GUINEA-BISSAU
McGovern-Dole International Food for Education and Child Nutrition Project

Final Evaluation

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MeREECE Final Evaluation Report

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Evaluation Authored by: School-to-School International
Dr. Parnika Bhatia, Fiona Eichinger, Emily Knowles-Crane, Drew Schmenner

Table of Contents

List of Figures

List of Tables

List of Acronyms

Acronym	Full Term
CRS	Catholic Relief Services – United States Conference of Catholic Bishops
EGRA	Early Grade Reading Assessment
FFPr	Food for Progress
FY	Fiscal Year
IHfRA	Innovative Hub for Research in Africa
KII	Key Informant Interview
MeREECE	Promotion of Educational and Economic Performance in Educative Communities in Guinea-Bissau *Melhoria do Rendimento Escolar e Económico das Comunidades Educativas na Guiné-Bissau*
MoH	Ministry of Health
MoE	Ministry of Education
SMC	School Management Committee
SOW	Statement of Work
SO	Strategic Objective
STS	School-to-School International
USDA	U.S. Department of Agriculture
WFP	World Food Programme

Executive Summary

Project Background and Purpose

Guinea-Bissau is a small West African coastal nation situated between Senegal and Guinea and extending north to the Sahel. It is one of the world's poorest countries, ranked on the 2020 United Nations Human Development Index at 175 out of 189 countries and with over 70 percent of the population living below the poverty line.[1] Portuguese is the official language of Guinea-Bissau, but it is estimated that less than one-fifth of the population speaks Portuguese.[2] Approximately 60 percent of the population over the age of 15 can read and write.[3]

In 2019, the United States Department of Agriculture (USDA) awarded Catholic Relief Services (CRS) Guinea-Bissau a five-year, $18.7 million project under the McGovern-Dole International Food for Education and Child Nutrition program. The MeREECE project—Promotion of Educational and Economic Performance in Educative Communities, or *Melhoria do Rendimento Escolar e Economico das Comunidades Educativas* (MeREECE)—has run from September 23, 2019, to August 31, 2024.[4] The initial target number of schools for this project was 321, but now 350 schools are enrolled in the regions of Bafata, Cacheu, Gabu, Quinara, and Oio. Currently, the project implementation is in its final year and concluding its final evaluation.

Over the project's five-year implementation period, CRS used donated commodities and funds provided by the Foreign Agricultural Service to implement a school feeding project. The project is focusing on achieving the following objectives:

- Improve teachers' and school administrators' ability to deliver quality literacy instruction through training and recognizing teacher performance.
- Improve the Ministry of Education's (MoE's) capacity to monitor and support teachers' technical development through capacity strengthening training and joint monitoring visits.
- Increase learner attentiveness and attendance by reducing child hunger through nutritious school meals.
- Improve learner attendance by establishing child-friendly school environments, school libraries, and extracurricular learning opportunities and by providing take-home rations.
- Increase parents' and communities' involvement in education outcomes for their children.
- Increase knowledge and improve health, nutrition, and dietary practices of teachers, learners, and parents.

CRS initially worked with technical partners—Plan International[5] and Caritas Guinea-Bissau—that have extensive experience in education and health sector in Guinea-Bissau. CRS aims to reach a total of 199,539 direct beneficiaries.

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[1] https://www.ohchr.org/en/stories/2022/07/people-share-priorities-first-ever-review-guinea-bissaus-sustainable-development

[2] https://pollylingu.al/pt/en/regions/55

[3] https://www.cia.gov/the-world-factbook/countries/guinea-bissau/

[4] Originally scheduled to close in September 2023, the project received an extension to August 2024.

[5] Plan International exit the project on December 31, 2023, and Caritas exit the project on 30 April 2024.

Evaluation Questions, Design, Methods, and Limitations

The MeREECE evaluation process involves three phases: a baseline, midterm, and final evaluation. This report summarizes the methodology and findings of the endline evaluation. The final evaluation was conducted in January 2024 to measure overall project performance, capture unintended outcomes, and reflect on the project's key evaluation questions. In addition to the Early Grade Reading Assessment (EGRA), questionnaires, and observation tools as deployed in the midterm evaluation, the endline included key informant interview (KII) and focus group discussion (FGD) tools in order to capture perspectives on the project from key stakeholders. Triangulation of this data provided more in-depth information to address the questions described below:

Relevance	1. To what extent do the project's interventions meet the educational, socio-economic, cultural, and political needs of beneficiaries? 2. To what extent are project interventions aligned with the education strategy outlined in the Guinea-Bissau Education Sector Plan (2017-2025) 3. Are stakeholders satisfied with their participation in the project? Why or why not? 4. To what extent have students (boys and girls) increased their reading comprehension skills compared to baseline? 5. To what extent are teachers implementing literacy techniques acquired through the project? 6. Is the project theory of change relevant? Are the actions and approaches used by the project sufficient to improve students' reading and writing skills?
Effectiveness	7. To what extent has the project achieved its goals and targets (including increasing enrollment, retaining girls, reducing dropouts, reducing hunger in schools, improving teacher and student attendance)? 8. Which interventions contributed most significantly to the expected results or objectives? 9. To what extent does the project coordinate and collaborate with other stakeholders? 10. To what extent were the baseline and midterm recommendations implemented? 11. Do the literacy promotion activities help improve the reading and comprehension abilities of students? 12. Which strategies have been put in place to effectively monitor and address the teachers' attendance? Has project implementation been effectively monitored? How well has the M&E mechanism helped project implementation, and what improvements could be made, if any? 13. To what extent has the implementation of SILC strengthened the economic capacity of parents to support their children's schooling and contribute to the life of the school? 14. How have teachers' and students' attendance affected the reading and understanding capacity of students?
Efficiency	15. To what extent have project resources (inputs) achieved the results achieved? 16. Can the same results be achieved with fewer resources or alternative approaches? 17. Were objectives achieved on time? 18. How did the project improve the efficiency of its partners? Was the project efficient at taking into account beneficiaries' feedback?

Sustainability	19. What progress has been made to reach the sustainability milestones presented in the graduation and sustainability plan document? 20. Is there evidence of community capacity to take ownership of project activities and are they meeting their commitments outlined in their MOUs (providing wood, cooks, complementary foods for meals, staple foods for 2-4 days coverage per month, etc.)? Are there any spontaneous actions that APEs/COGES have taken to maintain/improve school infrastructures? 21. To what extent can the project best practices can be replicated and adopted by Guinea-Bissau Ministry of Education? 22. What policies favor the sustainability of school canteen projects? 23. Have inclusive or gender sensitive strategies been implemented in view of sustainability among identified specific groups, if there are any? 24. To what extent does the SILC approach contribute to the project's sustainability?
Impact	25. What were the expected and unintended positive and negative effects of the intervention on children, communities and institutions? How does the intervention affect the well-being of different groups of stakeholders, including the most vulnerable and at-risk children? 26. What do beneficiaries and other stakeholders involved in the project perceive as the effects of the intervention on themselves? 27. To what extent did project objectives and activities reduce gender disparities in education in target zones, and what activities were most effective in leading to said reductions?

CRS explored evaluation approaches used in similar programs and identified the most rigorous evaluation plan possible—subject to time, quality, resources, and country context constraints. For ethical reasons, a randomized experimental approach is inappropriate to apply to primary schools in Guinea-Bissau, given that school-age children throughout the country require food assistance. For logistical reasons, an experimental or quasi-experimental approach is also not feasible given the country context in which multiple actors (UNICEF, World Bank, WFP, etc.) are implementing education assistance projects throughout all regions of Guinea-Bissau. Therefore, CRS decided that a non-experimental performance evaluation is the most feasible and appropriate approach. CRS then subcontracted the assessment to an external evaluation team, School-to-School International (STS). STS utilized a two-stage cluster sampling approach to select schools and then students at the schools randomly in the five MeREECE intervention regions of Bafata, Cacheu, Gabu, Quinara, and Oio. In the first stage, schools were selected at random, proportionally to the population of schools by region. In the second stage, enumerators selected 20 Grade 3 learners in the same class at random within each school. To achieve the necessary sample size for comparable, statistically significant findings, STS included the same 90 schools in the endline sample as visited at baseline and midterm with a target of 20 Grade 3 learners per school.[6]

After completing a five-day training, 35 enumerators collected data from January 29–February 9, 2024. STS maintained detailed documentation of all issues encountered during data collection in a tracker, which was used as part of the data cleaning process. Additionally, enumerators' use of electronic data

[6] McConnell and Vera-Hernandez (2015) was used to calculate sample sizes for a binary outcome, with the standard 80 percent and 5percent significance level, an ICC of 0.22, and a minimum sample size of 1,800 learners for the beneficiary group in 90 target schools (twenty learners per school).

capture via tablets contributed to data quality, consistency, and collection efficiency by streamlining fieldwork as well as reducing measurement and data entry errors.

The endline study collected quantitative data in the form of surveys with learners and school directors, school and classroom observations, and learner EGRAs. Due to the COVID-19 pandemic, the baseline data collection and evaluation was postponed from the end of the 2019-20 academic year to the beginning of the 2020-21 academic year. Under the new timeline, students were assessed at the start of Grade 3 rather than at the end of Grade 2. These Grade 3 students serve as a proxy for end-of-Grade 2 students as their exposure to Grade 3 instruction was minimal at the time of the evaluation. To collect comparable data, the same approach was followed both at midterm and endline. At each sampled school, enumerators administered an EGRA to 20 learners in Grade 3 to measure their core reading skills. In addition, enumerators administered one survey to the school director, completed one school observation, and conducted one observation of a Grade 2 classroom.

Qualitative data was also collected at endline. KIIs were conducted with local leaders and parents, while FGDs were conducted with school management committees (SMCs), students, community groups, and MeREECE project staff. The FGD with girls was designed to gain insight and understanding of girls' experiences and views on primary education and the food for education program, as well as current practices, expectations and obstacles related to girls' education within their community. The group and individual interviews with other respondents were intended to gain insight regarding perceptions of the quality and access to education in their community, parental/community involvement in schools, perceptions of the MeREECE program, and the project's sustainability. The interview guides also included questions to understand how community involvement through the SMCs contributed to the improvement of the learning and teaching conditions in the schools targeted by the MeREECE project in Guinea-Bissau.

STS cleaned and prepared for analysis the quantitative data collected through the EGRA, surveys, and observation tools. Cleaning was completed using R and Stata statistical packages and included a comprehensive outlier analysis of quantitative results to establish data consistency. Qualitative data were transcribed, translated, and reviewed for accuracy and quality as fully as possible upon the completion of data collection. Data were cleaned and anonymized, with participant information remaining confidential. Translated transcriptions were imported into NVivo 12, a data analysis software package, to systematically code and analyze the data. The qualitative data analysis methodology incorporated an iterative approach and included content analysis and constant comparison of narrative data to identify and validate emerging themes.

Secondary project monitoring data was provided by CRS and incorporated into this report, including school enrollment data, details from semi-annual project reports, and the project's indicator data.

The following limitations should be considered when reviewing the findings of the MeREECE final evaluation:

- **Language of the EGRA tool.** The instructions for the EGRA were in Portuguese. Based on the learner survey results, it is likely that many learners struggle with understanding Portuguese, so learners may not have understood instructions for individual subtasks. To ensure the validity and comparability of results across timepoints, this limitation could not be addressed at endline, but it should be considered for future evaluations.

- **Inherent bias in sampling children present on the day of assessment.** Learners' EGRA results may be biased towards the types of learners who attend school regularly and may exclude those learners who are enrolled but do not attend regularly.
- **Reduced sample size.** The target learner sample was 1,800 learners. At midterm, 1,655 observations were collected. After endline data cleaning, only 1,682 learners are included in the analysis. The difference between the target sample of 1,800, and the final total of 1,682 was due to some of the sampled schools having less than 20 learners available at school the day of interviews.
- **Time span between midterm and endline.** The midterm evaluation data collection was initially scheduled for March and April 2022, but it was postponed until January and February 2023, leaving only one year between the midterm and endline evaluations. This shortened time span limits the dosage of project intervention and may therefore result in seeing limited impact.
- **Purposive sampling for qualitative data collection.** The purposive sampling for qualitative data collection, especially for parents, community members, and SMC members, may have resulted in sampled schools selecting individuals who were more actively engaged in the project and therefore inclined to speak of project activities in a certain, more positive light.

Findings and Conclusions

To view the updated indicator performance tracking table (IPTT), please see Annex 8.

STRATEGIC OBJECTIVE ONE

The first Strategic Objective of the MeREECE project is the improved literacy of school-aged children in the Cacheu, Oio, Bafata, Gabu and Quinara regions. Achievement of this SO is measured through the percentage of learners who, at the end of second grade, demonstrate that they can read and understand the meaning of grade-level text (McGovern-Dole Indicator #1). For this evaluation, the EGRA was conducted in Portuguese.

INDICATOR 1: IMPROVED QUALITY OF LITERACY INSTRUCTION (IR 1.1)

The specified threshold used in this analysis is that a learner can correctly answer at least four of the five reading comprehension questions correctly. Values for this indicator were captured by administering the EGRA tool to boys and girls at the start of Grade 3. At baseline, the proportion of learners who met this threshold was 0.67 percent, or 11 out of 1,649 learners, and this proportion slightly increased at midterm to 0.91 percent (weighted)—or 21 out of 1,642 learners. This increase from baseline to midterm was statistically significant. At endline, the proportion of learners was 0.90 percent—or 15 out of 1,682 learners.[7] By year four, the project had set a target that 55 percent of learners would, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade level text. Endline results fall well below the target.

The proportion of learners who did not answer a single item correctly for each subtask—known as a zero score—at endline was lowest on the letter name identification subtask (4.29 percent) and highest on the reading comprehension subtask (79.28 percent). ***Across all subtasks, boys had a lower proportion of zero scores than did girls.***

[7] This is a significant increase as measured by the Pearson Chi Squared test (p=.003).

Zero scores generally decreased overall from baseline to endline on all subtasks except for initial sound identification, with two of the four decreases statistically significant. For instance, while 40.54 percent of learners were not able to read a single word of the reading passage at baseline, 27.77 percent of learners were unable to do so at endline. The likelihood of observing a zero score decreased from baseline to endline for two subtasks—letter name identification and the reading passage. The decreases in zero scores for familiar word reading and reading comprehension from baseline to endline were not statistically significant, as well as the increase in zero scores for initial sound identification.

LITERACY SKILLS AND ASSOCIATED FACTORS

The relationship between EGRA performance and key language-related learner survey responses was examined. The three key learner survey questions which were examined in relation to EGRA performance were:

1. "What languages does your family use most at home?"
2. "Do your parents or caregivers speak Portuguese?"
3. "What languages does your teacher use most in the classroom?"

STS analyzed these variables alone and in groupings of exposure to Portuguese: "high" (3), "medium" (1-2), "low" (0). Using the index score, across all the groupings, ***learners with "high" exposure to Portuguese had, on average, higher scores on the oral reading fluency passage*** than "medium" and "low" exposure learners at midterm and endline. At endline, students categorized as having medium exposure to Portuguese scored significantly higher on the oral reading fluency test compared to those with low proficiency, with an average increase of 6.75 points. Those in the high exposure category demonstrated an even more pronounced improvement, scoring on average 10.9 points higher than low exposure to Portuguese students. Additionally, the interactions between language exposure and gender did not demonstrate significant differences, indicating that the effect of language exposure on oral reading fluency is consistent across genders.

During school observations, enumerators recorded the presence of educational materials in the offices of school directors across 90 schools. Findings show that 61 schools possessed visual aids and 80 had didactic materials. Notably, schools with visual aids in the director's office demonstrated significantly higher performance across all literacy subtasks compared to those lacking such aids. Furthermore, schools where directors had didactic materials in their offices noted students achieving significantly better results in reading comprehension than those without these materials.

INDICATOR 2: IMPROVED LEARNER ATTENDANCE (IR 1.3)

At baseline,[8] midterm, and endline, school observations and director surveys were used to estimate learner attendance and enrollment.

School enrollment and attendance rate stayed the same from baseline to midterm but increased at endline. To calculate the average attendance rate, enrollment responses from the director survey and attendance responses from the school observation were merged and aggregated by gender across both pre-primary and primary (1-6) grades. These numbers were averaged over all schools and divided (attendance/enrollment) to calculate an attendance rate. Project targets set at baseline wanted to see a 75 percent average student attendance rate in USDA supported classrooms/schools by year four of the project. Although the endline results do not meet this threshold, progress was made, with the average

[8] At baseline only 79 project schools—or 87.78 percent of the baseline EGRA sample—on the day of data collection.

attendance rate increasing from 62.49 percent at midterm to 73.61 percent at endline, as shown in Table 12. In addition, attendance rates by gender were similar at endline, with girls' attendance slightly higher than boys' (73.87 percent to 73.34 percent, respectively).

INDICATOR 3: MORE CONSISTENT TEACHER ATTENDANCE (SUB-IR 1.1.1)

Teacher attendance rates increased from baseline to midterm among sampled schools but remained unchanged at endline. At baseline, midterm, and endline, school directors were asked a series of questions about teacher attendance and documentation of teacher attendance at the school level. At baseline on the day of the interviews, 400 of 806 employed (49.63 percent) teachers were present. Overall, 54.42 percent of women teachers and 47.88 percent for men teachers were present on the day their school was visited. Attendance rates increased at midterm, with 63.60 percent of men teachers and 63.45 percent of women teachers present, and remained relatively unchanged at endline, with 64.92 percent of men teachers and 61.76 percent of women teachers present. Despite the increase from baseline to endline, attendance rates did not meet the project targets of 70 percent teacher attendance by year four of the project.

INDICATOR 4: INCREASED SKILLS AND KNOWLEDGE OF TEACHERS (SUB-IR 1.1.4)

At endline, skills and knowledge composite scores among teachers increased. At endline, 88 classroom teachers were observed to gain an understanding of their knowledge of good instructional practices and teaching techniques. Enumerators were asked to observe classrooms looking for 12 specific teaching behaviors. Composite scores were then created, with each activity receiving up to one point per teaching behavior based on the quality and time spent utilizing the behavior.[9] At midterm, most teachers (95.37 percent) demonstrated between one and six of the teaching behaviors, while only 4.45 percent of teachers demonstrated more than six of the teaching behaviors. At endline, teachers' skills and knowledge scores improved, with 20.5 percent demonstrating more than six of the teaching behaviors.

INDICATOR 5: INCREASED SKILLS AND KNOWLEDGE OF SCHOOL ADMINISTRATORS (SUB-IR 1.1.5)

From baseline to endline, school directors' skills and knowledge composite scores increased. At baseline, more than half (52.22 percent) of school directors demonstrated skills and knowledge in only one to four techniques or tools, while at endline, only 15.55 percent did so. Further, the proportion of school directors demonstrating knowledge in at least five techniques or tools increased from 47.77 percent at baseline to 84.44 percent at endline, which is well above the target level of 50 percent by year four of the project.

INDICATOR 6: REDUCED HEALTH-RELATED ABSENCES (SUB-IR 1.3.2)

Enrollment data for all 350 project schools provided by CRS shows an increase in enrollment over the life of the project. Girls' enrollment increased from 37,404 at baseline to 45,615 at endline, while boys' enrollment grew from 41,384 at baseline to 48,106 at endline. The total enrollment of 93,721 is greater than the project's target of 82,889 learners enrolled by the end of year four.

STRATEGIC OBJECTIVE TWO
DIETARY PRACTICES

[9] The classroom observations observed both math and literacy activities. In cases where an item was skipped, the item score was treated as zero. Each question was equally weighted. This means that all activities were given a possible score of 1. While some items were treated as a binary yes or no, a number of questions used ordinal response items, asking the enumerator to rate the quality of an activity. In this case each question received a total possible score of 1, with each rating incrementally increasing in value from 0 (e.g., 1-4 will be transferred to 0, .33, .66, 1 respectively).

Like at midterm, most learners at endline said they were not hungry at school. At endline, 71.91 percent of boys and 72.19 percent of girls said that they were rarely hungry in the last five days while at school, while only 4.40 percent of boys and 7.28 percent of girls said they were hungry most of the time or often during the same period. In addition, nearly 90 percent of both boys and girls at endline said they had eaten food at school the previous day.

Endline qualitative data from community members, learners, and MeREECE personnel confirm the popularity of the school feeding program. As one learner reported in an FGD, "We eat here at school every day, and many students don't have the means to have breakfast in the morning and so they always come to school."

WATER, SANITATION, AND HYGIENE

***At midterm, both boys and girls each had equal and reliable access to latrines, and access slightly improved at endline*.** More than 70 percent of learners at endline reported that boys' and girls' latrines are always open during the school day.[10] The proportion of learners who said that girls and boys help to clean latrines at school also increased from midterm to endline. For example, the proportion of boys who said boys help clean the latrines increased from 18.18 percent at midterm to 29.52 percent at endline.

Nearly three-fifths of the latrines observed at endline on the day of school visits were pit latrines or buckets (58.89 percent). Of the 86 schools that had latrines, seven of them (9.81 percent) were unavailable for learners to use on the day of school visits.

As part of its school feeding intervention, MeREECE organized capacity strengthening trainings and refresher trainings for cooks on hygiene, food preparation, and storage in 350 schools, with 2,118 individuals trained over the course of the project; provided cooking materials including spoons, bowls, and aprons; conducted close monitoring of schools; and raised awareness regarding clean kitchen management standards.

The endline evaluation also examined the status of school kitchens. CRS provided kitchen materials to all 350 project schools, including bowls, spoons, scales, and other equipment, according to project monitoring data. Although enumerators took an inventory of school kitchens, all the materials may not have been present in the kitchens on the day of data collection. Although more kitchens had everything they needed at endline (65.56 percent) than at midterm (55.56 percent), fewer were totally clean at endline (64.44 percent) than at midterm (75.56 percent). At endline, all schools had a storeroom, according to internal project data. Having a storeroom was a precondition for participating in the project. At endline, school directors corroborated the presence of storerooms

The project reports that it has provided storage support materials to school council members, PTAs, school officials and conducted trainings on storage minimum standards. A fumigation activity and monthly physical inventory have been conducted at the CRS central warehouse before the food distribution calendar.

The lack of drinking water remains an issue. On the day of data collection at endline, 30.00 percent of schools had no water available, which was lower than midterm (38.89 percent of schools with no water available). The construction and rehabilitation of water infrastructure was not included in project

[10] All learners were asked this question. If it was not applicable to the learner because no latrine was available, the response was recorded as 999.

activities, according to project personnel. Students have utilized schools' pre-existing water infrastructure.

Despite modest improvements in handwashing practices from midterm to endline, they could still be improved. The proportion of schools in which more than half of children were observed to wash their hands increased from 43.33 percent at midterm to 53.34 percent at endline. Still, at endline, fewer than a quarter of learners washed their hands at 27.78 percent of schools visited.

The project reports that, during the COVID-19 period, handwashing devices were purchased by the project and distributed in beneficiary schools with the aim of improving hygiene practices. The project also established health clubs in 87 schools to encourage good practices on health and nutrition.

INTERMEDIATE OUTCOMES

SUPPORTIVE TEACHERS AND CAREGIVERS

Teacher support is a vital classroom component of learning, and a lack of teacher support can hinder a child's educational development. Throughout the project, teacher trainings were conducted, and teaching tools were provided to increase teacher competencies in pedagogy, mathematics, and Portuguese.

The proportion of learners who stated that their teacher(s) helps them most or all of the time when asked if their teacher helps them do better at school increased from midterm to endline. At midterm, while only 15.71 percent of boys and 16.53 percent of girls stated that their teachers help them most or all the time, at endline, 52.49 percent of boys and 49.68 percent of girls said their teachers did.

The proportion of learners who reported their teachers help struggling learners all the time also increased from midterm to endline. At midterm, 35.52 percent of boys and 32.38 percent of girls stated that teachers help learners all the time if they are struggling, while at endline, 54.48 percent of boys and 55.54 percent of girls reported their teachers did.

The proportion of learners who reported their caregivers were supportive of their education increased from midterm to endline. For instance, the proportion of girls who reported their caregivers read to or with them most of the time or always increased from 26.99 percent at midterm to 55.72 percent at endline. The trend was similar among boys, growing from 26.10 percent at midterm to 53.93 percent at endline. While no specific activities were developed for caregivers as part of the project, some of the caregivers were included in the teachers' training.

Notably, ***the majority of learners' caregivers speak a language at home different from Portuguese, the language of instruction*****.** Only 12.61 percent of boys and 18.37 percent of girls answered that their caregivers speak Portuguese at home, which was a decrease from the baseline proportions of 27.64 percent and 30.93 percent, respectively.

CHILD-CENTERED PROCESSES

The proportion of learners who stated that they often or always engage in child-centered processes in the classroom increased from midterm to endline**.** For instance, approximately two-thirds of both boys and girls at endline said their teachers encouraged them most of the time or always to ask questions at school, compared with 43.57 percent and 43.66 percent, respectively, at midterm.

Child-centered processes in the classroom can be vital to supporting literacy development. Outside of the classroom, MeREECE developed extracurricular activities to support children learning apart from the school environment.

EDUCATIONAL CONTENT AND TEACHING METHODOLOGY

The nature of the materials used in a classroom, including their sentiment and representation, can have a strong effect on learners' experiences and development in the classroom. ***The proportion of learners who said that their teachers tell positive stories about girls and boys and that their homework requires them to engage with their community sometimes remained relatively unchanged from midterm to endline*.** Learners' attitudes about what they learned at school changed, however, with the proportion of learners who said it helped them very much in life increasing from midterm to endline (18.40 percent to 60.45 percent for boys, and 19.02 percent to 60.98 percent for girls).

The project engaged with education content by supporting the development of teaching and learning materials in partnership with the National Institute for Education. These materials were provided to schools and utilized in teacher trainings.

SAFE LEARNING ENVIRONMENT

***Learners' high self-reported levels of safety while en route to school and in the classroom remained high at endline*.** More than 90 percent of all learners said they feel quite safe or always safe while travelling to and from school and while at school. In addition, the proportion of learners who said they rarely or sometimes felt welcome at school decreased from more than a quarter of both boys and girls at midterm to 14.1 percent of boys and 10.5 percent of girls at endline.

Safety and perceptions of safety can drastically impact learners' ability to learn. Although the project did not implement a specific activity regarding safe learning environments, some awareness was raised during teacher trainings. In addition, a video is being produced to increase child and teacher awareness of child protection, which will be distributed at the community level in the future.

SPECIAL STUDY

In conducting KIIs and FGDs with project stakeholders and staff, it is clear that project schools have benefited from changes in the knowledge, attitudes, and practices in communities, thanks to work from SMCs. MeREECE has especially helped SMCs better fulfill its first of three primary roles in contributing to school activities through donations, volunteering, and community engagement, while also bolstering its third of three roles—management. It was not as clear, however, how well the project has built SMC capacity to fulfill its second of three key roles—developing a vision for future school projects once the project itself closes in August 2024.

Lessons Learned

With the changes analyzed between baseline, midterm, and endline reading outcomes, the special study conducted of the project activity to build the capacity of SMCs, and other various metrics compared between midterm and endline, this evaluation presents multiple lessons learned for the project:

1. Project interventions to support literacy did not have the desired effect necessary to reach project goals, which prompts questions about their design and whether the foundational skills required for reading with comprehension were adequately addressed.
2. Exposure to Portuguese in and out of the classroom is directly related to higher literacy levels.
3. Although the project's work on increasing infrastructure for kitchens, storerooms, and latrines has been successful, it could not improve access to water at schools as part of its design due to budget constraints, which may have limited the impact of the feeding program.

4. Communities are willing to become more active participants in their schools if partners effectively engage with them and follow through on their own commitments, as community-based respondents in FGDs said MeREECE did; however, these respondents said if they approached local government authorities with requests to upgrade school infrastructure or make other improvements, the local officials would usually not do anything in response.
5. If the project does not focus on long-term strategic planning for sustainability with SMCs, short-term successes are in danger of not continuing once the project closes.

Recommendations

1. Concentrate on boosting children's foundational reading skills in future literacy projects.
2. Conduct further research on specific activities that may impact children's reading skills that this evaluation was unable to evaluate due to design and sampling constraints, including pilot reading clubs and libraries in project schools, and examine reasons how general reading interventions could be revised through a full review.
3. Examine the Portuguese language abilities of learners and teachers.
4. Future project funding should consider efforts to expand activities, including those related school to school infrastructure, WASH, and girls' education.
5. Determine why some project kitchens do not meet standards of cleanliness.
6. Identify the drivers of teachers' and students' attendance rate increases from baseline to endline, as well as the reasons that rates did not meet project targets.
7. Future project designs should incorporate the same successful activities the project used to strengthen SMCs so that communities, not just schools, are engaged in improving teaching and learning conditions at school.
8. The creation of a draft roadmap for sustainability of community-based projects should be a milestone included in future project graduation and sustainability plans so SMCs, SILCs, and other community-based organizations can develop sustainable plans well in advance of the project closing.

1. Introduction and Purpose

1.1. Project Context

Guinea-Bissau is a small West African coastal nation situated between Senegal and Guinea and extending north to the Sahel. Guinea-Bissau has nine administrative regions that covers 36,125 square kilometers. The country's capital city, Bissau, is home to approximately one-fifth of the population, with the rest of the population spread across mostly rural zones in the eight other regions of the country.[11] Guinea-Bissau's history has been marked by political turmoil, a civil war, and multiple coup d'états since its independence from Portugal in 1974. The country's unstable political environment has contributed to poverty, corruption, and many social issues. It is one of the world's poorest countries, ranked on the United Nations Human Development Index at 175 out of 189 countries.[12]

Portuguese is the official language of Guinea-Bissau. However, it is estimated that less than one-fifth of the population speaks Portuguese, while the majority speak Crioulo, a Portuguese-based Creole.[13] Guinea-Bissau's education system lacks resources for sufficient school materials, educational infrastructure, and trained teachers.[14] A report from Guinea-Bissau's Education Sectoral Program (2017-2025) notes that Grade 2 learners in Guinea-Bissau do not master half of the Portuguese or mathematics content they are expected to, and this gap between educational expectations and reality only increases through the later years of primary school.[15] Around 60 percent of the population over the age of 15 can read and write.[16]

According to the 2018-19 Guinea-Bissau Multiple Indicators Survey report, access to learning materials remains a huge challenge for learners. Only 0.5 percent of five-year-old children have three or more children's learning books.[17]

It is estimated that only 72 percent of school-age children attend primary school at all. There is a large difference in enrollment rates for learners depending on whether they live in urban or rural areas.[18]

Teachers have gone on strike several times in the past few years due to delayed salary payments. Teacher strikes have disrupted the school calendar and impacted the quality of learners' education. The 2017-2025 Education Sector Strategic Plan was developed, but it faces implementation challenges.

During the 2010-11 school year, a system-wide reform subdivided the education system into six subsectors which are still adhered to today: Pre-school Education, Basic Education, Technical and Professional Training, Higher Education and Literacy. Pre-school education is aimed at children aged three to five years. It is provided in kindergartens or daycare centers that are mostly community-based, private, or run by religious institutions. Children are not required to attend pre-school. The basic education sector is aimed at children aged six to 14 years and includes grades one through nine.

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[11] https://www.cia.gov/the-world-factbook/countries/guinea-bissau/

[12] https://www.ohchr.org/en/stories/2022/07/people-share-priorities-first-ever-review-guinea-bissaus-sustainable-development

[13] https://pollylingu.al/pt/en/regions/55

[14] https://www.cia.gov/the-world-factbook/countries/guinea-bissau/

[15] http://planipolis.iiep.unesco.org/sites/planipolis/files/ressources/guinea-bissau-esp-2017-2025.pdf

[16] https://www.cia.gov/the-world-factbook/countries/guinea-bissau/

[17] https://mics-surveys-prod.s3.amazonaws.com/MICS6/Westpercent20andpercent20Centralpercent20Africa/Guinea-Bissau/2018-2019/Surveypercent20findings/Guineapercent20Bissaupercent202018-19percent20MICSpercent20Surveypercent20Findingspercent20Report_Portuguese.pdf

[18] UNICEF 2022 https://data.unicef.org/topic/education/primary-education/

1.2. Project Description

In 2019, USDA awarded CRS Guinea-Bissau a four-year, $18.7 million project under the McGovern-Dole International Food for Education and Child Nutrition program. The MeREECE project – Promotion of Educational and Economic Performance in Educative Communities or *Melhoria do Rendimento Escolar e Económico das Comunidades Educativas* – runs from September 23, 2019, to August 31, 2024. This program targets 350 primary schools and is implemented in the regions of Bafata, Cacheu, Gabu, Quinara, and Oio.

Over the project's five-year implementation period, CRS used donated commodities and funds provided by the Foreign Agricultural Service to implement a project focused on achieving the following results:

- Improve teachers' and school administrators' ability to deliver quality literacy instruction through training and recognizing teacher performance.
- Improve the Ministry of Education's (MoE's) capacity to monitor and support teachers' technical development through capacity strengthening training and joint monitoring visits.
- Increase learner attentiveness and attendance by reducing child hunger through nutritious school meals.
- Improve learner attendance by establishing child-friendly school environments, school libraries, and extracurricular learning opportunities and by providing take-home rations.
- Increase parents' and communities' involvement in education outcomes for their children.
- Increase knowledge and improve health, nutrition, and dietary practices of teachers, learners, and parents.

CRS implemented the following activities to achieve the aforementioned results:

- Provided daily meals to students at project schools;
- Provided take-home rations to vulnerable girls and their families to incentivize them to stay enrolled in school;
- Promoted teacher attendance by evaluating their performance and honoring select teachers with recognition awards;
- Produced and developed supplemental teaching and learning materials;
- Printed school attendance registers to support school management;
- Trained teachers to improve their teaching practice on subjects such as Portuguese grammar;
- Trained school administrators and officials in effective school management practices and disaster management risks;
- Established salving and lending groups to support community development initiatives and economic development overall;
- Created libraries, reading clubs, and health clubs at select project schools;
- Strengthened the capacity of local-, regional-, and national-level education stakeholders in school feeding management and other areas;
- Trained community stakeholders in good health and nutrition practices, as well as food preparation and storage practices; and
- Supported distribution of deworming medication in project schools.

This project integrates the best practices and lessons learned from previous CRS McGovern-Dole projects and phases in Guinea-Bissau. CRS collaborates with technical partners—Plan International and Caritas Guinea-Bissau—who have extensive experience in the education and health sectors in the region. Caritas Guinea-Bissau has partnered with CRS since 1988 and serves as CRS's main implementing partner in the McGovern-Dole project. During the first phase of the MeRECCE project, the Caritas team worked in 350 schools and communities across five regions of Guinea-Bissau: Bafata, Cacheu, Oio, Gabu, and Quinara. Caritas Guinea-Bissau was responsible for collecting, managing, and monitoring impressive school feeding data. They also led various other activities, such as community awareness sessions on good health and nutrition practices, capacity building for school council members, and the establishment of Savings and Internal Lending (SILC) community groups, primarily composed of women. They involved community Private Service Providers (PSPs) to ensure the sustainability of these groups. Caritas exited the project on 30 April 2024.

Plan International, also a sub-recipient to CRS, had specific responsibilities in the MeRECCE Project, focusing on promoting inclusive, quality education and building skills and learning opportunities. They worked to enhance meaningful participation of children and communities in educational decision-making at all levels. To improve literacy among school-aged students in 350 schools and communities across the five project regions, Plan International's interventions included the following key activities:

- Promote teacher attendance
- Develop supplemental teaching and learning materials
- Train teachers
- Train school administrators
- Conduct extra-curricular activities

Plan International exited the project on December 31, 2023. Through advocacy and institutional and technical support, MeRECCE interventions aim to increase the capacity of the Ministry of Education (MoE) at a national level, as well as technical and administrative staff at the regional level in Bafata, Cacheu, Gabu, Quinara, and Oio. CRS aims to reach a total of 199,539 direct beneficiaries.

1.3. Results Framework

The project strategy is aligned with USDA McGovern-Dole's two strategic objectives (SO):

- SO 1: Improved literacy of school-age children
- SO 2: Increased use of improved health, nutrition, and dietary practices

MEREECE THEORY OF CHANGE

MeREECE will align with USDA McGovern-Dole's results framework to provide a relevant response for improved education outcomes in Guinea-Bissau founded in its two main strategic objectives and elaborated in two inter-locking theories of change.

SO1: The first theory of change is inspired by the work of Serena Masino and Miguel Nino-Zarazua, which posits that there are three core drivers of change that, when addressed, will improve literacy outcomes for children.[19] If these three drivers are addressed: 1) supply-side capacity strengthening (increased teacher capacity and pedagogical support and oversight, adaptation and development of improved literacy tools including continuous assessments, school feeding, and improved school infrastructure); 2) incentives for behavior change (awareness raising on the importance of education, learner and teacher recognition, adult literacy, take home rations for girls, extracurricular activities, school meals, and increased household financial access); and 3) bottom up and top-down government and community engagement (capacity strengthening in coordination, budgeting, and planning for national and decentralized government and COGES/APEs, promotion of a child-friendly school model, advocacy to increase commitment) then literacy of school-age will be improved. There is ample evidence that shows the relationship between these drivers and increased quality of education in Guinea-Bissau. The understanding that these links are even stronger when multiple weaknesses are simultaneously addressed has driven the design of MeREECE's holistic package of interventions.

SO2: The second theory of change posits that if parents, teachers, and learners have increased knowledge about nutrition, health, and WASH in conjunction with access to nutritious foods and health and WASH services, then they will adopt better health and dietary practices that will reduce teachers' and learners' health-related absences and improve leaner attendance and learning.

These strategic axes are essential in McGovern-Dole's approach to respond to the complex problem of the population's limited access to high-quality education. This strategy is also illustrated by the theory of change starting from the problem analysis of causal pathways to the respective expected results. Ultimately, MeREECE, which means "merit" in Portuguese, aims to offer a robust package of 12 key interventions that drive literacy outcomes while providing nutritious school meals to primary learners in 350 schools across the country.

Both SOs are supported as outlined in the MeREECE results frameworks, as seen in Figure 1 and Figure 2.[19]

[19] Masino, S., Nin˜o-Zarazu´ a, M., What works to improve the quality of leaner learning in developing countries? Int. J. Educ. Dev. (2015), http://dx.doi.org/10.1016/j.ijedudev.2015.11.012

Figure 1. SO1: Results Framework

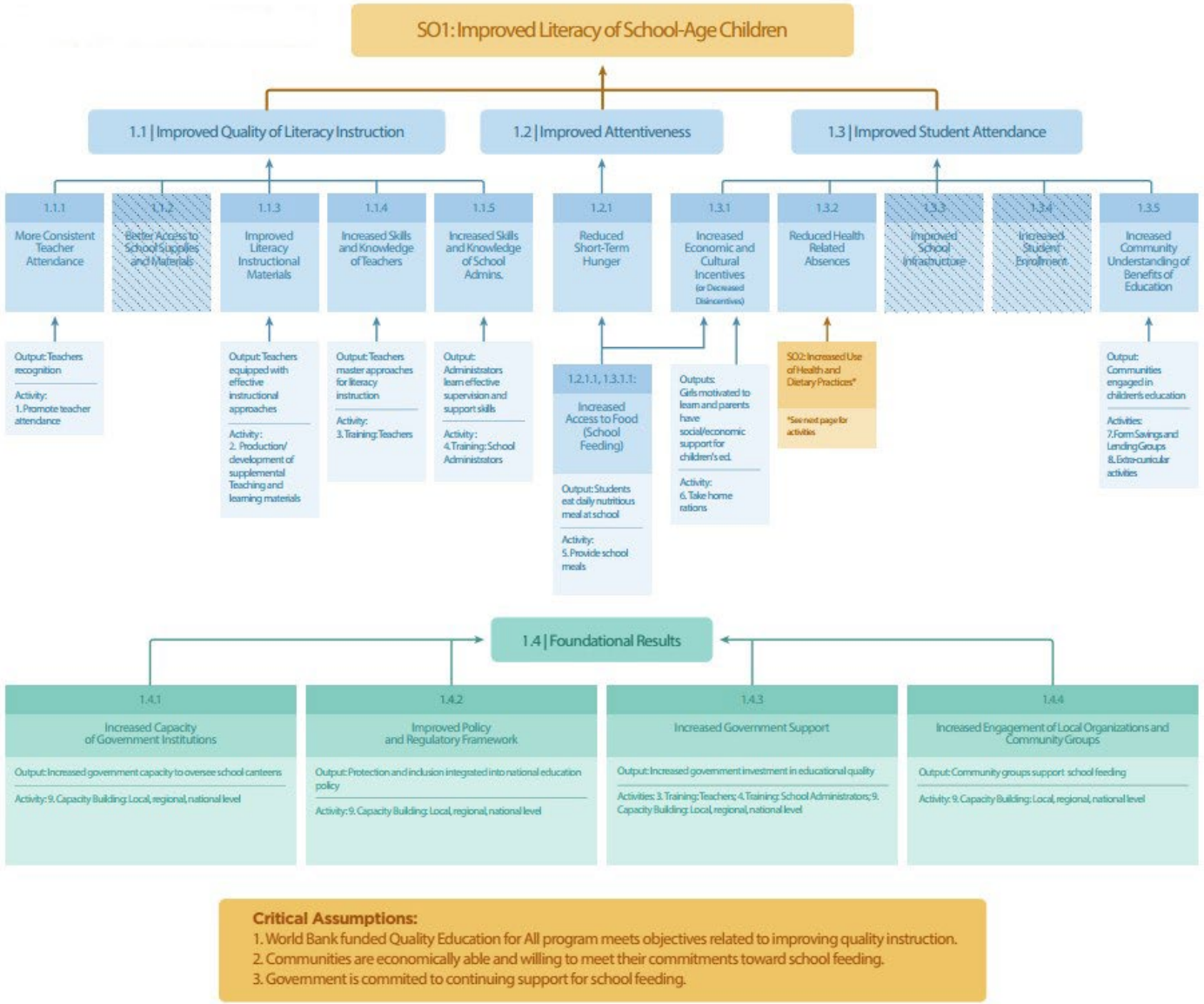
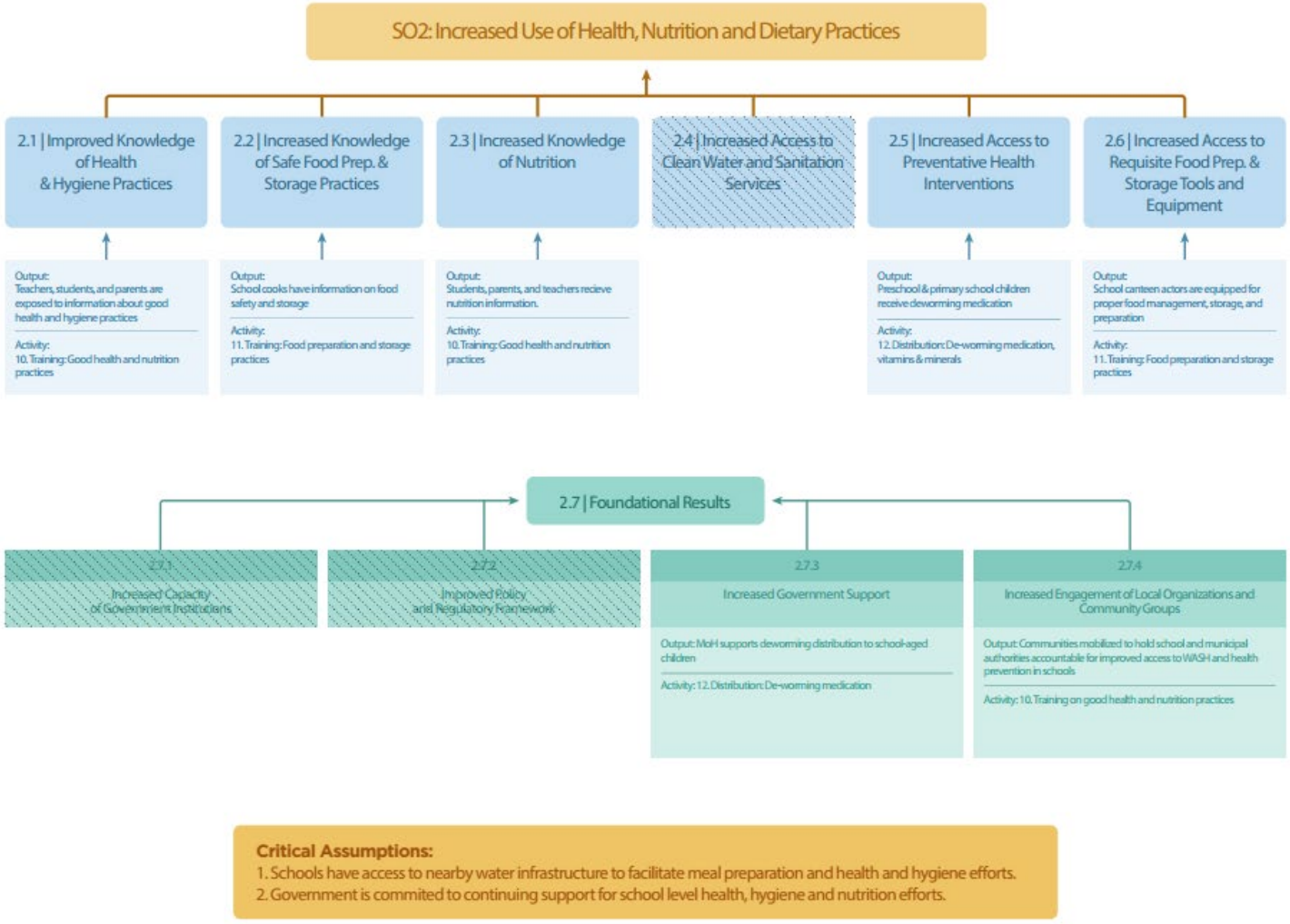


Figure 2. SO2: Results Framework



Under the project's first SO, MeREECE implements several school-based activities to improve school-age children's literacy in 350 intervention schools. CRS recognizes teachers' critical role in learners' learning and focuses on teachers' professional development through training and performance incentives. With an emphasis on sustainability, CRS also improves the capacity of the MoE to provide oversight and support to teachers. The MeREECE program provides daily school meals at all intervention schools as the heart of its intervention to encourage learners' attendance and attentiveness as well as take home rations.

The project's second SO seeks to increase the use of health and dietary practices. CRS's activities focus on promoting health, nutrition, and personal hygiene initiatives within the schools and communities. MeREECE provides training to food preparers, school administrators, and local leaders on proper food preparation, storage, and sanitation practices. MeREECE distributes de-worming medication, vitamins, and minerals for learners in pre-primary and primary schools.

To achieve the project's strategic objectives and move towards local and national sustainability, the MeREECE project team consistently works alongside local communities, organization partners, and government ministries, departments, and agencies.

1.4. Purpose of the Evaluation

The primary objectives of the endline evaluation were to a) measure overall project performance and desired or unintended changes observed in the target communities; b) compare values of project indicators at the end of the project compared with baseline and midterm values to determine the extent of change; c) present a clearer view of the project's constraints, lessons learned, and best practices; d) assess the sustainability aspects of the project; and e) cover the relevance and effectiveness of project strategies, the efficiency of interventions, and the extent to which objectives have been achieved.

2. Evaluation Design and Methodology

2.1. Evaluation Questions

The baseline, midterm and endline evaluations assessed progress in the implementation of project activities and overall performance using the criteria of relevance, effectiveness, efficiency, sustainability, impact of the Development Assistance Committee, to identify the first indications of the impact of the project. Additional data was collected through questionnaires, qualitative interviews, and observations to triangulate data and provide more in-depth information to address the questions described below:

Relevance	1. To what extent do the project's interventions meet the educational, socio-economic, cultural, and political needs of beneficiaries? 2. To what extent are project interventions aligned with the education strategy outlined in the Guinea-Bissau Education Sector Plan (2017-2025) 3. Are stakeholders satisfied with their participation in the project? Why or why not? 4. To what extent have students (boys and girls) increased their reading comprehension skills compared to baseline? 5. To what extent are teachers implementing literacy techniques acquired through the project? 6. Is the project theory of change relevant? Are the actions and approaches used by the project sufficient to improve students' reading and writing skills?

Effectiveness	7. To what extent has the project achieved its goals and targets (including increasing enrollment, retaining girls, reducing dropouts, reducing hunger in schools, improving teacher and student attendance)? 8. Which interventions contributed most significantly to the expected results or objectives? 9. To what extent does the project coordinate and collaborate with other stakeholders? 10. To what extent were the baseline and midterm recommendations implemented? 11. Do the literacy promotion activities help improve the reading and comprehension abilities of students? 12. Which strategies have been put in place to effectively monitor and address the teachers' attendance? Has project implementation been effectively monitored? How well has the M&E mechanism helped project implementation, and what improvements could be made, if any? 13. To what extent has the implementation of SILC strengthened the economic capacity of parents to support their children's schooling and contribute to the life of the school? 14. How have teachers' and students' attendance affected the reading and understanding capacity of students?
Efficiency	15. To what extent have project resources (inputs) achieved the results achieved? 16. Can the same results be achieved with fewer resources or alternative approaches? 17. Were objectives achieved on time? 18. How did the project improve the efficiency of its partners? Was the project efficient at taking into account beneficiaries' feedback?
Sustainability	19. What progress has been made to reach the sustainability milestones presented in the graduation and sustainability plan document? 20. Is there evidence of community capacity to take ownership of project activities and are they meeting their commitments outlined in their MOUs (providing wood, cooks, complementary foods for meals, staple foods for 2-4 days coverage per month, etc.)? Are there any spontaneous actions that APEs/COGES have taken to maintain/improve school infrastructures? 21. To what extent can the project best practices can be replicated and adopted by Guinea-Bissau Ministry of Education? 22. What policies favor the sustainability of school canteen projects? 23. Have inclusive or gender sensitive strategies been implemented in view of sustainability among identified specific groups, if there are any? 24. To what extent does the SILC approach contribute to the project's sustainability?

Impact	25. What were the expected and unintended positive and negative effects of the intervention on children, communities and institutions? How does the intervention affect the well-being of different groups of stakeholders, including the most vulnerable and at-risk children? 26. What do beneficiaries and other stakeholders involved in the project perceive as the effects of the intervention on themselves? 27. To what extent did project objectives and activities reduce gender disparities in education in target zones, and what activities were most effective in leading to said reductions?

2.2. Evaluation Design

CRS explored several evaluation approaches used in similar programs and identified the most rigorous evaluation plan possible—subject to time, quality, resources, and country context constraints. For ethical reasons, a randomized experimental approach is inappropriate to apply to primary schools in Guinea-Bissau, given that school-age children throughout the country require food assistance. For logistical reasons, an experimental or quasi-experimental approach is also not feasible given the country context in which multiple actors (UNICEF, World Bank, WFP, etc.) are implementing education assistance projects throughout all regions of Guinea-Bissau. Moreover, conversations with key stakeholders at UNICEF and the MoE indicate that plans are in place to completely overhaul the education system, which is currently in a state of crisis. The MoE has been working with partners to revise the entire curriculum for Grades 1 through 6, and the new curriculum for Grades 1 through 4 is currently being field-tested. These factors posed challenges in distinguishing the McGovern-Dole project's impact from other ongoing efforts to improve the quality of education and literacy among school-aged children. Therefore, CRS decided that a non-experimental performance evaluation is the most feasible and appropriate approach. Through a competitive bid process, CRS then subcontracted the assessment to an external evaluation team, School-to-School International (STS).

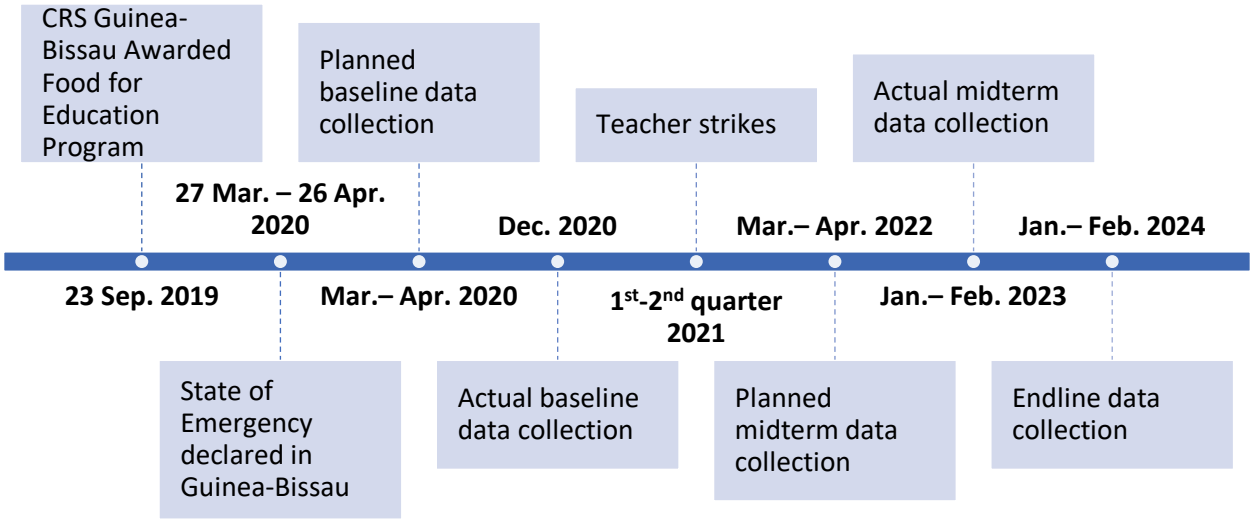
The MeREECE evaluation process involved three phases: a baseline, midterm, and final evaluation. This report summarizes the methodology and findings of the endline evaluation. The endline evaluation applied the same methodology and tools used in the baseline and midterm assessments. In addition to the EGRA, questionnaires, and observation tools as deployed in the midterm evaluation, the endline included key informant interview and focus group discussion tools in order to capture perspectives on the project from key stakeholders.

Due to the COVID-19 pandemic, the baseline data collection and evaluation was postponed from the end of the 2019-20 academic year to the beginning of the 2020-21 academic year. Under the new timeline, learners were assessed at the start of Grade 3 rather than at the end of Grade 2. These Grade 3 learners serve as a proxy for end-of-Grade 2 learners as their exposure to Grade 3 instruction was minimal at the time of the evaluation.

Assessing learners at the start of a new academic year as a proxy measure for learner learning levels at the end of the prior academic year is a common practice among education evaluations. COVID-19-related school closures in spring 2020 meant that learners entering Grade 3 in the 2020-21 school year had not been exposed to the full Grade 2 curriculum by the start of the new school year. Thus, baseline data collection took place with Grade 3 learners two months into the 2020-21 academic year to respond to the

study aim of measuring learners' literacy levels at the end of Grade 2. In order to be comparable to baseline, the midterm and endline data collections followed the same design. Grade 3 learners were sampled to serve as a proxy for learners at the end of Grade 2. A timeline graphic of key dates in the MeREECE project is provided in Figure 3.

Figure 3: Timeline of Key Events in MeREECE Project



2.3. Sampling Methods

At each evaluation timepoint, for quantitative data collection STS utilized a two-stage cluster sampling approach to select schools and school-based respondents randomly in the five MeREECE intervention regions. In the first stage, schools were selected at random, proportionally to the population of schools by region. STS collaborated with CRS to finalize the sample calculation and randomly select schools from the sampling frame. A list of appropriate replacement schools was created in case the original sample schools were unavailable or difficult for enumerators to reach. Within each sampled school unit, enumerators will conduct a school observation and a survey with the school director. In the second stage, enumerators selected learners in Grade 3 at random within each school, using a specific random selection procedure. To achieve the necessary sample size for statistically significant findings, STS included 90 schools in the endline sample with a target of 20 learners per school. A summary of the quantitative endline sample is depicted in Table 1.

Table 1: Endline Quantitative Sample

	Tool	N
	Learners	1,682
	School Directors	90
	School Observation	90
	Classroom Observations	88

At endline, in-person qualitative data collection was conducted to answer the general endline evaluation questions as well as a question posed by the special study. The primary research objective for the special study is to answer the following research question:

> To what extent has the multi-faceted participation of communities through the School Management Committees (SMCs) contributed to the improvement of the learning and teaching conditions in the schools targeted by the MeREECE project in Guinea Bissau?

The sampling strategy for qualitative data collection was partly guided by the need to select a mix of schools to answer the research question in the special study. Two criteria were used to select these schools for the special study—the level of activity of their SMCs (either high or low) and the learning outcomes observed at the midterm evaluation (either above average or below average). The MeREECE project team identified the schools on the spectrum of activity level of SMCs. Representative schools were selected to fill each cell of the two-by-two illustrated in Table 2.

Table 2: Qualitative School Selection Strategy

	High SMC Activity Level	Low SMC Activity Level
Above Average Learning Outcomes	2	1
Below Average Learning Outcomes	1	1

At these selected schools, the follow protocols were used to select participants for qualitative data collection:

1. **SMCs:** Purposive sampling was used to select SMC members for the FGD. A few days before data collection, enumerators contacted the school director of the selected school and asked all members of the SMCs to be invited to participate in the FGD. If the number of SMCs members was greater than 10, enumerators were instructed to select half men and half women.
2. **Parents:** Purposive sampling was used to select parents for KIIs. A few days before data collection, enumerators contacted the school director of the selected school and asked them to recommend active parents who could participate in the KII.
3. **Local Community Leaders**: Purposive sampling was used to select community leaders for KIIs. A few days before data collection, enumerators contacted the school director of the selected school and asked them to recommend active community leaders who could participate in the KII.
4. **Local Community Groups (APE, COGES, savings and internal lending communities):** Purposive sampling was used to select local community group members for the FGD. A few days before data collection, enumerators contacted the school director of the selected school and asked that active representatives from each group be invited to participate in the FGDs at the selected school. If the number of members was greater than 10, enumerators were instructed to select half men and half women with equal balance between groups.
5. **Learners:** Random sampling was used to select Grade 3 girl learners from the sampled schools to participate in the FGDs. At selected schools, enumerators assigned numbers to each Grade 3 girl present at school that day. Using a random number generator, enumerators selected between six to eight girls to participate in the FGD.

The total sample and participants for the qualitative portion of the endline sample are consolidated in Table 3.

Table 3: Endline Qualitative Sample

Participants	Target sample
FGDs with school council/management committees (SMCs)	10
FGDs with students (girls)	5
FGDs to obtain qualitative information from community groups	5
KIIs with parents	5
KIIs with local leaders	5
FGD with project staff (central-level)	1

2.4. Data Collection Methods

Informed Consent

Prior to the start of data collection, enumerators met with the school Director at each school to introduce themselves, explain the purpose of the data collection, discuss what support they needed from the school director, and receive permission to proceed with the activity. School Directors identified the Grade 3 classroom(s) from which enumerators would select the learners for the EGRA. Additionally, a Grade 2 classroom(s) if available, if not, grade 1-6, in which enumerators would complete a one-hour observation.[20]

At the start of the EGRA administration, enumerators introduced themselves and explained the activity to learners, then enumerators asked learners individually if they were willing to participate. Learners did not have to participate. If a learner said they did not want to participate, then the enumerator escorted the learner back to class and selected a new learner.

Informed consent was likewise gathered from FGD and KII participants. Personally identifiable information of respondents was not recorded. However, because schools only have one school director and may only have one Grade 2 teacher, it is possible that the identity of respondents on the school director survey and the classroom observation could be identified based on the school name. As such, all findings are aggregated, and no data is reported by school.

Data Collection Tools

The endline study collected quantitative data in the form of surveys with learners and school directors, school and classroom observations, and learner EGRAs. The EGRA at endline was not changed since baseline to ensure there were no changes to the validity or reliability of the assessment tool. However, new questions were added to the surveys at endline to investigate exposure to Portuguese, the use of Portuguese in the classroom, the gender gap in EGRA scores, and the impact of teacher attendance. As previously indicated, the endline study also added a series of qualitative tools to address the question posed by the special study.

EARLY GRADE READING ASSESSMENT (EGRA)

STS administered an EGRA to Grade 3 learners to measure their core early grade reading skills. The EGRA tool had been adapted at endline from an EGRA tool originally developed by Plan Guinea-Bissau. The EGRA

[20] 83 observations were from Grade 2 classrooms (94.32 percent), five observations from Grade 3 (5.68 percent).

contained six subtasks, which were administered in Portuguese: letter name identification, initial sound identification, familiar word reading, oral reading fluency, and reading comprehension. Table 4 provides a summary of the subtasks. It is important to note that the non-word reading subtask was determined to be not a good fit for the context and was removed. After an internal review by a language expert, the words used in the non-word subtask were determined to not follow common syllabic formations or standard phonemic principles that would be expected and therefore familiar to learners in this context.

Table 4. EGRA Subtasks

Subtask	Core Reading Skill	Subtask Description
Initial sound identification	Phonemic awareness	Identify the first sound in a list of five familiar words spoken aloud by the enumerator.
Letter name identification	Alphabet knowledge	Provide the name of 40 letters presented in both uppercase and lowercase in a random order.
Familiar word reading	Word recognition	Read 20 familiar words that are randomly ordered and drawn from a list of frequent words.
Oral reading fluency	Decoding and reading	Read a short, grade-appropriate passage of 68 words with accuracy and little effort.
Reading comprehension	Reading comprehension	Respond correctly to five questions, including four literal questions and one inferential question, about the passage read in the previous subtask.

Enumerators aimed to administer the EGRA to 20 Grade 3 learners at each school on tablets using Tangerine®, an electronic data collection software. The number of learners assessed at each school ranged from three to 21. In schools with fewer than 20 Grade 3 learners, enumerators assessed all Grade 3 learners present that day. In some schools, enumerators assessed more than 20 learners if time permitted. In total, 1,682 learners were assessed across sampled schools therefore achieving 93.4 percent of the target sample.

Following the end of the EGRA subtasks, enumerators administered a short survey to learners. Enumerators asked learners about their age, the languages used at home and in the classroom, and their diet. The survey was administered in Portuguese, but enumerators were able to rephrase, explain, and repeat questions as needed to ensure learners understood the question prior to responding.

SURVEYS AND OBSERVATION CHECKLIST

At each sampled school, enumerators administered one survey to the school director, completed one school observation, and conducted one observation of a Grade 2 classroom. STS had developed the surveys in close collaboration with CRS Guinea-Bissau at baseline. For the School Director survey and school observation, STS first drafted survey questions and observation items in English, based on experience with previously validated survey tools on other McGovern-Dole evaluations. Items were then reviewed by CRS staff for cultural appropriateness, relevance, and alignment to project indicators. Once the tools' content was agreed with CRS, STS translated the tools into Portuguese using an online professional translation service. CRS staff in Guinea-Bissau then reviewed, revised, and finalized the Portuguese translations. For the classroom observation tool, STS used CRS's standardized education sector classroom observation tool and protocol. This tool was already translated into Portuguese by CRS

and is designed to be used across all of CRS's education projects worldwide. At endline, a number of new questions were added to the survey and observations tools to provide further information on the findings at midterm. These new questions were translated into Portuguese by CRS.

KEY INFORMANT INTERVIEWS AND FOCUS GROUP DISCUSSIONS

At endline, KIIs were conducted with local leaders and parents, while FGDs were conducted with school councils (SMCs), students, community groups, and MeREECE project staff. The FGD with girls was designed to gain insight and understanding of girls' experiences and views on primary education and the food for education program, as well as current practices, expectations, and obstacles related to girls' education within their community. The group and individual interviews with other respondents were intended to gain insight regarding perceptions of the quality and access to education in their community, parental/community involvement in schools, and perceptions of the MeREECE program. The interview guides also included questions to understand how community involvement through the SMCs contributed to the improvement of the learning and teaching conditions in the schools targeted by the MeREECE project in Guinea-Bissau.

Secondary project monitoring data was provided by CRS and incorporated into this report. This includes initial and final enrollment totals for students, teachers, and school director.

Data Collection and Quality Assurance

This section describes the final evaluation's operational details, including enumerator training, data collection, and data management and analysis.

ENUMERATOR TRAINING

STS contracted the Innovative Hub for Research in Africa (IHfRA) to conduct the endline data collection in February 2024. IHfRA recruited 35 enumerators to participate in the training. At the conclusion of the training, all 35 participants demonstrated the necessary knowledge and skills to be deployed for fieldwork.

From January 8–11, 2024, STS conducted a remote training of master trainers with IHfRA. IHfRA then hosted an in-person enumerator training at CRS' Bissau office from January 22-26, 2024, with 35 participants. Quantitative training sessions included the content and administration protocols of the EGRA, school-based surveys and classroom observation and hands-on practice with data collection software and tablets. Qualitative training sessions discussed the content of the focus group discussion and key informant interview tools, administration procedures, facilitation responsibilities, and notetaking responsibilities. The training engaged all enumerators on ethical considerations for research, logistics, and a review of the MeREECE project. On January 26, enumerators practiced administering the tools during a field test at a nearby school in Bissau, after which the training reviewed best practices and lessons learned. STS provided remote support for master trainers as needed, including troubleshooting data connections to upload practice data. During the training, participants were assessed with written quizzes, Assessor Accuracy Measure (AAM) tests, and observed evaluations of their performances both within the classroom and in the field pilot. At the end of the training, STS and IHfRA evaluated results of the training assessments and determined that all 35 participants were apt for data collection.

DATA COLLECTION

The endline data collection was conducted from January 29–February 9, 2024. Teams of three—consisting of one supervisor, one enumerator who administered the EGRA and learner survey and one enumerator who conducted the school-based surveys and observations—visited one or two schools per day.

IHfRA regional supervisors provided on-the-ground data collection supervision in the field, while STS closely collaborated with IHfRA to provide daily remote data quality assurance. STS conducted daily spot-checks and discussed any issues that emerged with IHfRA in real-time via WhatsApp. Supervisors completed forms at each school to document the number and type of assessments, observations, and surveys completed, as well as noted any issues or challenges in the field. STS maintained detailed documentation of all issues encountered in a tracker, which was used as part of the data cleaning process. Additionally, enumerators' use of electronic data capture via tablets contributed to data quality, consistency, and collection efficiency by streamlining fieldwork as well as reducing measurement and data entry errors.

2.5. Data Processing and Analysis Methods

STS cleaned the quantitative data collected through the EGRA, surveys, and school and classroom observation tools in preparation for analysis. STS worked with IHfRA to ensure all missing data were handled appropriately and that STS's thorough, four-step cleaning process was adhered to. Cleaning was completed using Stata statistical packages and included a comprehensive outlier analysis of quantitative results to establish data consistency. STS utilized frameworks based on best practice and specific experience in evaluating reading and health activities to guide the analysis.

STS applied sampling weights to the learners' data to produce more representative estimates in the sample. To compute sampling weights, STS used the following information about all the schools in the relevant population: region, number of learners enrolled, and number of learners in attendance. This data was collected through the school Director survey and school observation.

After implementing the weighting functions, STS generated descriptive statistics. These statistics were then examined to identify statistically significant differences, focusing on variations by gender and across three key assessment timepoints: baseline, midterm, and endline. Both weighted and unweighted ordinary least squares (OLS) regressions were utilized for this analysis.

To directly assess differences in key metrics such as literacy scores and WASH (Water, Sanitation, and Hygiene) indicators across these time points, comparison analysis techniques were employed. For comparing two groups, t-tests were used, while OLS regression was applied for analyzing differences across multiple groups. These methods helped determine whether the observed differences were statistically significant.

Qualitative data were transcribed, translated, and reviewed for accuracy and quality as fully as possible upon the completion of data collection. Data were cleaned and anonymized, with participant information remaining confidential. Translated transcriptions were imported into NVivo 12, a data analysis software package, to systematically code and analyze the data. The qualitative data analysis methodology incorporated an iterative approach and included content analysis and constant comparison of narrative data to identify and validate emerging themes.

2.6. Evaluation Limitations

The following limitations should be considered when reviewing the findings of the MeREECE endline evaluation:

- **Language of the EGRA tool.** The instructions for the EGRA were in Portuguese. Based on the learner survey results, it is likely that many learners struggle with understanding Portuguese, so learners may not have understood the instructions of the EGRA subtasks well. To ensure the validity and comparability of results across timepoints, this limitation could not be addressed at endline, but it should be considered for future evaluations.
- **Inherent bias in sampling children present on the day of assessment.** Learners' EGRA results may be biased towards the types of learners who attend school regularly and may exclude those learners who are enrolled but do not attend regularly. However, this random sampling method on the day of the assessment is preferable to sampling learners in advance, as it may create opportunities for manipulation to have only high performers participate. This sampling approach will remain the same at future assessments to ensure comparison across timepoints remains valid. It is also possible that bias was introduced by allowing school directors to select the Grade 3 classroom, however, this was necessary in order to minimally disrupt school activities.
- **Reduced sample size.** The target learner sample was 1,800 learners. However, after data cleaning, only 1,682 learners are included in the analysis. The reduced sample size is due to a combination of factors including many schools having fewer than 20 learners in Grade 3 and some assessments being removed during the data cleaning process because of quality control checks.[21]
- **Time span between midterm and endline.** The midterm evaluation data collection was initially scheduled for March and April 2022, but it was postponed until January and February 2023, leaving only one year between the midterm and endline evaluations. This shortened time span limits the dosage of project intervention and may therefore result in seeing limited impact.
- **Purposive sampling for qualitative data collection.** The purposive sampling for qualitative data collection, especially for parents, community members, and SMC members, may have resulted in sampled schools selecting individuals who were more actively engaged in the project and therefore inclined to speak of project activities in a certain, more positive light.

3. Findings

3.1 SO1: School-Age Children in Guinea-Bissau Have Improved Literacy

Indicator 1: Improved Quality of Literacy Instruction (IR 1.1)

The McGovern-Dole International Food for Education and Child Nutrition project's first SO is to improve the literacy of school-age children. Achievement of this SO is measured through the percentage of learners who, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade-level text (McGovern-Dole Standard Indicator #1).

The specified threshold used in this analysis is that a learner can correctly answer at least four of the five reading comprehension questions correctly. Values for this indicator were captured by administering the EGRA tool to boys and girls at the midpoint of Grade 3. At baseline, the proportion of learners who met this threshold was 0.67 percent, or 11 out of 1,649 learners. This proportion slightly increased at midterm to 0.91 percent (weighted)—or 21 out of 1,642 learners—and was similar at endline at 0.90 percent—or

[21] 14 percent of schools in the sample had less than 20 learners present with the average number of students present on the day of evaluation being 17.3.

15 out of 1,682 learners.[22] By year four, the project had set a target that 55 percent of learners would, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade level text. Endline results fall well below the target.

The proportion of learners who did not answer a single item correct for each subtask at endline—known as a zero score—was lowest on the letter name identification subtask (4.29 percent) and highest on the reading comprehension subtask (79.28 percent). Across all subtasks, boys had a lower proportion of zero scores than did girls.

Zero scores decreased overall from baseline to endline on all subtasks except for initial sound identification. For instance, while 40.54 percent of learners were not able to read a single word of the reading passage at baseline, 27.77 percent of learners were unable to do so at endline. The likelihood of observing a zero score decreased from baseline to endline for two subtasks—letter name identification and the reading passage. The decreases in zero scores for familiar word reading and reading comprehension from baseline to endline were not statistically significant, as well as the increase in zero scores for initial sound identification.

Mean scores and zero scores for each EGRA subtask are presented in the following section, providing a better understanding of learners' reading performance. STS used weighted ordinary least squares regression analyses determine the difference in mean scores overall and those between boys and girls across the three timepoints. Statistically significant differences are noted below each table.

Letter Name Identification

In the letter name identification subtask, enumerators presented learners with a grid of 40 letters in uppercase and lowercase and asked learners to say the name of as many letters as they could in two minutes. The letter name identification subtask measures learners' knowledge of letters of the alphabet and their ability to recognize each letter's graphemic features.

Baseline, midterm, and endline results for the letter name identification subtask are presented in Table 5. Both boys' and girls' performance on this subtask statistically significantly improved from baseline to endline. Boys at endline were able to name 29.27 out of 40 letters on average, which was an increase from 26.62 at baseline. Girls on average were able to name 27.23 letters on average, which was an increase from 23.61 letters on average at baseline. Although scores did increase from midterm to endline, these gains were not statistically significant. The gender gap that was present at baseline—with boys scoring significantly higher than girls—has persisted, with boys performing higher than girls at endline (29.27 letters on average to 27.23 letters on average, respectively).

Table 5: Letter Name Identification Mean Scores by Gender (Correct out of 40)

	Baseline		Midterm		Endline	
Gender	**N**	**Mean Score**	**N**	**Mean Score**	**N**	**Mean Score**
Boys	807	26.62^	815	27.63^	859	29.27^†
Girls	842	23.61	827	25.21*	823	27.23†

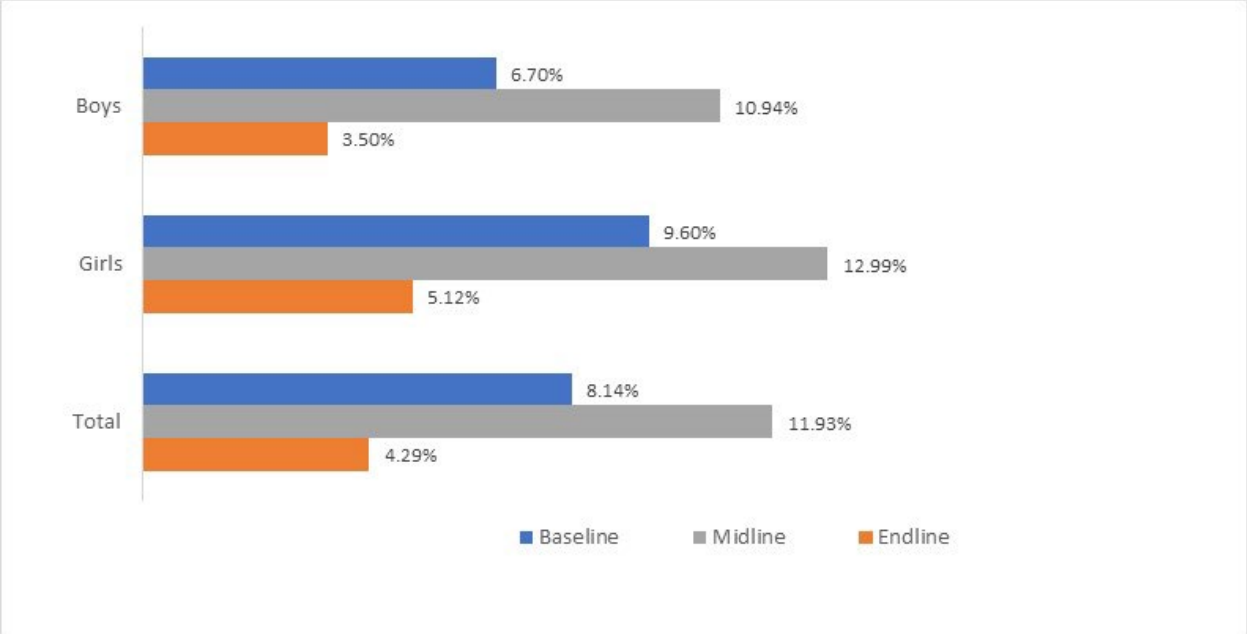
[22] This is a significant increase as measured by the Pearson Chi Squared test (p=.003).

	Baseline		Midterm		Endline	
Gender	**N**	**Mean Score**	**N**	**Mean Score**	**N**	**Mean Score**
Total	1,649	25.09	1,642	26.47*	1,682	28.29†

Note: * denotes a statistically significant change from baseline to midterm at * p < .05, while † denotes a statistically significant change from baseline to endline. ^ denotes boys or girls scored significantly higher than the other at baseline, midterm, or endline. N is unweighted count, and mean score is average weighted sum.

Zero scores from baseline, midterm, and endline from the letter name identification subtask are presented in Figure 4. At endline, 3.50 percent of boys and 5.12 percent of girls were not able to identify a single letter name. Overall, the proportion of zero scores decreased from 8.14 percent at baseline to 4.29 percent at endline. This decrease was statistically significant.

Figure 4: Letter Name Identification Zero Scores by Gender



Initial Sound Identification

For the initial sound identification subtask, enumerators read a simple, familiar word aloud twice to the learner and asked the learner to say the first sound in each word. This subtask measures learners' awareness of phonemes and their ability to distinguish among multiple phonemes.

Baseline, midterm, and endline results for the initial sound identification subtask are presented in Table 6. At endline, boys on average were able to identify 0.80 sounds on average, and girls were able to identify 0.68 sounds on average. Although these endline scores were higher than at baseline (0.52 sounds on average for both boys and girls), the gains from baseline to endline were not statistically significant. Overall, learners performed poorly on this subtask.

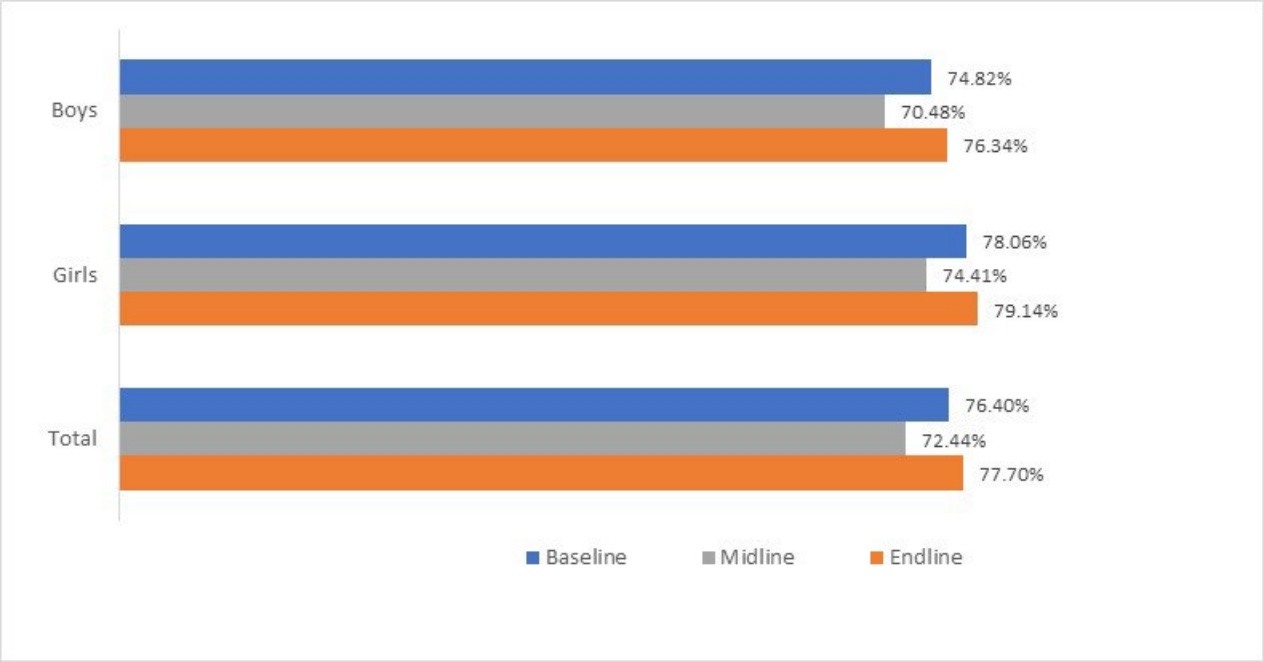
Table 6: Initial Sound Identification Mean Scores by Gender (Correct out of 5)

	Baseline		Midterm		Endline	
Gender	**N**	**Mean Score**	**N**	**Mean Score**	**N**	**Mean Score**
Boys	807	0.52^	815	0.83*	859	0.80
Girls	842	0.52	827	0.72*	823	0.68
Total	1,649	0.52	1,642	0.78*	1,682	0.74

Note: * denotes a statistically significant change from baseline to midterm at * p < .05, while † denotes a statistically significant change from baseline to endline. ^ denotes boys or girls scored significantly higher than the other at baseline, midterm, or endline. N is unweighted count, and mean score is average weighted sum.

Zero scores from baseline, midterm, and endline from the initial sound identification subtask are presented in Figure 5. At endline, 76.34 percent of boys and 79.14 percent of girls were not able to identify a single initial sound. Overall, although the proportion of zero scores slightly increased from baseline to endline—76.40 percent to 77.70 percent—the gain was not statistically significant.

Figure 5: Initial Sound Identification Zero Scores by Gender



Familiar Word Reading

For the familiar word reading subtask, learners were presented with a grid of 20 words. Enumerators asked learners to read aloud as many words as they could in one minute.

Baseline, midterm, and endline results for the familiar word reading subtask are presented in Table 7. Learners' ability to read familiar words statistically significantly increased from baseline to endline. While at baseline girls on average were only able to identify 2.96 words on average, at endline girls on average were able to identify 5.17 words. Boys, who at baseline could identify 4.35 words, were able to identify 5.74 words at endline. Although scores slightly increased from midterm to endline, these gains were not

statistically significant. While boys significantly outperformed girls at midterm (5.50 words to 3.82 words, respectively), girls closed this gender gap at endline, with no statistically significant difference between their score of 5.17 words to boys' scores of 5.74 words.

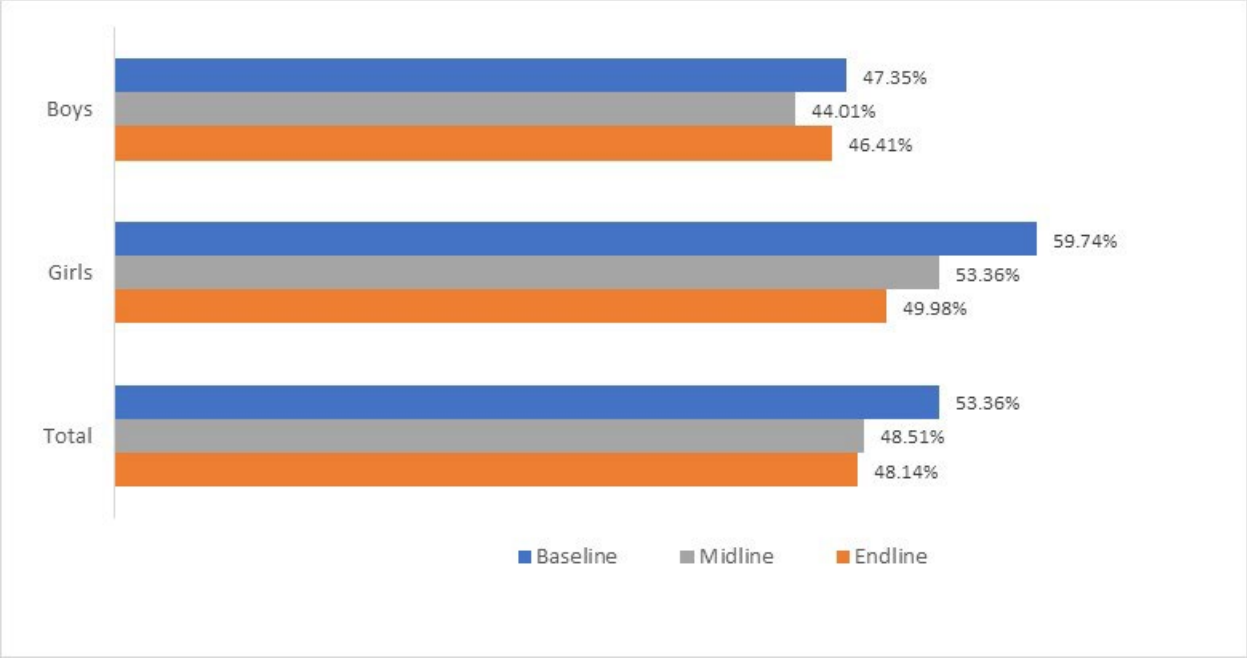
Table 7: Familiar Word Reading Mean Scores by Sex (Correct out of 20)

	Baseline		Midterm		Endline	
Gender	**N**	**Mean Score**	**N**	**Mean Score**	**N**	**Mean Score**
Boys	807	4.35^	815	5.50^*	859	5.74†
Girls	842	2.96	827	3.82*	823	5.17†
Total	1,649	3.64	1,642	4.65*	1,682	5.46†

Note: * denotes a statistically significant change from baseline to midterm at * p < .05, while † denotes a statistically significant change from baseline to endline. ^ denotes boys or girls scored significantly higher than the other at baseline, midterm, or endline. N is unweighted count, and mean score is average weighted sum.

Zero scores from baseline, midterm, and endline from the familiar word reading subtask are presented in Figure 6. At endline, 46.61 percent of boys and 49.98 percent of girls were not able to read a single familiar word. Overall, although the proportion of zero scores decreased from 53.36 percent at baseline to 48.14 percent at endline, this decrease was not statistically significant.

Figure 6: Familiar Word Reading Zero Scores by Gender



Reading Passage and Reading Comprehension

For the reading passage and reading comprehension subtasks, learners were presented with a short story of 68 words and were asked to read as much of the story aloud as they could in one minute. After finishing, enumerators asked up to five comprehension questions—four literal and one inferential—out loud to learners to test their understanding of the story's content. Learners were only asked comprehension

questions which corresponded to how far into the reading passage the learner had read. These two subtasks measure decoding and reading comprehension.

Baseline, midterm, and endline results for the reading passage subtask are presented in Table 8. While girls at baseline were only able to read 6.78 words on average, they read 8.28 words on average at midterm and 9.37 words on average at endline. The girls' gains from baseline to endline, however, were not statistically significant. While the boys' average baseline score of 8.93 words increased to 11.44 words at midterm, it decreased to 9.09 words on average at endline. While the gain in the boys' average score from baseline to midterm was statistically significant, the decrease from midterm to endline was not. Girls closed the gender gap in performance on the subtask at endline. While boys significantly outperformed girls at baseline and midterm, girls scored slightly higher than boys at endline (9.37 words to 9.09 words). This difference was not statistically significant, however.

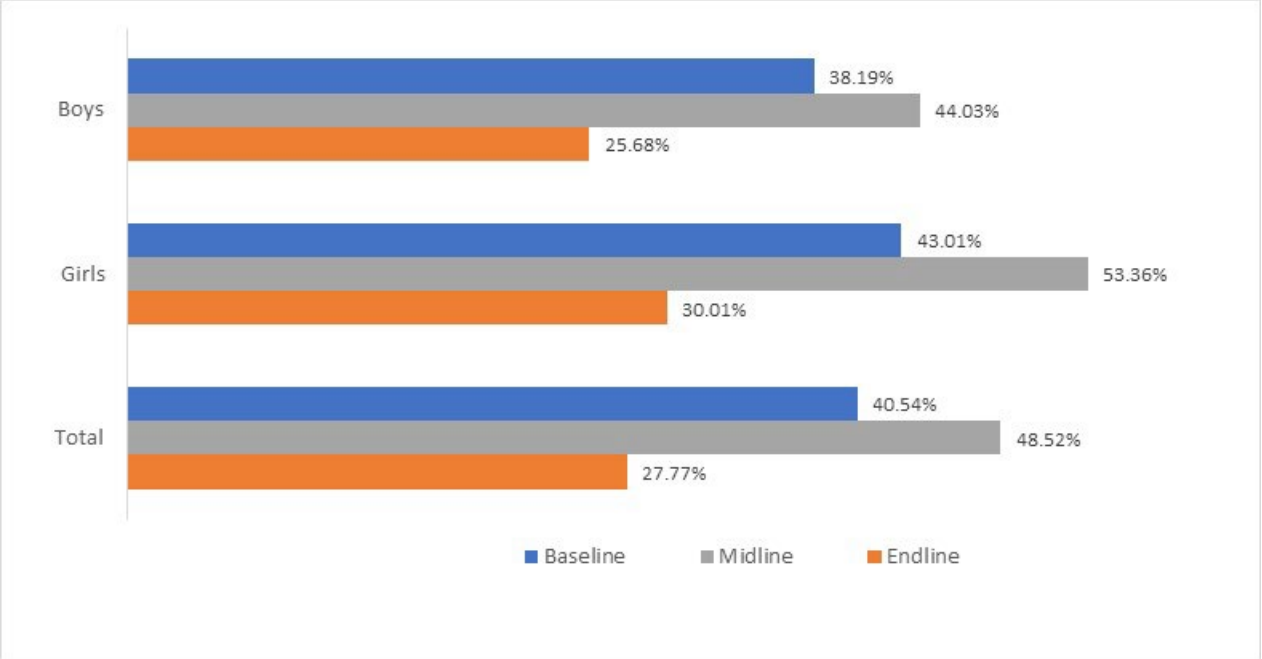
Table 8: Reading Passage Mean Scores by Gender (Correct out of 68)

	Baseline		Midterm		Endline	
Gender	**N**	**Mean Score**	**N**	**Mean Score**	**N**	**Mean Score**
Boys	807	8.93^	815	11.44^*	859	9.09
Girls	842	6.78	827	8.28*	823	9.37
Total	1,649	7.83	1,642	9.92*	1,682	9.64

Note: * denotes a statistically significant change from baseline to midterm at * $p < .05$, while † denotes a statistically significant change from baseline to endline. ^ denotes boys or girls scored significantly higher than the other at baseline, midterm, or endline. N is unweighted count, and mean score is average weighted sum.

Zero scores from baseline, midterm, and endline from the reading passage subtask are presented in Figure 7. At endline, 25.98 percent of boys and 30.01 percent of girls were not able to answer read a single word in the reading passage. Overall, the proportion of zero scores decreased from 40.54 percent at baseline to 27.77 percent at endline. This decrease was statistically significant.

Figure 7: Reading Passage Zero Scores by Gender



Baseline, midterm, and endline mean scores for the reading comprehension subtask are presented in Table 9. Overall, learners were able to answer 0.36 reading comprehension questions correctly at endline, an increase from 0.28 at baseline, but the gain was not statistically significant. Boys at baseline and midterm scored significantly higher than girls, but girls closed the gender gap at endline, with no significant difference between their score of 0.33 and boys' score of 0.39. Ultimately, however, the performance on this subtask remained very low.

Table 9: Reading Comprehension Mean Scores by Gender (Correct out of 5)

	Baseline		Midterm		Endline	
Gender	**N**	**Mean Score**	**N**	**Mean Score**	**N**	**Mean Score**
Boys	807	0.32^	815	0.38^	859	0.39
Girls	842	0.24	827	0.28	823	0.33
Total	1,649	0.28	1,642	0.33*	1,682	0.36

Note: * denotes a statistically significant change from baseline to midterm at * p < .05

The distribution of learners able to attempt and correctly answer reading comprehension questions is detailed in Table 10 and Table 11. At endline, approximately one-third of all learners (33.05 percent of girls and 28.25 percent of boys) did not attempt a single reading comprehension question.

Table 10: Distribution of Attempted Reading Comprehension Questions by Gender

	Baseline				Midterm				Endline			
Number of Questions Attempted	Girls	Girls (%)	Boys	Boys (%)	Girls	Girls (%)	Boys	Boys (%)	Girls	Girls (%)	Boys	Boys (%)
0	424	50.36%	344	42.63%	384	46.33%	304	40.20%	292	33.05%	249	28.25%
1	42	4.99%	56	6.94%	38	3.89%	31	26.50%	63	5.67%	63	7.93%
2	316	37.53%	336	41.64%	310	38.77%	357	43.09%	404	51.19%	464	54.52%
3	44	5.23%	50	6.20%	63	7.50%	69	8.42%	50	6.8%	58	6.24%
4	8	0.95%	18	2.23%	20	2.29%	39	4.20%	10	1.9%	19	2.24%
5	8	0.95%	3	0.37%	12	1.21%	15	1.44%	4	1.32%	6	0.82%

Note: Percentages reflect weighted proportions, N reflect unweighted counts.

Consequentially, more than three-fourths of learners did not answer a single reading comprehension question correctly out of 5—76.62 percent of boys and 82.13 percent of girls.

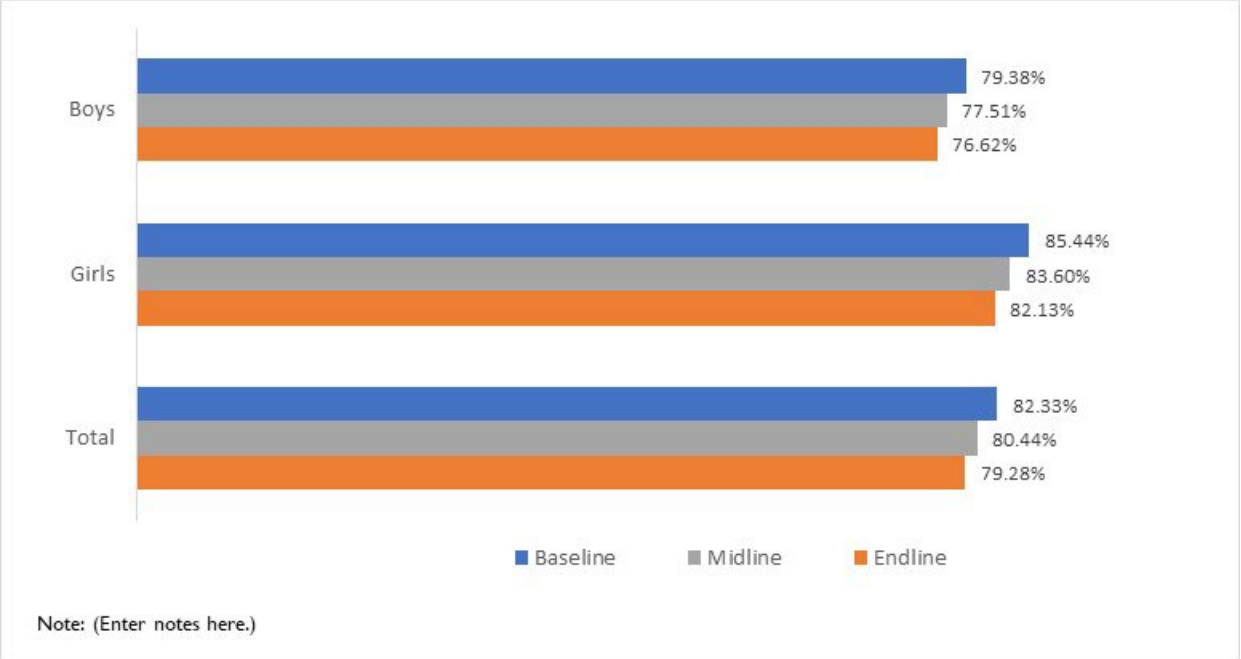
Table 11: Distribution of Correct Reading Comprehension Questions by Gender

	Baseline				Midterm				Endline			
Number of Questions Correct	Girls	Girls (%)	Boys	Boys (%)	Girls	Girls (%)	Boys	Boys (%)	Girls	Girls (%)	Boys	Boys (%)
0	718	85.27%	646	80.05%	678	83.60%	610	77.52%	689	82.13%	670	76.62%
1	69	8.19%	97	12.02%	77	8.57%	120	13.10%	82	9.68%	109	12.76%
2	36	4.28%	44	5.45%	42	4.77%	43	4.74%	36	4.41%	57	7.32%
3	15	1.78%	13	1.61%	22	2.25%	29	3.14%	10	2.12%	14	1.72%
4	4	0.48%	7	0.87%	4	0.47%	11	1.10%	3	0.45%	5	0.91%
5	0	0.00%	0	0.00%	4	0.34%	2	4.00%	3	0.12%	4	0.67%

Note: Percentages reflect weighted proportions, N reflect unweighted counts

Zero scores from baseline, midterm, and endline from the reading comprehension subtask are presented in Figure 8. At endline, 76.62 percent of boys and 82.13 percent of girls were not able to answer a single reading comprehension question correctly. Overall, although the proportion of zero scores decreased from 82.33 percent at baseline to 79.28 percent at endline, this decrease was not statistically significant.

Figure 8: Reading Comprehension Zero Scores by Gender



EGRA SCORES AND PORTUGUESE EXPOSURE

The relationship between EGRA performance and key language-related learner survey responses was examined. The three key learner survey questions which were examined in relation to EGRA performance were:

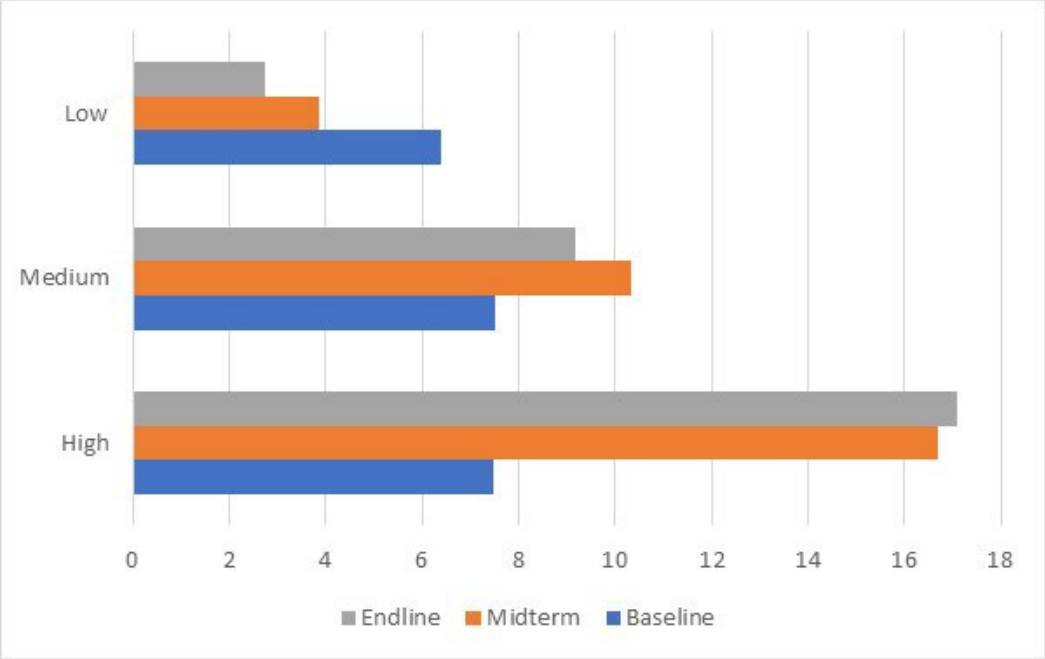
1. “What languages does your family use most at home?”
2. “Do your parents or caregivers speak Portuguese?”
3. “What languages does your teacher use most in the classroom?"

On all of the three questions (“Do your parents or caregivers speak Portuguese?” and “What languages does your teacher use most in the classroom?"), learners who answered “yes”/“Portuguese” had higher average scores on all subtasks than those that did not.

STS analyzed these variables alone and in groupings of exposure to Portuguese: “high” (3), “medium” (1-2), “low” (0). Using the index score, across all the groupings, learners with "high" exposure to Portuguese had, on average, higher scores on the oral reading fluency passage than “medium” and “low” exposure learners at midterm and endline. Further, there was no statistically significant difference between the average Portuguese language exposure score of boys and girls at midterm and endline. Lastly, learners at endline had statistically significantly higher scores on this composite than at baseline and midterm.

Furthermore, at endline, students categorized as having medium exposure to Portuguese scored significantly higher on the oral reading fluency test compared to those with low proficiency, with an average increase of 6.75 points. Those in the high exposure category demonstrated an even more pronounced improvement, scoring on average 10.9 points higher than low exposure to Portuguese students. Additionally, the interactions between language exposure and gender did not demonstrate significant differences, indicating that the effect of language exposure on oral reading fluency is consistent across genders.

Figure 9: Oral Reading Fluency Scores by Level of Exposure to Portuguese



EGRA SCORES AND OTHER ASSOCIATED FACTORS

During school observations, enumerators recorded the presence of educational materials in the offices of school directors across 90 schools. Findings show that 61 schools possessed visual aids and 80 had didactic materials. Notably, schools with visual aids in the director's office demonstrated significantly higher performance across all literacy subtasks compared to those lacking such aids. Furthermore, schools where directors had didactic materials in their offices noted students achieving significantly better results in reading comprehension than those without these materials.

INDICATOR 2: IMPROVED LEARNER ATTENDANCE (IR 1.3)

At baseline,[23] midterm, and endline, school observations and director surveys were used to estimate learner attendance and enrollment.

School enrollment and attendance rate stayed the same from baseline to midterm but increased at endline. To calculate the average attendance rate, enrollment responses from the director survey and attendance responses from the school observation were merged and aggregated by gender across both pre-primary and primary (1-6) grades. These numbers were averaged over all schools and divided (attendance/enrollment) to calculate an attendance rate. Project targets set at baseline wanted to see a 75 percent average student attendance rate in USDA supported classrooms/schools by year four of the project. Although the endline results do not meet this threshold, progress was made, with the average attendance rate increasing from 62.49 percent at midterm to 73.61 percent at endline, as shown in Table 12. In addition, attendance rates by gender were similar at endline, with girls' attendance slightly higher than boys' (73.87 percent to 73.34 percent, respectively).

[23] At baseline only 79 project schools—or 87.78 percent of the baseline EGRA sample—on the day of data collection.

Table 12: Average Learner Attendance Rate in USDA Supported Classrooms/Schools

	Baseline			Midterm			Endline		
Gender	Average Enrollment	Average Attendance	Attendance Rate	Average Enrollment	Average Attendance	Attendance Rate	Average Enrollment	Average Attendance	Attendance Rate
Boys	137.15	86.11	62.79%	132.33	84.31	63.71%	131.80	96.70	73.34%
Girls	124.81	77.99	62.49%	129.7	79.44	61.24%	122.27	90.33	73.87%
Total	261.46	166.74	63.77%	262.03	163.75	62.49%	254.07	187.03	73.61%

Note: These enrollment totals are based on the 90 sampled MeREECE schools visited at baseline, midterm, and endline.

INDICATOR 3: MORE CONSISTENT TEACHER ATTENDANCE (SUB-IR 1.1.1)

Teacher attendance rates increased from baseline to midterm among sampled schools but remained unchanged at endline. At baseline, midterm, and endline, school directors were asked a series of questions about teacher attendance and documentation of teacher attendance at the school level. Teacher attendance was measured by those present on the day of data collection rather than attendance during the previous weeks because, at baseline, collecting retroactive teacher attendance data was problematic due to school closures and a lack of standardized practices for recording teacher attendance. This practice was continued at midline and endline so attendance data would be comparable.

At baseline on the day of the interviews, 400 of 806 employed (49.63 percent) teachers were present. Overall, 54.42 percent of women teachers and 47.88 percent for men teachers were present on the day their school was visited. Attendance rates increased at midterm, with 63.60 percent of men teachers and 63.45 percent of women teachers present, and remained relatively unchanged at endline, with 64.92 percent of men teachers and 61.76 percent of women teachers present. Despite the increase from baseline to endline, attendance rates did not meet the project targets of 70 percent teacher attendance by year four of the project.

INDICATOR 4: INCREASED SKILLS AND KNOWLEDGE OF SCHOOL ADMINISTRATORS (SUB-IR 1.1.5)[24]

At baseline, midterm, and endline school directors were asked several questions linked to the standard best practices for school management. Many of these techniques served as the basis for new tools and techniques that were the focus of CRS interventions. The goal of this indicator is to help the project understand the practices in use by school administrators. Composite scores were created from the seven items collected with each activity receiving up to one point based on the quality and time spent utilizing the technique.[25]

[24] Correction Notice: Previous reports for baseline and midterm assessments contained a coding error in frequency measurement variables. Initially, more frequent activities such as "Weekly" meetings were assigned a lower numerical code, which inaccurately suggested a lower frequency value. This has been corrected in the endline analysis to align numerical codes with the actual frequency of events, ensuring that higher values now correctly indicate more frequent activities. This rectification standardizes the data interpretation across all timelines and ensures consistency in our analysis.

[25] The director survey requested to provide data that would support daily operations for school administration. In cases where an item was skipped, the item score was treated as zero. Each question was equally weighted. This means that all activities were given a possible score of 1. While some items were treated as a binary yes or no, a number of questions used ordinal response items, asking the enumerator to rate the quality of an activity. In this case each question received a total possible score of 1, with each rating incrementally increasing in value from 0 (e.g., 1-4 will be transferred to .25, .5, .75, 1 respectively).

From baseline to endline, school directors' skills and knowledge composite scores increased. At baseline, more than half (52.22 percent) of school directors demonstrated skills and knowledge in only one to four techniques or tools, while at endline, only 15.55 percent did so.

Table 13: Frequency of School Administration Knowledge Score (out of 7)

	Baseline		Midterm		Endline	
School Administration Knowledge Score	# of Directors	Percentage	# of Directors	Percentage	# of Directors	Percentage
0	0	0.00%	0	0.00%	0	0.00%
1	3	3.33%	0	0.00%	0	0.00%
2	7	7.78%	1	1.11%	3	3.33%
3	12	13.33%	4	4.44%	4	4.44%
4	25	27.78%	13	14.44%	7	7.78%
5	34	37.78%	38	42.22%	31	34.44%
6	8	8.89%	25	27.78%	38	42.22%
7	1	1.11%	9	10.00%	7	7.78%
Grand Total	**90**	**100.00%**	**90**	**100%**	**90**	**100.00%**

Further, as displayed in Table 14, the proportion of school directors demonstrating knowledge in at least five techniques or tools increased from 47.77 percent at baseline to 84.44 percent at endline, which is well above the target level of 50 percent by year four of the project. Overall, according to MeREECE indicator data, the project certified and trained 574 school administrators and officials. Raw frequency tables of responses are provided in Annex 2.

Table 14: School Administrators Demonstrating Use of New Techniques and Tools

Baseline		Midterm		Endline	
# of Directors	Percentage	# of Directors	Percentage	# of Directors	Percentage
43	47.78%	72	80.00%	76	84.44%

INDICATOR 5: REDUCED HEALTH-RELATED ABSENCES (SUB-IR 1.3.2)

Due to the constraints caused by school closures in the prior year during baseline, obtaining accurate data on learner health-related absences for the prior year was challenging. Instead, the baseline data collected was for learner health-related absences in the past two weeks. To add comparable data, the same strategy was followed at midterm and endline.

Rates of health-related absences remained similar at endline compared with those at midterm and baseline. At endline, based on 81 school directors' responses, the number of overall health-related absences in the two weeks prior to the school visit averaged of 4.04 days per school, as shown in Table 15. At midterm, the average number of health-related absences from the previous two weeks was 3.58. This is well below the project target of 10 days at year 4 of the project, but the project may want to check if school directors are collecting attendance data accurately because 38 of 81 school directors who

provided health-related attendance data claimed that no students had been absent in the prior two weeks due to health reasons.[26]

Table 15: Health-Related Absences

	Baseline	Midterm	Endline
Valid Responses	79	90[27]	81
Average Health-Related Absences Per School	3.65	3.58	4.04
Maximum Health-Related Absences	20	21	63
Minimum Health-Related Absences	0	0	0

INDICATOR 6: INCREASED COMMUNITY UNDERSTANDING OF THE BENEFITS OF EDUCATION (SUB-IR 1.3.5)

Enrollment data for all 350 project schools provided by CRS shows an increase in enrollment over the life of the project, as seen in Table 16. Girls' enrollment increased from 37,404 at baseline to 45,615 at endline, while boys' enrollment grew from 41,384 at baseline to 48,106 at endline. The rate of increase for girls' enrollment—21.95 percent—was higher than the rate of increase of boys' enrollment—16.21 percent. The total enrollment of 93,721 is greater than the project's target of 82,889 learners enrolled by the end of year four.

Table 16: Project Enrollment by Gender

	Baseline Enrollment	Midterm Enrollment	Endline Enrollment
Girls	37,404	41,101	45,615
Boys	41,384	45,173	48,106
Total	78,788	86,274	93,721

Note: Enrollment data are from MeREECE and represent all 350 project schools.

3.2 Intermediate Outcomes

At endline, learner responses were analyzed in various domains, including teacher and caregiver support, child-centered processes, educational content and teaching methodology, and perceived safety of their learning environment. These factors likely contribute to a learner's ability and likelihood of educational development. In analyzing this data, strengths and weaknesses within the classroom were identified. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline. Therefore, the tables in this section only report data from midterm and endline.

Supportive Teachers

Teacher support is a vital classroom component of learning, and a lack of teacher support can hinder a child's educational development. Throughout the project, teacher trainings were conducted, and teaching tools were provided to increase teacher competencies in pedagogy, mathematics, and Portuguese.

[26] First, school directors were asked if they tracked the reason for student absences. If they responded yes, then they were asked for the number of overall health-related absences for the two prior weeks. Out of 81 responses, 38 directors said they had no health-related absences, which seems highly unlikely.

[27] Two schools reported absences great than 300. This was determined to be an error and removed during data cleaning. Fourteen school directors said they did not know or refused to answer.

The proportion of learners who stated that their teacher(s) helps them most or all of the time when asked if their teacher helps them do better at school increased from midterm to endline. At midterm, while only 15.71 percent of boys and 16.53 percent of girls stated that their teachers help them most or all the time, at endline, 52.49 percent of boys and 49.68 percent of girls said their teachers did.

The proportion of learners who reported their teachers help struggling learners all the time also increased from midterm to endline. At midterm, 35.52 percent of boys and 32.38 percent of girls stated that teachers help learners all the time if they are struggling, while at endline, 54.48 percent of boys and 55.54 percent of girls reported their teachers did.

Table 17: Supportive Teachers

		Midterm				Endline			
		Boys		Girls		Boys		Girls	
		N	%	N	N	N	%	N	%
My teacher(s) helps me to do better at school.	Teacher(s) helps me	584	76.37	607	76.95	408	42.81	386	44.54
	Teacher(s) helps me some of the time	77	7.92	67	6.52	57	4.7	50	5.78
	Teacher(s) helps me most of the time	41	4.46	52	4.70	73	7.05	83	10.59
	Teacher(s) helps me all the time	113	11.25	101	11.83	321	45.44	304	39.09
When a learner in the classroom is struggling or falling behind, my teacher(s) tries to help them.	Teacher(s) rarely helps learner	84	10.69	97	10.19	43	4.3	49	7.02
	Teacher(s) helps learner some of the time	385	41.85	386	45.38	203	20.93	166	19.99
	Teacher(s) helps learner most of the time	101	11.94	101	12.05	179	20.29	161	17.46
	Teacher(s) helps learner all the time	245	35.52	243	32.38	434	54.48	447	55.54

Note: Percentages reflect weighted proportions, N reflect unweighted counts. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline.

Supportive Caregivers

The proportion of learners who reported their caregivers were supportive of their education increased from midterm to endline. For instance, the proportion of girls who reported their caregivers read to or with them most of the time or always increased from 26.99 percent at midterm to 55.72 percent at

endline. The trend was similar among boys, growing from 26.10 percent at midterm to 53.93 percent at endline. While no specific activities were developed for caregivers as part of the project, some of the caregivers were included in the teachers' training.

Notably, ***the majority of learners' caregivers speak a language at home different from Portuguese, the language of instruction*.** Only 12.61 percent of boys and 18.37 percent of girls answered that their caregivers speak Portuguese at home, which was a decrease from the baseline proportions of 27.64 percent and 30.93 percent, respectively.

Table 18: Supportive Caregivers

		Midterm				Endline			
		Boys		Girls		Boys		Girls	
		N	%	N	%	N	%	N	%
My parents or caregivers ask me about my schoolwork.	Rarely	170	23.40	164	21.29	127	12.94	106	12.08
	Sometimes	384	44.55	400	47.95	294	35.62	312	37.19
	Most of the time	74	7.87	61	5.85	167	18.88	150	17.59
	Always	187	24.18	202	24.91	271	32.56	255	33.14
Someone in my household reads to or with me.	Rarely	218	29.66	221	26.23	151	15.39	142	15.49
	Sometimes	381	44.25	381	46.79	261	30.68	237	28.79
	Most of the time	79	8.64	91	10.7	200	22.00	190	21.87
	Always	137	17.46	134	16.29	247	31.93	254	33.85
My parents or caregivers have talked to my teacher about my performance in school.	Rarely	266	33.81	270	34.94	268	29.87	223	24.72
	Sometimes	384	46.24	403	48.04	293	33.15	320	37.90
	Most of the Time	60	6.04*	57	6.51	93	10.19	89	11.48
	Always	105	13.92	97	10.51	205	26.80	191	25.90
My parents or caregivers speak the same language as the language of instruction	No	537	67.96	558	68.47	725	87.39	683	81.63
	Yes	278	32.04	269	31.53	134	12.61	140	18.37

Note: Percentages reflect weighted proportions, N reflect unweighted counts. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline.

Child-Centered Processes

***The proportion of learners who stated that they often or always engage in child-centered processes in the classroom increased from midterm to endline*.** For instance, approximately two-thirds of both boys

and girls at endline said their teachers encouraged them most of the time or always to ask questions at school, compared with 43.57 percent and 43.66 percent, respectively, at midterm.

Child-centered processes in the classroom can be vital to supporting literacy development. Outside of the classroom, MeREECE developed extracurricular activities to support children learning apart from the school environment that were piloted in select schools, including libraries and reading clubs.

Table 19: Child-Centered Processes

		Midterm				Endline			
		Boys		Girls		Boys		Girls	
		N	%	N	%	N	%	N	%
We work in small groups or pairs during class	Rarely	305	35.72	307	36.28	234	25.93	209	24.49
	Sometimes	415	52.19	435	53.67	443	53.56	453	55.64
	Most of the time	32	2.90	31	3.26	66	6.58	64	7.04
	Always	63	9.20	54	6.79	116	13.93	97	12.83
My teacher(s) encourage me to ask questions at school.	Rarely	113	14.98	124	15.26	55	4.87	40	5.15
	Sometimes	368	41.45	359	41.08	259	29.02	237	27.01
	Most of the time	102	10.92	102	11.67	213	21.57	194	22.07
	Always	232	32.65	242	31.99	332	44.54	352	45.77
We have time to practice new concepts in class (beyond simply listening to the teacher/ copying down notes).	Rarely	194	23.68	188	22.79	157	18.10	140	15.71
	Sometimes	414	50.16	422	49.64	335	40.22	334	39.32
	Most of the time	88	9.03	84	10.47	152	16.53	116	13.98
	Always	119	17.13	133	17.10	215	25.15	233	30.99

Note: Percentages reflect weighted proportions, N reflect unweighted counts. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline.

Educational Content and Teaching Methodology

The nature of the materials used in a classroom, including their sentiment and representation, can have a strong effect on learners' experiences and development in the classroom. ***The proportion of learners who said that their teachers tell positive stories about girls and boys and that their homework requires them to engage with their community sometimes remained relatively unchanged from midterm to endline.*** Learners' attitudes about what they learned at school changed, however, with the proportion of learners who said it helped them very much in life increasing from midterm to endline (18.40 percent to 60.45 percent for boys, and 19.02 percent to 60.98 percent for girls).

The project engaged with education content by supporting the development of teaching and learning materials in partnership with the National Institute for Education. These materials were provided to schools and utilized in teacher trainings.

Table 20: Learner Experiences with Positive Stories and Homework

		Midterm				Endline			
		Boys		Girls		Boys		Girls	
		N	%	N	%	N	%	N	%
My teacher(s) tells positive stories about girl characters, such as girls that are leaders.	Rarely	283	35.82	284	36.22	268	25.44	233	25.02
	Sometimes	398	47.77	429	50.66	445	55.89	443	55.55
	Most of the Time	48	5.38	33	3.66	59	7.5	58	8.08
	Almost Always	86	11.03	81	9.47	87	11.17	89	11.35
My teacher(s) tells positive stories about boy characters, such as boys that are leaders.	Rarely	263	34.85	277	35.52	275	26.1	224	24.32
	Sometimes	405	47.72	416	49.36	429	53.65	445	54.65
	Most of the Time	56	5.88	40	4.07	63	8.15	66	9.96
	Almost Always	91	11.55	94	11.04	92	12.1	88	11.07
My homework assignments require me to interact with my community (interview my community members, write stories about home, measure my family's farm plot for math, etc.)	Rarely	304	40.13	342	44.25	294	32.2	260	29.39
	Sometimes	370	40.58	348	39.44	361	42.22	358	44.21
	Most of the Time	63	6.82	45	4.52	74	8.51	89	10.4
	Almost Always	78	12.48	92	11.79	130	17.04	116	16.01
What I learn in school helps me in my daily life.	It does not help me	28	3.63	35	3.75	10	0.7	16	2.54
	It helps me somewhat	46	4.74	51	4.55	34	2.95	31	3.73
	It helps me quite a bit	569	73.23	574	72.67	351	35.89	306	32.76
	It helps me very much	172	18.40	167	19.02	464	60.45	470	60.98

Note: Percentages reflect weighted proportions, N reflect unweighted counts. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline.

Safe Learning Environment

***Learners' high self-reported levels of safety while en route to school and in the classroom remained high at endline*.** More than 90 percent of all learners said they feel quite safe or always safe while travelling to and from school and while at school. In addition, the proportion of learners who said they rarely or sometimes felt welcome at school decreased from more than a quarter of both boys and girls at midterm to 14.1 percent of boys and 10.5 percent of girls at endline.

Safety and perceptions of safety can drastically impact learners' ability to learn. Although the project did not implement a specific activity regarding safe learning environments, some awareness was raised during teacher trainings. In addition, a video is being produced to increase child and teacher awareness of child protection, which will be distributed at the community level in the future.

Table 21: Learner Perceptions of Safety

		Midterm				Endline			
		Boys		Girls		Boys		Girls	
		N	%	N	%	N	%	N	%
I feel safe traveling to and from school.	I do not feel safe	80	10.21	97	10.76	19	2.4	31	4.9
	I feel somewhat safe	32	3.35	38	4.38	26	4.1	27	3.7
	I feel quite safe	644	80.18	630	78.27	401	41.8	366	38.41
	I feel very safe	59	6.27	62	6.59	413	51.75	399	52.95
I feel safe at school.	I do not feel safe	54	7.05	61	6.67	11	0.8	18	2.5
	I feel somewhat safe	39	3.80	27	2.66	15	2.2	14	2.1
	I feel quite safe	645	80.96	660	82.09	405	41.8	366	40.1
	I feel very safe	77	8.19	79	8.57	428	55.2	425	55.3
I feel welcome at school.	Rarely	35	4.95	29	3.24	6	0..4	6	1.0
	Sometimes	214	21.92	219	23.55	81	9.7	68	9.5
	Most of the time	194	21.19	182	20.86	172	20.6	156	18.6
	Almost always	372	51.95	397	52.35	600	69.2	593	70.9

Note: Percentages reflect weighted proportions, N reflect unweighted counts. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline.

3.3 SO2: Increased use of improved health, nutrition, and dietary practices

The project's second SO seeks to increase the use of health, nutrition, and dietary practices by promoting health, nutrition, and personal hygiene initiatives within the schools and communities. At midterm and endline, the project's progress on increasing the use of improved health, nutrition, and dietary practices was evaluated by looking at health-focused questions in the learner survey and items recorded for the school observation. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline. Therefore, the tables in this section only report data from midterm and endline.

Dietary Practices

***Like at midterm, most learners at endline said they were not hungry at school*.** At endline, 71.91 percent of boys and 72.19 percent of girls said that they were rarely hungry in the last five days while at school, while only 4.40 percent of boys and 7.28 percent of girls said they were hungry most of the time or often during the same period. In addition, nearly 90 percent of both boys and girls at endline said they had

eaten food at school the previous day.[28] There was no significant difference between these values at midterm and endline.

Endline qualitative data from community members, learners, and MeREECE personnel confirm the popularity of the school feeding program. As one learner reported in an FGD, "We eat here at school every day, and many students don't have the means to have breakfast in the morning and so they always come to school."

As for students' diets, they did not change considerably from baseline to endline. Students were asked the kinds of foods they had eaten the day before, as shown in Table 22, and their self-reported diets remained relatively similar at the two time points, with a slight increase from baseline to endline in the proportion of students who reported eating legumes and nuts and a slight decrease in the proportion of those eating vegetables.

Table 22: Types of Foods Eaten at Baseline and Endline, by Gender

	Baseline		Endline	
	Boys (%)	**Girls (%)**	**Boys (%)**	**Girls (%)**
Grains, roots, and tubers	96.20	96.80	95.81	95.64
Flesh food	70.80	70.50	66.37	68.90
Vegetables	28.40	32.30	24.82	27.09
Legumes and nuts	25.80	27.30	33.90	31.14
Fruit	17.30	19.40	15.45	16.77
Eggs	1.80	2.19	1.07	2.12
Dairy	8.00	9.80	7.00	5.61

Water, Sanitation, and Hygiene

***At midterm, both boys and girls each had equal and reliable access to latrines, and access slightly improved at endline*.** More than 70 percent of learners at endline reported that boys' and girls' latrines are always open during the school day.[29] The proportion of learners who said that girls and boys help to clean latrines at school also increased from midterm to endline. For example, the proportion of boys who said boys help clean the latrines increased from 18.18 percent at midterm to 29.52 percent at endline. A full breakdown of responses can be seen in Table 23.

The proportion of learners who reported that latrines are accessible for both the youngest students and those with disabilities decreased from midterm to endline, however. While approximately two-thirds of boys and girls at midterm said latrines are accessible to both groups, less than half said so at endline.

[28] Correction Notice: During the midterm assessment, response options "Yes" or "No" relating to whether students had eaten food at school the previous day were inversely labeled. This mislabeling has now been identified and rectified for both the endline and midterm timepoints, ensuring that the response options accurately reflect the intended measurement and are consistent across all timepoints.

[29] All learners were asked this question. If it was not applicable to the learner because no latrine was available, the response was recorded as 999.

Table 23: Water, Sanitation, and Hygiene[30]

Item	Answer Options	Midterm				Endline			
		Boys		Girls		Boys		Girls	
		N	%	N	%	N	%	N	%
The girls' toilets/latrines in my school are open during the school day.	Rarely	69	8.71	66	8.52	133	13.3	109	12.93
	Sometimes	69	7.22	56	6.55	18	1.31	19	3.52
	Most of the Time	182	18.37	183	19.8	88	9.73	109	11.84
	Always	495	65.70	522	65.13	620	75.66	586	71.70
The boys' toilets/latrines in my school are open during the school day.	Rarely	76	8.93	76	9.73	140	14.01	110	12.39
	Sometimes	75	8.36	58	6.90	23	2.18	17	3.19
	Most of the Time	173	17.78	180	19.51	89	9.81	114	12.83
	Always	491	64.93	513	63.86	607	74.01	582	71.58
Girls help to clean the toilets/ latrines in my school.	Rarely	206	22.56	192	22.47	264	30.53	242	30.66
	Sometimes	357	45.97	394	46.35	155	17.96	147	18.4
	Most of the Time	77	7.83	78	9.14	72	6.32	68	5.98
	Always	175	23.64	163	22.04	368	45.19	366	44.96
Boys help to clean the toilets/ latrines in my school.	Rarely	304	32.16**	320	36.26	369	42.59	324	40.91
	Sometimes	340	44.18	348	42.53	167	19.82	169	20.37
	Most of the Time	49	5.48	46	5.86	80	8.06	73	6.7
	Always	122	18.18	112	15.35	243	29.52	257	32.02
Toilets/ latrines in my school are accessible for the youngest learners and those with disabilities	**NOT** accessible for youngest or students with disabilities	100	9.78**	106	11.66	291	29.8	246	27.9
	Accessible for youngest **OR** students with disabilities	224	21.68	204	23.03	194	23.04	199	24.52

[30] It is important to note that the project did not include any activity to repair or build latrines.

Item	Answer Options	Midterm				Endline			
		Boys		Girls		Boys		Girls	
		N	%	N	%	N	%	N	%
	Accessible for **BOTH** youngest and students with disabilities	491	68.54	517	65.31	374	47.16	378	47.58

Note: Percentages reflect unweighted proportions, N reflect unweighted counts. * denotes group scored significantly higher than other at midterm. * <.10 ** <.05 ***<.001. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline.

Nearly three-fifths of the latrines observed at endline on the day of school visits were pit latrines or buckets (58.89 percent). Of the 86 schools that had latrines, seven of them (8.14 percent) were unavailable for learners to use on the day of school visits. The full breakdown of responses can be seen in Table 24.

The project reports that students use the latrines that were built before the MeREECE project. The construction and rehabilitation of latrine facilities has not been included in project activities. As a mitigation measure, the field staff encourage PTAs to build latrines through community initiatives to foster hygiene practices at the schools. The project also piloted health clubs in 98 schools to reinforce awareness about hygiene practices and the use of latrine facilities.

Table 24: Status of Toilets

		Midterm		Endline	
		N	%	N	%
Toilets	No toilets available (only in the bush or in the fields).	4	4.44	4	4.44
	The toilets are pit latrines or buckets.	61	67.78	49	54.44
	The toilets are composting toilets.	25	27.78	37	41.11
Verify if the toilets are open/being used by learners today.	Yes	86	100.00	79	91.86
	No	0	0.00	7	8.14
Sanitary state of the toilets:[31]	Zero conditions of health and sanitation standards are met.	12	13.95	17	19.77
	One condition is met.	28	32.56	24	27.91
	Two conditions are met.	22	25.58	18	20.93
	Three or more conditions are met.	24	27.91	27	31.40

[31] Enumerators took an inventory of each school's sanitation facilities to see if they meant certain conditions: if they were clean; separated by sex; have at least one toilet per 50 boys enrolled and 50 girls enrolled; are accessible to the most young; are accessible to learners with disabilities; and if there is at least one toilet, with water, for menstrual hygiene for the girls and one for the teachers.

Note: Percentages reflect unweighted proportions, N reflect unweighted counts. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline.

The endline evaluation also examined the status of school kitchens. CRS provided kitchen materials to all 350 project schools, including bowls, spoons, scales, and other equipment, according to project monitoring data. Although enumerators took an inventory of school kitchens, all the materials may not have been present in the kitchens on the day of data collection. Although more kitchens had everything they needed at endline (65.56 percent) than at midterm (55.56 percent), fewer were totally clean at endline (64.44 percent) than at midterm (75.56 percent). The proportion of clean kitchens was slightly lower than the 72 percent of school kitchens that the project reported as clean as part of its internal monitoring.[32] A full breakdown of observations on school kitchens can be seen in Table 25.

The project reports that CRS organizes capacity strengthening trainings and refresher trainings for cooks on hygiene, food preparation and storage in 350 schools. Field staff conduct close monitoring of schools and raise awareness regarding clean kitchen management standards.

Table 25: Status of kitchen

		Midterm		Endline	
		N	%	N	%
Is the kitchen well-equipped?	The kitchen has everything it needs to provide meals to all pupils.	50	55.56	59	65.56
	The kitchen mostly has everything it needs to provide meals to pupils. It could use additional supplies in one or two items.	12	13.33	6	6.67
	The kitchen has everything it needs to provide meals to pupils adequately. It could use additional supplies in multiple items.	4	4.44	1	1.11
	The kitchen does not have everything it needs to provide meals to pupils adequately. It could use additional supplies in many items.	9	10.00	12	13.33
	The kitchen does not have the majority of the items it needs to provide meals to pupils.	15	16.67	12	13.33
Is the kitchen clean?	Everything in the kitchen is clean.	68	75.56	58	64.44
	Mostly everything in the kitchen is clean. One or two things could use further cleaning.	11	12.22	16	17.78

[32] The project considered that a kitchen was clean if all the following criteria were met—the cook knew at least three good health and nutrition practices; the cook was wearing a clean apron and clothes; the kitchen was clean and organized before, during, and after cooking and preparing food; the cook kept the dishes, cutlery, and kitchen equipment clean, well-maintained, and covered; there were waste bins in the kitchen; and the cook knew at least three handwashing techniques.

		Midterm		Endline	
		N	%	N	%
	Many things in the kitchen are clean. Three or four things could use further cleaning.	7	7.78	2	2.22
	The kitchen is not very clean. Many items could use further cleaning.	2	2.22	10	11.11
	The kitchen is not clean. The majority of items need cleaning.	2	2.22	4	4.44

Note: Percentages reflect unweighted proportions, N reflect unweighted counts. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline.

At endline, all schools had a storeroom, according to internal project data. Having a storeroom was a precondition for participating in the project. At endline, school directors corroborated the presence of storerooms, with 87 of 90 school directors confirming the school had a storeroom. The three school directors who replied their schools did not have a storeroom likely said so because they are located in their respective communities, not at the schools, primarily for security reasons due to the remoteness of their school from their communities.

The project reports that it has provided storage support materials to school council members, PTAs, school officials and conducted trainings on storage minimum standards. A fumigation activity and monthly physical inventory have been conducted at the CRS central warehouse before food distribution calendar.

The lack of drinking water remains an issue. On the day of data collection at endline, 30.00 percent of schools had no water available, which was lower than midterm (38.89 percent of schools with no water available). The full breakdown of responses can be seen in Table 26.

The construction and rehabilitation of water infrastructure was not included in project activities, according to project personnel. Students have utilized schools' pre-existing water infrastructure.

Table 26: Status of Drinking Water

		Midterm		Endline	
		N	%	N	%
Availability of Drinking Water	No water available at school. Water, if present, is provided by parents, children, or staff.	35	38.89	27	30.00
	Available water is: Unprotected inground well / spring, untreated rainwater, surface water.	25	27.78	14	15.56
	Available water is a cart with a small tank / drum or a protected spring.	5	5.56	16	17.78
	The available source of sanitary water is running water, a public tap, treated rainwater, a protected dug well or bottled water.	25	27.78	33	36.67
Verify if the source is functional today	Yes	51	92.73	62	98.41
	No	4	7.27	1	1.59

Note: Percentages reflect weighted proportions, N reflect unweighted counts. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline.

Despite modest improvements in handwashing practices from midterm to endline, they could still be improved. The proportion of schools in which more than half of children were observed to wash their hands increased from 43.33 percent at midterm to 53.34 percent at endline. Still, at endline, fewer than a quarter of learners washed their hands at 27.78 percent of schools visited. The full breakdown of responses can be seen in Table 27.

The project reports that, during the COVID-19 period, handwashing devices were purchased by the project and distributed in beneficiary schools with the aim of improving hygiene practices. Although the project does not include specific activities on WASH, these gaps will be addressed in future project implementation opportunities.

Table 27: Handwashing Practices

	Midterm		Endline	
	N	%	N	%
The learners don't wash their hands or fewer than 25% do.	18	20.00	25	27.78
Handwashing is sporadic (26-50%) OR more than 50% of children wash their hands but without soap or ash.	33	36.67	17	18.89
51 to 75% of children wash their hands with soap or ash. There is a supportive handwashing system or process (teacher supervises, encourages, is part of routine, etc.)	18	20.00	24	26.67
Almost all children (76% to 100%) wash their hands with soap or ash. There is a supportive handwashing system or process (teacher supervises, encourages, is part of routine, etc.)	21	23.33	24	26.67

Note: Percentages reflect unweighted proportions, N reflect unweighted counts. These questions were not asked at baseline because data collection was streamlined to reduce risk of COVID-19 transmission, resulting in less contextual data reported at baseline.

3.4 Project Research Questions

Responses in this section pull from both the quantitative findings detailed in the previous section and qualitative data collected in FGDs with community groups, SMCs, students, and central-level project staff and KIIs with parents and local leaders. It is important to note that the qualitative data should not be considered representative of the entire population, but only the 10 sampled communities, whose selection is described in detail in the methodology section, and that without a counterfactual, it is not possible to attribute any changes in educational or health outcomes to the project and its activities.

Relevance

Participants in the qualitative data collection provided their opinions on the relevance of the project. Additionally, quantitative data on progress toward desired results also informs the evaluation of the project interventions' relevance.

To what extent do the project's interventions meet the educational, socio-economic, cultural, and political needs of beneficiaries?

Participants from all respondent groups described how the MeREECE project has met the needs of communities and learners by addressing barriers that learners and their families have faced.

Learners' enthusiastic responses in FGDs highlighted how the school feeding program has filled a major need in communities where some families struggle to provide three meals a day. "We eat here at school every day, and many students don't have the means to have breakfast in the morning and so they always come to school," a learner shared. Learners had a positive outlook toward not only the meals themselves, but school in general. "When I leave the house to go to school, I feel good," another learner said. "I love going to school because I'm going to learn a lot of things."

Respondents also described how the project had engaged more families in supporting schools. "Many people were not aware of the school," a parent in one community said, "but now we all get involved in schoolwork, especially in cleaning the school the day before classes start." Engagement in some sampled areas extended beyond the school to the community at large. A parent shared how the project's saving program had strengthened the "bond among women," as well as how training had helped teachers realize the importance of engaging the community's participation at the school. A director at another school community said, "The community is interested, as I just said, because everyone has already understood that without school, they don't even occupy a space in the world we are living in."

Still, some needs of the communities are beyond the project's scope and speak to the many obstacles they face, including access to water and health- and economic-related issues. Although communities were aware of the limitations of what the project offered, they did not hesitate to share their needs for improved access to clean water, the establishment of health clinics, and assistance with diseases like malaria. In addition, communities' lack of economic diversification makes their fortunes depend solely on the cultivation of the cashew crop. At one school, a community member said families had had problems paying for school fees for the current school year due to a below-average harvest.

To what extent are project interventions aligned with the education strategy outlined in the Guinea-Bissau Education Sector Plan (2017-2025)?

The MeREECE interventions are aligned with the priorities outlined in the Guinea-Bissau Basic Education Sector Plan (2017–2025) related to expanding educational access and equity, improving the quality of instruction, and improving school management. The governmental plan spells out the need for activities that the project implemented, including those related to school canteens, teacher training, teacher recruitment, girls' education, teacher attendance, teaching and learning materials, and parental and community involvement.

Are stakeholders satisfied with their participation in the project? Why or why not?

Respondents noted how much they value MeREECE, making sure to stress they were not only satisfied with the project's contributions in increasing school enrollment, training teachers, and improving the school overall, but "very satisfied." A school director praised the project's impact:

> "There is no other way to address anything about the work of the MeREECE project over four years, if not to praise its intervention in this community, in which it played a leading role in community development, through training and other advances, overcoming some difficulties for children in accessing the school and the functioning of the school itself."

Stakeholders valued the project for more than just its educational impact. A community member stated how MeREECE is "one of the best projects because it brings improvements in the educational and economic performance of the community."

The high esteem in which communities hold the project is also evident in how respondents viewed the negative impact of its departure, as illustrated in greater detail in the sustainability subsection. A school director said, "As I said earlier, with the end of the project, we will face many difficulties, especially for our children."

To what extent have students (boys and girls) increased their reading comprehension skills compared to baseline?

As reported in section 3.1, boys' and girls' performance on the reading comprehension subtask remained very low with increases from baseline to endline that were not statistically significant. Overall, learners were able to answer 0.36 reading comprehension questions correctly at endline, an increase from 0.28 at baseline, but the gain was not statistically significant. Boys at midterm scored significantly higher than girls, but girls closed the gender gap at endline, with no significant difference between their score of 0.33 and boys' score of 0.39.

To what extent are teachers implementing literacy techniques acquired through the project?

Teachers were trained on quality teaching methods and techniques, including ways to effectively motivate students, plan lessons, review previous material, adapt to situations encountered in class, manage classroom time, and use assessment instruments, based on internal MeREECE documents. According to MeREECE data, nearly 92 percent of the teachers (2,247 of 2,489) were trained in new and quality teaching techniques demonstrated they were using them.

Further, at endline, skills and knowledge composite scores among teachers increased. At endline, 88 classroom teachers were observed to gain an understanding of their knowledge of good instructional practices and teaching techniques. Enumerators were asked to observe classrooms looking for 12 specific teaching behaviors. Composite scores were then created, with each activity receiving up to one point per teaching behavior based on the quality and time spent utilizing the behavior.[33] At midterm, most teachers (95.37 percent) demonstrated between one and six of the teaching behaviors, while only 4.45 percent of teachers demonstrated more than six of the teaching behaviors. At endline, teachers' skills and knowledge scores improved, with 20.5 percent demonstrating more than six of the teaching behaviors.

Is the project theory of change relevant? Are the actions and approaches used by the project sufficient to improve students' reading and writing skills?

The approach to MeREECE's theory of change was relevant, and its focus on three core drivers—supply-side capacity strengthening, incentives for behavior change, and bottom-up and top-down government and community engagement—was appropriate. MeREECE's "hybrid approach" that featured a range of activities differed with previous school feeding projects in Guinea-Bissau that focused solely on providing donor-approved food supplies to schools, according to the FGD with project staff. Partners and stakeholders have commended the project's approach, project staff shared. "These are actors who have

[33] The classroom observations observed both math and literacy activities. In cases where an item was skipped, the item score was treated as zero. Each question was equally weighted. This means that all activities were given a possible score of 1. While some items were treated as a binary yes or no, a number of questions used ordinal response items, asking the enumerator to rate the quality of an activity. In this case each question received a total possible score of 1, with each rating incrementally increasing in value from 0 (e.g., 1-4 will be transferred to 0, .33, .66, 1 respectively).

been in service for years, have accompanied the school canteen sector for years, and say that this is the most comprehensive project," a staff member said.

Despite the project's holistic activities, they ran into several major obstacles that curtailed the effective duration of implementation and likely affected the project's impact. The COVID-19 pandemic in March 2020 first disrupted the project, followed by teacher strikes in 2021 that eliminated nearly one full school year. "All literacy activities effectively started from 2022 onwards," a staff member said in an FGD. "This meant that teaching materials and teacher preparation through training did not have the opportunity to begin."

Effectiveness

Questions related to effectiveness are answered through a combination of quantitative measures discussed in previous sections and qualitative data collected through FGDs and KIIs.

To what extent has the project achieved its goals and targets (including increasing enrollment, retaining girls, reducing dropouts, reducing hunger in schools, improving teacher and student attendance)?

The project's two strategic objectives and their related IRs, sub-IRs, activities, and results are displayed in Table 28, with targets and actual results reported from MeREECE internal data. By comparing results to the project's targets, it is clear that MeREECE has achieved many of its goals and targets. The project surpassed many of its targets with respect to improved quality of literacy instruction, including the number of administrators and teachers trained and demonstrating use of new techniques and tools and the number of teaching and learning materials provided. It also met its targets for the second objective of increased use of health, nutrition, and dietary practices, including the number of health clubs established and the number of individuals demonstrating use of new child health and nutrition practices and new safe food preparation and storage practices. It did not attain some of its results related to reduced short-term hunger, such as the number of daily school meals provided, likely due to COVID-19-related delays in project implementation. The project also did not achieve other objectives related to teacher and student attendance.

Table 28: MeREECE Project Activity Indicators and Results

Life-of-project indicator results that did not meet their target are shaded red, those that are close to their targets shaded yellow, and those that surpass their targets shaded green.

#	IRs and Sub-IRs	Related Activity and Indicator	Life of Project (LOP) Indicator Target	LOP Indicator Result	Source
SO1	Improved Literacy of School-Age Children	Percent of learners who, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade-level text	55	0.90	Endline data
		1.1 Improved quality of literacy instruction			
1.1.1	More Consistent Teacher Attendance	Number of teachers receiving recognition rewards	100	120	Project data
		Percent of teachers in target school who attend and teach school at least 80 percent of scheduled school days per year[34]	70	n/a	n/a
1.1.3	Improved Literacy Instructional Materials	Number of teaching and learning materials provided	25,900	86,258	Project data
1.1.4	Increased Skills and Knowledge of Teachers	Number of teachers/educators/teaching assistants trained or certified	1,400	2,489	Project data
		Number of teachers/educators/teaching assistants in target schools who demonstrate use of new and quality teaching techniques or tools	1,050	2,247	Project data
1.1.5	Increased Skills and Knowledge of School Administrators	Number of school administrators and officials in target schools who demonstrate use of new techniques or tools	263	635	Project data
		Number of school administrators and officials trained or certified	370	574	Project data
		Percent of school officials in target school who demonstrate use of new and quality techniques or tools	50	84	Endline data
		1.2 Improved attentiveness			

[34] It was not possible to measure this indicator as defined because, at baseline, collecting retroactive teacher attendance data was problematic due to school closures and a lack of standardized practices for recording teacher attendance. Therefore, teacher attendance was measured instead by those teachers present on the data of data collection, and this practice was continued at midline and endline so attendance data would be comparable.

#	IRs and Sub-IRs	Related Activity and Indicator	Life of Project (LOP) Indicator Target	LOP Indicator Result	Source
1.2.1	Reduced Short-Term Hunger	Number of children who receive one or more meals per week	120,187	127,653	Project data
		Number of daily school meals provided	36,707,256	27,011,000	Project data
		Number of individuals benefiting indirectly from USDA-funded interventions	470,858	511,380	Project data
		Number of individuals participating in USDA food security programs	197,419	140,656	Project data
		Number of school-age children receiving daily school meals	120,197	127,653	Project data
		Number of students enrolled receiving USDA assistance	120,187	129,387	Project data
1.3	Improved Student Attendance	Average student attendance rate	75.00	73.61	Endline data
1.3.1	Increased Economic and Cultural Incentives	Number of individuals receiving take-home rations	13,378	10,837	Project data
		Quantity of take-home rations provided (in metric tons)	797	165	Project data
1.3.2	Reduced Health-Related Absences	Average number of days missed per student per school year due to student health issues[35]	n/a	n/a	n/a
1.3.5	Increased Community Understanding of Benefits of Education	Number of individuals participating in group-based savings, microfinance, or lending programs	13,125	16,307	Project data
SO2: Increased use of health, nutrition, and dietary practices					
2.1	Improved Knowledge of Health and Hygiene Practices	Number of functional health school clubs created	50	98	Project data
		Amount of fruits, vegetables, legumes, and/or animal-sourced foods provided (in metric tons)	84	100	Project data
		Number of schools councils who contribute fruits, vegetables, legumes, and/or animal-sourced foods	350	358	Project data
		Number of individuals trained in child health and nutrition	8,750	7,309	Project data
		Number of individuals who demonstrate use of new child health and nutrition practices	4,200	5,245	Project data

[35] It was not possible to measure this indicator as defined because obtaining accurate data at baseline on learner health-related absences for the prior year was challenging due to school closures. Instead, the baseline data collected was for learner health-related absences in the past two weeks. To add comparable data, the same strategy was followed at midterm and endline.

#	IRs and Sub-IRs	Related Activity and Indicator	Life of Project (LOP) Indicator Target	LOP Indicator Result	Source
2.2	Increased Knowledge of Safe Food Prep and Storage Practices	Number of individuals trained in safe food preparation and storage	2,100	2,118	Project data
		Number of individuals who demonstrate use of new safe food preparation and storage practices	1,400	3,373	Project data
2.3	Increased Knowledge of Nutrition	Number of functional health school clubs created	50	98	Project data
2.5	Increased Access to Preventative Health Interventions	Number of students receiving deworming medication	120,187	75,103	Project data
2.6	Increased Access to Requisite Food Prep & Storage Tools and Equipment	Number of individuals trained in safe food preparation and storage	2,100	2,118	Project data
		Number of individuals who demonstrate use of new safe food preparation and storage practices	1,400	3,373	Project data

Which interventions contributed most significantly to the expected results or objectives?

It is not possible to measure if MeREECE's interventions have had a causal effect on project results or objectives because the project design did not use an experimental approach that controlled for confounders and isolated individual treatments. Still, respondents did shed some light on what interventions they valued the most in KIIs and FGDs, mentioning teacher training, women's savings groups, and the school canteen program, which they believed had boosted school enrollment in their communities. These views combined with the modest improvements in reading outcomes and gains in teacher attendance and school attendance speak to the project's overall effectiveness.

To what extent does the project coordinate and collaborate with other stakeholders?

The range of respondents sampled for FGDs and KIIs reflects the holistic nature of MeREECE's activity design. The project mobilized various stakeholders to ensure that learners were enrolled in school and communities pooled their resources to provide materials for school canteens and supported education through other means, including cleaning school grounds, repairing school infrastructure, and making small donations to support teachers and other school initiatives.

Although the project engaged with government and communities, a lack of synergy between those two parties seems to remain, according to KIIs and FGDs with communities. As described in greater detail in the sustainability subsection, communities stated how they do not have much trust in the local government to follow through on their requests or provide them with the resources they need. Instead, communities view MeREECE and other NGOs' interventions as providers of services that the local government itself should provide. "If our government did at least 20 percent of what MeREECE has done at this moment we would not be in this situation," an SMC member said. "We often see the government's lack of interest in supporting communities."

To what extent were the baseline and midterm recommendations implemented?

According to internal project records, MeREECE did the following to address the recommendations included in the midterm report:

- To consider the low number of learners who, at the end of second grade, demonstrate they can read and understand the meaning of grade-level text, MeREECE distributed teaching and learning materials (TLMs) to schools, continued to train teachers on effective practice, created 50 pilot school libraries, and conducted extracurricular activities in targeted schools to improve students' reading skills.
- To examine the Portuguese language abilities of learners and teachers, MeREECE provided additional Portuguese language training as part of initial pedagogic training; distributed supplementary TLMs to project schools; awarded selected teachers for their exemplary practice in the classroom; collaborated with the National Institute for the Development of Education (INDE) on bilingual learning materials; and continued support of SMCs to encourage parents to help students with learning at home.
- To examine gender constraints within target communities, the project continued to provide take home rations for girls to encourage their attendance at school and raise awareness about the importance of girls' education and balancing their schoolwork and housework at home. In addition, MeREECE also conducted FGDs with girls and teachers about obstacles girls face.

- To encourage proper sanitation practices in target communities, MeREECE established health clubs in 98 pilot schools. As part of the health clubs, the project conducted awareness campaigns on health and hygiene practices; organized meetings with community leaders, women, and youth organizations; and continued outreach with SMCs, teachers, and school directors about improving handwashing and hygiene practices. MeREECE will also consider WASH components for future phrases of school feeding projects in Guinea-Bissau.
- To identify drivers of boosting teacher attendance and institutionalizing project practices, MeREECE singled out and reinforced the following factors—community participation, including financial incentives for teachers; awarding teachers with exemplary practice; promoting the use of teacher attendance books; and ensuring school inspectors make regular visits to schools.

Do the literacy promotion activities help improve the reading and comprehension abilities of students?

As noted in this section, it is not possible to measure if MeREECE's interventions have had a causal effect on project results or objectives because the project design did not use an experimental approach that controlled for confounders and isolated individual treatments.

Which strategies have been put in place to effectively monitor and address the teachers' attendance? Has project implementation been effectively monitored? How well has the M&E mechanism helped project implementation, and what improvements could be made, if any?

To track teacher attendance, MeREECE worked with school directors to ensure they recorded their presence and absences. According to endline data, all 90 school directors surveyed used a time book to track teacher attendance. The project also implemented other activities to motivate teachers, including honoring select teachers for their exemplary pedagogical practice after inspectors observed a sample of teachers at project schools. Despite the efforts from the project, however, teacher attendance rates at endline—with 64.92 percent of men teachers and 61.76 percent of women teachers present on the day of data collection—fell below the target of 70 percent.

To what extent has the implementation of SILC strengthened the economic capacity of parents to support their children's schooling and contribute to the life of the school?

Both quantitative and qualitative data show that the SILC activity has strengthened school groups' economic standing and enabled them to fund projects that improve school infrastructure.

According to MeREECE data, the number of individuals participating in project-based savings programs over the life of the project—16,307—exceeded the target of 13,125. Overall, at the end of September 2023, the groups' savings totaled $422,020, as well as a social fund of $50,733.80 available to fund school-related projects, based on the last semiannual MeREECE report provided by MeREECE. These saving groups contributed money to various school projects, including repairs of school roofs, wells, benches, and other materials and the construction of food storage facilities.

In FGDs, parents, SMCs, school directors, and project staff described how communities had banded together to pool their money for savings groups and funding for school-based projects. One school director shared how the SMC at his school recently met to determine how to use funds from the community's six savings group to repaint the school. It was not clear from some anecdotal FGD data whether all community-based funding from schools originated from savings groups. For instance, a

community group member explained how, after the harvest, families gave money to the school director to support the school canteen.

MeREECE staff shared how the SILC activity has especially affected women in the community. “They did not believe they were capable of saving 1000 francs, but now they save millions,” a staff member said. “When they speak, they do so proudly, showing a high level of self-esteem.”

According to MeREECE staff, it took dedicated outreach to communities for them to fully grasp how the SILCs would manage funds and operate autonomously. A staff member explained:

> Initially, there was misunderstanding about the savings and credit approach, with some thinking the money would be used and then repaid, as with credit methodologies. However, they now understand that the funds generated in the community are managed by local structures, not by MeREECE, which has increased trust and engagement. Communities now see the project as a helpful initiative.

How have teachers’ and students’ attendance affected the reading and understanding capacity of students?

The ratio of teachers and teaching assistants in the classroom to the total number of learners observed on the day of classroom assessment was calculated. The analysis indicated no significant relationship between this ratio and higher-order reading skills, including oral reading fluency and reading comprehension. Further, teacher attendance totals from the school director survey were correlated with reading comprehension scores. The results show that there is a significant negative relationship between teacher attendance and reading comprehension scores. This suggests that, contrary to expectations, more teacher attendance is correlated with lower scores. This counterintuitive result warrants further investigation to understand the underlying causes—perhaps examining the quality of teaching, student-teacher interactions, or other environmental and instructional variables. The analysis of these variables was constrained because of the tools used.

School Directors at Endline were surveyed regarding changes in teacher attendance over the past year, with 86 out of 90 indicating an improvement in teacher attendance. Nonetheless, analyses of literacy scores—specifically letter-sound identification and reading comprehension—showed no significant differences. Conversely, evaluations in initial sound recognition, familiar word identification, and oral reading comprehension demonstrated statistically significantly higher scores among directors who noted no improvement in teacher attendance than those who reported improvement. It is critical to recognize that these metrics serve as indirect indicators of teacher attendance and do not directly measure its impact on educational outcomes.

School directors reported the number of days their schools were operational over the past two weeks, with responses varying from 0 to 14 days. An analysis correlating the days schools were in session with learning outcomes indicated that schools operating more than 6 days exhibited significantly improved performance in familiar word recognition, initial sound identification, oral reading fluency, and reading comprehension, compared to schools that were in session for fewer than five days. It is important to note that the number of days a school is in session is an indirect measure of instructional days and may not directly reflect the actual teaching time.

School directors provided data on the number of teachers enrolled and those present on the day of data collection. Analysis revealed a small but statistically significant negative correlation between teacher attendance and reading comprehension scores ($r = -0.06$, $p < 0.05$), suggesting that higher teacher presence in schools is associated with lower reading comprehension scores.

During school observations, enumerators recorded the presence of educational materials in the offices of school directors across 90 schools. Findings show that 61 schools possessed visual aids and 80 had didactic materials. Notably, schools with visual aids in the director's office demonstrated significantly higher performance across all literacy subtasks compared to those lacking such aids. Furthermore, schools where directors had didactic materials in their offices noted students achieving significantly better results in reading comprehension than those without these materials.

Efficiency

To what extent have project resources (inputs) achieved the intended results?

As explained earlier in discussing which interventions contributed most significantly to expected results or objectives, it is impossible to ascertain if project activities led to changes in outcomes without a counterfactual. However, by conducting analyses to test differences in reading outcomes from baseline to endline, significant increases did occur in reading outcomes from baseline to midterm. Still, the gains were modest and far below project targets. Although scores remained unchanged from midterm to endline, the limited span of time between the midterm and endline studies was not ideal in trying to measure any significant change.

MeREECE also did its best to mitigate major inefficiencies outside of its control that negatively impacted the project, primarily turnover of teachers and administrators at project schools and the government suspension in 2023 of newly trained and hired teachers. To address turnover, according to MeREECE staff, the project provided training and orientation to newly hired directors and encouraged others who had received training to share their experiences with newcomers. As for the suspension of teachers, some schools had to suspend classes or cut back operations. Communities mobilized to find solutions, with some making financial contributions in order to retain teachers or hire different ones.

Can the same results be achieved with fewer resources or alternative approaches?

Respondents did not suggest any alternative interventions in KIIs and FGDs, and their requests for more assistance from MeREECE to address needs in their communities, including greater access to water and health care, underscore how further allocation of resources may have led to more impact in these communities. By contrast, it is apparent that many communities maximized what few resources they did have by doing such things as contributing funds to teachers so they would not go on strike and providing crops, oil, and other goods to school canteens.

Were objectives achieved on time?

As noted earlier in this section, several events caused delays in implementation at the start of the project—the COVID-19 pandemic and then extensive teacher strikes. "The school canteen cannot operate during a strike, nor can teacher training or other activities that had been mentioned before, so this translated into a significant challenge," a project staff member said in an FGD. Considering this challenge, it is noteworthy that MeREECE surpassed many of its targets, as discussed earlier in the effectiveness subsection.

How did the project improve the efficiency of its partners? Was the project efficient at taking into account beneficiaries' feedback?

The coordination required between partners and officials at different levels of government to distribute food and deworming seems to have improved communication and efficiency. A respondent in the FGD with MeREECE staff said he wanted "to highlight how the project contributed to bridging the gap between the central structure of governmental partners and the local structure." Another staff member added how the project "can connect the community to the school, teachers to the school, partners to the school, and the government to the school, creating a link between different actors operating in the development sector, especially in the area of school canteens."

Still, the turnover of officials from the level of the central MoE down to school directors in community schools was cited as an obstacle to efficiency in an FGD with project staff as well as its semi-annual reports. "Many times when [officials] are already familiarizing themselves with the project, they are changed again," a staff member said, "and this extends to the school level, the frequent change of directors."

The project also instituted a system for obtaining and responding to feedback and incident reports from beneficiaries in the community, according to internal project semi-annual reports, using the digital data collection platform CommCare.

Sustainability

- *What progress has been made to reach the sustainability milestones presented in the graduation and sustainability plan document?*
- *Is there evidence of community capacity to take ownership of project activities and are they meeting their commitments outlined in their MOUs (providing wood, cooks, complementary foods for meals, staple foods for 2-4 days coverage per month, etc.)? Are there any spontaneous actions that APEs/COGES have taken to maintain/improve school infrastructures?*
- *To what extent can the project best practices can be replicated and adopted by Guinea-Bissau Ministry of Education? What policies favor the sustainability of school canteen projects?*
- *Have inclusive or gender sensitive strategies been implemented in view of sustainability among identified specific groups, if there are any?*
- *To what extent does the SILC approach contribute to the project's sustainability?*

MeREECE's graduation and sustainability plan spells out key indicators and milestones that stakeholders ranging from the community to the national government should reach in order for the project's sustainability to be ensured. At the community level, milestones include the establishment of SILCs in all communities and the functioning of SMCs trained on school feeding advocacy, planning, and management at every school. At the national level, milestones include the passage of a national school feeding law, circulation of a draft roadmap for the National School Feeding Program in Guinea-Bissau, and allocation of funds in the national budget to support the school feeding program. Although communities seem poised to sustain certain project activities, the government's ability to take over the school feeding program and other elements of MeREECE programming are less clear, based on qualitative data collected during the endline evaluation.

Communities are well-positioned to continue project activities that they implement, thanks to the skills they have developed through project capacity building as well as the strong feeling of ownership they

have fostered over the course of the project. “We work for the good of the community,” an SMC member said in an FGD. “Nothing stops us from getting involved or supporting school activities.”

In an FGD with project personnel, multiple respondents over the course of the discussion noted how communities have taken “ownership” of community aspects of the project by making numerous contributions, including food to the school canteen and money pooled through the SILCs to make small-scale improvements to school infrastructure. “The community’s involvement is very positive, that they are taking ownership of the project,” a project staff member said.

Part of communities’ motivation to implement their own small-scale initiatives likely stems from their belief that the local government will likely not contribute. When asked what strategies should be used to obtain sustainable support from local government after the project ends, members of multiple communities responded that they would not attempt to seek such support. A parent in one community discussed how community members would try to approach the local government for support but did not expect to have a “favorable response,” according to the parent. A member of a school management committee in another community claimed that local government officials “only think about their families and how to help their children go to Europe to study. In the past, they painted the schools before classes started, but nothing.”

While communities have done their part to meet sustainability milestones, the government is still in the process of meeting its necessary sustainability mileposts. The government has taken a first step by passing a school canteen law, but it has yet to develop the policies needed to implement it, such as the draft roadmap noted in the project’s graduation and sustainability plan, according to the project.

The implications of this lack of progress were evident in the FGD with MeREECE staff. When asked about any concerns related to the project, multiple respondents discussed issues with sustainability. One respondent said that the project’s continuity was the “biggest concern.” In another portion of the FGD, a staff member said he was concerned “about the Ministry of Education’s ability to take over the school canteen program and continue providing meals to schools.” Another staff member added he anticipated a gap related to the use of supplementary reading materials MeREECE had provided schools because “without proper follow-up and monitoring, there is risk of neglecting these materials.”

According to internal monitoring data, MeREECE did make an effort to collaborate with the MoE. It conducted 20 sessions with MoE officials for advocacy work at national level, 12 more than its target of eight sessions. Still, it seems like not enough progress was made. When asked about what component of the project they wished they could change, a staff member said the project perhaps could have invested “a little more in strengthening the capacity of the ministry itself because it is an important element in the sustainability of the actions, there are still many gaps in relation to the ministry.” With the project nearing its end, project staff were doing what they could to ensure sustainability with the MoE in the closing months. Staff said they had reached out to the MoE to “explore avenues” for sustaining and monitoring certain project activities, including managing school libraries and training teachers who had not received initial training.

Impact

What were the expected and unintended positive and negative effects of the intervention on children, communities, and institutions? How does the intervention affect the well-being of different groups of stakeholders, including the most vulnerable and at-risk children?

Respondents in multiple communities reported that the success and popularity of the feeding program has led to unintended effects on enrollment, with learners from outside communities choosing to come to their schools to benefit from the school meals. The extent of this unintended effect is not clear because it is based on qualitative data that are not representative of the entire MeREECE school population.

These unintended effects on enrollment are both positive and negative. First, any opportunity to increase the number of children benefiting from project activities should be welcomed. By contrast, this increased enrollment may have some negative impact if the impacted school do not have the resources to accommodate the increased enrollment.

Respondents did not share any other negative effects of the project, with no mention of theft of food supplies or vandalism of project resources.

What do beneficiaries and other stakeholders involved in the project perceive as the effects of the intervention on themselves?

Respondents did not share any insights on how the project impacted themselves or their own well-being. Their responses merely touched on the project's impact on learners, teachers, and other educational stakeholders, as well as the community as a whole.

To what extent did project objectives and activities reduce gender disparities in education in target zones, and what activities were most effective in leading to said reductions?

Gender disparities were reduced from baseline to endline in school enrollment and performance on certain EGRA subtasks. At baseline, the rate of increase for girls' enrollment—21.95 percent—was higher than the rate of increase of boys' enrollment—16.21 percent. Still, more boys were enrolled than girls at endline—48,106 and 45,615, respectively. The donation of take-home rations to girls enrolled in regions with the highest dropout rates for girls may have helped to boost enrollment rates for girls. For instance, take-home rations were given to 4,623 girls in grades 5 and 6 during April to September 2023, according to a MeREECE semi-annual report.

Girls also closed the gender gap with boys in three of the five EGRA subtasks. While boys outperformed girls on familiar word reading, ORF, and reading comprehension at baseline, there was no significant difference between the two groups at endline on these subtasks.

As noted previously in this section, however, it is not possible to measure which MeREECE interventions have had a causal effect on reducing gender disparities because the project design did not use an experimental approach that controlled for confounders and isolated individual treatments.

Special Study

To what extent has the multi-faceted participation of communities through the SMCs contributed to the improvement of the learning and teaching conditions in the schools targeted by the MeREECE project in Guinea-Bissau?

As part of its design, MeREECE aimed to build the capacity of SMCs in the schools it targeted, with the goal of strengthening the bond between communities and their schools, encouraging the community to increase its support for schools, and ultimately improving learning and teaching conditions. The three key roles of SMCs that MeREECE identified, as defined by UNESCO, were:

> "(i) to support school activities through the mobilization of additional resources, voluntary work and school-community mediation; (ii) to ensure strategic governance and steering of the school, particularly with regard to the development, monitoring and evaluation of school projects; and finally (iii) to ensure administrative and financial management and control functions."[36]

In conducting KIIs and FGDs with project stakeholders and staff, it is clear that project schools have benefited from changes in the knowledge, attitudes, and practices in communities, thanks to work from SMCs. MeREECE has especially helped SMCs better fulfill its first of three primary roles in contributing to school activities through donations, volunteering, and community engagement, while also improving its third function of ensuring administrative and financial management by bolstering those capabilities. It was not as clear, however, how well the project has built SMC capacity to fulfill its second of three key roles—developing a vision for future school projects once the project itself closes in August 2024.

SMC members and other stakeholders discussed multiple ways in which communities were assisting schools, including donations of food and supplies to school canteens, volunteering to help maintain school infrastructure, and working with the community to increase enrollment and address any problems between the school and community. A parent in one community described how the community's greater awareness of the school led to greater contributions. "Many people were not aware of the school, but now we all get involved in schoolwork," the parent said, "especially in cleaning the school the day before classes start." Other respondents in the same community confirmed these contributions, including the school director and community members. The school director was especially effusive in his praise for the community's assistance:

> "The objectives recommended by the school council to support school activities are always achieved due to the openness and availability of members of this community to support the school canteen, through offers of rice, fish and other foods to ensure quality food."

Respondents in other communities also shared how they contributed to their schools through not only donating food and cleaning school grounds and facilities, but also donating materials for school infrastructure and increasing school enrollment and attendance through community engagement. In a second community, the school director recalled how people gathered sand and stones to help build a new school building. After realizing they initially did not gather enough material, community members ensured they continued until they did. The school director said a woman carrying an infant on her back said, "No matter what it takes, even with children on our backs, we will manage."

In a third community, an SMC member detailed the group's role in community engagement. He said one of his SMC roles was mobilizing families to enroll their children in school. He went door-to-door and spoke to parents and guardians about the benefits of education. In addition, during the harvest season, the SMC joined forces with a neighborhood leader to convene families and explain how the community would hire others to collect cashews so boys could remain enrolled in school, according to the SMC member.

[36] Gouvernement ouvert dans l'éducation : les comités de gestion scolaire en Afrique subsaharienne, Jonathan Dupain, IIPE-UNESCO, 2021.

Illustrating how MeREECE had helped the groups with their administrative and financial management skills, respondents from various SMCs shared how communities pooled their money together for various means and supervised the canteen program. A parent in one community reported how the SMC had recently conducted a meeting on how to tap into one of community's six savings groups to fund repainting of the school. Respondents in multiple communities explained how families had donated money to subsidize the salaries of teachers so they would continue teaching and not participate in a nationwide strike.

SMCs have also played a vital role in managing school canteens. In addition to their roles related to school maintenance and enrollment, several respondents in one community spelled out their roles in supervising the canteen. Once a shipment of food arrives, the SMC confirms the quantity and then determines how much food is needed daily. This constant tracking ensures that any potential shortages are noted with enough advance time so they can be resolved. For example, an SMC member explained, when they realized they would soon run out of cooking oil, the SMC asked parents to donate a small sum of money—100 francs—and the SMC was then able to purchase enough oil until another delivery was made.

The success stories that MeREECE staff shared about SMCs mirrored what respondents shared. "Communities began to take control of the schools, not only by seeking negotiated solutions but also by contributing their financial resources," a MeREECE staff member said. In one community, according to MeREECE staff, when the government suspended the salaries of teachers, families hired a non-teacher member with teaching skills as a replacement.

While MeREECE staff members said in an FGD that they "are satisfied with what the management committees have achieved," they do "acknowledge areas for improvement and work on them daily." They noted how continuous capacity-building efforts are being conducted, including training sessions in the project's five other regions, to improve the effectiveness of SMCs.

When respondents shifted their attention from the SMCs' recent successes to their future outlook, many voiced their concerns about what the project's impending closure in August 2024 would mean for the SMCs, as well as their schools and communities. "If the project were to come to an end without the community being prepared, it would lead to a decline in the attendance levels of the children," a parent said. "Therefore, we need training in school management."

Many respondents said they would do what they could to continue project activities, but the lack of details in their answers to questions about sustainability made it seem as if SMCs had not developed concrete strategies. Further, when asked what strategies should be used to obtain sustainable support from the government of Guinea-Bissau, many respondents said they did not think local officials would be able to help them. For instance, one SMC official said they would try to contact local authorities, but they "do not expect much of a favourable response from [them] for the continuation of a good level of education."

With SMC respondents unable to offer details about a long-term strategy, the degree to which they can oversee school activities once the project closes and financially support them remains unclear. MeREECE staff echoed community respondents' concerns about the extent to which government could help, explaining the difficulty in getting local authorities to address certain issues related to school infrastructure and maintenance. "These are aspects that are very easy to solve by the community itself instead of waiting for the government," a project staff member said. "The government has many priorities and many problems to solve, and resources are scarce."

4. Conclusions

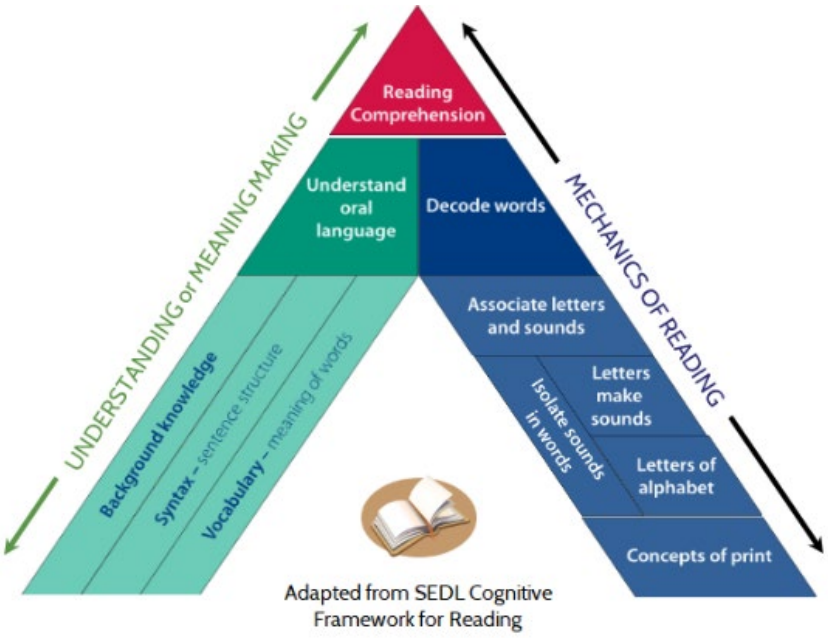
4.1 Evaluation Findings

The main objective of the endline evaluation was to assess and report on the situation in the five target regions as the result of MeREECE activities. The endline evaluation also sought to examine and provide feedback on project implementation, as well as determine the extent of the results achieved, including a detailed look at the activity to build the capacity of SMCs. Further, this evaluation assessed progress on the implementation of project activities using the Development Assistance Committee (DAC) criteria of relevance, effectiveness, efficiency, sustainability, and impact and analyzed effects of the project. Endline findings also document lessons learned and provide recommendations for future educational interventions in Guinea-Bissau.

By comparing the results of baseline, midterm, and endline reading assessments as part of this evaluation, stakeholders may examine the impact of the MeREECE activity on the learners' reading skills, as measured by the EGRA subtasks. Using SEDL's Cognitive Framework for Reading, it is possible to map EGRA subtasks to reading skills as follows:[37]

- **Mechanics of Reading:** Initial Sound Identification, Letter Name Identification, and Familiar Word Reading subtasks
- **Reading Understanding:** Oral Reading Fluency Reading Passage subtask
- **Reading Comprehension:** Reading Comprehension subtask

Figure 10: Reading Skills Framework from SEDL



[37] https://sedl.org/reading/framework/framework.pdf

Students' troubles on two subtasks focused on the mechanics of reading—identifying initial sounds and reading familiar words—underscore why they ultimately struggled on the reading comprehension subtask. Learners must master these skills before they can comprehend what they read. Literacy and reading instruction in the early grades—including the grades targeted by the MeREECE project—often focus predominantly on these skills, but EGRA results revealed that more time may need to be devoted to these skills in project schools, especially in the earliest grades. On average, learners responded to 0.74 out of five items on the initial sound identification subtask. Moreover, more than three-quarters (77.70 percent) of learners did not identify a single initial sound correctly, receiving a "zero score" for the subtask. For familiar word reading, learners averaged 5.46 words in one minute at endline, compared with 3.64 words at baseline. The increase in mean scores for familiar word reading was statistically significant, but it was still relatively weak, considering there were 20 familiar words included on the subtask.

The gaps in the mechanics of reading were apparent in the higher-level reading passage subtask, which is a measure of learners' understanding of meaning making from reading. Along with the mechanics of reading, reading understanding provides the foundation for reading comprehension. On the reading passage subtask, learners read at a rate of 9.64 words per minute on average; however, more than one-quarter (27.77 percent) of learners received zero scores on this subtask. Like the mechanics of reading, fluency should be targeted in the early grades to ensure that learners build a strong foundation for literacy.

Therefore, considering students' challenges on earlier EGRA subtasks, it is unsurprising that the subtask that Grade 3 learners participating in this evaluation struggled the most with was reading comprehension. This final subtask speaks to learners' ability to utilize the mechanics of reading, demonstrate fluency, and understand what the passage is about. As comprehension is often the purpose of reading, this subtask pulls on all of the other skills learners demonstrated in the previous subtasks. Nearly four out of five learners (79.28 percent) received zero scores, and the average number of questions correctly answered out of five was only 0.36. To increase reading outcomes on the top of the SEDL framework, more work needs to be done in classrooms to bolster the foundational skills that learners must develop before being able to comprehend what they read.

The project, however, was not only focused on improving learners' literacy, but also increasing enrollment at schools. Although it is not possible to draw a link between project activities and boosts in enrollment due to MeREECE's nonexperimental design, qualitative data speak to the project's role in improving enrollment, as community-based respondents drew a direct link between the school feeding program and greater community interest in sending children to school. At endline, the overall attendance rate for students was 73.61 percent, compared with 63.77 percent at baseline.

Teacher attendance also displayed improvement. On the day of the interviews, 64.92 percent of men teachers and 63.45 percent of women teachers were present—a notable increase from baseline (47.88 percent and 54.42 percent, respectively). It is unclear what factors played a role in this increase, however.

Enumerators also asked the school directors questions linked to the "use of new techniques or tools as a result of USDA assistance." Enumerators looked for seven specific techniques or tools based on criteria checklists by MoE inspectors on behalf of CRS. The indicator is managed by Partner Plan International under the supervision and validation of CRS. The baseline value is 0 and comparison is made with respect to the project target. At endline, 84.44 percent of school directors demonstrated knowledge and skills in at least five techniques or tools, compared with less than half at baseline (47.78 percent).

Finally, endline items related to classroom practices, learners' dietary practices and health, school infrastructure, and other topics were compared against the baselines established for Strategic Objectives during the midterm evaluation.[38] Learners consistently received daily meals through school feeding programs, according to quantitative and qualitative data, with nearly 90 percent of both boys and girls at endline reporting they had eaten food at school the previous day. Encouraged by SMCs with increased capacity and funded in part by SILCs, the community's contributions were instrumental in supporting the feeding program, with 100 metric tons of food provided in addition to USDA commodities by 100 percent of project schools' SMCs. Further, according to internal monitoring data, 5,245 individuals demonstrated use of new child health and nutrition practices, and 3,373 individuals demonstrated use of new safe food preparation and storage practices.

As for school infrastructure, as was found at midterm, both boys and girls had equal and reliable access to latrines. Most schools had clean and accessible kitchens, and all schools had storerooms. Access to drinking water and practice of proper handwashing techniques remained areas for improvement. At endline, 30.00 percent of schools had no drinking water available, and in 27.78 percent of schools, less than 25 percent of learners washed their hands. Although the project did not incorporate activities to build or rehabilitate water infrastructure or latrines, it is important to highlight this infrastructural limitation related to student health and their experience at school.

4.2 Lessons Learned

With the changes analyzed between baseline, midterm, and endline reading outcomes, the special study conducted of the project activity to build the capacity of SMCs, and other various metrics compared between midterm and endline, this evaluation presents multiple lessons learned for the project:

1. **Project interventions to support literacy did not have the desired effect necessary to reach project goals, which prompts questions about their design and whether the foundational skills required for reading with comprehension are adequately addressed.**
   While reading outcomes levels did significantly improve in some subtasks from baseline to endline, scores remained unchanged from midterm to endline. Future projects centered on literacy in Guinea-Bissau should review the approach used for MeREECE and determine what aspects may need to be revised, as detailed in the recommendations section.
2. **Exposure to Portuguese in and out of the classroom is directly related to higher literacy levels.**
   This finding was established at baseline and further solidified at midterm and endline. Future projects should consider how to incorporate more instruction on Portuguese language skills, especially vocabulary, oral language, and syntax, as these foundational skills are essential to develop to be able to read fluently with comprehension.
3. **Although the project's work on increasing infrastructure for kitchens, storerooms, and latrines has been successful, it could not improve access to water at schools as part of its design due to budget constraints, which may have limited the impact of the feeding program.**
   For future projects in the target regions, although some resources should be allocated to maintenance of storerooms, kitchens, and latrines, the majority of infrastructure resources should be directed toward providing water to those schools without any access to it and improving the sources of water for schools with poor access to water.

[38] Baselines were not set during the baseline evaluation because the data could not collected due to safety procedures put in place for COVID-19.

4. **Communities are willing to become more active participants in their schools if partners effectively engage with them and follow through on their own commitments, as community-based respondents in FGDs said MeREECE did but local government authorities typically did not.**
   Once MeREECE began its work in communities and delivered on its objectives, communities noticed and eagerly gave what they could—even financial contributions to mitigate the effects of teacher strikes and suspensions. By contrast, communities said they were unwilling to approach the local governmental authorities for support due to their beliefs that officials will never follow through on their promises.
5. **If the project does not focus on long-term strategic planning for sustainability with SMCs, short-term successes are in danger of not continuing once the project closes.**
   It was unclear from FGDs and KIIs with community members the extent to which MeREECE implementing partners had begun any discussions centered on sustainability, and the challenges that schools and communities will face once the project closes were palpable in the concerns voiced by community members and MeREECE staff about some project activities' long-term prospects of sustainability.

6. Recommendations

5.1 Project Recommendations

1. **Concentrate on boosting children's foundational reading skills in future literacy projects.**

Although the project's key indicator centers on reading fluently with comprehension, it is clear from the EGRA results that in addition to trouble with reading comprehension, children are also struggling to master the building blocks needed before doing so—including decoding, reading familiar words, and identifying initial sounds. For future projects, teaching and learning materials should be reviewed to determine if enough time and attention are being devoted to these fundamental skills in the classroom. The training design for instructional training should also be examined to see if teachers are receiving enough support and follow-up on how to teach these building blocks of reading in the classroom. Vocabulary is also an essential component of reading fluency and comprehension. Teacher trainings, materials, and instructional time should prioritize vocabulary in Portuguese.

2. **Conduct further research on specific activities that may impact children's reading skills, including pilot reading clubs and libraries in project schools, and examine reasons how general reading interventions could be revised through a full review.**

Although MeREECE implemented certain pilot interventions designed to augment classroom-based activities, including the establishment of 50 libraries and 63 reading clubs, their impact could not be researched with the baseline, midterm, and endline evaluations. When sampling schools at baseline, evaluators were not aware of which specific schools received these pilot reading interventions; therefore, data collection tools were not aligned to assess the impact. However, these pilot interventions are promising and warrant further investigation, especially in the schools with both reading clubs and libraries, of which there were at least 21, according to internal MeREECE documents. In addition,

MeREECE should perform a full review of its literacy activities to determine how they could be improved, including consulting any fidelity of implementation data it may have collected.

3. **Examine the Portuguese language abilities of learners and teachers.**

Overall, learners' performance on the reading assessment may indicate that they have a limited ability to understand spoken Portuguese. Learners who had higher exposure to Portuguese at home had higher scores on the reading passage subtask, as reported in findings section. Teacher training should both document the level of fluency and degree of comfort teachers have with Portuguese, but more importantly emphasize the importance of teaching literacy skills in the official language of instruction. Training materials should highlight the importance of using the official language of instruction, but also provide resources for teachers who may not demonstrate mastery of the language. In areas were lower-level fluency with Portuguese among teacher is high, the project should consider producing materials for teachers, primarily guides, in two languages—Portuguese and the local language.

4. **Future project funding should consider efforts to expand activities, including those related to school infrastructure, WASH, and girls' education.**

With its budget, the project could not implement all the activities that could be beneficial to schools, including improving access to clean water and sanitation and improving school infrastructure. The need for WASH interventions was apparent at project schools. At endline, nearly one-third of schools (30.00 percent) did not have access to water, and 15.56 percent of schools had access to water that was likely unsanitary, including unprotected inground well or spring water or untreated rainwater. Improving water access should be coupled with more robust WASH interventions, including school-led, sustainable management of WASH services, group handwashing to promote proper techniques, and consistent application of key hygiene practices. Further, in an FGD, MeREECE personnel shared their wishes for additional funding for school infrastructure, with one staff member recounting how some project schools were makeshift structures without desks, forcing children to sit on the ground holding a notebook with their legs. Another staff member added that the project could also improve its interventions targeted at girls, specifically "better incentives to make schools continue to be attractive for girls."

5. **Determine why some project kitchens do not meet standards of cleanliness.**

Despite MeREECE conducting initial and refresher trainings with more than 2,000 individuals on safe food preparation and storage over the course of the project, both internal project monitoring data and endline data found that some kitchens were not fully clean—28 percent and 36 percent, respectively. For internal data, the project's criteria for concluding if a kitchen was clean included cooks' knowledge of health and nutrition, as well as the cooks' practices. This internal data should be examined to see whether the more pressing issue with cooks in kitchens that did not meet cleanliness standards was their knowledge or their practices. If cooks' practices are determined to be an issue, the reasons behind the lack of proper preparation and storage practices should be investigated, including triangulating data related to access to clean water.

6. **Identify the drivers of teachers' and students' attendance rate increases from baseline to endline, as well as the reasons that rates did not meet project targets.**

There were mixed results for the attendance rates of students and teachers. Although they modestly increased from baseline to endline for students overall (63.77 percent to 73.61 percent), men teachers

(47.78 percent to 64.92 percent), and women teachers (54.42 percent to 61.76 percent), the endline rates were below the project targets of 75 percent for students and 70 percent for teachers. To understand these trends, the project should investigate not only what may have driven the increases, especially for men teachers, but also what may have tempered them despite the widespread popularity of the school canteens, according to qualitative data. As for teacher attendance, the effects of the training, evaluation, and recognition of teachers in promoting attendance should be weighed against the effects of any unresolved labor unrest or other challenges facing teachers in reducing attendance. In addition, several issues related to enrollment and attendance records should be examined. First, there was a notable discrepancy between the overall enrollment increase noted in project records from baseline to endline—78,788 to 93,721—and the slight decrease in the average enrollment at sample schools from baseline to endline—261.46 to 254.07. Second, although 81 of 90 school directors interviewed said that they tracked the reason for learners' absences, including those that are health-related, 38 of the 81 school directors said there had been no health-related absences in the past two weeks, which seems highly unlikely.

7. **Future project designs should incorporate the same successful activities the project used to strengthen SMCs so that communities, not just schools, are engaged in improving teaching and learning conditions at school.**

The benefits of engaging SMCs and other community governance structures were apparent from the KIIs and FGDs conducted with SMCs, other community members, and MeREECE personnel. Certain improvements to school infrastructure and operations may only be attainable through the contributions of community members, including the cleaning of school grounds, the repair of school infrastructure, and the supplementing of school canteen programs with local food. The community's involvement seems especially necessary when governmental authorities are not trusted to be viable partners and, at times, directly impede the project's objectives, as was the case in some communities participating in qualitative data collection. This obstacle emerged when the government suspended teacher salaries and some communities came together to raise money and supplement teacher salaries or hire new teachers.

8. **The creation of a draft roadmap for sustainability of community-based projects should be a milestone included in future project graduation and sustainability plans so SMCs, SILCs, and other community-based organizations can develop sustainable plans well in advance of the project closing.**

In MeREECE's graduation and sustainability plan, although one of the milestones for the national government is the circulation of a draft roadmap by year four for the national school feeding program, no similar roadmaps for guiding community-based structures after the project closes are mentioned as community-based milestones. Only the establishment of SMCs and SILCs are noted as milestones. Similar roadmaps may be helpful to sustaining these structures, based on responses in FGDs and KIIs. When asked what strategies should be used to obtain sustainable support from communities, some community-based respondents seem not to have considered comprehensively what strategies to execute or plans to implement once the project closes. A school director's vague response to how one community will sustain activities exemplifies this fact. He asked at the close of the KII, "Is there the possibility of training people locally who will continue with community assistance actions?" The willingness of the community to participate in project activities is apparent, as the school director reported parents' and guardians' support had been "100 percent" and the SMC's recommended objectives "are always achieved." Therefore, this community is eager for guidance on how to sustain activities but may not have received it.

Annexes

Annex 1: Items for Increased Skills and Knowledge of Teachers

At endline, 88 classroom teachers were observed to gain an understanding of their knowledge of good instructional practices and teaching techniques. Enumerators were asked to observe classrooms looking for 12 specific teaching activities. Composite scores were then created, with each activity receiving up to one point based on the quality and time spent utilizing the technique.[39] Raw frequency tables for each activity are provided below Table 29.

Table 29: Frequency of Quality Teacher Score (out of 12) at Endline

Quality Teacher Score	# of Classrooms	Percentage
1	5	5.7
2	9	10.2
3	12	13.6
4	13	14.8
5	18	20.5
6	13	14.8
7	7	8.0
8	11	12.5
9	0	0
10	0	0
11	0	0
12	0	0
Grand Total	**88**	**100.00%**

- Learning opportunities to support the development of math skills (number sense, time)
- Check if the teacher refers to a lesson plan to structure their math teaching
- Learning opportunities to support the development of literacy skills
- Check if teacher refers to a lesson plan to structure their literacy teaching
- Learning opportunities to develop expressive language skills. These are conversations that take place between the teachers and children throughout the observations. Conversations can occur during lessons, or in between lessons (while transitioning from one activity to another; during free play, etc.).
- Check if the teacher is speaking in the language of instruction
- Book reading to support children's listening and speaking skills

[39] The classroom observations observed both math and literacy activities. In cases where an item was skipped, the item score was treated as zero. Each question was equally weighted. This means that all activities were given a possible score of 1. While some items were treated as a binary yes or no, a number of questions used ordinal response items, asking the enumerator to rate the quality of an activity. In this case each question received a total possible score of 1, with each rating incrementally increasing in value from 0 (e.g., 1-4 will be transferred to 0, .33, .66, 1 respectively).

- Learning opportunities to promote fine motor skills
- Learning opportunities that allow children to engage in gross motor activities
- Learning activities that promote free play or open choice
- Learning opportunities that allow children to engage in Music/Movement activities
- The teacher provides some individualized instruction to children

Response	**Freq**	**Percentage**
Teacher provides some individualized instruction to children		
Teacher: •shows NO awareness that some children have different needs and abilities •uses a one-size fits all approach where all children do the same work and receive the same instruction and support • ignores child who struggles • makes no adaptations for children with special needs).	1	1.1
Teacher: •occasionally shows awareness of individual needs of children by checking for understanding of concepts and providing minimal support.	41	46.6
Teacher: •Looks for children who are having difficulty and gives them help (with or without specific requests for help) •looks for children who are not challenged and gives them developmentally appropriate activities or questions to keep them engaged.	25	28.4
Teacher: •Looks for children who are having difficulty and gives them help (with or without specific requests for help) • Looks for children who are not challenged and gives them developmentally appropriate activities or questions to keep them engaged	21	23.9
Total	88	100
Response	**Freq**	**Percentage**
Check if teacher refers to a lesson plan to structure their math teaching		
Yes	41	46.6
Total	47	53.4
Response	**Freq**	**Percentage**
Check if teacher refers to a lesson plan to structure their literacy teaching		
Yes	37	42
Total	51	58
Response	**Freq**	**Percentage**
Learning opportunities that allow children to engage in Music/Movement activities		
No music/movement activity is observed.	82	93.2
At least one music or movement activity occurred during observation	6	6.8
Total	88	100
Response	**Freq**	**Percentage**
Learning opportunities that allow children to engage in gross motor activities		
No gross motor activity is observed	75	85.2
Less than 10 minutes of gross motor activity is observed or only a few children participate.	5	5.7
Less than 20 minutes of gross motor activity is observed OR less than half of children participate.	4	4.5
Most children engage in at least 20 minutes of gross motor activity	4	4.5
Total	88	100
Response	**Freq**	**Percentage**

Response	Freq	Percentage
Learning opportunities to promote fine motor skills such as writing drawing/painting		
	53	60.2
	1	1.1
	17	19.3
	17	18.2
Total	88	100
Response	**Freq**	**Percentage**
Learning opportunities to support development of math skills number		
No math activities was observed.	37	42
The teacher teaches math concepts ONLY in: • Repetitive activities. Examples include group response to closed-ended questions (such as counting to ten); individual children using a pointer to name numbers; write or copy numbers	18	20.5
Teacher teaches math concepts by using ONE of the following strategies: •Children explore and play with concrete objects to learn concept • Children have some choice in how to carry out an activity • Teacher engages children in discussion, and sometimes uses open-ended questions • Teacher connects lesson to real-life or every-day experiences	20	22.7
Teacher teaches math concepts by using TWO OR MORE of the following strategies: • Children explore and play with concrete objects to learn concept • Children have some choice in how to carry out an activity •Teacher engages children in discussion, and sometimes uses open-ended questions• Teacher connects lesson to real-life or every-day experiences	13	14.8
Total	88	100
Response	**Freq**	**Percentage**
Book reading to support children listening and speaking skills		
	21	23.9
	18	20.5
	24	27.3
	25	28.4
Total	88	100
Response	**Freq**	**Percentage**
Check if teacher is speaking in the language of instruction		
No	16	18.2
Yes	72	81.8
Total	88	100
Response	**Freq**	**Percentage**
Learning opportunities to develop expressive language skills.		
Children are never or rarely invited to tell a story, describe events or objects, or answer any questions throughout the entire observation.	28	31.8
Teacher encourages expressive language skills ONLY by: •Repetitive activities. Examples include group response to close-ended questions (such as asking children to repeat a story or phrases word by word); individual children using a pointer to repeat words or sentences; individual responses to rote or close-ended questions.	25	28.4

Response	Freq	Percentage
Teacher encourages expressive language skills by using ONE verbal exchange activity, such as: •Asking children to describe objects (e.g., color, shape, size, function) or pictures; •Encouraging children to tell stories or describe events •Show and tell •Telling a story and asking children two or more open-ended questions about the story •Repeating and extending what child says, and including more advanced vocabulary Using story telling or discussion to encourage vocabulary that draws connections to the children lives and experiences.	21	23.9
Teacher encourages expressive language skills using TWO OR MORE verbal exchange activities, such as: •Asking children to describe objects (e.g., color, shape, size, function) or pictures; •Encouraging children to tell stories or describe events; •Show and tell •Telling a story and asking children two or more open-ended questions about the story •Repeating and extending what child says, and including more advanced vocabulary •Using story telling or discussion to encourage vocabulary that draws connections to the children lives and experiences.	14	15.9
Total	88	100
Response		
No free choice/open play activity is observed.	81	92
•Teacher chooses where or how children will play with materials •Teacher provides limited choices for activity •children must play with materials in a prescribed way.	1	1.1
Children have ONE opportunity to choose their own activity, where and how they play with materials BUT Teacher does not interact to add to children play or extend learning	1	1.1
Children have ONE or more opportunities to choose their own activity and where and how they play with materials •Teacher interacts to add to children play or extend learning.	5	5.7
Total	88	100
Response		
	Freq	Percentage
Learning activities that promote free play or open choice		
No free choice/open play activity is observed.	81	92
Teacher chooses where or how children will play with materials OR •Teacher provides limited choices for activity AND children must play with materials in a prescribed way.	1	1.1
Children have ONE opportunity to choose their own activity, where and how they play with materials BUT •Teacher does not interact to add to children's play or extend learning	1	1.1
Children have ONE or more opportunities to choose their own activity and where and how they play with materials AND •Teacher interacts to add to children's play or extend learning.	5	5.7
No free choice/open play activity is observed.	88	100
	Freq	Percentage
Learning opportunities to support development of literacy skills		

Response	Freq	Percentage
No literacy activities are observed	40	45.5
Teacher teaches literacy concepts ONLY by: •Repetitive activities. Examples include group response to close-ended questions (such as singing the alphabet, repeating letter sounds); individual children using a pointer to name letters; writing or copying letters	19	21.6
Teacher teaches literacy concepts by using ONE of the following strategies: •Children explore and play with concrete objects to learn concept •Children have some choice in how to carry out an activity •Teacher engages children in discussion, and sometimes uses open-ended questions •Teacher connects lesson to real-life or every-day experiences	15	17
Teacher teaches literacy concepts by using TWO OR MORE of the following strategies: •Children explore and play with concrete objects to learn concept •Children have some choice in how to carry out an activity •Teacher engages children in discussion, and sometimes uses open-ended questions •Teacher connects lesson to real-life or every-day experiences	14	15.9
No literacy activities are observed	88	100

Annex 2: Items for Increased Skills and Knowledge of Administrators

School directors were asked the following questions:

- Do you track the reason for a learner's absence from school in the school registrar?
- Is there a school improvement plan?
- Do teachers have a weekly work plan or lesson plan for each subject?
- Do you review the lesson plan and provide feedback each week?
- How often do schools administrators summarize or compile school metrics?
- Does the school have a time book for recording daily teacher attendance?
- How often are teachers trained or do they meet to discuss best teaching practice?

In cases where an item was skipped, the item score was treated as zero. Each question was equally weighted. This means that all activities were given a possible score of 1. While some items were treated as a binary yes or no, a number of questions used ordinal response items, asking the enumerator to rate the quality of an activity. In this case each question received a total possible score of 1, with each rating incrementally increasing in value from 0 (e.g., 1-4 will be transferred to .25, .5, .75, 1 respectively).

Do you track the reason for a learner absence from school in the school register		
Response	**Freq**	**Percentage**
No	9	10
Yes	81	90
Total	90	100
Is there a school improvement plan?		
Response	**Freq**	**Percentage**
No	46	52.3
Yes	42	47.7
Total	88	100
Do teachers have a weekly work plan or lesson plan for each subject?		
Response	**Freq**	**Percentage**
No	7	7.8
Yes	83	92.2
Total	90	100
Do you review the lesson plan and provide feedback each week?		
Response	**Freq**	**Percentage**
0	2	2.4

1	81	97.6
Total	90	100
How often do schools administrators summarize or compile school metrics?		
Response	**Freq**	**Percentage**
Weekly	6	6.7
Every 2 weeks	13	14.4
Once a month	38	42.2
Once a quarter	26	28.9
Other	7	7.8
Total	90	100
Does the school have a time book for recording daily teacher attendance such as		
Response	**Freq**	**Percentage**
No		
Yes	90	100
Total	90	100
How often are teachers trained or do they meet to discuss best teaching practice		
Response	**Freq**	**Percentage**
Weekly	4	4.4
Every 2 weeks	28	31.1
Once a month	46	51.1
Once a quarter	10	11.1
Other	2	2.2
Total	90	100

Annex 3: Intercorrelation Coefficient

The ICCs from the midterm sample are presented in Table 30. Learner data was clustered at the school level. All other data was clustered at the region level.

Table 30: Midterm Indicator Intercorrelation Coefficients

Indicator	Intercorrelation Coefficient
Initial Sound Identification Score	0.306
Familiar Word Score	0.264
Letter Identification Score	0.359
Oral Reading Fluency Score	0.236
Reading Comprehension Score	0.187
School Director Knowledge Composite Score	0.430
Quality Teaching Composite Score	0.030

Annex 4: Bibliography

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Annex 5: Data Collection Instruments

- Student Survey
- School Director Survey
- School Observation
- Classroom Observation
- FDG Guide: Project Staff
- FGD Guide: School Council Committee
- FGD Guide: Students
- FGD & KII Guide: Parents, Community Members, Local Leaders

This annex is provided as a separate document.

Annex 6: Terms of Reference/Statement of Work for the Evaluation

Terms of Reference for Baseline Study, Mid-Term and Final Evaluation

Catholic Relief Services

Program Name: McGovern-Dole International Food for Education and Child Nutrition Program: MeREECE

Agreement: FFE-657-2019/017-00

Program Period: October 2019- September 2023

Contents

1. Purpose

The double purpose of the terms of reference (TOR) is to describe the methodological requirement for the baseline, midterm and final evaluations *and* to outline the conditions and responsibilities of the consultant(s) who will undertake in Guinea-Bissau these evaluations for the McGovern-Dole project, *Promotion of Educational and Economic Performance in Educative Communities* (Melhoria do Rendimento Escolar e Economico das Comunidades Educativas na Guiné-Bissau), or **MeREECE**. The TOR will also provide the tasks and responsibilities for an external consultant to conduct these evaluations. CRS will engage an independent consultant, following a competitive international bidding process. Assuming a satisfactory work product, the same consultant will be hired for the midterm and final evaluations, thus CRS requests bids for all three evaluations, with a separate budget broken out for each.

Please note this ToR and its annexes are subject to donor approval, and thus may change before contract signing.

The external evaluator should be very familiar with the program Evaluation Plan (Annex 1), and Indicator Performance Tracking Table (IPTT) (Annex 2), in addition to the USDA's Food Assistance Indicators and Definitions and its Monitoring and Evaluation Policy. As of publication of these ToR, the project's Performance Monitoring Plan (PMP) had not yet been developed but is expected by end October. In the meantime, external evaluators can reference USDA's standard indicator definitions, as needed, in preparing a bid in response to these ToR. All evaluation reports will be reviewed in line with Annex 3: Checklist for Evaluating USDA Evaluation Reports (CRS internal).

2. Background

The **MeREECE** program aims to strengthen the education system in Guinea-Bissau and improve literacy of school-aged children in the regions of Oio, Cacheu, Quinara, Bafata and Gabu. CRS will work with its partners, Caritas Guinea-Bissau and Plan International to fully implement the project in 350 elementary schools to reach 199.539 individuals in the five proposed regions.

For more details on the context please refer to the evaluation plan *(Annex 1) section 2), Pages 1 and 2)*

3. Program Evaluation Process

The **MeREECE** evaluation process will involve three phases: a baseline assessment, and both a midterm and final evaluation. CRS is seeking an individual consultant or a research consulting firm to lead its external evaluation process from baseline to endline. The midterm and final evaluation contracts will be dependent on satisfactory completion of the baseline assessment. The midterm and final evaluations will be re-requisitioned if the baseline does not meet quality standards. The methodology and sampling detailed below may require revision based on the results of the baseline and suggestions from the consulting entity.

3.1. Purpose and Scope of the baseline Assessment

The main objective of this baseline is to assess and report on the situation before the beginning of the program. The baseline will seek to verify assumptions and pre-conditions made during project design as well as provide quantitative and qualitative data on the performance measures and identify potential threats to project implementation. The purpose of the baseline study is to establish a reference point and identify any underlying factors impacting literacy, nutrition and health of school-aged children. The results obtained from this evaluation will serve as a basis for comparison with the mid-term and final evaluations.

This baseline data will also be used to adjust the intervention logic of the project against the context if necessary.

Specific performance non-zero value indicators (located in Table 1) will be collected during the baseline. All individual-level data must be disaggregated by gender. Annex 4. CRS Standard Tools contains a Learner Survey and Classroom Observation tool that can assist data collection.

Table 1. Performance Indicators

Performance Indicator	Standard or Custom	Baseline
Number of individuals participating in USDA food security programs	Standard #30	0
Number of individuals benefiting indirectly from USDA-funded interventions	Standard #31	0
Number of schools reached as a result of USDA assistance	Standard #32	0
Number of individuals who demonstrate use of new child health and nutrition practices as a result of USDA assistance	Standard #19	0
Number of individuals who demonstrate use of new safe food preparation and storage practices as a result of USDA assistance	Standard #20	0
% of learners who, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade level text	Standard #1	45%
Number of teaching and learning materials provided as a result of USDA assistance	Standard #3	0
Number of children who receive 1 or more meals per week that include fruits, vegetables, legumes, and/or animal-sourced proteins in addition to the USDA commodities.	Custom	0
Amount (MT) of fruits, vegetables, legumes, and/or animal-sourced foods provided in addition to the USDA commodities (disaggregate by project versus COGES)	Custom	0
Average learner attendance rate in USDA supported classrooms/schools	Standard #2	54%
Number of functional health school clubs created as result of USDA assistance	Custom	0
Number of individuals trained in safe food preparation and storage as a result of USDA assistance	Standard #22	0
Number of individuals trained in child health and nutrition as a result of USDA assistance	Standard #23	0

Performance Indicator	Standard or Custom	Baseline
Number of learners receiving deworming medication(s)	Standard #29	0
Number of schools with improved food prep and storage equipment	Custom	0
% of teachers in target schools who attend and teach school at least 80% of scheduled school days per year	Custom	40%
Number of teachers receiving recognition rewards as a result of USDA assistance	Custom	0
Number of teaching materials or tools developed in USDA assistance targeted school	Custom	0
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	Standard #4	0
Number of teachers/educators/teaching assistants trained or certified as a result of USDA assistance	Standard #5	0
Number of school administrators and officials in target schools who demonstrate use of new techniques or tools as a result of USDA assistance	Standard #6	0
Number of school administrators and officials trained or certified as a result of USDA assistance	Standard #7	0
% of school officials in target schools who demonstrate use of new and quality techniques or tools	Custom	15%
Amount (MT) of staple commodities provided in addition to the USDA commodities (disaggregate by project versus COGES)	Custom	0
Quantity of take-home rations provided (in metric tons) as a result of USDA assistance	Standard #14	0
Number of individuals receiving take-home rations as a result of USDA assistance	Standard #15	0
Average number of days missed per learner per school year due to learner health issues	Custom	30
Number of learners enrolled in school receiving USDA assistance	Standard #9	69,470
Number of individuals participating in group-based savings, micro-finance or lending programs with USDA assistance	FFPr Standard #6	0
Number of daily school meals (breakfast, snack, lunch) provided to school-age children as a result of USDA assistance	Standard #16	0
Number of school-age children receiving daily school meals (breakfast, snack, lunch) as a result of USDA assistance	Standard #17	0

Performance Indicator	Standard or Custom	Baseline
Number of regional Ministry of Education Administrators and municipal authorities trained in school feeding management	Custom	0
Number of sessions held with Ministry of Education officials for advocacy work and national level	Custom	0
Number of policies, regulations, or administrative procedures in each of the following stages of development as a result of USDA assistance	Standard #10	0
% increase of the value allocated for basic education by responsible institutions	Custom	0%
Number of public-private partnerships formed as a result of USDA assistance	Standard #12	0
Number of Parent-Teacher Associations (PTAs) or similar "school" governance structures supported as a result of USDA assistance	Standard #13	0
Number of members of the educational support community (PTA, COGES,) with strengthened capacity to fulfill their roles in educational development	Custom	0
Value of new USG commitments, and new public and private sector investments leveraged by USDA to support food security and nutrition	Standard #11	0
Number of COGES who contribute of fruits, vegetables, legumes and/or animal-sourced proteins per week	Custom	0

3.1.1. Schedule of Baseline Survey Activities

Please refer to the evaluation plan (Annex 1) in section **Calendar of activities** Page 4

3.2. Purpose and Scope of Midterm Evaluation

The **MeREECE** midterm evaluation will be a summative exercise which will consist in examining implementation of program, and providing information and feedback on these, as well as determining the extent of the results achieved. Also, the midterm evaluation will hold after two of implementing helps CRS and stakeholders to learn more about success, to identify obstacles to achieving results and to possibly analyze the first effects of the program.

MeREECE midterm evaluation will apply the same methodology and tools used in the baseline assessment. Midterm findings will also document lessons learned and recommendations for better management and operations. The evaluation will assess progress in the implementation of project activities using the criteria of relevance, effectiveness, efficiency, sustainability, impact of the Development Assistance Committee (DAC), to identify the first indications of the impact of the project.

3.2.1. Schedule of Midterm Evaluation

See Evaluation plan in section **Calendar of activities** Page 9.

3.3. Purpose and Scope of the Final Evaluation

The purpose of the final evaluation is to measure overall project performance as well as desired or unintended outcomes observed in the targeted communities. The final study will present a clearer view of the constraints, lessons learned, best practices, opportunities as well as successful aspects of the project's implementation. Evaluation criteria will cover the DAC criteria of relevance and effectiveness of project strategies, the efficiency of project interventions, and the extent to which objectives have been achieved. The evaluation will also assess sustainability including: the targeted communities' capacity and willingness to take over project activities (e.g. school feeding); APEs' motivation for maintenance of school infrastructures and resources and stakeholder engagement to maintain the benefits of the project. The final evaluation will be based on the same key questions presented in the overall evaluation design and will include additional questions related to lessons learned and recommendations made by key stakeholders (beneficiaries, MoE, MoH, implementing partners, USDA, etc.).

3.3.1. Schedule of Final Evaluation

See Evaluation plan in section **Calendar of activities** Page 10.

4. Evaluation Approach and Methodology

Information in this section, and in Annex 1, outline the standards expected of the external evaluator during data collection and analysis. Justified deviations from these standards, after consultation with CRS, are possible.

The selected consultant or team is expected to determine the best approach and methods that will be used in these evaluations to effectively address all stated evaluation objectives. CRS will provide quality assurance to ensure the evaluation consultant or team use(s) a mixed-methods approach, including quantitative literacy assessments for learners and health; knowledge, attitudes and practices assessments for teachers and; qualitative focus group discussions and key informant interviews with program beneficiaries and stakeholders.

CRS, as an agency, is attempting to standardize tools used in its education sector projects and had developed a Classroom Observation tool and Learner Survey (see Annex 3. CRS Standard Tools). Some of the content in these tools are likely good proxies for measuring a few of the project's IPTT indicators. In addition, CRS can share tools used in evaluation its seven ongoing McGovern-Dole awards.

4.1. Sources of Data and Data Collection Methods

The data collection methodology will be based on evaluation standards and will be repeated during the different evaluations. However, the standard methods will be adjusted to align with project strategies and to improve data quality. The project team will collect questionnaire-based quantitative data (with learners, teachers, school administrators, cooks) using electronic tools. CRS will use structured and/or semi-structured key informant interview guides to gather information from implementing partners, USDA, opinion leaders and local authorities as well as focus group discussion guides to obtain qualitative information from community groups (APE, COGES, and savings and internal lending communities). In addition, observation instruments (e.g. checklists) on the preparation of meals and the diversity of foods consumed by learners will be used to triangulate with survey and focus group data. CRS and the evaluation team will adapt and use ASER[40] and PASEC [41] tools to assess learners' reading levels.

4.1.1. Data Collection Methods:

[40] Annual Status of Education Report (ASER)
[41] Programme d'Analyse des Systèmes Éducatifs de la CONFEMEN (PASEC)

Representative samples should always be selected randomly, ideally from a list or using a random walk, etc. However, often due to resource constraints, sample selection bias does occur. This frequently happens due to security constraints that prevent study teams from reaching an off-limits area or when the rosters from which individuals or clusters are randomly selected are outdated, and it would prove too costly or impossible to locate those randomly selected. In this case, in the limitations section of the evaluation report, describe any sources of bias as best as possible.

For example, if learners are not present in school the day of evaluation, how do absent learners differ from those present? Does a t-test of means show that the proportion of key groups (gender, ethnicity, geographic area)[42] in the sample is the same as those that were not included? If not, how might the sample be biased? How else might learners not present that day be different? Might they not perform as well on literacy tests, etc. because they might frequently miss school?

Sample weights. Sample weights should always be used when providing unconditional descriptive statistics (means or totals) for the underlying population. However, results from regression analyses, would ideally report unweighted and weighted results, and where there are differences, include a discussion of the underlying reasons. For example, observations from a school that has 90 second-graders vs. 30 will carry three times the weight; if there are heterogenous project effects for large vs. small schools (e.g. larger schools have a higher teacher/ learner ratio; this lack of learner attention results in poorer educational outcomes, etc.) then the conditional means might be different for weighted vs. unweighted analyses (Solon, Haider, and Wooldridge 2015).

Clustered or stratified samples and regression analysis. When reporting weighted conditional means from regression analyses, weighted values should use the appropriate weighted counterpart (e.g. weighted least squares, weighted maximum likelihood, etc.).

Additionally, because observations within a cluster are likely correlated, standard errors should always be clustered at the cluster-level (Cameron and Miller 2015). Statistical packages have functions for this; the appropriate function will vary depending on the method of analysis.

Control for any sample stratification in regression analyses by using binary variables for each stratum (excluding one to avoid the dummy variable trap).

Population Proportional to Size (PPS) cluster selection may not appropriate. PPS is a quantitative sample selection methodology commonly used to account for the size of clusters when selecting them in the first stage of evaluation studies, in which every person in every cluster has an equal probability of being selected into the sample. If, in the second stage, a simple random sample is used to select each individual among all individuals in the cluster, then the sample is "self-weighting" and no sample weights need be applied at the analysis stage.

Analysts of data collected via a PPS-selected sample should understand that if the sample was stratified, or if a simple random sample was not used in the second stage, then the sample is not self-weighting and sample weights must be used. Please refer to section 3, P3 for further details on the sampling methodology of the project

At the analysis stage, the Hansen-Hurwitz or Horvitz-Thompson estimators should be used to estimate the sample mean, and variance in any regression models (Hansen and Hurwitz 1942, Horvitz and Thompson 1952).

[42] The analyst may not have much information about learners not present. However, based on leaner names and school locations, they might at least have this information.

When using PPS, the measure of size should be accurate, otherwise it will over- or underestimate the sample variance, as compared to simple random selection of clusters (Thomsen, Tesfu, and Binder 1986), despite using the estimators described below. Even if baseline measures of size are accurate, if using a repeated cross-section (schools are commonly maintained across all three evaluation points) when evaluating in the same clusters at final evaluation and the "size" of the clusters changes notably over time, the same issue of mis-estimating the sample variance will occur.

For all these reasons, using PPS is likely too complex and not appropriate, and therefore not recommended. In lieu of PPS, clusters and individuals can be selected via a random sample, and sample weights used in analysis.

4.1.2. Data Collection Sources and Ideal Sample Sizes

Please see section 3, sampling sub-section, in Annex 1.

4.2. Data Processing and Analysis Procedures

To meet expectations as to how evaluation data can be useful, CRS will engage the recruited evaluation team to determine how to ensure data quality through a quality control system. Data analysis should be descriptive in that it will provide trends (central and dispersion trends, rate, Percentage) in the achievement of results at each measurement period. Because these evaluations will employ representative samples, the significance of the estimators (indicators) will be verified using inferential statistical methods.

The mid-term and final evaluations should, at minimum, check for statistical differences between baseline and respective report values. This will likely be via a t-test; however, a preferred general specification would be:

$$Outcome_{its} = Midterm_t + Final_t + Female_i + Strata_s + \varepsilon_{its}$$

where

- $Outcome_{its}$ is the outcome indicator of interest for individual i at time t (baseline, midterm, or final) in strata s;
- $Midterm_t$is a binary variable taking the value 1 if the data was collected during the midterm evaluation, and zero otherwise;
- $Final_t$is a binary variable taking the value 1 if the data was collected during the final evaluation, and zero otherwise (only relevant at final evaluation);
- $Female_i$ is a binary variable taking the value 1 if individual i is female, and zero otherwise;
- $Strata_s$ is a vector of binary variables for each stratum (excluding one to avoid the dummy variable trap);
- $\varepsilon_{its}$is the error-term that should be clustered at the cluster-level during analysis.

Ideally, a table with each indicator of interest could be presented per row, with the coefficient (or marginal value when using probit/ logit models) and standard errors for the midterm, final, and female indicators in columns. It is not necessary to present marginal values per stratum. The specification can be adapted if the outcome indicator is not at the individual level, not stratified, or not clustered.

5. Audience and Key Stakeholders

CRS will organize sessions to disseminate findings at the local and national level. These sessions will allow the team to present conclusions and gather feedback and interpretation of the data collected from beneficiaries and other key stakeholders. These information-sharing sessions will involve learners, teachers, school administrators, community-based educational support associations (APE, COGES), local

leaders, technical partners, government representatives and USDA representatives. Online information-sharing sessions in the form of webinars will be organized to gather feedback from key stakeholders. CRS will work with implementing partners and other stakeholders to develop recommendations and an action plan related to the evaluation findings. McGovern-Dole project managers will develop concrete next steps for each recommendation, identify responsible parties for each action, and create a timeline for responsible parties to verify completion of each element of the action plan. The action plan will be reviewed at quarterly project meetings.

6. Selection of the Evaluation Team

All evaluations will be conducted by an external independent consulting firm or individual evaluator in coordination with CRS's regional and national MEAL technical advisors and the CRS Program Quality Department. CRS will advertise the ToR for the baseline, midterm and final evaluations together and recruit one consultant or firm to conduct all three studies. The firm will be selected following a competitive, transparent and independent procurement process conducted by CRS procurement team.

The proposal will be assessed using the following criteria:

- Soundness of the technical approach;
- Practicality of the methodologies proposed;
- Timeframe;
- Cost Efficiency and;
- Evaluation consultant qualifications (see below)

7. Evaluator's Qualifications

The expected consultants and/or firm should have strong experience with education programming and evaluations including, in the domains of health and nutrition and school feeding programs. The team should at least be composed of a lead consultant and an associate consultant with the profile below:

Lead consultant

- Advanced degree in social sciences or any related background
- A minimum of 5 years of experience in conducting quantitative and qualitative impact and performance evaluations in similar complex international development programs.
- Experience in conducting research and evaluation of US government international development programs. Preference will be given to those who have experience in USDA McGovern-Dole Food for Education programs.
- Experience in designing or evaluating education, literacy and school feeding programs.
- Experience in designing, using and analyzing international literacy assessments such as PASEC and/or ASER.
- Experience in qualitative evaluation techniques such as key informant interviews, focus group discussions, observations, and case studies.
- Experience in quantitative data collection, statistics/econometrics such as randomized control trials, propensity score matching, regression discontinuity, sample size selection, design effects, questionnaire design, etc.
- Experience evaluating programs in West Africa, preferably Guinea-Bissau.
- Ability to communicate, read, and write fluently in English, Portuguese and other languages as appropriate.
- Willingness to work in remote areas without electricity and running water.

Associate consultant:

- MSC in statistics, Program Evaluation and Measure, international development or related background.
- Experience and knowledge in the use of electronic data collection tools in evaluations
- Background in statistics and evaluation methods that use counterfactual and experimental/quasi-experimental approach, cohort analysis experience will also appreciate.
- Experience in data processing, analysis and reporting
- Strong proficiencies in English and Portuguese are required

8. Evaluation Management

CRS MEAL Technical Advisor, Head of Program, and Deputy Head of Programs (all based in Dakar, Senegal) will led and oversee the evaluation management. They will be supported by teams from WARO and CRS HQ in Baltimore, Maryland. The CRS Operations and Human Resources departments located in CRS' Senegal office will be responsible for contracting external evaluation consultants and other service providers and will work with the MeREECE program team, including the Chief of Party and MEAL Manager, to coordinate logistics of data collection in the field. Project partners will participate in the ToR review, data collection supervision, review of draft reports and stakeholder workshops on evaluation design and sharing of results and recommendations.

9. Deliverables

The recruited Consultant shall deliver the following products in accordance with the validated timeline:

The evaluator is expected to follow American Evaluation Association's Guiding Principles for Evaluators (http://www.eval.org/p/cm/ld/fid=51). Dependent upon participants in the evaluation, the evaluator should specify steps that will be taken to ensure informed consent, confidentiality, and protection of minors. The evaluator should specify steps taken to safeguard data collected and data management procedures to be used in the evaluation. There will be a data rights clause in the signed contract, and the external evaluator should obtain permission from CRS before sharing the final evaluation report with any external party, including posting it to their organization's website.

All deliverables should be completed in English (and data collection tools must also be in Portuguese), be free of typos or grammatical errors, and be a polished document ready for submission to USDA. This means the document contains no factual errors or inaccuracies and citations are properly used.

Deliverables include the following:

- Work plan (including evaluator responsibilities for identifying, interviewing, contracting, training and overseeing enumerators).
- Sampling plan, including if the sample sizes will differ from Annex 1.
- Instruments, data collection manual, and training materials for enumerators (i.e., focus group guides, key informant interview guide, observation checklist).
- Quality Assurance Plan (including training of enumerators and weekly check-ins during data collection.
- Conduct interview with USDA (it is expected USDA will facilitate this exercise by providing the contact person and the means of interview)
- Data sets with accompanying codebook/data dictionary (original paper and/or electronic as well as final, clean electronic data sets with syntax).
  - If the evaluator provides .dta, .do, .sps, or .sav files, they must also provide open source file versions (.txt, .csv, .doc, etc.)

  - If pa of a longitudinal design, an identifier file that links respondent PII with ID numbers in the data file(s)
  - Deidentified transcripts of selected interviews and focus groups and/or data files of coded sections of text from interviews and focus groups
- At baseline only, a 10-page preliminary report, suitable for presentation to USDA, 6 weeks after the end of data collection. The report will only contain:
  - An IPTT for the indicators with non-zero baseline values, including relevant disaggregates;
  - Enough information about the methodology to engender confidence in the data quality. This should include a list of the data collection tools, number and gender of people interviewed, any information about stratification, and any data limitations. Whenever possible, the preliminary report should simply refer to the approved ToR and/ or Evaluation Plan, rather than incorporate the information;
  - Annex with description of team members' qualifications and their positionality.
- Draft Report with one round of edits from CRS and another subsequent round from USDA
- Final Report with the following sections:
  - Executive summary (including brief introduction of program evaluated, key evaluation questions, findings, and conclusions);
  - Background;
  - Evaluation questions
  - Evaluation design including assumptions and limitations;
  - Methodology;
  - Findings;
  - Conclusions, lessons learned and effective practices (if any), and
  - Recommendations (should be clear, concise, relevant, specific and practical, following directly from findings and conclusions established in report);
  - Annex with original scope of work (marked for redaction from final web version);
  - Annex with final data collection instruments;
  - Annex with description of team members' qualifications and their positionality;
  - Annex with additional methodological discussion/ robustness checks as needed.
  - Annex with updated IPTT.
  - Final reports must not contain any propriety or personally identifiable information (PII). PII is any information that directly or indirectly identifies an individual. This information can be used on its own or with other information to identify, contact or locate a single person, or to identify an individual in a specific situation. This may include, for example, a name, national ID number, address, birthplace, etc. PII includes both direct and indirect identifiers that, when taken together, could allow for identification of an individual (such as a village name, gender, age, name, and/ or facial image)."
    - In addition, final reports should not allow for the identification of individual schools or communities. Any list of schools or communities provided should be included as in the report annex, so that it can be easily removed before submitting to USDA for external sharing.
  - Final reports must be compliant with Section 508 of the United States Access Board which requires that information and services are accessible to persons with disability. (See https//section 508.gov/create).
  - A two to four-page summary document, with easily accessible graphics, highlighting the project's key successes, for sharing with a larger audience
  - Presentation of final evaluation to stakeholders
  - A webinar of key findings and lessons learned for CRS globally and USDA (if requested).

10. Ethical considerations

CRS maintains the highest ethical standards for MEAL policies, especially for evaluations in which some informants are children. CRS will commit to respect and enforce research and evaluation ethical requirements for service providers in accordance with current MEAL Policies and Procedures. Respect for

confidentiality and the protection of informants' personal data are essential conditions for all data collection and analysis functions. Therefore, the evaluation team will collect consent from respondents to ensure data privacy protection and responsible ethical considerations in all evaluation and research activities. The evaluation team conducting the assessments will maintain the integrity of the data collection and analysis while also adhering to CRS and USDA policies and procedures on evaluations.

11. Evaluation Resources

CRS and implementing partners will provide to consultant team preparatory, logistical assistance and the following documents.

- MEAL documents and tools such as the project's: results framework, evaluation plan, key performance indicators list, theory of change, learning agenda, existing evaluation reports and case studies (and other available documents as needed)
- Access to a database that includes all 350 schools targeted with demographic and geographical information
- Secondary data available to further understand educational context in Guinea-Bissau;
- Compilation of reference documents (project proposal, periodic reports, etc.)
- Contact details of stakeholders in the implementing zones
- Submitting protocol and compliance information to relevant local and administrative authorities (MoE, MoH, etc.) as needed
- Use of CRS Commd software license, if desired
- Tablets for data collection

12. Structure of Proposal and Submission Guidelines

Consultants or consulting firms wishing to apply to conduct these evaluations should send their CVs, along with a technical proposal that includes at least the following specifications:

- A description of the firm's expertise (maximum 5 pages)
- The different tasks they are planning to undertake in order to fulfill the evaluation's purpose, scope and objectives (2 pages)
- Detailed explanation of the selected methodology (maximum 5 pages)
- A detailed budget with explanatory notes (maximum 5 pages). Bidders must submit a detailed financial proposal for the baseline, midterm, and final evaluation, and special study, not exceeding $400,000 for the three data collection points.
- A sample of similar work undertaken as lead consultant(s) (maximum 5 pages)

The proposal should contain no more than a total of 25 pages of which; technical proposal 20 pages and financial proposal 5 pages. The proposals must be submitted **no later 22 October, 2019 at midnight GMT** to SN_HR@.crs.org

Bids for multiple awards. CRS currently also has an open bid for its newly awarded McGovern-Dole project in Togo and understands that some bidders may be interested in bidding for both contracts. The process is run separately in each country program. Applying for both contracts is acceptable, but country programs do consult each other in these processes. Thus, please note the following:

1) Given that timelines overlap, evaluators should clearly demonstrate they have the bandwidth to produce quality evaluations for both countries, either through expected LOE for overlapping staff members; different staff over specified dates; or the use of different study teams altogether.
2) Evaluators that are currently slated to conduct midterm or final evaluations for other CRS country programs during overlapping timeframes should also include clarity around point 1) above.

Table 3. List of Annexes (attached as separate documents)

Annex Number	**Document**
1	MeREECE Evaluation Plan
2	MeREECE Indicator Performance Tracking Table
3	CRS Report Review Template for USDA Evaluations
4	CRS Standard Tools

Annex 7: Description of Team Members' Qualifications and their Positionality

Melanie Phillips, Ph.D.

Dr. Melanie Phillips is a skilled researcher who uses a combination of empirical methods including survey, experiments, and in-depth fieldwork. She has studied the gender dynamics of women's political representation in African countries and has taught graduate-level courses in data analysis and gender and international human rights. Dr. Phillips brings in-depth skills in quantitative data analysis and experience in all phases of the research process. She holds a Ph.D. from the University of California, Berkeley in Political Science.

Parnika Bhatia, Ph.D.

Dr. Parnika Bhatia is a researcher with more than seven years of experience in the education sector. At School-to-School International, Bhatia works as the technical lead and advisor for several programs, designing tools and analyzing data of research studies for early-grade reading and mathematics assessments. She has also worked on project evaluations related to socio-emotional learning, inclusive education, and education technology. Additionally, she supports capacity building for partners in quantitative research methods.

Bhatia is driven to enable effective and equitable educational outcomes for all students. Her journey as an educator began in India during her tenure with the Teach for India fellowship. Bhatia's academic research examines the neural and behavioral mechanisms of fraction learning in children and adults with and without dyscalculia. Her academic work has been published in international peer-reviewed journals like the Journal of Computer Assisted Learning, Learning Disability Quarterly, Quarterly Journal of Experimental Psychology, and Cerebral Cortex. Bhatia has collaborated with school leaders, teachers, and researchers to work with students with differing cognitive abilities across three countries—India, the United States, and France—before joining STS.

Bhatia completed her master's in education with a concentration in mind, brain, and education at Harvard University and her doctorate in developmental cognitive science at Université Claude Bernard Lyon 1 (France). She speaks fluent English and Hindi as well as beginner-level French and Punjabi.

Drew Schmenner

Drew Schmenner is a senior technical writer and editor.

After serving as a Peace Corps volunteer in Niger, Schmenner was an award-winning newspaper reporter in southern California before returning to the field of international development. He specializes in writing and editing reports and case studies for both qualitative and quantitative studies and serves as a qualitative research advisor on assigned projects. His past responsibilities at STS have included coordinating its electronic data capture and data management efforts across its entire project portfolio and supporting numerous data collection trainings. His time in the field has included trips to the Democratic Republic of Congo, Ethiopia, Liberia, Mali, Nepal, Tajikistan, and Tanzania.

Schmenner earned a Bachelor of Arts in English at Northwestern University and has received two master's degrees: international studies at the University of San Francisco and journalism at the University of Missouri.

Fiona Eichinger

Fiona Eichinger is a technical manager with international experience in project management, education, curriculum development, monitoring, and evaluation since 2016. In her current position and previous role as STS program coordinator, Ms. Eichinger has gathered experience in Malawi, Morocco, Togo, the Philippines, and Nepal. Prior to joining STS, she managed education and social inclusion projects across Europe and the U.S., collaborating with INGOs, local NGOs, government agencies, education institutions, and the private sector.

Ms. Eichinger holds an M.A. in International Relations from Syracuse University, specializing in development and humanitarian assistance. She is professionally proficient in German and Spanish and studies Arabic.

Emily Knowles-Crane

Emily Knowles-Crane is a senior program coordinator providing financial, program, and contract management support to STS's projects.

Knowles-Crane's work in the education sector includes supporting youth employment and life-skills programming in Yemen, Jordan, Palestine, Egypt, and Tunisia; research on early childhood education policy and finance; and literacy tutoring with primary and middle-school students. During her time serving as a Peace Corps volunteer in Ghana, Knowles-Crane partnered with local agricultural extension services on livelihoods resilience and nutrition programming.

Knowles-Crane holds an M.A. in International Relations from Syracuse University, where she focused on humanitarian assistance and development and completed an exchange with Sciences Po, Paris. Knowles-Crane received a B.A. in International Relations and a B.A. in French from Roanoke College. She speaks advanced French.

Annex 8: Indicator Performance Tracking Table (IPTT)

Life-of-project indicator results that did not meet their target are shaded red, those that are close to their targets shaded yellow, and those that surpass their targets shaded green.

#	IRs and Sub-IRs	Related Activity and Indicator	Life of Project (LOP) Indicator Target	LOP Indicator Result	Source
SO1	Improved Literacy of School-Age Children	Percent of learners who, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade-level text	55	0.90	Endline data
		1.1 Improved Quality of Literacy Instruction			
1.1.1	More Consistent Teacher Attendance	Number of teachers receiving recognition rewards	100	120	Project data
		Percent of teachers in target school who attend and teach school at least 80 percent of scheduled school days per year[43]	70	n/a	n/a
1.1.3	Improved Literacy Instructional Materials	Number of teaching and learning materials provided	25,900	86,258	Project data
1.1.4	Increased Skills and Knowledge of Teachers	Number of teachers/educators/teaching assistants trained or certified	1,400	2,489	Project data
		Number of teachers/educators/teaching assistants in target schools who demonstrate use of new and quality teaching techniques or tools	1,050	2,247	Project data
1.1.5	Increased Skills and Knowledge of School Administrators	Number of school administrators and officials in target schools who demonstrate use of new techniques or tools	263	635	Project data
		Number of school administrators and officials trained or certified	370	574	Project data
		Percent of school officials in target school who demonstrate use of new and quality techniques or tools	50	84	Endline data
		1.2 Improved Attentiveness			

[43] It was not possible to measure this indicator as defined because, at baseline, collecting retroactive teacher attendance data was problematic due to school closures and a lack of standardized practices for recording teacher attendance. Therefore, teacher attendance was measured instead by those teachers present on the data of data collection, and this practice was continued at midline and endline so attendance data would be comparable.

#	IRs and Sub-IRs	Related Activity and Indicator	Life of Project (LOP) Indicator Target	LOP Indicator Result	Source
1.2.1	Reduced Short-Term Hunger	Number of children who receive one or more meals per week	120,187	127,653	Project data
		Number of daily school meals provided	36,707,256	27,011,000	Project data
		Number of individuals benefiting indirectly from USDA-funded interventions	470,858	511,380	Project data
		Number of individuals participating in USDA food security programs	197,419	140,656	Project data
		Number of school-age children receiving daily school meals	120,197	127,653	Project data
		Number of students enrolled receiving USDA assistance	120,187	129,387	Project data
1.3	Improved Student Attendance	Average student attendance rate	75.00	73.61	Endline data
1.3.1	Increased Economic and Cultural Incentives	Number of individuals receiving take-home rations	13,378	10,837	Project data
		Quantity of take-home rations provided (in metric tons)	797	165	Project data
1.3.2	Reduced Health-Related Absences	Average number of days missed per student per school year due to student health issues[44]	n/a	n/a	n/a
1.3.5	Increased Community Understanding of Benefits of Education	Number of individuals participating in group-based savings, microfinance, or lending programs	13,125	16,307	Project data
SO2: Increased Use of Health, Nutrition, and Dietary Practices					
2.1	Improved Knowledge of Health and Hygiene Practices	Number of functional health school clubs created	50	98	Project data
		Amount of fruits, vegetables, legumes, and/or animal-sourced foods provided (in metric tons)	84	100	Project data
		Number of schools councils who contribute fruits, vegetables, legumes, and/or animal-sourced foods	350	358	Project data
		Number of individuals trained in child health and nutrition	8,750	7,309	Project data
		Number of individuals who demonstrate use of new child health and nutrition practices	4,200	5,245	Project data

[44] It was not possible to measure this indicator as defined because obtaining accurate data at baseline on learner health-related absences for the prior year was challenging due to school closures. Instead, the baseline data collected was for learner health-related absences in the past two weeks. To add comparable data, the same strategy was followed at midterm and endline.

#	IRs and Sub-IRs	Related Activity and Indicator	Life of Project (LOP) Indicator Target	LOP Indicator Result	Source
2.2	Increased Knowledge of Safe Food Prep and Storage Practices	Number of individuals trained in safe food preparation and storage	2,100	2,118	Project data
		Number of individuals who demonstrate use of new safe food preparation and storage practices	1,400	3,373	Project data
2.3	Increased Knowledge of Nutrition	Number of functional health school clubs created	50	98	Project data
2.5	Increased Access to Preventative Health Interventions	Number of students receiving deworming medication	120,187	75,103	Project data
2.6	Increased Access to Requisite Food Prep & Storage Tools and Equipment	Number of individuals trained in safe food preparation and storage	2,100	2,118	Project data
		Number of individuals who demonstrate use of new safe food preparation and storage practices	1,400	3,373	Project data