the respondents' knowledge and their self-reported hygiene practices are low with a gap between them. The project's staff and partners should investigate this issue in further detail and adjust the focus of the project's activities efforts, perhaps by SMC and teachers, to inculcate a culture of using basic hygiene practices by children. If children learn these in the school, it is quite possible that these practices may spillover in their homes as well.
- **Continue to provide and improve BLA trainings.** The impact evaluation showed strong and significant improvement in students' literacy outcomes due to exposure to BLA-trained teachers. The project activities should continue building on their level of efforts in training teachers and ensuring that teachers intensify the use of BLA techniques in the classroom.

- **Work on the school environment.** Students cited the bad attitude of their teachers (e.g., hitting, yelling, harassing, and/or under-estimating children) as one of the most frequent reasons for what they do not like about their school and classroom. As recommended at baseline, the project should not only focus strengthening teachers' pedagogical practices, but also on improving teachers' attitudes and the school environment (explicitly addressing bullying) to create an atmosphere conducive to learning for students.
- **Target both male and female caregivers for improving outcomes such as children's school attendance.** The study also highlighted that men play a key role in decision-making on children's educational attainment. Any long-run, sustained program impact would also work towards changing the attitudes of men towards the educational attainment of their children. Strategies specific to men can include sensitizing them as partners or allies, with common goals for the welfare of the family. Even in patriarchal or religious/Islamic communities, activities can focus on reinforcing the positive emotions of men as caregivers of their daughters. Since the program's goal is to improve children's health and educational outcomes, including both female and male caregivers will be critical for meeting the program's objectives, especially improving the children's school attendance and reducing their dropout rates.
- **Scale-up activities related to savings and internal lending.** The SILC groups appear to offer the greatest path to sustainability after the project finishes, evidenced through CRS monitoring data and through the qualitative interviews with national and local stakeholders. The financial knowledge gained will last after the resources end, and several communities without SILC groups requested financial literacy training, knowing that this could help them maintain the canteens. Survey data also show that participation in the SILC groups helped parents in saving money for their children's school fees as well as improving their livelihood, including their income, assets, and food security. Future iterations of the project many want to include livelihood activities to expand the benefits of SILC group participation beyond the project objectives.
- **Increase infrastructure-building to keep pace with awareness building, or temper program expectations.** Awareness building appears to be happening faster than infrastructure building. For example, parents are aware of the importance of preventative health activities such as pre-natal care and vaccinating their children, but the expense involved, or the distance required to access care is too great for many families. Another example is many canteen activities require water, but without access to a regular water source, these activities cannot be completed.
- **Include lessons on collaboration for teachers to increase the sustainability of BLA.** Our impact evaluation shows that learning from BLA-trained teachers improves students' literacy outcomes. The lack of spillover effects within the same school (that is, no improvement in literacy for students in the same school taught by non-trained teachers) is additional evidence that sustained exposure to a trained teacher is the mechanism for students' improvement. However, the lack of increase for students in other classes also shows that teachers are not communicating or collaborating within their schools. Teachers are not sharing the techniques learned through BLA with other teachers. Because teacher turnover is so high, this threatens the sustainability of students' gains in literacy. The program could add activities on school-wide collaboration, where teachers and principals share and practice what they've learned through BLA with the whole school.
- **Consider incentives for teachers burdened with additional work.** Project staff reported that teachers are overwhelmed with extra managerial work related to the program (for example, inventory report, food delivery forms, etc.) In some schools, teachers are asked to help illiterate

SMCs who are unable to complete school action forms and other required paperwork on their own. Project staff and/or partners should consider talking with teachers to get a better understanding of the extra burden involved and what could encourage adding extra duties. It may be that small grants or teacher recognition could help motivate those teachers who are reluctant to take on this extra work.

- **Put in place the revised strategy for sustainability, and include indicators to measure progress.** Several activities will require external support to continue after the program ends. For example, in many communities, the amount of food families can contribute varies heavily from year to year based on climate. Teacher and SMC turnover also threaten sustainability, as without continuous training, new teachers and SMC members will not have the knowledge and skills to use BLA and run the canteens. CRS Mali's revised strategy for sustainability recognizes that communities need additional government support, and therefore should advocate mayors' offices (mandated to support school development under Malian decentralization law) to include financial support for school feeding and teacher training in their development action plans. Additional capacity building at the local level (such as mayor training) can support this. Monitoring progress towards the sustainability plan will help determine which strategies show promise and which need further revision.

SECTION 1. INTRODUCTION

The United States Department of Agriculture (USDA) has funded Catholic Relief Services (CRS) for three project phases through the McGovern-Dole (MGD) International Food for Education and Child Nutrition Program. The third phase, which is a five-year intervention (FY2016–FY2020) with a budget of \$29,899,945, extends and expands on the previously implemented MGD projects (MGD I and II). This third phase aims to improve literacy of school-aged children for 77,104 children in 264 primary schools in the Mopti and Koulikoro regions in Mali. The purpose of this report is to assess the progress of MGD III in achieving the desired project outcomes. The report also describes potential additional questions to be asked at endline evaluation and provides recommendations about the implementation of MGD III.

This report consists of seven sections. This introduction (Section 1) provides a brief overview of the program context for the MGD III evaluation. Section 2 outlines the mixed-methods evaluation approach, including research questions, sampling design and its modification, data tools, and data analysis. In Section 3, we describe field work for data collection. Section 4 describes the sample respondents and their key characteristics. Sections 5 and 6 present the quantitative and qualitative outcomes. Finally, Section 8 concludes the report with lessons learned, study limitations, and recommendations.

1.1 Program Background

In response to low school attendance and the recurrent food crisis in Mali, CRS has implemented MGD I and II school feeding projects funded by USDA, in collaboration with local partners and the Ministry of National Education (MONE) in Mali in 2007-2010 (phase I) and 2011-2015 (phase II). The previous Mali MGD project (2011–2015) reached 76,411 primary and secondary students in 311 schools and has achieved positive results in enrollment and attendance rates, especially for girls, through provision of school meals and take-home rations. In addition, MGD I and II also focused on implementing activities such as establishing water points and school gardens, constructing latrines, and improving communities' WASH knowledge and practices. These activities were specific to phase I and II.

Although the enrollment and attendance improved during the first two phases of the project, there was concern about the quality of education, particularly literacy in primary grades. Therefore, in September 2015, USDA awarded CRS \$29.9 million to implement the third phase of the MGD program, a five-year project (FY2016–FY2020) to build on previous successes with a main strategic objective of improving the literacy of 77,104 school-aged children in 264 primary schools in the regions of Mopti and Koulikoro (Exhibit 1). MGD III included elements of previous phases, including school meals, take-home rations (THR) and vitamin A and deworming medications distribution, and the formation of savings and internal lending community (SILC) groups. In addition, new project activities

Exhibit 1: Map of Targeted Region in Mali



for the third phase include school management committees (SMC) members capacity building, expansion of illustrated report cards, provision of literacy materials to schools, and training to teachers and administrators on the balanced literacy approach (BLA). (See the full list of MGD activities in all the three phases in Appendix A.)

Based on the MGD III results framework (see Appendix A), higher literacy rates for school-aged children will be achieved by improving student attendance at high-quality literacy instruction in an environment in which students are enabled to participate actively in class. To improve attendance and attentiveness in 264 primary schools identified in the previous phases, this MGD project will support community-specific enrollment campaigns based on community-led barrier analysis results and continue school feedings to reduce short-term hunger and improve student attentiveness. Vitamin A and deworming medications will be distributed to enrolled students in Y1, 2, and 3, with a transition to local responsibility in Y3. Take home rations (THR) will be distributed to all fifth and sixth grade students in USDA-supported primary schools with a minimum 90% attendance to promote attendance and retention.

CRS will also build sustained capacity in school feeding and early grade literacy instruction at the local, regional, and national levels. For school feeding, this includes tailored training to “graduate” SMCs in school management and matching grants to fund school action plans, incentivize graduation, and engender ownership by the decentralized structures that must provide a match. CRS will also provide technical support to the National School Canteen Center (CNCS) in response to weaknesses identified in their biennial evaluation of school feeding capacity. For early grade literacy instruction, this includes creating a network of government officials, school administrators, and teachers trained in the BLA, providing classroom kits, and monitoring student progress with the Early Grade Reading Assessment (EGRA).

CRS is leading the implementation of MGD III in partnership with Amprode, Caritas Bamako, Caritas Mopti, Education Development Center, Inc. (EDC), and Guamina. In collaboration with the MONE, regional education offices (Academie), school district offices, and SMCs, CRS is building local capacity and promoting sustainability for school feeding and literacy activities where local, regional, and national education officials directly support monitoring and evaluation activities.

1.2 Evaluation Background

CRS selected IMPAQ International, LLC (IMPAQ) in 2015–2016 to design the impact and performance evaluations of MGD III at baseline. IMPAQ used quantitative and qualitative methods to establish baseline values for outcome indicators required by USDA, refined targets for performance indicators, generated data to be used for comparative analysis, and validated project strategies and assumptions at baseline. In March 2018, CRS re-selected IMPAQ for the midline performance and impact evaluation of MGD III. Following the evaluation design at baseline, IMPAQ used quantitative and qualitative methods to assess progress in implementation, relevance of interventions, and appropriateness of strategies, management structures, and/or activities for improved project effectiveness, efficiency, impact, and sustainability.

The midline evaluation consists of the following two components:

1. **Performance evaluation.** This evaluation is structured to measure changes in outcomes up to the midpoint of the project and to inform the overall evaluation results on MGD III core objectives. To accurately capture program performance longitudinally, IMPAQ measures the same program

indicators at all three data collection points (baseline, midline, and endline). This report focuses on the midline evaluation findings and compares the performance of MGD III indicator outcomes between baseline and midline with regard to two of USDA's strategic objectives (SO): SO1 with a focus on students' reading proficiency, attendance, participation in classroom activities, and teachers' motivation, as well as parent/community engagement; SO2 with a focus on three key areas, including safe food preparation knowledge and storage practices, accessibility to preventive health interventions, and reducing health-related absences.

2. **Impact evaluation.** This component of the evaluation seeks to identify the causal effect of the BLA teacher training intervention on the literacy of primary-school-aged children. In this report, we compare students' outcomes at midline in second and third grades with their peers' outcomes at baseline when their teachers did not receive any training. This report discusses the impact of the two and three years of BLA intervention on literacy levels of both girls and boys in the targeted schools.

To evaluate the key outcome indicators and measure progress toward achieving them, as well as to address evaluation questions, which are outlined in detail in Section 2.1, IMPAQ collected survey data (students, parents/caregivers, teachers/principals, and SMCs) using the same instruments used at baseline, as well as qualitative key informant interviews, and focus group data. At midline, the qualitative research questions focused on learning what has occurred to date, including a formative assessment and suggestions for program process improvement. At endline, the qualitative research questions will focus on learning more about the potential for program sustainability and about promising practices and lessons learned.

SECTION 2. EVALUATION METHODOLOGY

The evaluation methodology follows a longitudinal quasi-experimental evaluation design, which was designed and implemented in the baseline evaluation in 2016. Our core quantitative evaluation design comprises the pre–post comparison and cohort comparison methods. In addition, we also implemented a performance analysis of mothers’ and fathers’ perceptions on education, improvement in school attendance, and operations of SILC groups. Similar to the baseline, we have integrated a complementary qualitative analysis to help address a few limitations of the quantitative analysis, as well as providing contextual understanding and interpretation of the quantitative results. This section describes the quantitative and qualitative methodology implemented for the MGD III midline evaluation in greater detail.

2.1 Evaluation Questions

Following our evaluation plan for MGD III at baseline, we will continue to assess the following five dimensions of the project’s achievements: (1) performance; (2) relevance; (3) effectiveness; (4) sustainability; and (5) efficiency, using a mixed-methods evaluation design. Exhibit 2 shows the full list of key evaluation questions with the method of their analyses.

Exhibit 2: Key Evaluation Questions

Performance and Impacts	Data Analysis Method
▪ Have children in the MGD intervention schools improved their literacy during the project? ▪ To what extent have teachers improved their skills and knowledge to instruct literacy? ▪ To what extent has student attendance in the MGD intervention schools improved during the project? ▪ To what extent has there been an increase in the use of standard hygiene and health practices among students in the MGD intervention schools during the course of the project? ▪ To what extent has there been an increase in dietary diversity among students in the MGD intervention schools during the course of the project? ▪ To what extent has there been an increase in access to preventive health interventions for students in the MGD intervention schools during the course of the project? ▪ To what extent has there been an increase in access to food preparation and storage tools and equipment in MGD intervention schools during the course of the project? ▪ To what extent has there been an increase in the involvement of parents in MGD intervention schools during the course of the project? ▪ What is the overall project outcome to date? To what extent have project objectives and the yearly benchmark indicators been achieved? What is facilitating (or not) the achievement of results and objectives in a timely manner? ▪ What evidence suggests that the BLA has contributed to improved literacy? ▪ Have there been changes in students’ attendance, particularly that of girls? ▪ Is student attentiveness improving? Why or why not? What more could be done?	Quantitative and qualitative methods

▪ Is the incentive strategy effectively promoting student attendance? Are strategy modifications needed to improve attendance? ▪ How has the project affected girls and boys? Is there an observable difference? ▪ Have community barriers to education been identified? If so, how are they being addressed? How could the project better support behavior and social change? ▪ How are parents encouraged to be involved in their children's education? How might they be encouraged to be more involved (including illiterate parents)? ▪ How have teacher attendance and motivation changed? What more could be done? ▪ How do teachers find instructional materials? How are they using them? What could be done to promote greater/more effective use? ▪ How are community-based structures (e.g., schools, SMCs, SILCs) supporting project implementation? Are they on track to assume ownership of key activities beyond the life of the project? Are they satisfied with their participation? How might they be encouraged and/or supported to participate more? ▪ How have capacity-building activities for SMCs improved their capacities? What obstacles persist? What more should be done to ensure that they will have the capacity to manage the school canteens beyond the life of the project? ▪ What innovations, lessons learned, and good practices can be documented so far?	
Relevance	
▪ To what extent has the MGD project aligned with local, regional, and national policies, interventions, and initiatives in education and health? ▪ To what extent were the objectives of the project valid? ▪ Are the activities and outputs of the project consistent with the overall goal and the attainment of its objectives? ▪ Are the activities and outputs of the project consistent with the intended impacts and effects? ▪ Does the program meet communities and government priorities? ▪ Are stakeholders (management, committees, parents, teachers, local authorities) satisfied with their participation in the program? Why or why not? ▪ Does the project align with government policies and programs (local, national)? Does the project align and complement other donor, other NGO, and/or local organizations' managed programs?	Qualitative methods
Effectiveness	
▪ To what extent were the objectives of the project and yearly benchmark indicators achieved/are likely to be achieved? ▪ What were the major factors influencing the achievement or non-achievement of the objectives? ▪ To what extent have government officials increased their skills and knowledge in MGD intervention departments during the course of the project? ▪ Are there changes to the monitoring and evaluation (M&E) system and processes that need to be taken to improve the utility, credibility, and reliability of the data and information collected? ▪ Have there been any unintended negative effects of the project? If so, why? ▪ Were the implementation strategies relevant and effective enough to improve (1) enrollment and attendance among pupils, particularly girls? (2) community participation and engagement? (3) a better learning environment? ▪ Are there more effective strategies that would have greater impact? ▪ What are the project's major limitations? ▪ Are the staffing structure and capacity sufficient and appropriate?	Qualitative methods

- Has program implementation been effectively monitored? How well did the monitoring and evaluation mechanism in place help the implementation of the project? - What changes are required in the project to achieve project goals and objectives?	
Sustainability	
- What steps has the project taken to address the sustainability of the project activities? What additional steps need to be taken to improve the chances for sustainability of the activities and benefits derived from the project activities? - How have local, regional, and national capacity changed regarding literacy instruction in treatment schools? School feeding projects? Student enrollment and attendance monitoring? Is there evidence that the capacity and ability to provide quality programming have improved? - How have the national capacities, policies, procedures, and priorities changed? - What activities and/or outcomes (both expected and unexpected) of the program are likely to be sustained? What evidence is there to suggest this? - What is the level of ownership acquired by the stakeholders? How can they evolve and/or continue the benefits resulting from the action after the end of the intervention? - What are the major factors that can influence the achievement or non-achievement of the sustainability of the project? - How do the government's capacities, policies, procedures, and priorities contribute to sustainability? - What strategies should be used to obtain long-lasting support from communities and local/central administration that goes beyond the time of the project?	Qualitative methods
Efficiency	
- Were activities cost-efficient? - Were objectives achieved on time? - Was the project implemented in the most efficient way compared to alternatives? - Does the food supply chain (including transport and storage) minimize loss and damages? - Are objectives being achieved on time? Is the MGD program implementing in the most efficient way compared to alternatives (efficiency and value for money)?	Qualitative methods

Source: CRS Terms of Reference and Baseline Report.

2.2 Evaluation

To provide a comprehensive understanding of the MGD III program impacts, the IMPAQ team modified the evaluation design to incorporate an analysis of mothers and fathers as well as SILC members, while maintaining the integrity of the cohort comparison impact evaluation. Moreover, because of political unrest in the program area, four of our original program schools had closed down, thereby reducing our school sample. We describe these changes in our evaluation design in greater detail in this subsection.

2.2.1 Quantitative Evaluation Design

The quantitative evaluation design consists of the pre-post comparison, cohort comparison, and the performance analysis described in this subsection.

Pre-Post Comparison Method

We use a pre-post comparison method to assess health and hygiene practices among project beneficiaries, including principals and teachers, SMCs, students, and parents, where matching the same project beneficiaries is possible. We also assess food security status among mothers/caregivers of children from grade 3 and grade 4 and minimum acceptable diets among students. We will use this methodology

to assess and quantify the project's impact by tracking changes in outcomes for the same project beneficiaries over time, using baseline and midline data on outcomes measured in the same manner.

An important precursor for this evaluation methodology is the determination of the sample size. For the pre–post comparison method, power analysis was conducted prior to the baseline evaluation implementation to determine the number of beneficiaries needed to detect differences in health and hygiene practices over time.

During the baseline evaluation, IMPAQ sampled students and caregivers from 50 schools in Mopti and Koulikoro. Our original sample of 2,464 students and 2,279 caregivers was sufficient to detect differences in handwashing practices among children. However, the CRS Mali team informed us that four out of the 50 sample schools have been closed because of insecurity in the region, thereby reducing the sample to 46 schools. After redoing the power calculations using the lower number of schools, we find that our new sample of 2,507 students and 2,460 caregivers is also sufficient to detect differences in handwashing practices.^{2,3}

Cohort Comparison Method

We used a cohort comparison method to evaluate the effects of the BLA on student literacy growth at midline. This methodology measures improvement (change) over time of beneficiaries relative to their initial state before the project started. Earlier cohorts serve as a comparison group to later cohorts. We can use this method in accordance with EDC's BLA implementation plan. In Year 1 (2015–2016), only grade 1 teachers received BLA intervention training. In Year 2 (2016–2017), grade 1 teachers became grade 2 teachers and received additional training, and new grade 1 teachers received BLA training. In Year 3 (2017–2018), grade 2 teachers became grade 3 teachers, grade 1 teachers became grade 2 teachers, and all received retraining; and new grade 1 teachers received BLA training. To implement the comparison cohort method described here, we sampled grade 1, grade 2, grade 3, and grade 4 students at baseline and collected data from new cohorts in the same grades at midline. Exhibit 3 provides a graphical representation of the cohort comparison method, which we explain in detail in the following subsections.

Exhibit 3: Cohort Comparison Approach to Project Evaluation Strategy

Cohort	Baseline	Midline	Endline
	2015–2016	2017–2018	2019–2020
Comparison 1	4 th grade		
Comparison 2	3 rd grade		
Comparison 3	2 nd grade	4 th grade	
Treatment Cohort 1	1 st grade	3 rd grade	
Treatment Cohort 2		2 nd grade	4 th grade

² During baseline, we found that the baseline average of children using handwashing practices was 0.49. To detect a change of handwashing practices from 0.49 to 0.64, we needed 900 students sampled from 50 schools. When we redo the power calculations for 46 schools, we found that we need 1,457 students. We surveyed 2,464 students during baseline and now surveyed 2,506 students during the midline, which are both higher than the number of students required per the power calculations.

³ For the power calculations, we set standard values for the level and power of the test ($\alpha = 0.05$ and $\beta = 0.8$) and assumed that $p = 0.25$.

Cohort	Baseline	Midline	Endline
	2015–2016	2017–2018	2019–2020
Treatment Cohort 3		1 st grade	3 rd grade
2-Year Program Effect			
3-Year Program Effect			
4-Year Program Effect			

We will calculate two types of project effects on literacy levels: average treatment effect on the treated (ATE) and total average treatment effect (TATE).

- **ATE** is equivalent to the change in literacy prevalence between treatment and comparison groups after controlling for any other effects that could be influencing our results simultaneously. To obtain unbiased ATE estimates, we need to take time effects into account. Specifically, we need to subtract any changes in illiteracy prevalence in primary school children that might have arisen because of changes over time in circumstances unrelated to the project.
- **TATE** is a weighted average of the ATE and the indirect treatment effect on the untreated (ITE). The ITE measures the indirect effect of the project on cohorts that were not selected to be taught by BLA-trained teachers, but that belonged to schools where these BLA-trained teachers taught (spillover effects). We will underestimate the treatment's effectiveness if we do not consider the possibility that the BLA-trained teachers might also improve the literacy level of students belonging to untreated cohorts. The treatment's effect on the treated will be underestimated, and its effect on the untreated will remain unmeasured, which may result in incorrect policy conclusions.

This phased-implementation approach will allow us to determine the following:

1. **Two-year project effects:** We find, highlighted in gray in Exhibit 3, the observations that were used to calculate the two-year project effects at midline. Grade 2 students from Treatment Cohort 2 at midline will have been exposed to two years of teachers with BLA training (2016–2018). By comparing these students with grade 2 students in Comparison 3 from baseline, we estimate the two-year project effect of having exposure to a BLA-trained teacher on literacy growth (Exhibit 4 provides an example of the calculations for the two-year project effects).
2. **Three-year project effects:** The observations that will be used to calculate the three-year project effects are highlighted in green in Exhibit 3. Grade 3 students from Treatment Cohort 1 at midline will have been exposed to three years of teachers with BLA training (2015–2018). By comparing these students with grade 3 students in Comparison 2 from baseline, we estimate the three-year project effect of having exposure to a BLA-trained teacher on literacy growth.
3. **Time effects:** To find time effects between baseline and midline, we compare grade 1 students from Treatment Cohort 1 at baseline with grade 1 students in Treatment Cohort 3 from midline, both of which would have been exposed to one year of teachers with BLA training.
4. **Spillover effects:** The cohort comparison design allows us to determine spillover effects of the BLA intervention on students within BLA schools. Some of the BLA-trained teachers end up teaching the comparison groups when the teachers assigned to those grades are absent from school. Taking that fact into account is important because teacher absenteeism has been

documented as a serious concern in developing countries. For example, grade 4 students in Comparison 3 at midline will not have been taught by a BLA-trained teacher but may have benefited from the BLA intervention through spillover effects. By comparing this group with the grade 4 students in Comparison 1 from baseline, we determine the three-year spillover effect on literacy progress of being in a BLA school.

Exhibit 4: Example of Calculations: Two-Year Program Effects

The average treatment effect on the treated after 2 years of exposure to the program (ATE_2) is the difference in illiteracy prevalence for children in second grade at midline and baseline after controlling for any time effects between baseline and midline, as shown in **Equation 1**.

$$ATE_2 = \underbrace{(P_{t+2}^2 - P_t^2)}_{\text{two-year change in prevalence}} - \underbrace{(P_{t+2}^1 - P_t^1)}_{\text{time effect}} \quad (1)$$

The total average treatment effect on literacy levels after two years of exposure to the program ($TATE_2$) is the weighted average of the ATE_2 after two years of exposure to the program and the indirect treatment effect on the untreated (ITE) after being exposed to the project between baseline and midline.

$$ITE = \underbrace{(P_{t+2}^4 - P_t^4)}_{\text{spillover effect}} \quad (2)$$

$$TATE_2 = 0.5 ATE_2 + 0.5 ITE \quad (3)$$

where

- P_{t+2}^2 is illiteracy prevalence of children in second grade in year 3 (midline)
- P_t^2 is illiteracy prevalence of children in second grade in year 1 (baseline)
- P_{t+2}^1 is illiteracy prevalence of children in first grade in year 3 (midline)
- P_t^1 is illiteracy prevalence of children in first grade in year 1 (baseline)
- P_{t+2}^4 is illiteracy prevalence of children in fourth grade in year 3 (midline)
- P_t^4 is illiteracy prevalence of children in fourth grade in year 1 (baseline)

Source: IMPAQ.

Limitations of the Cohort Comparison Method

This is a quasi-experimental design that relies on the assumption that we are able to capture causal changes in literacy rates by measuring changes across cohorts. Our identification strategy rests on the assumption that there are no unobserved variables that affect both the probability of being part of the intervention group and the literacy rates of children. For example, particular educational policies enacted by the government in the same year of the intervention would potentially confound the cohort comparison approach. We also assume that the time effects experienced by students in different grades are the same—that is, grade 1 students experience the same time effects as grade 2 and grade 3 students. If there were any changes in the overall environment or any government policy that influenced only particular cohorts between baseline and midline, then this assumption may not necessarily hold.

To safeguard from these threats and ensure the validity of our methodology, we have taken three different actions exploiting the structure of the program implementation and the data available:

- We include time effects controls for all year-specific, individual-shared increases in literacy outcomes for all individuals. This addresses the identification threat regarding other educational policies being enacted.

- Threats arising from spillover effects are investigated through comparison across cohorts in the same school.
- Additionally, our evaluation involves a substantial data collection on different variables. These variables are included in our specifications to control for other factors arising from students and teachers.

Therefore, by taking advantage of the longitudinal data, the cohort implementation of the program, and a wide set of variables, our proposed quasi-experimental design is rigorous and allows us to mitigate many of the potential issues.

Descriptive Performance Analysis

In addition to these quasi-experimental methods, we also conducted descriptive performance analysis using data collected from parents who are SILC members and from fathers and mothers of students in grade 1 and grade 2, in addition to the data analysis from teacher, school principal, SMC, student, and parent surveys (see Data Sources for more detail about the survey instruments). In addition, we analyzed the school attendance data provided to IMPAQ by CRS through its M&E data collection system.

- **Descriptive analysis of SILC members' data:** Based on the data collected on SILC members in the parent survey, we provide descriptive characteristics on the SILC group participation. For example, we provide information on how SILC membership has influenced the children's participation in schools and on the livelihoods of the household.
- **Comparative analysis of mothers' and fathers' response data:** In the midline evaluation, we surveyed both fathers and mothers from grades 1 and 2 and elicited their responses on the same key performance indicators, such as their perceptions of the importance of education. We also asked a series of questions on their degree of decision making in the household, especially in the realm of children's education. In many households in which a child's father and mother are present, fathers often act as the decision makers in family matters, including children's schooling. By comparing the responses of mothers and fathers, we analyzed the differences on educational awareness within a household and the differences in decision making. We performed t-tests to see whether the differences between fathers' and mothers' responses are also statistically significantly different.
- **Performance analysis using school attendance data:** We used the attendance data provided by CRS to assess the trends in school attendance after different periods of program maturity and across the two key study areas.

2.2.2 Qualitative Evaluation Design

Like the baseline, our qualitative design is a rapid-assessment approach using key informant interviews (KIIs) and focus group discussions (FGDs) with selected key project stakeholders and beneficiaries at both the national and community levels. For the midline evaluation, we included local administrative and education officials (including mayors), as mobilizing their support is a key aspect of program sustainability. We also added national stakeholders, including project staff, partners, and Ministry officials. We explain this in more detail in the section on sampling strategy (Section 2.3).

We created role-specific interview and focus group protocols to question the identified stakeholders about their perceptions of the project implementation process, the project management, and successes and challenges. For the baseline, protocols focused on collecting information on current project realities and perceptions. For the midline, we included questions on impact, effectiveness, and sustainability (see the protocols in Appendix D, Evaluation Instruments).

Qualitative Analysis

Immediately after data collection, the qualitative data collectors emailed their notes in French to the IMPAQ team. After receiving the first set of notes, the team and data collectors held a debriefing over Skype to review the following:

- Clarify any questions where respondents were confused.
- Discuss any challenges in the field.
- Identify what topics and issues needed further probing.
- Determine how to adapt the guides in real time, if needed, to obtain more meaningful data.
- Ensure that the research team shared a common understanding and interpretation of the main points and themes.

Following this initial meeting, the data collectors and research team communicated through email to continue discussing these points. After the data collection was complete, the team reviewed and analyzed the debriefing notes, supplemented by interview recordings, to identify recurring patterns pertaining to the five research domains.

2.3 Sampling Strategy Design

2.3.1 Quantitative Sampling

To implement a cohort comparison method, at baseline we sampled among schools where grades 1 through 4 were taught, there were no multi-grade classrooms for grades 1–4, and teachers taught only one grade (grades 1–4) per school. Following these criteria, we surveyed 2,464 students at baseline. In addition to students, we surveyed their mothers/caregivers, as well as their teachers, school principals, and SMCs in our sampled schools.

For the midline evaluation, because four of our originally sampled 50 schools were closed as a result of political instability, we visited the 46 remaining sampled schools for the midline evaluation, surveying approximately 627 students from each grade (grades 1-4; 14 students, on average, per grade in each school), for a total sample of 2,506 students (1,216 boys and 1,290 girls). Although we surveyed fewer students from fewer schools, our power calculations show that our minimum detectable effect increases

only slightly from baseline to midline evaluation.^{4,5} In addition, we surveyed teachers⁶, principals, and SMCs. To implement an analysis of differences in the perceptions of female and male caregivers, we surveyed either fathers or mothers of students in grade 1 and grade 2 (480 male caregivers and 726 female caregivers). To implement the pre–post comparison, we surveyed only the mothers/female caregivers of students in grades 3 and 4 (929 female caregivers).

Exhibit 5 contains the updated comprehensive list of the respondents, key information collected, and sampling strategy for the midline evaluation.

Exhibit 5: Sampling Strategy for Midline Evaluation

Respondent	Key Information Collected	Timeline	Sample Strategy
Students	Reading abilities (Annual Status of Education Report [ASER]), student perceptions of learning environment, learning habits, hunger, minimum acceptable diet, health status, and hygiene knowledge and practices	Baseline (2016)	540 each from grades 1–4
		Midline (2018)	627 each from grades 1–4
Fathers and Mothers	Demographic characteristics, hygiene knowledge and practices, food security status, education perceptions	Baseline (2016)	2,279 households (only mothers/female caregivers)
		Midline (2018)	1,663 mothers/female caregivers and 802 fathers/male caregivers
School Principals	Pre- and in-service trainings, school management, teacher monitoring and oversight, hygiene knowledge and practices, school characteristics	Baseline (2016)	50 school principals
		Midline (2018)	44 school principals
Teachers	Pre- and in-service trainings, BLA teaching practices, hygiene knowledge and practices	Baseline (2016)	185 teachers
		Midline (2018)	189 teachers
School Management Committee—Board Members	Roles and responsibilities, SMC management, school and canteen management, community contribution/ support for schools and canteens, hygiene knowledge and practices	Baseline (2016)	48 members
		Midline (2018)	45 members

⁴ During the baseline evaluation, the minimum detectable effect was 0.091 percentage points for the illiteracy rate using 50 schools. Now, with 46 schools, our minimum detectable effect increases only slightly, to 0.094 percentage points. These calculations are based on standard values for the level and power of the test ($\alpha = 0.05$ and $\beta = 0.8$) and made under the assumption that the intra-cluster correlation (ρ) is 0.25. The baseline level average illiteracy rate for Mali for children in primary school was based on UNICEF data and estimated to be 74.6%. The standard deviation on the outcome variable was 0.195.

⁵ Data source: http://www.unicef.org/infobycountry/mali_statistics.html; <http://mali.opendataforafrica.org/xtxxjx/mali-education-outcomes>

⁶ At midline due to lack of teachers and resources, a few teachers started teaching more than one grade (2 teachers were teaching Grade 1 and 2, and 1 teacher was teaching both Grade 3 and 4).

Respondent	Key Information Collected	Timeline	Sample Strategy
Saving and Internal Lending Communities Members	Changes in children's education, and financial capacity due to participation in groups	Baseline (2016)	Not implemented
		Midline (2018)	579 (subsample of caregivers 2,465)

Source: IMPAQ

2.3.2 Qualitative Sampling

In collaboration with CRS, we selected four sites to visit—two in Mopti and two in Koulikoro. At each site selected, we conducted FGDs with parents and SMC members. In addition, we held KIIs with local administrative and education officials, including mayors. Exhibit 6 summarizes the community-level sample over the entire evaluation. At baseline, women were underrepresented in both the parent and school management committee FGDs. These groups were also mixed-gender. For the midline evaluation, we tried to increase the number of women who participated in our focus groups and separated the focus groups by gender.

Exhibit 6: Qualitative Sampling Strategy

Respondent	Key Information Collected	Timeline	Sample Strategy	Status
National stakeholders (KII)	Project objectives, project alignment with other efforts, implementation barriers, and lessons learned for future efforts and sustainability	Baseline (2016)	2 stakeholders: 1 MONE (Ministry of Education), 1 CNCS (National Centre for School Canteens)	Completed
		Midline (2018)	2 stakeholders: 1 MONE (Ministry of Education), and 1 CNCS (National Centre for School Canteens)	Completed
		Endline (2020)	Determined in collaboration with CRS	To be determined
Project team and partners (KII)	Implementation effectiveness, staffing structure, coordination mechanisms, lessons learned	Baseline (2016)	Two stakeholders: 1 CRS and 1 EDC	Completed
		Midline (2018)	6 stakeholders, including 1 CRS, 1 EDC, 1 CARITAS Bamako, 1 Guamina, 1 AMPRODE, 1 CARITAS Mopti,	Completed
		Endline (2020)	4–8 respondents, determined in collaboration with CRS	To be determined
Local administrative and education officials (KII)	Targeting, policies, government capacity, level of participation and ownership	Baseline (2016)	N/A	N/A
		Midline (2018)	8 stakeholders, including mayors and deputy mayors	Completed
		Endline (2020)	Determined in collaboration with CRS	To be determined
Parents (FGD)	Perceived quality of education, parental involvement, attendance,	Baseline (2016)	50 parents: 12 women/38 men from 4 schools	Completed
		Midline (2018)	98 parents: 56 women /42 men from 4 schools	Completed

Respondent	Key Information Collected	Timeline	Sample Strategy	Status
	and aspirations for their children	Endline (2020)	40–48 parents: 20–24 women / 20–24 men from 4 schools	To be determined
School management committees (FGD)	Roles and responsibilities, training, and accomplishments to date	Baseline (2016)	22 members: 3 women / 19 men from 5 committees	Completed
		Midline (2018)	27 members: 8 women / 19 men from 4 committees	Completed
		Endline (2020)	16–24 members: 8–12 women / 8–12 men from 4 committees	To be determined
Students (FGD)	Aspirations and attitudes toward their schools/teachers	Baseline (2016)	46 students: 24 girls/22 boys from 4 schools	Completed
		Midline (2018)	N/A	N/A
		Endline (2020)	Determined in collaboration with CRS	To be determined

Source: IMPAQ

At the local level, across four schools in the two regions, 106 participants took part in eight KIs and eight FGDs. Local facilitators selected two schools in each region—one close to the road and remote/not easily accessible. See Exhibit 7 for a description of the sites and focus group participants and Exhibits 8 and 9 for a description of the KIs in Koulikoro and Mopti.

Exhibit 7: Participants in the Qualitative Focus Groups

Region	Locality	Community Type	Parents			SMCs		
			M	F	Total	M	F	Total
Koulikoro	Kolokani	Rural/Far from a main road and difficult to access	11	19	30	9	2	11
	Nara	Rural/ Close to a main road	10	4	14	6	1	7
Mopti	Koro	Rural/ Far from Mopti	7	8	15	3	3	6
	Mopti	Rural/ Close to Mopti	14	25	39	1	2	3
TOTAL			42	56	98	19	8	27

Exhibit 8: Participants in the Key Informant Interviews, Koulikoro

Locality	Title
Nonsombougou	Educational advisor
Sébékoro	Second deputy mayor in charge of education
Mourdiah	Communal advisor for education
Nara	Director of educational support council

Exhibit 9: Participants in the Key Informant Interviews, Mopti

Locality	Title
Bankass	Deputy director, Educational animation center
Mopti	Director, Educational animation center

Locality	Title
Koro	4 th deputy mayor in charge of education
Mopti	Mopti Mayor

2.4 Data Sources

2.4.1 Surveys

At midline, we used the survey instruments we employed at baseline, with a few changes. These include a student survey, parents' survey, teacher and school principal survey, and SMC survey. Using the same instruments and measuring the key outcomes of interest in the same way as the baseline enabled us to capture relevant changes at midline with respect to project relevance, effectiveness, efficiency, and early indications of sustainability and impact. We used the quantitative data to measure the progress of the program's objectives and indicators. We also added questions on SILC membership and household decision-making in the parents' survey.

2.4.2 Reading Assessment

At baseline, we developed, fielded, and used an adapted version of the ASER reading test to measure students' reading levels. In collaboration with CRS staff, IMPAQ conducted an adaptation workshop and a pretest in 2016 to ensure that the test was culturally appropriate and consistent with Mali's learning standards for each grade level in primary school.

In addition, we pretested the updated ASER again in two schools in Bamako at midline. The final version of the test included 11 levels (A–K), which roughly correspond to the reading standards for each grade level (see Appendix D). Exhibit 10 presents the structure of the ASER reading test, including the test's levels and corresponding grades and reading skills.

Exhibit 10. ASER Reading Test Structure

Level	Corresponding Grade	Reading Skills
Level 0	None	None
Level A	Grade 1 (CP1) – Lower level	Identify letters
Level B	Grade 1 (CP1) – Upper level	Read simple sounds
Level C	Grade 2 (CP2) – Lower level	Read complex sounds
Level D	Grade 2 (CP2) – Upper level	Decode simple words (1–2 syllables)
Level E	Grade 3 (CE1) – Lower level	Decode complex words (2–3 syllables)
Level F	Grade 3 (CE1) – Upper level	Read simple sentences
Level G	Grade 4 (CE2) – Lower level	Read complex sentences
Level H	Grade 4 (CE2) – Upper level	Read simple stories
Level I	Grade 5 (CM1) – Lower level	Answer reading comprehension questions on simple stories
Level J	Grade 5 (CM1) – Upper level	Read complex stories

Level	Corresponding Grade	Reading Skills
Level K	Grade 6 (CM2)	Answer reading comprehension questions on complex stories

Source: IMPAQ.

2.4.3 School Attendance Data

In addition to collecting data, CRS provided us with school attendance data, which we use to address questions on overall attendance and absence rates across regions and by gender.

2.4.4 Key Informant Interview and Focus Group Discussion Data

We collected primary data using a national KII protocol with project stakeholders and project team members/partners. At the local level, we developed focus group discussion guides for parents and SMC members, as well as KII protocols for local administrative and education officials. The protocols were created to include items related to activity implementation, perceived benefits of program activities, perceived capacity for sustainability, lessons learned, and recommendations for program improvement. All protocols included questions related to relevance, effectiveness, performance and impacts, and sustainability, as well as questions targeted to the respondents' specific roles:

- Local administrative and education officials: What is their level of participation and ownership? Does intervention targeting, and policy reflect this?
- Project team and partners: What are their perceptions of implementation effectiveness, staffing structure, and coordination mechanisms?
- SMC members: How do the groups improve school/canteen conditions? What factors prevent ownership of project activities?



SECTION 3. FIELDWORK

According to the US Department of Health and Human Services, this study was exempt from institutional review board (IRB) review because: (1) there is no biomedical testing involved in this research; and (2) this research is being conducted in an established or commonly accepted educational setting, “involving normal education practices.”⁷

Prior to administering the survey, enumerators were trained on procedures for contacting respondents, protecting respondent privacy and confidentiality, and securing the data. During the data collection, the survey team asked all respondents for their consent to proceed with the survey. With regards to students, we interviewed students after receiving their parents or school principals’ consent, as well as their assent. The survey team also assured children that their participation was voluntary, and that they could terminate the survey at any time they want. After data collection, the evaluation team also protected the privacy and confidentiality of respondents by storing the data in secure servers and separating personally identifiable information from the survey data.

This section outlines the quantitative and qualitative fieldwork and subsequent data analysis for this evaluation.

Data Collection Preparation

In collaboration with CRS, IMPAQ trained 50 enumerators to collect the midline data in April and May 2018. To enhance the efficiency of midline data collection, CRS was able to invite 28 enumerators who collected baseline data to the training sessions. Enumerator training consisted of three days of theoretical indoor training and two days of pilot testing, followed by a debrief session and instrument refinement in Bamako. Enumerators received training on the rationale behind each survey item and learned how to collect data on paper and tablets. At the end of the training, based on a written test and the quality of pilot data collected from enumerators’ practice, in collaboration with CRS, we hired the 44 most experienced and skillful enumerators out of 50 for the data collection. In addition to quantitative data collection training, we also provided a one-day training to the two local consultants hired by IMPAQ.

Data Collection

With CRS, we organized the 44 enumerators into 11 teams of four individuals and assigned each team to a region to survey. The final selected enumerators used tablets to conduct the in-person surveys and electronically submitted the surveys periodically during the fieldwork.

Each team had a team leader. Most of the team leaders were already familiar with the project, the schools, and implementation of the ASER reading assessment. In addition to leadership tasks, they conducted school-level observations, including handwashing practices and canteen and food storage safety activities. In collaboration with CRS facilitators and IMPAQ fieldwork managers, team leaders also contacted school principals to coordinate their arrival before visiting the school; ensured that randomly selected students were still enrolled and available to be surveyed; and, finally, asked principals to call on selected students’ parents to be present on a day of data collection to give their consent and be surveyed. Two IMPAQ local consultants, one in each region, closely followed the teams of enumerators daily to oversee the quality of the data that enumerators collected and provide them with technical support. They also conducted qualitative interviews with local stakeholders and beneficiaries.

⁷ Exemption 45 CFR 46.101(b)(1).

All enumerators regrouped with/contacted IMPAQ's fieldwork managers several times during the day to debrief, submit daily data collection logs, submit electronic surveys, and review and plan for the next days of data collection. IMPAQ also met with the fieldwork managers on a daily basis to the extent possible during data collection to ensure a smooth collection and provide guidance on the potential challenges faced in the field. In addition, during the data collection, the data management team conducted quality checks on the uploaded data since the first day of data collection to ensure high-quality datasets. The team completed the fieldwork in 15 days.

SECTION 4. EVALUATION SAMPLES

In this section, we provide summary statistics about students, parents, teachers, principals, and SMC members. In addition, because of migration or relocation of respondents, we might not have surveyed the same respondent from baseline.⁸ Therefore, in this section, we also provide balance checks for key demographic characteristics pertaining to each respondent to ensure that the midline sample is observationally equivalent to the baseline sample.

To address research questions, shown in Exhibit 2 in Section 2.1, and to measure progress of performance indicators toward the desired outcomes over time, we collected data from 46 schools in Mopti and Koulikoro. In each of the 46 primary schools, we surveyed the principal, the grade 1 through 4 teachers, and a random sample of grade 1 through 4 students and their caregivers,⁹ as well as a representative of the school's SMC. We followed the sampling strategy explained in Section 2 to randomly select students from the school list shared by CRS. For students in grades 3 and 4, to the extent possible, we tracked the same students who were surveyed at baseline when they were in grades 1 and 2. When students from the baseline could not be found (e.g., relocation and/or dropout), we surveyed a sample of new randomly selected third- and fourth-grade students.

Overall, we were able to reach our target with a sample of 2,460 students (with at least 608 students per grade), which is a large enough sample to reach our minimum detectable effect (MDE) and conduct the impact evaluation. All respondents, including students, parents, teachers, and PTA members, gave us their consent to proceed, except for four students and three parents, with whom we terminated the interviews right away.¹⁰ Exhibit 11 shows the distribution of sampled respondents by region.

Exhibit 11: Sample Distribution by Region and Type of Respondent

Region	Type of Respondents					
	Schools	Students	Caregivers	SMC ¹¹	Teachers	Principals
Koulikoro	30	1,699	1,673	29	124	28
Mopti	16	808	794	16	65	16
Total	46	2,507	2,465	45	189	44

Source: Surveys of students, caregivers, teachers, and principals; authors' calculations.

In the remainder of this section, we discuss the basic demographic characteristics of each group of respondents.

4.1 Schools

The evaluation team complemented its surveys with direct observation of handwashing, food storage, and canteen operations to assess school and canteen performance in these key areas affecting student

⁸ Exceptions are explained in detail in this section.

⁹ We interviewed pairs of mothers/caregivers and children to enable a more meaningful interpretation of the findings between students and mothers/caregivers.

¹⁰ In accordance with the US Department of Health and Human Services Guidelines on Human Subjects Research (45 CFR § 46), we asked all respondents for their consent to proceed with the survey.

¹¹ School Management Committee.

health. However, these observations are prone to social desirability bias, as students and school staff may temporarily improve their practices in the presence of outside observers. Because schools expected the survey team to arrive on the day of observation, they could have temporarily set up their washing stations, provided soap to the students, cleaned their kitchens, and so on. In one instance, an individual informed the survey team that the school's handwashing soap was especially brought in by its principal because of the team's presence at the school. However, no other bias cases were reported to the team.

Handwashing Observation

The survey team found handwashing stations in 87 percent of schools in Koulikoro, among which 85 percent were functional and 62 percent had soap available. A smaller proportion of schools in Mopti had handwashing stations—only 69 percent, with 64 percent of those being functional and 45 percent having soap available. Overall, based on our observations, the average percentage of students who used the latrine and washed their hands in each school, where students had access to washing stations with soap, was 27 percent (see Exhibit 12). The remaining 73 percent did not wash their hands with soap after using the latrines.

However, children in all schools without handwashing stations in Mopti rinsed their hands either in barrels filled with water or directly at the borehole (without soap). In one school in Mopti classified as having no classroom handwashing stations, children washed their hands only before lunch, using two buckets, one filled with water and the other with soapy water.

Exhibit 12: Handwashing Observation

Region	Schools	Handwashing Station Available	Handwashing Station Functional*	Soap Available at Washing Station*	Students Who Wash Hands with Soap after Using Latrines**
Koulikoro	30	26 (87%)	22 (85%)	16 (62%)	29%
Mopti	16	11 (69%)	7 (64%)	5 (45%)	24%
Overall	46	37 (80%)	29 (78%)	21 (57%)	27%

Source: School Observations; authors' calculation; *Among schools with washing stations. **Average among schools with soap available at washing stations and where students used the latrines.

Food Storage Safety

Overall, nearly all schools followed good food storage practices. All schools stored their food in clean and secure locations. All but one stored food in closed bags, and only two schools in Koulikoro had an insufficient number of pallets for their stored food (Exhibit 13).

Exhibit 13: Food Storage Observation

Region	Schools	Store Is Secure (lock, key, etc.)	Food Stores Are Set on Pallets	Food Stores Are Kept in Closed Bags	Store is Clean
Koulikoro	30	30 (100%)	28 (93%)	29 (97%)	30 (100%)
Mopti	16	16 (100%)	15 (100%)*	16 (100%)	15 (100%)*
Overall	46	46 (100%)	43 (96%)	45 (98%)	45 (100%)

Source: School Observations; authors' calculation; *In [REDACTED] food was temporarily stored with the SMC president to prevent theft until the store door can be secured, and surveyors were not able to observe the food storage site (answer marked N/A and school removed from denominator).

Canteen Practices

When it came to assessing canteen practices, results were more mixed (Exhibit 14). While all but one school had clean kitchen utensils and equipment and used clean platters to serve meals, many schools did not have handwashing stations or soap. Protection of food against flies was also an issue in one fourth of the schools.

Exhibit 14: Canteen Observation

Region (Schools)	Handwashing Station Present in Kitchen	Soap Available at Handwashing Station	Clean Kitchen Utensils and Equipment	Kitchen Is Clean	Meal Is Ready and Served on Time	Meal Is Protected Against Flies	Clean Glasses Used to Serve Meals
Koulikoro (30)	20 (67%)	18 (60%)	30 (100%)	26 (87%)	28 (93%)	20 (67%)	30 (100%)
Mopti (16)	10 (63%)	8 (50%)	15 (94%)	16 (100%)	14 (88%)	14 (88%)	15 (94%)
Overall (46)	30 (65%)	26 (57%)	45 (98%)	42 (91%)	42 (91%)	34 (74%)	45 (98%)

Source: School Observations; authors' calculation

4.2 Students

To maintain a balanced boys-to-girls ratio that reflects the population of beneficiary students, we randomly selected seven boys and seven girls in grades 1 to 4 in each school. This sample enabled us to disaggregate the data by students' gender and to explore differences across grade levels. In total, we surveyed 2,507 students in grades 1 to 4: 1,216 boys and 1,290 girls.

Exhibit 15 shows the composition of the student sample in terms of grade, gender, and age. Although in general the proportion of girls to boys is balanced, there were slightly more female students than males in Mopti compared to Koulikoro. Among these students, 23.7 percent repeated a grade, with 7.8 percent of students in first grade and above repeating first grade, 9.8 percent of Grade 2 students and above repeating second grade, 12.5 percent of Grade 3 students and above repeating third grade, and 13.4 percent of students in Grade 4 repeating fourth grade. This pattern shows that grade repetition is more prevalent at higher grades.

Exhibit 15: Student Sample Composition

Grade	Male		Female		Total	Average Age	Age Range
	Percent	Observations	Percent	Observations			
Grade 1	47.8%	300	52.1%	327	627	7	5–12
Grade 2	48.4%	303	51.6%	323	626	8	5–13
Grade 3	48.7%	307	51.4%	324	631	9	5–15
Grade 4	49.2%	306	51.8%	316	622	11	7–16
Total	48.5%	1,216	51.5%	1,290	100%	—	—

Source: Student survey; authors' calculations.

4.3 Parents

School principals were asked to call students' caregivers, either parents or their main caregivers, who are usually the most informed about students, to be at school on the day of data collection to be surveyed and to give consent for their children to be surveyed. If the caregivers were not available in the school, the data collection team had to get their contact information from the principal to survey them at their households.

We surveyed a total of 2,465 caregivers in Koulikoro and Mopti. The number of caregivers surveyed (N = 2,465) in Koulikoro and Mopti was slightly less than the number of students surveyed (N = 2,507) because (1) several students in our sample were siblings who had the same caregivers and (2) in some instances, the enumerators were not able to find the corresponding caregivers to survey.¹² In all, the number of surveyed caregivers still amply meets the sample size requirements.

For each student surveyed, when possible, we surveyed one of the parents or primary caregivers. As described in Section 2, for those students surveyed at baseline—that is, students who would likely be in third and fourth grade at midline—we surveyed as many mothers or female caregivers as possible to be able to receive responses from the same households that participated at baseline. This was sometimes challenging because of scheduling conflicts or insistence by respondents to have the male parent respond to the survey. Ultimately, the survey team was able to survey 929 female caregivers of third and fourth grade students out of 2,465 surveyed parents. For students who were not surveyed at baseline—that is, most of the students in first and second grade—the survey team sampled a total of 1,206 of male and female parents at random, 734 female and 482 male caregivers. See Exhibit 16 for a detailed breakdown of parents by students' grades.

Exhibit 16: Parents Composition by Gender and Students' Grade

Percent (of students in each grade)	Male		Female		Total
	Percent	Observations	Percent	Observations	
Grade 1	39.4%	238	60.7%	367	605
Grade 2	39.9%	244	60.1%	367	611
Grade 3	24.5%	156	75.5%	480	636
Grade 4	26.8%	164	73.3%	449	613
Total	32.5%	802	67.5%	1,663	2,465

Source: Caregiver survey

Of the caregivers we surveyed, about 30.7 percent were students' primary or secondary caregivers (such as grandmothers, sisters, or aunts) rather than the biological parent, which composed the remaining 69.3 percent of the sample. There were some notable regional differences: 33.4 percent of caregivers in Koulikoro compared to 24.9 percent of caregivers in Mopti were students' primary/secondary caregivers. Exhibit 17 shows the detailed composition of the caregiver sample disaggregated by gender and region. In addition, about 23.5 percent of surveyed caregivers (or another household member) were members of a SILC.

¹² In these cases, we obtained the consent to survey the student from the school principal and the teacher.

Exhibit 17: Caregiver Sample Composition

Region	Koulikoro				Mopti			
	Male		Female		Male		Female	
Relationship with the Student	%	#	%	#	%	#	%	#
Biological parent	63.4%	308	67.9%	806	69.9%	221	78.6%	374
Principal caregiver	29.8%	145	24.3%	404	24.4%	77	18.1%	86
Secondary caregiver	6.8%	33	5.3%	63	5.7%	18	3.4%	16
Total	100%	486	100 %	1,187	100%	316	100 %	476

Source: Caregiver survey; authors' calculations. # refers to the total number of observations, and % refers to the percentage of the indicator

4.4 Household Environment

The characteristics of students' households, such as caregivers' educational attainment or households' access to water, are important because they illuminate the conditions in which children live, and these conditions can limit or empower students in achieving the outcomes of interest. For example, a student whose primary caregiver is educated is likely to do better in school than a student whose caregiver is illiterate.¹³ A student who has access to water at or near home will be in a better position to apply the learned hygiene practices (such as handwashing) than a student who has inadequate access to water at home. In this section, we discuss key household characteristics, including:

- Caregivers' educational attainment
- Household composition (size, percentage of children under five, school-aged children and their school status)
- Household access to basic services
- Availability of books and reading habits in households

Caregivers' Educational Attainment

Exhibit 18 shows the overall sample of caregivers' educational attainment by region. At midline, the percentage of caregivers with no formal education was significantly lower in both Koulikoro and Mopti (11 and 13 percentage points, respectively, both significant at the 1 percent level), as the percentage of caregivers with primary or second education was significantly higher, implying a more educated population of caregivers relative to the baseline sample. However, there remain significant differences between the levels of education in Koulikoro and Mopti. A higher percentage of caregivers in Koulikoro had at least some primary education relative to caregivers in Mopti.

¹³ Harding, J., Morris, P., and Hughes D. "The Relationship Between Maternal Education and Children's Academic Outcomes: A Theoretical Framework." *Journal of Marriage and Family*, vol. 77, no. 1, 2015, pp. 60–76. DOI: 10.1111/jomf.12156.

Exhibit 18: Caregivers' Educational Attainment by Region

Region	Koulikoro			Mopti		
	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
None	71.3%	58.3%	-13.0*** (0.0000)	84.0%	73.0%	-11.1*** (0.0000)
Primary education (Grades 1 to 6)	22.8%	26.8%	4.1** (0.0112)	13.2%	18.6%	5.4*** (0.0027)
Secondary education (Grade 7 and above)	4.9%	13.4%	8.5*** (0.0000)	2.8%	7.1%	4.3*** (0.0000)
Vocational school	1.0%	1.5%	0.5 (0.2599)	0%	1.4%	1.4*** (0.0003)

Source: Caregiver survey; baseline: N=2377 (Koulikoro = 1405; Mopti = 972). Midline: N=2175 (Koulikoro = 1509; Mopti = 666); authors' calculations. These calculations exclude caregivers that attended Koranic school or madrasa from the calculations.

* p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

Household Composition

Exhibit 19 presents the characteristics of the surveyed households. At midline, the households were significantly larger in both regions by around three people (almost one more child under 5), compared to baseline. However, the spread between minimum and maximum household sizes stayed quite large from baseline to midline, between 2 and 98 people in Koulikoro and 3-95 people in Mopti. Large household sizes may be explained by the fact that, in rural areas, different families often live together as one community. This exhibit also shows, among the total number of students who were at school age, the proportion of parents in Mopti who reported having out-of-school children at midline decreased by two percentage points (p<0.01), whereas there was no significant change in out-of-school students in Koulikoro.

Exhibit 19: Household Characteristics

Household Characteristics	Koulikoro			Mopti		
	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
Caregiver knows her or his own age	90.7%	89.3%	1.4 (0.1890)	85.7%	88.7%	3.1* (0.0567)
Household size (mean)	15.9	18.5	2.6*** (0.0000)	13.5	16.6	3.1*** (0.0000)
Number of children under 5 in household	3.2	3.6	0.5*** (0.0000)	2.7	3.4	0.7*** (0.0000)
Number of school-aged children in household	4.1	4.6	0.5*** (0.0020)	3.7	4.3	0.5*** (0.0020)
Reporting out-of-school children in household	29.0%	29.3%	0.3% (0.8861)	40.4%	38.1%	-2.3*** (0.0021)

Source: Caregiver Survey; authors' calculations. Sample sizes for each characteristic: Caregiver knows own age: Baseline: N=2374 (Koulikoro = 1403; Mopti = 971). Midline: N=2455 (Koulikoro = 1664; Mopti = 791). Household size: Baseline: N=2376 (Koulikoro = 1405; Mopti = 971). Midline: N=2411 (Koulikoro = 1629; Mopti = 782). Number of children under 5: Baseline: N=2377 (Koulikoro = 1405; Mopti = 972). Midline: N=2447 (Koulikoro = 1658; Mopti = 789). Number of school-aged children: Baseline: N=1963 (Koulikoro = 1092; Mopti = 871). Midline: N=2062 (Koulikoro = 1372; Mopti = 690). Number of children out of school: Baseline: N=1963 (Koulikoro = 1092; Mopti = 871). Midline: N=2077 (Koulikoro = 1386; Mopti = 691). * p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

Exhibit 20 highlights the reasons that caregivers did not send their children to school by region and student's gender. The caregivers in both regions mentioned mainly school expenses as a reason for their girls being out of school, working in the field for their boys, and other options such as enrollment in Koranic schools or children's (mental/physical) disabilities. In Mopti, more than 30 percent of surveyed caregivers with children out of school said their school-aged child (either a boy or a girl) was not attending school because they could not afford the cost of school and 32 percent said they need their school-aged boys to help with housework or in the field. However, the majority of caregivers that mentioned "other" reasons, most frequently cited that the child is enrolled at a Koranic school, the child has a disability preventing school attendance, or it was the child's own choice. Other reasons included limited spaces at school. The project should take these responses into account to revise enrollment campaign focus.

Exhibit 20: Reasons for Child Not Attending School

Reasons for Child Not Attending School	Koulikoro		Mopti		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
Cannot afford the cost of school	8.2%	8.2%	33.7%	31.1%	17.2%	16.8%
Child is not smart enough/capable enough	14.5%	8.2%	2.9%	5.4%	10.4%	7.1%
Need my child to help me at home/in the field	13.9%	9.0%	32.0%	21.6%	20.3%	13.7%
My child is working to support the family	6.3%	4.5%	12.2%	15.5%	8.4%	8.7%
School's quality is bad (my child does not learn)	1.3%	0.8%	1.2%	0.7%	1.2%	0.8%
School is not safe	2.5%	3.7%	2.3%	3.4%	2.5%	3.6%
Girls are not supposed to go to school	N/A	2.9%	N/A	0.7%	N/A	2.0%
Child is attending a religious school instead	15.5%	15.5%	22.7%	12.8%	14.3%	14.5%
Child is sick with a mental or physical disability	4.4%	6.1%	2.3%	6.8%	3.7%	6.4%
School is too far or difficult to get to	3.2%	4.1%	1.2%	5.4%	2.5%	4.6%
It was the child's own choice/don't know	15.1%	5.7%	7.0%	4.7%	12.3%	5.3%
Marriage	0%	4.5%	0%	0%	0%	2.8%
Other	16.7%	20.1%	8.6%	10.2%	17.6%	15.7%
Total Number of Observations	317	245	172	148	489	393

Source: Caregiver Survey; authors' calculations. N=882 is the total surveyed caregivers that reported having out of school children.

Among caregivers who had a child drop out of school during the 2017–2018 academic year, large differences exist between the regions (Exhibit 21). In Koulikoro, the primary reason for boys dropping out of school was that they were not interested in school (46 percent), whereas for girls it was getting married (29 percent). However, in Mopti, the primary reason for boys dropping out was having to do farm work or other labor (33 percent), followed by not being interested in school (26 percent). Interestingly, the primary reason for girls dropping out in Mopti, according to their caretakers, was school fees (27 percent), with no caretaker reporting that a girl in their care dropped out of their school because she got married. In addition, a higher proportion of caregivers also mentioned "other" options. We examined their specified responses more carefully, and found they also mentioned dropping out of public schools to enroll in Koranic schools, repeating grades too many times, and choosing to drop out voluntarily or because school was too difficult as other options.

Qualitative data supports these findings – in Koulikoro, parents said that children don’t want to go to school, with one parent saying, “some parents submit to the wishes of their child.” Many parents also mentioned enrolling their children in Koranic schools, and sending their daughters to earn money in town for their wedding trousseaus. While not a main reason in the survey, in the focus groups, parents in Koulikoro mentioned lack of money for school fees as a reason that many children in their community drop out of school. In Mopti, parents said that school fees are a primary driver preventing children from attending school or causing them to drop out, as well as having to help their parents in the fields. Women from the SMC in Mopti said that in their communities, early marriage for girls has been declining. However, education officials in Mopti said that girls are still being sent from their villages into town to earn money for their wedding trousseaus.

Exhibit 21: Reasons for Child Dropping Out of School

Reasons for Child Dropping Out of School	Koulikoro		Mopti		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
School is too far	4.6%	0.0%	11.1%	13.3%	6.5%	4.7%
School fees	4.6%	10.7%	14.8%	26.7%	7.6%	16.3%
Housework	6.2%	9.0%	7.4%	9.0%	6.5%	9.0%
Farm work or other labor	13.9%	4.5%	33.3%	4.5%	19.6%	4.5%
Disease(s)	0.0%	3.6%	0.0%	6.7%	0.0%	4.7%
Pregnancy	N/A	3.7%	N/A	3.7%	N/A	3.7%
Child not interested	46.2%	2.9%	25.9%	2.9%	40.2%	2.9%
Punishments in schools	3.1%	0.0%	3.7%	0.0%	3.3%	0.0%
Humiliation by comrades	1.5%	7.1%	0.0%	6.7%	1.1%	7.0%
Married	NA	28.6%	N/A	0.0%	N/A	18.6%
Other	29.2%	28.6%	33.3%	13.3%	30.4%	23.3%
Do not know	1.5%	3.6%	3.7%	0.0%	2.2%	2.3%
Total Number of Responses	65	28	27	15	92	43

Source: Caregiver Survey; authors’ calculations.

Disease was the primary reason that a child missed school among surveyed caretakers who reported that one of their children missed school in the preceding week (Exhibit 22). 85 percent in Koulikoro and 51 percent in Mopti stated that the absence was due to the child being sick. Caregivers also reported “other” options, including teacher’s absenteeism and/ or family emergencies. Other reasons varied as shown in Exhibit 22.

Exhibit 22: Reasons for Child Missing School Last Week

Reasons for Child Missing School Last Week	Koulikoro	Mopti	Total
School is too far	1.3%	4.4%	2.4%
Housework	1.3%	11.1%	4.8%
Farm work or other labor	0 %	4.4%	1.6%
Disease / illness	84.8%	51.1%	72.6%

Reasons for Child Missing School Last Week	Koulikoro	Mopti	Total
Pregnancy	0.0%	0.0%	0.0%
Child not interested	3.8%	11.1%%	6.5%
Teacher punishment or humiliation by classmates	0.0%	2.2%%	0.8%
Family event	3.8%	8.9%	5.6%
Other	6.3%	8.9%	7.3%
Total Number of Observations	79	45	124

Source: Caregiver Survey; Authors' calculation

Households' Access to Basic Services

Exhibit 23 shows the households' access to basic services. Similar to baseline, overall households in Mopti seemed to have poorer access to basic services than those in Koulikoro. In Koulikoro, the proportion of households that had access to a latrine at home remained high (98.1 percent), whereas significantly more households in Mopti (5 percentage points, $p < 0.1$) reported having a latrine at home, compared to baseline. The vast majority of households at midline in both Mopti and Koulikoro who had access to a latrine at home had a pit latrine, either with a slab (60 percent in Koulikoro and 73.5 percent in Mopti) or without a slab (31 percent in Koulikoro and 24 percent in Mopti).

Exhibit 23: Households' Access to Basic Services

Households Access to Basic Services	Koulikoro			Mopti		
	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
Access to a latrine at home	97.9%	98.1%	0.2 (0.6732)	79.1%	84.3%	5.2*** (0.0049)
Access to electricity at home	50.7%	55.9%	5.2*** (0.0035)	41.2%	46.5%	5.3** (0.0252)

Source: Caregiver Survey; authors' calculations. Baseline: N=2377 (Koulikoro = 1405; Mopti = 972). Midline: N=2466 (Koulikoro = 1673; Mopti = 792). * p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

When it came to household drinking water, households in Koulikoro most frequently used running water, either from the tap in their yard (33.8 percent) or from a community fountain (32.1 percent). In Mopti, they most often used a public well (39.4 percent) or running water from a community fountain (24.75 percent), suggesting a greater importance of community access to water in Mopti relative to Koulikoro.

The majority of all households (98 percent) reported that their children walked to school, same as baseline. At midline, on average, caretakers reported that it took their child 15.6 minutes to get to school from their home, with children in Koulikoro taking longer (16.8 minutes on average) than in Mopti (13.3 minutes on average). However, in Mopti, children walked anywhere from 1 minute to 2 hours to get to school, whereas in Koulikoro the time varied between 1 and 90 minutes.

Availability of Books and Reading Habits in Households

Exhibit 24 shows that households at midline have a better home literacy environment, compared to baseline. Significantly, at midline there was a shift of approximately 15 percentage points from caregivers who reported having no book at home to having 1 to 5 books other than textbooks, $p < 0.01$, compared to baseline. Similarly, reading habits were more frequent at midline compared to baseline, reported

consistently by caregivers and students. However, half of the caregivers still reported that they rarely or never read to their child, but there was a significant increase in reading more frequently for their children, from 29 percent at baseline to 43 percent at midline, $p < 0.01$. The results were consistent with what students reported on reading habits at their homes (12 percentage points increase, $p < 0.01$. This was expected as households at midline are more educated with better socioeconomic backgrounds. There were no regional differences.

Exhibit 24: Availability of Books and Reading Habits in Households

Availability of Books and Reading Habits in Households	Baseline	Midline	Difference in Means (p-value test)
As reported by caregivers			
No books at home	73.4%	58.3%	-15.1*** (0.0000)
1–5 books at home	24.2%	38.7%	14.5*** (0.0000)
Rarely or never read books to their children	71.2%	57.4%	-13.9*** (0.0000)
Sometimes or often read books to their children	28.8%	42.6%	13.9*** (0.0000)
As reported by students			
Rarely or never are read to	61.8%	49.5%	-12.2*** (0.0000)
Sometimes or often are read to	38.3%	50.5%	12.2*** (0.0000)

Source: Caregiver Survey and Student Survey; authors' calculations. Parents: Question regarding books at home: Baseline: N=2377; Midline: N=2465. Question regarding reading at home: Baseline: N=2371; Midline: N=2452. Parents: Question regarding reading at home: Baseline: N=2460; Midline: N=2500. * p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

4.5 Teachers

At midline, we surveyed 189 teachers in grades 1–4 across 46 schools in Koulikoro and Mopti; among those, 11 were also school principals. Exhibit 25 shows the composition of the teacher sample in terms of gender, age, language, and experience as measured by years of teaching.

At both baseline and midline, teachers in Koulikoro were roughly similar to their counterparts in Mopti in terms of the proportion of teachers reporting French as the language they spoke best and their educational attainment. However, at baseline, teachers in Koulikoro were more likely to be older, male, and have more teaching experience than teachers in Mopti, and this gap widened at midline. Among our midline sample, 71.8 percent of teachers in Koulikoro reporting they had taught for 6 years or more, versus 44.6 percent of teachers in Mopti. In addition, whereas the proportion of female teachers stayed roughly the same in Koulikoro between baseline and midline (38–39 percent), the proportion of female teachers in the Mopti sample grew by 9 percent to become the majority (58 percent). At midline, the average age of teachers in the Koulikoro sample was 36 years, compared to 33 in Mopti.

Exhibit 25: Teachers' Characteristics

Region	Koulikoro			Mopti		
Characteristics	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
Female	38.1%	38.7%	0.7% (0.9178)	49%	58%	9.2% (0.2900)
Average Age	34.9	35.8	0.9 (0.3921)	32.3	32.8	5.6% (0.5980)
Average class size	72.7	78.0	5.3 (0.1516)	55.1	49.9	5.3 (0.2274)
French language skills ¹⁴	36.3%	16.1%	-20.8%*** (0.0004)	37.7%	16.9%	-20.8%*** (0.0070)
Proportion of teachers who have taught for 6 years or more	54.5%	71.8%	17.3%*** (0.0057)	42.0%	44.6%	2.6% (0.7648)
Total¹⁵	112	123*	-	69	65	-

Source: Teacher and Principal Survey; authors' calculations. *One teacher refused to provide an answer for class size and was removed from the total number of observations used in this table.

* p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

Exhibit 26 shows the educational attainment of teachers. At midline, more teachers in Mopti had university-level education or a CAP and fewer had a BAC or a BT1/BT1, as compared to teachers in Koulikoro and baseline and midline samples.

Exhibit 26: Teachers' Educational Attainment

Region	Koulikoro			Mopti		
Level of Education	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
DEF ¹⁶	15.9%	12.1%	-3.8 (0.3968)	21.7%	20.0%	-1.7 (0.8063)
CAP ¹⁷	14.2%	18.5%	4.4 (0.3648)	11.6%	23.1%	11.5* (0.0792)
BT1 & BT2 ¹⁸	34.5%	30.6%	-3.9 (0.5274)	30.4%	15.4%	-15.1** (0.0392)

¹⁴ For this variable, we asked teachers which language they spoke the best and calculated the percentage of teachers who said French, by region.

¹⁵ Including principals who taught.

¹⁶ *Diplôme d'études fondamentales (DEF)* or Diploma of Fundamental Studies, is given for completion of primary school. It is usually obtained after 9 years of education.

¹⁷ *Certificat d'Aptitude Professionnelle (CAP)*, or Certificate of Professional Ability, is usually obtained after 2 years of education post-DEF and gives the recipient a professional qualification in a specific field.

¹⁸ *Brevet de Technicien (BT1/BT2)*, or Technician Certificate, is given for successful completion of technical secondary school (3 years of education post-DEF for BT1 and 4 years for BT2).

Region	Koulikoro			Mopti		
Level of Education	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
BAC ¹⁹	7.1%	7.3%	1.8 (0.9578)	5.8%	0%	-5.8** (0.0492)
BAC+2 and higher	21.2%	22.6%	1.3 (0.8041)	23.2%	30.8%	7.6 (0.3261)

Source: Teacher and Principal Survey; authors' calculations. Baseline: N=182 (Koulikoro = 113; Mopti = 69). Midline: N=189 (Koulikoro = 124; Mopti = 65). * p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

At baseline, the majority of teachers in Mopti (62 percent) and Koulikoro (64 percent) were community employees. Few were government employees (Exhibit 27). This distribution of teacher employment status was replicated at midline, although a far smaller proportion of teachers in both Koulikoro and Mopti were IFM interns, with this reduction being compensated by a large growth in the government contract teacher status in Koulikoro (0.9 to 9.7 percent) and volunteer status in Mopti (0 to 6.2 percent). The decrease in IFM interns could be explained by the regional governments that are less actively recruiting the IFM alumni.

Exhibit 27: Teachers' Employment Status

Region	Koulikoro			Mopti		
Employment Status	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
Government employee	12.5%	8.1%	-4.4% (0.2622)	1.4%	3.1%	1.6% (0.5280)
Community employee	64.3%	67.7%	3.5% (0.5773)	62.3%	61.5%	-0.8% (0.9266)
Government contract teacher	0.9%	9.7%	8.8%*** (0.0030)	4.3%	6.2%	1.8% (0.6417)
IFM intern ²⁰	18.8%	5.6%	-13.1%*** (0.0018)	23.2%	7.7%	-15.5%** (0.0135)
Volunteer	0.9%	1.6%	0.7% (0.6237)	0%	6.2%	6.2%** (0.0366)

Source: Teacher and Principal Survey; authors' calculations. Baseline: N=181 (Koulikoro = 112; Mopti = 69). Midline: N=189 (Koulikoro = 124; Mopti = 65). * p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

4.6 School Principals

We surveyed almost all the principals from our sampled schools, a total of 44 school principals (11 of whom were also grade 1–4 teachers at the schools). Two out of 46 school principals were not available at school at the time of survey. Because of the small sample of school principal, the results presented here and in Section 5.1.5 are merely descriptive; no statistical analysis (t-test of difference in means) can be conducted.

¹⁹ *Baccalauréat* (BAC) or Baccalureate, is given for completion of general secondary school and allows the recipient to access tertiary education at a college or university, then designated by BAC + years of university education.

²⁰ *Instituts pour la Formation des Maîtres* (IFM) or the Institute for the Development of Teachers.

Exhibit 28 shows the composition of the principal sample in terms of gender, age, language, and experience as measured by years of experience serving as principal at the school. There were no significant changes between principals' characteristics at midline compared to baseline, except in proficiency in French language. A lower proportion of principals in both in Mopti and Koulikoro, 36 and 32 percent, respectively, reported that they are most comfortable with French. At midline, principals in Mopti were more likely to be female (no principals in the Koulikoro sample were women), younger, more educated, stronger in French, and less experienced.

Exhibit 28: Principals' Characteristics

Region	Koulikoro		Mopti	
Employment Status	Baseline	Midline	Baseline	Midline
Female	3.3%	0%	21.1%	25%
Average age	46.4	44.6	39.3	37.6
Most comfortable with French	56.7%	25.0%	73.7%	37.5%
Have served their school for 3 or more years	60.0%	71.4%	68.4%	68.8%

Source: Teacher and Principal Survey; authors' calculations. Baseline: N=49 (Koulikoro = 30; Mopti = 19). Midline: N=44 (Koulikoro = 28; Mopti = 16). * p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

Exhibit 29 shows the educational attainment of principals. At midline, principals seem to have more or less the same level of education in Koulikoro from baseline to midline. However, in Mopti teachers had a higher level of education compared to baseline, with a remarkable 31 percentage point decrease ($p < 0.01$) in BT1 and BT2 level.

Exhibit 29: Principals' Educational Attainment

Region	Koulikoro		Mopti	
Level of Education	Baseline	Midline	Baseline	Midline
	Percent			
DEF	6.7%	0%	0%	6.3%
CAP	10.0%	21.4%	15.8%	18.8%
BT1 & BT2	60.0%	28.6%	36.8%	18.8%
BAC	3.3%	3.6%	5.3%	0%
BAC+2 and higher	6.7%	21.4%	42.1%	43.6%
Other (largely IFM)	13.3%	25.0%	0%	12.5%

Source: Source: Teacher and Principal Survey; authors' calculations. Baseline: N=49 (Koulikoro = 30; Mopti = 19). Midline: N=44 (Koulikoro = 28; Mopti = 16). * p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

4.7 School Management Committees (SMCs)

We surveyed about one member from each SMC for the schools in our sample. At each school, we requested to survey the SMC president. When the president was unavailable, we generally asked to survey the second in command after the president. In total, we surveyed 45 SMC members (39 men and 6 women). Out of 45 SMC members, we surveyed 35 presidents and 10 "other members." One SMC member was missing during the time of data collection activities. Because of the small sample of SMC members, the results presented here and in Section 5.1.6 are merely descriptive; no statistical analysis (t -test of difference in means) can be conducted.

Exhibit 30 shows the composition of the SMC member sample in terms of gender and average age, and Exhibit 31 shows the educational attainment of surveyed SMC members. In general, members across the two regions were about the same age. There were no women in the SMC sample for Mopti, and 10 percent were women in the sample for Koulikoro. In addition, SMC members in Koulikoro tended to be less educated on average compared to their counterparts in Mopti.

Exhibit 30: SMC Characteristics

Region	Koulikoro		Mopti	
	Baseline	Midline	Baseline	Midline
Female	10.0%	17.2%	0%	6.3%
Average Age	51.1	52.2	48.8	51.6
Number of observations	30	29	18	16

Source: SMC Survey; authors' calculations.

Exhibit 31: SMCs' Educational Attainment by Region

Region	Koulikoro		Mopti	
	Baseline	Midline	Baseline	Midline
	Percent			
Level of Education				
None	23.3%	23.1%	50.0%	41.7%
Primary education (grades 1 to 6)	63.3%	65.4%	33.3%	50.0%
Secondary education (grade 7 and above)	10.0%	7.7%	16.7%	8.3%
Vocational school	3.3%	3.8%	0%	0%

Source: SMC Survey; authors' calculations. Baseline: N=48 (Koulikoro = 30; Mopti = 18). Midline: N=38 (Koulikoro = 26; Mopti = 12). These calculations exclude caregivers that attended Koranic school or madrassa from the calculations.

SECTION 5. QUANTITATIVE OUTCOMES

In this section, we present the findings from the quantitative performance and impact analyses. We first discuss in detail the descriptive analysis on the key performance indicators (Section 5.1) and then present the results of the main outcome of interest for the impact evaluation—that is, reading proficiency (Section 5.2).

5.1 Performance Evaluation

For the midline performance evaluation, we analyzed data from the students, caregivers, teachers, principals, PTA, and SMC members. We examined all the data by gender, grade, and region when possible, but highlighted the differences when descriptive differences exceeded 5 percentage points. Appendix C provides additional details. However, the results in this section, especially those on culturally and socially sensitive topics such as food security, should be interpreted with caution because of the social desirability bias of self-reported data.

In analyzing performance data from student, parent, teacher, principal, and SMC member surveys, we compared mean outcomes at baseline and midline by using *t*-tests and *p*-values to highlight statistically significant differences. Such analysis can only suggest a correlation between the observed changes in outcomes and CRS MGD interventions such as school feeding or teacher training. It cannot determine conclusively whether the interventions caused the changes. Other factors could have led to the observed changes over time, given that, at each data collection point (baseline and midline), we selected new samples of individuals to survey. There might be systematic differences in the two sets of samples that affected the outcomes. For example, improvements in literacy outcomes at midline relative to baseline could mean either that teacher trainings were effective or that the students selected at midline came from better socioeconomic backgrounds. In addition, a simple difference in outcomes between baseline and midline could be caused by other general trends that affected all the schools.

Exhibit 32 provides an overview of the baseline and midline levels of the key McGovern-Dole evaluation performance indicators, as required by the approved performance monitoring plan (PMP). The Data Source column shows which survey data we used to measure each indicator. Each of these indicators and other findings are discussed in detail further in this section. Appendix B provides the full table of the McGovern-Dole Project Indicators, including both the monitoring and the evaluation indicators.

Exhibit 32: McGovern-Dole Key Evaluation Indicators

McGovern-Dole Indicators	Data Source	Baseline Observations	Baseline Percentage	Midline Observations	Midline Percentage
Percent of students who, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade-level text	Student Survey	310	Boys: 2.3%	303	Boys: 15.8%
		331	Girls: 1.8%	323	Girls: 13.3%
		641	Overall: 2.0%	623	Overall: 14.5%

McGovern-Dole Indicators	Data Source	Baseline Observations	Baseline Percentage	Midline Observations	Midline Percentage
Percent of students who demonstrate decoding abilities	Student Survey	1,276	Girls: 7.1%	1,288	Girls: 17.0%
		1,183	Boys: 9.0%	1,216	Boys: 20.2%
Percent of female students reporting they feel encouraged to participate in class by their teachers	Student Survey	1,271	62%	1,288	65.2%
Percent of students in target schools who indicate that they are “not hungry” during the school day	Student Survey	2,041	91.1%	2,191	91.5%
Percent of school-aged children receiving a minimum acceptable diet	Student Survey	1,079	Boys: 28.0%	1,084	Boys: 34.2%
		1,168	Girls: 29.2%	1,117	Girls: 33.9%
Percent of community members demonstrating knowledge of educational benefits ²¹	Mother Survey	2,338	88.5%	2,431	86.0%
Percent of households Reporting out-of-school children	Caregiver Survey	1,963	34.1%	2,077	30.5%

Source: IMPAQ's Instrument; author's calculations.

5.1.1 School Outcomes

We examined the principal survey, student survey, and parent survey, as well as school-level observations, to describe the schools in our sample and compare midline outcomes with baseline when possible on school engagement and environment. However, because of the small sample of principals, the results presented from the principal survey are merely descriptive; no statistical analysis (t-test of difference in means) can be conducted.²² This section focuses on four key areas.

- School infrastructure
- School canteens
- School environment
- Scoreboards and colored report cards

School infrastructure

School infrastructure was good overall when it came to the quality of the canteens and food storage areas, as assessed by the survey team's observation checklist in Exhibits 33 and 34. However, handwashing infrastructure remained insufficient, particularly in Mopti, where only 69 percent of sampled schools had a handwashing station available, with the remainder having access to either barrels filled with water or

²¹ Of girls' education specifically. Knowledge of educational benefits was measured by the ability of respondents to identify at least two benefits.

²² There were also some questions that were added only at midline, so they were not comparable to baseline.

boreholes. Among these fewer washing stations, only 64 percent were functional; the rest were non-functional because of lack of water or disuse. In Koulikoro, 87 percent of schools had a handwashing station available and 85 percent of those stations were functional. Lack of soap at the few available handwashing stations was also a problem, with only 62 percent of washing stations in Koulikoro and 45 percent in Mopti having soap available. As mentioned in Section 1, WASH component was the focus of MGD II, thus no WASH related activities were implemented in MGD III. The data suggest that the effect of WASH component from the second phase probably was not sustainable.

The principal survey complemented the observation checklist with information on the availability of latrines and water. Between baseline and midline, the proportion of schools with access to water increased by 9 percentage points in Mopti but decreased by 7 percentage points in Koulikoro, as collaborated by the observation checklist, which noted that many handwashing stations or latrines in Koulikoro schools were inoperable because of a lack of water. In terms of latrines, the percentage of schools with latrines and the percentage of schools with gender-separated latrines remained roughly the same which was expected as MGD III does not focus on WASH structures. In Mopti, these percentages increased to reach 100 percent of schools with latrines in Mopti and 94 percent with gender-separated latrines. However, there remains an issue with latrines being far from the classrooms, as the survey team reported that first and second grade students in one Mopti school relieved themselves in the bushes. Other students in Koulikoro refused to use the latrines because they were badly maintained and emitted strong odors.

Exhibit 33: Frequency of Schools with Key Infrastructures and Resources

Key Infrastructures and Materials	Koulikoro		Mopti	
	Baseline	Midline	Baseline	Midline
Water				
Schools with access to water	77%	64%	79%	88%
Schools with access to water <u>in the school compound</u>	73%	57%	79%	88%
Latrines				
Schools with latrines	93%	93%	89%	100%
Schools with separate latrines for boys and girls	67%	68%	68%	94%
Total number of observations	30	28	19	16

Source: Principal survey; authors' calculations. Comparison between assets present at baseline and midline is not included here because of small sample sizes.

School canteens

As mentioned in Section 4.1, although school infrastructure was generally good, canteen handwashing remained a major challenge to address. Based on data collected from our observation checklist, roughly 65 percent of schools in both Mopti and Koulikoro had a handwashing station in the school kitchen, and a smaller proportion of those available handwashing stations had soap available (50 percent in Mopti and 60 percent in Koulikoro). Kitchen equipment, utensils, or glasses were not identified as a problem in almost all schools, aside from one case in which the kitchen was outside the school with no school canteen. Protecting meals against flies was still a challenge, as 67 percent of schools in Koulikoro failed to protect meals from flies, compared to 88 percent in Mopti.

School principals were also asked about the school infrastructure available for their canteen. Schools in Mopti were better equipped in basic canteen infrastructure, with 100 percent of principals reporting that their schools had food storage with pallets or an elevated surface for storing food and a school kitchen. In Koulikoro, 93 percent of schools had a food storage site, 90 percent had kitchens, and 96 percent reported having their food stored on pallets or an elevated surface. These self-reported data from principals are consistent with the school observations that reported in Section 4.1.

Encouragingly, both regions saw large increases in the proportion of principals stating that their schools had sufficient reading materials, increasing from 13 percent to 44 percent in Koulikoro and from 11 percent to 38 percent in Mopti between baseline and midline.

Exhibit 34: Frequency of Schools with Key Infrastructures and Resources

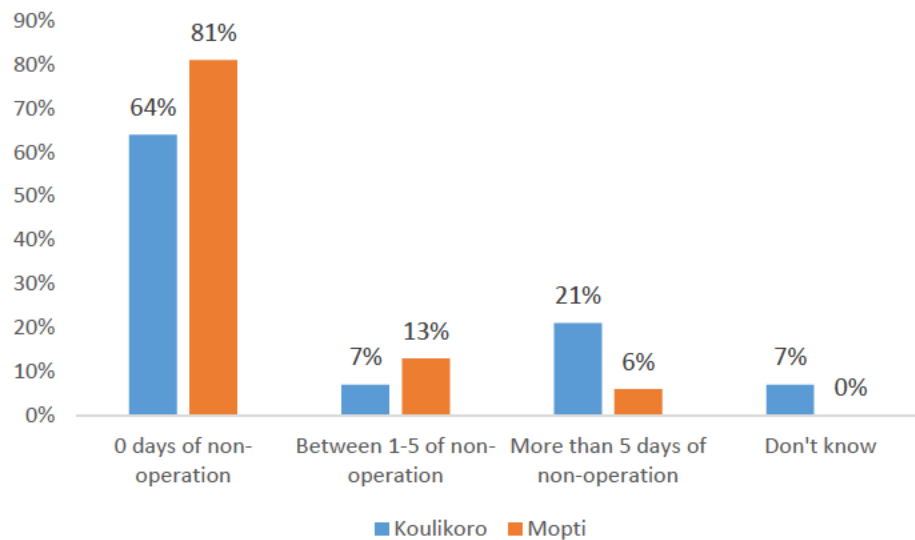
Key Infrastructures and Materials	Koulikoro		Mopti	
	Baseline	Midline	Baseline	Midline
Schools with food storage	90%	93%*	100%	100%
School with pallets or elevated food storage	97%	96%	95%	100%
Schools with kitchens	90%	89%	95%	100%
Sufficient reading materials	13%	44%	11%	38%
Total number of observations	30	28	19	16

*Source: Principal survey; authors' calculations *The discrepancy between the principal-reported presence of a food storage site and the survey team observation checklist can be explained by the wider definition of a food storage site used by our team (such as off-site or dual purpose storage site, such as a principal's office).*

We asked school principals about their opinion on the school canteen as part of the teacher/director survey. In regard to the management committees' participation in canteen operations, almost all principals were satisfied (100 percent in Koulikoro and 94 percent in Mopti). Many principals also reported that the canteen activity should continue in their school after the end of the project, with 86 percent in Koulikoro and 75 percent in Mopti agreeing. Overall, most of these principals believed that parents should take charge of the canteen after the end of the project (56 percent in Mopti, and 46 percent in Koulikoro), followed by the mayor's office (14 percent in Koulikoro and 6 percent in Mopti) or another entity (32 percent in Koulikoro and 25 percent in Mopti).

Principals were also asked how many days their school's canteen was non-operational in March 2018, immediately prior to the survey to keep the recall period easier. Principals in Mopti reported fewer number of days of non-operation: 81 percent of school principals in Mopti reported that their canteen had never been non-operational in March, compared to 64 percent in Koulikoro (Exhibit 35). As shown in Exhibit 35, 21 percent of principals in Koulikoro and 6 percent in Mopti reported that the canteen was not operated for a week. In Koulikoro, principals mentioned holidays and lack of monthly contributions or water as the main reasons for non-operational canteens.

Exhibit 35: Number of Non-Operational Days at the Canteen in March 2018



Source: Principal survey; authors' calculations. N=28 in Koulikoro and N=16 in Mopti

School environment

To measure the schools' environment, we looked at how students felt about their teachers, their classrooms, and their schools. The characteristics of students' school environments are important because they can shed light on students' outcomes, such as student attendance or student performance. At midline, we reworded the question to allow for more varied expressions of likes or dislikes related to the class or school overall. As shown in Exhibit 74 and 75 in Appendix C, very few students reported that they do not like anything about their class/school. Students' responses in Mopti and Koulikoro were more or less consistent, but not necessarily in the same order. The most frequent reason for children liking their class or school in Koulikoro was learning useful skills and knowledge (45.8 percent), followed by the lessons being easy to understand (37.3 percent) and food being provided (37 percent). In Mopti, the three most frequent reasons were the food being provided (52.5 percent), the lessons being easy to understand (35.2 percent) and participating in activities and class games (34.4 percent). On the other hand, almost half of the students in Koulikoro (48 percent) and 22 percent in Mopti mentioned their teachers' bad behavior (e.g., hits, yells, harasses, and/or under-estimates children) as what they do not like about their school and classroom. (See Exhibit 74 and 75 in Appendix C for more detail.) As also recommended at baseline, the project should not only focus strengthening teachers' pedagogical practices, but also on improving teachers' attitudes and the school environment.

Scoreboards and colored report cards

We asked caregivers about scoreboards and report cards at their children's school at both baseline and midline. At midline, as shown in Exhibit 36, there were statistically significant increases in both regions of more than 40 percentage points in parent awareness about the school notice boards and of more than 70 percent in receipt of colored report cards (both with $p < 0.01$). Almost all parents who knew that the school notice board existed and those who received colored report cards thought they were useful, similar to baseline. Caregivers found that the colored bullet report cards were useful for giving information about students' school attendance (68 percent). Findings from interviews also suggest that illiterate parents were enthusiastic about the notice board and colored report cards, as it is an easy way to inform them of

their children's progress in school. One father said, "every parent wants his child to bring home a green-colored bulletin, and especially no red!"

Exhibit 36. Notice Board and Colored Report Cards

Region	Koulikoro					Mopti				
Indicator	Baseline		Midline		Difference in Means (p-value test)	Baseline		Midline		Difference in Means (p-value test)
	%	#	%	#		%	#	%	#	
Proportion of parents who were aware of notice board	4.1%	1,376	44.1%	996	40.0*** (0.0000)	3.1%	943	50.0%	538	46.9*** (0.0000)
Proportion of parents who received a colored report card	9.0%	1,404	79.6%	1,575	70.5*** (0.0000)	9.8%	968	86.9%	754	77.1*** (0.0000)

Source: Teacher survey; authors' calculations. # refers to the total number of observations, and % refers to the percentage of the indicator

5.1.2 Student Outcomes

This section presents student outcomes, collected from the student survey, in the following five areas at midline in comparison with baseline:

- Health
- Hygiene knowledge and practices
- Food security
- Attendance
- Students' reading assessments

Health

To capture information regarding students' health and effects on school attendance, we looked at whether students had fallen ill in the past two weeks, and, if so, whether they missed school because of their illness. At midline, as shown in Exhibit 37, a greater proportion of students in Koulikoro reported being sick in the past two weeks, and if so, missing schools because of their sickness, both with a 5 percentage point increase from baseline to midline, statistically significant at the 1 and 10 percent levels, respectively. On the other hand, in Mopti, fewer students (a 4 percentage point decrease, $p < 0.1$) reported being sick, but there was not a significant change from baseline to midline in reporting missing schools because of their sickness. As Exhibit 77 in Appendix C shows, similar to what students mentioned at baseline, fever and headaches were the most frequent illnesses that were cited by students with no regional differences. Out of those who mentioned they missed school because of their illness, the majority (almost 81 percent) missed between one and three days of school.

Exhibit 37: Sickness and Related Health Absences

Indicator	Koulikoro				Difference in Means (p-value test)	Mopti				Differenc e in Means (p-value test)
	Baseline		Midline			Baseline		Midline		
	%	#	%	#		%	#	%	#	
Proportion of children who had been sick during the past two weeks	27.4%	1,464	32.0%	1,697	4.5*** (0.0053)	29.2%	998	25.4%	807	-3.8* (0.0756)
Proportion of students who missed school because of sickness during the past two weeks	74.3%	401	79.5%	542	5.2* (0.0593)	71.7%	290	69.3%	205	-2.5 (0.5552)

Source: Student survey; authors' calculations. # refers to the total number of observations, and % refers to the percentage of the indicator

However, the CRS monitoring and evaluation (M&E) attendance data show minimal health-related absences (almost none) in either of the regions in 2017–2018 (Exhibit 38). It is noteworthy that the self-reported data in Exhibit 37 refer to two weeks before the school visit, whereas the M&E data show the average of absenteeism because of illness at the school level and cannot be tied to every surveyed student. Therefore, these results in Exhibit 38 should be interpreted with caution.

Exhibit 38: Average number of days missed per student because of student health issues (October 2017 to April 2018)

	Koulikoro	Mopti	Overall
Girls	0.147	0.032	0.107
Boys	0.207	0.071	0.160
Total	0.175	0.047	0.130

Source: CRS attendance data; authors' calculations. N (Koulikoro schools) = 30 and N (Mopti schools) = 16.

Hygiene Knowledge and Practices

To measure students' knowledge and practice of hygiene, we looked at students' handwashing practices and knowledge of prevention of intestinal worms.

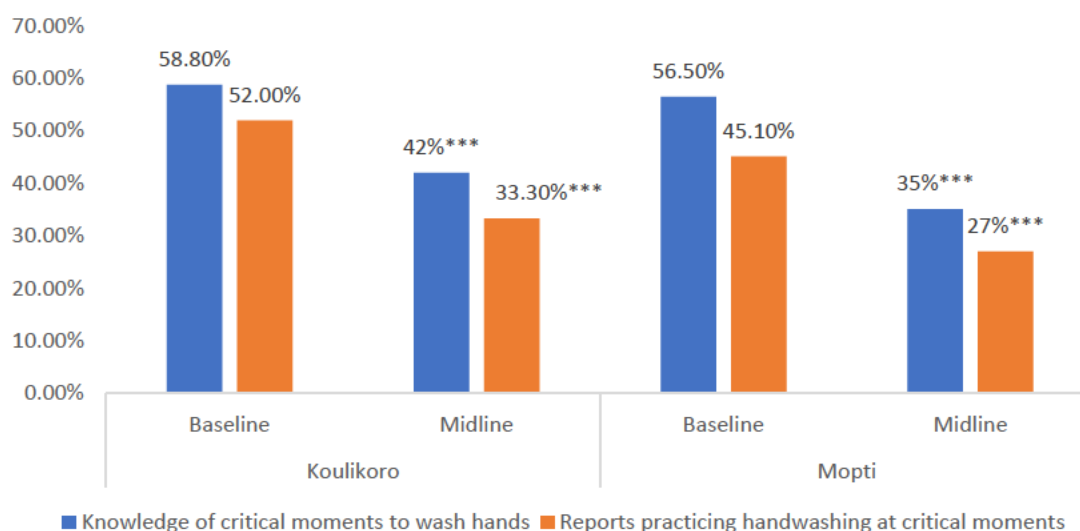
We asked children whether they washed their hands at critical moments, defined as before eating and after using the latrine. Then we compared these self-reported handwashing practices with students' knowledge of washing hands at the two critical moments. The orange bars in Exhibit 39 show that the proportion of students who reported they washed their hands at critical moments decreased significantly, by 18–19 percentage points from baseline (52 percent in Koulikoro and 45 percent in Mopti, statistically significant at the 1 percent level). Likewise, as shown by the blue bars of Exhibit 39, knowledge about handwashing practices dropped by 17–21 percentage points from baseline to midline in Koulikoro and Mopti, respectively ($p < 0.01$). In addition, the inconsistency shown in Exhibit 39 between children's knowledge and their actual practices suggests a possibility of over-reporting by students on their hygiene

practices. Moreover, the proportion of students who reported washing their hands with soap and water (not shown in the exhibit) also decreased by 7 and 9 percentage points from baseline in Koulikoro (90 percent) and Mopti (76 percent), respectively.

As explained in Section 4.1, we also triangulated these data with our observation checklist, and found similar numbers: on average, in schools with soap available at handwashing stations and where our team observed students using the latrines, 27 percent of students, on average, washed their hands with soap after using the latrines (29 percent in Koulikoro and 24 percent in Mopti).

It is important to note that WASH activities were only implemented in phase II of the project (2011-2015). The baseline data collection was conducted in May 2016 which could suggest that students might have still remembered what they learned from MGD II and reported accordingly in the survey. But at midline with having no WASH related activities and hygiene training in place, their knowledge might have diminished over time. In addition, these outcomes should also be interpreted with caution because of self-reported responses from young children. As well, the changes in outcomes can be attributable to external factors that are not necessarily associated with the project. For example, the significance in washing hands with soap and water may be explained by unavailability of soap and water in the schools.

Exhibit 39: Knowledge and Self-reported Handwashing Practices at Critical Moments



Source: Student survey; authors' calculations. Knowledge: Baseline: N=1457 in Koulikoro, N=998 in Mopti. Midline: N=1696 in Koulikoro, N=808 in Mopti. Practices: Baseline: N=1459 in Koulikoro, N=992 in Mopti. Midline: N=1685 in Koulikoro, N=806 in Mopti; * p-value < 0.1 ** p-value < 0.05 *** p-value < 0.01

We also defined a passing score for students who were able to mention at least two ways to prevent intestinal worms. Exhibit 40 shows that at midline the proportion of students who were able cite at least two ways for preventing intestinal worms has not changed in Mopti compared to baseline, whereas a smaller proportion of students (a decrease of 12 percentage points, statistically significant at the 1 percent level) could do so in Koulikoro.

Exhibit 40. Knowledge on Intestinal Worms

Indicator	Koulikoro					Mopti				
	Baseline		Midline		Difference in Means (p-value test)	Baseline		Midline		Difference in Means (p-value test)
	%	#	%	#		%	#	%	#	
Able to name at least two ways to prevent intestinal worms	37%	1,465	25.7%	1,699	-11.7*** (0.0000)	25.6%	999	24.4%	808	-1.2 (0.5442)

Source: Student survey; authors' calculations; * p-value < 0.1 ** p-value < 0.05 *** p-value < 0.01

Food Security

To measure food security among students, we looked at three critical dimensions: students' food intake, the diversity of students' diets, and students' minimum acceptable diet. To limit biases, we considered only the data from students who reported having a normal day²³ for the time period on which the questions were based. MGD III activities were not directly focused on diversifying children's diet and/or minimum acceptable diet beyond schools. However, as two of key project activities are school feeding and THR, looking at students' food security through those three dimensions can provide more information around 1.2.1 MGD outcome (reduced short-term hunger).

For food intake, we examined the frequency, location, and status of meals that students consumed on a daily basis. Specifically, we asked students whether they ate meals (breakfast, and lunch) and whether they felt full after consuming each meal. At midline, a significantly lower proportion of students ate breakfast²⁴ at home before going to school, especially in Mopti which has a decrease of 13 percentage points from 28 percent at baseline, as shown in Exhibit 81 in Appendix C. However, almost all students ate lunch (97 percent in Koulikoro and 98 percent in Mopti), similar to baseline. Of the children who reported that they ate breakfast and/or lunch, nearly all (97–99 percent) felt full after they consumed the meal, in both Koulikoro and Mopti. In focus groups with parents, many reported being happy with having food provided at school, because this addressed food insecurity and meant that they could devote less familial resources to food. This might explain the decrease in eating before coming to school, as parents are sure that their children would eat the school lunch, therefore breakfast is skipped. However, given the stigma attached to being hungry, students are likely over-reporting both the number of meals consumed per day and not feeling hungry.

For dietary diversity, in accordance with FAS guidelines, we defined dietary diversity as consuming four or more food groups out of the seven food groups in the previous 24 hours.²⁵ We first calculated the proportion of students who reached the threshold level of dietary diversity using student data and then recalculated students' dietary diversity using caregiver data to triangulate with self-reported responses from young children.

²³ A "normal" day is defined as a day without any special occasions such as a wedding or a market day before the survey.

²⁴ Measured as having breakfast or any snacks before going to school.

²⁵ The 7 food groups include 1) grains, roots, and tubers; 2) legumes and nuts; 3) dairy products (milk, yogurt, cheese); 4) flesh foods (meat, fish, poultry, and liver/organ meats); 5) eggs; 6) vitamin-A enriched foods, including vegetable oil, fruits, and vegetables; and 7) other fruits and vegetables.

As Exhibit 41 presents, the proportion of students who reached dietary diversity did not change drastically from baseline to midline. However, the responses were consistent between students and caregivers, with regional differences. In Koulikoro at midline, there was a significant increase (7 percentage points, $p < 0.01$) compared to baseline (28 percent), reported by students, consistent with a 3 percentage point increase reported by caregivers. In contrast, in Mopti, there was a 6 percentage point decrease compared to the proportion of caregivers at baseline (34 percent) who reported that their children reached dietary diversity. However, it was significant only at the 10 percent level, and there was no change in students' responses.

Exhibit 41: Students' Dietary Diversity

Indicator	Baseline		Midline		Difference in Means
	Percent	Observations	Percent	Observations	(<i>p</i> -value)
Koulikoro					
Students reached dietary diversity, reported by students	28.5%	1,333	36.0%	1,507	7.5%*** (0.0000)
Students reached dietary diversity, reported by caregivers	30.5%	1,314	33.9%	1,469	3.4%* (0.0568)
Mopti					
Students reached dietary diversity, reported by students	29.5%	912	30.5%	688	1.0% (0.6570)
Students reached dietary diversity, reported by caregivers	34.2%	896	28.5%	692	-5.7%** (0.0158)

Source: Student and caregiver survey; authors' calculations. * p -value < 0.1 ** p -value < 0.05 *** p -value < 0.01

We then used the minimum dietary diversity indicator to calculate the minimum acceptable diet among students using the following FAO-recommended formula:²⁶ *Minimum acceptable diet = Minimum dietary diversity + Minimum meal frequency.*²⁷ A child who meets the minimum feeding frequency and minimum dietary diversity for his or her age group is considered to have reached a minimum acceptable diet. Similar to our calculations for minimum dietary diversity, we calculated minimum acceptable diet by first using student data and then using caregiver data for purposes of comparison.

When we calculated the proportion of students who received a minimum acceptable diet, the data show no gender differences but did have regional differences. As shown in Exhibit 42, we found that 36 percent of students in Koulikoro received a minimum acceptable diet at midline, with the parent survey responses bringing us very close to those numbers (34 percent). Compared with baseline, these percentages significantly improved (an increase of 8 percentage points) at the 1 percent level from baseline, when only 28 percent of students received a minimum acceptable diet. In Mopti, however, there was little improvement between baseline and midline in the percentage of students who received a minimum acceptable diet. Whereas the proportion of boys with this diet grew by only 3 percent, the proportion of

²⁶ Food and Agriculture Organization. (2010). *Guidelines for Measuring Household and Individual Dietary Diversity*. Rome, Italy: United Nations.

²⁷ Minimum meal frequency is defined as three or more feedings of solid, semi-solid, or soft food per day.

girls with this diet grew by only 0.5 percent, neither of which was statistically significant, but there was a significant decrease from 34 to 28 percent according to caregivers' responses.

Exhibit 42. Minimum Acceptable Diet

Indicator	Baseline		Midline		Difference in Means (p-value)
	Percent	Observations	Percent	Observations	
Koulikoro					
Students received minimum acceptable diet	28.1%	1,335	35.7%	1,512	7.6%*** (0.0000)
Parents reported that students received a minimum acceptable diet	30.1%	1,315	33.6%	1,469	3.4%* (0.0515)
Mopti					
Students received minimum acceptable diet	29.4%	912	30.5%	689	1.1% (0.6363)
Parents reported that students received a minimum acceptable diet	33.8%	897	28.3%	692	-5.5%** (0.0202)

Source: Student and caregiver survey; authors' calculations; * p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

As Exhibits 41 and 42 present, in Koulikoro the increase in the proportion of students (reported by students or caregivers) who reached dietary diversity, as well as receiving a minimum acceptable diet, indicates improvements in students' food security—that is, receiving more frequent nutritious food—whereas the statistics for Mopti show the opposite. However, for Mopti the gap between these outcomes and hunger outcomes, discussed earlier, remained high compared with baseline. Since the data cannot show where students received the food (either at home or at the canteen), the data should be interpreted with caution.

Students' Enrollment and Attendance

As mentioned in Section 2.4.1, we also examined the student attendance data collected by CRS through its monitoring and evaluation. Among the 46 evaluation schools, the average number of students enrolled for the 2017–18 academic year was 452 in Koulikoro and 286 in Mopti, with more girls than boys (152 vs. 132) in Mopti and more boys than girls (235 vs. 213) in Koulikoro. As shown in Exhibit 78 in Appendix C, in terms of enrollment, Koulikoro had a total population of students enrolled for the 2017–18 academic year almost three times the size of Mopti's grade 1–4 student population (13,569 vs. 4,580). This difference is replicated for the 2016–2017 academic year. Both regions' enrolled student populations grew since the 2016–17 academic year. See also Exhibit 79 in Appendix C for the average number of students enrolled from 2016 to 2018 by region.

As Exhibit 43 also shows, a high proportion of students on average attended schools regularly, defined as attending more than 80% of school days, in the 2017–18 school year with no gender differences, however, regular student attendance seems to be lower in Mopti compared to Koulikoro.

Exhibit 43: Average Number (Percentage) of Students per School Regularly Attending in 2017–2018

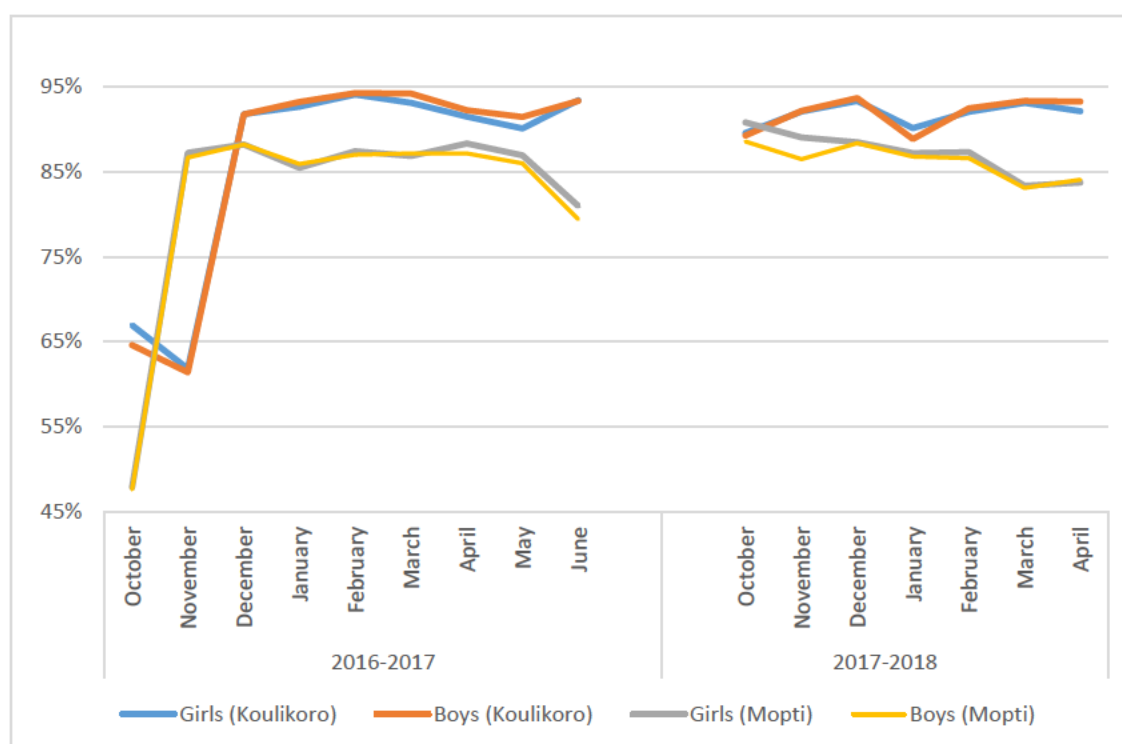
	Koulikoro	Mopti	Overall
Girls	217.6 (91%)	154.7 (87%)	195.7 (90%)
Boys	234.7 (92%)	131.6 (86%)	198.8 (90%)

	Koulikoro	Mopti	Overall
Total	452.3 (92%)	286.3 (87%)	394.5 (90%)

Source: CRS student attendance; authors' calculations.

Exhibit 44 shows disaggregates attendance trends from academic year 2016–17 to 2017–18, by month, region, and gender.²⁸ The data show that there were minor gender differences in students' attendance in both Koulikoro and Mopti over the two academic years. Students' attendance fluctuated more in 2016–17, especially at the beginning and at the end of the school year, whereas students attended more regularly in 2017–18. Exhibit 80 in Appendix C shows the overall students' regular attendance by month over the two academic years (2016–18). The data show high attendance throughout the two academic years, except in October and November 2016–17. The lower attendance in October and November 2016–17 might be explained by security reasons or weather conditions in that year. Another potential explanation could be that schools were getting ready to start canteen operations so that there was no prepared food for students at school.

Exhibit 44: Average Percent of Students Regularly Attending (2016–2018) by Month and Region



Source: CRS student attendance; authors' calculations. For Koulikoro sampled schools, there were N=6,375 enrolled girls in 2016–2017 and N=6,529 in 2017–2018, and N=6,844 enrolled boys in 2016–2017 and N=7,040 in 2017–2018. In Mopti sampled schools, there were N=2,430 enrolled girls in 2016–2017 and N=2,475 in 2017–2018, and N=2,003 enrolled boys in 2016–2017 and N=2,105 in 2017–2018. "Regular attendance" is defined as attending more than 80% of half-days per month.

Students' Reading Assessment

We used the ASER Literacy assessment to measure students' grade-level reading competencies. We determined the thresholds for an acceptable reading level at each primary school grade according to the

²⁸ For year 2017–18, we received the attendance data only up to May of the school year.

Malian curriculum guidelines and the calibration workshop that IMPAQ and CRS held in May 2016. Exhibit 10 in Section 2.4.2 shows which grade level corresponds to which proficiency level (x-axis in Exhibit 45).

Exhibit 45 shows the distribution of the ASER Literacy results and the acceptable thresholds (represented by a vertical red line) by gender and grade level for midline. For example, level B in the ASER test is the minimum acceptable level at the end of Grade 1 which corresponds to a student's demonstrated ability to read simple sounds. The first panel shows 16 and 15 percent of girls and boys, respectively, were at the threshold level, while the remaining 84 and 85 percent of first grade girls and boys, respectively, were below.

Overall, as shown in the four panels below, at midline the majority of students are below the threshold for their grade level, indicating owing that they have limited basic reading skills.

Exhibit 45: Distribution of Reading Skills by Grade Level (Percentage of Students)



Source: Students' assessments; authors' calculations. Baseline N (boys=931, girls=1,056), midline N (boys=959, girls=1,031);

However, as shown in Exhibit 46, the proportion of students who demonstrated reading ability at grade level or above improved significantly in each grade, with minimal gender differences. A significantly larger proportion of students in first grade (13 and 9 percentage points for girls and boys, respectively) could read simple sounds; second grade (12 and 14 percentage points for girls and boys, respectively) could decode simple words; third grade (20 and 23 percentage points for girls and boys, respectively) could read

simple sentences, all statistically significant at the 1 percent level, with no big changes for girls and boys in fourth grade students. Exhibit 82 in Appendix C includes the reading proficiency of students by grade in each region. There were not notable regional differences except for second and third grade students, which more students in those grades in Koulikoro were able to read at the grade level, compared to Mopti.

These improvements may be explained by students who are coming from better socioeconomic backgrounds, as described in Section 4, compared to baseline, including higher educated households, better reading habits, and better access to basic services. However, the results are also consistent with the intuition behind the implementation of the teacher training. Third graders whose teachers received the BLA training for three years showed more improvements in their reading proficiency, compared with fourth graders whose teachers did not receive any trainings.

Exhibit 46: Reading Proficiency at Grade Level by Grade and Gender

Grade Level	Baseline		Midline		Difference in Means (p-value test)
	Percent	Observations	Percent	Observations	
Girls					
Grade 1	3.4%	263	16.2%	259	12.8*** (0.0000)
Grade 2	2.2%	267	14.0%	258	11.7*** (0.0000)
Grade 3	5.0%	281	25.4%	260	20.4*** (0.0000)
Grade 4	5.3%	245	4.3%	254	-1.0 (0.6115)
Boys					
Grade 1	5.9%	239	15.1%	238	9.3*** (0.0009)
Grade 2	2.7%	256	16.4%	238	13.7*** (0.0000)
Grade 3	4.4%	248	27.6%	243	23.1*** (0.0000)
Grade 4	4.2%	238	5.0%	240	0.8 (0.6778)

Source: Student survey and ASER; authors' calculations. Excludes schools that shifted from testing in French to testing in local languages during the intervention. Baseline N (boys=931, girls=1,056), midline N (boys=959, girls=1,031); *P-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

5.1.3 Parent Outcomes

As explained in detail in Section 2, we surveyed caregivers to analyze their outcomes in the following seven areas, as described below:

- Food security status
- Health and hygiene knowledge
- Involvement in preventive health activities for children
- Involvement in school activities

- Perception of the importance of education
- Bargaining power in the household
- SILC group activities

Using the caregivers' survey, we present three types of analyses in this section: (1) performance descriptive analysis between mothers/female caregivers of third and fourth graders at baseline and midline (subject matters 1–5); (2) comparative analysis between male and female caregivers (subject matters 5 and 6); and (3) descriptive analysis at midline for caregivers who are members of a SILC group (subject matter 7).

Food Security Status

Although the project's focus was not to address the households' food security, it is important to provide more information about children's food security at home. We used USDA's Household Food Security Survey Module²⁹ to measure food security in the households of the students in our sample. To calculate our food security measure, we asked students' caregivers six questions about the food consumed in their household in the past 12 months and whether they were able to afford the food they needed. The sum of a caregiver's affirmative responses to the six questions is the household's raw score. We linked the raw score to food security status as follows:

- Raw score 0–1—High food security
- Raw score 2–4—Low food security
- Raw score 5–6—Very low food security

As shown in Exhibit 47, between baseline and midline, the percentage of households in both Koulikoro and Mopti facing low food security significantly decreased (11 and 6 percentage points in Koulikoro and Mopti with $p < 0.01$ and $p < 0.05$, respectively). The percentage of families that were food secure increased, especially in Mopti with 10 percentage points increase compared to baseline. The changes were statistically significant in both regions. However, in Koulikoro, the percentage of households that faced very low food security increased by 7 percentage points ($p < 0.01$), whereas there was an insignificant 3 percentage points decrease in Mopti.

Exhibit 47: Food Security Status

Status	Koulikoro			Mopti		
	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
Food secure	42.4%	46.9%	4.5* (0.0714)	32.4%	42.1%	9.7*** (0.0028)
Low food security	38.1%	26.8%	-11.3*** (0.0000)	32.9%	26.4%	-6.4** (0.0374)
Very low food security	19.5%	26.2%	6.7*** (0.0017)	34.7%	31.4%	-3.3 (0.3027)
Total ^a	722	846	-	490	401	-

²⁹ Economic Research Service, USDA. (2012). U.S. Household Food Security Survey Module: Six-Item Short Form (Tech.). Washington, DC: USDA.

Source: Caregiver survey; authors' calculations. * P-value < 0.1, ** p-value < 0.05, *** p-value < 0.01; ^a Sample includes caregivers of all students in grades 1st and 2nd at baseline and 3rd and 4th at midline

Caregivers were also asked which household members reduced or cut meals during periods of food insecurity in the previous year (i.e., from April 2017 to April 2018). As shown in Exhibit 48, answers were roughly similar between baseline and midline in both regions. In Mopti, however, the percentage of caregivers who stated that women or men would reduce their meals decreased by 11 and 10 percentage points, respectively, whereas the percentage of caregivers who stated that both girls and boys would reduce their meals during times of food insecurity increased by 3.3 percentage points (all statistically significant at different levels).

These outcomes are consistent with food security results, where our Koulikoro sample showed an apparent accentuation of food security polarization between the high and low ends of the food security spectrum, whereas in Mopti, the shift was more toward higher food security. One potential explanation for reduced meals for only boys and girls in Mopti could be that caregivers now send their children to eat at school and cut their meals to save them for adults.

Exhibit 48: Household Members Experiencing Reduced/Cut Meals during Food Insecurity

Household Members	Koulikoro			Mopti		
	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
Everyone	15.1%	15.7%	0.6 (0.7592)	28.8%	23.2%	-5.6* (0.0587)
Women	17.2%	14.6%	-2.6 (0.1624)	22.6%	11.7%	-10.9** (0.0000)
Girls	1.5%	0.5%	-1.0** (0.0337)	1.4%	4.7%	3.3*** (0.0037)
Men	15.2%	13.9%	-1.4 (0.4478)	19.8%	9.7%	-10.0*** (0.0000)
Boys	1.0%	0.5%	-0.5 (0.2429)	1.6%	5.0%	3.3*** (0.0046)
Other	0.1%	0.6%	0.5 (0.1470)	0.4%	0.0%	0.4 (0.1988)

Source: Caregiver Survey; authors' calculations, Baseline: N=362 in Koulikoro, N=363 in Mopti. Midline: N=385 in Koulikoro, N=218 in Mopti. Totals are greater than the number of survey respondents because respondents were able to provide multiple response choices. Sample includes caregivers of all students in grades 1st and 2nd at baseline and 3rd and 4th at midline

* P-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

Health and Hygiene Knowledge

To measure caregivers' knowledge and practice of hygiene habits, we looked at caregivers' handwashing practices and knowledge at critical moments of prevention of intestinal worms. In both Koulikoro and Mopti, similar to students' handwashing practices, the knowledge and practice of handwashing at critical moments (i.e., washing hands before eating and after using the latrine) decreased from baseline to midline (Exhibit 49). While knowledge of ways of preventing intestinal worms decreased modestly (5 percentage points; $p < 0.5$) in Koulikoro, it increased by 17 percentage points in Mopti ($p < 0.1$).

Exhibit 49: Caregivers' Health and Hygiene Knowledge

Indicator	Baseline		Midline		Difference in Means (p-value test)
	Percent	Observations	Percent	Observations	
Koulikoro					
Handwashing knowledge at critical moments	84.0%	723	78.8%	848	-5.2*** (0.0088)
Self-reported handwashing practices at critical moments	78.2%	721	71.4%	846	-6.8*** (0.0020)
Proportion of caregivers used soap and water as opposed to just water	95.3%	722	93.4%	848	-1.9 (0.1668)
Able to cite at least two ways of preventing intestinal worms	64.6%	723	59.2%	848	-5.4** (0.0284)
Mopti					
Handwashing knowledge at critical moments	81.6%	490	73.8%	401	-7.8*** (0.0050)
Self-reported handwashing practices at critical moments	72.4%	489	65.8%	401	-6.6** (0.0346)
Proportion of caregivers used soap and water as opposed to just water	85.1%	490	76.6%	401	-8.5** (0.0117)
Able to cite at least two ways of preventing intestinal worms	39.6%	490	56.6%	401	17.0*** (0.0000)

Source: Caregiver survey; authors' calculations. Sample includes caregivers of all students in grades 1st and 2nd at baseline and 3rd and 4th at midline; * P-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

Involvement in Preventive Health Activities for Children

MGD III aims to facilitate the distribution of the mineral supplements (e.g., vitamin A, iron, and deworming medications). The project also supports raising parents' awareness about preventive health services by inviting local community health center staff in school during the distribution activities (twice a year) to provide the communities with the appropriate health information. Thus, we measured caregivers' involvement in preventive health activities for their children to see the type of preventive health activities in which parents ever participated. Exhibit 50 shows caregivers' involvement in preventive health activities. Caregivers in both regions had an almost equally high frequency of involvement in vaccinating their children, with no major changes. As the exhibit shows, the only activity that the caregivers in Koulikoro were more frequently involved in was vitamin A supplementation, but in Mopti their involvement significantly decreased in almost all the activities. Between the baseline and midline samples, in both regions, the major difference that occurred was a statistically significant decrease in the percentage of caregiver involvement in prenatal care, by 10 percentage points in Koulikoro and 21 percentage points in Mopti (p<0.01).

Exhibit 50: Caregivers' Involvement in Preventive Activities by Region

Preventive Activities	Koulikoro			Mopti		
	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
Vaccination	95.4%	93.8%	-1.6 (0.1554)	93.7%	95.5%	1.8 (0.2457)

Preventive Activities	Koulikoro			Mopti		
	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
Supplement (food) iron	51.6%	59.6%	8.0*** (0.0015)	46.5%	39.5%	-7.0** (0.0369)
Vitamin A supplementation	59.9%	64.4%	4.4* (0.0716)	64.5%	53.7%	-10.8*** (0.0011)
Growth check-up	53.8%	56.7%	2.9 (0.2536)	38.4%	31.0%	-7.4** (0.0219)
Prenatal care	69.5%	59.1%	-10.4*** (0.0000)	62.9%	41.6%	-21.3*** (0.0000)

Source: Caregiver Survey; authors' calculations, Baseline: N=2393 in Koulikoro, N=1518 in Mopti. Midline: N=2824 in Koulikoro, N=1048 in Mopti. Totals are greater than the number of survey respondents because respondents were able to provide multiple response choices. Sample includes caregivers of all students in grades 1st and 2nd at baseline and 3rd and 4th at midline; * P-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

If caregivers had not participated in any preventive care activities for their children, they were asked the reasons for doing so. The most frequent response across Mopti and Koulikoro was that healthcare activities were too expensive (48.4 and 51.9 percent), followed by healthcare activities not being available or being too far away. Between baseline and midline, there were few changes, although in Koulikoro a higher percentage of respondents stated that healthcare activities were not available or were too far away. There was also a significant increase in the percentage of respondents who stated that healthcare activities were not important (3.6 to 6.7 percent). These reasons were consistent with qualitative interviews with parents in which they reported that accessibility to health facilities was a challenge for them. Many parents reported that the remoteness or absence of health care facilities in their communities made it difficult to engage in any health-related activities that are not directly provided at school. These results are not a critique to the project as establishing health centers and structures were not part of MGD III focus. However, they can suggest that raising awareness of parents about preventive health services could have been more effective if the appropriate structures were in place.

Involvement in School Activities

To measure caregivers' involvement with their children's school and education, we looked at caregivers' participation in school meetings and involvement in school support projects and in their children's education.

As Exhibit 51 shows, more caregivers (18 percentage points higher) reported that they had supported school activities such as cleaning latrines in Koulikoro compared to baseline, statistically significant at the 1 percent level, whereas there was an insignificant minimal change in school participation of parents in Mopti. Exhibit 83 in Appendix C shows the distribution of support activities that caregivers provided to their children's school. Among these caregivers, in both regions at baseline, the most frequent activity cited was helping the school as a cook or storekeeper (56 percent in Koulikoro and 58 percent in Mopti). At midline, the most frequent activity was contributing money or food to the school canteen (70 percent in Koulikoro and 61 percent in Mopti).

Exhibit 51 also shows caregivers' involvement in educating their children. Across regions, caregivers' engagement remained as high as at baseline, when almost all of them (99 percent in both regions at midline) reported that they had supported their child's/student's education. The most frequent activity

mentioned in relation to educationally supporting their children, in both regions and at baseline and midline, was making sure he/she went to school (decreased from 88 to 84 percent in Koulikoro and increased from 91 to 93 percent in Mopti); see Exhibit 84 in Appendix C for more detail.

Exhibit 51: Caregivers' Involvement in School Activities

Engagement	Koulikoro			Mopti		
	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
Proportion of caregivers supported school activities such as latrine cleaning, etc.	46.5%	64.3%	17.7*** (0.0000)	63.1%	63.6%	0.5 (0.8705)
Proportion of caregivers engaged in the support of their children's school	98.8%	99.3%	0.5 (0.2774)	99.8%	98.8%	-1.0* (0.0584)

Source: Caregiver Survey; authors' calculations, Baseline: N=723 in Koulikoro, N=490 in Mopti. Midline: N=846 in Koulikoro, N=401 in Mopti. Sample includes caregivers of all students in grades 1st and 2nd at baseline and 3rd and 4th at midline; * P-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

Exhibit 52 shows number of general assemblies in which caregivers participated since the start of the last school year (October 2017). Between the baseline and midline samples, the percentage of caregivers who reported that they had not attended any general assembly since the start of the previous school year decreased by 29 and 11 percentage points in Koulikoro and Mopti, respectively, both statistically significant at the 1 percent level. Whereas at baseline, caregivers in Mopti were more likely to have attended a general assembly, at midline caregivers in Koulikoro were more likely to have done so. Those who attended between 1 and 3 general assemblies was more significant in both regions, a 27 and 14 percentage point increases ($p < 0.01$) in Koulikoro and Mopti, respectively, while few respondents reported attending more than three general assemblies in either region.

Exhibit 52: General Assemblies Attended by Parents since the Start of the Previous School Year

Number of assemblies	Koulikoro			Mopti		
	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
None	77.0%	48.1%	-28.9*** (0.0000)	70.6%	59.6%	-11.0*** (0.0006)
1 to 3 assemblies	17.6%	44.1%	26.5*** (0.0000)	19.8%	33.4%	13.6*** (0.0000)
More than 3 assemblies	1.2%	5.8%	4.5*** (0.0000)	4.5%	6.7%	2.2 (0.1442)

Source: Caregiver Survey; authors' calculations, Baseline: N=723 in Koulikoro, N=490 in Mopti. Midline: N=848 in Koulikoro, N=401 in Mopti. Sample includes caregivers of all students in grades 1st and 2nd at baseline and 3rd and 4th at midline.

* P-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

Perception of the Importance of Education

Between baseline and midline, in both regions, the percentage of caregivers who stated that they thought their child would be working a white-collar job when they are close to 20 years old (regardless if the child is a boy or girl) decreased, while the percentage of those choosing another "don't know" increased (Exhibit

53). However, in both regions, the vast majority of caregivers (between 93 and 99 percent) expected their child to reach the level of education necessary to work in the category of profession in which they believed their child would work.

**Exhibit 53: Caregivers' Aspirations for their Children by Children's Gender
(Baseline and Midline)**

Indicator	For Girls			For Boys			Overall		
	Baseline	Midline	Diff. in Means (p-value test)	Baseline	Midline	Diff. in Means (p-value test)	Baseline	Midline	Diff. in Means (p-value test)
Blue collar	26.6%	22.0%	-4.6* (0.0600)	20.7%	25.7%	5.0** (0.0396)	23.7%	23.9%	0.2 (0.8993)
White collar	69.8%	67.5%	-2.4 (0.3717)	75.9%	64.7%	-11.3*** (0.0000)	72.8%	66.1%	-6.7*** (0.0003)
Did not know the answer	3.6%	10.5%	7.0*** (0.0000)	3.3%	9.6%	6.3*** (0.0000)	3.5%	10.0%	6.5*** (0.0000)
Total	613	627	-	598	614		1,212	1,247	-

Source: Caregiver survey; authors' calculations; Sample includes caregivers of all students in grades 1st and 2nd at baseline and 3rd and 4th at midline. * P-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

We also compared female and male caregivers' responses at midline to analyze the differences in educational awareness within the household. As indicated in Exhibit 54, the results were slightly different between male and female caregivers' responses for their children, either in terms of education or career prospects, but the differences were not statistically significant at any level. Exhibit 54 also shows that female and male caregivers' aspirations for their children were similar whether the child was a boy or a girl.

**Exhibit 54: Caregivers' Aspirations for their Children by Children's gender
(Female and Male Caregivers)**

Indicator	For Girls			For Boys			Overall		
	Male	Female	Diff. in Means (p-value test)	Male	Female	Diff. in Means (p-value test)	Male	Female	Diff. in Means (p-value test)
Blue collar	19.9%	21.3%	1.4 (0.6866)	17.9%	22.4%	4.5 (0.1876)	18.9%	21.8%	2.9 (0.2240)
White collar	66.1%	68.1%	2.0 (0.6113)	67.9%	64.0%	-3.8 (0.3280)	67.0%	66.1%	-0.9 (0.7469)
Other/ don't know	13.9%	10.6%	3.3 (0.2147)	14.2%	13.6%	0.6 (0.8442)	14.1%	12.1%	2.0 (0.3101)
Total	236	376		240	353		476	729	

Source: Caregiver survey; authors' calculations; Sample includes female and male caregivers of all students in grades 1st and 2nd at midline. * P-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

In addition, the proportion of male caregivers (97 percent) that thought their children would achieve the level of education they hoped for were slightly higher than female caregivers (93 percent), with the difference being statistically significant at the 1 percent level. However, approximately the same proportion of female and male caregivers (63 percent) expected their children to achieve the tertiary level.

With regards to attitude towards girls' schooling, the proportion of caregivers at midline that reported that girls schooling is a good thing remained as large as baseline in both regions (96 percent). The results were also the same between male and female caregivers at midline with no regional differences.

However, male and female caregivers differed slightly in their responses for supporting girls' education. Men were more likely (6 percentage points, $p < .01$) to cite that going to school would help girls with physical and mental improvements (they would "blossom"), compared to women. Meanwhile, female caregivers were more likely (12 percentage points, $p < .01$) to report that girls' schooling would improve their professional possibilities in the future; See Exhibit 55 for more details.

Exhibit 55: Caregivers' Reasons for Supporting Girls' Education

Reasons	Male Caregivers		Female Caregivers		Difference in Means (p-value test)
	Percent	Observation	Percent	Observation	
Improve the standard of living of the whole family	86.0%	407	84.3%	611	-1.8 (0.4022)
Improve their health (the girls)	35.5%	168	29.7%	215	-5.9** (0.0334)
Improve the health of the children that they will have	36.8%	174	32.6%	236	-4.2 (0.1312)
The girls will also be able to blossom	59.6%	282	52.0%	377	-7.6*** (0.0095)
Allow girls to find a better job	40.0%	189	51.7%	375	11.8*** (0.0001)
Other	3.0%	14	3.4%	25	0.5 (0.6418)
Total Number of Observations		1,234		1,839	-

Source: Caregiver Survey; authors' calculations, Midline: N=2163 in Koulikoro, N=910 in Mopti. Total number of responses is larger than the number of respondents because respondents could select multiple choices. Sample includes female and male caregivers of all students in grades 1st and 2nd at midline. * P-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

Bargaining Power

At midline, we asked caregivers a number of questions related to decision making in the household with regards to their children's education, and then presented their responses by region. More specifically, we asked parents about the person in charge for making decisions on:

- Boys' and girls' school attendance
- Boys' and girls' school fees

Across both regions there were discrepancies between mothers³⁰ and fathers³¹ responses in reporting the person in charge; however, consistently both did not mention their child or someone else in their household as having the final say in schooling of their children.

In Koulikoro, whereas 86 percent of fathers said they made the decisions on whether to send their girl or boy to school, roughly 69 percent of mothers said the same. Mothers were more likely to say that they made these decisions alone (roughly 10 percent) or with their spouse (roughly 16 percent), compared to fathers, among whom only 1.7 percent said mothers make these decisions and roughly 9 percent said they made them together. Roughly the same gender differences existed when caregivers were asked who in the household had the final say on their child's school fees. There were no significant differences in responses based on whether the child was a boy or a girl (Exhibit 56).

Exhibit 56: School Decision-Making Matrix in Koulikoro

Caregiver	Male	Female	Male	Female	Male	Female	Male	Female
Questions Responses	Deciding for boys' school attendance		Deciding for girls' school attendance		Final say in the boys' school fees		Final say in the girls' school fees	
Mother	1.7%	10.0%	1.7%	10.4%	1.9%	9.1%	2.0%	9.8%
Father	86.4%	69.9%	86.4%	68.8%	86.4%	66.7%	84.1%	65.2%
Both parents together	9.3%	15.8%	9.1%	16.5%	9.1%	20.0%	11.1%	21.0%
The child	0.2%	0.0%	0.4%	0.0	0.2%	0.0%	0.0%	0.0%
Someone else	2.5%	4.2%	2.5%	4.5%	2.5%	4.0%	2.7%	3.7%
Did not know the Answer	0.2%	0.3%	0.0%	0.2%	0.0%	0.2%	0.0%	0.3%
Total	485	1184	485	1184	485	1184	485	1184

Source: Caregiver Survey; authors' calculations.

As shown in Exhibit 57, in Mopti, a higher proportion of male and female caregivers reported that both parents made the decision on their child's attendance, as well as the final say on their school fee payment, compared to Koulikoro. Nevertheless, as in Koulikoro, most respondents, and especially fathers, said that the father of the household would be in charge for those decisions. Also, in Mopti, there was more variation in caregivers' responses based on the gender of the child, compared to Koulikoro. These findings highlight men's role in decision-making on children's educational attainment. This information should be considered in any related activities towards changing the communities' attitudes of children's schooling.

Exhibit 57: School Decision-Making Matrix in Mopti

Caregiver	Male	Female	Male	Female	Male	Female	Male	Female
Questions Responses	Deciding for boys' school attendance		Deciding for girls' school attendance		Final say in the boys' school fees		Final say in the girls' school fees	
Mother	1.0%	7.8%	0.6%	8.3%	0.0%	7.4%	0.0%	7.8%
Father	81.7%	68.5%	80.5%	67.4%	80.5%	63.6%	79.5%	62.2%
Both parents together	12.8%	19.7%	14.7%	20.5%	15.4%	24.7%	15.7%	26.0%

³⁰ Mothers in this sub-section refer to mothers and/or female caregivers, for simplicity.

³¹ Fathers in this sub-section refer to fathers and/or male caregivers, for simplicity.

Caregiver	Male	Female	Male	Female	Male	Female	Male	Female
Questions	Deciding for boys' school attendance		Deciding for girls' school attendance		Final say in the boys' school fees		Final say in the girls' school fees	
Responses								
The child	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Someone else	3.5%	3.0%	3.2%	3.0%	2.6%	2.8%	2.6%	3.0%
Did not know the answer	1.0%	0.9%	1.0%	0.9%	1.6%	1.5%	2.2%	1.0%
Total	312	473	312	473	312	473	312	473

Source: Caregiver Survey; authors' calculations.

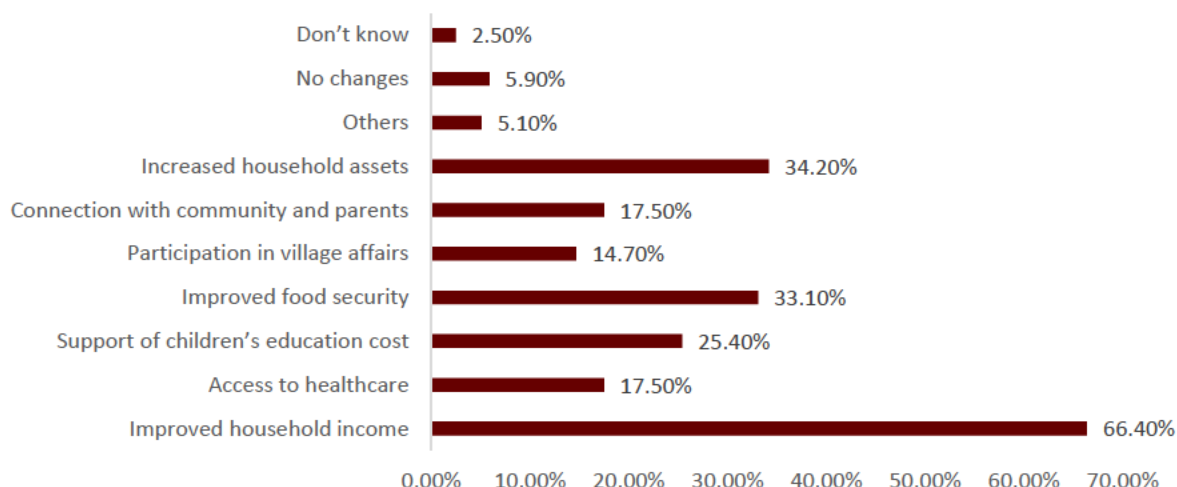
SILC Group Activities

At midline, caregivers were also asked about their involvement in saving and internal lending community (SILC) group activities and how participation in SILCs has changed their livelihood and children's education. In Koulikoro, 25 percent of caregivers (1,673) or a member of their household were SILC members. In Mopti, this number was higher, at 32 percent (of 792 total number of caregivers). Also, as expected, the majority of SILC members were women (71 percent).

SILC members or associated caregivers were also asked whether their household's financial revenue grew with their participation in a SILC group, and if so to what degree. The majority of SILC members said that the SILC grew their financial revenue: 66 percent in Koulikoro and 79 percent in Mopti. However, the highest percentage of respondents in both regions mentioned that their participation only increased their financial revenue a little (32 percent in Koulikoro and 45 percent in Mopti). Overall, almost all members in both Koulikoro and Mopti (93 percent) said they would still continue their participation in the group.

Exhibit 58 shows the reported changes in households' livelihood resulting from participation in SILC group. Of the SILC members or associated caregivers, the most frequent change reported in both regions was improvement in their household's income (66 percent in Koulikoro and 79 percent in Mopti), followed by increases in their household assets, improvement in their food security, and better support for children's education costs.

Exhibit 58: Changes in Households' Livelihood due to Participation in SILC



Source: Caregiver Survey; authors' calculations, Midline: N=787 in Koulikoro, N=544 in Mopti. Total number of responses is larger than the number of respondents because respondents could select multiple choices.

With regard to students' education, respondents also frequently said that SILC membership contributed to their children's education, with 40 percent in Koulikoro and 57 percent in Mopti saying it allowed them to save money for school fees; 33 percent in Koulikoro and 49 percent in Mopti saying it encouraged them to send their children to school; and 43 percent in Koulikoro and 32 percent in Mopti saying it helped them contribute to the school canteen. Only 9 percent in Koulikoro and 10 percent in Mopti of SILC members or associated caregivers said SILC membership did not contribute to the education of their children.

5.1.4 Teacher Outcomes

From the teacher survey, we compared baseline and midline outcomes for teachers, including principals who taught in grades 1–4, by grade in the following four areas:

- Pre-service and in-service trainings
- Balanced literacy approach (BLA)
- Pedagogical support and oversight
- Health and hygiene knowledge

Pre-Service and In-Service Trainings Received

We examined the percentage of teachers who were formally trained to teach and the type of trainings they received beyond the BLA training. At baseline, about 83 percent of teachers in Koulikoro and 87 percent in Mopti reported having been formally trained to teach. At midline, these percentages increased in both regions, to 86 percent in Koulikoro and 91 percent in Mopti.

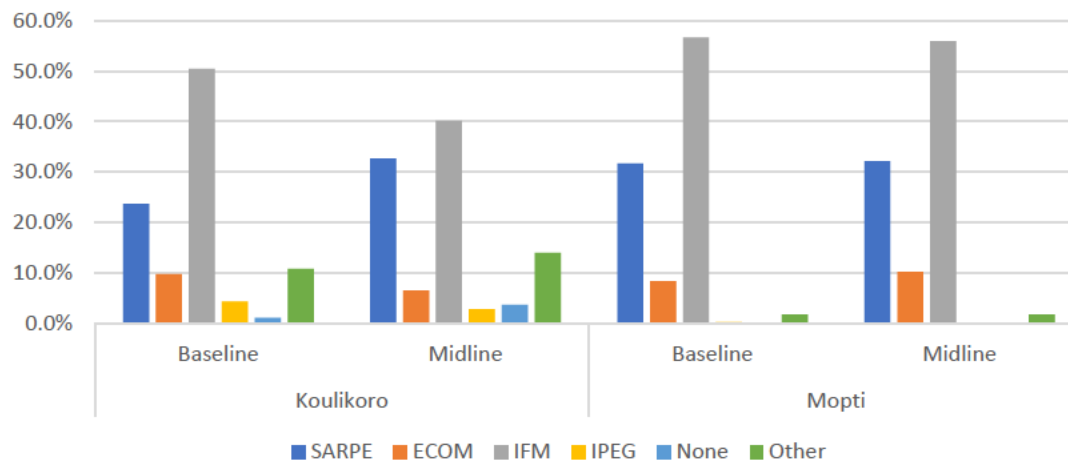
As Exhibit 59 shows, there were no significant changes between teachers at baseline and midline in the formal training that they received. However, at midline, the majority had been recruited and trained through IFM³² (Institut de Formation des Maîtres) and SARPE (Strategy Alternative de Recrutement du Personnel Enseignant).³³ The remainder were recruited and trained through ECOM (Ecole Communautaire)³⁴ and other options. Overall, a higher percentage of teachers in the Mopti sample were trained through IFM and ECOM than in Koulikoro.

³² IFM is a teacher training school. All schools have a 4-year program for Grade 9 graduates and 2-year training program for Grade 12 graduates. The training program includes psychology, pedagogy, and subject matters such as science, mathematics, and languages.

³³ SARPE is “a fast-track training route which involves taking slightly older students—again, with a minimum qualification of the DEF (although many will have received some further education)—and training them over what was 15 days and is now six months. SARPE is organized and taught by the local education authorities, with school advisors taking a prominent role in the training.” (“Mali: Teacher Preparation and Continuing Professional Development in Africa (TPA)”). Center for International Education (CIE). (2016). Mali: Teacher Preparation and Continuing Professional Development in Africa (TPA). Brighton, England: University of Sussex. <http://www.sussex.ac.uk/cie/projects/completed/tpa/mali>.

³⁴ ECOM is a 45-day training program for community school teachers. Those teachers are hired and paid by communities but go through this government-supported training program. The program also includes psychology, pedagogy, and other subject matters.

Exhibit 59: Different Types of Pre-Service Trainings



Source: Teacher survey; authors' calculations. N=107 in Koulikoro, and N=59 in Mopti.

In addition, the proportion of teachers who had received in-service trainings (non-BLA trainings) in literacy and pedagogy³⁵ since the beginning of the school year remained as low as at baseline, with no significant changes (Exhibit 60). However, there was an insignificant increase across both regions, especially in Mopti, between the baseline and midline samples.

Exhibit 60: Teachers Who Received In-Service (non-BLA) Trainings in Literacy and Pedagogy

Region	Koulikoro			Mopti		
Trainings	Baseline	Midline	Difference in Means (p-value test)	Baseline	Midline	Difference in Means (p-value test)
Literacy training (since beginning of school year)	26.8%	30.9%	4.1 (0.4900)	18.8%	23.1%	4.2% (0.5501)
Pedagogical training (since beginning of school year)	23.2%	22.6%	-0.6% (0.9084)	14.5%	24.6%	10.1% (0.1407)
Total	112	69	-	124	65	-

Source: Principal survey; authors' calculations.

Balanced Literacy Approach (BLA)

In our survey, teachers were asked whether they received the BLA and how frequently, if they used the BLA in their class, and what BLA techniques were favored by them and their students. As shown in Exhibit 61, between baseline and midline, the percentage of teachers who received training in the BLA grew to 100 percent for teachers in grades 1–3 in Koulikoro and to more than 93 percent in Mopti. Grade 4 teachers were not supposed to receive any training in BLA based on the program implementation. As expected, a much smaller percentage of grade 4 teachers reported receiving this training. The counterintuitive results for grade 4 teachers may be explained by those who taught more than one grade, or by teachers' confusion. Of teachers who received training, 56 percent of teachers were trained two or three times in the BLA, with 62 percent in Koulikoro and 44 percent in Mopti. Teachers in Mopti more

³⁵ This is referring to any literacy training, excluding BLA training.

frequently reported that they received BLA training more than four times (32 percent) compared to those in Koulikoro (15 percent), not shown in the exhibit.

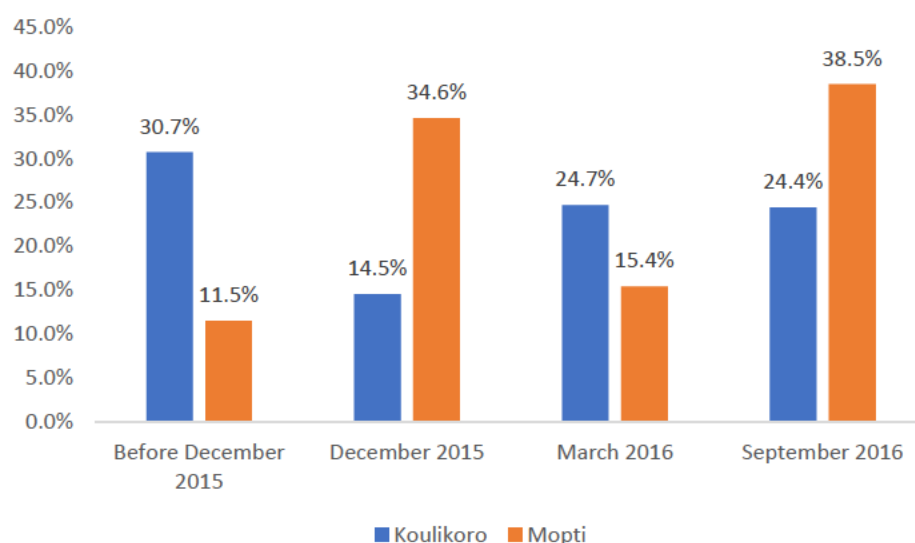
Exhibit 61: Proportion of Teachers Trained in BLA by Grade and Region

Grade	Baseline				Midline			
	Koulikoro		Mopti		Koulikoro		Mopti	
	Percent	Observation	Percent	Observation	Percent	Observation	Percent	Observation
Grade 1	96.7%	30	77.8%	18	100%	29	100%	16
Grade 2	30.8%	26	35.3%	17	100%	30	93.3%	15
Grade 3	57.1%	28	18.8%	16	100%	32	94.1%	17
Grade 4	32.1%	28	16.7%	18	24.2%	33	23.5%	17
Total		112		69		124		65

Source: Teacher survey; authors' calculations.

Approximately half of the teachers in both Mopti and Koulikoro reported that they received their BLA training in December 2015 and earlier (Exhibit 62). We also noticed these high percentages at baseline, reported by teachers who were not supposed to receive any training because of the project's implementation timeline (i.e., spring of 2016). The training these teachers received (in December 2015 and before), reported consistently at both baseline and midline, is likely different from the BLA training, so this finding should not undermine the validity of our evaluation.

Exhibit 62: Timing of Training in BLA



Source: Teacher survey; authors' calculations. N= 26 for Mopti and N=62 for Koulikoro.

At baseline, few teachers were trained in all eight techniques (9 percent of grade 1 and 18 percent of grade 2–4 teachers). On average, teachers received training in four techniques, with no significant differences across region and grade. At midline, 34 percent of grade 1 teachers in Koulikoro and 12 percent in Mopti had been trained in all eight BLA techniques. However, as shown in Exhibit 85 in Appendix C, for the remaining grades, a higher percentage of teachers in Mopti were trained in all eight

BLA techniques: only 10 percent of grade 2 teachers in Koulikoro were trained in all eight BLA techniques, whereas 27 percent of grade 2 teachers in Mopti were trained in all these techniques. For grade 3 teachers, the proportion was 25 percent in Koulikoro and 47 in Mopti; and for grade 4 teachers it was 3 percent in Koulikoro versus 12 percent in Mopti. Exhibits 86 through 89 show the distribution of different techniques that teachers received from baseline to midline, by grade and region.

In addition, the average number of techniques used in class among teachers trained in BLA varied across grades and regions. See Exhibit 90 in Appendix C for more detail. Overall, teachers, on average, used techniques more frequently, especially news in class, guided reading, and language mechanism games, in both regions and all grades between baseline and midline. In addition, similar to baseline, almost all (99 percent) trained teachers reported using the BLA materials in their class. In Mopti, all surveyed grade 2–4 teachers said they used the materials often, with 94 percent of grade 1 teachers using them often. In Koulikoro, responses were more mixed, with more than 92 percent of grade 2 and 3 teachers, 79 percent of grade 1 teachers, and 50 percent of CE2 teachers using it often.

Exhibit 63 shows the proportions of teachers who reported using at least one type of BLA technique in their class by grade and region. All surveyed grade 1 teachers in both Koulikoro and Mopti reported using at least one technique. The vast majority of grade 1 and 3 teachers reported implementing the techniques in their classroom: 93 and 97 percent, respectively, in Koulikoro and 80 and 88.2 percent, respectively, in Mopti. Grade 4 teachers were not meant to receive the BLA training, which explains the low number of observations for BLA-trained grade 4 teachers and the lower percentage who used these techniques. This exhibit shows that from baseline to midline, teachers started using the techniques that they received through the program, especially in grades 2 and 3 which is consistent with the program implementation for teachers in grades 1-3. Exhibits 91 through 94 in Appendix C show the distribution of teachers using different techniques from baseline to midline, by grade and region.

Exhibit 63: Proportion of Teachers Using Any of the BLA Techniques

Grade	Baseline				Midline			
	Koulikoro		Mopti		Koulikoro		Mopti	
	Percent	Observation	Percent	Observation	Percent	Observation	Percent	Observation
Grade 1	96.7%	30	88.9%	18	100%	29	100%	16
Grade 2	46.2%	26	29.4%	17	93.3%	30	80.0%	14
Grade 3	35.7%	28	37.5%	16	96.9%	32	88.2%	16
Grade 4	10.7%	28	16.7%	18	50.0%	8	50%	4
Total	112		69		99		50	

Source: Teacher survey; authors' calculations.

When probed about which BLA techniques students appreciated most, responses were varied by teacher's grade and by region (Exhibit 95 in the Appendix C). Across both regions, teachers in all grades most often cited class news, interactive radio (IR), language games, and guided reading as the most appreciated techniques in their class. Older students (grades 2-3) seemed to appreciate class news more in both regions at midline. Between baseline and midline samples in Koulikoro, a higher proportion of teachers thought class news and IR were appreciated in their class, whereas the percentage who said that this was the case for invented writing decreased. Teachers in Mopti reported that almost all techniques were appreciated in their class more at midline compared to baseline.

Teachers were also asked how frequently they used BLA kits³⁶ in their class during the last month.³⁷ Among those who used BLA equipment in their class, most teachers used it often. As shown in Exhibit 64, in Mopti, all grades 2-4 surveyed teachers said they used the equipment often, with 94 percent of first grade teachers using it often. In Koulikoro, responses were varied, with more than 92 percent of second and third grade teachers, 79 percent of first grade teachers, and 50 percent of fourth grade teachers using it often.

Exhibit 64: Teacher Use of BLA Equipment during Previous Month at Midline

Frequency	Koulikoro				Mopti				Overall			
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 1	Grade 2	Grade 3	Grade 4	Grade 1	Grade 2	Grade 3	Grade 4
Never	0%	0%	0%	0%	6.3%	0%	0%	0%	2.2%	0%	0%	0%
Rarely	0%	0%	0%	25.0%	0%	0%	0%	0%	0%	0%	0%	16.7%
Sometimes	20.7%	7.4%	3.2%	25.0%	0%	0%	0%	0%	13.3%	4.9%	2.1%	16.7%
Often	79.3%	92.6%	96.8%	50.0%	93.8%	100%	100%	100%	84.4%	95.1%	97.9%	66.7%
Total	29	27	31	4	16	14	16	2	45	41	47	6

Source: Teacher and Principal survey; authors' calculations

Pedagogical Support and Oversight

To measure the extent to which teachers were supported and supervised at school, we looked at how often principals observed teachers' reading-writing classes over a period of a month, and the other types of support that teachers received from principals.

Between baseline and midline, there was a roughly 10 percentage point increase in the proportion of teachers who stated that their principal observed them 1 or 2 days out of an ordinary week. However, the percentage of teachers who said their principal observed them every day in an ordinary week decreased by 7.4 percentage points in Koulikoro and by 11.6 percentage points all the way to 0 percent in Mopti (statistically significant). At midline, nearly 60 percent of teachers surveyed in Koulikoro and 65.5 percent of teachers in Mopti said their principal observed them twice a week. Fewer teachers (12 percent in Koulikoro and 21 percent in Mopti) said that the principals never observed their class during a week.³⁸

As principals were more likely to observe teachers during a month owing to their other responsibilities, at midline we asked teachers how often they were observed and by whom during a reading-writing lesson over the course of an ordinary month. Most teachers said they were observed more than twice per month by principals (59 percent in Koulikoro and 47 percent in Mopti). Meanwhile, 10 percent of teachers in Koulikoro and 12 percent in Mopti said that their principal never observed them over the course of an ordinary month.³⁹ The majority of teachers (90 percent in Koulikoro and 86 percent in Mopti) also said other individuals observed them during reading-writing lessons, particularly a teaching advisor or regional supervisor. In Koulikoro, 56 percent and 52 percent said that a teaching advisor or the regional supervisor, respectively, had also observed them. In Mopti, teachers more frequently (72 percent) said that a teaching

³⁶ The kits include audio programs on USB keys, MP3 players, teacher guides, posters, videos of experienced teachers implementing Balanced Literacy strategies on mobile devices via Stepping Stone, leveled texts for students, and flash cards.

³⁷ This question was not relevant at baseline

³⁸ Source: teacher survey, authors' calculations.

³⁹ Source: teacher survey, authors' calculations.

advisor had observed them during the lesson, with 54 percent saying that the regional supervisor had done so.

The vast majority of surveyed teachers also received other types of support from their principal at midline. Most frequently, this was encouragement (63–64 percent overall) or teaching advice (77–85 percent overall). These outcomes were more or less the same compared with baseline, with no significant changes. These results suggest that the project activities on training school administrators for supporting teachers in their classrooms are being implemented as planned.

Health and Hygiene Knowledge

To measure teachers' knowledge and practice of hygiene, we asked them about handwashing practices and intestinal worm prevention. Just as we did for caregivers and students, we first calculated the rate at which teachers identified at least the two critical moments (washing hands before eating and after using the latrines) and compared it to the rate at which teachers reported washing their hands for those two specific moments.

In general, there were no regional differences among teachers when it came to handwashing and from baseline to midline, with 91–95 percent saying that people should wash their hands for the two moments considered critical and roughly 85 percent saying they actually washed their hands in those moments. On average, almost every person reported using soap when they washed their hands. The majority of teachers were able to cite at least two ways of preventing intestinal worms: 81 percent of teachers in Koulikoro were able to do so (significantly higher than at baseline), whereas only 68 percent were able to do the same in Mopti.

5.1.5 School Principal Outcomes

This section presents baseline outcomes for all principals (N=44) in the following areas:

- Pedagogical advisors and oversight of teachers
- Health and hygiene knowledge

As mentioned in Section 4.6, due to the small sample of principals, the results in this section presented with no statistical analysis (t-test of difference in means).

Pedagogical Advisors and Oversight of Teachers

To measure the extent to which principals supported and supervised teachers, we investigated how often principals observed their teachers during the reading–writing class, whether principals had difficulties with supporting their teachers, and the extent to which pedagogical advisors were helpful to principals.

There were regional differences in the self-reported number of times principals observed their teachers during reading–writing lessons over an ordinary month. Unlike teachers' responses, no principal said they never observed their teachers in a month, whereas principals in Koulikoro said they observed their teachers far more often (57 percent said more than 2 times a month) than did principals in Mopti (44 percent said they did so once a month).

At baseline, most principals reported not having any difficulties with observing their teachers, with only 20 percent in Koulikoro and 32 percent in Mopti reporting such challenges. However, at midline, 69

percent of principals in Mopti faced challenges versus only 18 percent of principals in Koulikoro. More frequent insecurity issues in Mopti could be a potential explanation for the higher percentage in this region, compared to Koulikoro. In addition, Exhibit 65 also shows challenges principals faced in observing/supporting teachers. For those who did experience challenges, at both baseline and midline, the most cited challenge was lack of time. In Mopti, the proportion of principals who reported this as a challenge increased by 16.4 percentage points between baseline and midline, whereas the percentage who said that the lack of material resources such as books or chalk was a challenge dropped by 9.5 percent. In Koulikoro, there were few differences, and the only challenge mentioned was the aforementioned lack of time.

Exhibit 65: Challenges Faced by Principals in Supporting their Teachers

Challenges	Koulikoro		Mopti	
	Baseline	Midline	Baseline	Midline
Lack of time	13.3%	14.3%	21.1%	37.5%
Lack of material resources (books, chalk, etc.)	0.0%	0.0%	15.8%	6.3%
Did not know how to support teachers	0.0%	0.0%	0.0%	6.3%
Other	10.0%	3.6%	15.8%	31.3%
Total Number of Observations	30	28	19	16

Source: Teacher and principal survey; authors' calculations.

Health and Hygiene Knowledge

Same as all other respondents, at midline, principals were also asked about their handwashing practices as well as knowledge of hygiene, and intestinal worm prevention. As shown in Exhibit 66, principals showed high knowledge of health and hygiene practices. However, there was a gap between their knowledge and actual practices for washing their hands at critical moments, as other respondents.

Exhibit 66: Principals' Health and Hygiene Knowledge

Indicator	Percent	Observations
Knowledge of critical moments to wash hands	97.7%	44
Reports practicing handwashing at critical moments	88.6%	43
Use soap and water as opposed to just water	97.7%	44
Able to cite at least two ways of preventing intestinal worms	79.6%	44

Source: Teacher and principal survey; authors' calculations.

5.1.6 SMC Outcomes

This section presents SMC outcomes with no statistical analysis (t-test of difference in means), collected from the SMC survey, in the following five areas at midline in comparison with baseline, as described below.

- SMCs' training and management roles and responsibilities
- Knowledge of safe food storage and preparation
- Hygiene knowledge and self-reported practices of hygiene
- Canteen support and management
- School engagement

SMCs' Training and Management Roles and Responsibilities

We examined the proportion of SMC members who managed the canteen, and were formally trained since 2016, as well as the topics on which they were trained. All SMC members (100 percent) reported that they managed the school canteen. The proportion of SMC members who received training since 2016 grew to 100 percent from 90 and 94 percent in Koulikoro and Mopti, respectively. As shown in Exhibit 67, they most frequently received training in food management (93 percent in Koulikoro and 100 percent in Mopti), health, hygiene, and nutrition (83 percent in Koulikoro and 94 percent in Mopti), and roles and responsibilities of the SMC (79 percent in Koulikoro and 81 percent in Mopti). However, SMC members reported receiving the least training on follow-up and evaluation strategy, democratic setup of the SMC, and resource mobilization.

Exhibit 67: Different Topics in which SMCs Received Training

Training Topic	Koulikoro		Mopti	
	Baseline	Midline	Baseline	Midline
Food management	90.0%	93.1%	94.4%	100%
Health, hygiene, and nutrition	70.0%	82.8%	38.9%	93.8%
Democratic setup of SMC	46.7%	48.3%	33.3%	18.8%
Roles and responsibilities of SMC	66.7%	79.3%	72.2%	81.3%
Annual action plan development	53.3%	55.2%	38.9%	68.8%
Resource mobilization	43.3%	48.3%	22.2%	50.0%
Follow-up and evaluation strategy	50.0%	41.4%	16.7%	31.25%
Total number of observations	30	29	18	16

Source: SMC survey; authors' calculation

SMC members were also asked to name the main responsibilities of the SMC. Most cited following up on children, including students' progress and attendance, as well as canteen management, with 90 percent in Koulikoro and 94 percent in Mopti. In Koulikoro, there was a 23 percentage point increase from baseline to midline in the proportion of SMC members who said canteen management was a main responsibility. In Mopti, SMC members also commonly said that the hygiene and cleanliness of the children (75 percent) and ensuring communication between the school and the community (75 percent) were main responsibilities, with large increases relative to baseline percentages of 36 percent and 19 percent, respectively.

Interestingly, whereas in Koulikoro fewer SMC members mentioned that their SMC responsibilities were too heavy (21 percent, down from 37 percent at baseline), SMC members in Mopti more frequently said they were too heavy (56 percent, up from 44 percent at baseline). SMC members were also asked which responsibilities should remain as part of their scope of work, and who should take care of them if not SMC members. At both baseline and midline, SMC members less frequently mentioned advocating for support from town center, preparing the annual report, and following up on teachers as their main responsibilities to keep in their scope of work. They also believed that principals and the government should take charge of tasks that should not be done by the SMCs.

Knowledge of Safe Food Storage and Preparation

To measure SMC members' knowledge of safe food storage and safe food preparation practices, we calculated the proportion of members who could cite at least two and at least four practices for each of the two categories. The enumerators had a list of best practices, including storing food one meter away

from the wall/roof, storing food on elevated pallets, cleaning the storage, and so on. Then, they were supposed to select all the related options that the SMC member was citing without reading the list.

The most frequent good practices for food storage mentioned by SMC members in the surveys varied by region. In Mopti, they were placing bags on elevated pallets or platforms (100 percent) and placing bags one meter from a wall or roof (94 percent), the second having increased 49 percentage points from 44 percent at baseline. Classifying food by type was also mentioned far more frequently than at baseline (81 percent versus 28 percent). In Koulikoro, SMC members frequently cited many practices: placing bags on elevated pallets or platforms (90 percent), sweeping the food store (86 percent), keeping the shop well ventilated (83 percent), and keeping the shop secured (83 percent). As in Mopti, the percentage of respondents who said that bags should be placed one meter from the wall and roof increased significantly, from 40 to 76 percent. Overall, knowledge of good practices for food storage increased greatly in both regions. See Exhibit 68 in for more detail.

Exhibit 68: Best Practices for Food Storage Reported by SMC Members

Best Practices	Koulikoro		Mopti	
	Baseline	Midline	Baseline	Midline
The bags should be at one meter from the wall and roof	40.0%	75.9%	44.4%	93.8%
The bags should be placed on elevated pallets/platforms	83.3%	89.7%	94.4%	100%
The shop should be swept	90.0%	86.2%	77.8%	68.8%
The shop should be well-ventilated	63.3%	82.8%	72.2%	75.0%
The shop should be well secured	83.3%	82.8%	66.7%	68.8%
The food should be classified by type	43.3%	72.4%	27.8%	81.3%
The food should be well stacked to facilitate the inventory (not mixed)	46.7%	51.7%	33.3%	62.5%
Total number of observations	30	29	18	16

Source: SMC survey; authors' calculation

At midline, the proportion of SMC members who could cite at least two practices of safe food storage and safe food hygiene grew to 100 percent in both Koulikoro and Mopti. However, not all SMC members could cite at least four practices, but in Mopti, the proportion of SMC members who were able to cite at least four legitimate food storage practices grew greatly, from 67 percent at baseline to 94 percent at midline, compared to Koulikoro, as shown in Exhibit 69.

Exhibit 69: SMC Members Passing Best Practices of Safe Food Storage

Best Practices	Koulikoro		Mopti	
	Baseline	Midline	Baseline	Midline
Able to cite at least 2 legitimate food storage practices	96.7%	100%	94.4%	100%
Able to cite at least 4 legitimate food storage practices	80.0%	89.7%	66.7%	93.8%
Total number of observations	30	29	18	16

Source: SMC survey; authors' calculations.

When it came to good food preparation practices from a hygiene perspective, SMC members in both Koulikoro and Mopti frequently cited keeping surfaces that are used to prepare food clean (97 and 100 percent, respectively) and washing vegetables, fruits, and ingredients with drinking water (90 and 94

percent, respectively). Overall, knowledge of good food preparation practices increased in both regions. In addition, at midline the proportion of SMC members who could cite at least two and four legitimate food preparation practices remained with no change from baseline to midline, as shown in Exhibit 70.

Exhibit 70: SMC Members Passing on Best Practices of Safe Food Preparation

Best Practices	Koulikoro		Mopti	
	Baseline	Midline	Baseline	Midline
Able to cite at least 2 legitimate food preparation practices	100%	100%	100%	100%
Able to cite at least 4 legitimate food preparation practices	66.7%	69.0%	83.3%	81.3%
Total number of observations	30	29	18	16

Source: SMC survey, authors' calculations.

Hygiene Knowledge and Self-Reported Practices of Hygiene

We looked at hygiene practices of SMC members, and calculated their handwashing practices at critical moments in the same way as we did for other respondents. Between baseline and midline there were no notable changes in knowledge of washing hands at critical moments. For self-reported practices, in Koulikoro, the percentage of SMC members who reported washing their hands at critical moments dropped from 87 percent at baseline to 72 percent at midline. Meanwhile, in Mopti, this percentage increased from 72 percent to 81 percent. Knowledge of handwashing practices was high in both regions (above 83 percent). Finally, all SMC members in Koulikoro reported using soap to wash their hands, whereas 94 percent reported doing the same in Mopti.

Canteen Support and Management

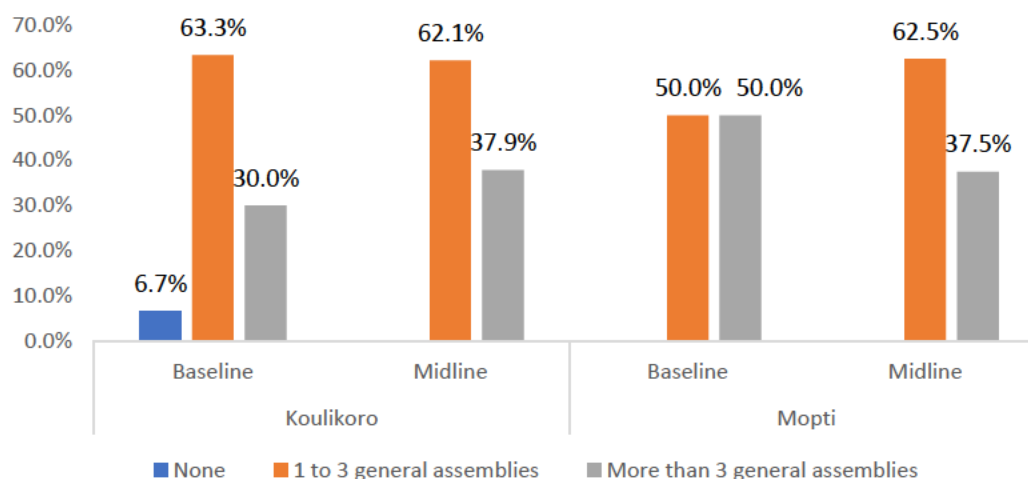
SMC members were asked about parents' contributions to the school canteen. According to SMC members in Koulikoro, all parents contributed wood to the school canteen and more started contributing wood to the canteen one to two days every week. Similarly, fewer SMC members reported that parents did not contribute food or condiments at all, including vegetables, salt, and potassium, to the school canteen over the week. In Mopti, the situation was reversed: fewer parents contributed wood or food/condiments to the school canteen on all five days of the week compared to baseline, and slightly more contributed no wood at all to the canteen. See Exhibits 96 and 97 in Appendix C for parents' contributions to the canteen reported by SMC members.

SMC members were also asked whether they had prepared their school action plan since October 2017, and at what level the action plan had been implemented. Between baseline and midline, more SMC members in Koulikoro reported that they had prepared a school action plan for the current school year (73 vs. 93 percent), whereas in Mopti this proportion shrank from 100 to 87 percent. This decrease may be explained by the insecurity situation in Mopti that caused temporary or permanent school closures. Among SMCs who had developed a school action plan, they were at more advanced levels (fourth quintile, 76–100 percent) of implementation of the action plan, compared with the same time at baseline.

School Engagement

SMC members were asked about the number of general assemblies that they had organized between parents and students since October 2017. As shown in Exhibit 71 all SMCs reported organizing at least one general assembly between parents and students to discuss the school in the 2017–18 school year. In Koulikoro, a higher proportion of SMCs relative to baseline organized more than three general assemblies. However, in Mopti, a higher proportion of SMCs organized only one to three general assemblies.

Exhibit 71: General Assemblies Organized by SMC Members for Parents



Source: SMC survey, authors' calculations. Baseline: N= 18 for Mopti and N=30 for Koulikoro. Midline: N= 16 for Mopti and N=29 for Koulikoro.

We asked SMC members whether they followed teachers' practices and students' progress, and how they did it. In both Koulikoro and Mopti, a higher proportion of SMCs monitored the practices of teachers, going from 83 to 97 percent in Koulikoro and 83 to 87 percent in Mopti. SMCs did this most frequently through classroom observation (93 percent in Koulikoro and 87.5 percent in Mopti), with SMCs using this method noticeably increasing between baseline and midline in Koulikoro: 70 to 93 percent. However, these findings should be interpreted with caution as following teachers' practices was not part of SMCs' scope of work. In addition, all SMC members said they monitored the presence of teachers in their school, primarily using daily checks (35–37 percent) and following up with the principal (34–35 percent).

All SMCs in both regions said they monitored student progress, most frequently through the results of compositions (86 percent in Koulikoro and 75 percent in Mopti), as they did at baseline, and now using colored bulletins (76 percent in Koulikoro and 94 percent in Mopti). There were remarkable increases in the proportion of SMC members who said they used colored bulletins to monitor student progress, with an increase of 62 percentage points in Koulikoro and 60 percentage points in Mopti.

Finally, at midline, 79 percent of surveyed SMC members in Koulikoro and 87 percent in Mopti said that the SMC had been informed of the balanced approach (BLA) used by the teachers.

5.2 Impact Evaluation

As described in the methodology section, we used the cohort comparison method to estimate the two- and three-year effects of the program of having exposure to a BLA-trained teacher on improvements in literacy as measured by the scores of the students on the reading assessment. Because cohorts of students are assessed at different times, we controlled for possible time effects unrelated to the intervention. Our key outcome of interest is the improvement of children's reading abilities due to exposure to well-trained teachers. We are interested in capturing the effect of two years of exposure to BLA-trained teachers on grade 2 students (treatment group) at midline as compared to grade 2 students (comparison group) at

baseline. The grade 1 students from midline and baseline are used to capture the time effects of the program intervention between baseline and midline. To obtain the two-year program effect of the program, we used the reading assessment data of both grade 2 and grade 1 students at midline and baseline. To estimate this effect, we ran the following regression model:

$$L_i = \beta_0 + \beta_1 \cdot P_i + \beta_2 \cdot T_i + \beta_3 \cdot P_i \cdot T_i + \beta_4 \cdot X_i + \varepsilon_i$$

where

- L_i is the reading assessment score of student i
- P_i is a dummy variable with value equal to 1 for student i at midline, and 0 otherwise
- T_i is a dummy variable with value equal to 1 for grade 2 students at midline and baseline, and 0 otherwise
- X_i represents other covariates such as the gender of student i , which could be potentially related to the literacy outcome of the student
- β_0 is the baseline average reading assessment score of grade 1 students
- β_1 is the average change in reading assessment score for grade 1 students between midline and baseline and represents the time trend
- β_2 is the average difference between grade 2 and grade 1 reading assessment scores at baseline
- β_3 is the average two-year effect of being exposed to BLA-trained teachers on grade 2 students, and is the main estimate of interest
- β_4 is the change in student's literacy scores if the student is a girl
- ε_i is the random residual term

To obtain more precise estimates, we included other covariates, such as the gender of the student in the preceding model. Because students are nested in a particular grade from a given school, literacy outcomes are related to each other (e.g., the residual term of a student in a given cohort in a particular school may be related to the residual term of his/her classmate). To account for this correlation of error terms across classmates in the same school, we estimated the standard errors after clustering for each separate cohort in each school (92 clusters for two grades in 46 schools). As a robustness check, we estimated our model by restricting the sample of grade 2 students at midline to only students who had been in the school since grade 1 (i.e., we excluded students who joined the school after baseline and may have been only partially exposed to the intervention). Similarly, we ensured that teachers who were associated with these students had received at least 2 years of teacher training (i.e., we excluded students of new teachers without BLA training).

We estimated the three-year program effect in a similar manner as described previously, except that instead of using grade 2 student literacy outcomes, we used grade 3 student data at midline and baseline. We estimated the spillover effect by using the sample of grade 4 student outcomes at midline and baseline and tested whether the average outcomes varied significantly. Similar to the program effect model, we tested the robustness of our spillover estimates by adding other covariates to our spillover effect model.

Exhibit 72 summarizes the impact results for two- and three-year program effects' regression models and the spillover effects regression models. The row highlighted in gray represents the key program effects on improvements in children's literacy outcomes, which is the key focus of the quasi-experimental evaluation.

Exhibit 72: Program Effects Using Cohort Comparison Method

Coefficients	Two-year effect model	Three- year effect model	Spillover effect model
Program effect (β_3)	0.857 (0.194)**	1.474 (0.285)**	-0.173 (0.201)
Time effect (β_1)	0.326 (0.092)**	0.326 (0.092)**	
Difference in average literacy scores between grades at baseline (β_2)	0.011 (0.095)	0.683 (0.154)**	
Average literacy scores at baseline of grade 1 students (β_0)	0.661 (0.046)**	0.668 (0.052)**	2.593 (0.169)**
Student is a girl (=1)	-0.020 (0.051)	-0.034 (0.068)	-0.354 (0.157)*
Total Number of Observations	2,389	2,390	1,146

*Source: Student Survey; p-value < 0.1 ** p-value < 0.05 *** p-value < 0.01; Standard errors shown in parentheses are clustered at the school-cohort level.

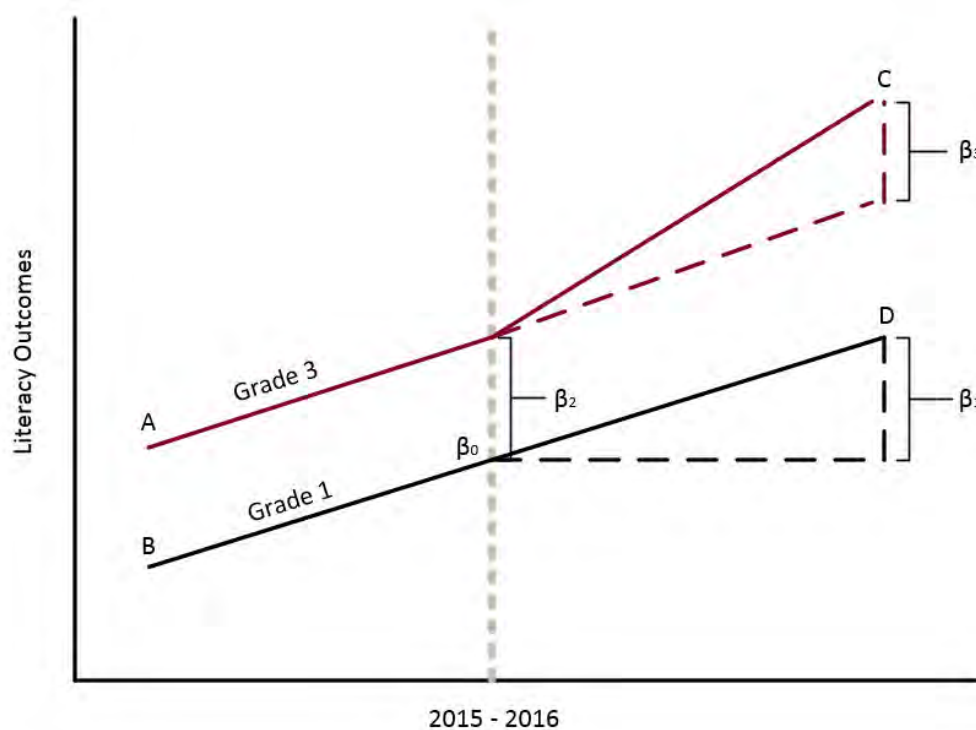
- Two-year project effects:** As shown in Exhibit 72, exposure to BLA-trained teachers for two years increases the reading assessment literacy scores of grade-2 students by 0.86 points ($p < 0.05$), which is approximately a one-level increase in the reading assessment.⁴⁰ The time effect in this case is also significant—that is, literacy scores of grade-1 students increased by 0.33 points just by entering the school after the introduction of the program instead of at baseline. The difference between grade 2 and grade 1 baseline scores is very small in magnitude and is not statistically significant. Moreover, being a girl was not associated with a difference in literacy outcomes as compared with boys.
- Three-year project effects:** The effect of being exposed to BLA-trained teachers for three years is even stronger. As depicted in the exhibit, students' reading assessment scores increased by 1.5 points ($p < 0.05$) if they were exposed to BLA-trained teachers for three years. This represents an increase of about a level and a half in reading abilities. The time effect—that is, the change in average literacy scores of grade-1 students at baseline and midline—is 0.33 points. In contrast to the two-year effects, the average literacy scores of grade-3 students at baseline were higher than grade 1 students by 0.68 points; this difference is statistically significant. Intuitively, these results are expected because although grade 2 and grade 1 students were not markedly different in their reading outcomes at baseline, the difference in literacy existed between grade 3 and grade 1 students. The literacy outcomes are also not significantly related to being a girl or a boy.
- Spillover effects:** We do not find any strong evidence of spillover effects. During baseline, we had anticipated that some aspects of BLA training may spill over to grade 4 students if BLA-trained teachers also taught them in case of grade 4 teachers being absent. However, we did not find this to be the case, as the spillover effect is not statistically significant. Therefore, we conclude that there were no significant spillover effects caused by the program. From the mechanism of change standpoint, the lack of positive spillovers suggests that consistent, long-term exposure to teachers

⁴⁰ We also restricted the sample of students to just grade 2 students at midline who were present in the school for two years and to teachers who had received at least two or more BLA trainings. When we limit the sample in such a way, we find that the project effect becomes even stronger, to a 0.89 point increase in the reading assessment score. However, in reality, students transfer and enter schools at different times, as reflected in our full sample of students. Therefore, we showcase the full sample scenario for our impact results.

leads to changes in literacy outcomes, rather than sporadic exposures to BLA training methods used by teachers.

The exhibit below further presents visually our results of the two-year program effect to facilitate easier comprehension of the intuition of the approach. As shown, (D-B) or β_1 is the time trend as represented by the grade 1 students' change in reading assessment scores. (B-A) or β_2 is the average change in scores between grade 2 and grade 1 students at baseline. Our main outcome of interest is β_3 , which is measured as the difference between grade 2 scores at midline and baseline, after adjusting for the time effects.

Exhibit 73: Two-year Program Effect on Literacy Outcomes



Source: IMPAQ

SECTION 6. QUALITATIVE FINDINGS

Through interviews with national stakeholders, project implementers, local administrative and education officials, and parents and SMC members, the research team assessed the relevance, effectiveness, efficiency, impact, and sustainability of the MGD intervention in Mali. Many of the key findings overlap category – for example, parents not being able to contribute food to the canteens challenges the effectiveness of the program and threatens sustainability. Below is a summary of the main findings, followed by a more detailed narrative.

Summary of Main Qualitative Findings	
Relevance	
- Local stakeholders (parents, SMC members, and local administration officials) agreed that the project aligned with the priorities of their communities. They noted that food and take-home rations addressed both food insecurity and student attendance. - Elements of the original MGD project seemed to be overly ambitious, including the responsibilities of local implementing partners and the scope of the SMC training. As a result, some activities were delayed and/or adjusted to better align with local capacity. - External factors affected the original design of the MGD project in terms of the planned objectives, outcomes, targets, and timeframe. The most prevalent factor out of the project team's control was the closing of schools due to political insecurity. Other factors include MONE's decision to promote syllabic teaching approach across the country, including the project area with BLA training, frequent teacher strikes, and students moving from public schools to Koranic schools.	
Effectiveness	
<i>Successes:</i> - Parents and local education and administrative officials confirmed that the literacy of school-aged children is improving. Parents appreciate having the color-coded reports to monitor their children's progress. - Program staff and partners attributed improved literacy to the BLA pedagogical techniques, including the training and involvement of teachers, principals, pedagogical advisors, and local education offices. <i>Challenges:</i> - Teacher turnover, low attendance, and lack of motivation is a problem which may negatively affect the implementation of the BLA pedagogical techniques. Also, teachers seem overwhelmed by the additional work due to the project, especially when they are tasked with assisting illiterate SMCs. - Immigration affects student enrollment, as in some communities, boys leave their villages to pursue opportunities abroad where they can send money home, while girls find work in big cities to support their wedding trousseaus. - Lack of water on school grounds prevents full effectiveness of the health and dietary objectives. No or limited water sources do not allow for handwashing, and also prevent SMC members from growing vegetables to supplement the canteen.	
Efficiency	
- While overall program staff and partners reported that the project resources are being used efficiently, school closures and some adjustments to the project activities in response to changes in beneficiaries' need have caused minor impediments in allocating budget resources. - Local administrative officials reported that in some communities, political differences within the local education sector, specifically between the mayors and community leaders led to conflicts around the	

Summary of Main Qualitative Findings
management of the schools. In other communities, the mayors often relocated teachers who were active in program schools without consideration for the needs of those schools. ▪ External factors such as school closure and teachers' strike, combined with the expiration of some of the commodities such as vegetable oil made the food distribution difficult for the program.
Impact
<i>Activities with the greatest impact:</i> ▪ Local and national stakeholders agreed that the BLA has a positive impact on improving children's literacy. ▪ Parents and SMC members found that school lunches and THR have a positive impact in their communities, as they address both hunger and school attendance. ▪ Project staff said that creating SILC groups is having a positive impact for communities, as participants are able to financially manage canteens. <i>Activities with the least impact:</i> ▪ Parents and SMC members said that activities requiring water are not impactful, as they are not able to grow school gardens with the limited water supply. ▪ Community contributions to the canteens are less impactful than hoped for, as many families are too financially insecure to provide food or money.
Sustainability
▪ The knowledge gained through BLA trainings and SILC/SMC groups will last longer than the program. However, because of the transience of teachers and community members, this knowledge may not stay in targeted communities. ▪ Although local stakeholders said that they will continue the canteens after the program leaves, they acknowledged that they will not be able to provide the same quantity and quality of food. ▪ Program staff expressed concern that local stakeholders lack capacity to take over the activities when CRS leaves.

6.1 Relevance

Interview topics focused on stakeholders' perspectives on the strengths and weaknesses of the project design and the extent to which the project considers economic, cultural, and political contexts. Stakeholders were also asked to share their perceptions on the extent to which the interventions are meeting the needs of beneficiaries and are aligned with Mali's national and local education and development strategies. Following is a summary of the qualitative findings on the relevance of MGD.

6.1.1 Alignment with Community and Government Priorities

Local education officials stated that they had been involved and consulted during the design phase of the project and their recommendations had been considered. In particular, they noted that the project addressed SMC management deficits in their communities by providing capacity-building trainings, and that the project addressed the issue of low student attendance by providing food at school. Education officials affirmed that food insecurity and poverty are serious concerns, and the provision of food was very welcome by all stakeholders. Because of this, the project aligned well with local government and community needs and priorities.

6.1.2 Adjustments to Project Design

Project staff and partners agreed that the objectives, targets, and timeframe were appropriate and realistic during the design phase. However, several external factors have forced adjustments from the original plan—most notably, schools closing temporarily or permanently because of insecurity in the program’s targeted area. Other external factors included the Ministry of Education’s decision to promote syllabic teaching approach across the country, and the frequent teachers’ strikes. Both of these caused some challenges to BLA trainings, as the project had to make some efforts to convince the government to allow for BLA training to continue in the project area and teacher strikes caused training events to be rescheduled or canceled. Finally, since the program started, Koranic schools have been increasing in the targeted area, particularly in Mopti. Local education officials confirmed that many parents started sending their children to Koranic schools for cultural reasons, the apparent security offered, and the simple fact that they are open, leading to a decrease in public school enrollment. These external factors required the original targets, objectives, and timeline of the MGD program to change.

There were internal factors that affected the original program design as well. For example, capacity-building activities at the local level took longer than planned. This was attributed to an overly ambitious SMC training, which covered too much information for one session. Local implementing partners decided to break the materials up over several sessions to make it easier for the SMC members to learn and process the topics. In addition, the local implementing partners expressed that the planned work in their regions was not appropriate given both their capacity and the capacity of the local stakeholders/beneficiaries, and therefore the rollout of activities was delayed accordingly.

6.2 Effectiveness

Interview topics focused on the extent to which the project is achieving its two strategic objectives, successes and challenges of program implementation, and the effectiveness of management arrangements and stakeholder collaboration.

6.2.1 Strategic Objective 1: Improved Overall Literacy of School-Aged Children

Successes

According to stakeholders in the local education sector, the project is already improving the literacy of children in their communities. Several education officials spoke of the “new approach” to literacy that was helping children learn faster and increase their comfort in speaking and reading. Moreover, almost everyone said that the canteens played a crucial role in pupils’ attendance at school, facilitating learning. They said that before the project, pupils were obliged to return home for lunch, and as many live far from school, they were tired and unable to return in the afternoon. Having lunch at school means more students stay for the entire day.

“Before the project, for students to master the alphabet, it took them two years. But now, with the new approach, we see pupils who are able to cite the alphabet at the first quarter of the first grade.”

—County mayor

“Today many kids are at school because of the canteen food. For example, the kids from Kimetogoro have abandoned school because they were obliged to walk long distance to return at their homes for the lunch at noon. Now they all come to school and stay there the whole day because they receive meal in the noon.”

– Parent

From the perspective of the parents, the canteens have been a good strategy to increase school attendance. Like the local administrators, parents reported that having lunch at school encourages students to stay a full day at school. Parents also mentioned the take-home rations, saying that they not only incentivize children to go to school, but parents also strongly encourage their children to attend because it helps them to secure and save food for the rest of the family. For example, because of the donation of oil, mothers encourage their daughters to go to school rather than asking them to stay home to do chores.

Program staff and partners said the BLA pedagogical techniques directly influenced children’s literacy. Project M&E data confirm this, as do the results of the impact evaluation (Section 5.2). Factors facilitating this success are the repeated trainings for teachers, which reinforce the new teaching methods, and the capacity building of the larger local education network, specifically school administrators, pedagogical advisors, and regional education offices.

While most parents did not directly speak to the literacy instruction (although many SMCs mentioned this), parents did mention the colored reports designed to assess their children’s performance at school. Parents appreciated that these simple tools helped them to support their kids at home. Literate parents reported supporting their children by tutoring or mentoring them at home. Illiterate parents reported still being able to indirectly motivate their children’s performance by providing rewards for good results and ensuring that their children have breakfast and money before they go to school.

“We should acknowledge that there has been a great improvement in our children’s literacy skills. Before the project, pupils from first, second, and third grade were unable to read well. Now, pupils from first to second grade can read, write their names and those of their parents.”

– SMC member

Challenges

Although the literacy of school-aged children is improving for now, stakeholders at both the national and local levels said that several factors challenge this objective. One is that teachers’ mobility could threaten the sustainability of the project’s results. Teachers who were trained in the new literacy approach will be relocated to other villages after three years of service, and the new teachers might not have received the training. Program staff also explained that some teachers and even parents resisted the BLA methods, as they did not believe that these methods would be effective.

Furthermore, there is still a problem with teacher attendance, as teachers often don’t show up at school, or arrive very late. Like their students, these delays often occur because many of them must travel a long distance because they live far from their schools. It was also reported in some areas that female teachers have left because of security issues and fear of attacks. Parents (particularly those who are illiterate) noted that if teachers lived in the same village, they could provide additional support to their students in the evening after the school day.

“SMC members are all illiterate, we need functional literacy training to be more effective”

– Male SMC

Program staff and partners also reported that teachers are overwhelmed with the tasks required through this program to 1) fill out food delivery sheets; and 2) work on the inventory report. These are in addition to their teaching schedules and responsibilities such as completing daily attendance records and creating colored report cards so illiterate parents can track their children’s progress. In

some schools, SMC members are illiterate, and require the teachers to help them fill out forms such as the school action plan. Partners reported that many teachers resent this and are reluctant to do additional work without more support.

Another challenge to the achievement of this objective is the local contribution of food for the canteen. Parents and local administrators stated that their contributions could be threatened by differing climatic conditions from one year to another, which could result in bad harvests. The contribution is also currently quite difficult for parents who are poor and/or have several children.

“We organized meetings many times with parents to sensitize them to contribute to the payment of foodstuff for the canteen, but some parents still don’t give their contribution. As a result, the canteen is sometimes closed for more than one week.”

–Rural SMC

“The most important source of incomes here are remittances sent by our family members abroad. Therefore, boys are dreaming of going abroad to help their families. The willingness to go to school is less important for them. As for girls, very early, they have to migrate to big towns to look for money for their marriage; which means once back, they are given in marriage.”

–Mother’s focus group

In some localities, immigration abroad is a reason many students drop out of school. Money sent from their relatives in foreign countries or in larger cities are a main source of their livelihoods. As a result, some families encourage their children to immigrate. Girls are particularly encouraged to migrate to town to save money for their marriage trousseau, while boys are encouraged to immigrate to find work and “have adventures.” Besides immigration, children’s attendance is threatened by domestic activities like working in the fields for boys and doing housework for girls. However, due to the provision of food and local sensitization efforts, these are becoming

less common reasons, and more children are attending school.

Finally, some local focus group participants mentioned that the absence of electricity at home makes it difficult for children to study at night; therefore, the objective of improving literacy may not reach its full potential.

6.2.2 Strategic Objective 2: Increased Use of Health and Dietary Practices in Program Schools

Successes

Program staff and partners said that good health and dietary practices have increased, as deworming medication, vitamin A, and iron supplements have been distributed to children at all program schools. In addition, the quality of food at the canteens has led to healthier meals at lunch.

From the local perspective, while participants spoke very favorably of the food ration provided by CRS for the canteens and the new literacy approach, the activities related to health, hygiene, and sanitation were mostly reviewed negatively. The next section describes the challenges.

Challenges

Issues related to water availability, the low flow of water pumps, and the remoteness or absence of health centers were most frequently stated by parents and SMC members as factors that negatively affect their children's health and dietary practices. The most common example given by parents was that handwashing practices are impossible to sustain because of the unavailability of water at the schools. Other parents said that the scarcity of water also affected their gardening activities at the schools. SMC groups said that the program requires them to grow vegetables for the canteen, but without water, they have not been able to do so.

"The lack of water seriously undermines the cooking of food at school. We need water to ensure the sustainability of the canteen."

—Female SMC group

Parents also reported being encouraged to visit health facilities for vaccinations or when their children are sick, but for the majority of community members, the distance is too great to walk. They therefore suggested having some sort of health center at the school level.

6.3 Efficiency

Interview topics focused on efficiency in the use of project resources, the timeliness of project activities, and the project's responses to internal and external factors that may hinder implementation.

6.3.1 Use of Project Resources

Program staff described school closures as the main obstacle affecting the budget and project resources. School closures caused the budget not to be fully spent as planned—fewer schools means training fewer teachers, providing fewer supplies, and so on. In addition, the project staff also mentioned they had to revisit their budget allocations in response to changes in the beneficiaries' need (e.g., increasing the number of training days for SMCs), which was underestimated. In such cases, the project used its saving from favorable exchange rates between the West African CFA franc and the US dollar.

"[Moving teachers] is done without any concern to allocate resources to real needs...For the project to be effective, strategies should be designed to actively involve all actors in the education sector. If all the actors are really involved in the life of the project, the objectives can be achieved without many issues."

—Local administrator

However, from the perspective of some local administrators, political differences within the education sector sometimes leads to inefficient allocation of resources. Mayors or leaders in the local education sector made decisions which affect project activities without involving other key actors. For example, it was reported that some mayors move teachers who are involved with the oppositional political party from MGD schools to schools not participating in the program.

6.3.2 Achievement of Project Timeline

As mentioned in Section 6.1, Relevance, the timeline has been delayed because of several factors, including school closures, teacher strikes, syllabic teaching program promoted by the MONE, and local capacity. These factors combined with the expiration of food has made it difficult for the program to

distribute all the commodities. However, in such cases, the project has distributed the food through different channels (THR rather than school meals) before their expiration dates.

6.4 Perceived Impact

Interview topics focused on stakeholders' perception of the effect of the project on children's education and health outcomes and the activities with the greatest and least medium- and long-term effects. Stakeholders were also asked to provide recommendations to improve the success of the project.

6.4.1 Addressing Barriers to Education

At baseline, the main barriers to education reported by parents and SMC members were distance to school, cultural beliefs, and local insecurity. At midline, parents and SMC members reported that some of these barriers have been addressed by the project. Respondents stated that enrollment and attendance of school-aged children have greatly improved as a result of food provision at school. Even though many students still live far away from school, they are motivated to attend by knowing that food is available, and are more likely to stay a full day rather than going home for lunch and not returning.

Parents and local education officials also stated that parents are now more concerned about their children's education. Factors facilitating this change in belief have been greater community sensitization through door-to-door campaigning, and also the colored reports on students' performance. For example, many parents said that having the report encouraged them to meet with teachers or the head of the school about how to encourage or work with their children to improve their academic performance.

A few parents mentioned political insecurity as a deterrent to school attendance, although this topic came up less frequently at midline compared to baseline. However, stakeholders at both the national and local levels said that student safety and security is still a very serious barrier to education.

6.4.2 Activities with the Greatest and Least Impact

From the local perspective (parents, SMC members, and education and administrative officials) the activities with the greatest impact are the food rations distributed to children (at lunch and THR) and the new literacy training approach. Local stakeholders overwhelmingly agreed that the activities with the least impact are those related to school gardens, community contributions, and sanitation and health. Again, the lack of water at the schools was the reason given for limited impact of the school gardens and the sanitation and health-related activities. For community contributions, the low and variable financial resources of the local families mean that many are unable to consistently help stock the canteens.

"We were expected to provide the canteen with vegetables through our gardening activities, but the activities have stopped because of the lack of water."

—SMC member

In corroboration with local project beneficiaries, national project staff/partners and Ministry officials confirmed that the BLA literacy approach has the greatest impact. The improvement in learning and instruction has been documented through project M&E data (EGRA and classroom observations), and also through the external impact evaluation (Section 5.2). National stakeholders also believed that the financial knowledge building and livelihood training through the SILC groups are having a substantial impact as well. Project staff see evidence that SILC groups are growing and successfully managing funds

even without access to local banks.⁴¹ In addition, project monitoring data show that 239 SILC groups have contributed an average of \$13 each to school canteens. However, staff mentioned that more activities needed to be done to ensure successful transfer of canteen activities to local stakeholders, including advocating for school feeding support from the mayors' offices.

6.4.3 Suggestions for Increasing Impact

Several parents appreciated the vegetable gardens initiated by the project, and believed that these gardens have an important potential to provide vegetables for the canteens. However, communities are unable to take the full advantage of these gardens because of the absence of a water source or because of the low flow rate of the existing pumps. Participants suggested that the next phase of the project should consider the provision of water sources to increase the impact of a fully functioning vegetable garden supplementing the canteens. Many discussants expressed regret that the project did not take into account provision of water sources and health facilities, which are serious issues for communities.

Although the project enabled many parents to take interest in and support their children's education, many stated that they are limited in their efforts by their lack of financial resources. For example, several parents said that even though they are sending their children to school, they are unable to buy supplemental learning materials such as notebooks and textbooks for their children. Many parents suggested that the project consider this aspect for the next round or in future interventions. Several parents and SMC members suggested adding a livelihood component to support parents with income-generating activities. Parents stated that if they were supported in launching income-generating activities such as soap making, animal husbandry, or even savings and loans committees, this could help increase the impact of the project.

Given that many parents are illiterate, the SMC members noted that their performance is therefore limited (e.g., record keeping is extremely difficult). Therefore, many parents and SMC members requested adult literacy training from the project to strengthen their capacities.

6.5 Sustainability

To assess the sustainability of project interventions, the research team asked all stakeholders to identify major factors that are likely to influence the achievement or non-achievement of project sustainability and to describe current sustainability activities implemented by CRS and its partners. Respondents were also asked to recommend strategies to sustain activities after funding ends.

6.5.1 Greatest Likelihood of Sustainability

Parents and local administrative officials are well aware that they are responsible for ensuring the program's sustainability. Discussions with parents and SMC members showed that even with challenges, parents are enthusiastic about continuing the canteen activities. They plan to continue school feedings through local contributions and school gardens, although SMC members cautioned that they would not be able to provide the same quantity of food that CRS currently provides.

⁴¹ This was not corroborated through our local focus group discussions, in which parents and SMC members specifically asked for assistance in forming SILCs. However, SILC groups are not in every area of the project, and were not targeted for qualitative data collection. See Section 5.1.3 for findings from the SILC member survey.

Project staff and partners said that the knowledge gained through the program would last beyond the program activities. For example, they are confident that the SILC groups will continue their activities, as the more established groups already function with minimal supervision. The literacy teaching approach will be sustainable to the extent that trained teachers stay in beneficiary communities (or if the incoming teachers are trained). Staff also hoped that when teachers move to other communities, they will bring the BLA techniques with them to their new schools.

6.5.2 Challenges to Sustainability

The lack of income-generating activities for parents was stressed as a critical issue for sustainability. Poverty was cited as the main driver of parents' inability to support their children's education. Parents and SMC members stated that sometimes schools lack the means to cook because they have not received the contribution of the community to buy food. Especially during years with a poor harvest, parents are often unable to contribute to the canteens.

"The project meets some needs such as food at school, the quality of teaching, the rise of school enrollment and attendance; but a lot of things remain – access to water in school, food security during the drought, security of children on their way to school."

–SMC member

From the perspective of some parents, they and other parents in their community lack means to buy school manuals, presenting a threat to their children's academic performance. Some said that their children are sometimes forced to stay at home when teachers refuse class admittance when students don't have required materials such as pens, copybooks, or slates.

Most of the parents recognized that sending their children to school is worthwhile, because they are aware that education is key for their children to get better jobs and social recognition in their communities. Most would like to see their children reach secondary and even university education. However, secondary schools are generally located far from the communities where they live, and require costly school fees and food and board arrangements. As a result, most parents are aware that their children will stop school after the primary level.

Finally, as mentioned earlier, the issue of water scarcity threatens the washing and sanitation practices and gardening activities.

From the perspective of project staff, most did not think that the local communities would be able to continue the project as is without additional support. They believed that there is not yet sufficient ownership at the local level to manage the canteens. They are also concerned about the transfer of knowledge as trained teachers leave schools. Project staff also mentioned political threats to project sustainability, most likely the potential for conflicts closing schools, the opening of more Koranic schools, and newly elected local leadership not invested in the canteens and other activities.

Recognizing that additional support was needed to ensure sustainability, project staff held three workshops at the national and regional levels in 2016 and 2017 to review the sustainability plan as originally proposed. They have since revised the plan, and are focusing on advocating mayors' offices (mandated to support school development under Malian decentralization law) to include financial support for school feeding and teacher training in their development action plans.

SECTION 7. IMPLICATIONS FOR THEORY OF CHANGE AND PROJECT OPERATIONS

Section 5 explained in detail the observed changes in outcomes since baseline (2016) by analyzing the performance evaluation data, collected by IMPAQ. Section 6 also provided a detailed analysis of qualitative interviews with national stakeholders, project implementers, local administrative and education officials, and parents and SMC members with regards to the relevance, effectiveness, efficiency, impact, and sustainability of the MGD III. In this section, we discuss the implication of those qualitative and quantitative findings for theory of change and project operations.

By looking at the measured outputs and outcomes with regards to the theory of change (Appendix A), the observed changes in the performance evaluation data suggest that the project is moving towards the intended objectives, especially SO1 (i.e., improving literacy of school-aged children). In summary:

- Providing BLA training to teachers, which is one of the key program interventions, was administered as planned to achieve MGD 1.1.3⁴² and MGD 1.1.4⁴³ outcomes. These trainings also appear to have translated into actual application in the classroom, based on self-reported data by the teachers. Most teachers mentioned that they used at least one BLA technique in the classroom, and almost all teachers also reported using BLA equipment in the previous month in their classroom. Qualitative data confirms this, as local education administrators said that the BLA approach was helping children read at an earlier age than previously in their community.
- There is evidence of the community understanding the benefits of education (MGD 1.1.5). Qualitative interviews show that both parents and education officials are more invested in children's education, and parents in particular mentioned taking an active involvement in encouraging their children at school, through participating in SMCs, telling their children to do homework, and meeting with teachers.
- At midline, a significantly lower proportion of students reported eating breakfast or a snack at home before going to school, especially in Mopti. However, almost all students ate lunch, similar to baseline. Although the quantitative data could not show where these children ate lunch, almost everyone in qualitative interviews said that the canteens played a crucial role in pupils' attendance at school, facilitating learning (MGD 1.2.1.1 and 1.3.1.1⁴⁴). Parents and local administrators said that before the project, pupils were obliged to return home for lunch, and as many live far from school, they were tired and unable to return in the afternoon. Having lunch at school means more students stay for the entire day.
- CRS's attendance data were not available⁴⁵ for baseline (2015-2016 academic year), thus assessing the changes on students' attendance and enrollment over time was not possible. However, the data show high enrollment, and consistent attendance for both boys and girls (MGD 1.3.4) in 2017-18 academic year, compared to the previous year (2016-2017). These results may also suggest improvement in communities' understanding of educational benefits (MGD 1.3.5), especially for girls. However, the attendance data collected from teachers' attendance logs should be interpreted with caution. It is because teachers may not routinely record attendance data. Even when they do and with the best intent, it is possible that teachers neglected to record missing children.

⁴² Improved literacy instructional materials

⁴³ Increased skills and knowledge of teachers

⁴⁴ Increased access to food (school feeding)

⁴⁵ The implementation has started in October 2016 after the completion of baseline evaluation (May 2016).

- The proportion of SMC members who received training since 2016 grew remarkably in both regions. They most frequently received training in food management, health, hygiene, and nutrition, and roles and responsibilities of the SMC. Moreover, the data show that SMC's knowledge of good practices for food preparation and storage also increased greatly in both regions. These results suggest that the related activities were implemented as planned toward achieving MGD 2.1 outcome.⁴⁶

However, these changes should be interpreted with caution for the performance evaluation. A new sample of individuals⁴⁷ were selected at each data collection point (baseline and midline). Therefore, comparing mean outcomes at baseline and midline by using t-tests can only suggest a correlation between the observed changes and MGD III interventions. We cannot conclusively determine whether the interventions caused the changes.

On the other hand, with regards to improved quality of literacy instruction (MGD 1.1) through BLA teacher training, our cohort comparison quasi-experimental design shows a clear proof of program impact on children's literacy outcomes. The data show that students' literacy outcomes improved by one level due to 2 years of exposure to a BLA-trained teacher and these outcomes increased by more than 1 level and a half due to 3 years of exposure to BLA-trained teachers. These findings are robust to adding other covariates.

Next section will provide our recommendation based on these observed changes and our lessons learned.

⁴⁶ Improved knowledge of safe food preparation and storage practices.

⁴⁷ Exceptions to the new sample selection are described in detail in Section 4.

SECTION 8. CONCLUSION

This report presents the midline performance and impact evaluation results of the McGovern-Dole International Food for Education and Child Nutrition III project in Koulikoro and Mopti. The evaluation highlights changes in outcomes related to the core program objectives and allows us to set the stage for a fuller-examination of the program effects at endline. To accurately reflect program performance over time, we followed the same performance evaluation methodology and sampling strategy used during the baseline to generate an appropriate comparison with the midline using USDA guidelines. Our findings are based on data collected from: 1) surveys of students, parents, teachers, SMC members, and school teachers and principals, 2) reading assessment scores, 3) focus group discussions, and 4) key informant interviews. For our quantitative analysis, we employed pre-post comparison and cohort-comparison quasi-experimental methods in addition to descriptive data analysis. We collected data on more than 500 variables from 2, 506 primary school students, 2, 465 caregivers, 189 teachers, 44 school principals, and 45 SMC members. This section summarizes key findings in response to the main research questions, highlights study limitations, and provides recommendations for the overall project and the evaluation.

8.1 Key Findings

We provide below the key findings from the performance evaluation related to students', caregivers', teachers', and principals and SMC members' knowledge of health and hygiene, results related to food security and dietary diversity, and findings related to the impact evaluation on children's literacy outcomes.

8.1.1 Students' Outcomes

We find an overall improvement in the reading ability of children across all grades, with no significant regional or gender differences. A significantly greater proportion of students in first grade (13 and 9 percentage points for girls and boys, respectively) could read simple sounds; second grade (12 and 14 percentage points for girls and boys, respectively) could decode simple words; third grade (20 and 23 percentage points for girls and boys, respectively) could read simple sentences, all statistically significant at the 1 percent level, with no big changes for girls and boys in fourth grade. Moreover, the program interventions also seem to be related to children's reported reasons for liking to attend school. Children in Koulikoro reported liking school and their classrooms because of the useful skills they acquired and the ease of understanding lessons. In Mopti, children mentioned having access to food and the ease of understanding as their key reasons for liking to attend school.

While the findings reveal an improvement in literacy and school attendance outcomes at midline, the progress on hygiene practices, which was the focus of MGD I and II activities, appears to be mixed, with wide variation across the two program sites. Progress on hygiene practices, such as washing hands, seems to be even slower. The average proportion of students who reported washing hands at critical moments is lower as compared to baseline. Moreover, the analysis also reveals that knowledge about handwashing practices, on average, did not change at midline as compared to baseline. While the actual reported washing of hands is lower possibly due to lack of proper infrastructure and facilities in the school, the lack of change in knowledge about handwashing practices is worth noting for strengthening program efforts. In the endline evaluation, we will also focus our efforts in understanding the reasons behind these changes in hygiene practices among students.

8.1.2 Parents Outcomes

At midline, we find an improved engagement of parents in their children's education. Improved participation of parents for their children's education is evidenced in several ways. First, parents' awareness about the school notice boards increased and a higher proportion of parents received colored report cards. Moreover, the average number of caretakers who attended a school general assembly increased in Koulikoro but not in Mopti. Presumably, other concerns such as safety prevented caregivers from going to the school for general assemblies in Mopti.

In contrast to the progress on improved engagement by parents for their children's education, the analysis suggests a lack of change in the involvement of parents in their children's preventative healthcare activities, such as providing iron and vitamin A supplements. It is noteworthy that the data collection was conducted before the distribution of the mineral supplements, which is scheduled in November and May of each project year. Many parents cited that healthcare activities were too expensive or were not available or accessible. Lack of progress on these healthcare outcomes suggests that deeper, structural financial and geographical constraints might be contributing to a lack of progress on these outcomes. However, the project was not designed to focus on health care structures. MGD III aims to facilitate the distribution of the mineral supplements (e.g., vitamin A, iron, and deworming medications). The project also supports raising parents' awareness about preventive health services by inviting local community health center staff in school to provide the communities with the appropriate health information.

At midline we also investigated decision-making within households and found differences in perceptions on decision-making for children's education within the household. A majority of men reported themselves as being the primary decision-maker for children's education. However, women suggested a relatively lower role of men in their children's education. Women felt that they play a relatively higher role vis-à-vis men's in their children's education – this is indicative of women exercising some say in their children's education. However, both reports confirm that men tend to dominate the decision when it pertains to their children's education. We also find no changes in parents' aspirations for their children's future between midline and baseline, suggesting the long period of time it takes to alter these deep-seated preferences of individuals.

8.1.3 Teachers and Principals' Outcomes

Our survey results suggest that one of the key program interventions – providing BLA training to teachers – was administered as planned. Almost 100 percent of 1st to 3rd grade teachers in Koulikoro and 93.3 percent of teachers in Mopti received BLA teacher training. Moreover, over half the number of these teachers had received approximately 2-3 BLA trainings. These trainings also appear to have translated into actual application in the classroom, based on self-reported data by the teachers. Most teachers mentioned that they used at least one BLA technique in the classroom, and almost all teachers also reported using BLA equipment in the previous month in their classroom.

Our results also suggest there were no key differences in handwashing practices by teachers between baseline and midline. However, this difference is being driven by the already high knowledge and reported practice of handwashing among teachers during both baseline and midline.

8.1.4 SMCs' Outcomes

Improvements in the performance of SMCs were notable across several dimensions. First, almost all SMC members managed school canteens at midline. Many of these SMC members had also received training and many different kinds of trainings. Second, a higher proportion of SMCs monitored the practices of teachers, especially through classroom observations. Third, these SMCs also followed student progress through monitoring the colored bulletins. However, one of the key outcomes where our SMC outcomes showed mixed results were the deployment of school action plans. While in Koulikoro there was a 20 percentage point increase in the SMCs that prepared a school action plan, there was a 12 percentage point reduction in Mopti. It is quite possible that political instability and strife in Mopti diminished the continuous operation of SMCs. As revealed in the interviews in Mopti with SMC members, illiteracy and challenges in filling forms for the plans was mentioned as one of the key constraining factors.

8.1.5 Impact Outcomes

Our cohort comparison quasi-experimental design shows a clear proof of program impact: children's literacy outcomes improved by one level due to 2 years of exposure to a BLA-trained teacher and these outcomes increased by more than 1 level and a half due to 3 years of exposure to BLA-trained teachers. These findings are robust to adding other covariates. However, we do not find any evidence of spillover effects indicating that the program is successful in improving reading abilities of children due to intensive, prolonged exposure to more effective and well-trained teachers. The statistically significant gains in literacy associated with the program intervention is the main critical finding of this report.

8.1.6 Qualitative Findings

Summarized below are the main qualitative findings by relevance, effectiveness, efficiency, impact, and sustainability.

Relevance:

- Local stakeholders (parents, SMC members, and local administration officials) agreed that the project aligned with the priorities of their communities. They noted that food and take-home rations addressed food insecurity, as parents do not have to provide food (or money for food) and student attendance, as students are motivated to attend school because of the lunch and/or THR.
- Elements of the original MGD project seemed to be overly ambitious, including the responsibilities of local implementing partners and the scope of the SMC training. As a result, some activities were delayed and/or adjusted to better align with local capacity.
- External factors affected the original design of the MGD project in terms of the planned objectives, outcomes, targets, and timeframe. The most prevalent factor out of the project team's control was the closing of schools due to political insecurity. Other factors include MONE's decision to promote syllabic teaching approach across the country, including the project area with BLA training, frequent teacher strikes, and students moving from public schools to Koranic schools.

Effectiveness:

- Parents and local education and administrative officials confirmed that the literacy of school-aged children is improving. Parents appreciate having the color-coded reports to monitor their children's progress.
- Program staff and partners attributed improved literacy to the BLA pedagogical techniques, including the training and involvement of teachers, principals, pedagogical advisors, and local education offices.
- Teacher turnover, low attendance, and lack of motivation have negatively affected the implementation of the BLA pedagogical techniques. Also, teachers seemed overwhelmed by the additional work due to the project, especially when they are tasked with assisting illiterate SMCs.
- Immigration affects student enrollment, as in some communities, boys leave their villages to pursue opportunities abroad where they can send money home, while girls find work in big cities to support their wedding trousseaus.
- Lack of water on school grounds prevents full effectiveness of the health and dietary objectives. No or limited water sources do not allow for handwashing, and also prevent SMC members from growing vegetables to supplement the canteen.

Efficiency:

- While overall program staff and partners reported that the project resources are being used efficiently, school closures and some adjustments to the project activities in response to changes in beneficiaries' need have caused minor impediments in allocating budget resources.
- Local administrative officials reported that in some communities there were political differences within the local education sector, specifically between the mayors and community leaders led to conflicts around the management of the schools. In other communities, the mayors often relocated teachers who were active in program schools without consideration for the needs of those schools.
- External factors such as school closure and teachers' strike, combined with the expiration of some of the commodities such as vegetable oil, made the food distribution difficult for the program.

Impact:

- Local and national stakeholders agreed that the BLA has a positive impact on improving children's literacy.
- Parents and SMC members found that school lunches and THR have a positive impact in their communities, as they address both hunger and school attendance.
- Project staff said that creating SILC groups is having a positive impact for communities, as participants are able to financially manage canteens.
- Parents and SMC members said that activities requiring water are not impactful, as they are not able to grow school gardens with the limited water supply.

- Community contributions to the canteens are less impactful than hoped for, as many families are too financially insecure to provide food or money.

Sustainability:

- The knowledge gained through BLA trainings and SILC/SMC groups will last longer than the program. However, transient teachers and community members mean that this knowledge may not stay in targeted communities.
- Although local stakeholders said that they will continue the canteens after the program leaves, they acknowledged that they will not be able to provide the same quantity and quality of food.
- Program staff expressed concern that local stakeholders lack capacity to take over the activities when CRS leaves. However, they are taking steps to revise the sustainability plan with a particular focus on the active support and involvement of the mayors' offices, who are mandated to support school development under Malian decentralization law.

8.2 Limitations

There are some limitations of the study that are worth noting:

- An important limitation of the study is that it relied on self-reported data for a number of socially and culturally sensitive subjects, such as food consumption, hygiene practices, and student attendance. This self-reported data should be interpreted with caution and is particularly susceptible to social desirability bias. To help counter biases related to hygiene practices, we integrated observational data of children's handwashing practices (at critical moments) at the school. However, this method has its limitations as many children did not eat or use the latrine during our school visit.
- As described in Section 5, at each data collection point (baseline and midline), we selected new samples of individuals to survey. A limitation of this approach is that there might be systematic differences in the two sets of samples that could confound the observed changes in the outcomes of interest over time. Inspection of the data indicate that the baseline and endline samples were similar along many demographic covariates, except for household size, and accessibility to basic services, parents' and teachers' educational attainment, and literacy training received by teachers.
- Another limitation is related to the small sample sizes for some indicators, in particular those related to the SMC and survey administrators' outcomes. It is important to note that the results presented in those sections rely on very small sample sizes which reduce the accuracy of the indicators measured and the magnitude and direction of observed changes over time needs to be interpreted with caution.
- Our impact evaluation design is a quasi-experimental methodology, which also rests on the assumptions that the time effects experienced by grade 1, 2, and 3 students are the same. Moreover, if any external policy changed the probability of participation in the program differentially for the grades, then the quasi-experimental methodology may not depict an accurate picture of the program impact on literacy.

- Our sample of schools from baseline to midline was also reduced to political instability in the country. As noted throughout the program report, we find differences in outcome achievement between Koulikoro and Mopti. It is quite possible that implementing the program as effectively in other Mopti schools was also challenging, and therefore, our analysis may be suggesting lack of improvement not because the program is not working but because of political strife in the region.

8.3 Recommendations

We present the following recommendations to CRS based on both lessons learned from our experience in the field and our findings after analyzing the collected data. The recommendations are not intended to address all challenges identified through the study; instead they focus on the main drivers of project success.

- **Improve awareness among parents and children about basic hygiene practices.** As the performance evaluation revealed, there is little progress on the adoption of hygiene practices by all the respondents, including children, parents, teachers, and SMC members. Although WASH related activities were only part of MGD II and the changes in these outcomes can be attributable to external factors such as lack of water sources, the respondents' knowledge and their self-reported hygiene practices are low with a gap between them. The project's staff and partners should investigate this issue in further detail and adjust the focus of the project's activities' efforts, perhaps by SMC and teachers, to inculcate a culture of using basic hygiene practices by children. If children learn these in the school, it is quite possible that these practices may spillover in their homes as well.
- **Continue to provide and improve BLA trainings.** The impact evaluation showed strong and significant improvement in students' literacy outcomes due to exposure to BLA-trained teachers. The project activities should continue building on their level of efforts in training teachers and ensuring that teachers intensify the use of BLA techniques in the classroom.
- **Work on the school environment.** Students cited the bad attitude of their teachers (e.g., hitting, yelling, harassing, and/or under-estimating children) as one of the most frequent reasons for what they do not like about their school and classroom. As recommended at baseline, the project should not only focus strengthening teachers' pedagogical practices, but also on improving teachers' attitudes and the school environment (explicitly addressing bullying) to create an atmosphere conducive to learning for students.
- **Target both male and female caregivers for improving outcomes such as children's school attendance.** The study also highlighted that men play a key role in decision-making on children's educational attainment. Any long-run, sustained program impact would also work towards changing the attitudes of men towards the educational attainment of their children. Strategies specific to men can include sensitizing them as partners or allies, with common goals for the welfare of the family. Even in patriarchal or religious/Islamic communities, activities can focus on reinforcing the positive emotions of men as caregivers of their daughters.⁴⁸ Since the program's goal is to improve children's health and educational outcomes, including both female and male caregivers will be critical for meeting the program's objectives, especially improving the children's school attendance and reducing their dropout rates.

⁴⁸ <http://www.un.org/womenwatch/daw/egm/men-boys2003/documents.html>

- **Scale-up activities related to savings and internal lending.** The SILC groups appear to offer the greatest path to sustainability after the project finishes, evidenced through CRS monitoring data and through the qualitative interviews with national and local stakeholders. The financial knowledge gained will last after the resources end, and several communities without SILC groups requested financial literacy training, knowing that this could help them maintain the canteens. Survey data also show that participation in the SILC groups helped parents in saving money for their children's school fees as well as improving their livelihood, including their income, assets, and food security. Future iterations of the project many want to include livelihood activities to expand the benefits of SILC group participation beyond the project objectives.
- **Increase infrastructure-building to keep pace with awareness building, or temper program expectations.** Awareness building appears to be happening faster than infrastructure building. For example, parents are aware of the importance of preventative health activities such as pre-natal care and vaccinating their children, but the expense involved, or the distance required to access care is too great for many families. Another example is many canteen activities require water, but without access to a regular water source, these activities cannot be completed.
- **Include lessons on collaboration for teachers to increase the sustainability of BLA.** Our impact evaluation shows that learning from BLA-trained teachers improves students' literacy outcomes. The lack of spillover effects within the same school (that is, no improvement in literacy for students in the same school taught by non-trained teachers) is additional evidence that sustained exposure to a trained teacher is the mechanism for students' improvement. However, the lack of increase for students in other classes also shows that teachers are not communicating or collaborating within their schools. Teachers are not sharing the techniques learned through BLA with other teachers. Because teacher turnover is so high, this threatens the sustainability of students' gains in literacy. The program could add activities on school-wide collaboration, where teachers and principals share and practice what they've learned through BLA with the whole school.
- **Consider incentives for teachers burdened with additional work.** Project staff reported that teachers are overwhelmed with extra managerial work related to the program (for example, inventory report, food delivery forms, etc.) In some schools, teachers are asked to help illiterate SMCs who are unable to complete school action forms and other required paperwork on their own. Project staff and/or partners should consider talking with teachers to get a better understanding of the extra burden involved and what could encourage adding extra duties. It may be that small grants or teacher recognition could help motivate those teachers who are reluctant to take on this extra work.
- **Put in place the revised strategy for sustainability, and include indicators to measure progress.** Several activities will require external support to continue after the program ends. For example, in many communities, the amount of food families can contribute varies heavily from year to year based on climate. Teacher and SMC turnover also threaten sustainability, as without continuous training, new teachers and SMC members will not have the knowledge and skills to use BLA and run the canteens. CRS Mali's revised strategy for sustainability recognizes that communities need additional government support, and therefore should advocate mayors' offices (mandated to support school development under Malian decentralization law) to include financial support for school feeding and teacher training in their development action plans. Monitoring progress towards the sustainability plan will help determine which strategies show promise and which need further revision.

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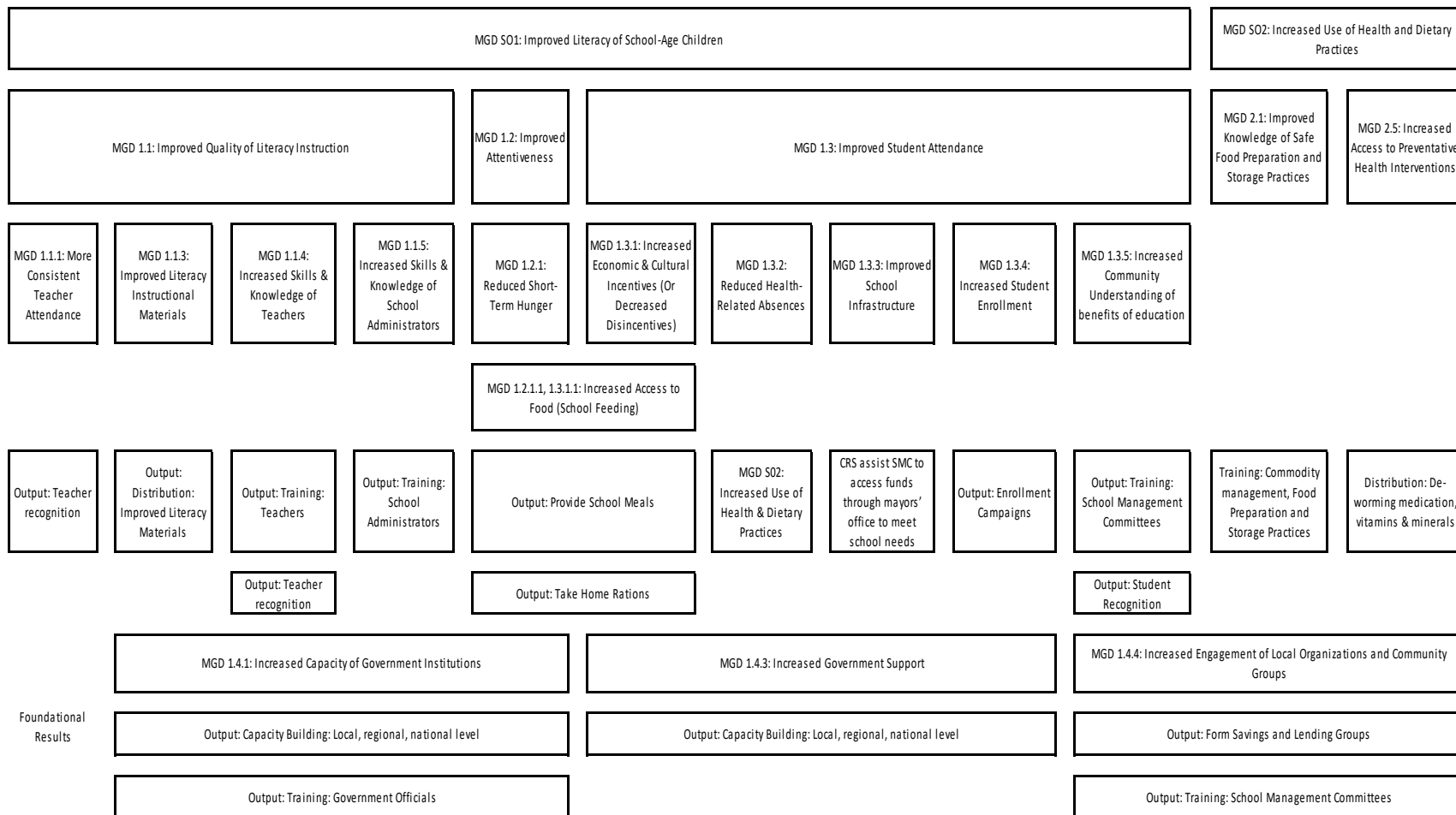
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APPENDICES

- A. McGovern-Dole Results Activities and Frameworks**
- B. McGovern-Dole Project Indicators**
- C. Additional Tables and Complementary Outcomes**
- D. Evaluation Instruments**

APPENDIX A. MCGOVERN-DOLE ACTIVITIES AND RESULTS FRAMEWORKS

Activities in common between MGD I through III	Activities Only Specific to MGD I and II	Activities Only Specific to MGD III
De-worming medication, vitamins & minerals distribution	Nutrition education activities through the positive deviance approach	Capacity Building: Local, regional, national level (Sustainability)
Enrollment campaigns	Establishment of water points and school gardens	Training: Government Officials (quality of Education)
Formation of Savings and Lending Groups	Hygiene and sanitation activities: provision of handwashing kits, construction of latrines and sensitization of communities on good hygiene and sanitation practices	Distribution: Improved Literacy Materials (quality of Education)
Provision of School Meals		Teacher recognition (quality of Education)
Student recognition		Training: School Administrators (quality of Education)
Take home rations		Training: Teachers (quality of Education)
Training: Commodity management, Food Preparation and Storage Practices		
Training: School Management Committees		



APPENDIX B: MCGOVERN-DOLE PROJECT INDICATORS

McGovern-Dole Indicators	Data Collection methods	Data Source	Baseline Percentage/Number (Observations)	Midline Percentage/Number (Observations)	Midline Target Percentage/Number (Observations)	Midline Target Met? (Yes/No)	Final Target (Percentage/Number)
Percent of students who, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade level text	IMPAQ/ Evaluation	Students Survey	Boys: 2% (310)	Boys: 16% (303)	10%	Yes	20
			Girls: 2% (333)	Girls: 13% (323)	10%	Yes	10
			Overall: 2% (643)	Overall: 14.5% (623)	10%	Yes	20
Number of individuals benefiting directly from USDA-funded interventions	CRS/ Monitoring	CRS	Male: 0	32,618	35,345	No	37,935
			Female: 0	33,298	36,494	No	39,169
			Overall: 0	65,916	71,839	No	77,104
Number of individuals benefiting indirectly from USDA-funded interventions	CRS/ Monitoring	CRS	0	252,988	143,678	Yes	231,312
Number of individuals benefiting directly from USDA-funded interventions (new)	CRS/ Monitoring	CRS	0	10,796	10,057	Yes	2,699
Number of individuals benefiting directly from USDA-funded interventions (continuing)	CRS/ Monitoring	CRS	0	55,834	61,782	No	74,405

McGovern-Dole Indicators	Data Collection methods	Data Source	Baseline Percentage/Number (Observations)	Midline Percentage/Number (Observations)	Midline Target Percentage/Number (Observations)	Midline Target Met? (Yes/No)	Final Target (Percentage/Number)
Value of public and private sector investments leveraged as a result of USDA assistance (Host Government)	CRS/ Monitoring	CRS	0	165,848 18,650	481,067	No	1,804,234
Value of public and private sector investments leveraged as a result of USDA assistance	CRS/ Monitoring	CRS	0	820,304	736,990	Yes	1,936,234
Number of Parent-Teacher Associations (PTAs) or similar "school" governance structures supported as a result of USDA assistance	CRS/ Monitoring	CRS	0	251	264	No	264
Value of public and private sector investments leveraged as a result of USDA assistance (Other Public)	CRS/ Monitoring	CRS	0	654,456	255,923	Yes	132,000
Number of Savings and Internal Lending Community (SILC) groups supported as a result of USDA assistance	CRS/ Monitoring	CRS	242	487	427	Yes	427
Average amount of contribution per Savings and Internal Lending Community (SILC) group to school canteens (per year, in US dollar) ¹	CRS/ Monitoring	CRS	5	11.39	12.33	No	15
Number of Savings and Internal Lending	CRS/ Monitoring	CRS	171	279	213	Yes	300

McGovern-Dole Indicators	Data Collection methods	Data Source	Baseline Percentage/Number (Observations)	Midline Percentage/Number (Observations)	Midline Target Percentage/Number (Observations)	Midline Target Met? (Yes/No)	Final Target (Percentage/Number)
Community (SILC) groups contributing to their school canteen							
Number of individuals actively participating in Savings and Internal Lending Community (SILC) groups as a result of USDA assistance	CRS/ Monitoring	CRS	3,993	10,993	9,107	Yes	7,500
Number of household members benefitting from the creation of Savings and Internal Lending Community (SILC) groups formed as a result of USDA assistance	CRS/ Monitoring	CRS	31,944	65,958	61,070	Yes	45,000
Number of School Management Committee members trained on MONE modules	CRS/ Monitoring	CRS	0	1,266	1,324	No	1,324
Number of Action Plans created by School Management Committees as a result of USDA assistance	CRS/ Monitoring	CRS	0	28	132	No	264
Number of Community Giant Scoreboards created as a result of USDA assistance	CRS/ Monitoring	CRS	0	254	264	No	264
Number of matching grants awarded to eligible School Management Committees	CRS/ Monitoring	CRS	0	0 ²	66	No	198

McGovern-Dole Indicators	Data Collection methods	Data Source	Baseline Percentage/Number (Observations)	Midline Percentage/Number (Observations)	Midline Target Percentage/Number (Observations)	Midline Target Met? (Yes/No)	Final Target (Percentage/Number)
Number of national-level organizational weaknesses in school canteen management addressed as a result of USDA assistance.	CRS/ Monitoring	CRS	0	2	5 ³	Yes	5
Number of local, regional or national education officials participating in sustainability events	CRS/ Monitoring	CRS	0	57	35	Yes	35
Number of government officials certified as Teacher Trainers	CRS/ Monitoring	CRS	0	36	36	Yes	36
Number of trained government officials participating in the Early Grade Reading Assessment (EGRA)	CRS/ Monitoring	CRS	N/A	48	26	Yes	26
Percent of students who demonstrate decoding abilities	IMPAQ/ Evaluation	Student Survey	Girls: 7% (1,276)	Girls: 17% (1,288)	21% (LOA target)	No	21%
			Boys: 9% (1,183)	Boys: 20% (1,216)	21% (LOA target)	No	N/A
Percent of students who reach the national reading standards by the end of the school year.	EDC/ Evaluation	EGRA	1.6%	13.2%	12% (LOA target)	Yes	12%
Average number of days present to teach per teacher	CRS/ Monitoring	CRS	0	117	155	No	155
Percent of teachers who have received feedback from school structures	CRS/ Monitoring	CRS	60	65%	44%	Yes	80

McGovern-Dole Indicators	Data Collection methods	Data Source	Baseline Percentage/Number (Observations)	Midline Percentage/Number (Observations)	Midline Target Percentage/Number (Observations)	Midline Target Met? (Yes/No)	Final Target (Percentage/Number)
Number of teachers who have received feedback from school structures	CRS/ Monitoring	CRS	0	319	300	Yes	144
Number of teachers that have literacy instructional materials as a result of USDA assistance	CRS/ Monitoring	CRS	0	488	429	Yes	703
Number of textbooks and other teaching and learning materials provided as a result of USDA assistance	CRS/ Monitoring	CRS	0	18,884	9,434	Yes	1,494
Number of balanced literacy kits distributed to schools (French)	CRS/ Monitoring	CRS	0	736	996	No	1,494
Number of balanced literacy kits distributed to schools (Bamanankan)	CRS/ Monitoring	CRS	0	39	58	No	180
Number of balanced literacy kits distributed to schools (Soninke)	CRS/ Monitoring	CRS	0	0	0	No	108
Number of balanced literacy kits distributed to schools (Dogo-so)	CRS/ Monitoring	CRS	0	3	12	No	78
Number of students benefiting from the distribution of school supplies and materials	CRS/ Monitoring	CRS	0	33,480	26,861	Yes	77,104
Number of schools receiving school supplies and materials as a result of USDA assistance	CRS/ Monitoring	CRS	0	252	264	No	264

McGovern-Dole Indicators	Data Collection methods	Data Source	Baseline Percentage/Number (Observations)	Midline Percentage/Number (Observations)	Midline Target Percentage/Number (Observations)	Midline Target Met? (Yes/No)	Final Target (Percentage/Number)
Number of teachers/educators/teaching assistants in target schools who demonstrate use of new and quality teaching techniques or tools as a result of USDA assistance	CRS/ Monitoring	0	0	319	216	Yes	633
Percent of girl students reporting they feel encouraged to participate in class by their teachers	IMPAQ/ Evaluation	Student Survey	62% (1,271)	65% (1,288)	75%	No	10
Number of teachers/educators/teaching assistants trained or certified as a result of USDA assistance	CRS/ Monitoring	CRS	0	488	678	No	703
Number of school administrators and officials in target schools who demonstrate use of new techniques or tools as a result of USDA assistance	CRS/ Monitoring	CRS	0	324	149	Yes	257
Number of school administrators and officials trained or certified as a result of USDA assistance	CRS/ Monitoring	CRS	0	357	319	Yes	293
Percent of students in target schools identified by their teachers as attentive during class/instruction	EDC/ Evaluation	EDC	50	60%	80%	No	80
Percent of students in target schools who indicate that they are "not	IMPAQ/ Evaluation	Student Survey	91% (2,041)	91.5% (2,191)	95%	No	20

McGovern-Dole Indicators	Data Collection methods	Data Source	Baseline Percentage/Number (Observations)	Midline Percentage/Number (Observations)	Midline Target Percentage/Number (Observations)	Midline Target Met? (Yes/No)	Final Target (Percentage/Number)
hungry" during the school day							
Percent of school-age children receiving a minimum acceptable diet	IMPAQ/ Evaluation	Student Survey	Boys: 28% (1,079)	Boys: 34.2% (1,084)	33%	Yes	10
			Girls: 29% (1,168)	Girls: 33.9% (1,117)	34%	No	
Number of school-aged children receiving daily school meals (breakfast, snack, lunch) as a result of USDA assistance	CRS/ Monitoring	CRS	0	Boys: 31,838	35,345	No	37,935
				Girls: 33,859	36,494	No	39,169
Number of school-aged children receiving daily school meals (breakfast, snack, lunch) as a result of USDA assistance (new)	CRS/ Monitoring	CRS	0	10,796	10,057	Yes	2,699
Number of school-aged children receiving daily school meals (breakfast, snack, lunch) as a result of USDA assistance (continuing)	CRS/ Monitoring	CRS	0	52,451	61,782	Yes	74,405
Number of daily school meals (breakfast, snack, lunch) provided to school-age children as a result of USDA assistance	CRS/ Monitoring	CRS	0	12,078,582	22,588.960	No ⁴	42,721, 386
Number of take-home rations provided as a result of USDA assistance	CRS/ Monitoring	CRS	0	354,886	395,234	No	19,499

McGovern-Dole Indicators	Data Collection methods	Data Source	Baseline Percentage/Number (Observations)	Midline Percentage/Number (Observations)	Midline Target Percentage/Number (Observations)	Midline Target Met? (Yes/No)	Final Target (Percentage/Number)
Number of individuals receiving take-home rations as a result of USDA assistance (new)	CRS/ Monitoring	CRS	0	5,198	2,986	Yes	975
Number of individuals receiving take-home rations as a result of USDA assistance (continuing)	CRS/ Monitoring	CRS	0	9,202	16,611	No	18,524
Number of individuals receiving take-home rations as a result of USDA assistance	CRS/ Monitoring	CRS	Boys: 0	Boys: 7,014	9,003	No	9,453
			Female: 0	Girls: 7,696	9,568	No	10,046
Number of individuals receiving take-home rations as a result of USDA assistance (Others)	CRS/ Monitoring	CRS	0	926	1,026	No	1,101
Number of social assistance beneficiaries participating in productive safety nets as a result of USDA assistance	CRS/ Monitoring	CRS	0	Boys: 31,838	35,345	No	37,935
			0	Girls: 33,859	36,494	No	40,270
Number of social assistance beneficiaries participating in productive safety nets as a result of USDA assistance (new)	CRS/ Monitoring	CRS	0	10,796	10,057	Yes	2,737
Number of social assistance beneficiaries participating in productive safety nets as a result of USDA assistance (continuing)	CRS/ Monitoring	CRS	0	53,323	61,782	No	75,468

McGovern-Dole Indicators	Data Collection methods	Data Source	Baseline Percentage/Number (Observations)	Midline Percentage/Number (Observations)	Midline Target Percentage/Number (Observations)	Midline Target Met? (Yes/No)	Final Target (Percentage/Number)
Total quantity of commodities (MT) distributed as family rations to cooks as a result of USDA assistance	CRS/ Monitoring	CRS	0	134.96	230	No	70
Number of individuals trained in commodity management, food preparation and storage practices at the community-level	CRS/ Monitoring	CRS	0	1,380	1,324	Yes	1,324
Number of school canteen cooks trained in safe food preparation and storage	CRS/ Monitoring	CRS	0	375	1,026	No	1,101
Number of government staff in relevant ministries/offices trained in commodity management, food preparation and storage practices	CRS/ Monitoring	CRS	0	15	14	Yes	14
Number of school-aged children receiving school meals (breakfast, snack, lunch) as a result of USDA assistance	CRS/ Monitoring	CRS	0	65,697	71,839	No	77,104
Number of individuals receiving take-home rations as a result of USDA assistance	CRS/ Monitoring	CRS	0	15,478	19,597	No	20,600
Number of social assistance beneficiaries participating in productive	CRS/ Monitoring	CRS	0	66,623	72,865	No	78,205

McGovern-Dole Indicators	Data Collection methods	Data Source	Baseline Percentage/Number (Observations)	Midline Percentage/Number (Observations)	Midline Target Percentage/Number (Observations)	Midline Target Met? (Yes/No)	Final Target (Percentage/Number)
safety nets as a result of USDA assistance							
Number of students regularly (80%) attending USDA supported classrooms/schools	CRS/ Monitoring	CRS	Boys: 0	Boys: 29,570	32,244	No	34,142
			Girls: 0	Girls: 30,294	33,294	No	35,252
Average number of days per student of school attended	CRS/ Monitoring	CRS	0	96.53	143	No	143
Percent of 5th and 6th grade students having at least 90% school attendance	CRS/ Monitoring	CRS	0	85%	90%	No	90
Average number of days missed per student per school year due to student health issues	CRS/ Evaluation	CRS	38	10.27	23	No	23
Number of students receiving Vitamin A tablets	CRS/ Monitoring	CRS	0	230,911	313,376	No	71,839
Number of de-worming treatments provided	CRS/ Monitoring	CRS	0	230,911	313,376	No	516,245
Number of Vitamin A supplements provided	CRS/ Monitoring	CRS	0	230,911	313,376	No	516,245
Percent of households reporting school aged children NOT in school	IMPAQ/ Evaluation	Household survey	34.1% (1,963)	30.5% (2,077)	23%	No	37,935
Number of students enrolled in schools receiving USDA assistance	CRS/ Monitoring	CRS	0	Boys: 31,838	35,345	No	39,169
			0	Girls: 33,859	36,494	No	264

McGovern-Dole Indicators	Data Collection methods	Data Source	Baseline Percentage/Number (Observations)	Midline Percentage/Number (Observations)	Midline Target Percentage/Number (Observations)	Midline Target Met? (Yes/No)	Final Target (Percentage/Number)
Number of target communities benefitting from enrollment campaigns	CRS/ Monitoring	CRS	0	252	224	Yes	264
Number of target communities benefitting from community-level barrier analyses	CRS/ Monitoring	CRS	0	252	264	No	80%
Percent of community members demonstrating knowledge of educational benefits	CRS/ Evaluation	CRS	88.5% (2,338)	86.0% (2,431)	92%	No	
Number of students whose parents received illustrated report cards distributed to literate and illiterate parents	CRS/ Monitoring	CRS	66,933	65,610	71,839	No	77,104
Number of students who receive certificates that recognize academic achievement	CRS/ Monitoring	CRS	0	2,288	5,280	No	5,280

Source: IMPAQ Instruments and CRS Monitoring Data

¹ This is an average over the 3 year period.

² The process is ongoing and the grants will be disbursed in September.

³ Target for the 5-year life of activity.

⁴ Up to March 2018.

APPENDIX C. ADDITIONAL TABLES AND COMPLEMENTARY OUTCOMES

Exhibit 74: What Students Liked About Their Classroom and School

Indicator	Koulikoro	Mopti
Nothing	0.5%	1.9%
The lessons are easy to understand	37.3%	35.2%
The teacher teaches well	15.0%	16.6%
The teacher is kind and helpful	5.5%	14.2%
Learn useful skills and knowledge	45.8%	22.4%
Participate in activities/class games	24%	34.4%
Food is provided	37.0%	52.5%
Access to water	5.0%	15.2%
Access to good latrines that are in good condition and clean	3.3%	12.9%
Doing sport at school	5.1%	5.0%
Other	17.3%	18.7%
Total number of observations	3329	1849

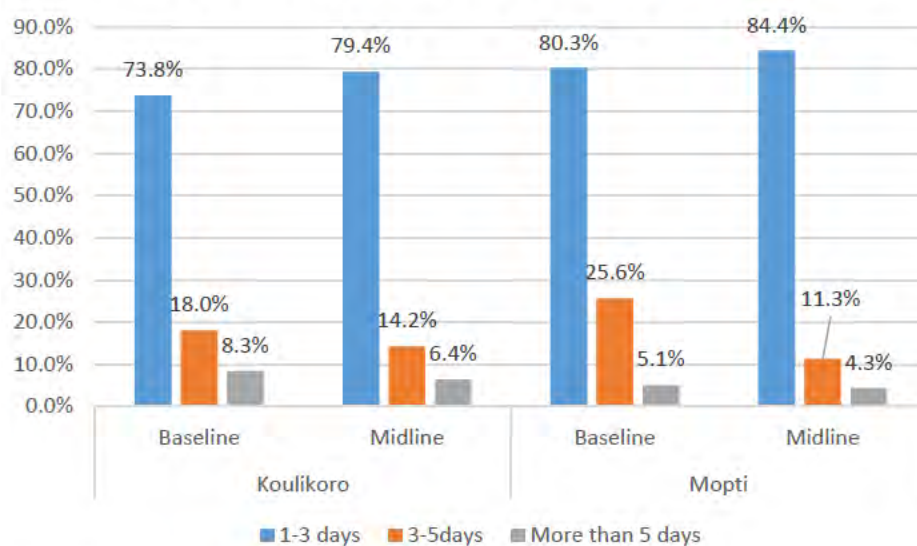
Source: student survey; authors' calculations

Exhibit 75: What Students Did Not Like About Their Classroom and School

Indicator	Koulikoro	Mopti
Nothing	14.1%	34.0%
Teachers hits, yells, harasses, and/or under-estimates	48.1%	22.3%
Lessons are difficult to understand	2.1%	0.9%
Don't learn interesting things/it is boring	1.4%	0.3%
Teacher is often not present at school	2.7%	0.6%
Lack of learning materials: that is books, board, etc.	2.4%	0.3%
School too far	2.0%	4.0%
Bad sanitary hygiene in the toilets, lack of toilets	4.2%	1.7%
Food provided is bad, no food provided	2.2%	1.2%
No access to water	0.9%	1.5%
Other students tease/intimidate me	29.6%	18.6%
Lack of clothes/uniforms	1.2%	1.2%
Other	18.1%	9.9%
Total number of observations	2187	779

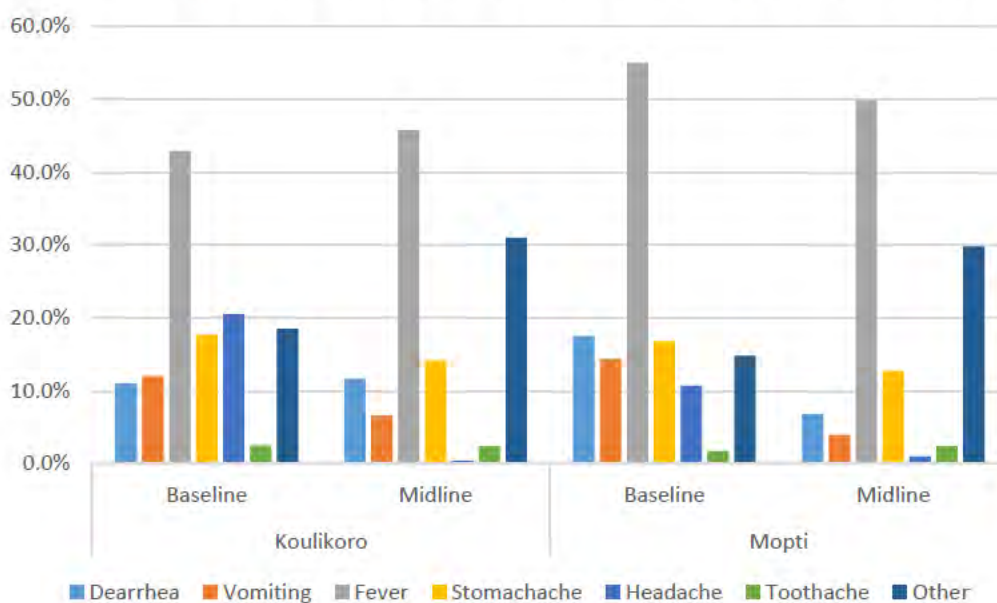
Source: student survey; authors' calculations

Exhibit 76: Number of School Days Missed due to Students' Illness in the Last Two Weeks



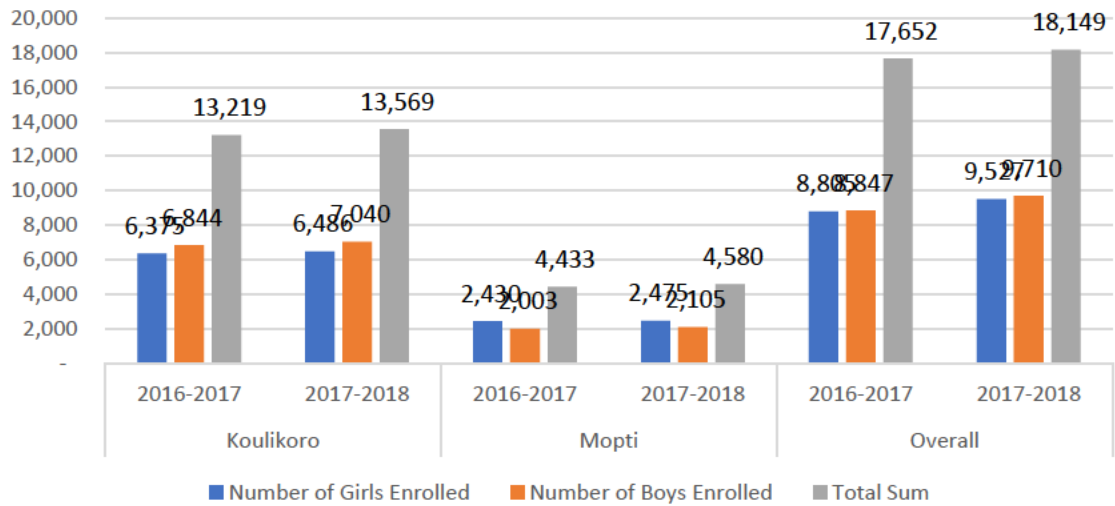
Source: student survey; authors' calculations

Exhibit 77: Type of Illness, If Student Missed School in the Last Two Weeks Due to Illness



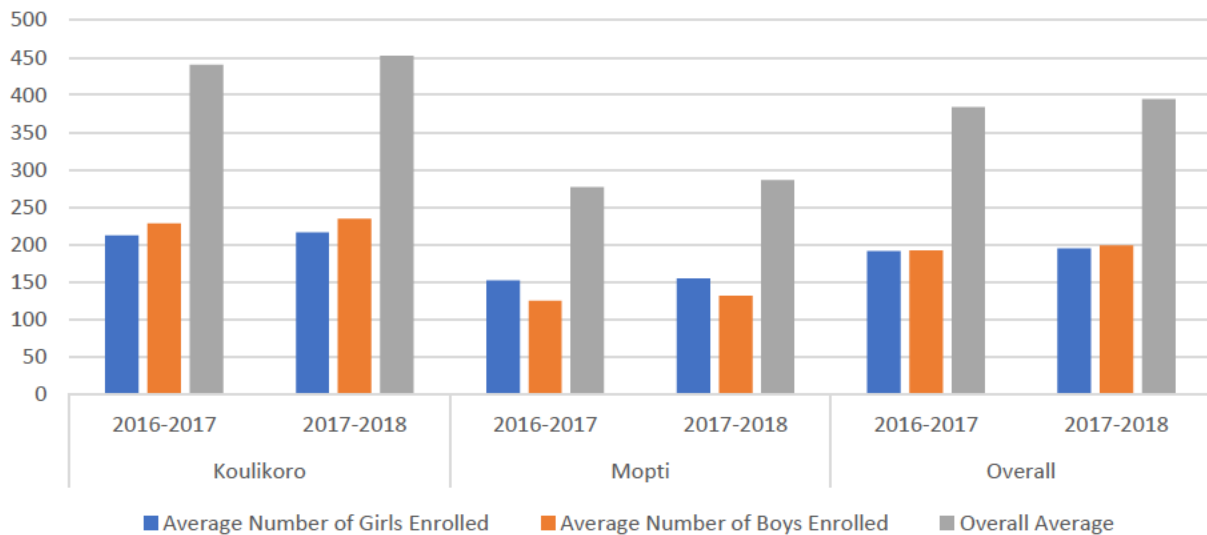
Source: student survey; authors' calculations

Exhibit 78: Students Enrollment (2016-2018)



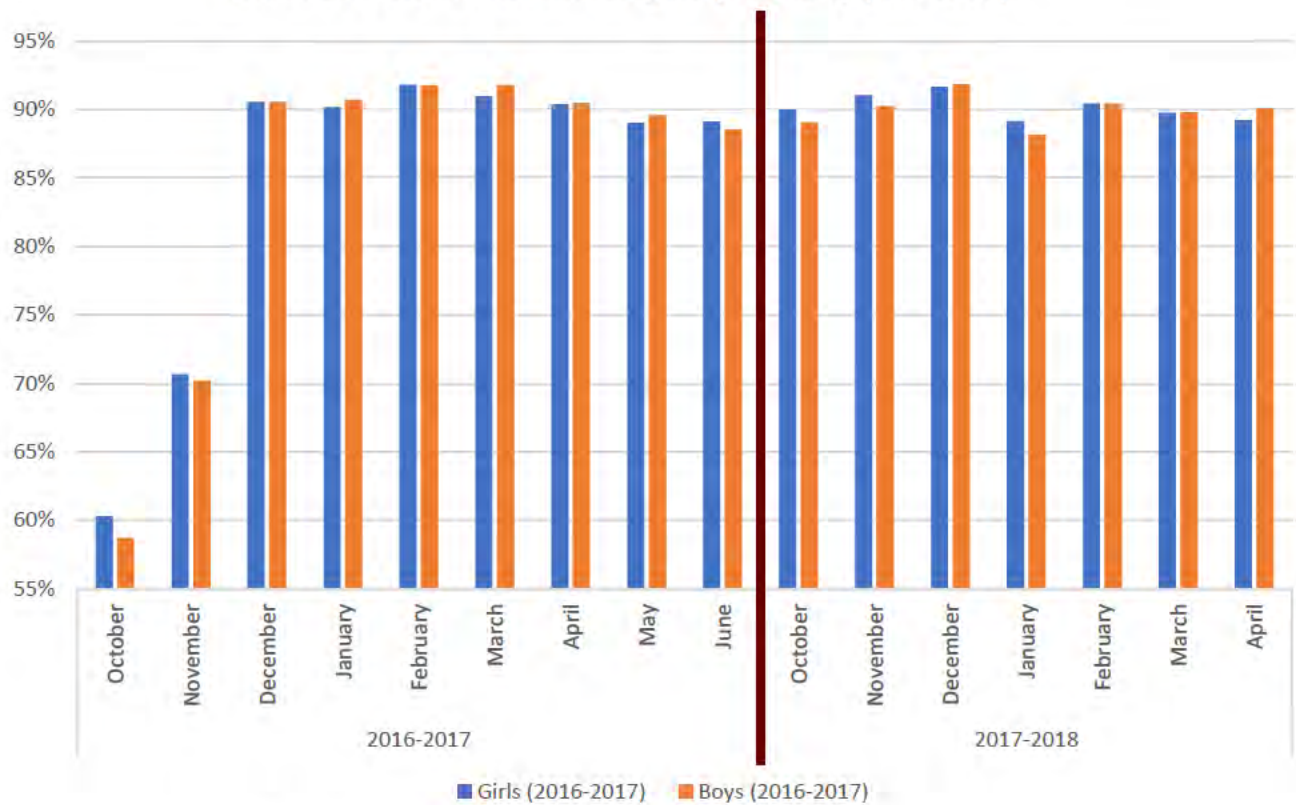
Source: CRS monitoring data; authors' calculations

Exhibit 79: Average Number of Students Enrolled per School (2016-2018)



Source: CRS monitoring data; authors' calculations. Exhibit describes the average number of students enrolled per school, among schools in the respective region (Koulikoro, Mopti, or both/overall).

Exhibit 80: Percent of Students Regularly Attending (2016-2018)



Source: CRS monitoring data; authors' calculations

Exhibit 81: Students Food Intake

Indicator	Baseline		Midline		Difference in Means
	Percent	Total Number of Observations	Percent	Total Number of Observations	(p-value)
Koulikoro					
Children ate before coming to school	21.5%	1,335	18.9%	1,512	-2.6%* (0.0784)
Children felt full after the morning meal	99.2%	1,286	98.7%	1,447	-0.5% (0.1728)
Children ate during lunch break	96.4%	1,335	97.3%	1,512	0.9% (0.1764)
Children felt full after eating lunch	99.4%	1,287	99.1%	1,471	0.3% (0.4296)
Proportion of students that felt full during the school day	93.0%	1,326	92.2%	1,505	-0.8 (0.4412)
Mopti					
Children ate before coming to school	28.5%	912	15.2%	689	-13.3%*** (0.0000)
Children felt full after the morning meal	97.1%	869	97.6%	654	0.4% (0.6078)
Children ate during lunch break	96.9%	912	97.7%	689	0.7% (0.3650)
Children felt full after eating lunch	97.1%	884	98.2%	673	1.1% (0.1425)
Proportion of students that felt full during the school day	88.4%	910	90.0%	686	1.6% (0.3145)

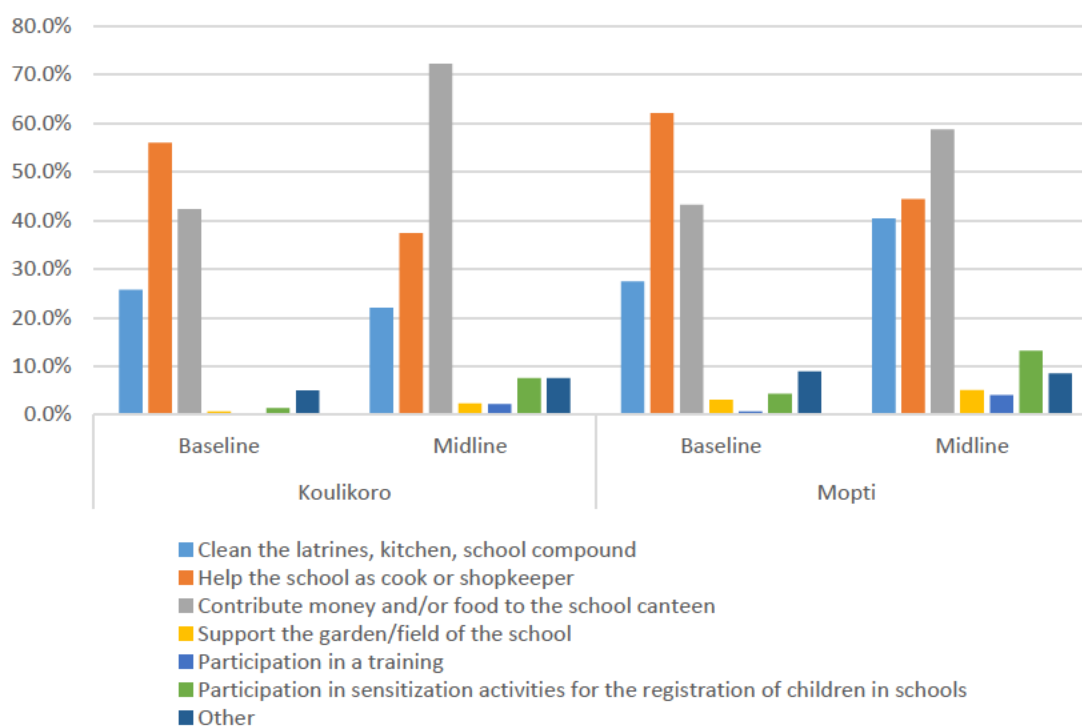
Source: student survey; authors' calculations

Exhibit 82: Reading Proficiency at Grade Level by Region

Grade Level Proficiency	Koulikoro					Mopti				
	Baseline		Midline		Difference in Means (p-value test)	Baseline		Midline		Difference in Means (p-value test)
	%	#	%	#		%	#	%	#	
Grade 1	5.2	367	19.2%	426	14.1*** (0.0000)	3.6%	251	19.6%	199	16.0*** (0.0000)
Grade 2	2.1%	382	16.2%	425	14.1*** (0.0000)	1.9%	259	10.9%	201	9.0%*** (0.0000)
Grade 3	4.3%	370	27.5%	429	23.2%*** (0.0000)	6.2%	260	26.2%	202	20.1%*** (0.0000)
Grade 4	5.5%	343	2.9%	417	2.7%* (0.0650)	2.2%	227	6.3%	205	4.1%** (0.0316)
Total	1462		1697		-	997		807		-

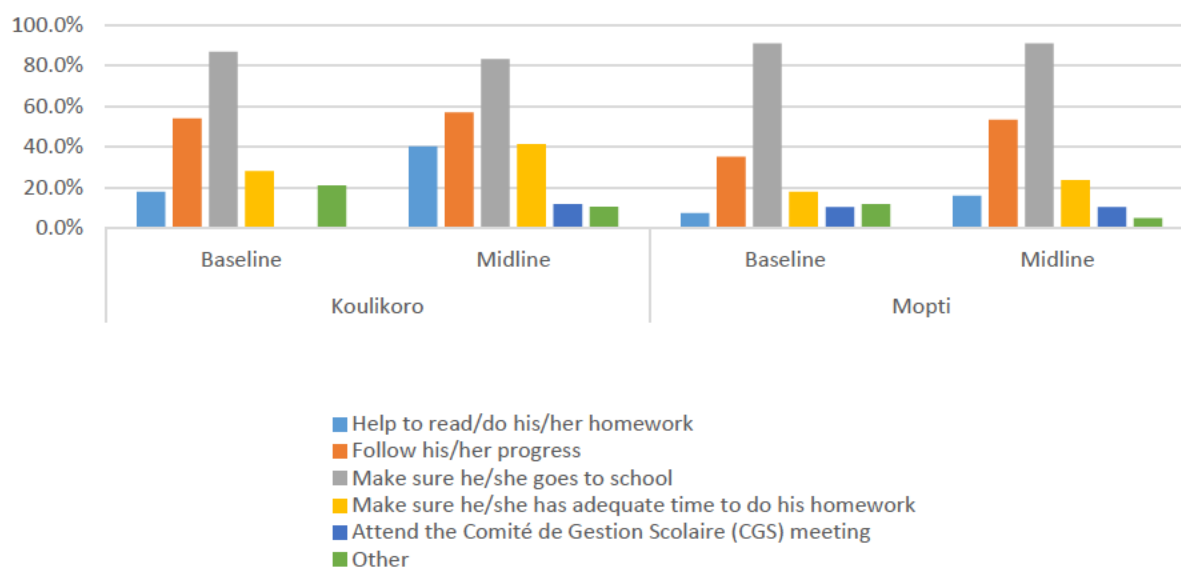
Source: student survey; authors' calculations; # refers to the total number of observation and % refers to the percentage of the indicator

Exhibit 83: School Support Activities That Caregivers Participated In



Source: Caregiver Survey; authors' calculations, Baseline: N=723 in Koulikoro, N=490 in Mopti. Midline: N=846 in Koulikoro, N=401 in Mopti. Sample includes only caregivers of students in 1st and 2nd grades at baseline and 3rd and 4th grades at midline.

Exhibit 84: Types of Academic Support Caregivers Provided to Students



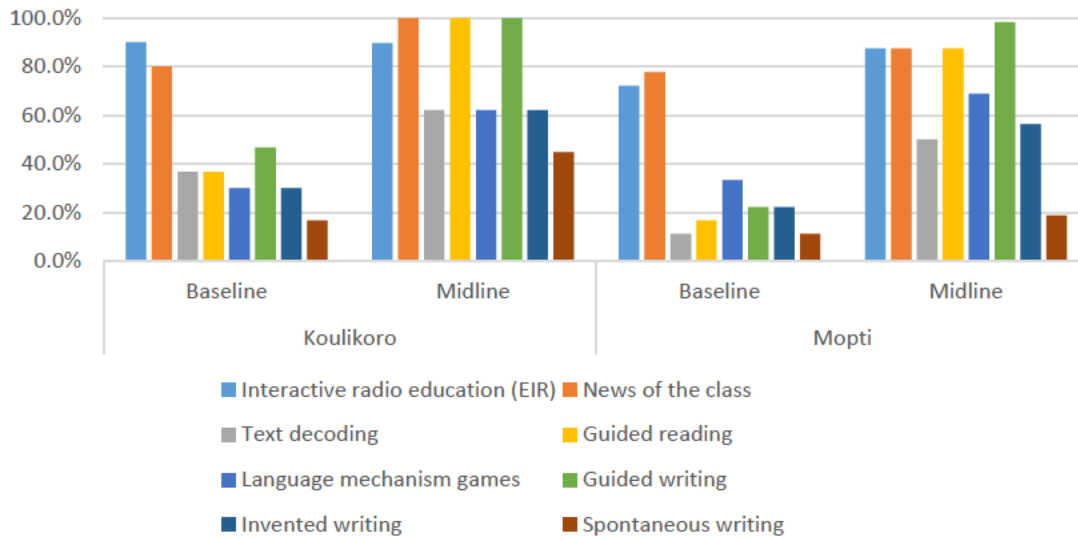
Source: Caregiver Survey; authors' calculations, Baseline: N=723 in Koulikoro, N=490 in Mopti. Midline: N=846 in Koulikoro, N=401 in Mopti. Sample includes only caregivers of students in 1st and 2nd grades at baseline and 3rd and 4th grades at midline.

Exhibit 85: Percentage of Teachers Trained in All Eight BLA Techniques at Midline

Grade	Koulikoro		Mopti	
	Percent	Observations	Percent	Observations
Grade 1	34.5%	29	12.5%	16
Grade 2	10.0%	30	26.7%	15
Grade 3	25.0%	32	47.1%	17
Grade 4	3.0%	33	11.8%	17

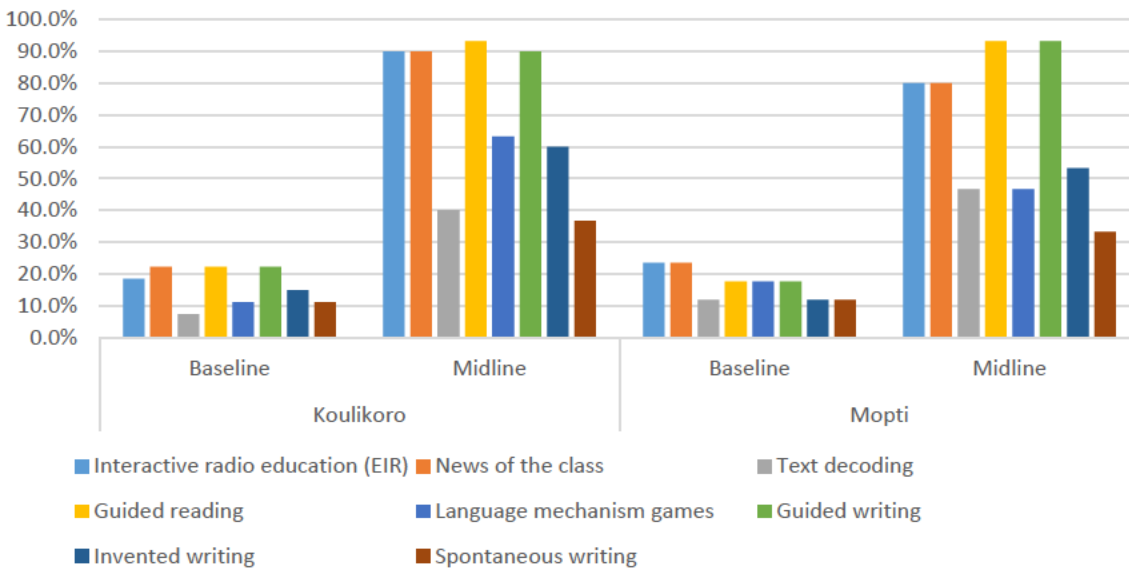
Source: Teachers and Principals Survey; authors' calculations.

Exhibit 86: Percentage of Grade 1 Teachers Trained in BLA Techniques



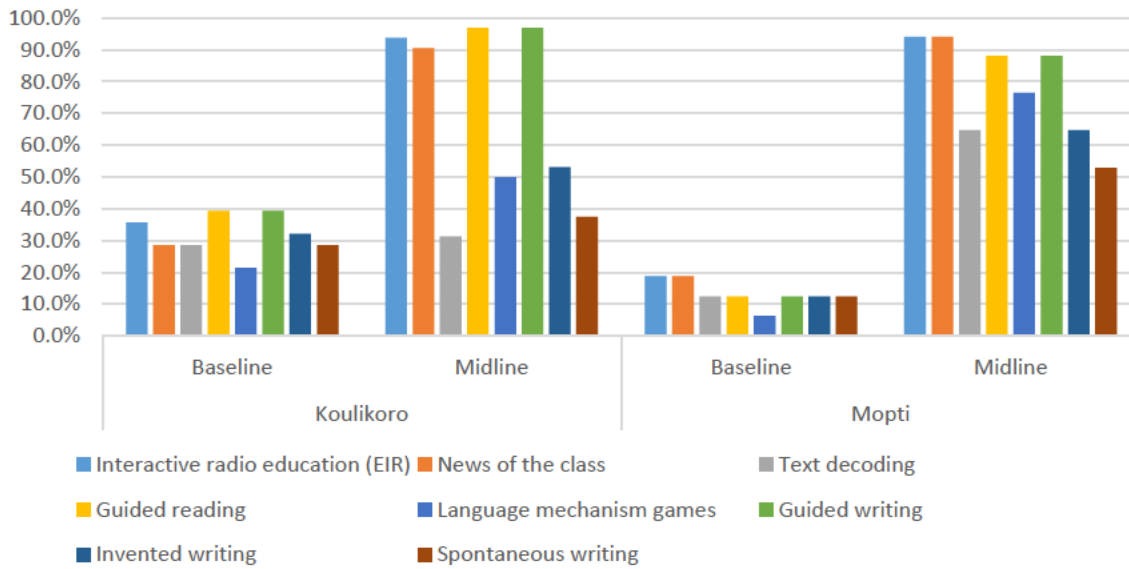
Source: Teachers and Principals Survey; authors' calculations.

Exhibit 87: Percentage of Grade 2 Teachers Trained in BLA Techniques



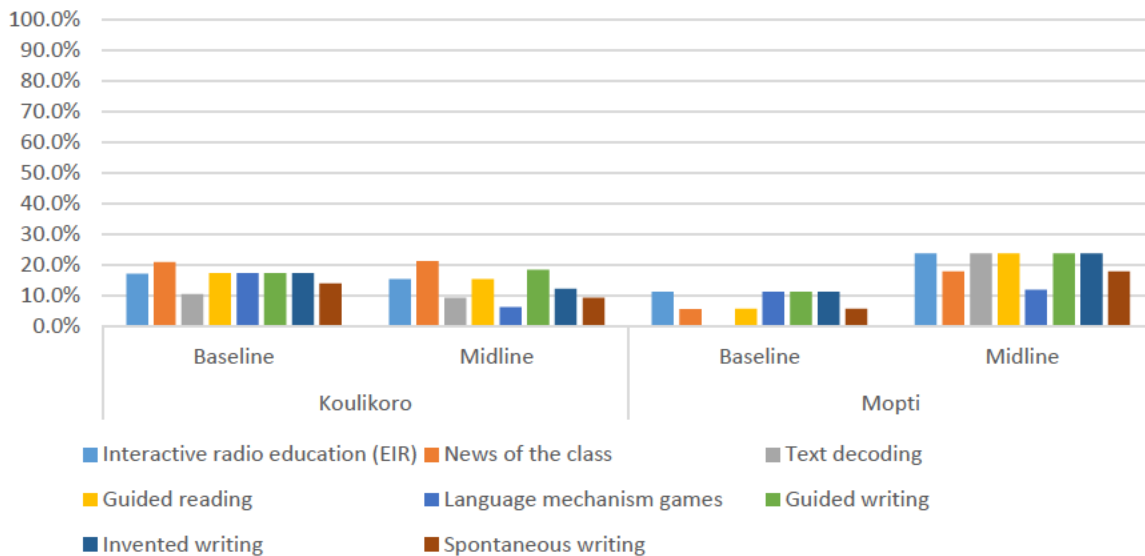
Source: Teachers and Principals Survey; authors' calculations.

Exhibit 88: Percentage of Grade 3 Teachers Trained in BLA Techniques



Source: Teachers and Principals Survey; authors' calculations.

Exhibit 89: Percentage of Grade 4 Teachers Trained in BLA Techniques



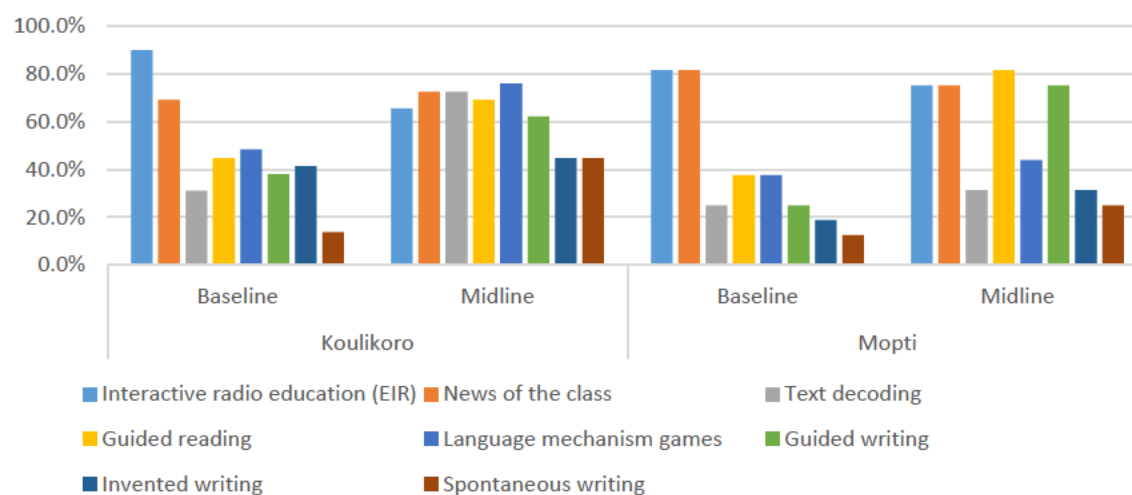
Source: Teachers and Principals Survey; authors' calculations.

Exhibit 90: Average Number of Techniques Used Among Those Trained In BLA

Grade	Koulikoro				Mopti			
	Baseline		Midline		Baseline		Midline	
	Average	Observations	Average	Observations	Average	Observations	Average	Observations
Grade 1	3.8	29	5.1	29	3.2	16	4.4	16
Grade 2	3.2	12	4.2	29	2.0	5	3.1	14
Grade 3	2.4	10	5.3	31	3.0	6	4.9	16
Grade 4	1.7	3	3.3	4	1.0	3	2.5	2

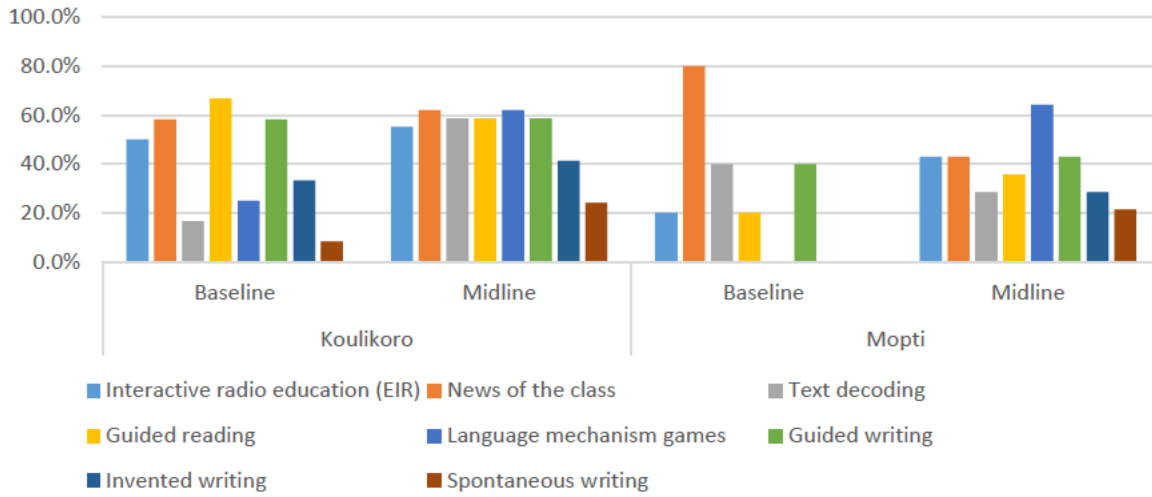
Source: Teachers and Principals Survey; authors' calculations.

Exhibit 91: Percentage of Grade 1 Teachers Using BLA Techniques



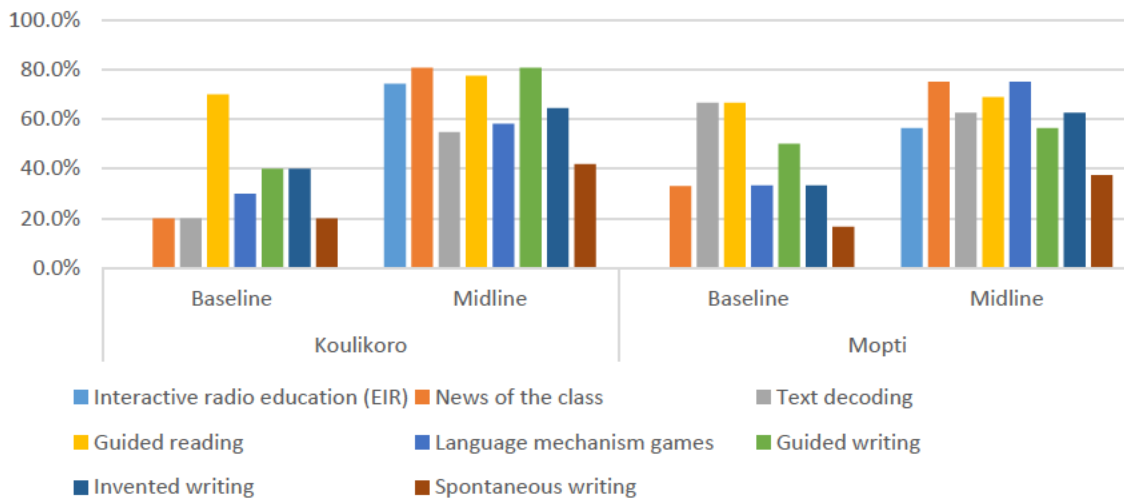
Source: Teachers and Principals Survey; authors' calculations.

Exhibit 92: Percentage of Grade 2 Teachers Using BLA Techniques



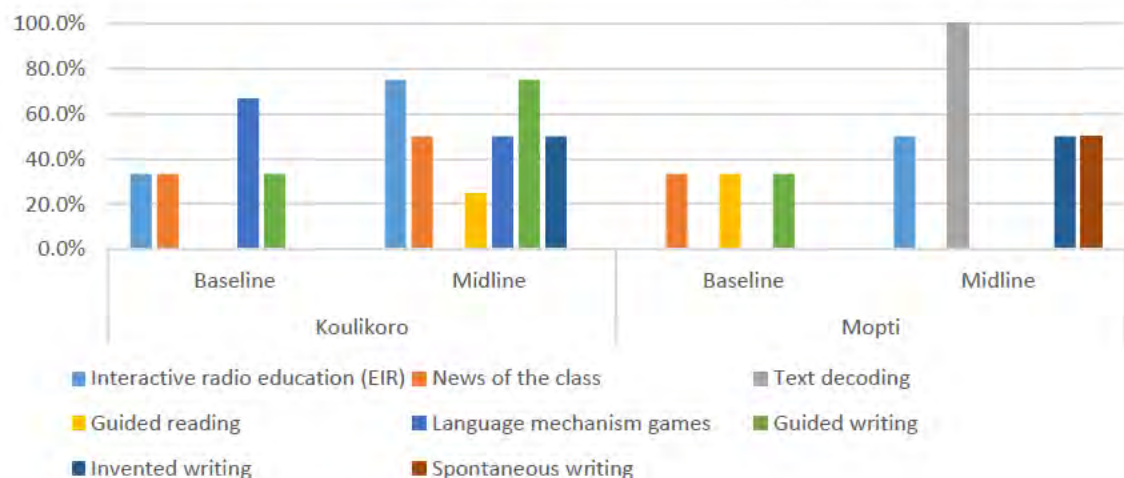
Source: Teachers and Principals Survey; authors' calculations.

Exhibit 93: Percentage of Grade 3 Teachers Using BLA Techniques



Source: Teachers and Principals Survey; authors' calculations.

Exhibit 94: Percentage of Grade 4 Teachers Using BLA Techniques



Source: Teachers and Principals Survey; authors' calculations.

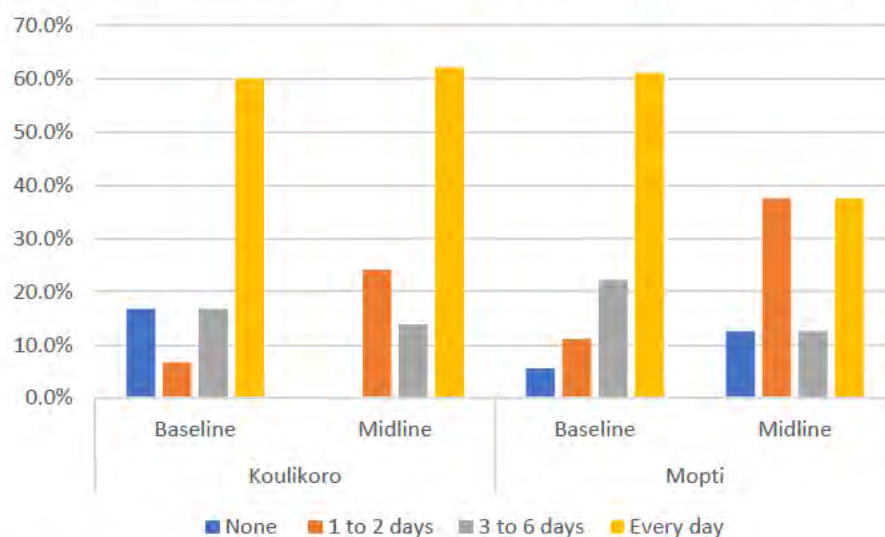
Exhibit 95: Percentage of Teachers Reporting Student Appreciation of BLA Technique

BLA Techniques Appreciated by Students According to Teachers		Interactive radio education (EIR)	News of the class	Text decoding	Guided reading	Language mechanism games	Guided writing	Invented writing	Spontaneous writing	Total number of responses	Total number of observations
Koulikoro		Baseline									
	Grade 1	86.2%	51.7%	17.2%	13.8%	34.5%	10.3%	20.7%	6.9%	70	30
	Grade 2	50.0%	33.3%	0.0%	50.0%	25.0%	50.0%	8.3%	0.0%	26	27
	Grade 3	0.0%	20.0%	0.0%	20.0%	30.0%	50.0%	40.0%	20.0%	18	28
	Grade 4	33.3%	33.3%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	3	29
		Midline									
	Grade 1	62.1%	55.2%	17.2%	44.8%	48.3%	20.7%	17.2%	3.5%	78	29
	Grade 2	48.3%	79.3%	10.3%	31.0%	51.7%	41.4%	10.3%	3.5%	80	30
	Grade 3	64.5%	74.3%	12.9%	35.5%	61.3%	29.0%	19.4%	6.5%	94	32
	Grade 4	50.0%	75.0%	0.0%	0.0%	50.0%	50.0%	25.0%	0.0%	10	33

BLA Techniques Appreciated by Students According to Teachers		Interactive radio education (EIR)	News of the class	Text decoding	Guided reading	Language mechanism games	Guided writing	Invented writing	Spontaneous writing	Total number of responses	Total number of observations
Mopti		Baseline									
	Grade 1	56.3%	62.5%	12.5%	6.3%	31.3%	0.0%	0.0%	0.0%	27	18
	Grade 2	20.0%	60.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5	17
	Grade 3	0.0%	50.0%	33.3%	33.3%	16.7%	16.0%	16.7 %	16.7 %	11	16
	Grade 4	0.0%	66.7%	33.3%	33.3%	33.3%	0.0%	0.0%	0.0%	5	18
		Midline									
	Grade 1	68.8%	81.3%	18.8%	43.8%	25.0%	50.0%	18.8 %	6.3%	50	16
	Grade 2	57.1%	78.6%	28.6%	64.3%	42.9%	42.9%	14.3 %	7.1%	47	15
	Grade 3	75.0%	81.3%	12.5%	50.0%	31.3%	25.0%	6.3%	6.3%	46	17
	Grade 4	100.0 %	100.0 %	0.0%	100.0 %	100.0 %	100.0 %	0.0%	0.0%	17	17

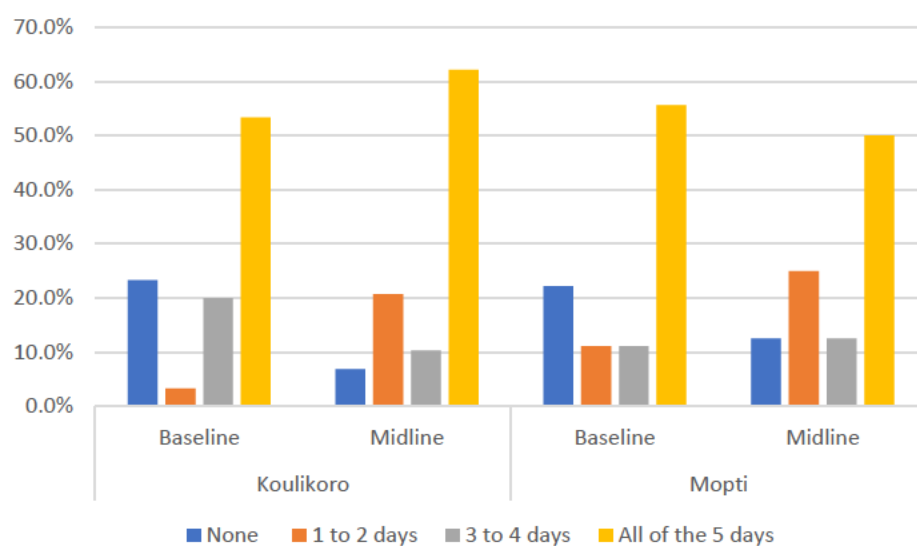
Source: Teachers and Principals Survey; authors' calculations.

Exhibit 96: Parents' Wood Contributions to the Canteen, Reported by SMC Members



Source: SMC survey, authors' calculations. Baseline: N= 18 for Mopti and N=30 for Koulikoro. Midline: N= 16 for Mopti and N=29 for Koulikoro.

Exhibit 97: Parents' Food/Condiments Contribution to the Canteen, Reported by SMC Members



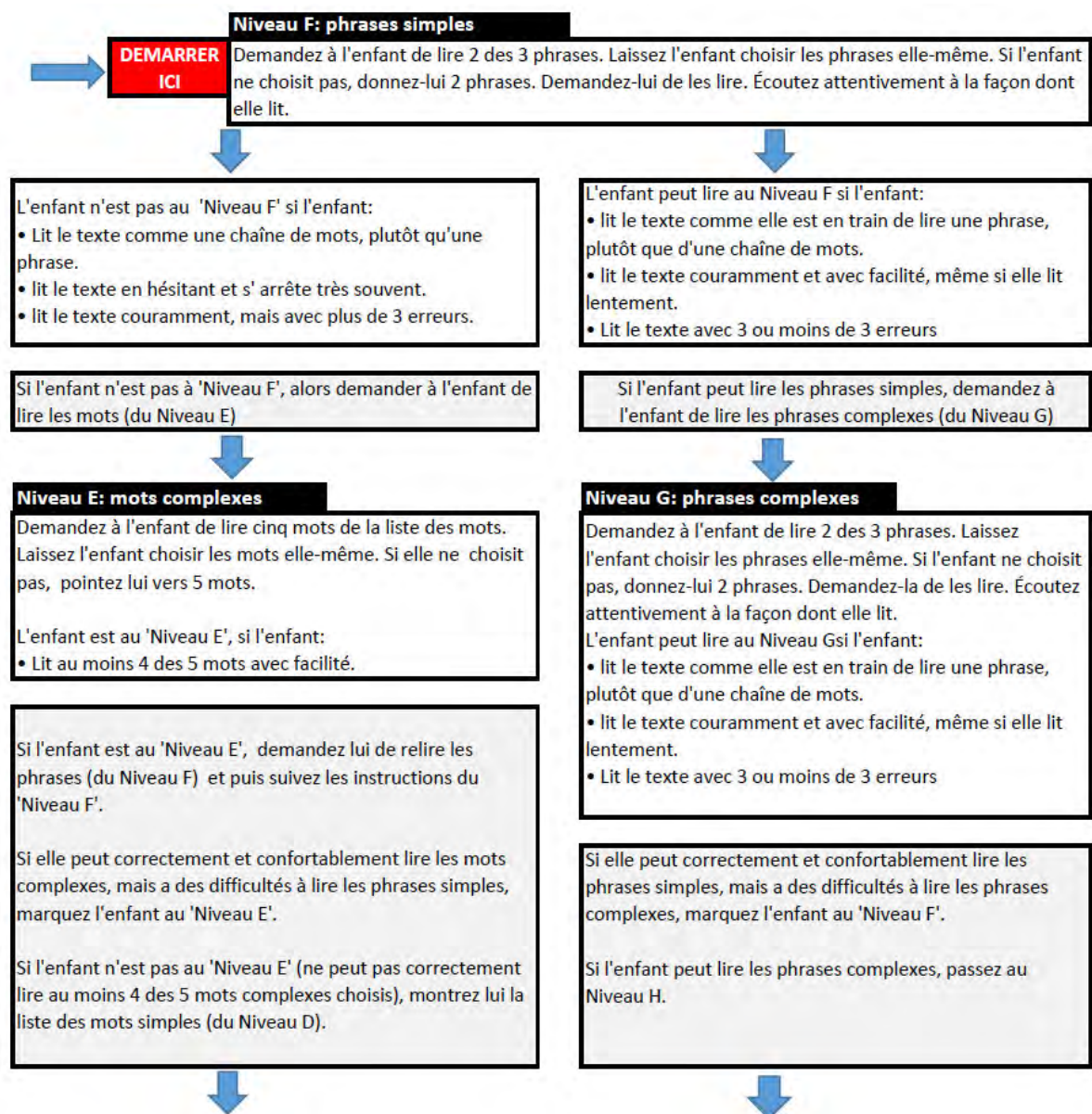
Source: SMC survey, authors' calculations. Baseline: N= 18 for Mopti and N=30 for Koulikoro. Midline: N= 16 for Mopti and N=29 for Koulikoro.

APPENDIX D. EVALUATION INSTRUMENTS

ASER Reading Assessment
ASER Test Administration Instructions
Student Survey
Caregiver Survey
Teacher/ Principal Survey
SMC Survey
Key Informant Interview Protocol
Focus Group Discussion Protocol

ASER Test Administration Instructions





Niveau D: mots simples

Demandez à l'enfant de lire cinq mots de la liste des mots. Laissez l'enfant choisir les mots elle-même. Si elle ne choisit pas, pointez lui vers 5 mots. L'enfant est au 'Niveau D', 'si l'enfant:

- Lit au moins 4 des 5 mots avec facilité.

Si l'enfant est au 'Niveau D', demandez lui de relire les mots complexes (du Niveau E) et puis suivez les instructions du 'Niveau E'.

Si elle peut correctement et confortablement lire les mots simples, mais a des difficultés à lire les phrases, marquez l'enfant au 'Niveau D'.

Si l'enfant n'est pas au 'Niveau D' (ne peut pas correctement lire au moins 4 des 5 mots simples choisis), montrez lui la liste des sons complexes (du Niveau C).



Niveau C: sons complexes

Demandez à l'enfant de lire cinq sons de la liste des sons. Laissez l'enfant choisir les sons elle-même. Si elle ne choisit pas, pointez lui vers 5 sons.

L'enfant est au 'Niveau C', 'si l'enfant:

- Lit au moins 4 des 5 sons avec facilité.

Si l'enfant est au 'Niveau C', demandez lui de relire les mots simples (du Niveau D) et puis suivez les instructions du 'Niveau D'.

Si elle peut correctement et confortablement lire les sons complexes, mais a des difficultés à lire les mots simples, marquez l'enfant au 'Niveau C'.

Si l'enfant n'est pas au 'Niveau C' (ne peut pas correctement lire au moins 4 des 5 sons complexes choisis), montrez lui la liste des sons simples (du Niveau B).



Niveau H: histoire simple

Demandez à l'enfant de lire l'histoire.

L'enfant est au 'Niveau H' si l'enfant:

- lit le texte comme elle est en train de lire une phrase, plutôt que d'une chaîne de mots.
- lit le texte couramment et avec facilité. L'enfant peut lire lentement.
- Lit le texte avec 3 ou moins de 3 erreurs.

Si elle peut correctement et confortablement lire les phrases complexes mais a des difficultés à lire l'histoire simple, marquez l'enfant au 'Niveau G'.

Si l'enfant peut lire l'histoire simple, passez au niveau I.



Niveau I: question de compréhension du text H

Lisez à l'enfant les trois questions de compréhension et demandez à l'enfant de répondre aux 3 questions.

L'enfant est au 'Niveau I' si l'enfant:

- Peut répondre correctement à au moins 2 questions de compréhension.

Si elle peut correctement et confortablement lire l'histoire simple mais a des difficultés à répondre correctement à 2 questions de compréhension marquez l'enfant au 'Niveau H'.

Si l'enfant peut répondre correctement à 2 questions de compréhension, passez au Niveau J.



Niveau B: sons simples

Demandez à l'enfant de lire cinq sons de la liste des sons. Laissez l'enfant choisir les sons elle-même. Si elle ne choisit pas, pointez lui vers 5 sons.

L'enfant est au 'Niveau B', si l'enfant:

- Lit au moins 4 des 5 sons avec facilité

Si l'enfant est au 'Niveau B', demandez lui de relire les sons complexes (du Niveau C) et puis suivez les instructions du 'Niveau C'.

Si elle peut correctement et confortablement lire les sons simples, mais a des difficultés à lire les sons complexes marquez l'enfant au 'Niveau B'.

Si l'enfant n'est pas au 'Niveau B' (ne peut pas correctement lire au moins 4 des 5 sons simples choisis), montrer lui la liste des lettres.



Niveau A: lettres

Demandez à l'enfant de lire cinq lettres de la liste des lettres. Laissez l'enfant choisir les lettres elle-même. Si elle ne choisit pas, pointez lui vers 5 lettres

L'enfant est au 'Niveau A', si l'enfant:

- Lit au moins 4 des 5 sons avec facilité.

Si l'enfant est au 'Niveau A', demandez lui de relire les sons simples (du Niveau B) et puis suivez les instructions du 'Niveau B'.

Si elle peut correctement et confortablement lire les lettres, mais a des difficultés à lire les sons simples marquez l'enfant au 'Niveau A'.

Si l'enfant n'est pas au 'Niveau A' (ne peut pas correctement lire au moins 4 des 5 lettres choisis), marquez l'enfant au 'Niveau 0'

Niveau J: histoire complexe

Demandez à l'enfant de lire l'histoire.

L'enfant est au 'Niveau J' si l'enfant:

- lit le texte comme elle est en train de lire une phrase, plutôt que d'une chaîne de mots.
- lit le texte couramment et avec facilité. L'enfant peut lire lentement.
- Lit le texte avec 3 ou moins de 3 erreurs.

Si elle peut correctement répondre à 2 questions de compréhension mais a des difficultés à lire l'histoire complexe marquez l'enfant au 'Niveau I'.

Si l'enfant peut lire l'histoire complexe passez au Niveau K.



Niveau K: Question de compréhension du text J

Lisez à l'enfant les 3 questions de compréhension et demandez à l'enfant de répondre aux 3 questions.

L'enfant est au 'Niveau K' si l'enfant:

- Peut répondre correctement à au moins 2 questions de compréhension.

Si elle peut correctement et confortablement lire l'histoire complexe mais a des difficultés à répondre correctement à 2 questions de compréhension marquez l'enfant au 'Niveau J'.

Si l'enfant peut répondre correctement à 2 questions de compréhension, marquez l'enfant au 'Niveau K'.



BASELINE EVALUATION OF THE CRS FOOD FOR EDUCATION PROJECT IN MALI

Student Survey

BASE INFORMATION

Enum_id	Surveyor ID	
Date	Date (JJ/MM/AAAA)	
Region	Write the name of the region	
CAP	Write the name of the Educational Animation Center	
schoolname	Write the name of the school	Select
studentname_id	Indicate the name and Unique Identity (ID) of the student	CODE I _ _ _ _ _ _ _ _ _ _
grade	Indicate the class of the respondent : <i>(Indicate the class of the student that is written on your school sheet)</i> 1. 1st year 2. 2nd year 3. 3rd year 4. 4th year	I _

Dear Student:

You have been selected to participate in a survey about health, nutrition, and education for the Cantine Scolaire (School Canteen) project. Your participation in this interview is voluntary. If, at any time, you wish to discontinue participation, you may do so without penalty. If you accept, please respond to all questions as candidly as possible. If you do not know the answer to a question, you may simply say so. All responses will be kept strictly confidential.

consent	Do you accept participation in this survey? 1. No → thanks 2. Yes → fname 88. Not found → thanks	I__I	*Select only one option
 If the response to “consent” is No or Not Found, thank the respondent and terminate the survey			

N.B: If the respondent refuses to answer any particular question, mark an « R » as the answer and move on the next question.

Personal Information

Great! Now, I will ask you a few questions about yourself...

fname	What is your first name?		
lname	What is your family name?		
primecarename	What is the first name of your mother OR responsible party/principal guardian?		
primecarelast	What is the last name of your mother OR responsible party/principal guardian?		
Age1	Do you know your age? 0. No → “age2” 1. Yes → “gender” 88. Don’t know	I__I	*Choose only one option
Age2	How old are you?	.....	*AGE INTERVAL from 4 to 19 *Write down -99 if the respondent refuse to answer
Gender	Are you a boy or a girl? 1. Male 2. Female	I__I	*Ask only if necessary *Select only one option
newsch	When you started at this school, in which grade were you? 1. 1st year		*Read the list, but don’t read “Don’t know”

	2. 2nd year 3. 3rd year 4. 4th year 88. Don't know		
Class	What is your current school year? 1. 1st year 2. 2nd year 3. 3rd year 4. 4th year	I__I	*If the student class is different from that noted on your student sheet, please check with the class master of the student *Select only one option
Repeat1	Did you repeat a year? 0. No 1. Yes		*Selection only one option
Repeat2	Which class(es) did you repeat? 1. 1st year 2. 2nd year 3. 3rd year 4. 4th year		*Choose all answers that apply
schoolday	When was the last day that you went to school? 1. Yesterday 2. Last Monday 3. Last Tuesday 4. Last Wednesday 5. Last Thursday 6. Last Friday 7. Last Saturday 8. It has been more than a week	I__I	*Select only one option

Schoolday2	How many days did you miss school last week? 0. None 1. 1 day 2. 2 days 3. 3 days 4. 4 days 5. All week 88. Don't know	|_|	*Select only one option
-------------------	--	---	--------------------------------

Environment and Participation at School

Very good! Now, I would like to ask you a few questions about your school...

Enviro1 a_new	What do you like about your classroom and school? 0. Nothing 1. The lessons are easy to understand 2. The teacher teaches well 3. The teacher is kind and helpful 4. Learn useful skills and knowledge 5. Participate in activities/class games 6. Food is provided 7. Access to water 8. Access to good latrines that are in good condition and clean 9. Doing sport at school 10. Other (Specify : _____) 88. Don't know	|_| |_| |_| |_| |_| |_| |_| |_|	*Do not give examples or read the list to the respondent *Choose all answers that apply
Enviro2 a_new	What do you not like about your classroom and school? 0. Nothing 1. Teachers hits, yells, harasses, and/or under-estimates 2. Lessons are difficult to understand 3. Don't learn interesting things/it is boring 4. Teacher is often not present at school 5. Lack of learning materials: that is books, board, etc. 6. School too far	|_| |_| |_| |_| |_| |_| |_|	*Do not give examples or read the list to the respondent *Choose all answers that apply

	7. Bad sanitary hygiene in the toilets, lack of toilets 8. Food provided is bad, no food provided 9. No access to water 10. Other students tease/intimidate me 11. Lack of clothes/uniforms 12. Other (Specify : _____) 88. Don't know	I__I I__I	
Enviro3	Usually, does the master ask you questions during the class lesson? 1. Often 2. Sometimes 3. Rarely 4. Never 88. Don't know	I__I	*Read the list to the respondent but don't read « don't know » *Select only one option
Enviro4	Usually, do you try to answer the questions of your class master? 1. Often 2. Sometimes 3. Rarely 4. Never 88. Don't know	I__I	*Read the list to the respondent but don't read « don't know » *Select only one option
Enviro5	Usually, do you do lessons with the radio? 1. Often 2. Sometimes 3. Rarely 4. Never 88. Don't know	I__I	*Read the list to the respondent but don't read « don't know » *Select only one option
Enviro6	Usually, do you do the news of the class (that is, the master asks you what you did the previous day and you tell them how to write it on the board)? 1. Often 2. Sometimes 3. Rarely 4. Never 88. Don't know	I__I	*Read the list to the respondent but don't read « don't know » *Select only one option

Enviro7	Usually , do you do class games? 1. Often 2. Sometimes 3. Rarely 4. Never 88. Don't know	I__I	*Read the list to the respondent but don't read « don't know » *Select only one option
Enviro8	Usually , does the master asks you to write about a subject of your choice? 1. Often 2. Sometimes 3. Rarely 4. Never 88. Don't know	I__I	*Read the list to the respondent but don't read « don't know » *Select only one option
Enviro9	Usually , does the master allow you to read a text of your choice? 1. Often 2. Sometimes 3. Rarely 4. Never 88. Don't know	I__I	*Read the list to the respondent but don't read « don't know » *Select only one option
Enviro10	Usually , is there someone at home who reads books to you? 1. Often 2. Sometimes 3. Rarely 4. Never 88. Don't know	I__I	*Read the list to the respondent but don't read « don't know » *Select only one option
Enviro11	Usually , do you read books for fun (that is, not required as homework)? 0. No 1. Yes	I__I	*Select only one option
Project 1	What do you like about this project? 0. Nothing 1. Food 2. Rations to take home 3. the medicines (deworming, vitamin A, etc.) 4. Rewards 5. Radio/reading writing 6. The games 7. Other (Specify : ____)	I__I I__I I__I I__I I__I I__I	*Refer to the program that CRS is implementing in their school *Select all the responses that apply

Project 2	What do you not like about this project?		
	0. Nothing	☐	*Refer to the program that CRS is implementing in their school *Select all the responses that apply
	1. Food (quality and/or quantity)	☐	
	2. Rations to take home	☐	
	3. the medicines (deworming, vitamin A, etc.)	☐	
	4. Rewards	☐	
	5. Radio/reading writing	☐	
	6. The games	☐	
	7. Other (Specify :_____)	☐	

Hygiene

Thanks! I would like to ask you a few questions regarding hygiene...

handwash	In your opinion, when should someone wash their hands? 1. Before eating 2. Before touching or preparing food 3. Before giving food to someone 4. When hands are dirty 5. After touching a dirty object 6. After touching a pet 7. After using the latrines 8. After changing a baby's diapers 9. Before prayers 10. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent *Choose all answers that apply
Hand1	How many times did you wash your hands yesterday?	.....	*Interval between 0 and 20 *If 0, move to « Hand8 »
Hand2	What were the reasons? 1. Before eating 2. Before touching or preparing food 3. Before giving food to someone 4. When hands are dirty 5. After touching a dirty object 6. After touching a pet	☐ ☐ ☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent

	7. After using the latrines 8. After changing a baby's diapers 9. Before prayers 10. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐	*Choose all answers that apply
Handa8	What do you usually use to wash your hands? 1. Just water 2. Water plus soap 3. Other (Specify : _____)	☐	* Do not give examples or read the list to the respondent *Select only one option
Worms	In your opinion, how can one avoid to catch intestinal worms (in the belly)? 1. Avoid walking bare foot (wear shoes) 2. Do not bathe or swim in stagnant water 3. Eat meat that is well cooked 4. Avoid contact with contaminated water, and if necessary to wear boots and gloves 5. Wash hands with drinking water and soap before preparing food, before serving food or before eating 6. Wash hands with drinking water and soap after using the latrines 7. Protect food from flies, cockroaches, and dust 8. Store food in a pantry or a place that is clean and well-ventilated 9. Other (specify : _____) 88. Don't know	☐ ☐	* Do not give examples or read the list to the respondent *After the respondent has given one way, incite the respondent to give a second way: What other way can help avoid intestinal worms? Incite for 2 ways in total

Health

Thanks! Now, I would like to ask you a few questions about health...

Health1	During the last two weeks, have you been sick? 0. No → fs1 1. Yes → health1a	|_| |_|	*Select only one option
Health1a	What did you have? 1. Diarrhea 2. Vomiting 3. Fever 4. Other (Specify : _____)	|_| |_| |_| |_|	*Choose all answers that apply
Health2	During the last two weeks, have you missed school because you were sick? 0. No → fs1 1. Yes → health3	|_| |_|	*Select only one option *If 1, move to "health3" *If 2, move to "fs1"
Health3	During the last two weeks, how many days have you missed school because you were sick? 1. None 2. 1-3 days 3. 3-5 days 4. More than 5 days	|_| |_|	*Select only one option

Food Security

Now, I would like you to think about all the meals that you've eaten yesterday...

Fs1	According to you, was yesterday 'ordinary/usual' or was it a special occasion? 1. Ordinary/Usual 2. Special _____ occasion (specify : _____)	|_| |_|	*Give examples of special occasions such as funeral and parties *Choose only one option
Fs2	Now thinking about what you did yesterday , did you eat something before the morning meal? 0. No 1. Yes	|_| |_|	*Select only one option
Fs3	Yesterday , have you eaten something for the morning meal? 0. No → fs3	|_| |_|	*Select only one option

	1. Yes → fs5		
Fs4a	Yesterday , were you satisfied after eating the morning meal? 1. I was satisfied → fs5 2. I could have eaten more → fs4b	I__I	*Select only one option
Fs4b	Yesterday , why didn't you eat more food? 1. There was no food left 2. There was not anything that I like 3. Other (Specify : _____)	I__I	*Select only one option
Fs5	Yesterday , did you eat something between the morning meal and the mid-day meal? 0. No 1. Yes	I__I	*Select only one option
Fs6	Yesterday , did you eat something for the mid-day meal? 0. No → fs8 1. Yes → fs7	I__I	*Select only 1 option
Fs7a	Yesterday , were you satisfied after having eaten the mid-day meal? 1. I was satisfied → fs8 2. I was not satisfied → fs7b	I__I	*Select only one option
Fs7b	Yesterday , why didn't you eat more food? 1. There was no food left 2. There was not anything that I like 3. Other (Specify : _____)	I__I	*Select only one option
Fs8	Yesterday , did you eat something between the mid-day meal and the evening meal? 0. No 1. Yes	I__I	*Select only one option
Fs9	Yesterday , did you eat something for the evening meal? 1. No 2. Yes	I__I	*Select only one option
Fs10a	Yesterday , were you satisfied after eating the evening meal? 1. I was satisfied → fs11	I__I	*Select only one option

	2. I could have eaten more → fs10b		
Fs10b	Yesterday , why did you not eat more food in the evening? 1. There was no food left 2. There was not anything that I like 3. Other (Specify : _____)	|__|	*Select only one option

We just talked about all the meals that you have eaten yesterday. Now, I would like you to take a few minutes to reflect on all the foods and beverages that you have eaten during the day and the night, either at home, at school or outside of home and school. Are you ready? Ok.

Fs11	Can you cite all the food and beverages that you gave to [student's name] yesterday? 1. Millet, rice, corn, sorghum, manioc 2. Nuts or beans (such as cowpeas, green peas, lentils) 3. Yoghurt, milk or cheese 4. Meat or fish 5. Eggs 6. Red palm oil or fruits or vegetables (such as carrots, squash, sweet potatoes, dark green leafy vegetables leaves, ripe mango, melon, apricot, ripe papaya, peach, red peppers, moringa leaves) 7. Other fruits and vegetables such as onion, eggplant, watermelon, oranges, green peppers, cabbage, tomato, dates, etc. 8. Don't know	__ __ __ __ __ __ __ __	*Note all the food and beverages mentioned by the respondent on a separated sheet of paper. If dishes are mentioned, ask for the list of ingredients of each dish mentioned. *When the respondent is done, ask the respondent to assure you that he/she has mentioned all the food and beverages given to the child yesterday, including all snacks. Use time references if necessary (morning, afternoon, evening, night). *Select all answers that apply. *For each food group not mentioned, ask the respondent if a food from this group has
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			been consumed yesterday.
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READING TEST

Here is the last series of questions! I would like to play a small game with you...

readassess	To what level has the student read? 0. O 1. A 2. B 3. C 4. D 5. E 6. F 7. G 8. H 9. I 10. J 11. K	I _ I	*Indicate the level of reading according to the test *Select only one option
thanks	Thanks a lot for answering my questions		
Note to enumerator: Fill out the next few questions based on the conducted survey			
Note1_enumerator	What language was the survey conducted? 1. French 2. Local language 3. A combination of both		
Note2_enumerator	What is the main language of instruction in this school? 1. French 2. Local language88. 88. Don't knowNot French but not sure		
Note3_enumerator	Enumerator Comment		



MIDLINE EVALUATION OF THE CRS FOOD FOR EDUCATION PROJET IN MALI

Caregivers Survey

BASE INFORMATION

Enum_ID	Surveyor <i>ID</i>	
Date	Date <i>(JJ/MM/AAAA)</i>	
Region	Write the name of the region	
CAP	Write the name of the Educational Animation Center	
schoolname	Write the name of the school	Select
studentid	Indicate the Unique Identity (ID) of the student	CODE | _ | _ | _ | _ | _ | _ | _ | _ |
Village	Write the name of the village where the mother/responsible party of the student lives	

Dear Mother:

You have been selected to participate in a survey about health, nutrition, and education for the *Cantine Scolaire (School Canteen)* project. Your participation in this interview is voluntary. If, at any time, you wish to discontinue participation, you may do so without penalty. If you accept, please respond to all questions as candidly as possible. If you do not know the answer to a question, you may simply say so. All responses will be kept strictly confidential.

Consent	Do you accept participation in this survey?	I__I	*Select only one option
	1. Yes → match 2. No → thanks 9. Not found → thanks		
 If the response to “consent” is No or Not Found, thank the respondent and terminate the survey			

N.B: If the respondent refuses to answer any particular question, mark an « R » as the answer and move on the next question.

PERSONAL INFORMATION

Fname	What is your first name? _____		
Lname	What is your family name? _____		
Biomo	What is your relationship with: _____ [name of the student]?	I__ I__	*Definition of the principal responsible party: person who takes care of the child and look after his/her health, physical well-being and social development, in the short or long term, either at her own residence or that of the child. *Definition of the secondary responsible party : person in the household who takes care of the child
	1. Biological parent → age1 2. Principal responsible party → age1 3. Secondary principal party → age1 4. Other → thanks		



If answer to “biomo” is Other, thank the respondent and terminate the survey

Age1	Can you give me your age? 0. No 1. Yes	| |	*If Yes, move to “age2” *If No, move to “gender” *Choose only one option
Age2	How old are you?	.....	*AGE INTERVAL between 12 and 99 *If do not know -99
Gender	What sex are you? 3. Male 4. Female	| |	*Ask only if necessary *Select only one option
edu	What is the highest level of education you have completed? 1. None 2. Some primary school but did not complete primary school 3. Completed primary school 4. Some secondary school but did not complete secondary school 5. Complete secondary school 6. Some university but did not complete university 7. Earned bachelor’s degree 8. More than bachelor’s degree 9. Professional school 10. Koranic school or medersa	| |	*Select only one option

Household Environment

Good! Now, I would like to ask you a few questions on [name of the student] and on your household...

Distance1	How long does it take for [name of the student] to get to school?		*In minutes -99 = if don’t know
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Distance2	How does [name of the student] usually get to school? 1. On foot 2. Bicycle 3. Motorcycle 4. On the back of an animal 5. Public transport (bus, cab, cart) 6. Other (specify:_____) 88. Don't know	_	*Do not give examples or mention the list to the respondent *Select only one option
Latrine1	Do you have a latrine where you live? 0. No → water 1. Yes → latrine2	|_|	*Select only one option
Latrine2	What type of latrine is it? 1. Installation with a mechanical or manual flush linked to a sewer or septic system or pit 2. Ventilated pit latrine 3. Latrine with a pit that has a slab 4. Latrine with a pit that has no slab 5. Bucket latrine 6. Other (specify:_____)	|_|	*Specify to the respondent that it is the main latrine used by most members of the household *Do not give examples or mention the list to the respondent *Select only one option
water	What is the main source of drinking water of your household? 1. Running water in the yard (tap) 2. Running water in the community (fountain) 3. Private well 4. Public well 5. Distribution of water by a tank 6. Natural source of water (lake/oxbow lake, river, stream, etc.) 7. Other (Specify:_____) 88. Don't know	|_|	*Define « household » or give examples : It's a group of people generally related by blood or marriage, usually living together, producing together, and whose socio-economic authority is theoretically under just one person called the head of the household *Do not give examples or mention the list to the respondent

			*Select only one option
Elec1	Do you have electricity where you live? 1. Yes 2. No	|_|	*Select only one option *If No, move to “cookstove1”
Elec2	For how many hours per day do you have electricity? 1. 0-1 hour 2. 1-3 hours 3. 3-5 hours 4. More than 5 hours	|_|	*Do not give examples or mention the list to the respondent *Select only one option
hsize	Including yourself, how many people are there in your household?	.....	*NB : the household could consist of only 1 member *INTERVAL from 1 to 60
Kid	How many kids younger than 5 years old live in your household?	.....	*Interval from 0 to 30
Kid1	How many kids living in your household are old enough to go to school (6-15 years old)?	.....	* Interval from 0 to 30 *If 0, move to “Book1”
Kid2	Among these kids, are there some who don’t go to school? 0. No → dropout1 1. Yes → kid2a	|_|	*Select only one option
Kid2a	Among those school-aged children, how many girls don’t go to school (never enrolled in school)?	.....	*Not to exceed the number in kid1 *If no girls are out of schools put 0
Kid2b	Among those school-aged children, how many boys don’t go to school (never enrolled in school)?	.....	*Not to exceed the number in kid1- kid2a *If no boys are out of schools put 0
Kid3_girls	What are all the reasons why these school-aged girls don’t go to school? 1. I can’t afford school fees	|_| |_| |_|	*Skip if the answer to kid2a is zero

	2. My child(ren) is/are not intelligent/capable enough 3. I need my child(ren) to help me at home/in the field 4. I need my child(dren) to work in order to support the family 5. The school quality is poor (that is, the students don't learn anything and/or the teachers are aggressive and/or are not present, etc.) 6. The school is not safe 7. Girls are not supposed to go to school 8. Other (Specify: _____)	☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent *Choose all answers that apply
Kid3_boys	What are all the reasons why these school-aged boys don't go to school? 1. I can't afford school fees 2. My child(ren) is/are not intelligent/capable enough 3. I need my child(ren) to help me at home/in the field 4. I need my child(dren) to work in order to support the family 5. The school quality is poor (that is, the students don't learn anything and/or the teachers are aggressive and/or are not present, etc.) 6. The school is not safe 7. Other (Specify: _____)	☐ ☐ ☐ ☐ ☐ ☐ ☐	*Skip if the answer to kid2a is zero *Do not give examples or read the list to the respondent *Choose all answers that apply
Dropout1	Has anyone in your household dropped out of school since the beginning of this year, that is since October 2017? 0. No → book1 1. Yes → drop_out2	☐	*Select only one option
Dropout2	If yes, how many boys and girls in your household have dropped out since the beginning of the school year that is since last October?		*Enter the number, but it cannot to exceed kid1 – kid2a – kid2b

	1. Boys : _____ 2. Girls : _____		
Dropout3_girls	What were the reasons for girls in your household to drop-out of school? 1. School is too far 2. School fees 3. Domestic work 4. Agricultural/other work 5. Girl's sickness 6. Pregnancy 7. The girl(s) are not interested 8. Too much punishment at school 9. Humiliation of classmates 10. They got married 11. Other (specify): _____ 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Select all that apply
Dropout3_boys	What were the reasons for boys in your household to drop-out of school? 1. School is too far 2. School fee 3. Domestic work 4. Agricultural/other work 5. Child's sickness 6. Child was not interested 7. Too much punishment at school 8. Humiliation of classmates 9. Other (specify): _____ 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Select all that apply
Book1	Approximately, how many books do you have at home, excluding school books? 0. No book 1. 1-5 2. 6-10 3. 11-20 4. More than 20	☐	*Select only one option *Confirm that the respondent understands that this does not refer to the Coran but to story books
Book3	In general , do you or another adult in your household read books for [student's name]? 1. Often	☐	*Select only one option *Read the list to the respondent but don't

	2. Sometimes 3. Rarely 4. Never 88. Don't know		read « don't know » or « refused »
Attendance1	How many days did [student's name] go to class in the past week?	.....	*A normal school week between 0-5
Attendance2	What were the reasons that [student's name] that they missed schools last week? 1. School is too far 2. School fee 3. Domestic work 4. Agricultural/other work 5. Child's sickness 6. Child was not interested 7. Too much punishment at school 8. Humiliation of classmates 9. Other (specify): _____ 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Only ask if Attendance1 is not equal to 5

Health

Thanks! Now, I would like to ask you a few questions regarding the health of [student's name]...

Health1	Have you ever engaged in the following preventive health care activities? 1. Vaccination 2. Deworming 3. Diet supplement in iron 4. Vitamin A supplement 5. Growth check-up 6. Prenatal care 7. Other (specify: _____)	☐ ☐ ☐ ☐ ☐ ☐	*Read the list to the respondent *Ask Health1a if the respondent does not check ALL the answers (1 to 5) for the Health1 question. *Choose all answers that apply * Define « growth check-up » : Visits to a health-care professional to monitor child growth in the first few years of life in order to check for delays in development and any problem
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Health1a	For the preventive health-care activities of [student's name] that you didn't do, what held you back? 1. The healthcare activities are too expensive 2. The healthcare activities are not available/too far away/not provided in my community 3. The healthcare activities are not important 4. I don't have time 5. Religious reason 6. Other (Specify : _____)	☐ ☐ ☐ ☐	*Don't cite the list of reasons *Choose all answers that apply
Health3	During the last two weeks, has [student's name] gotten sick? 0. No 1. Yes	☐	*Select only one option *If Yes, move to "health3a" *If No, move to "handwash"
Health3a	What were the symptoms of that/those disease(s)? 1. Diarrhea 2. Vomiting 3. Fever 4. Other (Specify : _____)	☐ ☐ ☐ ☐	*Don't give examples or read the list to the respondent *Choose all answers that apply
Health3b	During the last two weeks, has [student's name] missed school because he/she was sick? 2. No → handwash 3. Yes → health3c	☐	*Select only one option *If Yes, move to "health3c" *If No, move to "handwash"
Health3c	During the last two weeks, how many days has [student's name] missed school because he/she was sick? 5. 1-3 days 6. 3-5 days 7. More than 5 days	☐	*Do not read list to the respondent *Select only one option

Hygiene

Thanks! I would like to ask you a few questions regarding hygiene...

handwas h	In your opinion, when should someone wash their hands? 1. Before eating 2. Before touching or preparing food 3. Before giving food to someone 4. When hands are dirty 5. After touching a dirty object 6. After touching a pet 7. After using the latrines 8. After changing a baby's diapers 9. Before prayers 10. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent *Choose all answers that apply
Hand1	How many times did you wash your hands yesterday?	.....	*Interval between 0 and 20 *If 0, move to « Hand3 »
Hand2	What were the reasons? 1. Before eating 2. Before touching or preparing food 3. Before giving food to someone 4. When hands are dirty 5. After touching a dirty object 6. After touching a pet 7. After using the latrines 8. After changing a baby's diapers 9. Before prayers 10. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent *Choose all answers that apply
Hand3	What do you usually use to wash your hands? 1. Just water 2. Water plus soap 3. Other (Specify : _____)	☐	* Do not give examples or read the list to the respondent *Select only one option

Worms	In your opinion, how can one avoid to catch intestinal worms (in the belly)? 1. Avoid walking bare foot (wear shoes) 2. Not to bathe or swim in stagnant water 3. Eat meat that is well cooked 4. Avoid contact with contaminated water, and if necessary to wear boots and gloves 5. Wash hands with drinking water and soap before preparing food, before serving food or before eating 6. Wash hands with drinking water soap after using the latrines 7. Protect food from flies, cockroaches, and dust 8. Store food in a pantry or a place that is clean and well-ventilated 9. Other (specify : _____) 88. Don't know	☐ ☐	* Do not give examples or read the list to the respondent *After the respondent has given one way, incite the respondent to give a second way: What other way can help avoid intestinal worms? Incite for 2 ways in total
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Food Security

Great! Now, I would like that you take a minute and reflect on all the food and beverages that you have given to [student's name] yesterday during the day and evening either at home or outside of the house...

Fs1	According to you, was yesterday 'ordinary/usual' or was it a special occasion? 1. Ordinary/Usual 2. Special _____ occasion (specify : _____) *If Gender = 1 (father/male caregiver) → Fs2_father *If Gender = 2 (mother/female caregiver), Fs2	☐ ☐	*Give examples of special occasions such as funeral and parties *Choose only one option
Fs2	Can you cite all the food and beverages that you gave to [student's name] yesterday? 1. Millet, rice, corn, sorghum, manioc 2. Nuts or beans (such as cowpeas) 3. Yoghurt, milk or cheese 4. Meat or fish	☐ ☐ ☐ ☐	*Note all the food and beverages mentioned by the respondent on a separated sheet of paper. If dishes are mentioned, ask for the list of ingredients of each dish mentioned.

	5. Eggs 6. Red palm oil or fruits or vegetables (such as carrots, squash, sweet potatoes, dark green leafy vegetables leaves, ripe mango, melon, apricot, ripe papaya, peach, red peppers, moringa leaves), etc. 7. Other fruits and vegetables such as onion, eggplant, watermelon, oranges, green peppers, cabbage, tomato, dates, lentils, peas, etc. Then, Move to fs3	☐ ☐	*When the respondent is done, ask the respondent to assure you that he/she has mentioned all the food and beverages given to the child yesterday, including all snacks. Use time references if necessary (morning, afternoon, evening, night). *Select all answers that apply. *For each food group not mentioned, ask the respondent if a food from this group has been given to their kid yesterday.
Fs2_f ather	Can you cite all the food and beverages that [student's name] eat yesterday? 1. Millet, rice, corn, sorghum, manioc 2. Nuts or beans (such as cowpeas) 3. Yoghurt, milk or cheese 4. Meat or fish 5. Eggs 6. Red palm oil or fruits or vegetables (such as carrots, squash, sweet potatoes, dark green leafy vegetables leaves, ripe mango, melon, apricot, ripe papaya, peach, red peppers, moringa leaves), etc. 7. Other fruits and vegetables such as onion, eggplant, watermelon, oranges, green peppers, cabbage, tomato, dates, lentils, peas, etc. 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐	*Note all the food and beverages mentioned by the respondent on a separated sheet of paper. If dishes are mentioned, ask for the list of ingredients of each dish mentioned. *When the respondent is done, ask the respondent to assure you that he/she has mentioned all the food and beverages given to the child yesterday, including all snacks. Use time references if necessary (morning, afternoon, evening, night). *Select all answers that apply. *For each food group not mentioned, ask the respondent if a food from this group has been given to their kid yesterday.
Fs3	Yesterday, has [student's name] eaten something before the morning meal?	☐	*Select only one option

	0. No 1. Yes 88. Don't know		
Fs4	Yesterday , has [student's name] eaten something for the morning meal? 0. No 1. Yes 88. Do not know	|__|	*Select only one option
Fs5	Yesterday , has [student's name] eaten something between the morning meal and the mid-day meal? 0. No 1. Yes 88. Do not know	|__|	*Select only one option
Fs6	Yesterday , has [student's name] eaten something for the mid-day meal? 0. No 1. Yes 88. Do not know	|__|	*Select only one option
Fs7	Yesterday , has [student's name] eaten something between the mid-day meal and the evening meal? 0. No 1. Yes 88. Do not know	|__|	*Select only one option
Fs8	Yesterday , has [student's name] eaten something for the evening meal? 0. No 1. Yes 88. Do not know	|__|	*Select only one option
Fs9	Yesterday , has [student's name] eaten something after the evening meal? 0. No 1. Yes 88. Do not know	|__|	*Select only one option

Now, I will read to you several statements that people have made regarding their food situation. For some of these statements, please tell me if the statement is often valid, sometimes valid, or never valid for your household during the last 12 months – that is, since last May.

Fs16	The food supplies that we bought did not last at all, and we have no money to buy more.	__	*Select only one option
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	Is this often, sometimes, or never the case for your household during the last 12 months, that is, since last April? 1. Yes, often 2. Yes, sometimes 3. No, never 88. Don't know		
Fs17	We couldn't afford the luxury of eating balanced meals. Is this often, sometimes, or never the case for your household during the last 12 months? 1. Yes, often 2. Yes, sometimes 3. No, never 88. Don't know	I__I	*Explain « balanced meals » *Select only one option
Fs18	During the last 12 months, that is, since last April, have you one time eaten less than what you should because there was not enough food or money for food? 0. No 1. Yes 88. Don't know	I__I	*Select only one option
Fs19	During the last 12 months that is, since last April, were you hungry one time but did not eat because there was not enough food or money to buy food? 0. No 1. Yes 88. Don't know	I__I	*Select only one option
Fs20	During the last 12 months that is, since last April, have you or other adults in your household decreased the size of your meal OR skipped meals OR substitute some foods for other foods that are less nutritious because there was not enough food or money for food? 0. No 1. Yes	I__I	*If Yes, move to "fs20a" *If No or Don't know, move to "fs22" *Select only one option

	88. Don't know		
Fs20a	How many times did this happen? - Nearly every month - Some months but not every month - Only 1 or 2 months 88. Don't know	|__|	*Select only one option
Fs21	For whom in the household do you usually reduce the size of the meal? - Everyone - The women - The girls - The men - The boys - Other (Specify: _____)	|__| |__| |__| |__| |__| |__|	*Don't give examples or read the list to the respondent *Choose all answers that apply
Fs22	During the last 12 months, that is, since last April, how have you faced the fact that you did not have enough food for everyone in your household? - Reduce the number of meals of the household members - Reduce school fees of children - Borrow money to buy food - Receive food from members of the family, parents and neighbors - Cook everything that is available in the house for meals - Sell our cattle or other actives - Other (specify : _____)	|__| |__| |__| |__| |__| |__|	*Ask Fs22 only if the respondent has responded YES OR YES OFTEN OR YES, SOMETIMES to at least one of the questions: "fs16" OR "fs17" OR "fs18" OR "fs19" OR "fs20" *Don't give examples or read the list to the respondent *Choose all answers that apply

Parent Participation

Thanks! Now, I'd like to ask you a few questions regarding your engagement at the school of [student's name]...

Act2	Since the start of the school year, that is since last October, how many general assemblies have you participated in? 0. None 1. 1 to 3 assemblies 2. More than 3 assemblies 88. Don't know	☐	*Don't read the list to the respondent *Choose only one option
Act3	In your opinion, to what extent is the Comité de Gestion Scolaire (CGS) of the school of [student's name] active/engaged? 1. Often 2. Sometimes 3. Rarely 4. Never	☐	*Don't read the list to the respondent *Choose only one option
Act4	Have you participated in a support activity of the school of [student's name], such as clean the latrines, the kitchen, the school premises, help the school as cook or shopkeeper, or other activities? 0. No 1. Yes	☐	*If Yes, move to "Act5" *If No, move to "Act6" *Select only one option
Act5	To which activity/ies have you participated? 1. Clean the latrines, kitchen, school compound 2. Help the school as cook or shopkeeper 3. Contribute money and/or food to the school canteen 4. Support the garden/field of the school 5. Participation in a training 6. Participation in sensitization activities for the registration of children in schools 7. Other (Specify :_____)	☐ ☐ ☐	*Don't give examples or read the list to the respondent *Choose all answers that apply

Act6	Are you engaged in the academic support of [student's name]? 0. No 1. Yes	☐	*Give examples if necessary : Help [student's name] to read/do his homework ; follow his progress ; make sure he goes to school; make sure he has adequate time to do his homework; attend the Comité de Gestion Scolaire (CGS) meeting; etc. *Select only one option
Act7	Can you state all the ways in which you are engaged in the education of [student's name]? 1. Help to read/do his/her homework 2. Follow his/her progress 3. Make sure he/she goes to school 4. Make sure he/she has adequate time to do his homework 5. Attend the Comité de Gestion Scolaire (CGS) meeting 6. Other (Specify: _____)	☐ ☐ ☐ ☐ ☐ ☐	*Don't give examples or read the list to the respondent *Choose all the answers that apply
Score1	Is there a notice board at the school of [student's name]? 0. No 1. Yes 88. Don't know	☐	*Select only one option *If Yes, move to "score2" *If No, move to "Report1"
Score2	According to you, is this notice board at the school of [student's name] useful? 0. No, not useful 1. Yes, useful 2. Both useful and not useful		*If Yes, move to «Score 3» and don't ask « Score4 » *If Not, move to « score4» and don't ask « score3» *If Both useful and not useful move to « Score3 » AND ask « Score4 » *Select only one option

Score3	Can you give examples on the ways this board is useful? 1. Gives information about the attendance of students at school (school attendance) 2. Gives information about the school registration 3. Gives information about the performance of students at school 4. Gives information about the presence of teachers at school 5. Gives information about the performance of teachers at school 6. Gives information about the community contributions to the school (canteen) meals 7. Give information about the action plans of the school 8. Other (specify:_____)	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Don't give examples or read the list to the respondent *Choose all the answers that apply
Score4	Can you give examples why this board is not useful? 1. The information on the board is not clear/legible 2. The information on the board does not inform me 3. The information on the board is not updated 4. The board is not displayed in an accessible place 5. Other (specify:_____)	☐ ☐ ☐ ☐ ☐	*Don't give examples or read the list to the respondent *Choose all the answers that apply
Report1	Have you received a colored bulletin for [student's name]? 0. No → teacheratt 1. Yes → report2 88. Don't know → teacheratt	☐	*Select only one option
Report2	According to you, is this colored bulletin for [student's name] useful? 0. No 1. Yes 2. Both useful and not useful		*If Yes, move to «Report3» and don't ask « Report4 » *If No, move to «Report4» and don't ask « Report3»

			*If Both useful and not useful, move to « Report3 » AND ask « Report4 » *Select only one option
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Report3	Can you give me examples on how this colored bulletin is useful? 1. Gives examples about the performance of students at school 2. Other (specify:_____)	☐ ☐	*Don't give examples or read the list to the respondent *Choose all the answers that apply
Report4	Can you give me examples about why the colored bulletin is not useful? 1. The information on the bulletin is not clear/confusing/illegible 2. The information on the bulletin does not teach me anything new 3. The information on the bulletin is not updated 4. Other (specify:_____)	☐ ☐ ☐ ☐	*Only ask this question if the respondent responded No to «Report2 » *Don't give examples or read the list to the respondent *Choose all the answers that apply
Teacheratt	In general, is the headmaster absent at school? 1. Often 2. Sometimes 3. Rarely 4. Never 88. Don't know	☐	*Read the list to the respondent but don't read « don't know » *Select only one option

SILC group activities

Great, thanks! Now I would like to ask you some questions about Saving and Internal Lending Community activities...

silc1	Are you or any member of your household a member of a Saving and Internal Lending Community (SILC) ? 0. No one in my household is a member of CECI group → asp1 1. Yes, I am a member of CECI → silc2 2. Someone else in my household is a member of CECI group → silc2 88. Don't know	☐	*Select only one option
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Silc2	What significant changes has participation in a SILC had on the life of your household or your own life? 1. Improved household's income 2. Access to healthcare 3. Support on children's education's cost 4. Improved food security 5. Participation in village affairs 6. Connection with other community members and parents 7. Increased household's asset (e.g., husbandry, households, equipment, personal items-cloths, jewels, etc.) 8. Others 9. No changes 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Select all that apply *Do not read the options to the respondent
Silc3	To what degree, have your financial revenue improved with your participation in SILC group? 0. No improvement 1. Improved a little 2. Improved by a fair amount 3. Improved substantially 88. Don't know	☐	*Select only one option
Silc4	How has participation in SILC group contributed to the education of your children? 1. Encouraged enrollment of children in school 2. Allowed you to save more for school 3. Monitor your child's school performance 4. Contribute to the school canteen 5. Other (specify)		*Do not read the options *Select all that apply

	6. No change 88. Don't know		
Silc5	If given a chance, will you or your household continue your participation in SILC group activities after CRS Food for Education (FFE) project ends? 0. No 1. Yes 88. Don't know	I__I	*Select only one option

Educational Aspiration of Mothers

Great! Now, I would like to ask you a few questions regarding the education of [student's name]

Asp1	When [student's name] will be close to 20 years old, what job do you think he/she will do? 1. Blue collar (Jobs that do not require a high level of education) 2. White collar (Jobs that require a high level of education) 3. Other (specify: _____ _) 88. Don't know	I__I	*If the respondent chooses a blue collar job, write down 1 *If the respondent chooses a white collar job, write down 2 *The examples given have the goal to help the enumerators pick the right answer. But don't give
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	Blue Collar job examples a. Full time housewife b. Agricultural worker c. Construction worker (building) d. Office secretary e. Religious leader/priest/sheik f. Merchants/sellers g. Military h. Mason i. Sportsman/Sportswoman j. Domestic employee k. Driver l. Mechanic m. Cab driver n. Farmer o. Public servant p. Firefighter q. Traditional profession r. Fisherman s. Policeman/policewoman t. Singer	White Collar Job examples a) Veterinarian b) President of the country c) Professional cook d) Jurist (judge, notary, lawyer, etc.) e) Scientist f) Dentist g) University professor h) Manager i) Tax collector j) Physician k) Accountant l) Actor/actress m) Artist n) Engineer o) Nurse p) High school teacher	examples or read the list to the respondent *Select only one option
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		q) Painter /decorator r) Businessman/business woman s) Airplane pilot t) Computer scientist u) Head of school/university		
Asp2	Ideally, what level of education would you want [student's name] to reach? 1. None 2. Some primary school 3. Complete primary school 4. Some secondary school 5. Complete secondary school 6. Some university 7. Obtain a bachelor's degree 8. More than a bachelor's degree 9. Professional school 88. Don't know	I__I	**Don't give examples or read the list to the respondent *Select only one option	
Asp3	Do you expect [student's name] to reach that level of education? 0. No 1. Yes	I__I	*If yes, move to "GirlsSch1" *If No, move to "Asp4" *Select only one option	

Asp4	Why do you think that [student's name] will not reach this level of education? 1. I can't afford school fees for my kid 2. My kid is not intelligent/capable enough 3. I need my kid to help me at home/in the field 4. I need my kid to work to support the family 5. Other (Specify:_____)	☐ ☐ ☐ ☐ ☐	*Don't give examples or read the list to the respondent *Choose all the answers that apply
Girlsch1	In the past, it was mostly boys who went to school. Nowadays, both boys and girls go to school. According to you, is this a good or bad thing? 1. Good 2. Bad 3. Both good and bad 88. Don't know	☐	*Select only one option *If Good, move to « girlsch2» and don't ask « Girlsch3 » *If Bad, move to « girlsch3» and don't ask « Girlsch2 » *If Both good and bad, move to « girlsch2» *If Don't know, thank the respondent and move to observations
 If the response to "girlsch1" is Don't know, thank the respondent and move to observations.			
Girlsch2	Why do you think that the schooling of girls is a good thing? 1. Improve the standard of living of the whole family 2. Improve their health (the girls) 3. Improve the health of the children that they will have 4. The girls will also be able to blossom 5. Allow girls to find a better job 6. Other (specify:_____)	☐ ☐ ☐ ☐ ☐ ☐	*Don't give examples or read the list to the respondent *Choose all the answers that apply
Girlsch3	Why do you think that the schooling of girls is a bad thing? 1. Girls are supposed to stay at home 2. Girls don't need to go to school 3. Girls don't work outside of the house, so, what is the point? 4. Girls should not be outside in public 5. There is not girl-only school and they should not go to school with boys 6. School is dangerous for girls 7. Other (specify :_____)	☐ ☐ ☐ ☐ ☐ ☐	*Don't give examples or read the list to the respondent *Choose all the answers that apply

Decision 1	Who makes a decision for your boy (male children) in your household to attend school? 1. Mother 2. Father 3. Both parents together 4. The child himself 5. Someone else (specify): _____ 88. Don't know / No response	I__I	*Do not read the examples to the respondent *Select only one option *If the respondent indicates that the decision is made by the child with one or more parent (s), categorize the response as the decision of the parent (s) (i.e. choose one of the answers 1, 2, or 3)
Decision 2	Who makes a decision for your girl (female children) in your household to attend school? 1. Mother 2. Father 3. Both parents together 4. The child himself 5. Someone else (specify): _____ 88. Don't know / No response	I__I	*Do not read the examples to the respondent *Select only one option *If the respondent indicates that the decision is made by the child with one or more parent (s), categorize the response as the decision of the parent (s) (i.e. choose one of the answers 1, 2, or 3)
Decision 3_boys	Who in your household usually have the final say in the payment of the boys' school fees?: 1. Mother 2. Father 3. Both parents 4. The child himself 5. Someone else (specify): _____ 88. Don't know / No response	I__I	*Do not read the examples to the respondent *Select only one option
Decision 3_girls	Who in your household usually have the final say in the girl's school fees?: 1. Mother 2. Father	I__I	*Do not read the examples to the respondent *Select only one option

	3. Both parents 4. The child herself 5. Someone else (specify): _____ 88. Don't know / No response		
thanks	Thanks a lot for answering my questions		



Midline EVALUATION OF THE CRS FOOD FOR EDUCATION PROJET IN MALI

Teacher/Principal Survey

Base Information

Enum	Surveyor (last name and first name)	
Date	Date (DD/MM/YYYY)	
Region	Write the name of the region	
CAP	Write the name of the Educational Animation Center	
schoolname	Write the name of the school	

Dear Director/Teacher :

You have been selected to participate in a survey about health, nutrition, and education for the Cantine Scolaire (School Canteen) project. Your participation in this interview is voluntary. If, at any time, you wish to discontinue participation, you may do so without penalty. If you accept, please respond to all questions as candidly as possible. If you do not know the answer to a question, you may simply say so. All responses will be kept strictly confidential.

consent	Do you accept participation in this survey? 0. No → thanks the respondent and terminate the survey 1. Yes → fname	☐ ☐	
 If the response to “consent” is No or Not Found, thank the respondent and terminate the survey.			

Personal Information

Excellent! Now I would like to ask a few questions about you...

fname	What is your name? _____		
lname	What is your last name? _____		
Age1	Do you know your age? 0. No 1. Yes 2. Don't know	I__I	*If Yes, go to "age2" *If No or Don't know, go to "gender" *Only select one option
Age2	How old are you?	.....	*AGE INTERVAL between 15 and 99
gender	Enter the teacher's sex? 1. Male 2. Female	I__I	*Only ask if necessary
language	Which language do you speak best? 1. French 2. Local Language 3. Other (specify:_____)	I__I	*Select only one option
Language2	In which language do you use to teach? 1. French 2. Local Language 3. Both	I__I	*Select only one option
Language3	In which language are you are more comfortable teaching? 1. French 2. Local Language 3. Other (specify:_____)	I__I	*Select only one option
Edu	What is the highest level of education that you achieved? 1. DEF 2. BAC 3. BT1 4. BT2 5. CAP 6. Bac+2 (DEUG, DUT) 7. Bac+3 8. Bac+4	I__I	*Select only one option

	9. Bac+5 10. Other (Specify : _____)		
Teach	Do you teach 1st, 2 nd , 3rd, or 4th grade in this school? 0. No 1. Yes	☐	*If yes, go to “ Teach1 ” *If no, go to “principal”
Teach1	What class do you teach? 1. First grade 2. Second Grade 3. Third Grade 4. Fourth Grade	☐ ☐ ☐ ☐	*Choose all the answers that apply
Teach2	Have you had this class since the beginning of school? 0. No 1. Yes	☐	*Choose only one option *HINT to the enumerator: if s/he was a replacement teacher in the middle of the school-year
Teachlen	How long have you been teaching? 1. Less than one year 2. 1 to 2 years 3. 3 to 5 years 4. 6 years or more	☐	*Choose only one option
same_classe	Are your children from different class years sitting together in the same calss at the same time? 0. No 1. Yes		*Choose only one option *Relevant only if selected more than 1 option for teach1 *If No, skip to Kid1
Kid	How many students are in your class?	....	*Indicate a number, 0 to 150
Kid1	How many students are in your 1st grade class?	....	*Indicate a number, 0 to 150

Kid2	How many students are in your 2nd grade class?	....	*Indicate a number, 0 to 150
Kid3	How many students are in your 3rd grade class?	....	*Indicate a number, 0 to 150
Kid4	How many students are in your 4th grade class?	....	*Indicate a number, 0 to 150
emp	What is your employment status? 1. Government official 2. Community official 3. Government contractor 4. IFM intern 5. Volunteer 6. Other	I__I	*Read the list to the respondent *Select only one option

TRAINING AND KNOWLEDGE

Thank you! Now, I would like to ask a few questions on the type of training and degrees you have received in the past...

Train1	Were you trained to teach? 0. No 1. Yes	I__I	* Select only one option *If No, go to "Train4"
Train2	What is your training in teaching? 1. SARPE 2. ECOM 3. IFM	I__I	* Select only one option

	4. IPEG 5. Hégire 6. None 7. Other (Specify : _____)		
Train3	Was this training validated by a diploma, certificate, and attestation of success? 1. Diploma 2. Certificate 3. Attestation of success 4. Other	|_|	* Select only one option
Train4	Were you trained on the balanced approach? 0. No → train7 1. Yes → train4a	|_|	* Select only one option
Train4a	How many times did you receive the balanced approach training? 1. Only once 2. Twice 3. Three times 4. Four times 5. More than four times 88. Don't know	|_|	* Select only one option
Train5	When were you trained on the balanced approach? 1. Before December 2015 2. December 2015 3. March 2016 4. September 2016 5. December 2016 6. September 2017 7. December 2017 8. Other (Specify: _____)	|_| |_| |_| |_|	* Select only one option
Train6	On which techniques of the balanced approach were you trained? 1. Interactive radio educatoin (EIR) 2. News of the class 3. Text decoding 4. Guided reading 5. Language mechanism games 6. Guided writing 7. Invented writing 8. Spontaneous writing	|_| |_| |_| |_| |_| |_| |_| |_|	*Don't give examples or read the list to the respondent *Choose all answers that apply

	9. Other (Specify: _____)		
Train6a	Do you use the activities of the balanced approach in your class? 0. No 1. Yes	|_|	If Yes, go to “Train6b” If No, go to “Train7” * Select only one option
Train6b	What activities of the balanced approach do you use during the Language and Communication lessons? 1. Interactive radio education (EIR) (in theory, every day) 2. News of the class (in theory, every day) 3. Text decoding 4. Guided reading 5. Language mechanism games (in theory, every day) 6. Guided writing 7. Invented writing 8. Spontaneous writing 9. Other (Specify: _____)	|_| |_| |_| |_| |_| |_| |_| |_|	*Don’t give examples or read the list to the respondent *Choose all answers that apply
Train6c	What are the activities of the balanced approach that your students appreciate most in your class? 1. Interactive radio education (EIR) 2. News of the class 3. Text decoding 4. Guided reading 5. Language mechanism games 6. Guided writing 7. Invented writing 8. Spontaneous writing 9. Other (Specify: _____)	|_| |_| |_| |_| |_| |_| |_| |_|	*Don’t give examples or read the list to the respondent *Choose all answers that apply
Train6d_material	Do you use the balanced approach teaching materials in your class? 0. No → «Train9» 1. Yes → «Train6e_material»	|_|	* Select only one option

Train6e_ma terial	How often did you use the Balanced Approach equipment during the last month? 0. Never 1. Rarely 2. Sometimes (sometimes) 3. Often (frequently)	☐	* Select only one option
Train6f	According to you, does the balanced approach help improve your students' level of reading and writing? 1. Not at all 2. A little 3. Moderately 4. A lot 88. Do not know	☐	* Select only one option
Train6g	Which aspects of the balanced approach techniques are you satisfied with? 0. Nothing 1. the formations 2. Supervision of the project 3. Supervision of the principal 4. Supervision of CAP officers 5. The material distributes 6. Student participation 7. Other (specify) 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐	*Don't give examples or read the list to the respondent *Choose all answers that apply
Train7	Have you received another training in the didactics/teaching of reading-writing since the beginning of the school year, that is since last October? 0. No → train7a 1. Yes → 88. Don't know → train7a	☐	*Specify to respondent that this does not include the balanced approach * Select only one option
Train7a	Who supported the training? 1. CAP 2. CRS/EDC/other partners 3. Other (Specify:_____)	☐ ☐ ☐	*Choose all the answers that apply
Train7a	Did you participate in another training in teaching since last October? 0. No → train9 1. Yes → train8 1. Don't know → train9	☐	*Specify to respondent that this does not include the balanced approach

			* Select only one option
Train8	Who supported the training? 4. CAP 5. CRS/EDC/other partners 6. Other (Specify: _____)	☐ ☐ ☐	*Choose all the answers that apply
Attend3	Over the course of an ordinary week , how frequently does the director observe you during a lesson of reading-writing? 0. Never 1. 1-2 days 2. 3-4 days 3. Every day 4. Not applicable (respondant is a principal)	☐	* Don't read this list to the respondent * Select only one option
Attend3_m onth	Over the course of an ordinary month , how frequently does the director observe you during a lesson of reading-writing? 0. Never 1. Once month 2. 2 times a month 3. More than 2 times a month 4. Not applicable (respondent is director)	☐	* Don't read this list to the respondent *If 1, 2, or 3, go to "Attend3a" *If Never, go to "Attend3b" * Select only one option

Attend3a	In your opinion, are the observations of the director useful? - Often (frequently) - Sometimes (a few times) - Rarely - Never	☐	*Don't ask this question if the answer to attend3 and attend3_month are "never" *Read the list to the respondent * Select only one option
Attend3b	Other than observations, does the director offer other types of support? - None - Encouragements/Congratulations - Teaching advice - Other (Specify : _____)	☐ ☐ ☐ ☐	* Do not read the list to the respondent * Choose all the answers that apply
Attend3c	Apart from the school director, who else has observed you during a lesson of reading-writing? - No one - Pedagogical advisor - The regional supervisor - Other (Specify : _____)	☐ ☐ ☐	* Choose all the answers that apply
Attend3d	How many times have you been observed by people other than the Director during the year? - Never - Once - Twice - More than twice 88. Don't know	☐	* Select only one option
Attend4	Usually, do your students participate during the lesson? - Often (frequently) - Sometimes (a few times) - Rarely - Never → handwash	☐	*Read the list to the respondent * Select only one option
Attend4a	Usually, with regards to student's participation during the lesson, is there a difference between the girls and the boys? - Yes → attend4b - No → handwash	☐	* Select only one option

Attend4b	Who participates most during the lesson— the girls or the boys? 1. The girls 2. The boys	☐	* Select only one option
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Hygiene

We're almost done! Now, I will ask you a few questions on hygiene...

handwas h	In your opinion, when should someone wash their hands? 1. Before eating 2. Before touching or preparing food 3. Before giving the food to another person 4. When the hands are dirty 5. After touching a dirty object 6. After touching a domestic animal 7. After using the latrines 8. After changing a baby's diaper 9. Before the prayer 10. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	* Do not read the list to the respondent *Choose all the answers that apply
Hand1	How many times have you washed your hands yesterday?	.....	*0 = < & <20 *If 0, go to Hand3
Hand2	What were the reasons? 1. Before eating 2. Before touching or preparing food 3. Before giving the food to another person 4. When the hands are dirty 5. After touching a dirty object 6. After touching a domestic animal 7. After using the latrines 8. After changing a baby's diaper 9. Before the prayer 10. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	* Do not read the list to the respondent *Choose all the answers that apply

Hand3	Usually , what do you use to wash your hands? 1. Simple water 2. Water plus soap 3. Other (Specify : _____)	I__I	* Do not read the list to the respondent *Select only one option
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Worms1	By what way can we prevent intestinal worms? 1. Avoid walking barefoot (wear shoes) 2. Don't bathe yourself or swim in stagnant water 3. Eat meat that is cooked appropriately 4. Avoid contact with contaminated water, but if necessary wear boots and gloves 5. Wash hands with clean water and soap before preparing food, before serving food, or before eating 6. Wash hands with water that is clean and soap after using the latrines 7. Protect food against flies , cockroaches, and dust 8. Keep food in a pantry, or a place that is clean and well aerated 9. Other (specify: _____) 88. Don't know	I__I I__I	*Do not give examples or read the list to the respondent *After the respondent gives a way, encourage the respondent to give a second way: By what other way can we prevent intestinal worms? *Encourage to obtain 2 ways total
Stuprop	In your opinion, during a normal day, how many students among your students wash their hands before eating at school? 1. None 2. Less than half 3. Around half 4. More than half 5. Almost all 6. All 88. Don't know	I__I	*Select only one option

Director

Now, I would like to know if you serve as director of the school?

principal	Are you the director in this school? 0. No → thank the respondent and end the survey 1. Yes → principal1	I__I	*Select only one option
 If the response to “principal” is No, thank the respondent and end the survey			

Principal1	How long have you been director of this school? 1. Less than a year 2. 1 to 2 years 3. 3 to 5 years 4. 6 years or more	I _ I	*Select only one option
Principal2	Have you been trained to track and support your teachers in your teaching of the reading-writing? 0. No → principal3 1. Yes → principal2a	I _ I	*Select only one option
Principal2a	When were you trained the last time in the use of tools for supervising teachers in the teaching of reading-writing? 0. Never 1. December 2017 2. September 2017 3. January 2016 4. Other (Specify) 88. Dont know	I _ I	*Select only one option
Principal2b	Have you received another training on the supervision of teaching of reading-writing since the beginning of the school year, which is since last October? 0. No → principal3 1. Yes → principal2c 88. Don't know → principal3	I _ I	*Select only one option
Principal2c	Who supported the training? 2. CAP 3. CRS/EDC/other partners 4. Other (Specify -----)	I _ I I _ I I _ I	*Select more than one option
Principal3	During a normal week, at which frequency do you observe your teachers during a lesson of reading-writing? 1. Never 2. 1-2 days 3. 3-4 days	I _ I	* Don't read the list to the respondent *Select only one option

	4. Every day		
Principal3_month	During a normal month, at which frequency do you observe your teachers during a lesson of reading-writing? 0. Never 1. 1 time 2. 2 times 3. More than 2 times	I__I	* Don't read the list to the respondent *Select only one option
Principal4	Do you have any challenges observing/supporting your teachers? 0. No → principal6 1. Yes → principal5	I__I	*Select only one option
Principal5	What are these challenges? 1. Lack of time 2. Lack of material resources (books, chalk, etc.) 3. Don't know how to support them 4. Other (Specify : _____)	I__I I__I I__I I__I	* Don't read the list to the respondent * Choose all the answers that apply
Principal6	How often do the pedagogical advisors help you in your work? 1. Often (frequently) 2. Sometimes (a few times) 3. Rarely 4. Never	I__I	*Read the list to the respondent *Select only one option

PHYSICAL ASSETS OF THE SCHOOL

Since you are the director, that is, the first responsible for the school, I would like to ask you a few questions about the physical assets of the school...

Asset1	Does the school have an aerated place to store food? 0. No 1. Yes	I__I	*Select only one option
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Asset2	Does the school have pallets or an elevated surface for storing food? 0. No 1. Yes	I__I	*Select only one option
Asset3	Is there a kitchen in the school? 0. No 1. Yes	I__I	*Select only one option
Asset4	Is there any source of water available for the school? 0. No 1. Yes	I__I	*Select only one option
Asset4a	What is the main source of water available for the school? 1. None 2. Faucet, running water SOMAGEP 3. Borehole/village pump 4. Improved well (protected) 5. Traditional well (non protected) 6. Surface water (backwater, river, stream) 7. Rainwater 8. Other (specify:_____)	I__I	*Do not give examples or read the list to the respondent *Select only one option
Asset4b	How far from the school is the main water source? 1. In the school compound 2. Less than 15 minutes on foot 3. More than 15 minutes on foot 88. Don't know	I__I	*Read the list to the respondent, but don't read "don't know" *Select only one option
Asset4c	Do you currently have any problems in accessing drinking water access problems? 0. No → asset5 1. Yes → asset4d	I__I	*Select only one option
Asset4d	What kind of problems do you have for accessing drinking water? 1. Broken pump 2. Water point occupied by animals 3. Drying up of water point 4. Water point is used for agriculture 5. Other (specify : _____)	I__I I__I I__I I__I I__I	*Don't give examples or read the list to the respondent *Choose all the answers that apply

Asset5	Are there sanitary installations inside the school? (ex. latrines, toilets, etc.) ? 0. No 1. Yes	☐	*Select only one answer
Asset6	Are there sanitary installations inside the school in separate blocs for girls and boys? 0. No 1. Yes	☐	* Select only one answer
Asset7	Is there a sufficient availability of reading materials? 0. No 1. Yes	☐	* Select only one answer

SCHOOL CANTEEN

Very good! Now, I would like to ask you a few questions on the school canteen...

Canteen1_new	In March 2018, how many days did the canteen not work? 0. 0 days of no operation – worked full month 1. Between 1-5 days of non-functioning 2. More than 5 days of non-operation 88. Don't know	☐	* Select only one answer
Canteen2_new	What were the reasons that the canteen did not work? 1. Absence of stoves 2. Absence of teachers 3. Food breakdown of the project 4. Lack of condiments 5. Other (to be specified) 88. Don't know	☐ ☐ ☐ ☐ ☐	*Don't read the list to the respondent *Select all the responses that apply.
Canteen3_new	To what extent, are you satisfied with the participation of management committees in the operation of the canteen? 0. Not satisfied 1. A little satisfied 2. Satisfied 3. Very satisfied 88. Don't know	☐	* Select only one answer

Canteen4	Do you think the canteen activity should continue in your school after the withdrawal of the project? 0. No 1. Yes 88. Don't know		* Select only one answer
Canteen5	Who do you think should take charge of the canteen after the withdrawal of the project? 1. Parents 2. Mayor's Office 3. State 4. Other (to be specified) 88. Don't know		* Select only one answer
school_image	[Take a photo of the school when principal=1]		
thanks	Thank you very much for having answered my questions.		



Midline EVALUATION OF THE CRS FOOD FOR EDUCATION PROJECT IN MALI

SMC Survey

BASE INFORMATION

Enum_id	Surveyor ID	
Date	Date (DD/MM/YYYY)	
Region	Write the name of the region	
CAP	Write the name of the Educational Animation Center	
schoolname	Write the name of the school	

Dear Sir/Madam:

You have been selected to participate in a survey about health, nutrition, and education for the *Cantine Scolaire (School Canteen)* project. Your participation in this interview is voluntary. If, at any time, you wish to discontinue participation, you may do so without penalty. If you accept, please respond to all questions as candidly as possible. If you do not know the answer to a question, you may simply say so. All responses will be kept strictly confidential.

consent	Do you accept participation in this survey? 3. No → thank the respondent and terminate the survey 4. Yes →	I__I	*select only one option
 If the response to “consent” is No, thank the respondent and terminate the survey			

N.B: If the respondent refuses to answer any particular question, mark an « R » as the answer and move on the next question.

PERSONAL INFORMATION

Fname	What is your first name? _____		
Lname	What is your last name? _____		
Match 2	Are you : 1. School Principal 2. Teacher 3. Parent of a student 4. Other (Specify : _____)	☐	*Choose only one option *Respondent should select "Other" only if all other options don't apply
Match 3	What is your role in the CGS? 1. Director of the CGS 2. President of the supply/food store 3. Administrative secretary 4. Responsible for canteen 5. Responsible for Scofi 6. Other (Specify:_____)	☐	
Age1	Can you state your age? 0. No → "gender" 5. Yes → "age2"	☐	*If Yes, move to "age2" *If No, move to "gender" *Choose only one option
Age2	How old are you?	.....	*AGE INTERVAL between 12 and 99
Gender	What is your gender? 3. Male 4. Female	☐	*Ask only if necessary *Select only one option
edu	What is the highest level of education you have completed? 11. None 12. Some primary school but did not complete primary school 13. Completed primary school 14. Some secondary school but did not complete secondary school 15. Complete secondary school	☐	*Select only one option

	16. Some university but did not complete university 17. Earned bachelor's degree 18. More than bachelor's degree 19. Professional school 20. Koranic school or medersa 21. Other (specify: _____)		
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TRAINING AND KNOWLEDGE OF CGS

Good! Now, I would like to ask you a few questions on the training that you received and your knowledge...

Train1	Does the CGS manage the school canteen? 0. No 1. Yes	☐ ☐	*Select only one option
Train2	Did the CGS members receive training since 2016? 0. Non → Train4 1. Oui → Train3	☐ ☐	*Select only one option If Yes, move to Train3 If No, move to Train4
Train3	In what fields have the CGS members received training? 1. Food management 2. Health, hygiene, and nutrition 3. Democratic set-up of CGS 4. Roles and responsibilities of CGS 5. Annual action plan development 6. Resource mobilization 7. Follow-up and evaluation strategy 8. Other (Specify : _____)	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Do not give examples or mention the list to the respondent *Choose all answers that apply
Train4	Can you name the main responsibilities of the CGS? 1. Children follow-up (child retention in school, schooling progress of children, etc.) 2. Teacher follow-up (being present, etc.) 3. Canteen management 4. Resource mobilization for the school (financial and/or material) 5. Hygiene and cleanliness of children 6. Ensure communication between school and community (communication)	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent *Choose all answers that apply

	7. Ensure school development and maintenance (maintenance of buildings, latrines, water check-points) 8. Annual report of activities to the population 9. Advocate for support from the town hall/CAP 10. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐	
Train5	In your opinion, do you think that the responsibilities assigned to the CGS are too heavy? 0. No → train8 1. Yes → train6	☐	*Choose only one option *If Refused, move to "Train6"
Train6	In your opinion, which responsibilities should be kept? 1. Children follow-up (child retention in school, schooling progress of children, etc.) 2. Teacher follow-up (presence, etc.) 3. Canteen management 4. Resource mobilization for the school (financial and/or material) 5. Hygiene and cleanliness of children 6. Ensure communication between school and community (communication) 7. Ensure school development and maintenance (maintenance of buildings, latrines, water check-points) 8. Annual report of activities to the population 9. Advocate for support from the town hall/CAP 10. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent *Choose all answers that apply
Train7	In your opinion, who should be in charge of the responsibilities that should not be kept? 1. School principal 2. Teacher 3. Parents 4. Government/Ministry of Education 5. Other (specify : _____) 88. Don't know	☐ ☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent *Choose all answers that apply *Probe based on what they mentioned in the previous question – responsibilities that they

			you think should not be kept for CGS members
Train8	Does the training(s) received allow you to fulfill your responsibilities? 1. All 2. Mostly 3. Some 4. None	☐	*Read the list to the respondent *Choose only one option
Train9	In your opinion, what are the best practices for food storage? 1. The bags should be at one meter from the wall and roof 2. The bags should be placed on elevated palettes/platforms 3. The shop should be swept 4. The shop should be well-ventilated 5. The shop should be well secured 6. The food should be classified by type 7. The food should be well stacked to facilitate the inventory (not mixed) 8. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent *Choose all answers that apply
Train10	In your opinion, what are good practices for food preparation, from a hygiene perspective? 1. Keep the surfaces that are used to prepare food clean 2. Wash vegetables, fruits and ingredients with drinking water 3. Cook meat, fish thoroughly 4. Respect the steps in food preparation 5. Never mix raw food and food already cooked 6. Never save meals to be warmed up and served the next day 7. Serve meals of the day when they are hot 8. Not let meals exposed to the open air 9. Place meals in clean plates/cups 10. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent *Choose all answers that apply

handwas h	In your opinion, when should someone wash their hands? 11. Before eating 12. Before touching or preparing food 13. Before giving food to someone 14. When hands are dirty 15. After touching a dirty object 16. After touching a pet 17. After using the latrines 18. After changing a baby's diapers 19. Before prayers 20. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent *Choose all answers that apply
Hand1	How many times did you wash your hands yesterday?	.....	*Interval between 0 and 20 *If 0, move to « Hand3 »

Hand2	What were the reasons? 1. Before eating 2. Before touching or preparing food 3. Before giving food to someone 4. When hands are dirty 5. After touching a dirty object 6. After touching a pet 7. After using the latrines 8. After changing a baby's diapers 9. Before prayers 10. Other (Specify : _____) 88. Don't know	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	*Do not give examples or read the list to the respondent *Choose all answers that apply
Hand3	What do you usually use to wash your hands? 1. Just water 2. Water plus soap 3. Other (Specify : _____)	☐	* Do not give examples or read the list to the respondent *Select only one option
Worms	In your opinion, how can one avoid to catch intestinal worms (in the belly)? 1. Avoid walking bare foot (wear shoes) 2. Not to bathe or swim in stagnant water 3. Eat meat that is well cooked 4. Avoid contact with contaminated water, and if necessary to wear boots and gloves 5. Wash hands with drinking water and soap before preparing food, before serving food or before eating 6. Wash hands with drinking water soap after using the latrines 7. Protect food from flies, cockroaches, and dust 8. Store food in a pantry or a place that is clean and well-ventilated 9. Other (specify : _____) 88. Don't know	☐ ☐	* Do not give examples or read the list to the respondent *After the respondent has given one way, incite the respondent to give a second way: What other way can help avoid intestinal worms? Incite for 2 ways in total

SCHOOL CANTINE MANAGEMENT

Thanks! Now, I would like to ask you a few questions about the general assemblies and management of the school canteen...

SMC1	Since the beginning of the school year, which is since last October, how many general assemblies have been organized by the CGS between parents and students to discuss school life? 0. None 1. 1 to 3 general assemblies 2. More than 3 general assemblies 88. Don't know	|_|	*Don't read the list to the respondent *Choose only one option
SMC13	During the last three months, that is since February, has the community ensured the maintenance of the shop? 0. Non 1. Oui	|_|	*Choose only one option
SMC14	During a week of canteen, how many days did parents/students contribute for the wood? 0. Aucun None 1. 1 to 2 days 2. 3 to 6 days 3. Every day 88. Don't know	|_|	*Don't give examples or read the list to the respondent *Choose only one option
SMC15	During one week of canteen, how many days have parents contributed to condiments (vegetables, salt, potassium, etc)? 0. None 1. 1 to 2 days 2. 3 to 4 days 3. All of the 5 days 88. Don't know	|_|	*Don't give examples or read the list to the respondent *Choose only one option
SMC15_a	Since the beginning of the school year, did the parents contribute to condiments (vegetables, salt, potassium, etc) of the canteen? 0. No 1. Yes	|_|	*Choose only one option

SMC17	Since the beginning of the school year, that is since last October, have you prepared your annual school action plan? 0. No 1. Yes	I__I	*If Yes, move to “SMC18” *If No, move to “Edu1” *Select only one option
SMC18	Since the beginning of the school year, that is since last October, what is the level of implementation of the annual school action plan (the overall activities to do at school during the year) : 1. 0% 2. 1-25% 3. 26-50% 4. 51-75% 5. 76-100%	I__I	*Do not read the list to the respondent, give examples if necessary: school garden, choral singing, fencing work, latrine, kitchen, classrooms, etc. *Select only one option

TEACHING FOLLOW-UP

Edu1	Has CGS been informed of the pedagogical approach of the program used by teachers? 0. No 1. Yes	I__I	*Select only one option
Edu1_precise	Has the CGS been informed about the balanced approach used by teachers? 0. No 1. Yes 88. don't know	I__I	*Select only one option
Edu2	Does the CGS follow the practices of the teacher? 0. No → edu4 1. Yes → edu3	I__I	*Select only one option
Edu3	How does the CGS follow the practices of the teacher? 1. Class observation 2. Notebook preparation 3. Asking questions to children 4. Other (Specify : _____)	I__I I__I I__I I__I	*Do not give examples or read the list to the respondent *Choose all answers that apply

Edu4	Does the CGS follow the correct conservation and use of pedagogical materials? 0. No → edu6 1. Yes → edu5	I__I	*If Yes, move to “Edu5” *If No, move to “Edu6” *Choose only one option
Edu5	How does the CGS follow the correct conservation and use of pedagogical materials? 1. Visiting the local area where materials are stored 2. Inventory 3. Class observation 4. Other (Specify : _____)	I__I I__I I__I I__I	*Do not give examples or read the list to the respondent *Choose all answers that apply
Edu6	Does the CGS follow the children’s progress? 0. No → edu7 1. Yes → edu8	I__I	*Select only one option
Edu7	How does the CGS follow the children’s progress? 1. Results of compositions 2. Community tools of learning evaluations (Beekungo, EGRA lite, other) 3. Colored bulletins 4. Other (Specify : _____)	I__I I__I I__I I__I	*Do not give examples or read the list to the respondent *Choose all answers that apply
Edu8	Have students’ parents questioned the CGS on the pedagogical approach of teachers? 0. No 1. Yes	I__I	*Select only one option
Edu9	Does the CGS monitor the presence of teachers? 0. No → thanks 1. Yes → edu10	I__I	*Select only one option
Edu10	How does the CGS monitor the presence of children's teachers? 1. Daily check 2. Keeping an attendance register 3. Follow up with the principal 4. Other (specify: _____)	I__I	*Select only one option
thanks	Thank you very much for having answered my questions.		

Administrative and Education Officials

Organization:

Title:

Gender:

Background

1. What is your title? How long have you been with [agency/organization]? Can you tell me about what your role has been related to the FFE project? How long have you been involved with this project?

Relevance

2. What do you think is the main goal of the Food for Education project? What, specifically, is it trying to achieve? (Probe on short-term versus long-term goals) Do you think these are reasonable goals? Why/why not?
3. Were you involved or consulted in the design phase? If so, in what ways? Was this adequate?
4. What are the barriers to education in your region (Koulikoro/Mopti)? Are there different barriers for boys and girls? In what ways do you think the FFE project took these socio-economic, cultural, and political situations into consideration during the design phase?

5. How well do you think that the FFE project is aligned with your region's (Koulikoro/Mopti) priorities, policies, programs and laws?
6. Do you think the planning and organization of the FFE project were well-planned and realistic in terms of its objectives, desired outcomes, targets, and timeframe? Why or why not?
7. Since the project began, have beneficiaries' needs changed over time in a way that has affected the project? If so, how has the project responded to changing needs?

Effectiveness

8. To what extent do you think the FFE project is meeting its goals? In what ways, if any, does it fall short? How can it be improved?
9. What outputs or outcomes has the project achieved so far? Are the implementation of some activities more successful than others? If so, which ones? Why?
10. Overall, what are the successes and challenges experienced in the implementation process? How can they be addressed for better achievements in the future?

Efficiency

11. To what extent does the FFE project collaborate with your government department/organization? Is this an adequate level of collaboration? Why or why not? How can it be improved?
12. Do you think the project is implemented in the most efficient way? In what ways can it be more efficient?

Impact

13. What are the impacts, if any so far, of the activities on communities where the FFE project is being implemented? Which activities do you think have the greatest impacts? Why?
14. Is there a difference in the way that the activities are affecting boys and girls?
15. In your opinion, is there anything about the project that could be strengthened or done differently? What were the overall challenges you see? What are the overall successes of the FFE project? How can they be taken into account for future projects?
16. In what ways, if any, have political conflicts had impacts on community response and commitment to this project?

Sustainability

17. From your perspective, which activities and processes will be sustainable beyond project funding and which will not be sustainable? Please explain. What are the biggest challenges to sustainability? Is the project prepared to overcome these challenges?
18. What role, if any, will your agency/organization have in ensuring sustainability of the outcomes? What measures, and which specific efforts, have been undertaken already to prepare for the phase out of the project's funding?
19. Do you have any recommendations to help ensure sustainability of the project?

Conclusion

20. Is there anything that I did not ask about that you would like to share with me, or do you have any additional thoughts about what we have discussed today?

Thank you for your time and comments.

National Government Stakeholders

Organization:

Title:

Gender:

Background

1. What is your title? How long have you been with [government agency/organization]? Can you tell me about what your role has been related to the FFE project? How long have you been involved with this project?

Relevance

2. What do you think is the main goal of the Food for Education project? What, specifically, is it trying to achieve? (Probe on short-term versus long-term goals) Do you think these are reasonable goals? Why/why not?
3. Were you involved or consulted in the design phase? If so, in what ways? Was this adequate?
4. What are the barriers to education in Mali (or region, if talking to regional official)? Are there different barriers for boys and girls? In what ways do you think the FFE project took these socio-economic, cultural, and political situations into consideration during the design phase?

5. How well do you think that the FFE project is aligned with Mali's (or the region's) priorities, policies, programs and laws?

Effectiveness

6. To what extent do you think the FFE project is meeting its goals? In what ways, if any, does it fall short? How can it be improved?

Efficiency

7. In what ways do you think the FFE project used existing capacity or structures to address the educational and health needs of students?
8. To what extent does the FFE project collaborate with your government department/organization? Is this an adequate level of collaboration? Why or why not? How can it be improved?

Impact

9. What impact do you think the FFE project has had so far, if any, in the communities where it is implemented? Which activities have had the greatest impacts so far?
10. In your opinion, is there anything about the project that could be strengthened or done differently? What were the overall challenges you see? What are the overall successes of the FFE project? How can they be taken into account for future projects?

11. In what ways, if any, have political conflicts had impacts on community response and commitment to this project?

Sustainability

12. From your perspective, which activities and processes will be sustainable beyond grant funding and which will not be sustainable? Please explain. What are the biggest challenges to sustainability? Is the project prepared to overcome these challenges?

13. What role, if any, will your agency/department have in ensuring sustainability of the outcomes?

Conclusion

14. Is there anything that I did not ask about that you would like to share with me, or do you have any additional thoughts about what we have discussed today?

Thank you for your time and comments.

Project Staff/Partners

Organization:

Title:

Gender:

Background

1. What is your title? How long have you been with [organization]? What are your main responsibilities in your position, particularly related to the FFE project? How long have you been involved with this project?

Relevance

2. What do you think is the main goal of the Food for Education project? What, specifically, is it trying to achieve? (Probe on short-term versus long-term goals) Do you think these are reasonable goals? Why/why not?
3. Were you involved or consulted in the design phase? If so, in what ways? What are the strengths of the project's design? What are its weaknesses?
4. Do you think the planning and organization of the FFE project were well-planned and realistic in terms of its objectives, desired outcomes, targets, and timeframe? Why or why not?
5. In what ways/how well do you think the FFE's goals fit with the government's educational and health priorities goals? (national/regional/local)
6. Since the project began, have beneficiaries' needs changed over time in a way that has affected the project? If so, how has the project responded to changing needs?

- **Effectiveness**

7. Are the project's planned activities proceeding on schedule? What has helped stay on schedule and what has made it difficult?
8. What outputs or outcomes has the project achieved so far? Are expected results occurring as planned? To what extent will the objectives be achieved?
9. Are the implementation of some activities more successful than others? If so, which ones? Why?
10. How effective is the monitoring strategy for collecting regular and reliable data on the work? What are the strengths and gaps in the monitoring system?
11. Overall, what are the successes and challenges experienced in the implementation process? How can they be addressed for better achievements in the future?

Efficiency

12. To your knowledge, to what extent are the planned activities being implemented according to the budget?

13. What obstacles in allocating budget resources have arose? How were they overcome and at what cost?

14. Do you think the project is implemented in the most efficient way? In what ways can it be more efficient? Are objectives being achieved on time? Why or why not?

Impact

15. What are the impacts, if any so far, of the activities on communities where the FFE project is being implemented? Which activities do you think have the greatest impacts? Why?

16. Is there a difference in the way that the activities are affecting boys and girls?

17. What has been impact of the project's activities on the communities in terms of

- a. Building organizational capacities (SMC, SILC)
- b. Raising awareness in parents /teachers/students (for example, on the importance of education, promoting attendance for students and teachers)

18. How are community-based structures (e.g. schools, SMC, SILC) supporting project implementation? Are they on track to assume ownership of key activities beyond the life of the project? Are they satisfied with their participation? How might they be encouraged and/or supported to participate more?

19. How have capacity building activities for SMC improved their capacities? What obstacles persist? What more should be done to ensure they will have the capacity to manage the school canteens beyond the life of the project?

20. What innovations, lessons learned and good practices can be documented so far?

Sustainability

21. From your perspective, which activities and processes will be sustainable beyond project funding and which will not be sustainable? Please explain. What are the biggest challenges to sustainability? Is the project prepared to overcome these challenges?

22. How has the FFE Project engaged other stakeholders (e.g., government and local organizations) to sustain the project activities and outcomes after the project funding ends? What will be their role be in sustaining the outcomes of the project at the district and community levels? What systems do you think they have in place to sustain the outcomes?

23. Do any socio-cultural or political aspects endanger the sustainability of the project and what actions are being taken to sensitize local institutions and target groups to these issues?

24. What measures, and which specific efforts, have been undertaken already to prepare for the phase out of the project's funding?

25. Do you have any recommendations to help ensure sustainability of the project?

-
-
-

Conclusion

26. Is there anything that I did not ask about that you would like to share with me, or do you have any additional thoughts about what we have discussed today?

- *Thank you for your time and comments.*

Parents: Focus Group Discussion

School:

Gender:

Number of Participants:

- Here as researchers for the FFE project. We are not funding any programs or school, we are providing feedback to program implementers
 - After we finish, we will ask parents who participate in the SMC to stay a few minutes longer to answer additional questions about their activities in the group
 - Everything is confidential, we will not record anyone's name or share anything they say with teachers, principals, or any other community members. Respect each other and do not repeat this conversation outside of here
 - No right or wrong answers – it's ok to disagree, because we want everyone's opinion. Everyone should speak freely, and respect each other
 - We will be here for one hour
 - You do not have to answer a question if you do not want
 - Can we record the discussion for notes?
 - Do you have any questions for us before we begin?
1. In some communities, not all children are able to attend school on a regular basis. Does this happen in your community? Are there some children who attend school more than others? What prevents some children in this community from going to school? (Probe to understand if there are different things that prevent boys and girls from going to school).
 2. Have any barriers to sending children to school been addressed through the FFE program activities (such as take home rations or daily hot meals)? What about parents' attitudes towards the value of education? (Spend time on this question and probe – for example, if they parents say "school feeding" ask specifically what the previous barrier was, and how the project is helping. Try to get a lot of responses here – keep following up, "is there anything else?")

3. What do you think would encourage children in your community to go to school more often? What are the specific encouragements needed for girls? For boys? (Spend time on this question and probe – for example, if they parents say “money” ask specifically what the costs are, and why they are prohibitive. Try to get a lot of responses here – keep following up, “is there anything else?”)
4. What do you like about the school your child attends? What, if anything, could be better? Do you know your child’s teacher or teachers? What do you like (or not like) about your child’s teacher or teachers?
5. How far do most children in this area get in school? Elementary school? Beyond? Do most children in the community go as far in school as they would like? If not, what stops them?
6. How far would you like to see your own child/children go in school? Why? What difference will it make in their lives to have this level of education? Do you think your attitude in this is different or similar to other parents in your community?
7. Do you encourage your children to study at home? Why? Why not? How else are you involved in your child’s education? Is this typical of families in your community?
8. What were you hoping [activity/program] would do for your family? For your community? Has [activity or program] met your expectations? Why or why not?

9. Do you think [school feeding/take home rations] support children to go to school? Why or why not? (Probe for any differences between boys and girls)

10. From your perspective, does the overall program adequately address the needs of children and their families? Why or why not? What would you do differently to better support children and their families?

11. Overall, have you had a positive or negative experience in [activity or program]? Please explain.

12. Is there anything that I did not ask about that you would like to share with me, or do you have any additional thoughts about what we have discussed today?

Thank you for your time! If you are a member of the SMC, I will ask you to please stay a few more minutes for some additional questions related to your activities with this group. If you are not a member, you may now leave.

School Management Committee: Focus Group Discussion

School:

Gender:

Number of Participants:

Thank you for staying. I am going to ask you

1. What SMC responsibility do you like the most? Why?

2. What SMC responsibility do you like the least? Why? What is the most challenging aspect?

3. Have you been a part of or seen any successful activities through your work as a member of the SMC? How did it make you feel? What aspects of the activity(ies) do you feel were the most successful? (Probe: were there any successful outcomes that were surprising to you?)

4. Were there any activities the SMC tried to do this year or last year which were not successful? Which were the least successful? What needs do you think are still unmet? (Probe: were there any negative outcomes that were surprising to you?)

5. From your perspective, does the overall program adequately address the needs of children and their families? Do you think that children in your community have access to quality education? Why or why not? What would you do differently to better support children and their families?

6. In what ways, if any, has the FFE project improved your community? What about the abilities and capacities of your SMC?
7. In your opinion, is there anything about the project that could be strengthened or done differently?
8. From your perspective, which activities and processes will be sustainable beyond project funding and which will not be sustainable? Please explain. What are the biggest challenges to sustainability? Is the SMC prepared to overcome these challenges?
9. What role, if any, will your SMC have in ensuring sustainability of the outcomes? What measures, and which specific efforts, have been undertaken already to prepare for the phase out of the project's funding? What support does your SMC need to manage activities in the future?
10. Do you have any recommendations to help ensure sustainability of the project?
11. Have you learned anything from participating in the SMC? Overall, has it been a positive or negative experience? Why?

Thank you for your time!