

# Evaluation of the Promoting Autonomy for Literacy and Attentiveness Through Market Alliances (PALAM/A) Project

## Baseline Report

---

Adria Molotsky, Chinmaya Holla, Hannah Ring, Pooja Nakamura, Andrea Coombes, Varsha Ranjit, and Ann Weber

APRIL 2022



Advancing Evidence.  
Improving Lives.



# Evaluation of the Promoting Autonomy for Literacy and Attentiveness Through Market Alliances (PALAM/A) Project Baseline Report

---

Adria Molotsky, Chinmaya Holla, Hannah Ring, Pooja Nakamura, Andrea Coombes, Varsha Ranjit, and Ann Weber

APRIL 2022



**AIR® Headquarters**  
1400 Crystal Drive, 10th Floor  
Arlington, VA 22202-3289  
+1.202.403.5000 | **AIR.ORG**

Notice of Trademark: “American Institutes for Research” and “AIR” are registered trademarks. All other brand, product, or company names are trademarks or registered trademarks of their respective owners.

Copyright © 2022 American Institutes for Research®. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, website display, or other electronic or mechanical methods, without the prior written permission of the American Institutes for Research. For permission requests, please use the Contact Us form on [AIR.ORG](https://www.air.org).





# Contents

---

Executive Summary.....	1
Study Design .....	2
Summary of Findings .....	2
Recommendations .....	4
Introduction .....	5
Background and Context .....	6
PALAM/A Program .....	7
Program Description .....	7
Theory of Change.....	9
Methodology.....	13
Evaluation Criteria and Evaluation Questions .....	13
Evaluation Design.....	15
Baseline Findings.....	20
1. Sample.....	20
2. Sample Composition .....	21
3. Sample Characteristics.....	21
4. Awareness and Understanding of PALAM/A Project.....	23
5. Baseline Status of School Facilities .....	23
6. Literacy and Schooling .....	30
7. Health, Nutrition, and WASH Practices .....	42
8. School Feeding Program .....	72
Limitations.....	76
Conclusions .....	79
Recommendations and Next Steps.....	80
References .....	82
Annex A. PALAM/A Indicators .....	88
Annex B. Inter-Rater Reliability.....	91
Annex C. Terms of Reference.....	92
Annex D. Data Collection Instruments.....	112

# Exhibits

---

- Exhibit 1. Overview of MEL Approach ..... 6
- Exhibit 2. Theory of Change ..... 10
- Exhibit 3. Sample Sizes From Each District for the Project Evaluation ..... 16
- Exhibit 4. Select Outcome Measures for Project Evaluation ..... 18
- Exhibit 5. Baseline Respondent Types and Research Objectives..... 19
- Exhibit 6. Baseline Qualitative Data Collection Overview ..... 20
- Exhibit 7. Number of Individuals Surveyed..... 21
- Exhibit 8. Sex Distribution of Individuals Surveyed ..... 21
- Exhibit 9. Household Size and Preschool Attendance ..... 22
- Exhibit 10. Household Possession of Assets ..... 22
- Exhibit 11. Main School Infrastructure ..... 24
- Exhibit 12. Water Facilities ..... 26
- Exhibit 13. Toilet Facilities ..... 28
- Exhibit 14. School Meal Preparation ..... 30
- Exhibit 15. Attendance Trends in the Student Sample ..... 31
- Exhibit 16. Reasons for Missing School..... 32
- Exhibit 17. Means of Getting to School ..... 33
- Exhibit 18. Time Taken to Reach School ..... 34
- Exhibit 19. Languages Spoken at Home..... 35
- Exhibit 20. Home Literacy Environment Indicators ..... 36
- Exhibit 21. Languages in Which Reading Materials Are Available at Home ..... 37
- Exhibit 22. Letter Recognition..... 38
- Exhibit 23. Distribution of Letter Recognition Scores..... 39
- Exhibit 24. Word Recognition ..... 39
- Exhibit 25. Reading Comprehension..... 40

Exhibit 26. Writing and Spelling Ability.....	40
Exhibit 27. Receptive Vocabulary .....	41
Exhibit 28. Importance of Children Eating At or Before School .....	42
Exhibit 29. Proportion of Respondents Reporting It Is Important for Children to Have Different Types of Foods at Meals.....	43
Exhibit 30. Proportion of Respondents Reporting It Is Difficult for Children to Have Different Types of Foods at Meals.....	44
Exhibit 31. Knowledge of Food Groups Constituting Nutritious Meal .....	44
Exhibit 32. What Makes a Child Grow?.....	45
Exhibit 33. SMP Perceptions of Importance and Commonality of Nutrients .....	45
Exhibit 34. SMP Identification of Signs of Nutrient Deficiency in Children .....	46
Exhibit 35. SMP Identification of Plant-Based Protein Sources.....	47
Exhibit 36. Reasons Children Should Avoid Too Much Sugar .....	48
Exhibit 37. Proportion of SMPs Who Agree or Strongly Agree Symptom Can Affect Safety of Food Being Prepared .....	49
Exhibit 38. SMP Knowledge of Proper Handwashing Behaviors .....	50
Exhibit 39. SMP Meal Preparation Area Cleaning Behaviors – Before Preparation.....	51
Exhibit 40. SMP Meal Preparation Area Cleaning Behaviors – After Preparation .....	52
Exhibit 41. SMP Proper Food Storage Methods .....	52
Exhibit 42. Perceived Likelihood of Children Getting Sick from Food that Was Not Stored Properly.....	54
Exhibit 43. Proportion of SMPs Who Know About Raw Meat Contamination.....	54
Exhibit 44. SMP’s Potential for Contamination .....	55
Exhibit 45. SMP Knowledge of When Food is Cooked, Safe, and Ready to Serve.....	56
Exhibit 46. SMP Knowledge of How to Prep Raw Fruits and Vegetables .....	57
Exhibit 47. SMP Cooking Water Sources.....	57
Exhibit 48. SMP Student Beverage Water Sources.....	58
Exhibit 49. Perceived Importance of Safe Water - SMPs.....	59
Exhibit 50. Perceived Benefits of Boiling Drinking or Cooking Water - SMPs .....	60
Exhibit 51. School Drinking Water Sources.....	61

Exhibit 52. Perceived Importance of Safe Water - Teachers .....	61
Exhibit 53. Perceived Benefits of Boiling Drinking or Cooking Water - Teachers.....	62
Exhibit 54. Reported Behaviors for Children’s Proper Latrine Usage.....	63
Exhibit 55. Moments Children Should Usually Brush Their Teeth.....	64
Exhibit 56. Perceived Importance of Children Brushing Their Teeth .....	64
Exhibit 57. Proportion of Teachers Describing Proper Handwashing Technique.....	65
Exhibit 58. Proportion of Teachers Who Know Five Key Moments to Wash Hands .....	65
Exhibit 59. Perceived Importance of Children Washing Their Hands.....	66
Exhibit 60. Teacher Familiarity and Knowledge of Trachoma .....	67
Exhibit 61. Teacher Familiarity and Knowledge of Dengue Fever .....	68
Exhibit 62. Teacher Familiarity and Knowledge of Intestinal Worms.....	68
Exhibit 63. Teacher Familiarity and Knowledge of Bilharzia.....	69
Exhibit 64. Teacher Familiarity and Knowledge of Covid-19 .....	69
Exhibit 65. Reported Reactions to a Student Testing Positive for Covid-19.....	70
Exhibit 66. Feeding Assistance .....	72
Exhibit 67. Actors and Their Roles in the Government Meal Program.....	73

## Executive Summary

---

While Sri Lanka has made commendable progress toward universal enrollment in primary school, there is wide variation in students' academic outcomes. Student performance in the Northeast lags more developed regions of the country (Little et al., 2011; O'Donnell et al., 2018) and has worsened in recent years (National Education Research and Evaluation Centre [NEREC], 2015). Nutrition and sanitation challenges—also more pronounced in the Northeast—may constitute added obstacles for children attending school. Children in Sri Lanka who are stunted and wasted have below-average test scores (Aturupane et al., 2014), and many Sri Lankan children also lack vital micronutrients such as iron and vitamin A (Jayatissa et al., 2014; Abeywickrama et al., 2018). Water, sanitation, and hygiene (WASH) facilities in Sri Lankan primary schools also remain a challenge: Seventeen percent of schools do not have drinking water facilities, and only half have adequate sanitation infrastructure (Clarke et al., 2016).

### Program Description

In response to the nutrition and sanitation challenges in Sri Lankan primary schools, Save the Children (SC) is launching the Promoting Autonomy for Literacy and Attentiveness Through Market Alliances (PALAM/A) project. PALAM/A will work to ensure that Sri Lanka's school meal program is well targeted and responsive to children's needs by strengthening government capacity and partnerships to ensure contribution and accountability of local communities and program stakeholders. The two primary objectives of the PALAM/A project are (a) to improve the literacy of school-age children and (b) to improve their nutritional status and diet diversity and decrease health-related absences.

The PALAM/A project aims to improve literacy outcomes by improving student attentiveness and teacher capacity, as well as by providing opportunities for engaging in reading with caregivers and after school. Student attendance and attentiveness in school will increase based on improved food safety and nutrition practices, connections to supply partners, and facilities that schools use to provide children with nutritious meals. The increased presence and attention in the classroom will also improve students' opportunities to learn. By producing new literacy materials and providing teachers with training and recognition, the PALAM/A project aims to improve the capacity of schools and teachers to teach early grade reading. Finally, the project will also build capacity among parents and caregivers on strategies to improve literacy and provide an opportunity for children to engage in after school reading activities in Children's Literacy Clubs.

## Study Design

SC contracted the American Institutes for Research (AIR) to conduct mixed-methods monitoring and evaluation (M&E) for the PALAM/A program. AIR's main objectives are to examine the *relevance, effectiveness, and sustainability* of the program while also exploring the *fidelity of implementation*, supporting the *monitoring, evaluation, and learning* (MEL) of the program, and assessing the *quality and equity* of program outputs and outcomes. This report presents findings from the baseline evaluation of the program.

Quantitative tools captured information on students' literacy and the knowledge, attitudes, and practices (KAP) of teachers and SMPs with respect to appropriate child health and nutrition practices. We assessed the KAP of SMPs regarding safe food preparation and storage practices. Quantitative methods provide objective measures of these outcomes, and statistical analysis of such data will help explain trends in these outcomes over the life of the PALAM/A project. The project evaluation is similar to program monitoring, and thus we report descriptive statistics on all performance indicators and assess trends and changes over time. Assessment data was analyzed descriptively to identify baseline values of students' literacy outcomes. Similarly, we descriptively assess health and nutrition KAP of teachers and SMPs.

The qualitative component of the evaluation identifies and analyzes the structural and contextual factors (economic, sociocultural, governance, etc.) that affect and help explain the relevance, effectiveness, equity, and sustainability of the PALAM/A program. The baseline qualitative sample includes 14 schools or communities (two schools or communities per program district). At baseline, we interviewed school principals, SMPs, SDS members, and government officials at the district and local levels. The qualitative baseline phase focused on understanding the initial state (i.e., prior to program implementation) of school meal provision, attendance and literacy rates, school infrastructure (e.g., kitchen and WASH facilities), and nutrition and dietary knowledge and practices among students, teachers, and parents.

## Summary of Findings

Baseline results largely confirmed the relevance of the literacy and nutrition programming planned under the PALAM/A project, particularly regarding the appropriateness of the following planned aspects of program implementation:

- ***Widespread infrastructure improvements, especially designated kitchen spaces and distribution of additional kitchen equipment.*** Respondents emphasized the need to improve the delivery of school meals, particularly through designating areas in schools for food preparation and improving the availability of kitchen equipment and utensils.

- **Teachers need training on nutrition and WASH best practices that go beyond basic information.** Most respondents considered teachers to be the best means of disseminating information to both students and parents, and thus training in nutrition and food diversity to improve their knowledge will likely increase the amount of nutritional and dietary information possessed by students and parents.

Below we summarize key baseline findings related to school facilities, literacy, attendance, and nutrition.

### ***School Facilities***

Respondents emphasized the need for more physical space within classrooms and clean water supplies. Overall, only 46% of the schools had classrooms that were in good physical condition. Kilinochchi fared well on this metric, where 76% of the schools had classrooms in a good physical condition. As for infrastructure to support learning, most schools (69%) also had inadequate space. Less than half of the schools surveyed (36%) had any library space. Further, the water supply was not clean and affected the safety of students, teachers, and principals.

### ***Literacy***

Baseline data from the student assessment revealed that while students generally showed proficiency in emergent literacy skills such as oral vocabulary knowledge, letter recognition, and word recognition, Grade 2 students' reading comprehension skills remain low. We define competency on the comprehension assessment as the ability to answer at least 80% of the questions correctly. Overall, only 24% of the students could comprehend the text based on this definition of competency.

### ***Attendance***

Baseline data indicate that attendance was consistently high, except for in Kilinochchi. However, attendance consistently dropped during rainy season in all areas. The most cited reason, by far, for missing school was sickness. Seventy-five percent of the students who had missed a day of school in the week prior to the survey identified sickness as their reason for doing so. In addition, there seemed to be room for improvement in attendance monitoring.

### ***Nutrition***

Monitoring of indicators related to children's nutrition seemed to be relatively consistent, and respondents were aware of some of the basic indicators that were important for children's health and nutrition. However, while teachers and SMPs reported receiving information and training on children's health and nutrition, their knowledge was inconsistent and varied widely across PALAM/A project districts.

Respondents identified several key strengths of the government meal program, most notably that meals were nutritious and well-liked by students. There were also some challenges, however, mostly with the allocation of 30 Rs per child meal, which respondents indicated was not sufficient given current food prices. There was also widespread agreement that payments to SMPs were routinely delayed and sometimes not made at all. Given that PALAM/A will operate through the same structures as the government meal program, it is relevant to consider these strengths and challenges as the program launches.

## Recommendations

Based on the baseline data collection, we recommend that SC consider the following recommendations for program implementation:

- **Plan stopgap measures for increasing attendance during rainy season.** Because attendance was relatively consistent except for during rainy season, the program could consider approaches to increasing attendance during rainy season, or potentially planned lending of materials to students when travel is not possible.
- **Build on the current system to ensure the continuation of attendance, literacy, and nutrition monitoring.** Because attendance monitoring seemed to be inconsistent, the program could build on the existing efforts to ensure the sustainability of attendance monitoring, as well as the monitoring of other indicators associated with literacy and nutrition.
- **Provide tailored training on children's nutrition, health, and WASH based on teachers' and SMPs' baseline knowledge.** While all teachers and SMPs were knowledgeable about children's health and nutrition to some extent, there was wide variation in the level of knowledge and reporting of correct practices being implemented across the program districts. Instead of targeting all districts with the same information, districts should be targeted with the knowledge they are lacking to maintain interest and improve KAP.
- **Work with the Government of Sri Lanka to determine whether an adjustment to the price per meal is feasible.** Respondents widely agreed that the current allotment (Rs 30 per student meal) is insufficient given current food prices. School meal providers pointed to how allocations for school meals have not reflected the changes in food prices in the past decade. For example, the price of an egg is Rs 25, and capping the allowance per meal at Rs 30 makes providing meals unmanageable. A respondent suggested that increasing the allowance from Rs 30 per meal to Rs 45–50 will help school meal providers meet their responsibility. Further, reducing delays in compensating school meal providers is recommended.



## Introduction

---

While Sri Lanka has made commendable progress toward universal enrollment in primary school, there is wide variation in students' academic outcomes. Student performance in the Northeast lags more developed regions of the country (Little et al., 2011; O'Donnell et al., 2018) and has worsened in recent years (National Education Research and Evaluation Centre [NEREC], 2015). Nutrition and sanitation challenges—also more pronounced in the Northeast—may constitute added obstacles for children attending school. Children in Sri Lanka who are stunted and wasted have below-average test scores (Aturupane et al., 2014), and many Sri Lankan children also lack vital micronutrients such as iron and vitamin A (Jayatissa et al., 2014; Abeywickrama et al., 2018). Water, sanitation, and hygiene (WASH) facilities in Sri Lankan primary schools also remain a challenge: Seventeen percent of schools do not have drinking water facilities, and only half have adequate sanitation infrastructure (Clarke et al., 2016).

In response to the nutrition and sanitation challenges in Sri Lankan primary schools, Save the Children (SC) is launching the Promoting Autonomy for Literacy and Attentiveness Through Market Alliances (PALAM/A) project. PALAM/A will work to ensure that Sri Lanka's school meal program is well targeted and responsive to children's needs by strengthening government capacity and partnerships to ensure contribution and accountability of local communities and program stakeholders. The two primary objectives of the PALAM/A project are (a) to improve the literacy of school-age children and (b) to improve their nutritional status and diet diversity and decrease health-related absences.

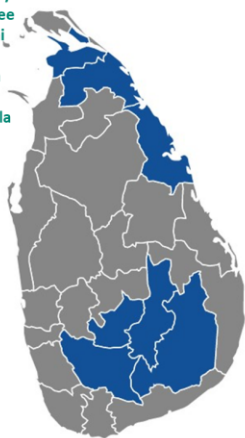
SC contracted the American Institutes for Research (AIR) to conduct mixed-methods monitoring and evaluation (M&E) for the PALAM/A program. AIR's main objectives are to examine the *relevance, effectiveness, and sustainability* of the program while also exploring the *fidelity of implementation*, supporting the *monitoring, evaluation, and learning* (MEL) of the program, and assessing the *quality and equity* of program outputs and outcomes. **Exhibit 1** presents an overview of our approach.

## Exhibit 1. Overview of MEL Approach

### Monitoring and Evaluation of the Promoting Autonomy for Literacy and Attentiveness Through Market Alliances (PALAM/A) Project

#### Sampling: 7 program districts

- Nuwara Eliya
- Trincomalee
- Kilinochchi
- Mullaitivu
- Ratnapura
- Badulla
- Monaragala



#### Five Key Components:

Continuous Project Monitoring & Evaluation

Collaborating, Learning, and Adapting Approach

Dissemination

Baseline Survey 2021

Endline Survey 2023

#### Total Sample:

##### Quantitative:

- 7 Districts
- 820 Schools in PALAM/A
- 84 Schools selected for Project Evaluation
- 869 Grade 2 Students

##### Qualitative:

- 7 Districts
- 2 Communities per district
- 2 Schools per district
- 3 Stakeholders per school

**820** School Observation Checklist



**869** Literacy Assessments



**155** KAP Surveys



**42** Key Informant Interviews



**7** Focus Group Discussions



The baseline report begins with a short literature review and background information on the status of education and the provision of school meals in Sri Lankan primary schools. We then briefly describe the PALAM/A program, introduce the PALAM/A program's theory of change (TOC), and provide a detailed explanation of our approach to the evaluation before presenting the baseline results.

## Background and Context

Although enrollment in primary school (Grades 1–5) is near universal in many provinces in Sri Lanka, wide disparities in student performance exist. More developed regions continue to perform better than the Northeast, which is still recovering from wartime infrastructural losses, including destruction of schools and hospitals, and suffering from a shortage of qualified teachers (Little et al., 2011; O'Donnell et al., 2018). These issues have been linked to high dropout rates and lack of progress in learning outcomes (UNICEF, 2013). According to the most recent national assessment, primary language literacy indicators in the Northeast have declined since 2013 (NEREC, 2015). Plantation workers from the estate sector (Central and Uva Provinces), are a hard-to-reach population that depend on the estate management for their basic housing, health, and education needs; and they also perform below average on key literacy indicators (Shekar et al., 2007; Jayawardena, 2014; NEREC, 2015). While literacy rates remain nominally high in Sri Lanka, 84% of children who sat for their Grade 5 examinations in 2017 received zero points on the essay question (Room to Read, 2018). Moreover, a Room to Read study found that one in four women in plantation communities are illiterate. These results point to often overlooked nuances in national literacy rates that cloud the disparities in

education quality and literacy instruction persisting across the country and most prominently in plantation and estate communities.

Nutrition and sanitation may present significant barriers to attending and staying in school in Sri Lanka, where 21% of children under age 5 are underweight, 17% are stunted, and 15% are wasted (Adukia, 2017; Allison et al., 2019). Undernutrition is largely concentrated in the estate sector and the Northeast, where rates of stunting reach 30% (Department of Census and Statistics [DCS] and Ministry of Health, Nutrition and Indigenous Medicine, 2017). Moreover, poor childhood nutrition contributes to persistent illnesses that reduce time spent in school, which in turn results in poor performance on cognitive tests (Wisniewski, 2010). Lack of vital micronutrients such as iron and vitamin A is also prevalent in Sri Lanka (Jayatissa et al., 2014; Abeywickrama et al., 2018). In addition to adverse effects on cognitive development, micronutrient deficiencies lower children's immune function, which increases health-related absences. Programs targeting these deficiencies have been shown to increase school attendance among Sri Lankan primary school students (Mahawithanage et al., 2007). WASH in schools also remains a major challenge in Sri Lanka: Close to 17% of schools do not have drinking water facilities, and only half have adequate sanitation infrastructure (Clarke et al., 2016). Additionally, while deworming interventions lowered the overall prevalence of intestinal worms in Sri Lanka, the estate sector population continues to have a relatively high prevalence of worms due to poor sanitation (Drake et al., 2014).

## **PALAM/A Program**

### **Program Description**

The PALAM/A project offers an opportunity to ensure that Sri Lanka's school meal program is well targeted and responsive to children's needs. The strategic objectives of the PALAM/A project are to improve (a) the literacy of school-age children and (b) school children's nutritional status and diet diversity and decrease health-related absences. The program addresses these objectives in two ways: through the provision of training and coaching to teachers, school meal providers (SMPs), and government officials and through the construction and rehabilitation of school kitchens and latrines. The following section on the theory of change provides more details on the role and expected outcomes of training and construction.

The current iteration of the government feeding program contracts SMPs to provide a meal in schools with a student population of less than 100 in all provinces except for the Northern Province while the government milk program provides a glass or packet of fresh milk to all Grade 1–5 students. In the Northern Province, students in Grades 1–9 were eligible for the program due to the World Food Program's presence in the region. School eligibility for

government feeding assistance is determined by average attendance instead of enrollment. As of 2019, 8,584 schools were estimated to be benefiting from the program.

The Ministry of Education provides SMPs with a menu containing information about ingredients, appropriate portion sizes, and suggested dishes. SMPs are required to follow the menu, but substitutions for ingredients can be made for religious reasons as well as to accommodate locally available ingredients and seasonality. For example, animal-based foods can be replaced by plant-based protein for Hindu students. Additionally, provision of at least two eggs a week is required, but eggs may be replaced by tofu and mushrooms for Hindu students. Further, zonal and/or provincial nutrition committees can modify the suggested menu after obtaining approval from the Ministry of Education.

Most schools in program districts do not have food preparation facilities, and SMPs are expected to prepare the meals in their own houses. Each SMP is contracted to provide meals for up to 100 students. SMPs deliver meals and/or fresh milk within an hour of the start of school, typically between 7:30 and 8:30 a.m. SC, in consultation with the Ministry of Education and the Ministry of Health, will promote the nutritional value of pink salmon and yellow split peas to SMPs and parents through PALAM/A.

In addition to the promotion of nutritious school meals, the PALAM/A project will rehabilitate and construct kitchens and latrines in program schools as well as codevelop supplementary texts and other reading materials for primary classrooms. All intervention schools will receive packs of books containing high-quality, targeted texts promoting national cohesion; positive gender norms; and improved health and nutrition knowledge, behavior, and attitudes. SMPs will also receive food preparation and storage products to equip their kitchens.

Over the last three years, the PALAM/A project encountered several major challenges which severely constrained program implementation. These challenges included a political crisis, delays in signing government-to-government Memorandums of Understanding (MOUs), the global COVID-19 pandemic, and national elections. In October 2018, the Sri Lankan President dismissed the country's Prime Minister, installing the former President in his place. This government change up led to three months of political uncertainty and caused major delays in obtaining the duty-free entry of the commodities from USDA for the PALAM/A project as well as the selection of project schools, school access, and other start-up coordinating activities. Immediately following the formal resolution of the constitutional crisis in Sri Lanka, the United States government shutdown (from December 22, 2018 until January 25, 2019) during which time SC and USDA staff were unable to work together to move the PALAM/A project forward.

Then, in fall of 2019, SC requested approval to move forward with preparation and planning, specifically in relation to procurement and rehabilitation for baseline activities; however,

despite receiving verbal confirmation the project could move forward, approval was withheld until the government-to-government MOU was officially signed. This MOU was not signed for another six months, causing even further delays to the project.

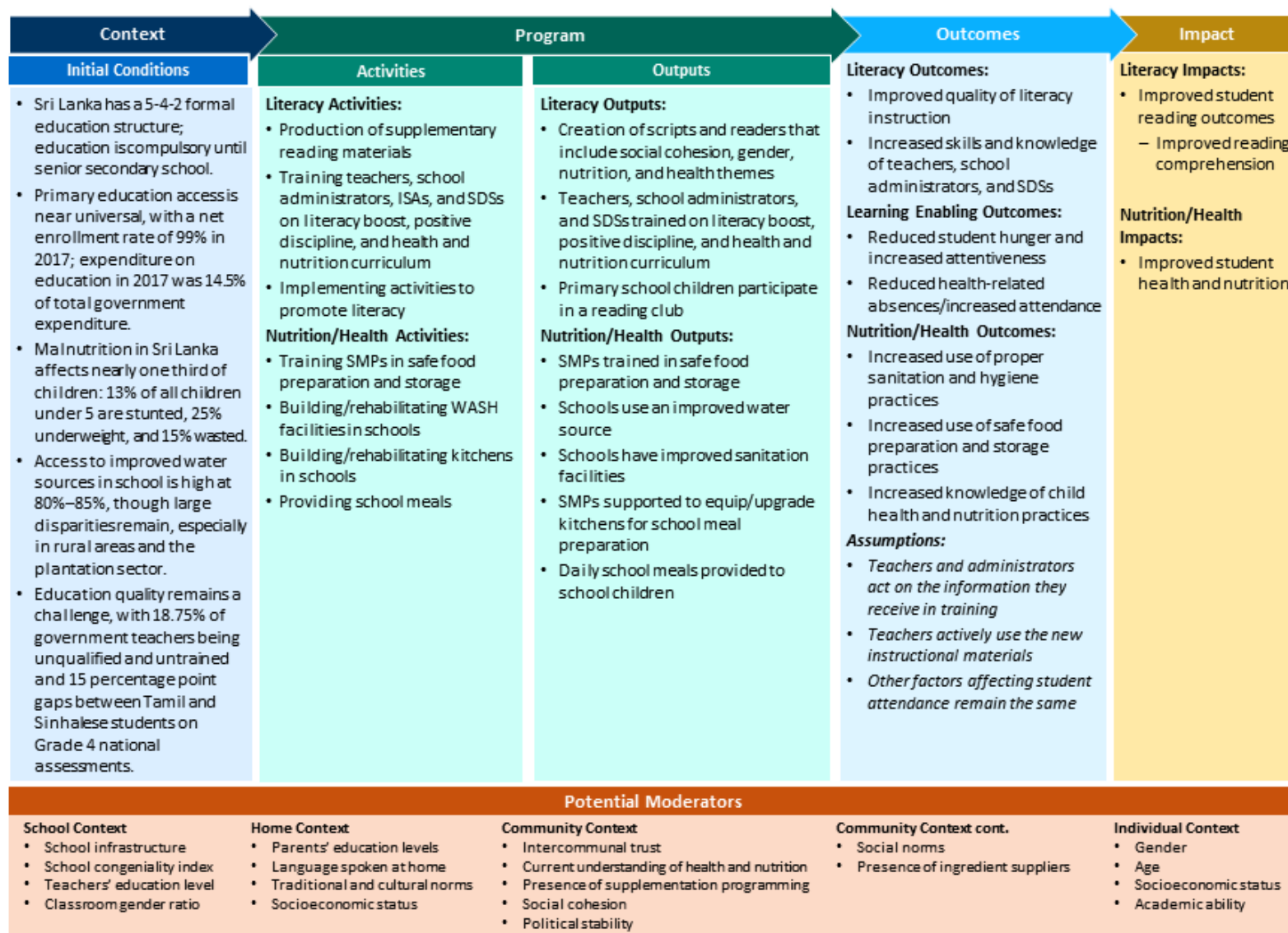
Subsequently, as with many projects globally, the PALAM/A project's school-level activities were significantly delayed by the outbreak of COVID-19. The Government of Sri Lanka closed schools on March 16, 2020 and schools did not fully reopen until late-fall of 2021.

Lastly, national elections took place in Sri Lanka for president at the end of 2019 and for parliament in 2020. The newly elected regime increased their level of scrutiny on NGOs including the level of reporting and government approvals necessary to continue with activities. During this time, the PALAM/A project realized a shift in government priorities, with a focus on increasing the budget for infrastructure improvements within the project scope. SC worked with the government to balance these new requests with the fidelity of the original design. A major project redesign was completed and approved by the Government of Sri Lanka in August 2021. Therefore, in light of all these obstacles, the PALAM/A project will be at least three years delayed in its implementation.

## Theory of Change

Policy-relevant research and evaluation should be based on a theory of change (ToC) that outlines the causal chain among activities, inputs, outputs, outcomes, and impacts and the underlying assumptions (White, 2009). To inform our study design, AIR developed a ToC for the PALAM/A project based on the description of the project components, the results framework, and performance monitoring plan provided in the RFP (see **Exhibit 2**). The ToC is based on the description of the various components of the program in the terms of reference (TOR) coupled with emerging evidence on the linkages between student nutrition and literacy outcomes.

## Exhibit 2. Theory of Change





The PALAM/A project's guiding theory suggests that simultaneous investments in children's nutrition and early grade reading instruction, alongside the provision of training for service providers and cost efficiencies in school meal provision, can help achieve the program's two strategic objectives of (a) improving the literacy of school-age children and (b) improving schoolchildren's nutritional status and diet diversity and decreasing health-related absences. The PALAM/A project aims to improve literacy outcomes by improving student attentiveness and teacher capacity, as well as by providing opportunities for engaging in reading with caregivers and after school. Student attendance and attentiveness in school will increase based on improved food safety and nutrition practices, connections to supply partners, and facilities that schools use to provide children with nutritious meals. The increased presence and attention in the classroom will also improve students' opportunities to learn. By producing new literacy materials and providing teachers with training and recognition, the PALAM/A project aims to improve the capacity of schools and teachers to teach early grade reading. Finally, the project will also build capacity among parents and caregivers on strategies to improve literacy and provide an opportunity for children to engage in after school reading activities in Children's Literacy Clubs.

The PALAM/A project will train SMPs with the goal of increasing their knowledge of child health and nutrition. Assuming the training is effective, the increased knowledge should result in increased use of appropriate practices by SMPs (i.e., safe preparation, storage, and provision of nutritious meals). The combination of school feeding interventions and rehabilitation or construction of school kitchens and latrines will ensure that children will arrive at school ready to study and will receive proper instruction to improve their core reading skills.

The ToC is supported by empirical evidence showing a link between improved health and more time spent at school and in the classroom as well as a link between nutrition and literacy outcomes (Powell et al., 1998; King et al., 2005; Walker et al., 2005; Fernando et al., 2006; Glewwe & Miguel, 2008; Ebenezer et al., 2013; Verguet et al., 2020). For instance, Aturupane and colleagues (2014) found that children in Sri Lanka who are stunted had below-average test scores and that wasted children scored slightly lower than average. Moreover, poor childhood nutrition in Sri Lanka contributes to persistent illnesses that reduce time spent in school, which in turn leads to poor performance on cognitive tests (Wisniewski, 2010). Lastly, Chakraborty and Jayaraman (2019) found that the long-term provision of midday meals in Indian public primary schools improved students' math and reading test scores.

School health and nutrition programs can increase the time students spend in school by targeting some of the major constraints affecting school participation and learning outcomes, such as short-term hunger, iron deficiency, worm infections, diarrhea, and malaria (Bundy, 2011). Studies consistently demonstrate the important connection between nutrition and

schooling (Ebenezer et al., 2013; Powell et al., 1998) and between health status and educational outcomes (Fernando et al., 2006). Improved health and hygiene practices on their own may, however, not be able to meaningfully improve learning outcomes if children also face short-term hunger that is preventing them from concentrating on the material. A study by AIR showed that a remedial education program in Kenya had larger effects on learning outcomes for food-secure households, highlighting the importance of addressing this constraint (de Hoop et al., 2018). A systematic review of school feeding programs by Kristjansson and colleagues (2007) found that such interventions led to weight gain, more consistent school attendance, and better performance on some short-term cognitive tasks among program participants in lower income countries. This finding is consistent with the results of a systematic review that showed positive effects of school feeding programs on learning outcomes (Snilstveit et al., 2016). Furthermore, qualitative research from Sri Lanka suggests that the provision of midday meals may incentivize school attendance (UNICEF, 2013).

A number of key assumptions underlie this ToC and the link between children's nutrition and improved literacy outcomes. First, AIR's research suggests that the link between nutrition and literacy depends on baseline levels of malnutrition and food insecurity. In other words, if the rates of malnutrition in the implementation region are relatively low to begin with, school feeding programs may not have a large impact on enrollment and on literacy outcomes. A systematic review of early grade reading in Latin America and the Caribbean conducted by AIR showed evidence of positive effects of nutrition interventions on early grade reading outcomes in contexts where malnutrition rates were high (Maluccio et al., 2009; Stone et al., 2018). A systematic review by Snilstveit and colleagues (2016) also showed that school feeding interventions increased attendance and literacy outcomes and had a positive effect on enrollment and dropout rates in contexts where food insecurity was high and school participation was low. School officials must also buy into health and nutrition promotion interventions to directly benefit children. If the schools do not take advantage of the improved school infrastructure or strengthened classroom practices that promote reading, then an impact on increased literacy will not carry over to children. In fact, local ownership has been singled out as an important component of a successful school health and nutrition intervention in the Sri Lankan context (He, 2010).

Moreover, the strength of the effect of the PALAM/A project on student literacy and health and nutrition is likely moderated by factors such as a student's underlying academic ability, their socioeconomic background and the alignment of the language spoken at home with the language of instruction in school. For example, students from poorer households likely have higher rates of morbidity than their less socioeconomically disadvantaged counterparts. Accordingly, these students might, for example, require more rounds of deworming medication to affect their health outcomes and school attendance. Likewise, children from poorer



households or plantation estates might have higher rates of malnutrition than their peers and may require a higher “dosage” of the PALAM/A interventions to realize the same impact as their better nourished classmates. In other words, the program may differentially affect students with different characteristics along these dimensions.

Based on the ToC and the program description, AIR has designed a rigorous mixed-methods MEL approach to test the underlying assumptions; track program implementation; and measure program outputs and outcomes. The next section describes our approach in detail.

## Methodology

---

### Evaluation Criteria and Evaluation Questions

AIR’s evaluation assesses PALAM/A’s progress toward the expected outcomes using the results framework and identifies potential issues with the project’s capacity and approach. The research questions (RQs) fall into four primary categories: (a) relevance of the program, (b) effectiveness of the program, (c) sustainability of the program, and (d) equity considerations of the program. We explain and describe the RQs for each theme below.

**Relevance.** Investigating the relevance of the PALAM/A project in this context means assessing the extent to which the project design incorporates the needs of primary school children in Sri Lanka as well as the needs of schoolteachers, administrators, and meal providers. Further, it entails analyzing whether project objectives and strategies were formulated in a realistic and culturally appropriate way. The RQs under this theme test ToC assumptions about program inputs, such as the cultural appropriateness of school meals and literacy interventions ).

- 1.1. Do project stakeholders (e.g., students, parents, School Development Society (SDS) members, teachers, principals, and SMPs) feel that the PALAM/A project is meeting their needs? Why or why not?
- 1.2. Are the in-school meals that include split peas and pink salmon culturally appropriate according to parents?
- 1.3. Do parents, teachers, and principals perceive the educational and instructional materials as culturally appropriate and age-appropriate for primary school students?
- 1.4. Do teachers and principals perceive that the educational and instructional materials improve literacy skills and support the teaching of literacy in the classroom?

**Effectiveness.** Analyzing effectiveness means evaluating the extent to which project inputs and activities led to outputs such as higher quality materials and to what extent they led to outcomes such as improved quality of literacy instruction. The effectiveness of the various elements of PALAM/A will be measured by the extent to which they achieve their objectives relative to the results framework.

2.1. To what extent has the project achieved its output and outcome targets?

2.2. What factors have inhibited or facilitated the achievement of project goals, objectives, and expected results?

**Sustainability.** This theme requires us to assess the delivery of inputs and project activities as well as the linkage between activities and desired outputs to determine to what extent the benefits of the intervention are likely to be sustained and replicated. We will draw lessons from other components of the study (relevance and effectiveness) to assess if the intervention has strengthened capacity in such a way that the benefits of the project are likely to be sustained in the future.

3.1. Do stakeholders feel that PALAM/A's school meal, literacy, and nutrition activities can be sustained at current levels after the project's conclusion? What additional inputs are necessary to achieve sustainability?

3.2. What are the current barriers to achieving sustainability?

**Equity.** Disparities in education exist across multiple dimensions above and beyond attendance and nutrition. There are disparities in the accessibility of learning materials in the classroom, inclusive classroom teaching practices, and classroom disciplinary practices, to name a few. Thus, we will assess equity and exclusion of individuals in Sri Lankan classrooms.

4.1. To what extent are PALAM/A activities targeted equally at all schools, students, teachers, and SMPs? Are there differences by sex, ethnicity, school performance, geography, or rurality?

4.2. Are there any observable trends with respect to the accessibility of learning materials, inclusive teaching practices, and classroom discipline in PALAM/A schools? Are the materials equally accessible to all students regardless of sex, ethnicity, school congeniality index, school performance, geography, or rurality? Are the classroom practices equitably targeted at students regardless of sex, ethnicity, school congeniality index, school performance, geography, or rurality?

4.3. Are schools, teachers, students, and SMPs all equally benefiting from the rehabilitation and construction of school kitchens and latrines? Are there any differences by sex, ethnicity, school performance, geography, or rurality?

The project evaluation's main objective is to establish how performance indicators changed in PALAM/A schools over time. We will employ both quantitative and qualitative methods for the project evaluation. We have designed a mixed-methods approach to answer all RQs, creating synergies in the process. For example, quantitative methods are typically better suited to answering questions about what happened, whereas qualitative methods can better reveal why or how something happened. Below we describe our specific approaches in greater detail. We will first describe our mixed-methods approach to the PALMA/A project evaluation.

## Evaluation Design

The main objective of the evaluation is to assess the extent to which the PALAM/A project is on track to achieving its goals in relation to the literacy, health, and nutrition outcomes (relevance, effectiveness, equity, and sustainability). Insights gleaned from the project evaluation will ultimately be used to identify program components requiring corrective action to better align them with program objectives. Accordingly, we will leverage extant monitoring data continuously collected by SC and its partners during implementation to supplement the primary data collected to assess progress along key performance indicators. The specific indicators used to assess PALAM/A performance have been agreed upon in consultation with SC and USDA during the inception phase.

### *Quantitative Methods*

Quantitative tools captured information on students' literacy and the knowledge, attitudes, and practices (KAP) of teachers and SMPs with respect to appropriate child health and nutrition practices. We assessed the KAP of SMPs regarding safe food preparation and storage practices. Quantitative methods provide objective measures of these outcomes, and statistical analysis of such data will help explain trends in these outcomes over the life of the PALAM/A project.

**Quantitative Sampling.** For the project evaluation, we randomly selected schools in each of the seven project districts in accordance with the district's relative project size, along with proportional sampling relative to the receipt of the intensive literacy programming. Using a planned sample size of 840 students, we randomly selected approximately 10 students (five girls and five boys) from each of 84 schools across the seven districts for the project evaluation, as laid out in **Exhibit 3**. At baseline, we sampled Grade 2 students at the end of the school year, while at endline we will sample Grade 3 students near the beginning of the school year to serve as a proxy for measuring Grade 2 student outcomes.

### Exhibit 3. Sample Sizes From Each District for the Project Evaluation

District	Number of schools in PALAM/A	Number of schools selected for project evaluation	Planned Number of Grade 2 students (10 per school)	Actual Number of Grade 2 students
Nuwara Eliya	251	23	230	232
Trincomalee	115	11	110	118
Kilinochchi	37	3	30	42
Mulaitivu	53	5	50	65
Ratnapura	156	15	150	156
Badulla	202	19	190	194
Monaragala	73	8	80	62
TOTAL	887	84	840	869

AIR and EML administered the literacy and KAP assessment to each sampled Grade 2 teacher (97 teachers) and administered KAP surveys to 20% of all SMPs for the 84 sampled schools (58 SMPs). At follow-up rounds, we will revisit these same 84 schools and will administer assessments to the same sample of Grade 2 teachers and SMPs.

Since there is no comparison group for the project evaluation, we provide estimates of means and frequencies by district and for all PALAM/A schools sampled. Accordingly, in lieu of power calculations, we present margin of error calculations using the formula below. The margin of error tells us the maximum variation in our estimates from the true value. In other words, we can be 100\*(1- $\alpha$ )% confident that an estimate will not differ from the true value by more than the margin of error. The margin of error depends partly on the intracluster correlation (ICC), which measures the extent to which students within schools resemble each other relative to the extent to which they resemble students in other schools. Therefore, we calculate the margin of error as follows:

$$ME = z_{\alpha/2} * \sqrt{r(1-r) * \left( \frac{1 + (m-1) * ICC}{mJD} \right)}$$

where  $m$  is the number of students per school,  $J$  is the number of schools per district,  $D$  is the total number of districts,  $ICC$  represents the amount of variation within a school compared to the variation across schools for a given outcome variable,  $r$  is the rate (mean) of the performance indicator of interest, and  $z_{\alpha/2}$  represents the desired level of confidence. We will sample 10 children per school, and there are, on average, 12 schools in each of the PALAM/A project's seven districts. Assuming an ICC of 0.25 for children missing school due to an illness,

95% confidence ( $z_{\alpha/2} = 1.96$ ), and an indicator rate of 50%, our monitoring approach can obtain an overall margin of error of 0.061. Therefore, based on our sample of Grade 2 students, we can be 95% certain that the estimate we obtain from the results of the literacy assessments will not differ from the true value by more than about 6%.

**Quantitative Instruments and Data Collection.** We used four different quantitative instruments to capture literacy, health, and nutrition outcomes at baseline. All assessments, including the observation tool, were administered electronically by local enumerators in Sinhala and Tamil. AIR staff conducted a week-long training of approximately 100 quantitative enumerators in Sri Lanka with support from our local partner, EML Consultants, including training on the administration of all tools and pilot testing of all instruments on the tablets.

We used a modified version of the *SC literacy boost tool* to capture child literacy outcomes. This assessment encompasses the basic literacy boost tool, which has been locally validated in Sinhala and Tamil, supplemented with field-tested modules covering concept of print and oral language knowledge. Through this tool, we assessed children's letter awareness, single-word recognition, reading fluency and accuracy, reading comprehension, and oral language knowledge. Additionally, we included questions to identify the language(s) spoken at the child's home and the language with which the student and their teacher are most familiar to help us provide more context for the literacy results. These innovative testing elements allowed us to assess emergent literacy skills such as students' understanding of how print functions (skills children often master prior to letter awareness and word recognition).

We captured the *health and nutrition KAP* of teachers and SMPs through surveys administered at the schools. Included are teachers' and SMPs' KAP related to children's health and nutrition and also SMPs' KAP regarding safe food preparation and storage.

We also completed a *school and classroom observation checklist* in all 887 PALAM/A schools at baseline. The observation checklist will be readministered at endline only to those schools selected for inclusion in the student sample. This checklist collected information on the schools' GPS coordinates; student enrollment profile; teacher profile; government school meal program status; principal contact; language medium; school type; school grade levels; congeniality index classification; physical infrastructure, including the availability and quality of WASH resources; and school meal distribution facilities. When schools reopen at endline, we will also assess classroom pedagogy and management.

In future rounds, we will leverage existing M&E data collected at regular intervals by SC and also data from the Ministry of Education to supplement the information obtained via the aforementioned tools. For instance, teachers will collect student attendance data and

administer a nutrition survey to students, reporting all of this information back to the PALAM/A project’s MEAL officers. Such information can be used to confirm and explain the results obtained through our health and nutrition assessment.

**Outcome Measures.** Exhibit 4 shows our main outcome measures for this evaluation.

#### Exhibit 4. Select Outcome Measures for Project Evaluation

Outcome	Data source	Description
<b>Literacy outcomes</b>		
Student literacy scores	Literacy assessment	<ul style="list-style-type: none"> <li>Percentage of students who demonstrate they can read and understand the meaning of grade-level texts</li> <li>Student raw scores for each assessed subskill</li> <li>Percentage of students who demonstrate mastery of each assessed subskill</li> </ul>
<b>Learning-enabling outcomes</b>		
Student attendance	School records	<ul style="list-style-type: none"> <li>Percentage of students attending at least 4 of the last 5 days of school</li> <li>Average student attendance rate</li> </ul>
<b>Nutrition/health outcomes</b>		
Teacher knowledge of health and nutrition	Teacher health and nutrition KAP	<ul style="list-style-type: none"> <li>Percentage of teachers who can identify the components of a healthy diet for children</li> </ul>
Teachers using correct health and nutrition practices	Teacher health and nutrition KAP; school observations	<ul style="list-style-type: none"> <li>Percentage of teachers who demonstrate use of at least one new child health and nutrition practice</li> </ul>
SMP knowledge of child health and nutrition	SMP health and nutrition KAP	<ul style="list-style-type: none"> <li>Percentage of SMPs who can identify the components of a healthy diet for children</li> </ul>
SMPs using correct health (food safety) and nutrition practices	SMP health and nutrition KAP; school observations	<ul style="list-style-type: none"> <li>Percentage of SMPs who demonstrate use of at least one new child nutrition practice</li> <li>Percentage of SMPs who demonstrate use of at least one new safe food preparation and storage practice</li> </ul>

**Quantitative Analysis.** The project evaluation is similar to program monitoring, and thus we report descriptive statistics on all performance indicators and assess trends and changes over time. Assessment data was analyzed descriptively to identify baseline values of students’ literacy outcomes. Similarly, we descriptively assess health and nutrition KAP of teachers and SMPs.

#### Qualitative Methods

The qualitative component of the evaluation identifies and analyzes the structural and contextual factors (economic, sociocultural, governance, etc.) that affect and help explain the

relevance, effectiveness, equity, and sustainability of the PALAM/A program. The baseline qualitative sample includes 14 schools or communities (two schools or communities per program district). At baseline, we interviewed school principals, SMPs, SDS members, and government officials at the district and local levels. See **Exhibit 5** for a summary of baseline respondents and what we aimed to learn from each respondent type.

### Exhibit 5. Baseline Respondent Types and Research Objectives

Respondent type	Method	Objectives
<b>School meal providers (SMPs)</b>	Focus group discussion (FGD)	To obtain an in-depth understanding of the current state of school meal provision, students’ nutrition and literacy, and school facilities prior to program intervention and to learn about the role of SMPs
<b>School Development Society (SDS) members</b>	Key informant interview (KII)	To understand the role of SDS members in supporting positive nutrition, health, and literacy outcomes for students as well as the current state of schools’ infrastructure, particularly kitchens and WASH-related facilities, prior to program intervention
<b>Principals</b>	KII	To understand the current state of schools’ support for children in terms of nutrition, health, and literacy prior to program intervention; what the teaching and learning environment looks like and where the gaps are; and who provides what services to the schools
<b>District and local government officials</b>	KII	To understand the current policy and program landscape of school meal, nutrition, and literacy programs from a district perspective

The qualitative baseline phase focused on understanding the initial state (i.e., prior to program implementation) of school meal provision, attendance and literacy rates, school infrastructure (e.g., kitchen and WASH facilities), and nutrition and dietary knowledge and practices among students, teachers, and parents. The endline phase will build on baseline findings to focus on how stakeholders perceive changes to these conditions as the PALAM/A program interventions are implemented.

**Qualitative Methods.** We used two primary methods for qualitative data collection:

- 1. Key informant interviews (KIIs).** We conducted KIIs with SDS members (14), principals (14), and local- and district-level government officials (14).
- 2. Focus group discussions (FGDs).** We conducted seven FGDs with SMPs.

**Exhibit 6** provides an overview of the baseline qualitative sample.

## Exhibit 6. Baseline Qualitative Data Collection Overview

Round	Activity	Respondent	Count	Total
Baseline (2021)	FGDs and actor mapping component	School meal providers	7	7 FGDs
	KIIs and actor mapping component	School Development Society members	14	42 KIIs
		Principals	14	
		District government officials	14	

**Qualitative Sampling.** In consultation with SC, we purposively selected 14 schools or communities (2 schools or communities in each of seven program districts: Nuwara Eliya, Trincomalee, Kilinochchi, Mulaitivu, Ratnapura, Badulla, and Monaragala) from the quantitative project evaluation random sample. This sampling approach allowed us to analyze key areas of variation relevant to the PALAM/A evaluation. We selected schools or communities based on the criteria below:

- ethnicity;
- geographic distribution (including estate and non-estate areas);
- accessibility; and
- rurality.

**Qualitative Data Analysis.** AIR researchers created a coding structure based on the interview and focus group protocols that served as a preliminary guide for data analysis. By reviewing the coding interview and focus group transcripts (using the qualitative data analysis software NVivo), we were able to identify patterns of response that emerged across categories and individuals (Maxwell, 2005). To ensure the validity of the data analysis, we involved multiple coders in the coding process and undertook qualitative comparisons of coding across coders. After analyzing the data, we synthesized and summarized the findings and interpreted them while triangulating with other data sources.

## Baseline Findings

### 1. Sample

To set benchmark values for performance indicators and to measure progress toward desired outcomes over time, the team selected 840 Grade 2 students across 84 schools in seven districts of Sri Lanka: Badulla, Kilinochchi, Monaragala, Mulaitivu, Nuwara Eliya, Ratnapura, and Trincomalee. Although we aimed to survey 10 students in Grade 2 in each selected school,



challenges in the field related to COVID-19 school closures required the survey team to oversample students in larger schools to meet the quota. In each school, we also intended to survey one Grade 2 teacher to gain insight into their KAP related to children’s health. Additionally, we surveyed a portion of all SMPs covering the 840 selected schools.

## 2. Sample Composition

**Exhibit 7** shows the total numbers of students, teachers, and SMPs who participated in the student and KAP surveys by district. Of the 97 teachers surveyed, 82 were Grade 2 teachers while 15 were Grade 3 teachers.

**Exhibit 7. Number of Individuals Surveyed**

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Total
Surveyed students	194	42	62	65	232	156	118	869
Surveyed teachers	20	4	7	7	32	16	11	97
Surveyed SMPs	11	4	1	9	13	11	9	58

Further disaggregating this information by sex, we see that the project student sample has a relatively balanced sex ratio, as shown in **Exhibit 8**. Among the 869 students, 51.21% were male while 48.79% were female. However, both the teachers and SMPs consist of more females than males.

**Exhibit 8. Sex Distribution of Individuals Surveyed**

	Male		Female	
	%	<i>n</i>	%	<i>n</i>
Surveyed students	51.21	445	48.79	424
Surveyed teachers	14.43	14	85.57	83
Surveyed SMPs	22.41	13	77.59	45

## 3. Sample Characteristics

The average household size reported by second graders across districts was 4.38 members (**Exhibit 9**). Kilinochchi had the highest average number of members per household (4.76),

while Ratnapura had the lowest (3.92). The spread between minimum and maximum household sizes was quite small (the households ranged between 1 and 12 members).

Almost all the students surveyed (94% of the sample) stated that they had attended preschool, highlighting that access to preschool is widespread. Preschool is defined as school that children attend before entering Grade 1. In all the districts, at least 90% of the students indicated that they had attended preschool. In Kilinochchi, 100% ( $n = 42$ ) of the students had attended preschool.

### Exhibit 9. Household Size and Preschool Attendance

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Average size of household	4.71	4.76	4.67	4.46	4.33	3.92	4.24	4.38
Percentage of students attending preschool	91%	100%	93%	98%	93%	96%	92%	94%
Observations	194	42	61	65	232	156	118	868

The households of students surveyed mostly have access to electricity, but there is considerable variation in ownership of mobile phones, radios, and bicycles (**Exhibit 10**). Overall, 95% of the student households have access to electricity, with Nuwara Eliya having the lowest access, at 91%. Of all the students surveyed, 78% noted that at least one person in the household has a mobile phone. This figure, however, varies between 60% in Nuwara Eliya and 90% in Ratnapura. While 64% of the students surveyed mentioned that at least one member in the household has a bicycle, the percentage in Nuwara Eliya is quite low (31%). However, we should interpret these numbers with caution because it is possible that for these products households have substituted more expensive assets such as TVs and motor bikes. For example, in Mulaitivu, even though only 32% households have a radio, 83% have a TV.

### Exhibit 10. Household Possession of Assets

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Electricity	96%	93%	94%	98%	91%	100%	93%	95%
Roof	85%	83%	85%	91%	75%	96%	92%	86%

TV	93%	74%	76%	83%	77%	92%	73%	83%
Mobile phone	76%	88%	82%	86%	60%	90%	89%	78%
Water source at home	82%	57%	61%	82%	36%	92%	100%	70%
Bicycle	60%	98%	77%	88%	31%	73%	89%	64%
Radio	64%	29%	68%	32%	67%	71%	40%	59%
<i>Observations</i>	194	42	62	65	232	156	118	869

#### 4. Awareness and Understanding of PALAM/A Project

Qualitative respondents had inconsistent awareness and understanding of the PALAM/A program. Zonal officials and principals were more likely to be familiar with the program than SMPs and SDSs, but still not all were aware of it. Some recognized that the PALAM/A program provided dry foods (such as dahl and fish) to schools donated through the USDA. Others said they had heard of the program, but could not describe exactly what it was.

#### 5. Baseline Status of School Facilities

##### *Schools and Classrooms*

Schools suffered from varying levels of physical infrastructure and classroom deficiencies by district (**Exhibit 11**). Overall, only 46% of the schools had classrooms that were in good physical condition (i.e., were free from cracks, holes in the roof, walls, or floors, broken windows, or peeling paint). Kilinochchi fared well on this metric, where 76% of the schools had classrooms in a good physical condition. As for infrastructure to support learning, most schools (69%) also had inadequate space. Less than half of the schools surveyed (36%) had any library space.

School grounds, while mostly clean, are not safe for children. School grounds are observed to be safe in only 57% of the schools. In Trincomalee, 39% of the school grounds are reported as being safe, with dangerous materials<sup>1</sup> being accessible to students in 55% of the school grounds. Overall, 83% of the school grounds are reported to be clean. In Trincomalee, only 52% of the school grounds were observed to be clean. Standing water on school grounds and in school buildings appears to be an issue of concern, with only 69% of the schools reported to be

---

<sup>1</sup> Dangerous materials include but are not limited to chemicals, bleach, highly flammable liquids like kerosene and petrol, paint thinner, etc.

free of standing water. A principal from Badulla explained that due to small indoor classroom spaces, teachers conducted lessons outdoors, sometimes where farm animals such as cows grazed, and the environment was unsanitary.

### Exhibit 11. Main School Infrastructure

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
School grounds are clean	82%	88%	93%	61%	90%	98%	52%	83%
School grounds are safe	53%	59%	64%	57%	51%	77%	39%	57%
Dangerous materials are inaccessible to students	76%	71%	53%	84%	74%	66%	45%	68%
School grounds and school buildings are free of standing water	71%	68%	57%	76%	75%	80%	46%	69%
Classrooms are in good physical condition	49%	76%	60%	67%	57%	67%	46%	57%
Students have adequate space for learning activities	59%	91%	67%	81%	42%	67%	55%	59%
School has a library or reading room	33%	85%	58%	88%	20%	35%	24%	36%
Classrooms have reading corners	20%	79%	38%	88%	9%	24%	10%	25%
More than 20 reading materials are available (of the schools that have a library or a reading room)	76%	96%	52%	98%	55%	53%	73%	74%
Laptop or desktop at school	61%	74%	51%	80%	67%	57%	85%	66%

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Observations	187	34	72	49	215	151	112	820

Similarly, qualitative data suggest that basic school infrastructure is limited. For example, school representatives from Badulla and Nuwara Eliya listed some of the challenges, which included lack of space in the school, lack of space in the classrooms, unsanitary grounds, limited drainage, little to no library space, and no clean water supply. Regarding classroom space, both school- and zonal-level representatives mentioned the existence of classrooms that were extremely crowded. For example, a zonal officer from Nuwara Eliya explained that across schools in the area, each school building usually only accommodated five classrooms, and there was an average of 45 students per classroom. Similarly, a school in Badulla accommodated 85 students in a 40' x 20' space.

Speaking about other challenges, a principal from Badulla explained that even basic infrastructure necessary to a school is unavailable. The principal said, *“We don’t have a spacious hall. We don’t have a library. For the past six years we conduct classes in two buildings. We also utilize classroom facilities at the main Kendagolla Maha Vidyalya too. We have no separate pathway to the school. We do not even have a safety parapet wall. Those are our shortcomings.”* Multiple respondents expressed the importance of building a parapet wall around the school for safety reasons, such as to keep animals off school premises. Further, new schools established as recently as 2019 had even more limited infrastructure, as funds were reallocated due to the COVID-19 pandemic.

Further, qualitative data indicates that perceptions of school and classroom infrastructure quality differed between districts. For example, in the districts of Kilinochchi, Mulaitivu, Ratnapura, and Monaragala, school-level officials observed school and classroom infrastructure to be sufficient and reasonable, whereas school officials in Badulla, Nuwara Eliya, and Trincomalee highlighted several challenges in infrastructure.

To address some of the challenges described above, parents who are part of the SDS reportedly built a temporary parapet wall to prevent their children from falling from the elevated area where the school was built. Parents of students in a school in Monaragala also helped clean school premises, which is considered part of their contribution towards fee-free education.

School officials from districts prioritized needs differently. For example, school officials in Badulla district prioritized obtaining adequate space, as lack of space ultimately hindered the development of a positive learning environment for both students and teachers. A principal from Badulla explained that teachers cannot apply best teaching practices due to limited space

(40' x 20' for 85 students). Although teachers are encouraged to teach some lessons outside to make learning fun, teachers resort to teaching outdoors because of space constraints. Further, the same principal pointed to outdoor spaces as environmentally unsafe for students. An SDS representative from Badulla said, *“Main concern is that the school lacks in building facilities. The school does not have a library, nor a playground.”* The small space (24 perches of land) limited the construction of additional building facilities, and to address this barrier a school official suggested adding another plot of land to the current school premises. In Monaragala, building school walls was a priority.

Interviews indicated a gap in understanding of funding responsibilities for infrastructure and maintenance, which should flow from the principal to the zone, and then to the province, who allocates funds based on availability. An SDS representative stated, *“The school does not consist of a large area of space, [and hence] the school is not entitled in receiving funds for construction and development related projects. Therefore, there are no development projects executed.”* A zonal officer also acknowledged that there are limited funds available.

### WASH

Survey data suggest that school infrastructure to meet other non-learning-based basic needs such as access to drinking water and working toilets was also limited. Almost 30% of the schools had no access to any source of drinking water, and of the schools that had access to drinking water, only 77% had access to treated and safe water (**Exhibit 12**). The issue of access to drinking water appears to be particularly severe in Nuwara Eliya, where 52% of the schools do not have a single source of drinking water. However, we observe some inconsistency in the data, which indicates that even with a limited number of schools having a source of water in Nuwara Eliya, 77% of schools provide access to enough drinking water. Overall, 81% of the schools provided access to enough drinking water. Most schools (97%) ensure that when a drinking water source is available, it is accessible to the smallest students.

### Exhibit 12. Water Facilities

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
School has access to a source of drinking water	68%	79%	64%	80%	48%	72%	90%	67%
Observations	187	34	72	49	215	151	112	820
Drinking water is treated to make it safe	69%	63%	78%	72%	80%	83%	84%	77%

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Students have access to a sufficient amount of clean drinking water	67%	96%	76%	95%	77%	87%	89%	81%
Average number of available drinking points (in schools with a source of drinking water)	5.8	5.3	6.9	5.3	5.6	6.1	7.5	6.2
Drinking water source is accessible to smallest students	96%	100%	89%	97%	96%	98%	98%	97%
<i>Observations</i>	127	27	46	39	104	109	101	553

Note: The type of water source was not collected during baseline.

Most schools were found to have clean and functioning latrines, separate for boys and girls, within a 5-minute walk from the school building (**Exhibit 13**). Overall, 91% of the schools had one or more functioning latrines. Most districts had functioning latrines in 85% or more schools, except for Monaragala, where only 75% of the schools had a functioning latrine. In 97% of the schools, the latrines were within a 5-minute walk from the school. Most schools maintained their latrines to keep them clean and sanitary (87%). We observe that the percentage of schools maintaining clean and sanitary latrines ranged from 99% in Ratnapura to 69% in Mulaitivu. Similarly, interview data from school-level officials confirmed that a positive aspect within school infrastructure was the presence of latrines. For example, a principal said, “*We only have toilet facilities*”. In 88% of the schools, there were separate toilets for boys and girls, with at least 80% of the schools in all districts having separate toilets.

We observe two issues regarding latrines that require attention: (a) accessibility of toilets by students with disabilities and (b) proper segregation of waste. Almost 37% of the latrines were not accessible to students with disabilities, even though across districts almost all toilets were accessible by small students. This problem is particularly acute in Trincomalee and Badulla, where, respectively, 68% and 46% of the latrines are inaccessible to students with disabilities. Only 56% of the schools segregate and store waste by type. Schools in Ratnapura (77%) are performing well on this indicator.

Most schools provide soap for handwashing and have a functioning drainage system at the handwashing points. Overall, 85% of the schools have handwashing soap available, and 77% have a functioning drainage system at the handwashing points, though in Kilinochchi and Mulaitivu only 18% of the schools have a drainage system.

### Exhibit 13. Toilet Facilities

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Has one or more functioning latrines in school	91%	97%	75%	98%	89%	97%	89%	91%
<i>Observations</i>	187	34	72	49	215	151	112	820
Number of functioning latrines on the school grounds	4.1	4.7	5.4	4.8	4.0	4.5	4.2	4.3
Functioning latrines are within a 5-minute walk of the school buildings	98%	97%	94%	98%	97%	97%	98%	97%
The latrines can be used by the smallest students	98%	97%	94%	100%	95%	98%	97%	97%
The latrines are accessible to students with disabilities	54%	89%	72%	96%	70%	67%	32%	63%
The functioning latrine stalls are clean and sanitary	88%	79%	89%	69%	88%	99%	78%	87%
<i>Observations</i>	170	33	54	48	191	147	100	743



	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
There are separate, private functioning latrines for girls and boys	87%	94%	89%	85%	91%	88%	83%	88%
There are separate, private functioning latrines for male and female teachers	44%	48%	67%	27%	58%	40%	42%	47%
Clean water for handwashing is located in close proximity to the latrines	80%	94%	92%	98%	82%	91%	79%	85%
Soap is available for handwashing	63%	91%	83%	84%	84%	89%	46%	75%
There is functioning wastewater drainage system in use at hand-washing and drinking water points	83%	18%	78%	18%	89%	91%	66%	77%
WASH facilities are cleaned regularly	83%	82%	86%	78%	94%	93%	66%	85%
Solid waste is segregated and stored by type	58%	35%	61%	18%	56%	77%	42%	56%
<i>Observations</i>	187	34	72	49	215	151	112	820

### ***Kitchens***

School meal preparation takes place on school grounds in only 8% of schools (**Exhibit 14**). Other than Mulaitivu (57%) and Kilinochchi (56%), school meal preparation takes place on school

grounds in less than 5% of the schools. In Mulaitivu, we observed that in 29% of the schools where meal preparation takes place on the grounds, there is debris, dirt, or standing water in the food preparation area, and in 21% of the schools, there were animals in the preparation area. The comparable figures for Kilinochchi are 21% and 32%.

#### Exhibit 14. School Meal Preparation

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
School meal preparation takes place on school grounds	1%	56%	3%	57%	4%	0%	4%	8%
<i>Observations</i>	187	34	72	49	215	151	112	820
There is no debris, dirt, or standing water in food preparation area	100%	79%	50%	71%	88%	NA	75%	76%
The food preparation area is free of free-roaming animals	100%	68%	100%	79%	75%	NA	100%	77%
The food preparation area is separate from the eating, classroom, play, and toilet areas	100%	95%	50%	96%	88%	NA	75%	92%
<i>Observations</i>	1	19	2	28	8	0	4	62

Note: The number of SMPs surveyed is quite small, especially in Badulla, Monaragala, and Ratnapura, limiting the generalizability of these results as they reflect the views of only a few individuals.

## 6. Literacy and Schooling

### *Attendance Trends*

Attendance, as measured by the percentage of students who attended school on all days in the week prior to the survey, was high. Overall, 86% of the students surveyed said that they had attended school on all days the previous week (**Exhibit 15**). However, in the Kilinochchi sample,

we observe that only 64% did not miss a single day of school in the previous week, indicating that students there may be facing hardships in attending school.

Students who missed at least 1 day of school in the week prior to the survey missed an average of 2.37 days. Among the students who missed at least 1 day, the number of days of school missed ranged from 1.65 in Nuwara Eliya to 3.15 in Badulla. This indicates that in Badulla, even though a small percentage of students missed school, the magnitude of schooling missed by those students is quite high.

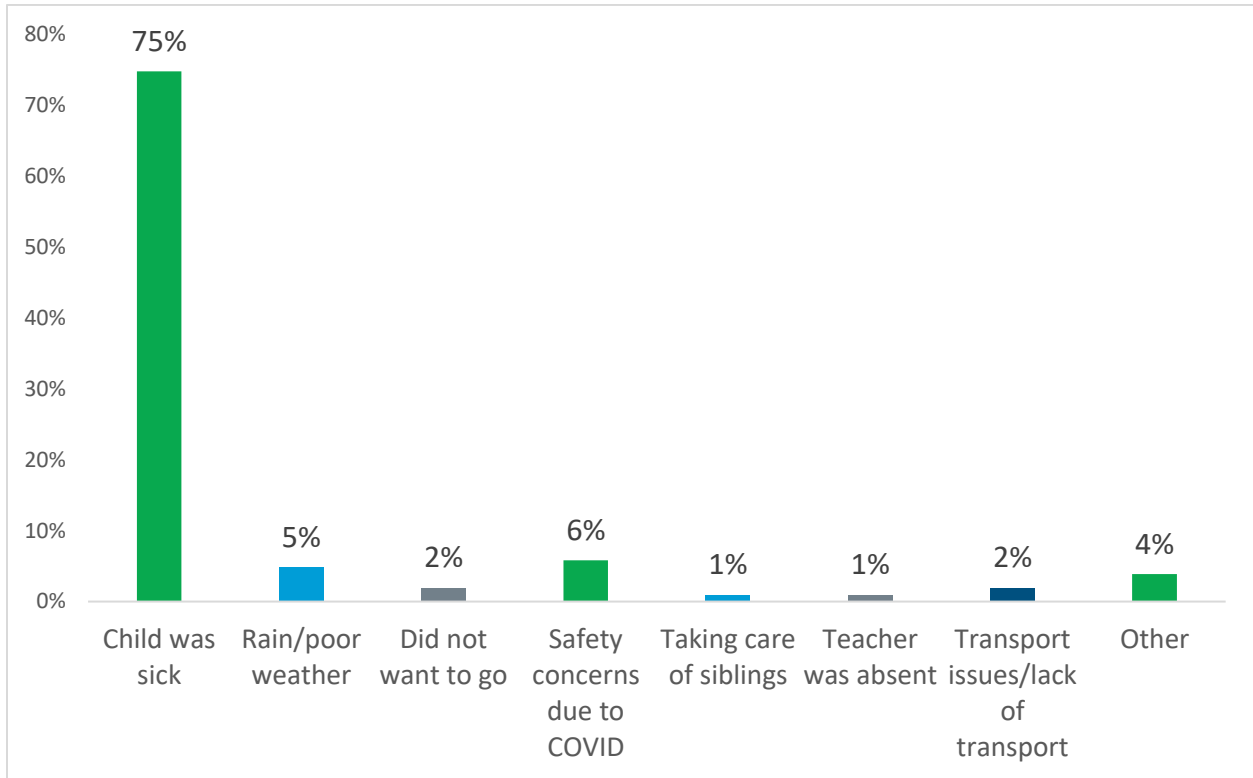
The most cited reason, by far, for missing school was sickness (**Exhibit 16**). Seventy-five percent of the students who had missed a day of school in the week prior to the survey identified sickness as their reason for doing so. According to students, safety concerns due to COVID-19 (6%) and rain (5%) were other main reasons for missing school.

Students reached school mostly by walking (**Exhibit 17**). Forty-eight percent of the students surveyed indicated that they reached school by walking. The proportion of students reaching school by walking was highest in Nuwara Eliya (77%), followed by Badulla (49%) and Trincomalee (49%). Bicycling was the second most popular mode of transportation to school, with 23% of the students surveyed indicating that they reached school by bicycle.

#### Exhibit 15. Attendance Trends in the Student Sample

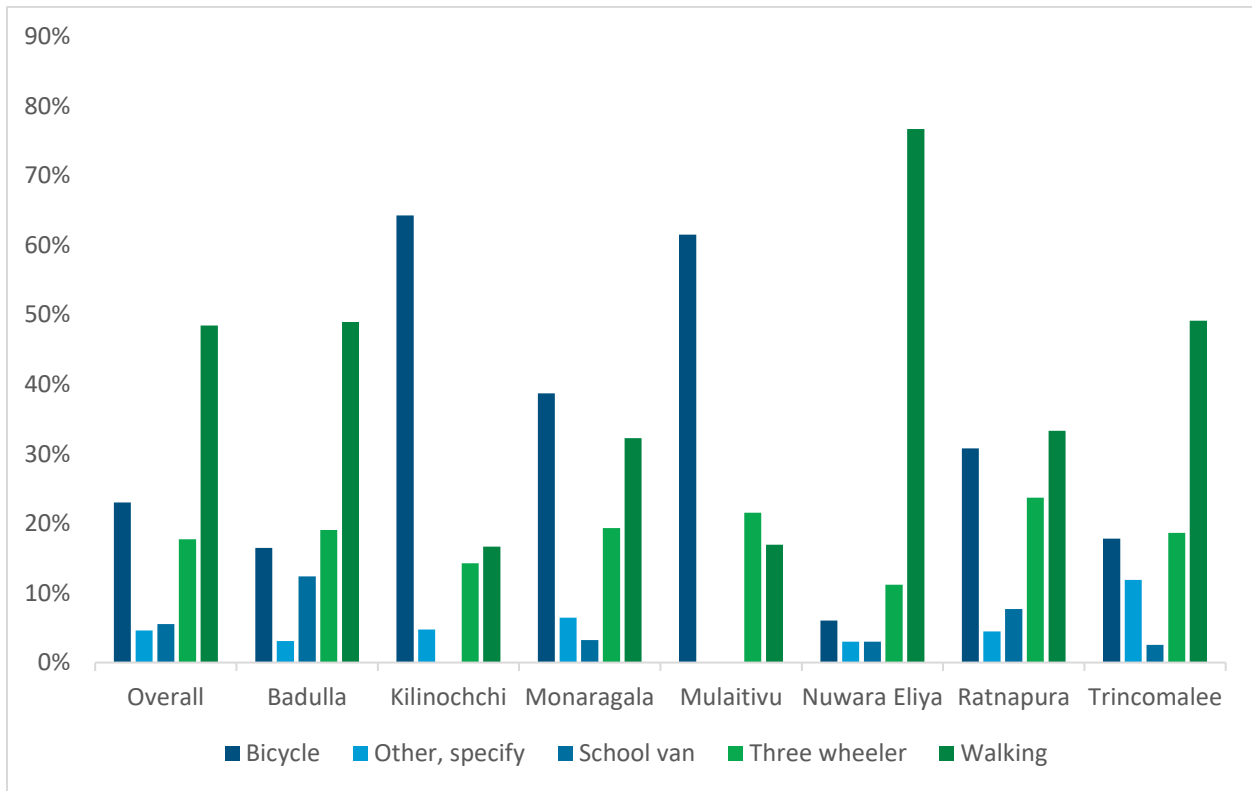
	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Attended school on all days in previous week	92%	64%	82%	80%	88%	83%	92%	86%
<i>Observations</i>	194	42	62	65	232	156	118	869
Average number of days missed in the last week	3.15	2.41	2.55	2.15	1.65	2.95	1.66	2.37
<i>Observations</i>	13	12	9	13	23	23	9	102
Attend after-school reading activities	8%	2%	31%	17%	9%	8%	9%	10%
<i>Observations</i>	194	42	62	65	232	156	118	869

### Exhibit 16. Reasons for Missing School



Source: Authors' calculations; Total N = 102; Badulla N = 13, Kilinochchi N = 12, Monaragala N = 9, Mulaitivu N = 13, Nuwara Eliya N = 23, Ratnapura N = 23, Trincomalee N = 9.

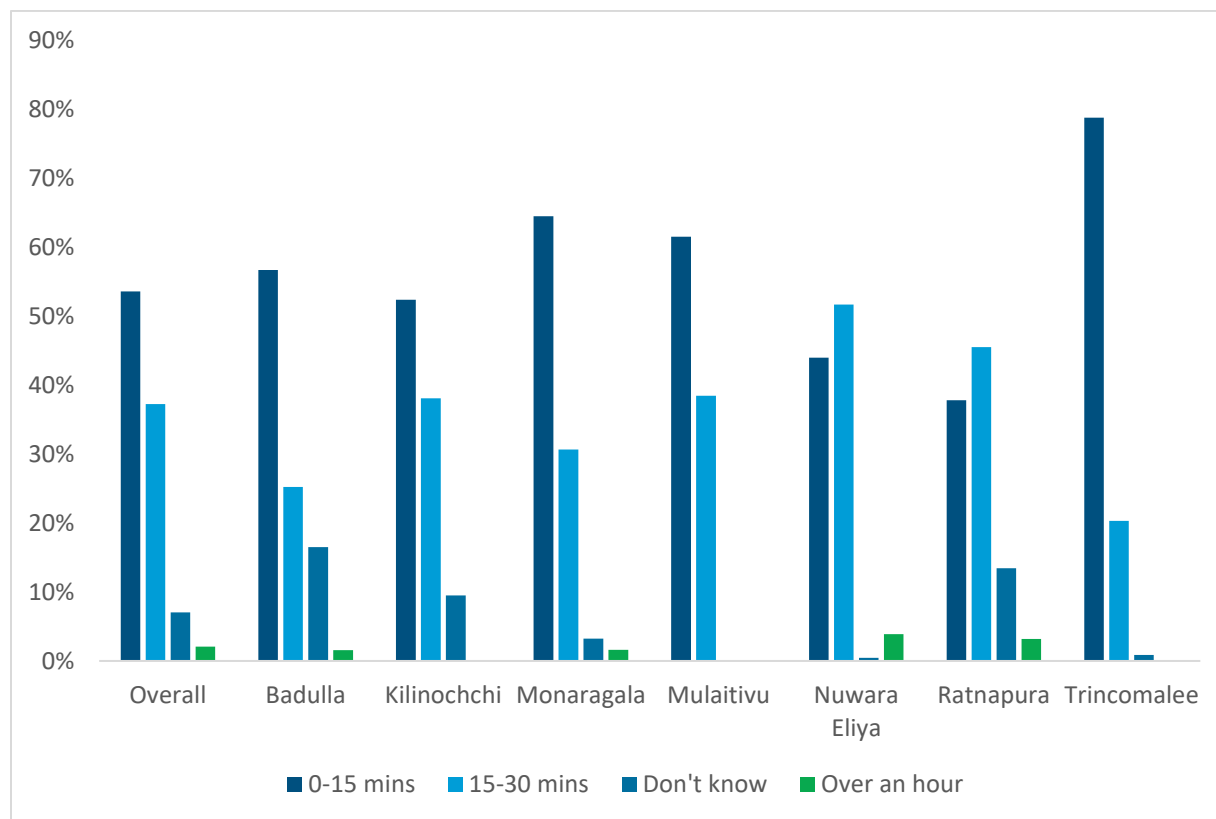
### Exhibit 17. Means of Getting to School



Source: Authors' calculations; Total N = 869; Badulla N = 194, Kilinochchi N= 42, Monaragala N = 62, Mulaitivu N = 65, Nuwara Eliya N = 232, Ratnapura N = 156, Trincomalee N = 118.

Most students (53%) indicated that they took less than 15 minutes to reach school, and 37% indicated that they took between 15 and 30 minutes (**Exhibit 18**). Very few students took more than an hour to reach school (2%).

## Exhibit 18. Time Taken to Reach School



Source: Authors' calculations; Total N = 869; Badulla N = 194, Kilinochchi N = 42, Monaragala N = 62, Mulaitivu N = 65, Nuwara Eliya N = 232, Rathnapura N = 156, Trincomalee N = 118.

Overall, respondents in most zones did not see student attendance as a big challenge, except in special circumstances, such as the rainy season and COVID-19. Multiple respondents said that problems with attendance are more common in poorer areas. For example, a zonal respondent from Mulaitivu said, *“Children are less likely to go to school when they go to work early in the morning.”* Attendance also seems to be connected to the regular provision of school meals. A zonal respondent from Trincomalee said, *“Whenever the meal is not supplied that the attendance will gradually down. Girls’ attendance better than boys.”* Finally, one respondent from Rathnapura said that absences in Tamil schools seem to be higher than in Sinhala schools.

School attendance monitoring is taking place in most of the zones in the study. Most respondents said teachers monitor attendance and report their findings up to the zonal level, and respondents in Kilinochchi, Nuwara Eliya, Rathnapura, and Badulla described specific attendance monitoring committees at the school level. However, respondents also said that approaches to monitoring could be improved. A zonal respondent from Kilinochchi said, *“We have school attendance monitoring body with outside officials, such as Grama Niladary and Police officers, but functioning of the attendance committee is not in the expected level.”*

## Language of Instruction

There is considerable regional variation in the languages spoken at home by children. In the whole sample, 57% of students reported that they speak Tamil at home, and 43% noted that they speak Sinhala at home (**Exhibit 19**). Only 1% of the students indicated that they speak English at home. While 90% of the children surveyed in Mulaitivu said that they speak Tamil at home, only 23% speak Tamil at home in Ratnapura. Similarly, while 81% of the students in Monaragala indicated that they speak Sinhala, only 5% in Kilinochchi speak Sinhala at home. A small proportion of the sample (2.2%) speak more than one language at home.

### Exhibit 19. Languages Spoken at Home

Outcome	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Tamil spoken at home	33%	95%	18%	90%	82%	23%	81%	57%
Sinhala spoken at home	66%	5%	81%	12%	21%	75%	22%	44%
English spoken at home	1%	0%	3%	1%	0%	3%	0%	1%
Observations	194	42	62	65	232	156	118	869

Respondents perceived students as doing well in learning Tamil or Sinhala as their primary language. In Trincomalee and Mulaitivu, where students learn in Tamil, with Sinhala as a second language, respondents perceived students as having less difficulty with Sinhala than English as a second language.

English instruction begins as a subject in Grade 3 in all zones, though respondents also said that teachers introduce English words to students in the first and second grades. However, respondents said that English is difficult for students, especially because of a lack of teachers qualified to teach English. In addition, a respondent from Nuwara Eliya said that there is “no equipment [and] books are scarce but not suitable for beginners.”

## Home Literacy Environment

Almost all the students surveyed stated they have at least one type of reading material at home. The most common type of reading material available at home are textbooks, with 83% of the students indicating that they have access to textbooks (**Exhibit 20**). Magazines are the

least available form of reading material. Only 15% of the students report that they have magazines at home. Storybooks (62%), religious books (55%), and picture books (50%) are other accessible forms of reading material for students.

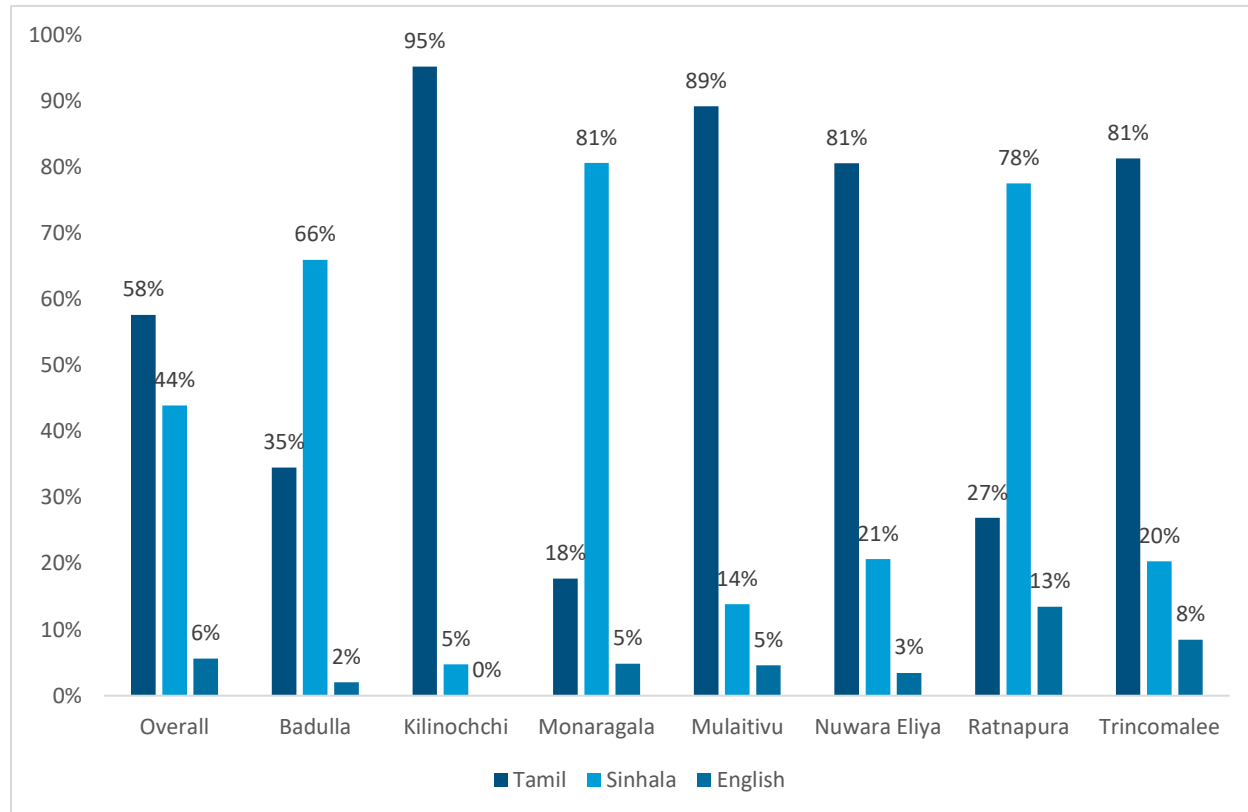
### Exhibit 20. Home Literacy Environment Indicators

Reading materials in the home	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Textbooks	91%	95%	82%	100%	70%	89%	72%	83%
Storybooks/ comic books	66%	40%	67%	47%	60%	76%	53%	62%
Religious books	45%	71%	64%	84%	47%	41%	77%	55%
Picture/letter posters	53%	50%	43%	63%	57%	42%	37%	50%
Newspapers	59%	7%	67%	20%	27%	69%	26%	43%
Coloring books	41%	4%	69%	7%	17%	53%	32%	34%
Magazines	9%	0%	8%	0%	23%	19%	22%	15%
None of the above	0%	0%	1%	0%	6%	0%	0%	2%
<i>Observations</i>	194	42	62	65	232	156	118	869

As shown in **Exhibit 21**, overall, the most commonly available reading materials at home are in Tamil (58%). While 44% of the students said that they have reading materials available in Sinhala at home, only 6% said they have access to reading materials in English. There is wide variation in availability by language between districts. For example, in Kilinochchi, 95% of the students indicated that the reading materials available to them are in Tamil, with only 5% saying that they have access to reading materials in Sinhala. By contrast, in Monaragala, 81% of the students mentioned that they have access to Sinhalese reading materials, whereas only 18% indicated that they have Tamil reading materials at home.



## Exhibit 21. Languages in Which Reading Materials Are Available at Home



Source: Authors' calculations; Total N = 869; Badulla N = 194, Kilinochchi N = 42, Monaragala N = 62, Mulaitivu N = 65, Nuwara Eliya N = 232, Ratnapura N = 156, Trincomalee N = 118.

### Student Assessment Results

We administered a modified version of the Literacy Boost Reading Assessment (LBRA) to evaluate the students' language skills. LBRA is a modified version of the Early Grade Reading Assessment. The PALAM/A team developed the LBRA in collaboration with the MOE/NIE using Sri Lanka's second-grade curricula and tested it for appropriateness for the Sri Lankan context. The assessment was administered either in Sinhala or Tamil, depending on the medium of instruction in the school. The version of LBRA used for this baseline study consists of six subtests:

1. Letter knowledge: the number of letter sounds the student could identify out of 25.
2. Silly phrases: the number of phrases that the student could identify as nonsensical when provided with a set of phrases that contained one nonsensical phrase and three sensible phrases.
3. Word recognition: the number of words out of the 15 most-used words from leveled textbooks that the student could read correctly. Recognition is defined as the student's ability to read the word.

4. Reading comprehension: Enumerators asked nine comprehension questions related to a short story that the students were asked to read aloud. After the students had read the whole passage, they were asked eight comprehension questions:
  - a. Summary: one question that tests each student’s ability to identify the main ideas of a reading passage.
  - b. Literal: five questions whose answers are clearly and explicitly stated in the passage.
  - c. Inferential: one question whose answer is implied rather than clearly stated in the passage.
  - d. Evaluative: one question that requires some level of cognitive and/or emotional judgment. To answer such a question, each student needs to draw on their opinions.
5. Writing: the number of words out of four that the student could spell correctly in written form. (the ability a student has to listen to a short sentence, and write the sentence correctly i.e. spelling, direction and punctuation)
6. Receptive vocabulary: the number of pictures the student was able to correctly match to a word after hearing the word that described the picture.

We now present the results for each of these subtests.

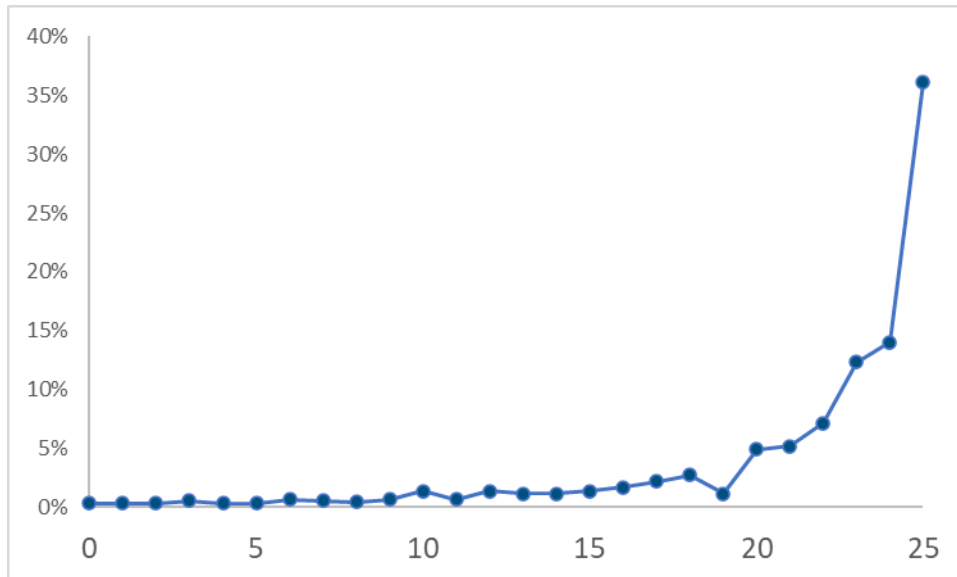
### **Letter Knowledge**

To assess students’ letter knowledge, enumerators showed them a chart of 25 letters in Tamil or Sinhala and asked them to name each letter. Most students (80%) could identify at least 75% of the letters. Overall, students recognized an average of 21 letters, 36% were able to identify all 25 letters, but there was no student who could not identify a single letter. **Exhibit 22** shows the percentage of letters that students in each district identified correctly. **Exhibit 23** shows the distribution of letter recognition scores for the sample of students. There were no significant differences in the outcomes by gender, primary language at home, or district.

#### **Exhibit 22. Letter Recognition**

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Letter knowledge (% correct)	86%	91%	86%	88%	81%	90%	85%	86%
Observations	194	42	62	65	232	156	118	869

### Exhibit 23. Distribution of Letter Recognition Scores



Source: Authors' calculations; Total N = 869; Badulla N = 194, Kilinochchi N= 42, Monaragala N = 62, Mulaitivu N = 65, Nuwara Eliya N = 232, Ratnapura N = 156, Trincomalee N = 118.

### Word Recognition

Overall, most of the students (71%) were able to read words correctly (**Exhibit 24**). There are disparities, however, in word recognition across districts. In Nuwara Eliya, students could read only 55% of the words correctly, whereas in Mulaitivu, students could read 81% of the words correctly. We also note that only 40% of the students in Nuwara Eliya were able to read more than 75% of the words correctly, compared to Ratnapura, where students successfully read 85% of the words.

### Exhibit 24. Word Recognition

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Word recognition (% correct)	74%	78%	67%	81%	55%	85%	72%	71%
Observations	194	42	62	65	232	156	118	869

### Reading Comprehension

Reading comprehension is very low among students. We define competency on the comprehension assessment as the ability to answer at least 80% of the questions correctly.

Overall, only 24% of the students could comprehend the text based on this definition of competency (**Exhibit 25**).

There is considerable variation in reading comprehension by gender and district. Female students (27%) are likelier to have comprehended the text than male students (22%), and 41% of the students in Ratnapura were able to comprehend the text, whereas only 7% of the students in Nuwara Eliya were able to do so.

### Exhibit 25. Reading Comprehension

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Competent in reading comprehension	37%	5%	40%	20%	7%	41%	15%	24%
<i>Observations</i>	194	42	62	65	232	156	118	869

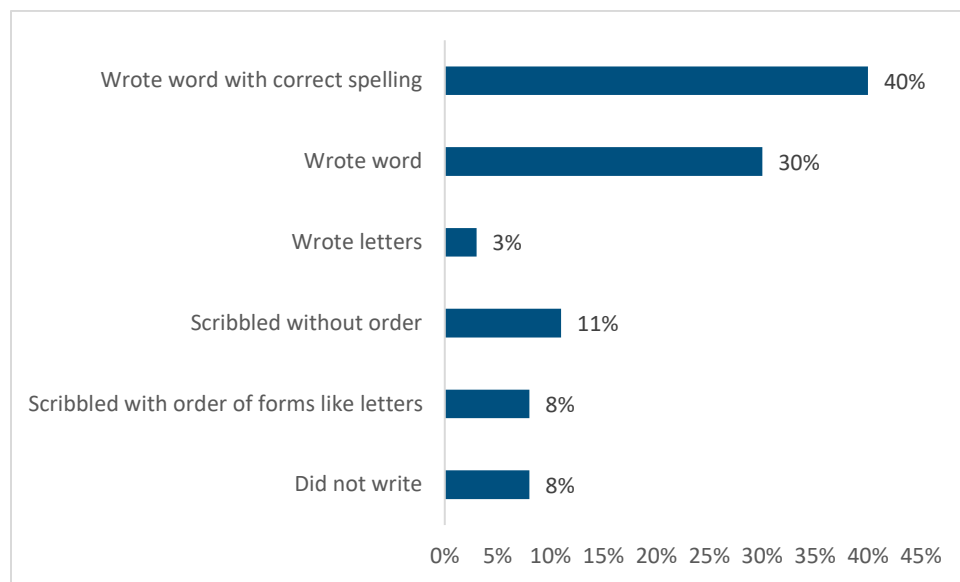
### Writing

Writing skills among the students surveyed are weak. Overall, only 40% of the students were able to write the full sentence with the correct spelling. Students in Mulaitivu and Nuwara Eliya performed poorly on this subtask, on average scoring 12% and 19%, respectively. Students in Monaragala emerged as the best performers, with students on average able to write 64% of the words with the correct spelling.

### Exhibit 26a. Writing and Spelling Ability

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Wrote words with correct spelling (% correct)	61%	23%	64%	12%	19%	63%	22%	40%
<i>Observations</i>	194	42	62	65	232	156	118	869

## Exhibit 26b. Writing and Spelling Ability



### Receptive Vocabulary Test

Receptive vocabulary performance was uniformly high across districts (**Exhibit 27**). Overall, students matched 99% of the picture–word pairs correctly. We do not see any variation in student performance across districts, with the spread ranging from 97% in Monaragala to 99% in Badulla, Mulaitivu, Ratnapura, and Trincomalee.

### Exhibit 27. Receptive Vocabulary

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Oral vocabulary test (% correct)	99%	98%	97%	99%	98%	99%	99%	99%
Observations	194	42	62	65	232	156	118	869

### Existing Literacy Interventions and Policies

Respondents in all zones except Rathnapura described existing literacy interventions and policies, including more formal programs and informal assistance for students who are struggling with learning. Interventions included a program to “build a pleasant school environment for children” (Badulla), “a program called Literacy Boost,” which was part of the Save the Children programme, but funded by a different donor, (Kilinochchi), and the USAID “Room to Read programme” (Nuwara Eliya and Trincomalee).

Otherwise, schools seem to be implementing policies in line with divisional and zonal educational plans. For example, a zonal respondent in Badulla said, *“The main objectives here are to find ways of increasing literacy levels and how the process could be monitored.”* In Mulaitivu, a zonal respondent said, *“Schools are identifying students with low levels of literacy and implementing programs that we monitor.”* A principal in Trincomalee described the process of helping students to acquire literacy: *“So far we have conducted detection tests to improve. Next we have done the worksheets on the subject. Next, subject-wise, we have instructed schools.”* Lastly, one principal from Mulaitivu mentioned the use of reading camps for improving reading, and many respondents mentioned reading rooms, though mostly in the context of needing infrastructure improvements.

## 7. Health, Nutrition, and WASH Practices

In this section, we present SMP’s and teacher’s KAP related to children’s health, nutrition, and WASH practices at baseline as well as information from stakeholders on existing programming and policies related to these topics in PALAM/A target districts.

### *SMP and Teacher KAP*

#### Children’s Nutrition

Both teachers and SMPs were asked about children’s nutrition. Specifically, we asked about the importance of students eating before school, the importance of eating multiple meals a day, the importance of children getting multiple types of food in their diet, knowledge of nutritious foods, as well as SMPs current practices regarding the MoES recommended school meals.

First, we asked about the importance of children eating at or before school as well as the difficulty for children in doing so. **Exhibit 28** provides the average responses for teachers and SMPs by district. Most teachers believe it is important for students to eat before school and to have three meals plus a snack every day. Similarly, 98% of all SMPs surveyed noted it was very important for children to eat at school. However, there is variation in the perceived difficulty for students to attain these goals. For instance, only 10% of teachers in Badulla reported it was difficult for children to eat before school while 75% of teachers in Kilinochchi, 50% of teachers in Nuwara Eliya, and 45% of teachers in Ratnapura reported the same.

#### Exhibit 28. Importance of Children Eating At or Before School

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
<i>Teachers</i>								

Important for children to eat before school	100%	100%	100%	100%	97%	100%	100%	98%
Difficult for children to eat before school	10%	75%	14%	14%	50%	45%	18%	30%
Important for children to have 3 meals + snack daily	75%	100%	100%	71%	81%	94%	82%	83%
Difficult for children to have 3 meals + snack daily	20%	100%	14%	57%	50%	19%	64%	40%
<i>Observations</i>	<i>20</i>	<i>4</i>	<i>7</i>	<i>7</i>	<i>32</i>	<i>16</i>	<i>11</i>	<i>97</i>

**SMPs**

Important for children to eat at school	100%	100%	100%	89%	100%	100%	100%	98%
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

Note: The number of SMPs surveyed is quite small, especially in Kilinochchi and Monaragala, limiting the generalizability of these results as they reflect the views of only a few individuals.

For SMPs only, we asked what they believed the consequences were if children skip a meal at school and go hungry. 57% believe students will get sleepy or lethargic and 52% believe students will not be able to study well. 41% believe children skipping a meal will have shorter attention spans and not be able to concentrate. Finally, 34% think it will lead to poor school performance. Relatedly, teachers were asked about the consequences of children not eating before school. 82% believe children will not be able to study well, 68% believe children will have short attention spans or low concentration, and 41% believe students will not do as well as they could at school.

SMPs and teachers were also asked about the importance of children consuming nutritious foods, especially meals with different types of food. **Exhibit 29** presents the proportion of SMPs and teachers noting it is important for children to have different types of foods at meals.

**Exhibit 29. Proportion of Respondents Reporting It Is Important for Children to Have Different Types of Foods at Meals**

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
SMPs	100%	100%	100%	100%	100%	100%	100%	100%

Teachers	90%	100%	100%	86%	94%	100%	91%	93%
----------	-----	------	------	-----	-----	------	-----	-----

*Note:* 58 total SMP observations: Badulla=11, Kilinochchi=4, Monaragala=1, Mulaitivu=9, Nuwara Eliya=13, Ratnapura=11, and Trincomalee=9. 97 total teacher observations: Badulla=20, Kilinochchi=4, Monaragala=7, Mulaitivu=7, Nuwara Eliya=32, Ratnapura=16, and Trincomalee=11.

While most teachers and SMPs think it is important for children to have different types of foods at meals, two-thirds of SMPs surveyed think it is difficult for children to get different types of foods at meals, mainly citing the expense of buying different ingredients to be prohibitive (see **Exhibit 30**).

### Exhibit 30. Proportion of Respondents Reporting It Is Difficult for Children to Have Different Types of Foods at Meals

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
SMPs	91%	75%	100%	89%	54%	55%	78%	66%
Teachers	20%	75%	29%	71%	56%	25%	64%	44%

*Note:* 58 total SMP observations: Badulla=11, Kilinochchi=4, Monaragala=1, Mulaitivu=9, Nuwara Eliya=13, Ratnapura=11, and Trincomalee=9. 97 total teacher observations: Badulla=20, Kilinochchi=4, Monaragala=7, Mulaitivu=7, Nuwara Eliya=32, Ratnapura=16, and Trincomalee=11.

Next, both types of respondents were asked about their knowledge of nutritious foods, especially for children, and SMPs were further asked about their knowledge of certain nutrient deficiencies. First, teachers we asked to list the food groups which make up a nutritious meal. 84% of teachers surveyed were able to list at least three of the five key food groups while only 15% were able to list all five. **Exhibit 31** shows the breakdown by district.

### Exhibit 31. Knowledge of Food Groups Constituting Nutritious Meal

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Named 3 components	95%	100%	86%	86%	63%	94%	100%	84%
Named all 5 components	15%	75%	29%	29%	9%	6%	9%	15%
<i>Observations</i>	20	4	7	7	32	16	11	97

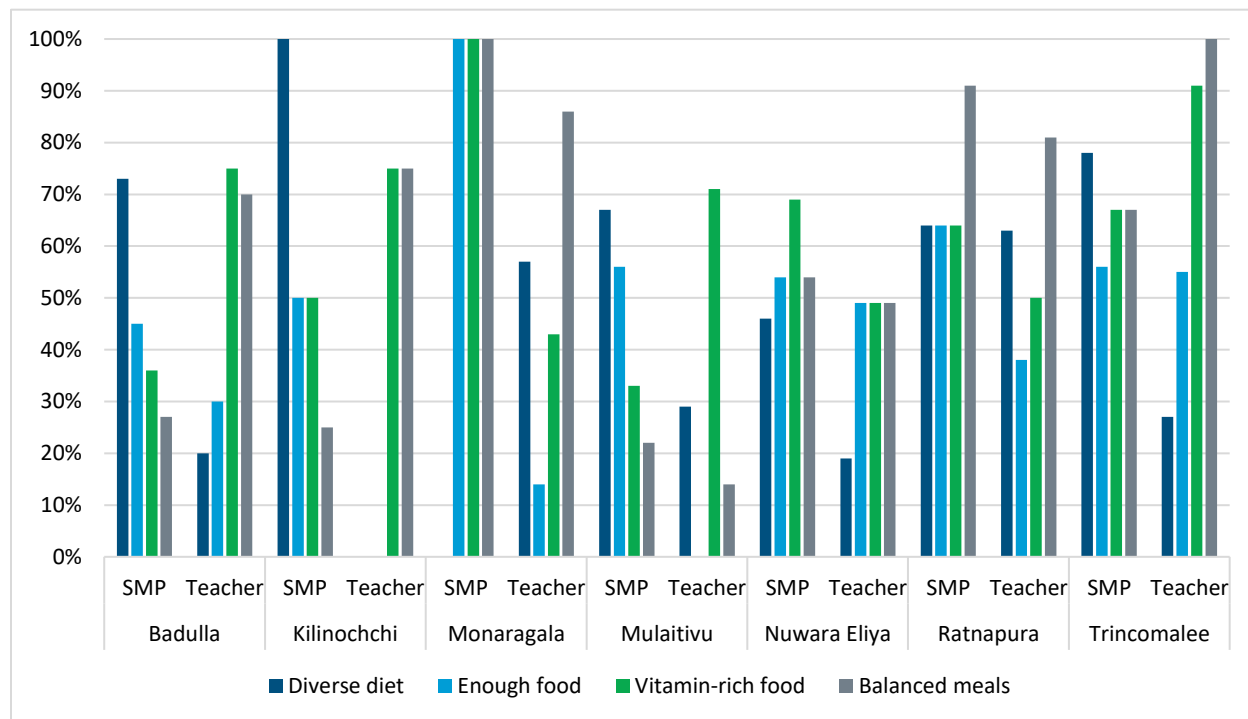
*Note:* The five components of a healthy meal include: starch/carbohydrate, protein, fiber, fat, vitamins/minerals.

Teachers and SMPs were then asked to identify some important nutritional components of foods that make children grow. **Exhibit 32** shows the distribution of SMPs' and teachers'



responses to this question. Vitamin-rich foods and balanced meals appear as the most common answers across all districts. The importance of a diverse diet varies widely by geography as does the importance of children getting enough food.

### Exhibit 32. What Makes a Child Grow?



Source: Authors' calculations; 58 total SMP observations: Badulla=11, Kilinochchi=4, Monaragala=1, Mulaitivu=9, Nuwara Eliya=13, Ratnapura=11, and Trincomalee=9. 97 total teacher observations: Badulla=20, Kilinochchi=4, Monaragala=7, Mulaitivu=7, Nuwara Eliya=32, Ratnapura=16, and Trincomalee=11.

Both KAP surveys then assessed respondents' knowledge of nutrients in foods, particularly Vitamin A, iron, protein, and calcium. SMPs were asked about the importance of these nutrients in food, the rarity of nutrient deficiencies in school children as well as signs of nutrient deficiency in children. Teachers and SMPs were asked to identify nutrient-rich foods, for the latter specifically in relation to examples of foods they use in school meals. **Exhibit 33** provides the results of the SMP KAP about their perceptions of the importance of various nutrients. Close to 100% of SMPs believe it is important to include nutrient rich ingredients in food. Fewer than half, however, believe a deficiency in any of these nutrients is common in schoolchildren.

### Exhibit 33. SMP Perceptions of Importance and Commonality of Nutrients

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
--	---------	-------------	------------	-----------	--------------	-----------	-------------	---------

Believe iron-rich foods are important	100%	100%	100%	100%	100%	100%	100%	100%
Believe protein-rich foods are important	100%	100%	100%	100%	100%	100%	100%	100%
Believe Vitamin A-rich foods are important	100%	100%	100%	100%	92%	100%	100%	98%
Believe iron deficiency is common in schoolchildren	9%	50%	0%	44%	62%	55%	56%	45%
Believe Vitamin A deficiency is common in schoolchildren	18%	50%	0%	44%	38%	36%	56%	38%
Believe protein deficiency is common in schoolchildren	9%	50%	0%	44%	54%	45%	33%	38%
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

**Exhibit 34** shows the proportion of SMPs who could name at least one sign of nutrient deficiency for each of the key nutrients and the average number of signs identified by district. On average, over half of all SMPs surveyed can identify at least one sign of Vitamin A, iron or protein deficiency in children. However, SMPs could only identify one or two signs, on average.

#### **Exhibit 34. SMP Identification of Signs of Nutrient Deficiency in Children**

	<b>Badulla</b>	<b>Kilinochchi</b>	<b>Monaragala</b>	<b>Mulaitivu</b>	<b>Nuwara Eliya</b>	<b>Ratnapura</b>	<b>Trincomalee</b>	<b>Overall</b>
Identified 1 sign of Vitamin A deficiency	64%	50%	0%	56%	62%	91%	33%	60%
Average number of signs of Vitamin A deficiency identified	1	1	0	1	1	2	1	1
Identified 1 sign of iron deficiency	64%	50%	0%	67%	62%	91%	44%	64%

Average number of signs of iron deficiency identified	2	2	0	2	1	3	1	2
Identified 1 sign of protein deficiency	64%	50%	0%	44%	54%	91%	56%	60%
Average number of signs of protein deficiency identified	1	2	0	1	1	2	1	1
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

Note: There were six possible signs of each deficiency SMPs could have noted.

SMPs were also asked to identify plant-based substitutes for animal proteins which could be provided to vegetarian students. 90% of all SMPs could name at least one plant-based protein substitute for animal protein and, on average, could name two including mushrooms, tofu, dhal, eggs, and hathmaluwa. **Exhibit 35** shows the frequency with which each plant-based protein source was named by SMPs. Eggs and dhal were the most commonly mentioned protein sources for vegetarian students while hathmaluwa was the least mentioned.

### Exhibit 35. SMP Identification of Plant-Based Protein Sources

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Eggs	73%	50%	100%	67%	46%	82%	33%	60%
Dhal	73%	25%	100%	67%	15%	45%	78%	52%
Mushrooms	45%	25%	100%	11%	46%	55%	22%	38%
Tofu (soya meat)	45%	25%	100%	33%	23%	27%	67%	38%
Hathmaluwa	9%	0%	0%	0%	23%	27%	11%	14%
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

Next, we asked both teachers and SMPs why children should avoid too much sugar-rich food such as sweets and candies. **Exhibit 36** provides their responses. The majority of respondents are aware that too much sugar can cause tooth decay, but fewer than half mentioned it was not nutritious, and fewer than one-third mentioned it can interfere with a child's appetite.

### Exhibit 36. Reasons Children Should Avoid Too Much Sugar

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
<b>Teachers</b>								
Can cause tooth decay	90%	100%	71%	71%	88%	88%	100%	88%
Not nutritious	45%	25%	57%	29%	56%	38%	55%	47%
Interfere with appetite	40%	0%	43%	29%	28%	38%	36%	33%
<i>Observations</i>	20	4	7	7	32	16	11	97
<b>SMPs</b>								
Can cause tooth decay	64%	100%	0%	89%	77%	91%	78%	79%
Not nutritious	55%	50%	0%	33%	46%	18%	56%	41%
Interfere with appetite	27%	0%	0%	0%	23%	27%	22%	19%
<i>Observations</i>	11	4	1	9	13	11	9	58

Lastly, SMPs were asked about how much the alignment of their menus with the recommendations from the MoES as well as what currently constitutes their school meals. Overall, 74% of SMPs said they always provide the MoES recommended menu to schools. 16% reported they mostly do, 9% sometimes, and 2% said they never do. Only one SMP from Kilinochchi mentioned they never provide the MoES recommended menu while a handful of SMPs from Badulla and Nuwara Eliya reported they only sometimes do. For those that reported they always serve the recommended menu, 19 (44%) said they never make adaptations to the menu while 13 (30%) said they always adapt the menu, and 11 (26%) said they sometimes do so. Of that 14 SMPs that sometimes or mostly provide the MoES recommended menu, 4 (29%) said they most often adapt the recommended menu, and 9 (64%) said they sometimes adapt the menu. Across all SMPs, the most common reasons for adapting the recommended menu were because ingredients were unavailable or were too expensive (43% mentioned these reasons).

As for what SMPs reported including in meals, each student across all districts receives one egg, on average. SMPs in all districts, with the exception of Mulaitivu, reported serving beverages with their school meals. About half of the SMPs in Mulaitivu noted they do not include beverages with school meals. Of those that reported serving beverages, milk was the most

common beverage provided (57%) followed by a powdered drink (29%) and juice (14%). No SMPs reported serving chai with meals.

### Food Safety

For food safety, SMPs were asked about personal hygiene and food, cleaning the food preparation area, food storage practices, knowledge of common food contamination issues, cleaning up after cooking/serving meals, water safety for drinking and cooking, and whether they have been observed or supervised during school meal preparation. 93% of SMPs reported they never missed any days of meal prep because they were sick in the most recent school year. Of the 4 SMPs that did miss at least one day, they all mentioned that they missed because they felt bad and they know it potentially affects food safety. However, a little fewer than one-third of SMPs (28%) agreed that their staff always help prepare meals even when they are sick (i.e., with flu, cold, diarrhea, coughing, etc.).

SMPs were then provided with seven ailments or symptoms and asked whether they agree or disagreed that it could affect the safety of the food being prepared. **Exhibit 37** shows the proportion of SMPs reporting they agreed or strongly agreed that the symptom could affect the safety of the food. Overall, SMPs seem to be aware of symptoms which could put the food at risk of contamination, though there is some minor discrepancy across districts and across symptoms. Diarrhea was not consistently seen as a potential food safety risk across districts even though it poses a relatively high risk if proper hygiene is not followed.

### Exhibit 37. Proportion of SMPs Who Agree or Strongly Agree Symptom Can Affect Safety of Food Being Prepared

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Sneezing	91%	100%	100%	100%	92%	100%	100%	97%
Coughing	91%	100%	100%	100%	92%	91%	100%	95%
Having an Open Wound	100%	100%	100%	89%	92%	100%	89%	95%
Fever	91%	100%	100%	100%	92%	91%	100%	95%
Vomiting	91%	100%	100%	100%	77%	91%	100%	91%
Diarrhea	91%	100%	100%	89%	62%	91%	89%	84%

Headache	64%	50%	100%	44%	23%	45%	0%	38%
Observations	11	4	1	9	13	11	9	58

SMPs were asked about handwashing behaviors including at which moments they wash their hands, how they wash their hands when they do so, and for how long. **Exhibit 38** shows the proportion of SMPs who were able to correctly describe how to wash their hands (including both using clean water and soap or ashes), how long one should wash their hands, as well as those identifying key moments to wash their hands. Of the SMPs interviewed, only 33% correctly identified each of the six key moments SMPs should wash their hands. This result ranges from no teachers in Kilinochchi and Monaragala to 67% of teachers in Trincomalee. Further, only 24% of SMPs, on average, could correctly describe how to wash their hands though 83% knew hands should be washed for a minimum of twenty seconds.

### Exhibit 38. SMP Knowledge of Proper Handwashing Behaviors

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Can describe proper handwashing technique	36%	25%	0%	0%	8%	18%	67%	24%
Know to wash hands for 20 seconds	100%	100%	100%	78%	62%	91%	78%	83%
Know should wash hands...								
Before preparing meals	100%	100%	100%	89%	92%	100%	100%	97%
Before serving meals	73%	75%	100%	67%	92%	82%	89%	81%
After using the toilet	82%	50%	100%	56%	85%	82%	78%	76%
After handling raw meat/poultry	73%	25%	0%	44%	69%	55%	78%	60%
After touching/taking out garbage	82%	25%	100%	56%	54%	45%	78%	60%
After touching money	55%	25%	100%	44%	38%	55%	89%	53%

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Knows all 6 key moments	55%	0%	0%	33%	15%	18%	67%	33%
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

We then asked SMPs about their prep areas. Of those interviewed, 69% reported they prepare school meals in a separate, dedicated room in their house. 24% prepare meals in a separate but undedicated room in their house and 2% reported they prepare meals outside in a covered area. All SMPs noted that they believe it is important to maintain a clean cooking environment. They were then asked how and when they clean their prep areas. **Exhibit 39** shows their responses. While SMPs stated they understand the importance of cleaning food prep areas, not quite 100% mentioned cleaning theirs prior to prepping meals and only about two-thirds reported cleaning after preparing meals. Similarly, only two-thirds reported cleaning food prep surfaces with water and soap while a little over half reported cleaning with water only. The majority (71%) reported sweeping the floor prior to prep, while almost 60% remove trash and 55% clean utensils.

### Exhibit 39. SMP Meal Preparation Area Cleaning Behaviors – Before Preparation

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Clean before preparing meals	91%	100%	100%	100%	85%	100%	100%	95%
Sweep/wipe the floor	64%	75%	100%	67%	77%	64%	78%	71%
Clean after preparing meals	73%	50%	100%	78%	46%	64%	89%	67%
Clean prep surfaces with soap and clean water	64%	75%	100%	11%	92%	82%	67%	67%
Remove trash	64%	100%	100%	56%	31%	55%	78%	59%
Clean prep surfaces with water only	64%	100%	0%	67%	62%	27%	44%	55%
Clean utensils	64%	50%	100%	56%	38%	64%	56%	55%
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

SMPs were also asked about cleaning and drying their food preparation areas and cooking implements. **Exhibit 40** presents the proportion of SMPs reporting each behavior. SMPs generally seem to be cleaning off extra food into the trash (71%) and cleaning items with hot water (60%) and soap (69%) and then letting them air dry (76%). 43% reporting drying items off with a towel, though there is variation across the districts.

#### Exhibit 40. SMP Meal Preparation Area Cleaning Behaviors – After Preparation

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Let air dry	100%	50%	100%	89%	54%	73%	78%	76%
Scrape excess food into rubbish bin	100%	75%	100%	33%	46%	91%	78%	71%
Wash with detergent	91%	50%	100%	78%	69%	36%	78%	69%
Wash with clean or hot water	45%	75%	0%	56%	54%	82%	67%	60%
Dry with a clean towel	82%	50%	0%	11%	54%	27%	33%	43%
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

SMPs were next asked about their food storage practices. Firstly, we asked about how they store various types of foods including meat, poultry, fish, foods from the sea or lake, dairy products, and cooked foods. **Exhibit 41** shows the proportion of respondents mentioning at least one proper storage (i.e., in the refrigerator or cool box, covered, or separated from cooked or ready-to-eat foods). Most SMPs reported they correctly use at least one storage technique, but no SMP mentioned using all three proper storage methods for any type of food. The most commonly cited storage method for each food type was using a refrigerator or cool box.

#### Exhibit 41. SMP Proper Food Storage Methods

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
At least one proper method – fish	100%	100%	100%	89%	85%	100%	100%	95%



	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
At least one proper method – cooked food	100%	50%	100%	89%	85%	91%	100%	90%
At least one proper method – sea/lake	100%	50%	100%	78%	92%	91%	89%	88%
At least one proper method – poultry	100%	50%	100%	78%	92%	82%	89%	86%
At least one proper method – meat	100%	50%	100%	67%	92%	82%	89%	84%
At least one proper method – dairy	100%	50%	100%	89%	69%	91%	89%	84%
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

Further, 98% of SMPs believe it is important to keep meat, poultry, fish, seafood or cooked food in a cool place such as a cool box or refrigerator. 47% also reported that it is difficult for them to do so because they do not have a fridge or cool box and it is expensive to get one.

SMPs were then asked about how much time passes between their preparation of hot foods for school meals and when it is delivered to students. Half of the SMPs interviewed said less than half an hour passes while another 30% mentioned it is less than an hour. Twelve percent mentioned one to two hours passing and 5% reported over two hours. It is recommended that food not sit out more than two hours when the temperature is less than 30C and no more than one hour when the temperature is over 30C. When asked if the time between preparation and delivery differs if the weather is hotter than 30C, thirteen SMPs (22%) said that the timing does differ. Eleven of those SMPs reported that it results in more time passing between preparation and delivery while two SMPs said it resulted in a shorter amount of time passing.

When asked why it is important to not keep hot food out at room temperature for too long before serving, 67% of SMPs knew that bacteria can grow quickly and contaminate food; 38% reported it is important because the food can get cold. Relatedly, when asked whether they should avoid serving leftovers which were not kept in a cool place (i.e., stored at room

temperature for more than one to two hours, depending on the outside temperature), 57% said they should not be served because food can spoil, 45% the food is not safe to serve anymore, and 24% high temperatures can make germs grow quickly on the food.

Only 13 (22%) of the SMPs surveyed mentioned they ever reheat leftovers or food that was prepared earlier. Of these 13 SMPs, only two mentioned they reheat food to at least 75C (considered a safe temperature). Three others mentioned heating to less than 75C and the remaining seven did not know. Even so, 95% of all SMPs believe it is likely children will get sick or seriously sick from eating food that was not stored properly. **Exhibit 42** provides the breakdown by district.

**Exhibit 42. Perceived Likelihood of Children Getting Sick from Food that Was Not Stored Properly**

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Believe children will likely become sick from eating food that was not stored properly	100%	100%	100%	89%	85%	100%	100%	95%
Believe children will likely become seriously sick from eating food that was not stored properly	100%	75%	100%	89%	92%	100%	100%	95%
<i>Observations</i>	11	4	1	9	13	11	9	58

**Exhibit 43** shows the proportion of SMPs by district who know they should prevent raw meat, offal, poultry, and seafood from touching other foods such as those that are cooked or ready to eat because the raw foods often contain germs which can contaminate other foods.

**Exhibit 43. Proportion of SMPs Who Know About Raw Meat Contamination**

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Know raw animal foods often	91%	50%	100%	78%	69%	82%	78%	78%

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
contain germs which can transfer to other foods								

SMPs were then asked a series of questions about behaviors that could potentially cause contamination and to report whether they agreed or disagreed with the statements. **Exhibit 44** provides the results of this module. Most SMPs report behaviors that reduce the risk of contaminating food such as using separate, clean utensils for different types of food (93%) and cleaning the prep surface after cutting raw meat (88%). However, 17% reported using the same, dirty utensils for raw meat and other foods, and 16% reported preparing raw meat that has pests on it.

#### Exhibit 44. SMP's Potential for Contamination

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
I use separate (clean) utensils to handle different types of food.	91%	100%	100%	89%	92%	91%	100%	93%
I clean the food prep surface after cutting raw meat and before cutting fruits or vegetables.	100%	100%	100%	100%	85%	73%	78%	88%
I use the same (dirty) utensils to hand raw meat and other foods.	9%	0%	0%	0%	31%	36%	11%	17%
I prepare raw meat	0%	25%	0%	0%	31%	27%	11%	16%

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
that has pests on it.								
<i>Observations</i>	11	4	1	9	13	11	9	58

Next, we asked how likely SMPs think it is for children to get sick from eating undercooked meat. All SMPs interviewed reported they believe it is likely children will get sick from eating undercooked meat, and 93% believe it is likely children will get super sick from eating undercooked meat. A few SMPs do not believe children will get super sick from these foods.

Moreover, SMPs were asked about their knowledge of signs that food is cooked, safe and ready to be served. **Exhibit 45** shows that 72% of SMPs are able to identify when soups and stews are ready to serve and 64% know how to tell when meat and seafood is ready to be served.

#### Exhibit 45. SMP Knowledge of When Food is Cooked, Safe, and Ready to Serve

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Know soups and stews are ready when they are boiling and well cooked	73%	50%	100%	56%	69%	82%	89%	72%
Know meat and seafood is cooked and safe when there is no blood or pink flesh inside	91%	50%	0%	56%	31%	73%	89%	64%
<i>Observations</i>	11	4	1	9	13	11	9	58

SMPs were also asked what they should do before serving children raw fruits and vegetables. **Exhibit 46** shows their responses. The majority of SMPs wash raw fruits and vegetables with clean water only prior to serving them to students. One-third peel them and 29% wash them with both clean water and soap.

## Exhibit 46. SMP Knowledge of How to Prep Raw Fruits and Vegetables

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Wash them with clean water only	82%	50%	100%	89%	62%	73%	100%	78%
Peel them	36%	25%	0%	56%	23%	27%	33%	33%
Wash them with clean water and soap	27%	50%	0%	11%	54%	27%	11%	29%
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

On average, SMPs deliver meals to schools in the morning with 66% delivering food before 8:30am and 81% delivering before 10am. Per the MoES guidelines, meals should be provided within the first hour of the start of school or between 7:30-8:30am. One factor contributing to the delivery time is how long it takes to reach the school from one's home. It takes SMPs on average 34 minutes to deliver the meals to the school with delivery times ranging from 17 minutes in Nuwara Eliya to almost an hour (57 minutes) in Mulaitivu. This delivery time is also an important consideration for food safety purposes.

Next, we asked SMPs for their knowledge and practices related to safe water (**Exhibit 47 and 48**). Most water SMPs are using for cooking comes from water tanks (43%) or wells (33%). Likewise, most water used for creating students' beverages comes from water tanks (33%), wells (21%), and protected springs (22%).

## Exhibit 47. SMP Cooking Water Sources

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Tank	36%	25%	100%	67%	38%	18%	67%	43%
Well	18%	75%	0%	33%	23%	64%	11%	33%
Protected spring	55%	0%	0%	11%	54%	18%	0%	28%
Borehole	18%	25%	0%	22%	15%	9%	33%	19%
Pond/lake	0%	0%	0%	0%	8%	0%	0%	2%

Unprotected spring	0%	0%	0%	0%	0%	9%	0%	2%
Dam	0%	0%	0%	0%	0%	0%	0%	0%
Stream/river	0%	0%	0%	0%	0%	0%	0%	0%
Roof catchment	0%	0%	0%	0%	0%	0%	0%	0%
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

#### Exhibit 48. SMP Student Beverage Water Sources

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Tank	18%	25%	0%	67%	38%	18%	33%	33%
Well	9%	25%	0%	33%	15%	45%	0%	21%
Borehole	18%	25%	0%	33%	15%	9%	22%	19%
Protected spring	45%	0%	0%	0%	46%	18%	0%	22%
Roof catchment	0%	50%	0%	0%	0%	0%	0%	3%
Pond/lake	0%	0%	0%	0%	8%	0%	0%	2%
Unprotected spring	0%	0%	0%	0%	0%	9%	0%	2%
Dam	0%	0%	0%	0%	0%	0%	0%	0%
Stream/river	0%	0%	0%	0%	0%	0%	0%	0%
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

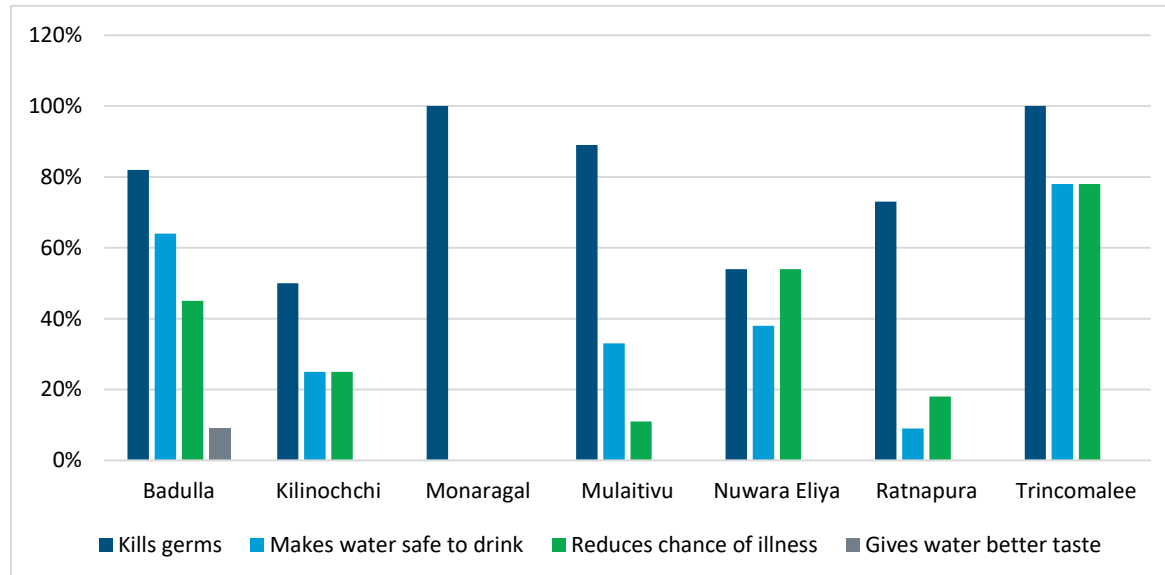
Next, SMPs were asked about their perceptions about safe water for drinking and cooking and their knowledge of the importance of boiling water for safety. **Exhibit 49** shows how SMPs responded. All SMPs believe it is important to boil water used for drinking, slightly less believe the same about water used for cooking (93%), and most believe it is likely children will get sick from drinking unboiled water (98%). Only 19% of the SMPs surveyed know they should boil water between one to three minutes to ensure it is safe.

### Exhibit 49. Perceived Importance of Safe Water - SMPs

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Believe important to boil water used for drinking	100%	100%	100%	100%	100%	100%	100%	100%
Believe important to boil water used for cooking	100%	100%	100%	89%	92%	82%	100%	93%
Believe children will likely become sick from drinking unboiled water	100%	100%	100%	89%	100%	100%	100%	98%
Know to boil water for 1-3 minutes to ensure it is safe	9%	25%	0%	22%	46%	9%	0%	19%
<i>Observations</i>	<i>11</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>13</i>	<i>11</i>	<i>9</i>	<i>58</i>

**Exhibit 50** depicts SMPs’ understanding of the benefits of boiling water before using for drinking or cooking. Over half of all SMPs in each district reported boiling water is important to kill germs and microorganisms in the water. There was wide variation in the proportion reporting that boiling water makes it safe to drink and reduces the likelihood of illness.

## Exhibit 50. Perceived Benefits of Boiling Drinking or Cooking Water - SMPs



Source: Authors' calculations; 58 total SMP observations: Badulla=11, Kilinochchi=4, Monaragala=1, Mulaitivu=9, Nuwara Eliya=13, Ratnapura=11, and Trincomalee=9.

Now that we understand more about SMPs' knowledge of and beliefs about food safety, we asked about their perceptions of who bears the responsibility of ensuring food is safe. 88% of SMPs believe it is the cooks' responsibility for preventing food poisoning and foodborne illness, and 86% believe it is the servers' responsibility.

Lastly, SMPs were asked about their experience with supervision and oversight of meal prep. 72% of SMPs reported having had someone supervise them as they prepare school meals. With the exception of Badulla, this result was fairly consistent across districts; in Badulla 27% (3 SMPs) reported being supervised. The supervisors tended to be PHIs (76%) or school principals or administrators (57%). Rarely were other ministry officials (29%), parents of students (12%) or WFP staff (2%) reported as serving as supervisors. Of those SMPs that reported being supervised, one-third are supervised one a month, one-third are supervised one a week, and the rest are split between daily, every three months and every six months. 93% of these supervised visits are not arranged beforehand, but instead are random drop-ins.

### WASH

For WASH components, we asked teachers about safe water, sanitation and latrines, oral hygiene and handwashing knowledge and behaviors. Beginning with safe water, teachers listed all sources of drinking water at their school. As seen in **Exhibit 51**, the majority of schools in our sample get their drinking water from piped water sources followed by water tanks and wells.



Overall, this suggests relatively clean drinking water availability for students and teachers at school.

### Exhibit 51. School Drinking Water Sources

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Boiled water	4	0	1	0	4	1	0	10
Unboiled water	2	0	0	0	0	0	0	1
Piped water	10	2	2	1	19	7	0	52
Water tank	0	0	1	2	14	5	1	23
Well	5	0	2	2	1	5	1	16
Filtered	0	1	0	0	0	0	0	1
Bring water from home	3	0	0	1	0	1	0	5

Next, we assessed teachers' knowledge of the importance of providing safe water to children.

**Exhibit 52** shows that except for teachers in Badulla District, all teachers believe that it is important to boil water used for drinking or cooking, and the majority believe that children are likely to become sick from drinking unboiled water. However, only 35% of teachers in our sample know that you must boil water for at least one minute (three minutes at high altitude) for it to be considered safe for consumption. Even so, all seven teachers interviewed in Mulaitivu correctly identified the minimum time required to boil water to kill germs.

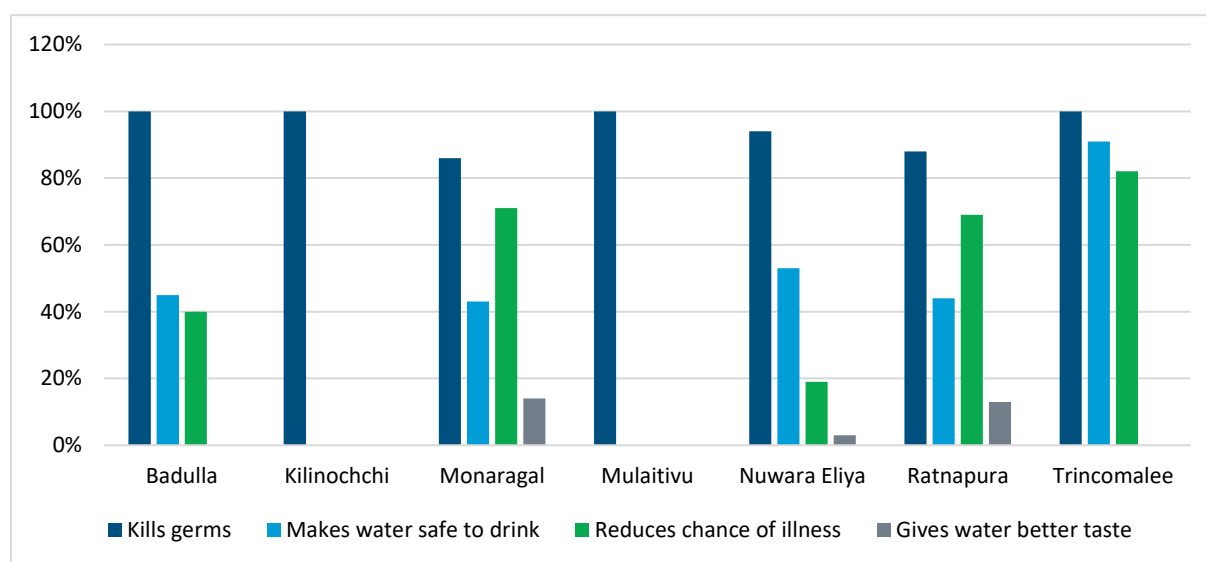
### Exhibit 52. Perceived Importance of Safe Water - Teachers

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Believe important to boil water used for drinking or cooking	22%	100%	100%	100%	100%	100%	100%	98%
Believe children will likely become sick	22%	100%	86%	100%	88%	94%	100%	92%

from drinking unboiled water								
Know to boil water for 1-3 minutes to ensure it is safe	49%	50%	29%	100%	41%	0%	27%	35%
Observations	20	4	7	7	32	16	11	97

**Exhibit 53** depicts teachers’ understanding of the benefits of boiling water before using for drinking or cooking. Almost all teachers mentioned it was important to boil water in order to kill germs and microorganisms that could be in it. Some teachers in each of the districts except Kilinochchi and Mulaitivu also mentioned it makes water safer to drink and reduces the chance of illness.

**Exhibit 53. Perceived Benefits of Boiling Drinking or Cooking Water - Teachers**



Source: Authors’ calculations; 97 total teacher observations: Badulla=20, Kilinochchi=4, Monaragala=7, Mulaitivu=7, Nuwara Eliya=32, Ratnapura=16, and Trincomalee=11.

We then asked teachers about school sanitation and children’s latrine usage. Of the 98 teachers interviewed, 89% reported that children use the latrines at school. While the other ten percent noted students do not use latrines at school, they did not provide additional information about why children are not using the latrines or whether they instead use a bush, the river or go home. Teachers were then asked to describe the proper way for a child to use the toilet from when they enter the latrine to when they exit. **Exhibit 54** shows the proportion of teachers mentioning each appropriate behavior by district. The majority of teachers in each district correctly identified the proper latrine usage behaviors with 74% of teachers being able to

correctly identify five of the six behaviors; however, none of the teachers mentioned washing hands after using the toilet in their descriptions.

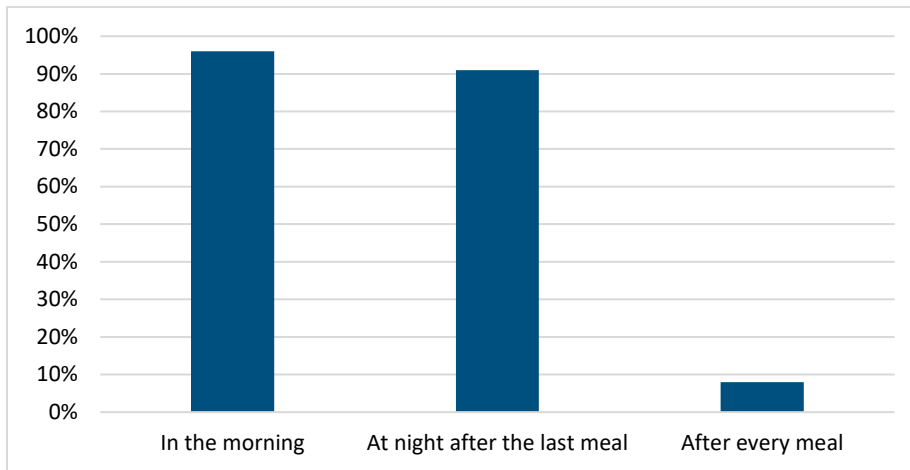
#### Exhibit 54. Reported Behaviors for Children’s Proper Latrine Usage

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Clean themselves after defecating/urinating with toilet paper or water	100%	100%	86%	100%	97%	100%	100%	98%
Flushing the toilet with water after use	100%	100%	86%	86%	100%	100%	100%	98%
Defecate/urinate in the toilet bowl	100%	100%	86%	86%	94%	100%	73%	93%
Not throwing solid objects into the toilet	90%	100%	71%	57%	97%	94%	82%	89%
Throwing toilet paper in toilet or basket	100%	100%	71%	86%	75%	100%	45%	82%
Washing hands after using the toilet	0%	0%	0%	0%	0%	0%	0%	0%
<i>Observations</i>	<i>20</i>	<i>4</i>	<i>7</i>	<i>7</i>	<i>32</i>	<i>16</i>	<i>11</i>	<i>98</i>

84% of teachers reported their school having a trash bin or waste pit, and 93% of those teachers also reported disposing of trash in the bin or pit. Of the three main waste disposal methods (i.e., putting in bin/pit, throwing on ground, and burning), burning was reported by all teachers as one of the methods used at their school while only 8% of teachers reported disposing of waste by throwing it on the ground.

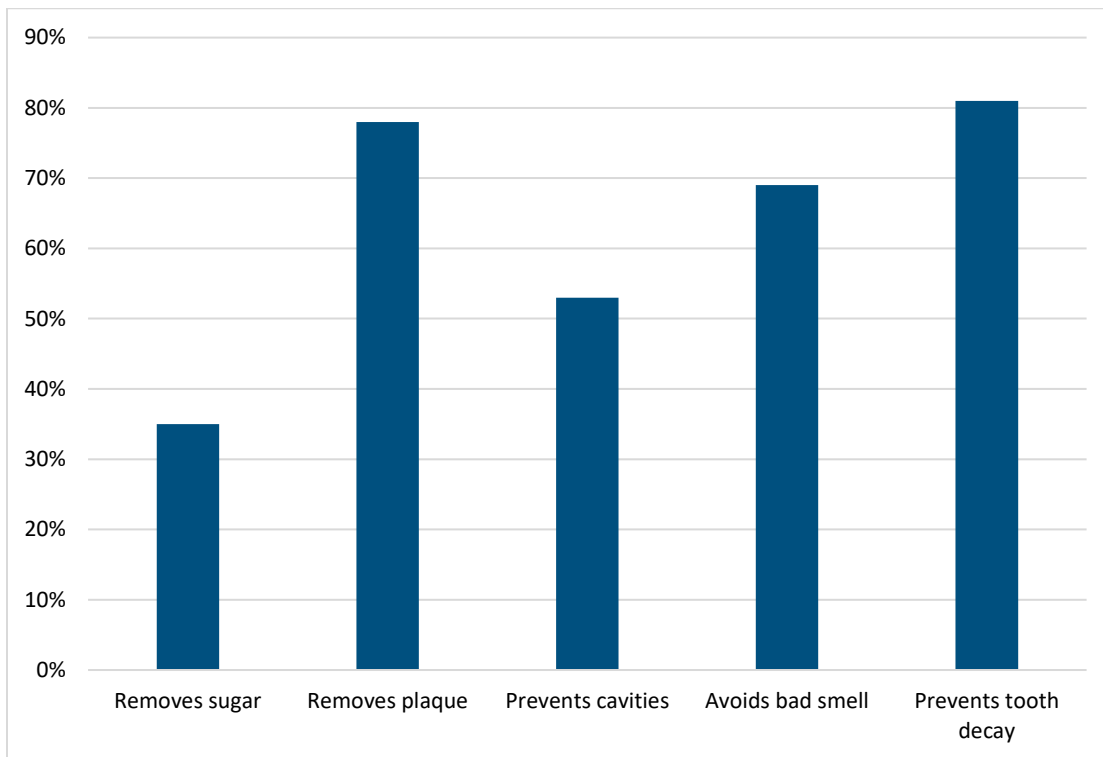
We then asked teachers about children’s oral hygiene. **Exhibit 55** shows the moments teachers noted children should usually brush their teeth while **Exhibit 56** shows the reasons teachers mentioned it was important for children to brush their teeth. 96% of teachers said children should brush their teeth in the morning and 91% said at night after the last meal. Teachers mentioned brushing one’s teeth is important for preventing tooth decay (81%) and removing plaque (78%). Brushing also prevents a bad smell (69%), prevents cavities (53%), and removes sugar (35%).

### Exhibit 55. Moments Children Should Usually Brush Their Teeth



Source: Authors' calculations; 97 total teacher observations: Badulla=20, Kilinochchi=4, Monaragala=7, Mulaitivu=7, Nuwara Eliya=32, Ratnapura=16, and Trincomalee=11.

### Exhibit 56. Perceived Importance of Children Brushing Their Teeth



Source: Authors' calculations; 97 total teacher observations: Badulla=20, Kilinochchi=4, Monaragala=7, Mulaitivu=7, Nuwara Eliya=32, Ratnapura=16, and Trincomalee=11.

Lastly, we asked teachers about their knowledge of and perceptions about children's handwashing behaviors. 98% of teachers stated that it is important for children to wash their hands throughout the day, but only 32% of teachers could describe how to appropriately wash

your hands.<sup>2</sup> **Exhibit 57** shows the breakdown in the proportion of teachers describing the proper handwashing technique by district. As seen in the table, there is a large discrepancy across districts in the proportion of teachers who correctly described how to wash one’s hands. All four teachers in Kilinochchi were able to describe this, but only 19% of the 32 teachers (6 teachers) were able to do so in Nuwara Eliya.

### Exhibit 57. Proportion of Teachers Describing Proper Handwashing Technique

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Can describe proper handwashing technique	20%	100%	43%	43%	19%	19%	73%	32%

Further, teachers were asked about the five key moments in which students should wash their hands. These five moments include: 1) before eating, 2) after defecation, 3) after feeding or caring for animals, 4) after cleaning or wiping a baby, and 5) before preparing food. Of the teachers interviewed, only 13% correctly identified each of these key moments. This result ranges from no teachers in Monaragala and Nuwara Eliya to 75% of teachers in Kilinochchi (see **Exhibit 58**).

### Exhibit 58. Proportion of Teachers Who Know Five Key Moments to Wash Hands

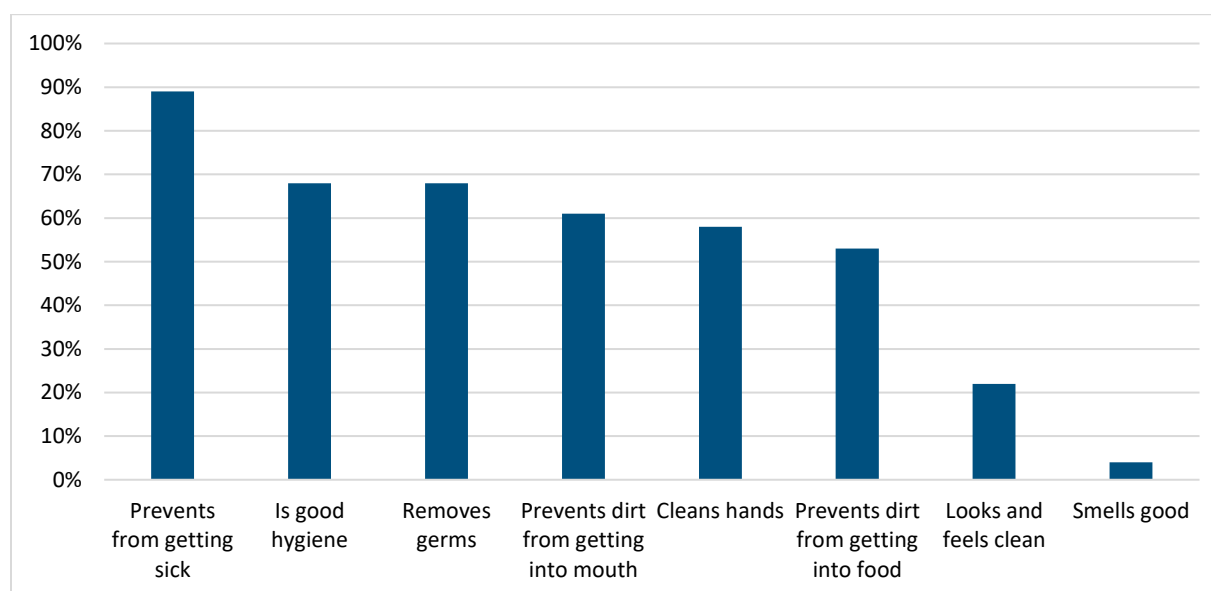
	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Before eating	95%	100%	100%	100%	84%	94%	100%	93%
After defecation	85%	100%	86%	71%	66%	75%	100%	78%
After feeding or caring for animals	55%	100%	14%	57%	13%	13%	55%	33%
Before preparing food	55%	100%	29%	29%	13%	31%	27%	32%
After cleaning or	30%	75%	0%	14%	0%	13%	9%	13%

<sup>2</sup> For this study, proper handwashing required teachers to mention both 1) using a clean water source (either from a tap or someone pouring water onto to one’s hands from a jug) and 2) using soap or ashes.

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
wiping a baby								
Knows all 5 key moments	30%	75%	0%	14%	0%	13%	9%	13%
Observations	20	4	7	7	32	16	11	98

All teachers noted that handwashing stations are available at their school whether in the form of a sink, tap with bucket, or tippy tap. Even so, 81% of teachers surveyed responded that all of their students wash their hands before meals while 12% noted most of them do so and 6% said only some of them do so. No teachers reported that none of their students wash their hands before meals. Relatedly, 55% of teachers reported that all of their students, 25% reported that most of their students, and 19% reported that some of their students wash their hands after using the bathroom. Teachers were also asked why they believe it is important for children to wash their hands. **Exhibit 59** presents teachers' perceptions on why this form of hygiene is important. Teachers were able to select as many reasons as they thought were important. The most common reason cited was that handwashing prevents children from getting sick (89%). Next, teachers mentioned handwashing is good hygiene (68%) and removes germs (68%). Over half of all teachers also mentioned handwashing preventing dirt from getting in one's mouth (61%), cleaning hands (58%), and preventing dirt from getting in food (53%).

### Exhibit 59. Perceived Importance of Children Washing Their Hands



Source: Authors' calculations; 97 total teacher observations: Badulla=20, Kilinochchi=4, Monaragala=7, Mulaitivu=7, Nuwara Eliya=32, Ratnapura=16, and Trincomalee=11.

## Children’s Health

Teachers were also asked about their knowledge of common diseases and health issues such as trachoma, dengue fever, intestinal worms, bilharzia, and COVID-19. Specifically, they were asked about their familiarity with different diseases including being able to identify causes of the illness, whether a child has the affliction, and what can be done to prevent infection.

**Exhibits 60-64** shows the proportion of teachers by district who were familiar with each affliction along with the proportion of teachers who correctly reported at least one cause of the infection, those who identified at least one symptom of each disease as well as the proportion who were able to identify all potential symptoms. Across all diseases, when teachers have heard of the disease, they are more likely to report knowing at least one cause and at least one symptom. However, on average, teachers do not know all symptoms of these diseases. Aside from COVID-19, teachers are most familiar with Dengue Fever and least familiar with Bilharzia.

### Exhibit 60. Teacher Familiarity and Knowledge of Trachoma

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
<i>Trachoma</i>								
Heard of trachoma	50%	100%	71%	71%	44%	50%	55%	54%
<i>N</i>	20	4	7	7	32	16	11	97
Knows at least one cause	100%	100%	100%	80%	100%	100%	100%	98%
<i>N</i>	10	4	5	5	14	8	6	52
Knows at least one symptom	100%	75%	100%	80%	93%	100%	100%	94%
<i>N</i>	10	4	5	5	14	8	6	52
Number of symptoms known (out of 3)	1	1	2	1	1	1	1	1
<i>N</i>	20	4	7	7	32	16	11	97
Knows at least one way to prevent	100%	100%	100%	100%	100%	100%	100%	100%
<i>N</i>	10	4	5	5	14	8	6	52

*NOTE: Teachers were only asked follow-up questions about their knowledge of causes and/or symptoms if they noted they had heard of the infection.*

### Exhibit 61. Teacher Familiarity and Knowledge of Dengue Fever

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Heard of dengue	100%	100%	86%	100%	78%	94%	100%	91%
<i>N</i>	20	4	7	7	32	16	11	97
Knows at least one cause	100%	100%	100%	100%	96%	100%	100%	99%
<i>N</i>	20	4	6	7	25	15	11	97
Knows at least one symptom	100%	100%	100%	57%	96%	100%	100%	95%
<i>N</i>	20	4	6	7	25	15	11	97
Number of potential symptoms known (out of 7)	4	2	2	1	2	4	3	3
<i>N</i>	20	4	7	7	32	16	11	97
Knows at least one way to prevent	100%	100%	100%	100%	100%	100%	100%	100%
<i>N</i>	20	4	6	7	25	15	11	97

NOTE: Teachers were only asked follow-up questions about their knowledge of causes and/or symptoms if they noted they had heard of the infection.

### Exhibit 62. Teacher Familiarity and Knowledge of Intestinal Worms

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Heard of intestinal worms	75%	100%	57%	57%	41%	88%	36%	60%
<i>N</i>	20	4	7	7	32	16	11	97
Knows at least one cause	100%	100%	100%	50%	100%	100%	75%	95%
<i>N</i>	15	4	4	4	13	14	4	58
Knows at least one way to prevent	100%	75%	100%	50%	100%	100%	75%	93%
<i>N</i>	15	4	4	4	13	14	4	58



NOTE: Teachers were only asked follow-up questions about their knowledge of causes and/or symptoms if they noted they had heard of the infection.

Teachers were also asked whether children at their school ever received deworming treatment. Teachers in Mulaitivu were the only ones to all report that students had never received deworming while there was a mix of responses in most other districts, and all teachers reported children have received deworming treatment in Monaragala and Trincomalee.

### Exhibit 63. Teacher Familiarity and Knowledge of Bilharzia

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Heard of intestinal bilharzia	10%	25%	14%	14%	0%	6%	0%	6%
N	20	4	7	7	32	16	11	97

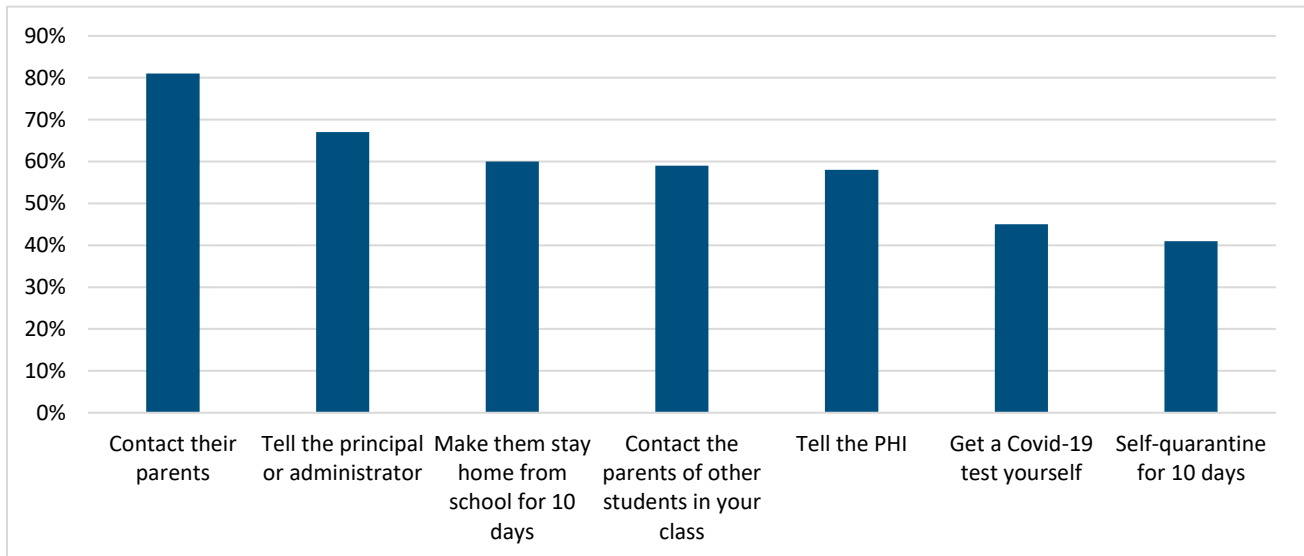
### Exhibit 64. Teacher Familiarity and Knowledge of COVID-19

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Knows at least one symptom of COVID-19	100%	100%	86%	100%	94%	100%	100%	97%
N	20	4	7	7	32	16	11	97
Number of potential symptoms known (out of 9)	5	5	4	3	3	5	4	4
N	20	4	7	7	32	16	11	97
Knows at least one way to prevent	100%	100%	100%	100%	100%	100%	100%	100%
N	20	4	7	7	32	16	11	97

Lastly, teachers were asked how, if at all, one can treat COVID-19 and what they should do if a child in their classroom tests positive for COVID-19. Sixty-four percent of all teachers surveyed believe a hospital intervention is necessary to treat COVID-19 while 54% reported prescription medicines being another viable treatment option. 11% of teachers reported that COVID-19 is untreatable, 16% mentioned over-the-counter medication and 11% noted traditional medicine as treatment options. **Exhibit 65** shows the proportion of teachers by district reporting each response to a positive case in their classroom. Most teachers said they would contact the

students’ parents (81%), tell the principal (67%), make the student stay home from school for 10 days (60%), contact the parents of the other students in their class (59%), and tell the PHI (58%). Of the teachers interviewed, 45% said they would get a COVID-19 test themselves and 41% would self-quarantine for 10 days.

### Exhibit 65. Reported Reactions to a Student Testing Positive for COVID-19



Source: Authors’ calculations; 97 total teacher observations: Badulla=20, Kilinochchi=4, Monaragala=7, Mulaitivu=7, Nuwara Eliya=32, Ratnapura=16, and Trincomalee=11.

### Existing Health/Nutrition/WASH Interventions and Policies

Respondents in some zones described school meal programs, but it seems that such programs stopped during COVID-19 or had just started again. When nutrition programs, such as programs providing school meals, were available, respondents said they helped increase student weight. One Mulaitivu respondent at the zonal level described the connection between interventions and improved outcomes for students: *“Currently the school nutrition program has been re-launched and student attendance has increased when it has been successfully implemented in the past.”* Poorer students were perceived as more likely to come to school without breakfast or without bringing their lunch and to be underweight. Respondents also agreed that students who are hungry have difficulty concentrating in class.

All areas regularly monitor child health indicators. A few respondents (e.g., from Ratnapura, Nuwara Eliya, and Trincomalee) mentioned that Ministry of Health officials measure student BMI and monitor nutrition programs. A zonal respondent from Kilinochchi said, *“Public health officials will come, they will come to get vaccinated and in addition it is currently the corona period so public health officers will come [for students] to get tested.”* A respondent from Trincomalee said, *“Medical officer inspects student health such as height, weight, hearing,*

*viewing and heart beat and general check-up during the months of January or February of each year. In addition, the dental check-up also being conducted by the medical officer. Midwife check girls' health and providing necessary advice on the sexual aspect."*

Teachers share nutrition, health, and WASH practices with parents and students. For example, a principal in Badulla said, *"We share information on the values of a nutritious meal and how to prepare a nutritious meal at home. We also highlight the importance of leading a healthy lifestyle."* Teachers also share WASH information with parents and students, especially as a result of COVID-19. Parents in an FGD in Kilinochchi confirmed that *"we observed in the morning meeting time they sharing the information on the hand washing."* A Nuwara Eliya zonal respondent said, *"Teachers are instructed through the Director in charge of Health and Physical Education to improve the hygiene habits of the students."*

Many teachers and SMPs reported currently receiving trainings on various health, nutrition, and food safety topics. For instance, half of the SMPs interviewed mentioned they received training on children's health and nutrition: 32% within the past six months, 25% within the past year, 25% over a year ago. All of these trainings were provided by PHI and half of the attendees did not find the material too difficult to understand. 66% of teachers mentioned receiving information on children's nutrition through teacher trainings and 60% mentioned from health workers once or twice a month. To then train children, teachers have access to print materials (71%), lectures (60%), and posters (57%).

Teachers also reported receiving information on handwashing mainly through teacher trainings (65%), health workers (59%) and the broader community (56%) every day either in regular lessons or health clubs. Similarly, teachers receive information on WASH through the same three main mechanisms (66%, 58%, and 51%, respectively). For handwashing, teachers generally have access to print materials (74%), lectures (66%), and posters (59%). Few teachers mentioned access to games for active learning around handwashing (8%). For WASH, teachers also have access to print materials (73%), lectures (64%), and posters (59%) with only 6% reporting access to active learning materials like games.

Similarly, half of the SMPs reported receiving information on food safety techniques within the past six months from PHIs and other ministry officials. However, only one-third of SMPs have had formal training on food safety techniques. For those that received training, it was within the past six months and also led by PHIs. Those attending these trainings did not feel they were difficult to understand.

## 8. School Feeding Program

### *Current Government Meal Program*

More schools report that they have received school meal assistance from sources other than the government (**Exhibit 66**), even though almost all of them indicate that they are listed to receive support from the government meal program. A small fraction of schools (7%) reported that they receive feeding assistance from the government. The fraction of schools indicating that they received feeding assistance from the government was highest in Kilinochchi (15%). No schools in Monaragala reported that that they received government feeding assistance, but 13% reported receiving assistance from other sources. The schools reporting nongovernmental assistance are highest in Mulaitivu (92%) and Kilinochchi (56%). This observation should be interpreted with caution, however, because most (86%) of the schools reporting a nongovernmental source of assistance specify that they receive assistance from either the zonal office or the “Nutrition Programme.” It is possible that the respondents are failing to identify the source of assistance correctly.

### **Exhibit 66. School Meal Assistance**

	Badulla	Kilinochchi	Monaragala	Mulaitivu	Nuwara Eliya	Ratnapura	Trincomalee	Overall
Receives school meal assistance from government	6%	15%	0%	2%	10%	3%	11%	7%
Receives school meal assistance from other sources	15%	56%	0%	92%	0%	9%	4%	13%
Covered by Government feeding program: Meal	97%	88%	100%	90%	97%	97%	100%	97%
Covered by Government feeding program: Meal and milk/yoghurt	3%	9%	0%	10%	1%	0%	0%	1%
Covered by Government feeding	0%	3%	0%	%	2%	3%	0%	2%

program:  
Milk/yoghurt

Qualitatively, some respondents reported that no school meals had been provided since the end of 2019, while others said school meals had since resumed, in one case as recently as the day prior. A zonal director from Badulla said that the government meal program had only been operating in rural schools at the time of data collection, but this was not corroborated by other respondents. Children attending schools without active government meal programs mostly bring water and meals from home.

### **Actors Involved**

Several actors are involved in the coordination, preparation, and delivery of government school meals. SDSs appeared to have primary responsibility for identifying and selecting SMPs and ultimately were responsible for compensating them with funds received from the government. SMPs prepare and deliver meals according to the government meal schedule or menu, and their work is monitored by zonal officers, principals, teachers, and school food/nutrition committees. **Exhibit 67** lists the primary role(s) played by each actor involved in the government school meal program.

### **Exhibit 67. Actors and Their Roles in the Government Meal Program**

Actor	Role
SMP	<ul style="list-style-type: none"> <li>Prepares and distributes meals according to the government meal schedule</li> </ul>
Zonal officer	<ul style="list-style-type: none"> <li>Determines meal schedule</li> <li>Provides training on meal preparation and food safety</li> <li>Monitors meal provision (both cooking and distribution)</li> </ul>
Public health inspector	<ul style="list-style-type: none"> <li>Monitors meal provision and food safety</li> </ul>
Principal	<ul style="list-style-type: none"> <li>Coordinates with SDS and SMP to ensure meal delivery to school</li> <li>Sometimes is responsible for buying/delivering ingredients (Mulaitivu SDS)</li> <li>Monitors meal provision</li> </ul>
Teacher	<ul style="list-style-type: none"> <li>Monitors meal provision and ensures food quality</li> </ul>
School food/nutrition committee	<ul style="list-style-type: none"> <li>Monitors meal provision and ensures food quality</li> </ul>
SDS	<ul style="list-style-type: none"> <li>Connects principals to SMPs</li> <li>Helps select SMPs</li> <li>Coordinates and pays SMPs</li> </ul>

### **Types and Sourcing of Food**

Respondents reported that SMPs adhered to the government-stipulated menu for school meals with relatively few deviations. A school principal from Nuwara Eliya said, *“Food is provided as per the government diet schedule. Sometimes minor changes are made without compromising quality.”* The increased cost of food has made it more difficult to follow the government schedule, however, and some noted that requirements such as serving eggs a certain number of days per week can no longer be met given the increase in prices. Foods were primarily obtained from local markets, and meals featured a wide range of foods, including milk, fish, eggs, fruit, chickpeas, rice, peanuts, grains, and leafy vegetables.

### **Funding**

Funding for the government school meal program came from the zonal education office, according to respondents. SDSs paid SMPs based on the number of students served per school, although their payments were frequently delayed. Many respondents emphasized the lengthy delays (often several months) in paying SMPs, and some said that occasionally SMPs never received payment at all. A Kilinochchi SDS member stated that *“most of the time the cooking person is working as a volunteer due to lack of [money] in the SDS account to [make] payment.”* A member of the SMP in Monaragala said, *“There is a two-to-three-month delay in getting paid for the food provided for one month,”* a pattern that informants from other districts corroborated. Members of multiple SMPs reported using their personal jewelry as collateral to purchase food to continue to prepare meals while waiting for payment from previous months.

### **Changes Due to COVID-19**

The government school meal program appears to have been paused for most of the past 2 years due to the COVID-19 pandemic. However, some schools reported distributing dry food in place of school meals. A member of the SMP in Kilinochchi said, *“During COVID-19 we hand over dry food to the parents and they cook it at home.”* Other respondents mentioned NGOs—including Save the Children, through the PALAM/A program—that supported schools with dry food distribution while the government program was paused.

### **Food Safety Measures**

Respondents reported several different procedures adopted to ensure food safety, including an initial assessment of SMPs’ meal preparation and delivery process, routine monitoring by the zonal office, circulars on food preparation, and the use of well-sealed containers to transport food. There were also some ad hoc practices reported, such as teachers sampling food before students to ensure safety. A Mulaitivu SDS member said that meals *“should be given to students only after the teachers have tasted it for safety reasons.”* While some principals reported sharing the responsibility for monitoring food safety, the zonal education office bore primary

responsibility for monitoring and oversight. That said, the food safety policies and guidelines used by the schools appear to vary. When asked about food safety policies, a Badulla zonal official said the following:

*“Well, we have not stipulated such policies or guidelines. But we have advised the meal providers to follow hygienic guidelines at all times. We monitor whether the plates and cups of children are clean through the teachers in charge of nutrition. We also check if the meal providers and their staff are clad in clean clothing at the time of serving food to children. Even the cleanliness of their hands, legs and fingernails are also closely scrutinized. We look into all aspects, but the modes and systems are different from school to school.”*

SMPs, for their part, were not consistently clear on the guidelines they were meant to follow, but did consistently reference receiving food safety instructions from principals and being “inspected” by zonal officials.

### **Messaging**

There did not appear to be any explicit nutrition-related messaging associated with the government school meal program, but respondents reported that schools delivered messages related to nutrition and the need to wash hands before eating. Teachers and principals were primarily responsible for sharing this information and said that any nutrition-related concerns were brought up during parent–teacher meetings. PHIs monitored children’s height and weight regularly and also shared concerns about children’s nutritional status with teachers. A zonal official from Badulla stated that nutrition-related messages are also shared as part of the curriculum: *“[D]uring the home science period of children, we educate them on preparing meals in a nutritious and creative manner. We guide them on good food habits.”* Giving nutritional advice was not explicitly mentioned by other respondents.

### **Strengths of Current Meal Program**

There was widespread agreement among respondents that children liked the food provided under the government meal program. A member of the Badulla SMP said, *“The children love the food. No child has resisted it. If they are not satisfied with the portion, they come to us seeking more food.”* SMPs from multiple districts reported that they cook “deliciously” and feed schoolchildren as they would their own. A Trincomalee SMP member commented, *“My child also comes to this school. I bring the food considering all the children are mine,”* which was a sentiment echoed by numerous other SMPs. SDS members commented about the quality of the food less frequently, but those that did concurred that students liked the meals.

In addition to mentioning that the children liked the food, SMPs and principals consistently described the food provided under the government meal program as “hot and fresh” and nutritious, as stipulated by the ministry’s menu. Respondents reported minimal food waste and indicated that extra food is shared equitably. Food waste only occurred on days where there were a lot of absences, and in Rathnapura the SMP said that they called schools ahead of time to confirm the exact number of students present before bringing meals to ensure the quantity was appropriate and to minimize waste. Lastly, respondents agreed that meals were served on schedule without delay.

### **Challenges of Current Meal Program**

By far the number one challenge mentioned was the price of food, which respondents believed was a result of inflation and COVID-related supply disruptions. All respondents—especially SMPs—noted that it was difficult to adhere to the ministry’s required menu given the current food prices and the fact that they are allocated only Rs 30 per meal. Eggs, in particular, have become more expensive. A Rathnapura principal said, *“A meal costs 30 rupees. When it costs 25 rupees for the egg you can’t provide all the remaining [food] for 5 rupees.”* In Badulla, respondents indicated they had not been able to find anyone to provide meals given the Rs 30 allowance per student meal. The principal noted, *“No one is volunteering to prepare the meals for the students as the cost allocated for the task is not sufficient to complete the task at all.”*

In addition to the cost of food, delayed payment to SMPs also appears to have been a significant challenge. SMPs reported waiting several months to receive payment or not receiving payment at all. An SMP member from Monaragala said, *“There is a two-to-three-month delay in getting paid for the food provided for one month.”* Members of multiple SMPs reported using their personal jewelry as collateral to purchase food to continue to prepare meals while waiting to receive payment from previous months.

To a lesser extent, respondents also complained that school kitchens were either nonexistent or were not sufficiently equipped for SMPs to prepare meals in. Supplies such as utensils were not readily available, and in some areas certain foods were not available for purchase.

## **Limitations**

---

The study faced the following limitations in evaluation design and analysis.

**Reliance on self-reported data.** The quantitative approach relies on self-reported data from children on socially and potentially culturally sensitive subjects such as food security or health-related absences from school. Thus, the data should be interpreted with caution because it is



particularly susceptible to social desirability bias; young children, especially in Grade 2, may not always be emotionally and cognitively able to answer survey questions effectively. To minimize this limitation and improve data reliability, we devoted attention to cognitive testing of the survey instrument with children in Grade 2 before the PALAM/A baseline data collection. In consultation with our data collection partners, we adjusted question phrasing to make sure children could understand the questions and feel comfortable answering. Further, we thoroughly trained enumerators on best practices for administering surveys to children including ways to make them feel comfortable and to elicit more honest responses.

As for the qualitative research, the data collected reflects individual perspectives, which are subject to bias and preconceptions. Recognizing this potential challenge, our experienced interviewers dedicated time to explain the questions to respondents, as needed. Another limitation is that parents who are motivated to support their children's education may be more likely than others to participate in a focus group than those who are not as supportive. Thus, enthusiastic responses from parents about the importance of education should be interpreted with caution.

**Absence of electronic class lists.** We will have to sample from students who are present at school rather than from the full classroom. While our approach ensures sampling consistency across schools and will achieve a random sample of students who are present on the day of data collection, the possibility of systematic absences might induce a risk of sampling bias by selecting only present students. For example, such a bias can arise from excluding information on children who are more likely to be absent from school, including those from vulnerable socio-economic backgrounds who may live further from school and have difficulties commuting to school on muddy roads during rainy seasons, or those who may be absent due to health issues.

**Subjectivity of classroom observations and lack of comparability.** Snapshot observations measure a specific variable or indicator—in this case, student attention—at a specific point in time. They do not support conclusive statements about whether an intervention—in this case, school meals—caused observed changes since attention is impacted by various external factors not related to the program interventions. In addition, the subjective nature of the tool could create inconsistencies in findings due to the inherently difficult job of making observational judgements across changing settings. For example, the observers might be different from baseline to final evaluation and make a different judgment call for a distracted student. To mitigate this limitation, AIR will provide the observers with a consistent training across assessment phases to enhance the comparability of the findings. In addition, to increase the interrater reliability of the observations, the observers conducted the classroom observations in pairs in at least 10 percent of the sampled classrooms. This challenge could also be less of a

limitation if the observational outcomes will be mainly used for learning about one point in time rather comparing two points in time.

**Reduced instruction time due to COVID-19.** In March 2020, after confirming its first cases of COVID-19, the Government of Sri Lanka announced a nationwide lockdown and closed all schools effective as of March 2020. After a two month lock down period, students returned to school to complete their disrupted school year and gain back instruction time that had been lost during the lockdown. However, schools closed again in 2021 due to the outbreak of the Omicron variant. All of these school closures and disruptions likely led to reduced learning for students, particularly students in Grade 2 in the most recent school year as they would have started their primary schooling the year of COVID-19 (2020). Therefore, it is possible that the results of the LBRA for the baseline of PALAM/A are actually lower than usual. If student scores are lower than normal due to less time in the classroom, especially for literacy instruction, it is possible that our use of a cross-sectional design could show larger changes over time in literacy outcomes for Grade 2 students as the next cohort assessed will have experienced two full years of uninterrupted education prior to the assessment such that their scores are naturally higher than the first Grade 2 cohort. In other words, there is potential for this assessment to overestimate changes over time in Grade 2 literacy outcomes.

**Small quantitative sample sizes limit generalizability.** As mentioned, schools were coming out of the second wave of the COVID-19 pandemic in Sri Lanka when baseline data collection took place. As such, enumerators found it difficult to locate all SMPs associated with PALAM/A schools. This resulted in a smaller number of SMP KAP surveys administered thereby rendering the results of the survey less generalizable both within and across districts. Specifically, in cases where we were only able to interview one or two SMPs, the results of the KAP are not being adequately averaged across a representative sample of the population, and are instead reflecting one or two people's opinions and knowledge. Therefore, special consideration should be given to the results from the baseline SMP KAP surveys.

**Lack of information on school water sources.** While we gathered data on the presence of a source of drinking water, the enumerators did not assess the type of water source. Potentially, this washes out the differences in quality associated with water sources. For instance, a tap with a predictable water supply is easier for children and teachers to access than sourcing water from a well near the school. We will include a question in the endline questionnaire, to establish this nuance.

## Conclusions

---

Baseline results largely confirmed the relevance of the literacy and nutrition programming planned under the PALAM/A project. This section summarizes high level conclusions with regard to school facilities, literacy, attendance, and nutrition.

### ***School Facilities***

Overall, respondents emphasized the need for more physical space within classrooms and clean water supplies. According to the classroom observation tool, there were schools in most districts that had inadequate space for learning and lacked library space and associated learning and reading materials. Further, the water supply was not clean and affected the safety of students, teachers, and principals.

### ***Literacy***

Baseline data from the student assessment revealed that while students generally boast proficiency in emergent literacy skills such as oral vocabulary knowledge, letter recognition, and word recognition, Grade 2 students' reading comprehension skills remain low.

### ***Attendance***

Baseline data indicate that attendance was consistently high, except for in Kilinochchi. However, attendance consistently dropped during rainy season in all areas. In addition, there seemed to be room for improvement in attendance monitoring.

### ***Nutrition***

Monitoring of indicators related to children's nutrition seemed to be relatively consistent, and respondents were aware of some of the basic indicators that were important for children's health and nutrition. However, while teachers and SMPs reported receiving information and training on children's health and nutrition, their knowledge was inconsistent and varied widely across PALAM/A project districts.

The government meal program was just starting to resume at the time of baseline data collection. Respondents identified several key strengths of the program, most notably that meals were nutritious and well-liked by students. There were also some challenges with the program, however, mostly around the allocation of 30 Rs per child meal, which respondents indicated was not sufficient given current food prices. There was also widespread agreement that payments to SMPs were routinely delayed and sometimes not made at all. Given that PALAM/A will operate through the same structures as the government meal program, it is relevant to consider these strengths and challenges as the program launches.

## Recommendations and Next Steps

---

Baseline data collection confirmed the appropriateness of the following planned aspects of program implementation:

- **Widespread infrastructure improvements, especially designated kitchen spaces and distribution of additional kitchen equipment.** Respondents emphasized the need to improve the delivery of school meals, particularly through designating areas in schools for food preparation and improving the availability of kitchen equipment and utensils.
- **Teachers need training on nutrition and WASH best practices that go beyond basic information.** Most respondents considered teachers to be the best means of disseminating information to both students and parents, and thus training in nutrition and food diversity to improve their knowledge will likely increase the amount of nutritional and dietary information possessed by students and parents. A zonal education officer also suggested offering practical workshops on the school premises to parents on various WASH activities such as waste disposal methods that could be replicated in the home environment.

Based on the baseline data collection, we recommend that Save the Children consider the following additional recommendations for program implementation:

- **Plan stopgap measures for increasing attendance during rainy season.** Because attendance was relatively consistent except for during rainy season, the program could consider approaches to increasing attendance during rainy season, or potentially planned lending of materials to students when travel is not possible.
- **Build on the current system to ensure the continuation of attendance, literacy, and nutrition monitoring.** Because attendance monitoring seemed to be inconsistent, the program could build on the existing efforts to ensure the sustainability of attendance monitoring, as well as the monitoring of other indicators associated with literacy and nutrition.
- **Provide tailored training on children's nutrition, health, and WASH based on teachers' and SMPs' baseline knowledge.** While all teachers and SMPs were knowledgeable about children's health and nutrition to some extent, there was wide variation in the level of knowledge and reporting of correct practices being implemented across the program districts. Instead of targeting all districts with the same information, districts should be targeted with the knowledge they are lacking to maintain interest and improve KAP.
- **Work with the Government of Sri Lanka to determine whether an adjustment to the price per meal is feasible.** Respondents widely agreed that the current allotment (Rs 30 per

student meal) is insufficient given current food prices. School meal providers pointed to how allocations for school meals have not reflected the changes in food prices in the past decade. For example, the price of an egg is Rs 25, and capping the allowance per meal at Rs 30 makes providing meals unmanageable. A respondent suggested that increasing the allowance from Rs 30 per meal to Rs 45–50 will help school meal providers meet their responsibility. Further, reducing delays in compensating school meal providers is recommended.

## References

---

- Abeywickrama, H. M., Koyama, Y., Uchiyama, M., Shimizu, U., Iwasa, Y., Yamada, E., Ohashi, K., & Mitobe, Y. (2018). Micronutrient status in Sri Lanka: A review. *Nutrients*, *10*(11), 1583. Retrieved from <https://www.mdpi.com/2072-6643/10/11/1583>
- Adukia, A. (2017). Sanitation and Education. *American Economic Journal: Applied Economics*, *9*(2), 23-59.
- Allison, M.A., Attisha, E., Lerner, M., De Pinto, C.D., Beers, N.B., Gibson, E.J., Gorski, P., Kjolhede, C., O'Leary, S.C., Schumacher, H., & Weiss-Harrison, A. (2019). The link between school attendance and good health. *Pediatrics*, *143*(2), 1-13.
- Aturupane, H., Glewwe, P., Ravina, R., Sonnadara, U., & Wisniewski, S. (2014). An assessment of the impacts of Sri Lanka's programme for school improvement and school report card programme on students' academic progress. *Journal of Development Studies*, *50*, 1647–1669. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/00220388.2014.936396>
- Bundy, D.A.P. (2011). *Rethinking school health: A key component of education for all*. Washington, DC: World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/900271468332690641/pdf/600390PUB01D171Health09780821379073.pdf>
- Chakraborty, T., & Jayaraman, R. (2019). School feeding and learning achievement: evidence from India's midday meal program. *Journal of Development Economics*, *139*, 249-265.
- Clarke, D., Wijesundera, S., & Sethunga, P. (2016). *Sri Lanka Child-Friendly Approach (CFA) evaluation: Final report*. Retrieved from [https://www.unicef.org/evaldatabase/files/CFA\\_Evaluation\\_UNICEF\\_Sri\\_Lanka\\_Final\\_Report\\_2015-006.pdf](https://www.unicef.org/evaldatabase/files/CFA_Evaluation_UNICEF_Sri_Lanka_Final_Report_2015-006.pdf)
- de Hoop, T., Ring, H., Coombes, A., Brudevold-Newman, A., Rothbard, V., Udayakumar, C., Davis, D., & Seidenfeld, S. (2018). *Scaling education innovations in complex emergencies: Evidence from the Humanitarian Education Accelerator*. Washington, DC: American Institutes for Research.

- Department of Census and Statistics [DCS] and Ministry of Health, Nutrition and Indigenous Medicine. (2017). *Sri Lanka Demographic and Health Survey 2016*. Retrieved from [http://www.statistics.gov.lk/social/DHS\\_2016a/FIST%20PAGE\\_%20CONTENTS.pdf](http://www.statistics.gov.lk/social/DHS_2016a/FIST%20PAGE_%20CONTENTS.pdf)
- Drake, L.J., Peiris, R., Dixon, R., Palfreyman, A., Ebenezer, A., Lokubalasureya, A., Kwon, J., Medagama, R.S., Bundy, D.A.P., Aturupane, H., & De Silva, N. (2014). *School health and nutrition in Sri Lanka* (South Asia: Human Development Sector Discussion Paper Series, Report No. 71). Retrieved from <http://documents.worldbank.org/curated/en/231091468188678045/pdf/97773-NWP-P113488-Box391484B-PUBLIC.pdf>
- Ebenezer, R., Gunawardena, K., Kumarendran, B., Pathmeswaran, A., Jukes, M.C.H., Drake, L.J., & Silva, N.D. (2013). Cluster-randomised trial of the impact of school-based deworming and iron supplementation on the cognitive abilities of schoolchildren in Sri Lanka's plantation sector. *Tropical Medicine and International Health*, 18, 942–951. Retrieved from <https://onlinelibrary.wiley.com/doi/full/10.1111/tmi.12128>
- Fernando, D., De Silva, D., Carter, R., Mendis, K.N., & Wickremasinghe, R. (2006). A randomized, double-blind, placebo-controlled, clinical trial of the impact of malaria prevention on the educational attainment of school children. *The American Journal of Tropical Medicine and Hygiene*, 74, 386–93. Retrieved from <http://www.ajtmh.org/content/journals/10.4269/ajtmh.2006.74.386>
- Glewwe, P., & Miguel, E. (2008). The impact of child health and nutrition on education in less developed countries. In T.P. Schultz & J. Strauss (Eds.), *Handbook of development economics* (Vol. 4, pp. 3561–3606). Amsterdam: North-Holland.
- He, F. (2010). *Essays on education programs in developing countries* [Ph.D. thesis]. New York, NY: Columbia University.
- Jayatissa, R., Gunathilaka, M.M., Herath P., & Fernando D.N. (2014). *National Nutrition and Micronutrient Survey, Part II. Iron, zinc, calcium deficiency among children aged 6–59 months*. Colombo, Sri Lanka: Ministry of Health and UNICEF Sri Lanka. Retrieved from [https://www.unicef.org/srilanka/Nutrition\\_Survey\\_Iron\\_Zinc\\_Calcium\\_deficiency\\_among\\_children.pdf](https://www.unicef.org/srilanka/Nutrition_Survey_Iron_Zinc_Calcium_deficiency_among_children.pdf)

- Jayawardena, P. (2014). *Can people in Sri Lanka's estate sector break away from poor nutrition: What causes malnutrition and how it can be tackled* (Health Economic Series No.1). Colombo, Sri Lanka: Institute of Policy Studies of Sri Lanka. Retrieved from <http://www.ips.lk/wp-content/uploads/2017/02/Can-People-in-SL-Estate-Sector-Break-Away.pdf>
- Kim, J. O., & Mueller, C. W. (1978). *Factor analysis: Statistical methods and practical issues*. Beverly Hills, CA: Sage.
- King, G., & Nielsen, R. (2018). *Why propensity scores should not be used for matching*. Political Analysis. Retrieved from <https://gking.harvard.edu/files/gking/files/psnot.pdf>
- Kristjansson, B., Petticrew, M., MacDonald, B., Krasevec, J., Janzen, L., Greenhalgh, T., Wells, GA., MacGowan, J., Farmer, AP., Shea, B., Mayhew, A., Tugwell, P., & Welch, V. (2007). *School feeding for improving the physical and psychosocial health of disadvantaged students*. Cochrane Database of Systematic Reviews, 1. Art. No.: CD004676. Retrieved from [https://www.cochrane.org/CD004676/BEHAV\\_school-feeding-for-improving-the-physical-and-psychosocial-health-of-disadvantaged-schoolchildren](https://www.cochrane.org/CD004676/BEHAV_school-feeding-for-improving-the-physical-and-psychosocial-health-of-disadvantaged-schoolchildren)
- Little, A., Upul Indika, H.N., & Rolleston, C. (2011). *Access, attendance and achievement in rural schools in Sri Lanka* (Create Pathways to Access, Research Monograph No. 73). Falmer, UK: University of Essex. Retrieved from [http://www.create-rpc.org/pdf\\_documents/PTA73.pdf](http://www.create-rpc.org/pdf_documents/PTA73.pdf)
- Mahawithanage, S., Kannangara, K., Wickremasinghe, R., Chandrika, U., Jansz, E.R., Karunaweera, N., & Wickremasinghe A. (2007). Impact of vitamin A supplementation on health status and absenteeism of school children in Sri Lanka. *Asia Pacific Journal of Clinical Nutrition*, 16(1), 94–102. Retrieved from <http://nutritionsof Sri Lanka.org/wp-content/uploads/Mahawithanage-et-al-2007.pdf>
- Maluccio, J. A., Hoddinott, J., Behrman, J. R., Martorell, R., Quisumbing, A. R., & Stein, A. D. (2009). The impact of improving nutrition during early childhood on education among Guatemalan adults. *The Economic Journal*, 119(537), 734–763. Retrieved from [https://www.jstor.org/stable/20485342#metadata\\_info\\_tab\\_contents](https://www.jstor.org/stable/20485342#metadata_info_tab_contents)
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage Publishing.



- National Education Research and Evaluation Centre [NEREC]. (2015). National Report – National Assessment of Achievement of Students Completing Grade 4 in Year 2015 in Sri Lanka. Colombo, Sri Lanka: University of Colombo. Retrieved from <https://edu.cmb.ac.lk/nerec/?p=452>
- O'Donnell, A., Ghani Razaak, M., Kostner, M., & Perumpillai-Essex, J. (2018). *Shadows of conflict in northern and eastern Sri Lanka: Socioeconomic challenges and a way forward*. Washington, DC: World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/784281539195433971/pdf/130701-PUB-PUBLIC-document-date-10-26-18.pdf>
- Powell, C. A., Walker, S. P., Chang, S. M., & Grantham-McGregor, S. M. (1998). Nutrition and education: A randomized trial of the effects of breakfast in rural primary school children. *The American Journal of Clinical Nutrition*, 68(4), 873–879. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.870.1022&rep=rep1&type=pdf>
- Room to Read. (2018). 5 Ways Room to Read is Improving the State of Education in Sri Lanka. Retrieved from <https://www.roomtoread.org/the-latest/5-ways-room-to-read-is-improving-the-state-of-education-in-sri-lanka/>
- Shekar, M., Somanatha, A., & Du, L. (2007). *Malnutrition in Sri Lanka: Scale, scope, causes, and potential response*. Washington, DC: World Bank. Retrieved from <https://openknowledge.worldbank.org/handle/10986/7656>
- Snilstveit, B., Stevenson, J., Menon, R., Phillips, D., Gallagher, E., Geleen, M., Jobse, H., Schmidt, T., & Jimenez, E. (2016). *The impact of education programmes on learning and school participation in low- and middle-income countries: A systematic review summary report* (3ie Systematic Review Summary 7). London: International Initiative for Impact Evaluation (3ie). Retrieved from <http://www.3ieimpact.org/evidence-hub/publications/systematic-review-summaries/impact-education-programmes-learning-school-participation-low-and-middle-income-countries>
- Stone, R., de Hoop, T., Coombes, A., Goett, M., Morey, M., & Kamto, K. (2018). *What works to improve early grade literacy in Latin America and the Caribbean: 2016 update of a systematic review*. Washington, DC: American Institutes for Research (AIR) under the USAID-funded LAC Reads Program (LRCP).
- UNICEF. (2013). *Country study: Out-of-school children in Sri Lanka*. Retrieved from [https://www.unicef.org/srilanka/2013\\_OSS.pdf](https://www.unicef.org/srilanka/2013_OSS.pdf)

- Verguet, S., Limasalle, P., Chakrabarti, A., Husain, A., Burbano, C., Drake, L., & Bundy, D. (2020). The Broader Economic Value of School Feeding Programs in Low- and Middle-Income Countries: Estimating the Multi-Sectoral Returns to Public Health, Human Capital, Social Protection, and the Local Economy. *Frontiers in Public Health*, 8(587046). Retrieved from <https://doi.org/10.3389/fpubh.2020.587046>.
- Walker, S.P., Chang, S.M., Powell, C.A., & Grantham-McGregor, S.M. (2005). Effects of early childhood psychosocial stimulation and nutritional supplementation on cognition and education in growth-stunted Jamaican children: Prospective cohort study. *Lancet*, 366, 1804–1807.
- White, H. (2009). Theory-based impact evaluation: Principles and practice. *Journal of Development Effectiveness*, 1(3), 271–284.
- Wisniewski, S. L.W. (2010). Child nutrition, health problems, and school achievement in Sri Lanka. *World Development*, 38, 315–332.

---

# Annexes

## Annex A. PALAM/A Indicators

Result	Indicator	Baseline	Final Target
SO1	MGD 1: Percent of students who, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade level text	24%	58%
SO2	MGD 19: Number of individuals who demonstrate use of new child health and nutrition practices as a result of USDA assistance	0	1,406
SO2	MGD 20: Number of individuals who demonstrate use of new safe food preparation and storage practices as a result of USDA assistance	0	1,800
SO1/SO2	MGD 30: Number of individuals participating in USDA food security programs	0	157,723
SO1/SO2	MGD 31: Number of individuals benefiting indirectly from USDA-funded interventions	0	501,807
SO1/SO2	MGD 32: Number of schools reached as a result of USDA assistance	0	887
1.1	Custom: Percentage of teachers in target schools using project-supported materials in schools	0	80%
1.1	MGD 4: 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	0	134
1.3	MGD 2: Average student attendance rate in USDA supported classrooms/ schools	86%	92%
1.3.4	MGD 9: Number of students enrolled in schools receiving USDA assistance	108,940	285,806

2.6/2.4	MGD 8: Number of educational facilities (i.e. school buildings, classrooms, improved water sources, and latrines) rehabilitated/ constructed as a result of USDA assistance	0	76
2.6	Custom: Number of school meal providers supported to equip kitchens.	0	1100
2.4	MGD 27: Number of schools using an improved water source	612 <sup>3</sup>	850
2.4	MGD 28: Number of schools with improved sanitation facilities	739 <sup>4</sup>	825
1.3.5	Custom: Number of primary school-age children in targeted communities who participated in a reading event in the past year	0	4,200
1.4.4	MGD 13: Number of Parent-Teacher Associations (PTAs) or similar "school" governance structures supported as a result of USDA assistance	0	213
1.4.4	MGD 11: Value of new USG commitments, and new public and private sector investments leveraged by USDA to support food security and nutrition	0	610,522.66
1.1.2	MGD 3: Number of teaching and learning materials provided as a result of USDA assistance	0	80
1.2.1.1	MGD 16: Number of daily school meals (breakfast, snack, lunch) provided to	0	25,524,729

---

<sup>3</sup> We did not ask about the type of water source used in schools. Instead, we asked about the availability of a source of drinking water (found in 67 percent of schools) and whether the water is treated to make it safe (found in 77 percent of schools). Using these proportions as proxies for improved water sources, we get between 569 and 654 schools with improved water sources or an average of 612 schools.

<sup>4</sup> We did not ask about the type of sanitation facility schools had. Rather we asked whether there was one or more functioning latrine on school grounds (found in 91 percent of schools) and if there were separate, private functioning latrines for girls and boys (found in 88 percent of schools). Using these proxies for improved sanitation facilities, we get between 726 and 751 schools with improved sanitation facilities, or an average of 739 schools.

	school-age children as a result of USDA assistance		
1.2.1.1	MGD 17: Number of school-age children receiving daily school meals (breakfast, snack, lunch) as a result of USDA assistance	0	132,924
1.2.1.1	MGD 14: Quantity of take-home rations provided (in metric tons) as a result of USDA assistance	0	533.30
1.2.1.1	MGD 15: Number of individuals receiving take-home rations as a result of USDA assistance	0	106,659
1.2.1.1/ 1.3.1.1	MGD 18: Number of social assistance beneficiaries participating in productive safety nets as a result of USDA assistance\	0	155,078
2.2	MGD 22: Number of individuals trained in safe food preparation and storage as a result of USDA assistance	0	2,250
2.3	MGD 23: Number of individuals trained in child health and nutrition as a result of USDA assistance	0	2,250
1.4.1	Custom: Number of government officials trained as a result of USDA assistance	0	78
1.1.4	MGD 5: Number of teachers/educators/teaching assistants trained or certified as a result of USDA assistance	0	168
1.1.5	MGD 7: Number of school administrators and officials trained or certified as a result of USDA assistance	0	168

# Annex B. Inter-Rater Reliability

To measure the reliability and level of homogeneity of enumerators’ scores on children’s literacy skills, 5 percent of the overall second grade sample (42 out of 869) were assessed by two different enumerators simultaneously. Long one-way Analysis of Variance (ANOVA) techniques, which is used to determine whether the mean of a dependent variable is the same in two or more unrelated and independent groups, were used to calculate the intra-class correlation within pairs of assessors for a measure of inter-rater reliability. Adapted from Fleiss et al. (1973), we interpreted the intra-class correlations as it follows:

- Less than 40% – Poor
- Between 40% and 75% – Good or fair
- Greater than 75% – Excellent

Exhibit shows the percent of agreement between the raters, as well as inter-rater reliability ratings for the project evaluation sample. Overall, the inter-rater reliability (IRR) across the project evaluation sample was good for most of the literacy skills, showing high internal validity of the scores.

**Exhibit 68. IRR by Literacy Skill Subtests**

	IRR	Rating
Letter Knowledge	91%	Excellent
MUW Recognition	89%	Excellent
Invented Word Recognition	65%	Good
Writing	72%	Good
Reading Comprehension	68%	Good
Listening Comprehension	70%	Good
<i>Observations</i>	42	

Overall, the IRR was good or excellent. To maintain the good internal validity of the scores, and improve the administration and scoring of the assessment, we will provide further training at endline.

# Annex C. Terms of Reference

## *Original Terms of Reference*

### **Terms of Reference (TOR)**

Baseline, Midline, Endline Evaluation

Promoting Autonomy for Literacy and Attentiveness through Market Alliances  
(PALAM/A) Project

Donor: United States Department of Agriculture (USDA)  
Start Date: October 1, 2018  
End Date: September 30, 2023

### **I. Introduction**

The core principle of Promoting Autonomy for Literacy and Attentiveness through Market Alliances Project (PALAM/A, or bridge in Tamil and Sinhala) is to bridge constraints to sustainability and full government ownership of the national school meal program in Sri Lanka. Using a market-based approach to achieve full graduation of Sri Lanka's Homegrown School Meal Program, PALAM/A will build government capacity to implement a resilient, context-specific school meal program. The strengthened Homegrown School Feeding Program will support sustainable literacy and nutrition outcomes for school children throughout the country. PALAM/A will use a systems strengthening approach to support literacy and health outcomes by improving training and coaching for teachers on teaching comprehension and fluency to early-grade readers. PALAM/A will also strengthen the training and coaching of Public Health Inspectors, charged with implementing and monitoring school health and nutrition in schools, and Public Health Midwives, responsible for identifying and referring underweight children to the existing government-run nutrition supplementation program and providing appropriate counseling to their parents, including pregnant and lactating women.

The PALAM/A project will improve the quality of literacy instruction, improve children's attentiveness by decreasing short-term hunger, and improve children's attendance, while increasing the use of health, nutrition, and dietary practices in Sri Lanka. To achieve these goals, Save the Children will partner with International Executive Service Corps (IESC), implementers of the USDA Food for Progress (FFPr) Market Oriented Dairy Project, and Lanka Jathika Sarvodaya Shramadana Sangama Movement (Sarvodaya) to reach approximately 196,092 school children over five years in 887 schools in seven districts in the Northern and Eastern Provinces, along with the Estate/Plantation Sector (Kilinochchi, Mullaitivu, Trincomalee, Nuwara Eliya, Badulla, Monaragala, and Ratnapura). The project will improve cost efficiency in the existing school meal program by creating Joint Sourcing Groups (JSG) of individual School Meal Providers to decrease the cost of sourcing ingredients for school meals and increase the incentive to provide nutritious meals. Schools in Nuwara Eliya District will receive a randomly assigned mix of these interventions and will comprise the sample for the project's impact evaluation.

### **Project Results Framework**

The project's results framework (see Annex A) is based on the following strategic objectives (SO):

SO1: Improved literacy of school-age children through the following activities:

- **1.1.3: Improved Literacy Instructional Materials:** Develop instructional materials that include social cohesion, gender, nutrition, and health themes to provide resources that are easy for



teachers and volunteers to use to improve children's fluency and reading comprehension skills, while also improving gender norms, social cohesion, and nutrition and dietary practices.

- **1.1.4: Increased Skills and Knowledge of Teachers:** Collaborate with the National Institute for Education and teachers' college trainers to train In-Service Advisors. Co-facilitate In-Service Advisor teacher trainings, using the USAID 5 T's as a keystone methodology, and mentor In-Service Advisors to coach teachers.
- **1.2.1: Reduced Short-Term Hunger:** Enhance the efficiency and effectiveness of the Government of Sri Lanka's Home Grown School Meal program by creating groups of School Meal Providers (Joint Sourcing Groups) for 887 schools to procure bulk ingredients, promoting a fully graduated program as a vehicle to meeting schoolchildren's nutrition requirements.
- **1.3.2: Reduced Health-Related Absences:** When children are sick, they are unable to attend school. PALAM/A will reduce health-related absences by Increasing the Use of Health, Nutrition, and Dietary Practices.
- **1.3.5: Increased Community Understanding of Benefits of Education:** Promote parent support to literacy, nutritional well-being, and positive discipline through meetings with community volunteers and community-based reading activities.

SO2: Increased use of health, nutrition, and dietary practices through the following activities:

- **2.1: Improved Knowledge of Health and Hygiene Practices:** With the National Institute for Education, cascade child-centered teaching for nutrition and health subjects to In-Service Advisors and teachers. Provide training to Medical Officers for Health and co-facilitate trainings to Public Health Inspectors to implement the School Health Promotion Program guidance for School Health Clubs. Co-facilitate trainings for School Health teachers to use child-to-child methodologies to improve children's knowledge of key health messages with special emphasis on nutrition and increased dietary diversity.
- **2.2: Increased Knowledge of Safe Food Prep and Storage Practices:** Provide training to Medical Officers for Health and ensure cascade of training to Public Health Inspectors to train School Meal Providers through Joint Sourcing Groups on safe food prep and storage practices.
- **2.3: Increased Knowledge of Nutrition:** Public Health Inspectors monitor schoolchildren's growth during annual School Medical Inspections and provide referrals to medical establishments for children who are underweight. School Health teachers with School Health Clubs monitor children's growth each school term. School Health teachers will refer children who do not demonstrate growth two measurements in a row to the Public Health Inspector. Medical Officers for Health train 300 Public Health Midwives in Nurawa Eliya, Ratnapura, and Monaragala on growth monitoring for children under five years of age, counseling caregivers, and providing referrals for supplementation to families of underweight children.
- **2.4: Increased Access to Clean Water and Sanitation Services:** Ensure that Public Health Inspectors regularly monitor the school environment, following the School Health Promotion

Program. Community volunteers work with School Development Societies to develop and implement school WASH maintenance plans, including point-of-use water treatment.

- 2.5: Increase Access to Preventative Health Interventions: When children are sick, they are unable to attend school. Ensure that all 887 schools are connected to the School Health Promotion Program's School Medical Inspections, including annual deworming and Vitamin A and iron supplementation.
- 2.6: Increased Access to Requisite Food Prep and Storage Tools and Equipment: Support links between School Meal Providers and lending services to equip household kitchens with requisite food prep and storage tools and equipment.
- 1.4.1 & 2.7.1: Increased Capacity of Government Institutions: Work with MOE and MOH to develop efficiencies for In-Service Advisors, Public Health Inspectors, and Public Health Midwives allowing them to support children's learning, health, and nutrition effectively.
- 1.4.2 & 2.7.2: Improved Policy and Regulatory Framework: Link MOE, MOH, and other stakeholders to develop, approve, and enact a Home Grown School Meal policy.
- 1.4.4 & 2.7.4: Increased Engagement of Local Organizations and Community Groups: Establish private sector market linkages for the Home Grown School Meal program, including Joint Sourcing Groups and Dairy Supplier linkages.

#### **USDA Learning Agenda**

The findings from the impact evaluation for the PALAM/A project will build on the USDA Learning Agenda and fill the following two gaps in the evidence base:

1. Which components of school meal programs, including food production, procurement, and preparation of meals, are the most sustainable in terms of operational efficiency and why? Does the cost-effectiveness of these programs change over time and if so, how and why?
2. In what ways do the combination of school meal interventions and educational interventions improve health, nutrition, and education and literacy levels? How can these combinations improve cost-effectiveness?

By leveraging an experimental cross-sectional design with matched comparison group, the impact evaluation will: (1) evaluate the effect of the Joint Sourcing Group approach to school meals on health, nutrition, and literacy outcomes, and (2) evaluate the effect of literacy, health, and nutrition programming on literacy, health, and nutrition outcomes.

## II. Scope of Work for Evaluator

Save the Children is seeking a consultant or 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. The midterm and final evaluations will be re-competed 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.

### II.I Baseline Study

#### A. Purpose and Scope

Baseline data will be collected for four purposes: (1) to measure pre-implementation values for performance indicators, (2) to confirm estimated indicator targets, (3) to establish baseline values for the project impact evaluation and determine the comparability of the intervention and comparison schools, and (4) to confirm project design assumptions and identify potential threats to project implementation.

#### B. Methodology

For the PALAM/A baseline study in Year 1, the evaluation team will use a mixed-methods approach and will replicate the approach for the midterm and final evaluations in Years 3 and 5. The evaluation team will use quantitative and qualitative methods to establish baseline values and track progress for targeted performance indicators throughout the project. Additionally, the baseline data from Nuwara Eliya District will serve as the baseline for an experimental impact evaluation.

#### *Tools*

The evaluation will include the following quantitative data collection tools to establish baseline indicator values and measure outcomes at midterm and final evaluations stages:

- A literacy assessment of students in Grade 2 in all seven districts. The evaluation team will administer to all sampled students a one-on-one oral emergent literacy test composed of five sub-tests: letter awareness, single word recognition, reading fluency and accuracy, and a set of comprehension questions linked to the passage. This assessment is similar to the Early Grade Reading Assessment (EGRA) developed by RTI with USAID funding, but is adapted for use with Save the Children's literacy interventions.
- A health and nutrition assessment of students in Grade 2 in all seven districts. The project will assess all sampled students on height, weight, age, individual food intake recall, and incidence of diarrheal disease recall.
- A health and nutrition knowledge, attitudes, and practices (KAP) assessment of Grade 2 students and School Meal Providers in all seven districts.
- A School Meal Provider survey in which cost data will be collected retrospectively following an ingredients approach using a semi-structured questionnaire. The project will base the survey on a standardized costing framework capturing capital (fixed) and recurrent costs incurred at the provider level. The questionnaire will cover cash and in-kind contributions to estimate financial costs. Financial costs capture actual expenditures for project implementation on an annual basis.
- A school observation checklist, including a WASH resources assessment, in all 887 schools.

The evaluation team will collect the literacy, health and nutrition, and KAP data on tablets using the electronic data collection software Kobo Toolbox (developed by the Harvard Humanitarian Initiative and Brigham and Women’s Hospital). Save the Children has extensive experience programming surveys in Kobo and training internal and external staff on their use.

The baseline will utilize qualitative methods to inform the Joint Sourcing Group component of PALAM/A. Save the Children will conduct focus group discussions with School Meal Providers in the existing government model and key informant interviews with principals, School Development Society members, and district government officials to gain a better understanding the existing school meal model.

*Research Design and Sampling*

PALAM/A’s quantitative evaluation approach allows for tracking over time trends in children’s literacy skills, health and nutrition status, children’s KAP, trends in School Meal Provider KAP, and assessment of different treatment impacts through an experimental design.

**Impact Evaluation.** PALAM/A’s experimental impact evaluation will take place in Nuwara Eliya District, where there are 264 project-targeted schools of which 62 are not currently receiving any government-recognized school meal program. Most of these schools will be part of the evaluation, split among one of four groups, as outlined in Table 1.

**Table 1: Impact Evaluation Treatment Groups**

Group	Sample Size (Schools)	Mode of Assignment/ Selection	Project Interventions		
			School Meal	Literacy	Health and Nutrition
Treatment 1	50	Random	Current government meal program	Nothing	Nothing
Treatment 2	50	Random	Current government meal program	Literacy Programming	Health and Nutrition Programming
Treatment 3	102	Random	Joint Sourcing Group Model	Literacy Programming	Health and Nutrition Programming
Comparison	40	Matched Comparison	Nothing	Nothing	Nothing

The evaluation team will randomly assign to one of the three treatment arms 202 schools in Nuwara Eliya that are currently receiving school meals. Random assignment will occur after the baseline needs assessment. The project will geographically block the schools and then randomly assign treatment to ensure there is enough distance between treatment and comparison schools to mitigate the risk of contamination. The experimental blocked randomized design will allow the evaluation team to estimate causal effects of different approaches to school meal and literacy interventions. This design also takes into account the fact that most schools in Nuwara Eliya currently receive some form of meal services.

In order to estimate the effect of treatment on intervention to a counterfactual in which schools receive no meals, literacy, health, or nutrition intervention, Save the Children will layer on a quasi-experimental evaluation. For this component, the evaluation team will select a set of 40 comparison schools from among those schools that are not currently receiving any school meals (estimated at a total sampling frame of 62 schools based on data from MOE). Save the Children will take two approaches to minimize the threat to internal validity due to selection bias – that is, the presence of external factors that result in most schools in Nuwara Eliya receiving school meal but these 62 schools are not receiving such



services. First, the evaluation team will use propensity score matching to identify the subset of possible comparison schools that most closely match the set of treatment schools. Then the evaluation team will randomly select 40 of these schools to comprise the final comparison group. This setup allows for multiple treatment-control contrasts:

- First, among the randomly assigned treatment groups, the evaluation team can compare the effect of literacy programming (pooling treatment 2 and 3) to no literacy programming (treatment 1). Save the Children expects to see moderate to large gains on the literacy assessment upwards of 0.35 standard deviations (SD).<sup>i</sup>
- Second, among the randomly assigned treatment groups, the evaluation team can compare the effect of health and nutrition programming (pooling treatment 2 and 3) to no health and nutrition programming (treatment 1). Save the Children expects to see moderate gains on the health and nutrition assessment upwards of 0.20 SD.<sup>ii</sup>
- Third, among the randomly assigned treatment groups, the evaluation team can compare the effect of the JSG model (treatment 3) to the current school meal model (pooling treatment 1 and 2). Save the Children expects to see more moderate gains on student outcomes – focusing primarily on health and nutrition outcomes – given that all schools are receiving some form of meal services. A reasonable detectable effect size is 0.18 SD.
- Fourth, the evaluation team can compare school meal services (pooling treatments 1 through 3) to no meal services (comparison).

The evaluation team will randomly select 20 Grade 2 students (10 girls and 10 boys) from each of the 242 schools to participate in the literacy, health and nutrition, and KAP assessments at baseline. This yields a total sample size of 4,840 Grade 2 students. This sample size was calculated using the user-written “clustersamps” command in Stata 15.1 and is the minimum sample size necessary to detect a project effect size of 0.35 standard deviations for comparisons between treated and non-treated schools and a project effect size of 0.18-0.20 standard deviations for comparisons between treatment groups, assuming a power level of 80%, intra-cluster correlation of 0.25, and a 50% correlation of other covariates with the measured outcomes. The team will assess a cross-section of Grade 2 students in each of the baseline, midterm, and final evaluation phases. The evaluation team will administer the School Meal Provider KAP and cost survey to a random sample of 20% of all school meal providers for the schools sampled as part of the student-level assessments.

Project Evaluation. The evaluation team will also collect literacy, health and nutrition, and KAP data from schools in the remaining six districts for the broader project evaluation to track changes in indicators over time. Save the Children will use a two-stage cluster sampling approach to select a cross-section of Grade 2 students for the baseline literacy, health and nutrition, and KAP assessments. First, the evaluation team will randomly select a number of schools from each district according to the relative project size in that district (see Table 2). Next, for the Grade 2 literacy, health and nutrition, and KAP assessments, the team will randomly choose 10 students (five girls and five boys) from one Grade 2 classroom.

The sample size for the literacy, health and nutrition, and KAP assessments was derived using the recommendations from the USAID EGRA Toolkit<sup>iii</sup> to confirm the sample size of 830 second graders for the literacy, health, and nutrition outcomes. The sample size was calculated using the following formula:

$$n = 4 \left( \frac{t_{\frac{\alpha}{2}, n-1} \sqrt{1 + (k-1)\rho\sigma}}{CIwidth} \right)^2$$

Where  $t_{\frac{\alpha}{2}, n-1}$  is the critical value corresponding to a 95% confidence level (set to 1.96),  $k$  is the cluster size (set to 10 students per school),  $\rho$  is the inter-cluster correlation (set to 0.45 based on previous EGRA studies),  $\sigma$  is the estimated standard deviation (set to 26 based on previous EGRA studies), and  $CIwidth$  is the width of the confidence interval (set to 8). The formula yields a desired sample size of 820, which has been adjusted upward to 840 to allow the school sample size in each district to be proportionate to the number of project schools in the district.

**Table 2: Sample Sizes from Each District for the Project Evaluation**

District	Number of schools in PALAM/A	Number of schools selected for evaluation	Total Grade 2 students (10 per school)
Nuwara Eliya	202	19 (subset of impact evaluation sample)	190 (covered by impact evaluation sample)
Trincomalee	122	12	120
Kilinochchi	40	4	40
Mulaitivu	58	5	50
Ratnapura	175	17	170
Badulla	204	19	190
Monaragala	86	8	80
<b>Total</b>	<b>887</b>	<b>84</b>	<b>840</b>

The evaluation team will administer the School Meal Provider KAP and cost survey to a random sample of 20% of all School Meal Providers for the schools sampled as part of the student-level assessments. For the qualitative component of the project evaluation, the evaluation team will select School Meal Providers, School Development Societies members, principals, and district government officials from 10% of the project communities where PALAM/A will implement the Joint Sourcing Group model of school meals (see Table 6 for sample details).

#### Data Analysis

The evaluation team will clean and analyze quantitative baseline data using Stata or similar software. The contracted external evaluator will produce summary statistics and indicator data according to a pre-specified analysis plan. Additionally, the evaluator to assess the equivalence of the three treatment groups and one comparison group for the Nuwara Eliya impact evaluation, using comparison of means through clustered t-tests and chi-squared analyses. As needed, additional analyses according to gender, socio-economic status, and home literacy environment will provide data to the project. The evaluation team will transcribe and analyze qualitative evaluation data using ATLAS.ti, NVivo, or similar software.

#### C. Selection of Evaluation Team

In Year 1, Save the Children will contract an experienced, independent third party to conduct the baseline, midterm, and final evaluations and the impact evaluation. Save the Children's preference is to use the same external evaluator for all three phases to support consistency in the data collection and analysis. Save the Children will select the third party consultant or firm through a competitive recruitment process in alignment with Save the Children and United States Department of Agriculture

(USDA) policies. The PALAM/A Monitoring and Evaluation (M&E) Manager will manage the recruitment process and the finalization of the evaluation team with support from the Save the Children technical advisors and the PALAM/A Chief of Party.

#### D. Key Audience and Stakeholders

Save the Children will consult key stakeholders in both the design and results dissemination phases for the baseline, midterm, and final evaluations and the project impact evaluation. Save the Children will plan the evaluation in collaboration with the implementing and technical partners (IESC, Sarvodaya), local and national government partners and research institutions, such as Sri Lanka’s Medical Research Institution, and USDA. Stakeholder groups to be consulted as key audiences include students, parents, teachers, school administrators, community leaders, and volunteers.

#### E. Baseline Study Timeline

The baseline study will take place in Year 1 during the first trimester of the school year, in March 2019, prior to the start of project activities. USDA will receive the final baseline report within six months of the finalization of the performance monitoring plan and evaluation plan. See Table 3 below.

**Table 3: Timeline of Activities for the Baseline Evaluation**

Baseline Evaluation Activities	Month and Year
Finalize performance monitoring plan with USDA	December 2018
Finalize Terms of Reference (TOR) for PALAM/A evaluator with USDA	December 2018
Advertise for PALAM/A evaluation consultant (for baseline, midterm, and final evaluations, including impact evaluation)	December 2018
Recruit consultant and finalize consultant contract	December 2018-January 2019
Refine evaluation methodology and data collection tools	January-February 2019
Data collection	March 2019
Data analysis	April 2019
Conduct stakeholder meetings to share initial findings	April/May 2019
Finalize and submit draft baseline report to USDA (within 60 days of evaluation fieldwork and within 15 days of report completion)	May 2019
Submit final baseline report and established targets to USDA	June 2019
Discuss actions to address findings and recommendations with USDA	June 2019
Report on implementation of follow-up activities	September 2019

## II.II Midterm Evaluation

### A. Purpose and Scope

The purpose of the midterm evaluation is to assess the progress of PALAM/A implementation, assess the relevance and early effectiveness of the interventions, determine whether the project is on track to meet its objectives, summarize the lessons learned to date, and recommend any changes to the project components that are necessary. The midterm evaluation will use the same instruments from the baseline assessment. The evaluation will also include key informant interviews with students, parents, School Development Society members, teachers, principals, Joint Sourcing Group School Meal Providers, non-Joint Sourcing Group School Meal Providers, and local officials. In Nuwara Eliya District, the site for the PALAM/A impact evaluation, the evaluation team will use an experimental design with matched comparison group approach to compare literacy, health and nutrition, and KAP gains in the schools assigned to each of the three treatment arms and one comparison arm.

## B. Key Evaluation Questions

The midterm evaluation will assess the relevance, effectiveness, efficiency, sustainability, and impact of the key project interventions. Key representative midterm evaluation questions are below.

### Relevance

- Do project stakeholders (students, parents, School Development Society members, teachers, principals, Joint Sourcing Group School Meal Providers, non-Joint Sourcing Group School Meal Providers) feel the PALAM/A project is meeting their needs? Why or why not?
- Are the in-school meals culturally appropriate?
- Are educational and instructional materials perceived as culturally appropriate and age-appropriate for primary school students?

### Effectiveness

- To what extent has the project achieved its output and outcome targets?
- What factors have inhibited or facilitated the achievement of project goals, objectives, and expected results?
- What is the cost of school meal provision through the government feeding model compared with the Joint Sourcing Group model? To what extent has the Joint Sourcing Group model led to greater efficiency and cost-savings in school meal provision?

### Efficiency

- Have intervention components been delivered within the planned timeline?
- Are commodities delivered on time and in a way that minimizes waste?

### Sustainability

- Do stakeholders feel that the PALAM/A's school meal, literacy, and nutrition activities can be sustained at current levels after the project's conclusion? What additional inputs are necessary to achieve sustainability?
- What are the current barriers to achieving sustainability?

### Impact

- Have literacy skills of school-age children generally improved in the PALAM/A project area?
- Have nutrition outcomes of school-age children generally improved in the PALAM/A project area?
- Have nutrition, dietary, and food safety practices in schools improved in the PALAM/A project area?
- Have there been any positive or negative impacts in the target areas, besides the realization of the strategic objective-level results?
- How do literacy, health and nutrition, and Knowledge, Attitudes, and Practices (KAP) outcomes compare across the three treatment groups and one comparison group in Nuwara Eliya District? Is there evidence of a positive impact of PALAM/A on literacy, health and nutrition, and KAP outcomes?



### C. Methodology

#### *Tools, Research Design, and Sampling*

To ensure comparability of the midterm evaluation findings with the baseline, the midterm will use the same tools and sampling methodology described in the *Baseline Study* section (Section II.I.B.) above. See Table 6 for details of the midterm evaluation tools and sample.

#### *Data Analysis*

The team will use multivariate regression to analyze the midterm impact data from Nuwara Eliya District. Given the experimental design of the three treatment arms, a straightforward analytic approach for these analyses. For comparisons between treatment and control, a propensity score matching technique will be used to derive the trimmed sample of schools that should comprise the comparison group with a difference-in-differences analytic approach to estimate the difference in literacy, health and nutrition, and KAP outcomes among the three treatment groups and one comparison group. The evaluation team will use the same statistical and analytical software from the baseline. The team will reflect any necessary changes identified through the midterm evaluation in updates to the project's detailed implementation plan and, as appropriate, in revisions to the project M&E system, after being approved by USDA.

### D. Selection of Evaluation Team

Before the baseline evaluation, Save the Children will seek to engage an external consultant or evaluation firm that can carry out the baseline, midterm, and final evaluations throughout the life of the project.

### E. Key Audience and Stakeholders

The project will plan the midterm evaluation in collaboration with IESC, Sarvodaya, local and national government partners, and USDA. The key audience for the midterm evaluation will consist of the same stakeholder groups as the baseline evaluation, described above.

### F. Midterm Evaluation Timeline

Preparation for the midterm will commence at the end of Year 2 in August 2020, with data collection in March 2021 and a final report submitted to USDA in June 2021.

**Table 4: Timeline of Activities for the Midterm Evaluation**

Midterm Evaluation Activities	Month and Year
Submit draft TOR for midterm evaluation to USDA	August 2020
Finalize midterm evaluation TOR with USDA and consultant	October 2020
Revise and finalize consultant contract	November 2020
Prepare for midterm evaluation -Finalize internal project evaluation team -Finalize evaluation design with consultant and government	December 2020 – February 2021
Data collection	March 2021
Data analysis	April 2021
Conduct stakeholder meetings to share initial findings	April/May 2021
Finalize and submit draft midterm report to USDA (within 60 days of evaluation fieldwork and within 15 days of report completion)	May 2021
Submit final midterm report to USDA	June 2021
Discuss actions to address findings and recommendations with USDA program analyst (within 30 days of report submission)	June 2021

Midterm Evaluation Activities	Month and Year
Report on implementation of follow-up activities	September 2021

### II.III Final Evaluation

#### A. Purpose and Scope

The purpose of the final evaluation is to assess whether the project achieved the results outlined in the results framework and, through the impact evaluation, to estimate the overall impact of the project on literacy, health and nutrition, and KAP outcomes among the cross-section of Grade 2 students, as well as KAP and costing survey of School Meal Providers. The impact evaluation will also allow for a calculation of cost-effectiveness of the existing government model as compared to the JSG model. The final evaluation will use the same quantitative and qualitative methods as the baseline and midterm evaluations to explore questions related to project design, implementation, management, lessons learned, sustainability, and impact.

#### B. Key Evaluation Questions

Like the midterm evaluation, the final evaluation will focus on questions of relevance, effectiveness, efficiency, impact, and sustainability. Key representative final evaluation questions are below.

##### **Relevance**

- Do stakeholders feel that their voices were heard and their needs considered throughout the project?
- Were activities to support literacy and improved nutrition integrated in culturally appropriate ways in the target communities?

##### **Effectiveness**

- To what extent has the project achieved its output and outcome targets?
- What factors have inhibited or facilitated the achievement of project goals, objectives, and expected results?
- What is the cost of school meal provision through the government feeding model compared with the Joint Sourcing Group model? To what extent has the Joint Sourcing Group model led to greater efficiency and cost-savings of school meal provision?

##### **Efficiency**

- Were intervention components delivered within the planned timeline?
- Which commodity management strategies were most efficient for quick delivery and reduction of waste?

##### **Sustainability**

- Do schools, School Meal Providers, and Joint Sourcing Groups have the necessary infrastructure and food management plans in place to continue feeding after the project concludes?
- What are the necessary components for successful school handover of activities, as modeled by this project? What were the lessons learned?

##### **Impact**

- Have literacy skills of school-age children improved in the PALAM/A project area?
- Have nutrition outcomes of school-age children improved in the PALAM/A project area?

- Have nutrition, dietary, and food safety practices in schools improved in the PALAM/A project area?
- Have there been any positive or negative impacts in the target areas, besides the realization of the strategic objective-level results?
- How do literacy, health and nutrition, and KAP outcomes compare across the three treatment groups and one comparison group in Nuwara Eliya District? Is there evidence of a positive impact of PALAM/A on literacy, health and nutrition, and KAP outcomes?
- How does the cost-effectiveness of the two models of school feeding compare?

#### C. Methodology Tools, Research Design, and Sampling

The PALAM/A final evaluation will use the performance evaluation methodology detailed in Section II.I.B. above. Refer to Table 6 for details of the final evaluation tools and sample size.

##### *Data Analysis*

The evaluation team will use the same data analysis approach from the midterm evaluation. See Section II.II.C. for more information.

#### D. Final Evaluation Timeline

Preparation for the final evaluation will commence at the end of Year 4 in August 2022, with data collection in March 2023 and a final report submitted to USDA in June 2023.

**Table 5: Timeline of Activities for the Final Evaluation**

Final Evaluation Activities	Month and Year
Submit draft Terms of Reference for midterm evaluation to USDA	August 2022
Finalize final evaluation TOR with USDA and consultant	October 2022
Revise and finalize consultant contract	November 2022
Prepare for final evaluation -Finalize internal project evaluation team -Finalize evaluation design with consultant and government	December 2022 – February 2023
Data collection	March 2023
Data analysis	April 2023
Conduct stakeholder meetings to share initial findings	April/May 2023
Finalize and submit draft final report to USDA (within 60 days of evaluation fieldwork and within 15 days of report completion)	May 2023
Submit final evaluation report to USDA	June 2023
Dissemination workshop	June 2023

#### E. Limitations of the Study Design

The main limitation of the quantitative approach is the inability to triangulate student self-reported responses with those of an informed adult, like a parent or a teacher (e.g. parents' education, availability of reading materials at home). The team will place a strong emphasis on the cognitive interviews prior to data collection to ensure instrument suitability to the Sri Lankan context and collection of reliable data.

Another limitation arises from sampling students who are present at school, rather than drawing a sample from full classroom lists. The possibility of systematic student absences might induce a risk of sampling bias by selecting only present students in the absence of electronic lists. For example, students

from vulnerable socio-economic backgrounds with higher health-related absences may be precluded from the study if they are absent on the day of data collection. However, the current approach ensures a large enough sample for the evaluation and sampling consistency across schools and this concern is not significant given the high attendance rates across the country.

A limitation of the qualitative approach is that the data collected will be from a very small sample, and therefore the results are not necessarily generalizable. Another limitation is that the suitability of some questions asked in the focus group discussions and key informant interviews cannot be known prior to project implementation, so it is not possible to predict all potential threats.

Potential threats to randomization include: (1) non-random assignment of the comparison group, (2) incomplete exposure of one of the treatment samples or low treatment dosage, (3) movement of students and/or teachers between treatment and comparison schools, (4) given the nature of the government-level of some interventions, contamination of comparison schools due to district and provincial officials crossing over treatment/control conditions, and (5) other similar interventions in the project area. These potential threats will be prevented to every extent possible in consultation with the external evaluator.

**Table 6: Summary of Evaluation Components**

Evaluation Component	Tools	Sample	Timing
<b>Baseline</b>	Student literacy assessment	Cross-section of 5,490 Grade 2 students (including 4,840 for impact evaluation)	March 2019
	Student health and nutrition assessment	Cross-section of 5,490 Grade 2 students (including 4,840 for impact evaluation)	
	Student KAP assessment	Cross-section of 5,490 Grade 2 students (including 4,840 for impact evaluation)	
	School Meal Provider KAP assessment	20% of School Meal Providers from among sampled schools	
	School Meal Provider costing survey	20% of School Meal Providers from among sampled schools	
	School observation checklist	All 887 project schools	
	Qualitative focus group discussions and key informant interviews	Parents, teachers, principals, SDSs, government officials, and school meal providers from 10% of project communities	
<b>Midterm</b>	Same as baseline (excluding school observation checklist)	Same as baseline (excluding school observation checklist)	March 2021
<b>Final</b>	Same as baseline (excluding school observation checklist)	Same as baseline (excluding school observation checklist)	March 2023



### III. Evaluation Management

#### A. Roles and Responsibilities

PALAM/A M&E staff in Sri Lanka will manage the monitoring and evaluation of the project. Save the Children’s US-based education and M&E technical advisory staff will provide technical input on the development of tools, sampling plan, electronic data collection instruments, assessor training, and piloting of tools. For the baseline, midterm, and final evaluations and the impact evaluation, Save the Children will contract an independent third party consultant firm to collect baseline, midterm, and final evaluation data that is reliable, accurate, valid, and timely. Save the Children will support the independent consultant through review of the survey plan, survey instruments, sampling methods, and the development of a data analysis plan based on the project indicators.

M&E staff in Sri Lanka will be responsible for managing the commodity monitoring system as well as maintaining the M&E monitoring system used for internal data collection and semi-annual reporting to USDA. M&E staff will conduct monthly visits to project communities to monitor and collect data on project activities. The Senior M&E Manager and technical team will review all data in the M&E monitoring system before submitting evaluation reports to USDA.

**Table 7: Evaluation Roles and Responsibilities**

Save the Children
<b>PALAM/A Sr. M&amp;E Manager:</b> Draft and revise baseline, midterm, and final evaluation TOR for external evaluator, support selection of external evaluator, review draft evaluation methodology and tools, review data in monitoring system, finalize and submit donor reports, coordinate dissemination events with regional M&E staff and external evaluator.
<b>PALAM/A Chief of Party:</b> Recruit and contract external evaluator, review TOR for baseline, midterm, and final evaluations, review draft evaluation methodology and tools, review draft baseline, midterm, and final evaluation reports.
<b>PALAM/A M&amp;E Coordinators:</b> Obtain necessary permits for evaluation activities, collect and input data in monitoring system, contribute to and review donor reports, coordinate dissemination events with the Sr. M&E Manager and external evaluator.
<b>Save the Children Research Team:</b> Revise assessment tools as necessary, support Sr. M&E Manager and external evaluator to conduct data collection, review baseline, midterm and final evaluation reports.
External Evaluator
<b>External Evaluator:</b> Draft and finalize tools and methodology, train enumerators and field test tools for baseline, midterm, and final evaluations, manage data collection and ensure data quality, analyze data for baseline, midterm, and final evaluations, facilitate reflection event for participatory analysis of preliminary results, co-facilitate evaluation dissemination events, prepare draft and final reports. The independent evaluator will be free to draw their own conclusions free from organizational or political pressure.
Government Partners
<b>Provincial and District Education Staff, MOH Staff, MOE Staff:</b> Contribute to design of TOR and interpretation of baseline, midterm and final evaluation findings, and participate in reflection events and dissemination workshops.
USDA
<b>USDA:</b> Comment and approve evaluation TORs and reports and participate in a stakeholder phone call with the third-party evaluator

#### B. Evaluation Plan Review and Updating

USDA’s M&E Policy and the McGovern-Dole Learning Agenda as well as Save the Children’s standard M&E policies and procedures will inform the evaluation plan for PALAM/A. The team will update the

M&E System and Evaluation Plan throughout the life of the project as needed, including following the semi-annual reports, the midterm evaluation, visits from technical assistance advisors, or at USDA's request.

### C. Deliverables

The consultant should submit the following deliverables for each stage of the evaluation process (baseline, midterm, endline) during the evaluation process:

- A research protocol that includes at a minimum: Principal Investigator, Country/Location, Objectives, Research Questions, Research Design, Sample, Data Collection Methods, Data Analysis Methods and Plan, Quality Assurance Plan, Data Handling and Confidentiality, Consent and Assent Forms, Translation Services (if needed), and Data Collection Tools. The research protocol will be submitted to Save the Children US Ethics Review Committee (ERC) and the consultant will incorporate ERC's input.
- Data collection tools developed for primary data collection.
- A draft report
- A final report submitted in English that incorporates Save the Children's feedback into the draft report (public and internal versions, where relevant)
- Raw data (both qualitative and quantitative) and appropriate data documentation including a data dictionary
- Cleaned datasets
- Presentation of key findings to be delivered at an evaluation stakeholders' meeting
- Standalone summary<sup>1</sup>

As noted, the deliverables will be reviewed and approved by the Save the Children team, which will include the PALAM/A Chief of Party, the Senior M&E Manager, SC/Washington technical advisors, as well as USDA/Washington.

Save the Children expects that the final reports will include the following sections, at a minimum:

- Cover Page
- Acronym List
- Executive Summary
- Project Background
- Objectives of the Evaluation
- Key Evaluation Questions
- Evaluation Methodology
- Evaluation Results
- Conclusions (successes and challenges)
- Recommendations
- Lessons Learned
- A minimum of two success stories (not relevant for baseline)
- Performance indicator tables including custom and standard indicators and updated values
- Attachments (photos, charts, graphs, regression analysis results)

---

<sup>1</sup> A two to three-page stand-alone summary describing the evaluation design, key findings and lessons learned. This document will serve to inform any interested stakeholders of the final evaluation, and should be written in a language easy to understand by non-evaluators and with appropriate graphics and tables.

The final versions of the baseline, midterm, and final evaluation reports must be submitted in two hard copies and in electronic format.

#### D. Dissemination Strategy

Save the Children will share the information from PALAM/A evaluations with stakeholders, such as beneficiaries, local authorities, Sri Lankan government agencies, other local or regional organizations working in the education sector, USDA, and other USG-funded education projects. Save the Children will ensure that results are shared widely in appropriate formats (e.g., stakeholder workshops and on Save the Children's external website) and at various venues, including government partnership meetings, internal Save the Children presentations and workshops, and externally-facing conferences such as the Comparative International Education Society annual conference. The project will hold dissemination events after the baseline, midterm, and final evaluations to present findings to key government figures and community members. Additionally, USDA will be notified and invited to attend key events where evaluation results will be presented.

#### E. Key Audience(s)

Save the Children will consult key stakeholders in both the design and results dissemination phases for the baseline, midterm, and final evaluations and the project impact evaluation. Evaluations will be planned in collaboration with the implementing and technical partner (Mercy Corps), local and national government partners, and USDA. Stakeholder groups to be consulted as key audiences for the evaluation include program beneficiaries (students, parents, teachers, school administrators, community leaders, and volunteers), the Ministry of Education, Ministry of Health, and provincial education and health officials.

## **I. Establish activities to promote literacy**

In order to provide children additional time to practice their reading, SC in collaboration with MoE will support to set up Children's Reading Clubs in schools. With both MoE and NIE Primary Education departments, SC Literacy Boost (LB) Reading Clubs module to be contextualised and adapted to be facilitated by teachers keeping with the ethos of interactive and a fun learning approach to improve early grade literacy. Accordingly, SC will work with NIE to train ISA's who will in turn train teachers to facilitate CRC's supported by a community volunteer from the SDS. In addition, SDS volunteers will be trained in each school community on effective ways to coordinate and support the administrative aspects of a CRC. SDSs will be oriented to the steps for developing a sustainable volunteer selection and an apprenticeship training system for the CLCs.

Based on the contextualised and adapted SC LB Community Action parental awareness sessions which focus on the benefits of making learning participatory, SC will train SDS members from each school on tips and methods to support literacy improvement at home. The trained SDS members will be recognised as change agents who will be responsible to conduct awareness sessions with other SDS members and cascade learnings.

SDS members will also work with school principals to organize literacy events or festivals in conjunction with a local celebration once per year. School community will be supported to organize events focus on promoting literacy and creating opportunity for children to engage in fun interactive activities that create a love for reading.

This activity will commence post the implementation of Literacy Boost in schools and is planned to be initiated during the final year of the project.

## **2. Production of books and supplementary reading materials**

SC will collaboratively develop supplementary texts with the MOE and the National Institute of Education (NIE) to provide students with targeted fluency and reading comprehension practice while simultaneously promoting national cohesion, positive gender norms, and improved health and nutrition knowledge, behavior and attitudes.

SC will work with key stakeholders in the MOE and NIE to collaboratively develop supplementary reading materials to fill identified content gaps. These supplementary reading materials will be easy for teachers and volunteers to use with children to improve fluency and reading comprehension skills.

SC will work with the Publications and Resources Department to print copies of supplementary texts that will be distributed for 20 literacy intervention schools in each district.

Using high-quality text identified through a Literacy Market Survey, SC will distribute packs of books to all intervention schools (140-schools) across all seven program districts and 25 established reading rooms within the PALAM/A project implementation area.



### **3. Training: Government Officials**

SC will work with the MoE and NIE to develop guidance and standards for the In-Service Advisor position so they can sustainably deliver improved literacy-focused training and coaching for teachers. SC will work with MOE and NIE to adapt teacher professional development trainings to be compliant with COVID-19 protocols and to support distance learning. SC will build on SC's Literacy Boost and Student Needs Action Pack (SNAP) training materials for In-Service Advisors and teachers and will work with NIE/MOE to adapt these trainings to be more supportive of distance and self-learning modules, where possible, including short instructional videos and teaching tips that can be shared through social media and MOE/NIE websites. SC will collaborate with the Dubai Cares-funded Save the Children project to embed key elements of the Literacy Boost's approach in the National Institute for Education teacher training curriculum. SC and the NIE will co-facilitate trainings for In-Service Advisors in all seven project districts.

At the national level, SC staff will advocate with the Government of Sri Lanka to ensure that nutrition issues for primary school age children, currently outlined in the National Nutrition Strategy and the School Health Promotion Program are fully implemented.

### **4. Training: Teachers**

SC will give pedagogical focus to improving student fluency and reading comprehension. Training will also provide teacher strategies to help meet the needs of struggling learners and will offer practical tips for implementing positive discipline techniques in the classroom. In addition, teachers will receive training how to promoting health and nutrition practices in schools in fun and practical ways. In-Service Advisors will be responsible for training teachers, and SC will help equip them with the skill and extend the necessary logistical support. SC will provide In-Service Advisors with coaching and training support with the purpose of developing their capacity and demonstrating the effectiveness of more regular teacher training and coaching. Activities will be adapted to be compliant with COVID-19 protocols and support MOE and NIE in developing distance learning modalities for teacher professional development.

## **SCHOOL HEALTH AND NUTRITION COMPONENT**

### **5. Building/Rehabilitation Kitchens:**

This activity is to improve the quality of the school meal and strength the government school meal program and improve the quality of the school meal by enhancing the cooking procedures, adopting best cooking practices and to strength the government school meal program.

SC will provide all School Meal Providers (SMPs) in all project schools with food preparation and storage equipment for their kitchens, including pots, pans, transportation containers, and other cooking utensils. SC will provide plates for all students in all selected project schools (approximately 887). Procurement

will be done by SCI as per the internal procedures and local level partner (Sarvodaya) will support distribution to the schools.

To facilitate SMP coordination in larger schools, SC will construct school kitchens in project schools with more than 600 students (approximately 17). SC will work together with the MOE to hire the construction company and will request MOE provincial/zonal engineer oversight to ensure safety for students. By considering SCI guidelines on construction, SCI will mobilize and train school management and SDS members to support monitoring of construction. Clusters will be formed to ease the monitoring and awareness process and each district will have 2 clusters where Kilinochchi and Mulaitivu will be considered as one district. Training will be conducted by SCI staff for these 12 clusters by creating awareness on the role and responsibility of each party in this activity. Site Technical Officers and supervisory officers will organized the training at district level. 2 SDS members per school, 1st year initial training and 2nd year refresher training. 73 school sites x 2 people per school + 36 construction staff will participate for the said training.

#### **6. Building/Rehabilitation Latrines:**

To ensure students have accessibility for improved sanitation facilities, SC will construct latrines in schools with between 125 and 160 students (approximately 56 schools). SC will use MOE standard designs for schools latrines. SC will work together with the MOE to hire the construction company and will request MOE engineer oversight to ensure safety for students. Based on the international standards, there are 25 girls per stall and 30 boys per stall with a urinal. Given the designs, each toilet block as given to us to use by the SHN Division in December is good for 75 students. Therefore, if we build a boys' block and a girls' block in each school, the designs are good for schools with 150 students. Based on the school observations conducted during the baseline, appropriate schools will be identified in consultation with MoE - SHN branch. Provincial MoE and SCI will collaboratively implement the activity via external construction company/ies. MoE (Provincial or zonal) will supervise the work via the regular government supervisory procedures and SCI will support to monitor the construction work through TOs and Site Supervisory Officers. Respective MOH office/PHI will be involved throughout the process for relevant approvals and guidance.

#### **7. Training School Meal Providers (in Joint Distribution Points):**

This activity is to improve the quality of the school meal by enhancing the cooking procedures, adopting best cooking practices and strength the government school meal program. SCI will develop the training modules for SMPs in 07 districts (approx. 1100) in collaboration with and technical guidance of the MoH and MoE. SCI will conduct ToT for SCI Joint Distribution Point (JDP) Officers who will cascade the training for SMPs under each divisional directors/ SHN coordinators supervision. Training will be planned to coincide with the commodity distribution date. These trainings will be short, interactive sessions on food handling practices, safe kitchens and storage. PHIs will supervise SMPs kitchens and their cooking practices as a part of their regular supervisory schedule and School Principal and/or assigned teacher will monitor the quality of daily school menu which will be prepared by SMP as part of their regular monitoring.

#### **8. Promote Good Health and Nutrition Practices:**

To promote locally available nutritious ingredients and create awareness on different preparation methodologies to protect the nutrition value and to create awareness on nutrition value of commodities and best preparation methods.

SCI in consultation with MoE and MoH will develop and disseminate a 2 sided leaflet on the nutritious value of pink salmon and YSPs as well as include a few recipes to create awareness on the best preparation methods of these commodities that protect the nutrition value. This leaflet will be distributed with the take home ration pack to approximately for 110,575 families.

Subsequently, SCI with the support of SMP's will collate/adapt nutritionally high- valued and cost-effective recipes with locally available ingredients, which will be published in the form of a recipe book. This recipe book will be disseminated among families.

### **9. Training Teachers:**

In order to promote health and nutrition best practices among primary grades and in longer term to change attitudes and create a culture of healthy behaviors among primary grade students. In collaboration and technical support of the MoE/SHN branch, MoH and NIE Primary department will develop the SHN promotion module for ISA ToT. This SHN module complements the current primary grade curricular which also encourages practical application will be developed to further promote best SHN practices. ToT series will conduct for ISAs on Literacy Boost topics 7 Positive Class Room management, SNAP, and school health and nutrition promotion. The total budget is under Literacy component and SHN module will jointly deliver with Literacy component. In consultation with MoE SHN Branch, NIE and Provincial Education Department relevant ISA's and zonal/divisional coordinators (approx. 65) will be identified for a ToT training at national level in both languages. MoE and NIE will provide required technical expertise to conduct trainings and establish Provincial TOTs. SCI will facilitate the process in collaboration with MoE and NIE supported by the SCI District Education Managers.

Above trained ISAs and Zonal/divisional coordinators will cascade the School HN Promotion training to teachers at their catchment schools. One teacher from each 887 schools will be selected and clustered for training based on their preferred language. Sarvodaya district coordinators, SCI District Education Mangers will organize the meetings and trained ISA will be the facilitator for training. Also, following year refresher trainings will be organized by Sarvodaya at divisional and zonal level collaboratively with District Education Managers.

# Annex D. Data Collection Instruments

## *Qualitative Protocols*

### **PALAM/A – School Meal Providers FGD Protocol at Baseline**

#### **Informed Consent Script**

Hello, my name is \_\_\_\_\_ and I am working with the American Institutes for Research (AIR) and EML Consultants to gather information about the PALAM/A project. The PALAM/A project aims to help lower the cost of providing nutritious school meals to primary school students and, as a result, improve learning outcomes. We are gathering information about the project from school principals, school meal providers (SMPs), school development society (SDS) members, and government officials at the zonal and divisional levels. This evaluation is funded by Save the Children.

#### **Participation**

We would like to conduct an interview OR we are asking you to participate in a focus group discussion. The focus group is a group interview with about 6-8 people from this school. We will ask you questions about your involvement in the PALAM/A project and your opinions on and experiences with the project. The interview or focus group will take about 1-2 hours. We will be taking notes and if you are comfortable, we would like to record this interview OR focus group discussion. We will use the audio recording to fill in any gaps in our notes and then immediately delete the recording.

#### **Risk**

There are no physical risks to you if you take part in this study. If any of the questions we ask are sensitive or make you uncomfortable, you do not have to answer them. The research is not evaluating you, your child, or your school.

#### **Benefits**

You will not receive any personal benefits (monetary or other gift) by participating in this study. However, the information you provide us will help researchers understand the challenges and successes of the PALAM/A project. This information can be used to improve the program in the future.

#### **Confidentiality**

You can speak openly and honestly in your responses. We will not include your name in any reports and we will not tell anyone that you have contributed to this research. If you are participating in a focus group discussion, it is important to respect other people's privacy and not share what has been discussed with others outside of this discussion. All information will be stored securely on AIR and EML computers and will be deleted after all reports are approved by the funder at the end of the project in 2023.

#### **Voluntary Participation**

Your participation in these data collection activities is completely voluntary. You may choose not to answer any questions or stop the interview OR focus group discussion at any time. If you do not want to participate in the study, your decision will have no negative impact on you or your child's participation in the program.

### **More Information**

If you have questions about the study, please contact Nirodha Dissanayaka, the study coordinator at 77 581 2182, [nirodha@emlconsultants.com](mailto:nirodha@emlconsultants.com) or Dr. Pooja Nakamura, the project director of the evaluation, at [pnakamura@air.org](mailto:pnakamura@air.org). If you have concerns or questions about your rights as a participant, contact AIR's Institutional Review Board at [IRB@air.org](mailto:IRB@air.org), toll free at 1-800-634-0797, or by postal mail: AIR c/o IRB, 1000 Thomas Jefferson Street NW, Washington, DC 20007.

### **Informed Consent**

If you have understood the information above and voluntarily agree to participate, please provide verbal consent by saying "I consent" aloud.

---

**Interviewer: Thank you all for agreeing to participate in our study. We are here to study the PALAM/A program. If you have never heard of PALAM/A, the goal of the program is to help lower the cost of providing nutritious school meals to primary school students and, as a result, improve learning outcomes. The purpose of today's conversation is to understand the current state of your school and how things work currently. We would like to begin our conversation today with introductions and then I will ask you a series of questions about your role as school meal providers.**

### Introduction

1. Can each person state their name and how long you have been in your position?
2. Could someone please explain to me the role of the school meal provider? What are your specific activities and responsibilities?
3. Are you familiar with the PALAM/A program? If so, how did you hear about it? *Enumerator Note: If no, skip to question 4.*
  - a. What have you heard the program will include?

### Health, Nutrition & WASH

4. Could one of you please describe how the current school meal model works?
  - a. Where does the food for the school meals currently come from?
  - b. What factors influence decisions about what kinds of food are sourced?
    - i) To what extent is nutrition considered when making these decisions?
  - c. What are the main challenges the current model faces in delivering nutritious food to students? What can be improved?
5. Who are the main actors involved in providing school meals to students? Please describe each of their roles.
  - a. How are the key actors connected to one another?
  - b. Who decides what type of food to use for school meals?
  - c. Who buys the food for school meals currently?

- i) If schools purchase the food, how do they get funding to buy food and other meal related commodities?
  - d. Who has the most influence in how funding is allocated and spent?
- 6. What types of meals are offered at schools?
  - i) Do you have a sense if the children like the school meals? Why or why not?
  - ii) Do you consider the meals to be nutritious? Why or why not?
- 7. Does the school share any health/nutrition information with students? *Enumerator note: Probe for any information about eating healthy foods, washing your hands, etc.*
  - a. What information and how do you share it? *Enumerator note: Probe for differences by grade, whether different information is provided to girls and boys.*
  - b. Which actors are best positioned to share information related to nutrition and dietary practices to students and parents?
- 8. Does the schools you work with and meal providers follow certain standards to ensure that food is prepared and stored safely? If yes, please describe. *If no, skip to question 9.*
  - a. How are these standards set?
  - b. Who is responsible for monitoring if these standards are met?
- 9. Does the schools you work with typically have a kitchen? If yes, what is it used for? (*Enumerator Note: If no, skip to question 10*).
  - a. If meals are cooked in the kitchen, what do typical meals consist of? Are the meals for teachers or students or both?
  - b. Is the kitchen clean?
  - c. Does the kitchen have adequate supplies (i.e., food and cooking utensils)? Please describe.
  - d. Is the kitchen an appropriate size for the school (not too big or too small)?
  - e. Do you think kitchen facilities are currently adequate to ensure food safety? Why or why not?
- 10. What do you think schools need in order to improve delivery of nutritious school meals?
  - a. What specific support do school meal providers need to improve their ability to deliver nutritious school meals?

### Relevance

- 11. Based on what you know about the program, do you think the PALAM/A project is designed to help support school meal providers do their work? Why or why not? *Enumerator note: If the respondents are unfamiliar with PALAM/A skip to question 12.*
  - a. What aspect of the project do you think will be the most helpful? Why?

### Effectiveness

- 12. What do you think will help PALAM/A achieve its objectives of delivering more nutritious meals to primary school students?
  - a. What are some barriers the program might have to overcome?
- 13. Under the current school meal model, is it a struggle for schools to meet the costs of providing meals? *Enumerator note: If the respondents don't know this information, skip to question 14.*
  - a. What are the key factors that affect costs?

### Efficiency

14. Are food and other commodities usually delivered on time in the current food sourcing model? If not, what factors cause delays?
15. How much food and other commodities are wasted under the current model? What do you think schools can do to reduce waste?

Conclusion

16. Is there anything else you'd like to tell me about the school environment that we haven't already discussed?

**Thank you very much for answering all my questions.**

## **PALAM/A –Zonal/Divisional Education Officers KII Protocol at Baseline**

### **Informed Consent Script**

Hello, my name is \_\_\_\_\_ and I am working with the American Institutes for Research (AIR) and EML Consultants to gather information about the PALAM/A project. The PALAM/A project aims to help lower the cost of providing nutritious school meals to primary school students and, as a result, improve learning outcomes. We are gathering information about the project from school principals, school meal providers (SMPs), school development society (SDS) members, and government officials at the zonal and divisional levels. This evaluation is funded by Save the Children.

### **Participation**

We would like to conduct an interview OR we are asking you to participate in a focus group discussion. The focus group is a group interview with about 6-8 people from this school. We will ask you questions about your involvement in the PALAM/A project and your opinions on and experiences with the project. The interview or focus group will take about 1-2 hours. We will be taking notes and if you are comfortable, we would like to record this interview OR focus group discussion. We will use the audio recording to fill in any gaps in our notes and then immediately delete the recording.

### **Risk**

There are no physical risks to you if you take part in this study. If any of the questions we ask are sensitive or make you uncomfortable, you do not have to answer them. The research is not evaluating you, your child, or your school.

### **Benefits**

You will not receive any personal benefits (monetary or other gift) by participating in this study. However, the information you provide us will help researchers understand the challenges and successes of the PALAM/A project. This information can be used to improve the program in the future.

### **Confidentiality**

You can speak openly and honestly in your responses. We will not include your name in any reports and we will not tell anyone that you have contributed to this research. If you are participating in a focus group discussion, it is important to respect other people's privacy and not share what has been discussed with others outside of this discussion. All information will be stored securely on AIR and EML computers and will be deleted after all reports are approved by the funder at the end of the project in 2023.

### **Voluntary Participation**

Your participation in these data collection activities is completely voluntary. You may choose not to answer any questions or stop the interview OR focus group discussion at any time. If you do not want to participate in the study, your decision will have no negative impact on you or your child's participation in the program.

### **More Information**



If you have questions about the study, please contact Nirodha Dissanayaka, the study coordinator at 77 581 2182, nirodha@emlconsultants.com or Dr. Pooja Nakamura, the project director of the evaluation, at pnakamura@air.org. If you have concerns or questions about your rights as a participant, contact AIR’s Institutional Review Board at IRB@air.org, toll free at 1-800-634-0797, or by postal mail: AIR c/o IRB, 1000 Thomas Jefferson Street NW, Washington, DC 20007.

### **Informed Consent**

If you have understood the information above and voluntarily agree to participate, please provide verbal consent by saying “I consent” aloud.

-----  
**Interviewer: Thank you for agreeing to participate in our study. We are here to study the PALAM/A program. If you have never heard of PALAM/A, the goal of the program is to help lower the cost of providing nutritious school meals to primary school students and, as a result, improve learning outcomes. The purpose of today’s conversation is to understand the current state of the schools in this district and how things work currently. We would like to begin our conversation today with introductions and then I will ask you about your perspectives on the current state of nutrition and literacy levels in schools within your district.**

**First, can you please state your name, title, how long you have been in your position, and what your primary responsibilities are?**

### Introduction

1. Are you familiar with the PALAM/A program? If so, how have you heard about it?  
*Enumerator Note: If no, skip to question 2.*
  - a. What have you heard the program will include?
  - b. In what area do you anticipate PALAM/A will support your school the most? Why?

### Attendance and Learning

2. Does the zonal/divisional office monitor primary school students’ literacy rates?
  - a. What are some of the current trends you have noticed?
3. Does the zone/division track attendance rates? If yes, is attendance rates consistent throughout the year? *Enumerator Note: Probe for seasonality, typical attendance levels for girls vs. boys, other trends in attendance.*
4. What zonal/divisional level policies or program activities promote increased levels of literacy?
5. What zonal/divisional level policies or program activities promote increased levels of school attendance?

### Health, Nutrition & WASH

6. Does the zone/division have health personnel (e.g., public health inspectors, medical officers, public health midwives, etc.) that regularly visit schools? If yes, what do they do?
7. Does the zone/division monitor students’ nutrition and health outcomes? If yes, How frequently?
  - a. What are the current trends?

8. What zonal/divisional level policies or programs promote positive nutrition and dietary practices in schools?
9. Do the schools and food preparers have to follow certain standards to ensure that food is prepared and stored safely? If yes, please describe. *Enumerator Note: If no, skip to question 10.*
  - a. How are these standards set?
  - b. At the zonal/divisional level, is there any way to monitor if these standards are being met?
10. Please describe how the current school meal program works.
  - a. Where do schools currently get food for their meals?
  - b. Where do they get the funds to do so?
  - c. Are you aware of any challenges the current program faces in delivering nutritious food to primary school students? If so, please describe.
11. Who are the main actors currently involved in providing school meals to primary students? Please describe each of their roles.
  - a. How are the key actors connected to one another?
  - b. Who buys the food for school meals currently?
    - i) If schools purchase the food, how do they get funding to buy food and other meal related commodities?
  - c. Who has the most influence in how funding is allocated and spent?
12. Does the zone/division share any health/nutrition information with schools? *Enumerator note: Probe for any information about eating healthy foods, washing your hands, etc.*
  - a. What information and how do you share it? *Enumerator note: Probe for differences by grade, whether different information is provided to girls and boys.*
  - b. Which actors are best positioned to share information related to nutrition and dietary practices to students and parents?
13. Can you describe the general state of school facilities and infrastructure across your zone/division?
  - a. How do schools access funding to build or improve facilities?
  - b. What challenges do schools face in accessing these funds?
  - c. What kind of support does the zone/division provide, if any, to help schools upkeep their infrastructure?
14. What do you think schools need in order to improve delivery of nutritious school meals?
  - a. How do you see the zone/division's role in supporting schools to improve the delivery of nutritious school meals to their students?
  - b. In what ways can the zone/division improve its support?

### Relevance

15. Based on what you know about the program, do you think the PALAM/A project is designed to meet the needs of the schools in your zone/division? Why or why not? *Enumerator note: If the respondent is unfamiliar with PALAM/A skip to question 16.*
  - a. What aspect of the project do you think will be the most helpful? Why?

### Effectiveness

16. What factors do you think will help PALAM/A achieve its objectives of boosting literacy rates and delivering more nutritious meals to the schools in your zone/division?

- a. What would be some challenges the program might have to overcome?

**Conclusion**

17. Is there anything else you'd like to tell me about your zone/division's schools that we haven't already discussed?

**Thank you very much for answering all my questions.**

## **PALAM/A – School Development Society Members KII Protocol at Baseline**

### **Informed Consent Script**

Hello, my name is \_\_\_\_\_ and I am working with the American Institutes for Research (AIR) and EML Consultants to gather information about the PALAM/A project. The PALAM/A project aims to help lower the cost of providing nutritious school meals to primary school students and, as a result, improve learning outcomes. We are gathering information about the project from school principals, school meal providers (SMPs), school development society (SDS) members, and government officials at the zonal and divisional levels. This evaluation is funded by Save the Children.

### **Participation**

We would like to conduct an interview OR we are asking you to participate in a focus group discussion. The focus group is a group interview with about 6-8 people from this school. We will ask you questions about your involvement in the PALAM/A project and your opinions on and experiences with the project. The interview or focus group will take about 1-2 hours. We will be taking notes and if you are comfortable, we would like to record this interview OR focus group discussion. We will use the audio recording to fill in any gaps in our notes and then immediately delete the recording.

### **Risk**

There are no physical risks to you if you take part in this study. If any of the questions we ask are sensitive or make you uncomfortable, you do not have to answer them. The research is not evaluating you, your child, or your school.

### **Benefits**

You will not receive any personal benefits (monetary or other gift) by participating in this study. However, the information you provide us will help researchers understand the challenges and successes of the PALAM/A project. This information can be used to improve the program in the future.

### **Confidentiality**

You can speak openly and honestly in your responses. We will not include your name in any reports and we will not tell anyone that you have contributed to this research. If you are participating in a focus group discussion, it is important to respect other people's privacy and not share what has been discussed with others outside of this discussion. All information will be stored securely on AIR and EML computers and will be deleted after all reports are approved by the funder at the end of the project in 2023.

### **Voluntary Participation**

Your participation in these data collection activities is completely voluntary. You may choose not to answer any questions or stop the interview OR focus group discussion at any time. If you do not want to participate in the study, your decision will have no negative impact on you or your child's participation in the program.

### **More Information**

If you have questions about the study, please contact Nirodha Dissanayaka, the study coordinator at 77 581 2182, nirodha@emlconsultants.com or Dr. Pooja Nakamura, the project director of the evaluation, at pnakamura@air.org. If you have concerns or questions about your rights as a participant, contact AIR’s Institutional Review Board at IRB@air.org, toll free at 1-800-634-0797, or by postal mail: AIR c/o IRB, 1000 Thomas Jefferson Street NW, Washington, DC 20007.

## **Informed Consent**

If you have understood the information above and voluntarily agree to participate, please provide verbal consent by saying “I consent” aloud.

-----

**Interviewer: Thank you for agreeing to participate in our study. We are here to study the PALAM/A program. If you have never heard of PALAM/A, the goal of the program is to help lower the cost of providing nutritious school meals to primary school students and, as a result, improve learning outcomes. The purpose of today’s conversation is to understand the current state of your school and how things work currently. We would like to begin our conversation today with introductions and then I will ask you a series of questions about your role and school context.**

**First, can you please state your name, how long you have been in your position, and what your primary responsibilities are?**

### Introduction

1. Are you familiar with the PALAM/A program? If so, how have you heard about it?  
*Enumerator Note: If no, skip to question 2.*
  - a. What have you heard the program will include?
  - b. In what area do you anticipate PALAM/A will support your school the most? Why?

### Health, Nutrition & WASH

2. Please describe how the current school meal program works.
  - a. Where does the food for the school meals currently come from?
  - b. What factors influence decisions about what kinds of food are sourced?
  - c. What is the role of the SDS in this process? How do they support the delivery of nutritious school meals to students?
  - d. What are the main challenges the current program faces in delivering nutritious food to students?
3. Who are the main actors involved in providing school meals to students? Please describe each of their roles.
  - a. How are the key actors connected to one another?
  - b. Who buys the food for school meals currently?
    - i) If schools purchase the food, how do they get funding to buy food and other meal related commodities?
  - c. Who has the most influence in how funding is allocated?
4. Do schools and meal providers follow certain standards to ensure that food is prepared and stored safely? If yes, please describe. *Enumerator Note: If no, skip to question 5.*

- a. How are these standards set?
  - b. What specific practices do you follow to ensure that food is prepared and stored safely?
  - c. Did anyone provide training to you on safe food preparation and storage? If so, please describe what you learned through this training.
  - d. Who is responsible for monitoring if these standards are met?
5. Can you describe the general state of your school's facilities and infrastructure?
- a. Who is responsible for infrastructure and maintenance related decisions in your school?
  - b. What school facilities require the most immediate attention for upgrades? *Enumerator probe for kitchens, bathrooms, hand washing stations, etc.*
  - c. How do schools fund projects to build or improve facilities? What challenges do schools face in accessing these funds?
    - i) Is the SDS involved? Please describe.
  - d. What kind of support do SDS members receive to develop and implement school maintenance plans? What further support is needed?
6. Does the school have a kitchen? If yes, what is it used for? (*Enumerator note: If no, skip to question 7*).
- a. If meals are cooked in the kitchen, what do typical meals consist of? Are the meals for teachers or students or both?
  - b. Is the kitchen clean?
  - c. Does the kitchen have adequate supplies (i.e., food and cooking utensils)? Please describe.
  - d. Is the kitchen an appropriate size for the school (not too big or too small)?
  - e. Do you think kitchen facilities are currently adequate to ensure food safety? Why or why not?
7. Does the school have potable water available to students for drinking? Please describe.
8. Are there enough toilets/latrines for students at this school?
- a. How would you characterize the cleanliness of the toilets/latrines?
  - b. Is there soap and water for handwashing near all latrines?
  - c. Are the girls' and boys' toilets/latrines separate from each other? Please describe.

#### Relevance

9. Based on what you know about the program, do you think the PALAM/A project is designed to meet the needs of SDS members? Why or why not? *Enumerator note: If the respondent is unfamiliar with PALAM/A skip to question 10.*
- a. What specific component of the project do you think will be the most helpful? Why?

#### Effectiveness

10. What do you think will help PALAM/A achieve its objectives of boosting literacy rates and delivering more nutritious meals in your school?
- a. What are some barriers the program might have to overcome?

#### Conclusion

11. Is there anything else you'd like to tell me about your school or the school environment that we haven't already discussed?

**Thank you very much for answering all my questions.**

## **PALAM/A – Principals KII Protocol at Baseline**

### **Informed Consent Script**

Hello, my name is \_\_\_\_\_ and I am working with the American Institutes for Research (AIR) and EML Consultants to gather information about the PALAM/A project. The PALAM/A project aims to help lower the cost of providing nutritious school meals to primary school students and, as a result, improve learning outcomes. We are gathering information about the project from school principals, school meal providers (SMPs), school development society (SDS) members, and government officials at the zonal and divisional levels. This evaluation is funded by Save the Children.

### **Participation**

We would like to conduct an interview OR we are asking you to participate in a focus group discussion. The focus group is a group interview with about 6-8 people from this school. We will ask you questions about your involvement in the PALAM/A project and your opinions on and experiences with the project. The interview or focus group will take about 1-2 hours. We will be taking notes and if you are comfortable, we would like to record this interview OR focus group discussion. We will use the audio recording to fill in any gaps in our notes and then immediately delete the recording.

### **Risk**

There are no physical risks to you if you take part in this study. If any of the questions we ask are sensitive or make you uncomfortable, you do not have to answer them. The research is not evaluating you, your child, or your school.

### **Benefits**

You will not receive any personal benefits (monetary or other gift) by participating in this study. However, the information you provide us will help researchers understand the challenges and successes of the PALAM/A project. This information can be used to improve the program in the future.

### **Confidentiality**

You can speak openly and honestly in your responses. We will not include your name in any reports and we will not tell anyone that you have contributed to this research. If you are participating in a focus group discussion, it is important to respect other people's privacy and not share what has been discussed with others outside of this discussion. All information will be stored securely on AIR and EML computers and will be deleted after all reports are approved by the funder at the end of the project in 2023.

### **Voluntary Participation**

Your participation in these data collection activities is completely voluntary. You may choose not to answer any questions or stop the interview OR focus group discussion at any time. If you do not want to participate in the study, your decision will have no negative impact on you or your child's participation in the program.

### **More Information**



If you have questions about the study, please contact Nirodha Dissanayaka, the study coordinator at 77 581 2182, nirodha@emlconsultants.com or Dr. Pooja Nakamura, the project director of the evaluation, at pnakamura@air.org. If you have concerns or questions about your rights as a participant, contact AIR’s Institutional Review Board at IRB@air.org, toll free at 1-800-634-0797, or by postal mail: AIR c/o IRB, 1000 Thomas Jefferson Street NW, Washington, DC 20007.

### **Informed Consent**

If you have understood the information above and voluntarily agree to participate, please provide verbal consent by saying “I consent” aloud.

---

**Interviewer: Thank you for agreeing to participate in our study. We are here to study the PALAM/A program. If you have never heard of PALAM/A, the goal of the program is to help lower the cost of providing nutritious school meals to primary school students and, as a result, improve learning outcomes. The purpose of today’s conversation is to understand the current state of your school and how things work currently. We would like to begin our conversation today with introductions and then I will ask you a series of questions about the systems you have in place at your school.**

### Introduction

1. Can you please state your name, how long you have been in your position, and what your primary responsibilities are?
2. What were the key challenges you faced during the school closures due to COVID-19?
3. What was the greatest challenge you faced to ensure continuous learning for the children in your community during school closures due to COVID-19?
4. Are you familiar with the PALAM/A program? If so, how have you heard about it?  
*Enumerator Note: If no, skip to question 5.*
  - a. What have you heard the program will include?
  - b. In what area do you anticipate PALAM/A will support your school the most? Why?

### Attendance and Learning

5. Is attendance in your school consistent throughout the year? *Enumerator Note: Probe for seasonality, typical attendance levels for girls vs. boys, other trends in attendance.*
6. What is the language of instruction in the classrooms? *Enumerator Note: English is introduced as a second language starting in Grade 3.*
  - a. For students in grades 3 and above, how comfortable would you say students are with English? Sinhala/Tamil?:
    - i) Speaking?
    - ii) Reading?
    - iii) Writing?
7. Let’s now talk a little bit about your school’s approach to teaching, reading, and writing:
  - a. Do teachers use any activities to encourage reading/writing skills? Please describe.
  - b. Do teachers receive any training on how to teach reading/writing? If yes, please describe.
  - c. What challenges do teachers commonly face when they teach reading/writing?



- d. What books or other learning materials are currently available in your school to help children learn to read and write?
- 8. How does your school monitor literacy (reading and writing ability) levels of students?

### Health, Nutrition & WASH

- 9. Are basic medical supplies (such as a first aid kit) available at the school?
- 10. Are there are health personnel (e.g., public health inspectors, medical officers, public health midwives, etc.) that regularly visit this school? If yes, what do they do?
- 11. Are students' growth monitored at all at school? What about their weight? *Enumerator Note: Probe for frequency, who does it, etc.*
- 12. Do you have a sense of whether most of your students show up having eaten breakfast? Or are they hungry when they arrive at school?
  - a. *If many are hungry, do they have difficulty concentrating in class?*
  - b. *Are many students here stunted, wasted, or underweight? Enumerator note: Provide definitions for each of these terms. We don't need an exact # or %, just a general sense of whether it's many children or just a few.*
- 13. Does the school distribute any medication or vitamins/minerals to students? If yes, what is distributed? *Enumerator Note: Probe for frequency, who does it, etc.*
- 14. Do most children bring lunch to eat at school?
- 15. What types of meals are offered at school? *Probe for type of food (e.g. fish, eggs, potatoes, vegetables, fruit, etc.).*
  - a. Do children tend to like the meals? Why or why not?
  - b. Do you consider the meals to be nutritious? Why or why not?
- 16. Please describe how the current school meal model works.
  - a. Where does the food for the school meals currently come from?
  - b. What factors influence decisions about what kinds of food are sourced?
    - i) To what extent is nutrition considered when making these decisions?
  - c. What are the main challenges in delivering nutritious food to students under the current school meal program? What can be improved?
- 17. Who are the main actors involved in providing school meals to students? Please describe each of their roles.
  - a. How are the key actors connected to one another?
  - b. Who decides what type of food to use for school meals?
  - c. Who buys the food for school meals currently?
    - i) If schools purchase the food, how do they get funding to buy food and other meal related commodities?
  - d. Who has the most influence in how funding for school meals is allocated and spent?
- 18. Does the school share any health/nutrition information with students? *Enumerator note: Probe for any information about eating healthy foods, washing your hands, etc.*
  - a. What information and how do you share it? *Enumerator note: Probe for differences by grade, whether different information is provided to girls and boys.*
  - b. Which actors are best positioned to share information related to nutrition and dietary practices to students and parents?
- 19. Are there district/zonal or national regulations your school must comply with related to the provision of school meals? If yes, please specify.

20. Does the school or food preparers follow certain standards to ensure that food is prepared and stored safely? If yes, please describe. *If no, skip to question 21.*
  - a. How are these standards set?
  - b. Who is responsible for monitoring if these standards are met?
21. What do you think your school needs in order to improve delivery of nutritious school meals?
22. Can you describe the general state of your school's facilities and infrastructure?
  - a. Who is responsible for infrastructure and maintenance related decisions in your school?
  - b. What school facilities require the most immediate attention for upgrades? *Enumerator note: Probe for kitchens, bathrooms, hand washing stations, etc.*
  - c. How do schools fund projects to build or improve facilities? What challenges do schools face in accessing these funds?
    - i) Is the School Development Society (SDS) involved? If yes, please describe.
23. Does the school have a kitchen? If yes, what is it used for? (*Enumerator note: If no, skip to question 24.*)
  - a. If meals are cooked in the kitchen, what do typical meals consist of? Are the meals for teachers or students or both?
  - b. Is the kitchen clean?
  - c. Does the kitchen have adequate supplies (i.e., food and cooking utensils)? Please describe.
  - d. Is the kitchen an appropriate size for the school (not too big or too small)?
  - e. Do you think kitchen facilities are currently adequate to ensure food safety? Why or why not?
24. Does the school have potable water available to students for drinking? Please describe.
25. Are there enough toilets/latrines for students at this school?
  - a. How would you characterize the cleanliness of the toilets/latrines?
  - b. Is there soap and water for handwashing near all latrines?
  - c. Are the girls' and boys' toilets/latrines separate from each other? Please describe.

### School Supports

26. Does the school have a development plan?
  - a. *If so, who is supporting the development and implementation of the plan?*
  - b. *Do you incorporate a health and sanitation component into the plan?*
27. How active is the SDS? How often do they meet? What types of projects have they completed at this school?
28. Apart from the SDS, are other groups or organizations active in your school? What do they do? *Enumerator Note: Probe for religious groups, NGOs, government workers, etc.*
29. What other type(s) of support (*materials, capacity building, etc.*) do you think this school needs most? Why?

### Relevance

30. Based on what you know about the program, do you think the PALAM/A project is designed to meet the specific needs of your school? Why or why not? *Enumerator note: If the respondent is unfamiliar with PALAM/A skip to question 31.*
  - a. What specific component of the project do you think will be the most helpful? Why?

### Effectiveness

31. What do you think will help a program like PALAM/A achieve its objectives of delivering more nutritious meals in your school and boosting literacy rates?
  - a. What are some barriers the program might have to overcome?
32. Under the current school meal model, is it a struggle for your school to meet the costs of providing meals?
  - a. What are the key factors that affect costs?

### Efficiency

33. Are food and other commodities usually delivered on time in the current food sourcing model? If not, what factors cause delays?
34. How much food and other commodities are wasted under the current model? What do you think your school can do to reduce waste?

### Conclusion

35. Is there anything else you'd like to tell me about your school or the school environment that we haven't already discussed?

**Thank you very much for answering all my questions.**

## Reading with Comprehension skill assessment tool

### Enumerator Assessment Guide

#### Instructions

This packet will allow you to record the background information and assess the literacy skills of children. Please pay careful attention to the instructions, and read all questions to children exactly as they appear.

**Special Instruction A:** Be aware that some children may need more time and guidance to understand the questions or may be louder speaking/ speak slow (with enough intervals)/ body language/ facial expressions/ gestures to make the question clearer. Please apply this instructions throughout the assessment.

***Bold type are instructions to you, as the enumerator.***

Regular type face identifies questions you should read to the child.

Before beginning any assessment, it is important to establish a relaxed and playful rapport with the child. Ask him/her a few questions about subjects of interest to them. As much as possible, help the child see the assessment as a game rather than a serious test.

Throughout the assessment, offer neutral encouragement to the child. Give encouragement in between questions and test sections, rather than in the middle of questions or test sections. Do not give hints to questions or make facial expressions while the child is completing tasks.

***Shield the tablet so the child cannot see what you record.***

**Part I: Identifying Information**

**Complete as much as possible prior to beginning assessment.**

Province	<input type="checkbox"/> Province 1 (1) <input type="checkbox"/> Province 2 (2) <input type="checkbox"/> Province 3 (3) <input type="checkbox"/> Province 4 (4) <input type="checkbox"/> Province 5 (5) <input type="checkbox"/> Other specify .....
District/ village name or ID where child lives	
School Name or ID:	
Name of Assessor or ID:	
Enumerator Role	<input type="checkbox"/> Interviewing the child (1) <input type="checkbox"/> Listening to the Assessment (2)
Child ID (1-x):	

**Part 2: Assent**

Before we start, I want to tell you my name. I'm \_\_\_\_\_. Let me tell you why I am here today. I work with Save the Children and we are trying to understand how children learn to read so we can find ways to help children like you learn to read better. You will be given some test to see if you know letters and how well you read.

The test will take about 30 minutes.

The program we're using has been used around the world and has helped many children learn better. First I would like to speak with you here (in an empty school classroom/assembly hall/office, under a tree, or wherever is available), I will ask you some questions about your home, and ask you to read some letters, words, and maybe a simple story with me.

You will not receive any grades and you don't need to worry if you don't know many things on the tests. We just want to see what you know about reading. If you don't want to participate, you do not have to, and you can go back to your classroom.

There is nothing bad that can happen to you. By helping us, you will be helping us to learn more about how children learn to read. We hope this information will be used to help all the children of Sri Lanka to learn better. We will not tell anyone what you tell us.

If you do not want to be part of this study, you may say so at any time. If you choose not to take part, nothing bad will happen to you. But we would really like you to help us.

\_\_\_ Child assented (1) \_\_\_ child did not assent (0) (*walk child back to class*)

**Part 3: Child Background information:**

**Read each question exactly as it is written. If the child seems not to understand, you may rephrase the question slightly to help them understand. (Refer to the special instruction A)**

1.	Child's name (first and last name):	
2.	Name of parent or guardian (first and last name):	
3.	Child's gender	<input type="checkbox"/> Boy (0) <input type="checkbox"/> Girl (1)
4.	How old are you?	<i>Enter age in years.....</i> <i>Write '999' if age is unknown.</i>
5.	Did you attend a learning program (preschool/Montessori) before grade 1?	<input type="checkbox"/> No(0) <input type="checkbox"/> Yes (1) <input type="checkbox"/> Don't know/no answer (999)
6.	What language(s) do you speak at home? Select all that apply.	<input type="checkbox"/> Tamil <input type="checkbox"/> Sinhala <input type="checkbox"/> English <input type="checkbox"/> Other .....(specify) 77 <input type="checkbox"/> Don't know/no answer (999)
7.	<p>a) At home do you or anyone else in your household have?</p> <ul style="list-style-type: none"> <li>- Electricity</li> <li>- Roof (tiles, tin/sheet)</li> <li>- Bicycle, bike or three wheeler</li> <li>- TV</li> <li>- Radio</li> <li>-</li> <li>- Mobile phone</li> <li>- Water source at home (well, tube well, stream)</li> </ul> <p>b) How do you come to school?</p> <p>c) How long does it take for you to come to school?</p>	<input type="checkbox"/> No (0) Yes (1) Don't know or don't answer (999) <input type="checkbox"/> No (0) Yes (1) Don't know or don't answer (999) <input type="checkbox"/> No (0) Yes (1) Don't know or don't answer (999) <input type="checkbox"/> No (0) Yes (1) Don't know or don't answer (999) <input type="checkbox"/> No (0) Yes (1) Don't know or don't answer (999) <input type="checkbox"/> No (0) Yes (1) Don't know or don't answer (999) <input type="checkbox"/> No (0) Yes (1) Don't know or don't answer (999) <input type="checkbox"/> No (0) Yes (1) Don't know or don't answer (999) <input type="checkbox"/> No (0) Yes (1) Don't know or don't answer (999) <input type="checkbox"/> Walking <input type="checkbox"/> Bicycle <input type="checkbox"/> Three wheeler <input type="checkbox"/> School van <input type="checkbox"/> Other <input type="checkbox"/> 0-15 mins <input type="checkbox"/> 15-30 mins <input type="checkbox"/> Over an hour





b) Home Literacy Activities

Instructions				
<b>Say to the child:</b> Now I am going to ask you some questions about activities you do with your family members and people you live with.				
<b>Ask the child:</b> Who lives in your house with you? For each person that the child lives with, <b>ask the child if the person is 5 years old or older</b> (i.e., old enough to be in school).				
<b>If they are 5 years old or older, ask the questions about home literacy activities for each person.</b>				
1. How many people live with you?				
2. How many of these people are 5 years old or older?				
In the past week I did				
Relationship Codes to use: 1=Mom, 2=Dad, 3=Sister, 4=Brother, 5=Grandma, 6=Grandpa, 7=Other Female, 8=Other Male In	You see this person reading? No (0), Yes (1), Don't know / skip (999)	He/she tell or help you to study/ homework? No (0), Yes (1), Don't know / Skip (999)	He/she read to you? No (0), Yes (1), Don't know / Skip (999)	He/she tell you a story? No (0), Yes (1), Don't know / Skip (999)
a)				
b)				
c)				
d)				
e)				
3. In the last week, did you read somewhere outside of school?			<input type="checkbox"/> No (0) <input type="checkbox"/> Yes (1) <input type="checkbox"/> Don't know (999)	
a) If yes, where? .....				
4. Other than at school, did you read alone last week?			<input type="checkbox"/> No (0) <input type="checkbox"/> Yes (1) <input type="checkbox"/> Don't know (999)	
5. In the last week, have you helped anyone using your reading skills?			<input type="checkbox"/> No (0) <input type="checkbox"/> Yes (1) <input type="checkbox"/> Don't know (999)	
6. Other than at school, did you share books with anyone in the last week?			<input type="checkbox"/> No (0) <input type="checkbox"/> Yes (1) <input type="checkbox"/> Don't know (999)	
7. Other than at school, did you read books to anyone in the last week?			<input type="checkbox"/> No (0) <input type="checkbox"/> Yes (1) <input type="checkbox"/> Don't know (999)	

8. Other than at school or at home, did anyone in your community read to you last week?	<input type="checkbox"/> No (0) <input type="checkbox"/> Yes (1) <input type="checkbox"/> Don't know (999)
9. Do you have a reading corner or separate space for you study at home?	<input type="checkbox"/> No (0) <input type="checkbox"/> Yes (1) <input type="checkbox"/> Don't know (999)
10. a) Do you attend after-school reading activities? b) If yes, did you attend last week?	<input type="checkbox"/> No (0) <input type="checkbox"/> Yes (1) <input type="checkbox"/> Don't know (999)

**Part 5: Letters:**

a) Letter Identification

<p>Instructions</p> <p><b>Give the child the card of letters and say to the child:</b></p> <p>Let's look at some letters. Can you start here (<b>point to first letter</b>) and tell me what these letters are reading each letter in each row from left to right? (<b>Indicate left to right direction</b>). Do you understand? Ok, you can begin.</p> <p><b>What to do if a child is struggling: If the child is struggling and hesitates at any letter for five seconds, ask follow-up questions:</b></p> <ol style="list-style-type: none"> <li>1) What is the name of this letter?</li> <li>2) Or do you know a word that starts with this letter?</li> </ol> <p><b>If the child still hesitates for five seconds, ask:</b> Can you tell me any of these letters?</p> <p><b>If the child still hesitates for five seconds, then stop and thank him/her for trying his/her best. Mark any letters that the child did not identify or did not attempt as incorrect. Then, continue to the next section.</b></p> <p><b>Scoring: Do not mark correct letters. Instead, tap the letter that are incorrect. The answer is considered correct if the child does any of the following:</b></p> <ol style="list-style-type: none"> <li>1. States the letter name in the home language or language of instruction,</li> <li>2. Gives a response which says "It begins like..." giving a word for which the letter is the initial letter.</li> </ol>
--

Example Child Card: Letters:


### Part 6 : Most- Used Words

<p>Instructions</p> <p><b>Give the child the laminated Most-Used Word card. Say:</b></p> <p>I would like you to read some words for me. They are words from your textbook. Can you point to each word and read it for me? (<b>point to the first word and moving across each line indicating left to right direction</b>). Do you understand? Ok, you can begin.</p> <p><b>What to do if a child is struggling</b></p> <ul style="list-style-type: none"> <li>• If the child hesitates or fails to correctly pronounce a word within 5 seconds, the child is told the word and an error is scored.</li> </ul> <p><b>If the child hesitates or incorrectly identifies the first (6) words, then stop and thank him/her for trying his/her best. Then, continue to the next section.</b></p> <p><b>The directions may be given in the home language if necessary.</b></p> <p><b>If, after 10 seconds, the child has not identified at least one word, then stop and thank him/her for trying his/her best. Then, continue to the next section.</b></p> <p><b>Scoring: tap the words that are incorrect or tap any words that the child did not identify or did not attempt. Remember that pronunciations of words according to local dialects are acceptable. A child receives credit for reading the words correctly regardless of the order in which the words are read. If the child reads the words out of order, then remember to bring his/her attention to the ones they might have skipped.</b></p>
---

Example Child Card- Most- Used Words


**Part 7 : Reading Passage/Story**

Instructions:  
**Give the child the reading passage [Insert title of passage]. Say:**

I would like you to read a story for me. When I say 'begin,' start reading aloud from the title on this page. Try to read each word. If you come to a word you don't know, I'll tell it to you. Be sure to try to do your best. Do you understand what I want you to do?

**Say: ok begin, when the child begins to read the first word, click the 'start' button on the tablet. As the child reads, follow on your tablet and tap each incorrect word. Do not mark correct words.**

**Struggling Child:**

- *If the child pronounces a word incorrectly but keeps reading, do not correct him or her. But mark the word as incorrect.*
- *If the child hesitates for 5 seconds on a word, tell the child the word, mark it incorrect, and continue.*

**When the tablet timer reaches 30 seconds, a box will appear on the tablet screen that asks you to select the word being read at the time. Click on the word the child is reading at that moment.**

Stop Rule: **If the child is unable to read at least 5 words correctly during the first 30 seconds of reading the story, stop the timer and say:** Thank you for trying to read for me!  
**Tap all of the words the child did not read as incorrect.**

**When the tablet timer reaches 60 seconds, a box will appear on the tablet screen that asks you to select the word being read at the time. Click on the word the child is reading at that moment.**

**If the child stops reading before the end of the story, encourage the child to keep reading. Show the child where he/she stopped, if necessary.**

**Stop the timer as soon as the child finishes reading the last word of the story. Say, Thank you.**

**Then say:** Now I am going to ask you some questions about the story.

Example Child Card: Reading Passage/story

Comprehension questions:

1	A summary question “Can you tell me what happened in the story?” In the assessor’s copy, list the name of the main character, the location of the story, the conflict in the story and how it is resolved. Childs earn a point if three of these four central points are cited during the retelling of the story.	Correct	Incorrect
2	Require recall/lookup of details from the story. These should not replicate the items in the summary. Relates to the first line or two of the passage	Correct	Incorrect
3	Require recall/lookup of details from the story	Correct	Incorrect
4	Require recall/lookup of details from the story	Correct	Incorrect
5	Require recall/lookup of details from the story	Correct	Incorrect
6	Require recall/lookup of details from the story	Correct	Incorrect
7	Require recall/lookup of details from the story	Correct	Incorrect
8	Inference questions	Correct	Incorrect
9	Inference questions An inference is an assumption made based on specific evidence in the text	Correct	Incorrect

10	<p>Evaluative or opinion question</p> <p>This usually takes the form of "Do you think this? Why or why not?". This question assesses whether the child can form text-based opinions of characters and their actions. <b>There is not just one correct answer for an evaluative question.</b> Rather, children earn a point for supporting their opinion with details from the story, regardless of what their opinion is.</p>	Correct	Incorrect
----	---	---------	-----------

**Part 8 : Writing**

- a) Name writing

<p>Instructions:</p> <p><b>Hand the lined sheet of paper and pencil to the child. Say:</b> Now we're going to play and write. Try to write your name here in any way you know. Don't worry if you can't do it well, just try your best.</p> <p><b>Limit this section to 1 minute from when the child begins writing. If the child does not write for thirty seconds after the prompt, stop.</b></p> <p><b>Score this section on the tablet. If the score is "0" or "1" do not move to the sentence dictation task. Thank the child and tell the child he or she may go back to class.</b></p>
---

## b) Sentence dictation

## Instructions

**Turn the lined sheet of paper. Say:** We're going to move on to our next game now. I am going to read you a short sentence. Please listen carefully. I will read the whole sentence once. Then I will read it in parts so you can write what you hear. I will then read it again so that you can check your work. Are you ready?

**Read the following sentence ONCE at about one word per second.**

Word1 word2 word3 word4.

**Give the child the pencil, and read the sentence a SECOND time, :**

Word1 word2 word3 word4.

**After the child finishes writing, read the whole sentence again.**

Word1 word2 word3 word4.

**Wait 5 seconds and score the task.**

**Stop rule: If the child does not write anything for 30 seconds, stop the task and Thank the child for agreeing to participate in this assessment. Tell the child he or she may go back to class.**



## Oral vocabulary Knowledge Test Instructions

This test measures the child’s “Receptive Oral Vocabulary Knowledge”. It checks the child’s ability to see a picture, hear a spoken word, and match the spoken word to the picture.

### Administering the test

1. This test will be given individually to each student
2. This test consists of a set of test words that you will have to say out loud for each page, and a set of X pages of pictures, with 4 pictures on each page. Make sure that the student is only looking at one page at a time.
3. Start with two examples. Point to the first page and say, ***“Each page in front of you has four pictures. We will start with the first page and I will say a word. I want you to point to or touch the one picture that matches that word. Then, we will continue on to the next page and begin again. Please touch only one of the four pictures on each page.”***
4. Start with example 1: **“For example, if I say “Flower,” you would point to this picture.”** [Point to corresponding picture.] **“Great, let’s turn the page.”**
  1. **“Now you try. The word is “Butterfly” Please point to the picture that matches this word.”**
  2. *[If correct]: “Very good.”* [Point to correct picture.]
  3. *[If incorrect]: “The matching picture is this one.”* [Point to correct picture.]**“Do you understand what you should do? Now, we’ll begin the test on the next page.”**

### How to Score

- If a child points to the correct picture, the child earns 1 point.
- If a child selects the wrong picture, more than one picture, and/or the child does not select any picture, they receive a score of 0.
  - Encourage students to guess and select a picture even if they are not sure of the answer.



- Oral Vocabulary Test

List of Target words	
1.	Eye
2.	Rose
3.	Rabit
4.	Bus
5.	Mango
6.	Beans
7.	Table
8.	Pen
9.	Sun
10.	Doll

Sample Picture -1



Oral Vocabulary Test

3

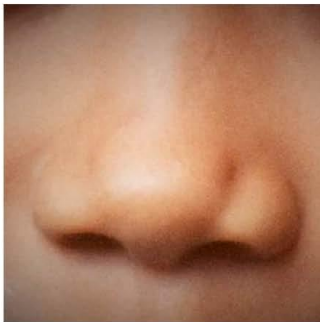
Sample Picture - 2



Oral Vocabulary Test

4

1.



Oral Vocabulary Test

5

2.



Oral Vocabulary Test

6

3.



Oral Vocabulary Test

7



4.



Oral Vocabulary Test

8

5.



Oral Vocabulary Test

9



6.



Oral Vocabulary Test

10

7.



Oral Vocabulary Test

11

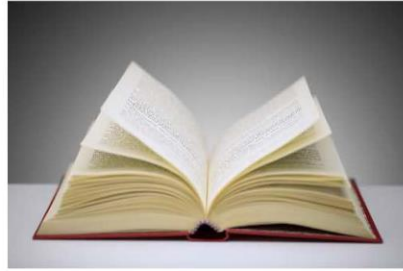
8.



Oral Vocabulary Test

12

9.



Oral Vocabulary Test

13

10.



Oral Vocabulary Test

14

SMP nutrition and food safety KAP	
<b>Question</b>	<b>Response</b>
Date of Interview	dd/mm/yyyy (numbers only)
Name of Village / District	
School Name / Number	
Name / code of interviewer	
Name of respondent	
Sex of respondent	1 - Female 0 - Male

Module 1: Child health and nutrition		
Question	Instruction	Response
How important is it for a child to eat while at school?	- "Not important" means children do not have to eat while at school - "A little important" means children could eat while at school, but it is not that important - "Rather important" means children should eat at school if they can - "Very important" means children definitely should eat while at school	1 - Not important 2 - A little important 3 - Rather important 4 - Very important
What can happen if a child skips a meal at school and goes hungry?	Select all that apply	1 - Child can have a short attention span/low concentration 2 - Child cannot study well 3 - Child does not do as well at school as she could 4 - Child gets sleepy or lethargic 5 - Other, specify 88 - DK
What are some of the important nutritional practices for school children?	Select all that apply	1 - Eat different kinds of foods, diverse diet 2 - Eat enough food 3 - Eat food rich in vitamins 4 - Eat balanced meals (vegetables + starch + meat or fish) 5 - Other, specify 88 - DK
If selected "3 - Rather difficult" or "4 - Very difficult", ask Why?	Select all that apply.	1 - Difficult to obtain different ingredients 2 - Different ingredients are more expensive 3 - Children do not like eating different types of foods 4 - Other, specify
What are some signs of vitamin A deficiency in children?	Select all that apply.	1 - Dry skin 2 - Eye problems 3 - Night blindness 4 - Acne 5 - Poor wound healing 6 - Throat infection 7 - Other, specify 88 - DK
What are some signs of iron deficiency in children?	Select all that apply.	1 - Fatigue 2 - Weakness 3 - Pale skin 4 - Chest pain 5 - Headache/dizziness 6 - Cold hands or feet 7 - Other, specify 88 - DK
What are some signs of protein deficiency in children?	Select all that apply.	1 - Edema (swollen and puffy skin) 2 - Loss of muscle mass 3 - Stunted growth 4 - Increased incidence of infections 5 - Increased bone fractures 6 - Hair, skin or nail problems 7 - Other, specify 88 - DK

What are some of the plant-based proteins that can substitute animal-based protein for vegetarian students?	Select all that apply.	1 - Mushroom 2 - Tofu (soya meat) 3 - Dhal 4 - Eggs 5 - Hathmaluwa (veg curry with cashews) 6 - Other, specify 88 - DK
Why should you avoid serving too much of sticky and sugar-rich foods, such as sweets and candies?	Select all that apply.	1 - Because they can cause tooth decay 2 - Because they are not nutritious 3 - Because they interfere with appetite 4 - Other, specify 88 - DK
Do you provide the MoE recommended menu?		1 - Yes, always 2 - Yes, most times 3 - Yes, sometimes 4 - No, never
Do you make adaptations to the MoE recommended menu?		1 - Yes 0 - No
Why did you make adaptations to the MoE recommended menu?	Select all that apply.	1 - Recommended ingredient unavailable 2 - Recommended ingredient too expensive 3 - Recommended ingredient is not good / not nutritious 4 - Adaptation for student's diets (e.g., for vegetarian students) 5 - Other, specify
Which vegetables are you serving this week?	Select all that apply.	Select all that apply from a <b>list of context-appropriate vegetables.</b>
Which fruits are you serving this week?	Select all that apply.	Select all that apply from a <b>list of context-appropriate fruits.</b>
How many eggs did you provide to each student this week?	Enter integer.	
Do you serve beverages with school meals?		1 - Yes 0 - No
What kind of beverages do you serve?	Select all that apply.	1 - Juice 2 - Milk 3 - Tea / chai 4 - Powdered drink 5 - Other, specify
How confident do you feel preparing healthy and nutritious meals for school children?		1 - Not at all confident 2 - A little confident 3 - Mostly confident 4 - Very confident

<b>Access to health and nutrition information</b>		
Did you ever attend a training on child health and nutrition?		1 - Yes 0 - No >> Next section
When was the last time you attended one?		1 - In past week 2 - In past month 3 - In past 6 months 4 - In past year 5 - More than one year ago
Was the training provided by Public Health Inspectors?		1 - Yes 0 - No
If not, who provided the training?		[insert response]
Where did you receive information about child health and nutrition?	Select all that apply.	1 - SMP training 2 - Public Health Inspectors 3 - Other SMPs 4 - MoH materials 5 - MoE materials 6 - Other, specify
Did you have any difficulty understanding the content or training materials?		1 - No difficulty 2 - Little difficulty 3 - Some difficulty 4 - A lot of difficulty
What is the most important action for preventing Covid-19 infection?		1 - Wash your hands with soap and water after being in a public place 2 - Avoid close contact with people who are sick 3 - Maintain a physical distance of 1 meter from anyone not in your household 4 - Cover your mouth and nose with a mask when around others 5 - Cover your cough and sneezes 6 - Clean frequently touched surfaces daily 7 - Other, specify 88 - DK



<b>Food Safety</b>		
<i>Personal hygiene</i>		
<b>Question</b>	<b>Instruction</b>	<b>Response</b>
Did you miss any days of meal prep because you were sick in the past 3 months?		1 - Yes 0 - No
If yes, why did you miss days when you were sick?	Select all that apply.  Do not read options.	1 - I felt bad 2 - It affects food safety 3 - Other, specify
My staff always help me to prepare meals even when they are sick (i.e., with flu, cold, diarrhoea, coughing, etc.).		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
For the following statements, state how much you agree or disagree with the statement:		
Sneezing can affect the safety of the food being prepared.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
Coughing can affect the safety of the food being prepared.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
Back pain can affect the safety of the food being prepared.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
An open wound on fingers/hand that comes in contact with food can affect the safety of the food being prepared.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
Having a fever can affect the safety of the food being prepared.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
Having a headache can affect the safety of the food being prepared.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
Vomiting can affect the safety of the food being prepared.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
Diarrhea can affect the safety of the food being prepared.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
At what moments do you wash your hands?	Select all that apply.  Do not read options.	1 - Before preparing meals 2 - Before serving meals 3 - After handling raw meet or poultry 4 - After touching money 5 - After using the toilet 6 - After touching / taking out garbage 7 - Other, specify
Describe how you wash your hands?	Select all that apply.  Do not read options.	1 - Washes hands in a bowl of water (sharing with other people) — poor practise 2 - With someone pouring a little clean water from a jug onto one's hands — appropriate practise 3 - Under running water — appropriate practise 4 - Washes hands with soap or ashes 5 - Other, specify

How long do you wash your hands for? In seconds.		
How important is it to wear clean clothes (or clean apron) when you cook?		1 - Not important 2 - A little important 3 - Rather important 4 - Very important
<b>Prep area</b>		
Describe the area where you prepare meals.		1 - Separate (dedicated) room in house 2 - Shared (not dedicated) room in house 3 - Outside 4 - Other, specify
Describe how you clean the area where you prepare meals.	Select all that apply.	1 - Clean prep surfaces with soap and clean water 2 - Clean prep surfaces with water only (no soap) 3 - Sweep / wipe the floor 4 - Remove trash 5 - Clean utensils 6 - Other, specify
When do you clean the area where you prepare meals?		1 - Before preparing each batch of meals 2 - After preparing each batch of meals 3 - Other, specify
How important is it to maintain a clean cooking environment ?		1 - Not important 2 - A little important 3 - Rather important 4 - Very important
<b>Food Storage</b>		
How do you store [FOOD TYPE]?	Do not read options. Select all that apply.	1 - In the refrigerator (below 5 °C)/cool box 2 - Covered (protected from insects, rodents, pests and dust) 3 - Uncovered 4 - Separated from cooked or ready-to-eat foods 5 - Combined with all other food items (cooked or uncooked) 6 - Other, specify
How important is it to keep meat, poultry, fish, seafood or cooked food in a cool place, for example in a cool box or in the refrigerator?		1 - Not important 2 - A little important 3 - Rather important 4 - Very important
If selected "1 - Not important" or "2 - A little important", ask Why?		[open-neded]
How difficult is it for you to keep foods in a cool box or in the refrigerator?		1 - Not difficult 2 - A little difficult 3 - Rather difficult 4 - Very difficult
If selected "3 - Rather difficult" or "4 - Very difficult", ask Why?	Select all that apply.	1 - Do not have a fridge/cool box 2 - Fridge/cool box is expensive 3 - Do not have icex 4 - Do not have electricity 5 - Other, specify
How much time usually passess between preparing hot food and delivering it to students?		1 - Less than 30 minutes 2 - Less than 1 hour 3 - Between 1 and 2 hours 4 - Over 2 hours
Does this time differ depending on the weather (i.e., if it is >30C)?		1 - Yes 0 - No
If so, how?		1 - Longer time between prep and delivery 2 - Shorter time between prep and delivery 3 - Other, specify
Why is it important to not keep hot food out at room temperature before serving for too long?	Select all that apply.	1 - Bacteria grows well at room temperature 2 - The food gets cold 3 - Other, specify 88 - DK
Why should you avoid serving leftovers that were not kept in a cool place [if stored for more than 2 hours or 1 hour if it's warmer than 30C]? This does not apply to uncut fruit or breads.	Select all that apply.	1 - Because food is not safe anymore 2 - Foods get spoiled (germs multiply very quickly and can cause illness) 3 - Higher temperatures make germs grow faster 4 - Other, specify 88 - DK
Do you reheat leftovers or the food that has been prepared earlier before serving it?		1 - Yes 0 - No
If yes, to what temperature?		1 - Less than 75C 2 - 75C 3 - Over 75C 88 - DK
How likely are children to get sick from eating food that was not stored properly?		1 - Not likely 2 - A little likely 3 - Somewhat likely 4 - Highly likely
How likely ar children to get seriously sick from eating food that was not stored properly?		1 - Not likely 2 - A little likely 3 - Somewhat likely 4 - Highly likely

<b>Contamination</b>		
Why should you prevent raw meat, offal, poultry and seafood from touching other foods such as those that are cooked or ready to eat?		1 - Raw animal foods often contain germs (which may be transferred to cooked and ready-to-eat foods) 2 - Other, specify 88 - DK
For the following statements, state how much you agree or disagree with the statement:		
I use separate (clean) utensils to handle different types of food.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
I use the same (dirty) utensils to handle raw meat / poultry and other foods (e.g., fruit or vegetables).		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
I prepare raw meat / poultry that has pests on it (i.e., flies, roaches, insects).		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
I clean the food prep surface (table, counter, chopping board) after cutting raw meat or poultry and before cutting fruits or vegetables.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
<b>Is it ready to eat?</b>		
When cooking soups and stews, what sign shows that these are ready and safe to be served?		1 - They are boiling/well cooked 2 - Other, specify 88 - DK
When cooking flesh meat, organ meat or seafood, what sign shows that these are ready and safe to be served?		1 - No blood / pink inside 2 - Other, specify 88 - DK
How likely are children to get sick from eating undercooked <b>meat</b> or poultry?		1 - Not likely 2 - A little likely 3 - Somewhat likely 4 - Highly likely
How likely is it for a child to get seriously sick from eating undercooked <b>meat</b> or poultry?		1 - Not likely 2 - A little likely 3 - Somewhat likely 4 - Highly likely
What should you do before serving children raw fruits and vegetables?	Select all that apply.	1 - Wash them with clean water and soap 2 - Wash them with clean water only 3 - Peel them 4 - Other, specify 88 - DK
<b>Transportation / Delivery</b>		
When do you deliver the meals to the school?		1 - Before 7:30 am 2 - Between 7:30 and 8:30 am 3 - Between 8:30 and 10 am 4 - After 10 am 5 - Other, specify
How long does it take you to deliver the meals to students (in minutes)?	Enter integer.	
<b>Cleaning up</b>		
After you have prepared a school meal, kitchen surfaces, pots, pans, plates and utensils are dirty. Can you describe how you clean them usually?	Select all that apply.	1 - Scrape excess food into rubbish bin 2 - Wash with clean or hot water 3 - Wash with detergent 4 - Other, specify
After you clean kitchen surfaces, pots, pans, plates and utensils, how do you dry them?	Select all that apply.	1 - Clean towel 2 - Air dry 3 - Other, specify

<b>Drinking water / water for cooking</b>		
Where do you get water for cooking?	Select all that apply.	1 - Pond, lake 2 - Dam 3 - Stream/river 4 - Unprotected spring 5 - Protected spring 6 - Well 7 - Borehole 8 - Water tank 9 - Roof catchment 10 - Other, specify
Where do you get water for children's beverages (e.g., for powdered drinks)?	Select all that apply.	1 - Pond, lake 2 - Dam 3 - Stream/river 4 - Unprotected spring 5 - Protected spring 6 - Well 7 - Borehole 8 - Water tank 9 - Roof catchment 10 - Other, specify
How important is it to boil or filter water that will be used for drinking?		1 - Not important 2 - A little important 3 - Rather important 4 - Very important
Why is it important to boil or filter water that will be used for drinking?	Select all that apply.	1 - Kills germs, microorganisms 2 - Makes water safe to drink 3 - Reduces chance of illness (diarrhea) 4 - Gives water better taste 5 - Other, specify 88 - DK
How important is it to boil or filter water that will be used for cooking?		1 - Not important 2 - A little important 3 - Rather important 4 - Very important
Why is it important to boil or filter water that will be used for cooking?	Select all that apply.	1 - Kills germs, microorganisms 2 - Makes water safe to drink 3 - Reduces chance of illness (diarrhea) 4 - Gives water better taste 5 - Other, specify 88 - DK
How likely are children to get sick from drinking unboiled or unfiltered water?		1 - Not likely 2 - A little likely 3 - Somewhat likely 4 - Highly likely
How long does water need to be boiled to ensure it is safe?		1 - Less than 1 min 2 - Between 2 and 3 mins 3 - 3 minutes 4 - More than 3 minutes 88 - DK
<b>Attitudes / Responsibilities</b>		
Cooks are responsible for preventing food poisoning or foodborne illness.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
Servers are responsible for preventing food poisoning or foodborne illness.		1 - Strongly agree 2 - Agree 3 - Disagree 4 - Strongly disagree
<b>Supervision and Awareness</b>		
Has anyone ever come to supervise you as you prepare school meals?		1 - Yes 0 - No
If yes, who has supervised you?	Select all that apply.	1 - Public health inspector 2 - Ministry official 3 - School principal or head teacher 4 - Parents of students 5 - WFP officials 6 - Other, specify
How often do they come to supervise you?		1 - Daily 2 - About once a week 3 - About once a month 4 - Every 3 months 5 - Every 6 months 6 - Once a year 7 - Less than once a year
Are you aware someone is coming to supervise you in advance? Do they arrange it with you or is it a random drop in?		1 - Arranged supervision 2 - Random drop in
What do you do to prepare for these visits?		[open-ended]

<b>Access to food safety information</b>		
Have you ever recieved information about food safety techniques?		1 - Yes 0 - No
When was last time you received food safety information?		1 - This week 2 - Last week 3 - This month 4 - Within past 6 months 5 - Within the past year 6 - Over a year ago
Who did you receive food safety information from?		1 - Public health inspector 2 - Ministry official 3 - School principal or head teacher 4 - Parents of students 5 - WFP officials 6 - Other, specify
What was the information you received?		[open-ended]
Did you ever attend a training on food safety?		1 - Yes 0 - No >> Next section
When was the last time you attended one?		1 - In past week 2 - In past month 3 - In past 6 months 4 - In past year 5 - More than one year ago
Was the training provided by Public Health Inspectors?		1 - Yes 0 - No
If not, who provided the training?		[insert response]
Where did you receive information about food safety?	Select all that apply.	1 - SMP training 2 - Public Health Inspectors 3 - Other SMPs 4 - MoH materials 5 - MoE materials 6 - Other, specify
Did you have any difficulty understanding the content or training materials?		1 - No difficulty 2 - Little difficulty 3 - Some difficulty 4 - A lot of difficulty

## Sri Lanka PALAM/A Program Observation Tool

### School Observation Checklist

**Instructions:** Ask a member of the school staff to show you the entire school grounds and all its buildings. It is important to observe things directly. You may ask your guide questions to clarify your ratings, but you should see things yourself (not just rate based on what someone tells you).

A. General Information						
Date of Observation		Observer Name		Observer Designation		
District						
Name of School			Government Feeding Program	<input type="radio"/> Meal <input type="radio"/> Milk/Yogurt <input type="radio"/> Meal and Milk/Yogurt		
Does this school currently receive any feeding assistance?	<input type="radio"/> No <input type="radio"/> Yes, government program implemented by WFP <input type="radio"/> Yes, other (specify)					
Principal (Head Teacher) Name			Principal (Head Teacher) Phone Number			
School's Language of Instruction	<input type="radio"/> Tamil <input type="radio"/> Sinhala <input type="radio"/> English <input type="radio"/> Mixed medium		Class/Grade Levels in School			
Number of Primary Grade Teachers at the School	Female		Total Number of Students Enrolled in the School by Grade Level		Female	Male
				G1		
	G2					
	G3					
	G4					
Male						

### Sri Lanka PALAM/A Program Observation Tool

			<b>G5</b>	
<b>Does the school have a Health Club?</b>	<input type="radio"/> Yes <input type="radio"/> No		<b>Does the school have a child safety/protection committee?</b>	<input type="radio"/> Yes <input type="radio"/> No
<b>Congeniality Index</b>				
<b>If any circumstances affected your ability to complete this observation, please describe</b>				
<b>Time at Start</b>			<b>Time at End</b>	
<b>GPS Coordinates</b>				

## Sri Lanka PALAM/A Program Observation Tool

<b>B. Main Physical School Infrastructure</b>	
1. The school grounds are clean.	
Cleans refers to free of litter/garbage that is not in a closed garbage container, free of insects, vermin, unwanted animals, feces, molds, and other disease vectors which lead to diarrheal diseases, acute respiratory infections, etc. If any of the above are present on the school grounds then select "No".	
<b>Yes</b>	<b>No</b>
2. The school grounds are safe.	
Safe refers to the grounds being free of large holes or pits students could fall into, the play-area is clear of hazards and hazardous materials, there is a safe boundary wall/fence around the grounds, etc. If any of the above are present on the school grounds then select "No".	
<b>Yes</b>	<b>No</b>
3. Dangerous materials are inaccessible to students.	
Dangerous materials include (but are not limited to) cleaning chemicals, bleach, highly flammable liquids like kerosene and petrol, paint thinner, etc. If any of the above are present on the school grounds then select "No".	
<b>Yes</b>	<b>No</b>
4. The school grounds and school buildings are free of standing water.	
Large areas of standing water attract vermin and transmit diseases. Standing water sources can include (but are not limited to) large puddles on the ground or roof, bowls, broken equipment and tires that collect water, etc. Select "No" if any of the above are present OR if there is so much standing water, puddles, bogs, marshland, etc. that the school grounds are fully wet (for example if a school is located on a flood plain and is accessed by boat).	
<b>Yes</b>	<b>No</b>



## Sri Lanka PALAM/A Program Observation Tool

<b>c. WASH Facilities</b>	
1. School has access to any source of drinking water.	
Sources for drinking water may include pipes, public standpipe, borehole, protected well, bottled water, filtered water, or water treated chemically (chlorine) or boiled, as well as water taken directly from rivers, lakes, ponds, or streams (without treatment).	
<b>Yes</b>	<b>No</b>
2. Drinking water that is available is treated to make it safe for drinking.	
Water that is safe for drinking is either piped, comes from a public standpipe, borehole, or protected well, or is bottled water, filtered water, water treated chemically (chlorine) or boiled. Water obtained directly from rivers, lakes, ponds, streams without treatment is NOT safe to drink. It is important to confer with school staff that the water system is functioning properly and stored properly (i.e., covered) if not piped.	
<b>Yes</b>	<b>No</b>
3. Students have access to a sufficient amount of clean drinking water.	
It is recommended that everyone have access to roughly 2 litres per person per day. Drinking water should be provided at clearly marked points. If drinking water comes from the same source as water for hand washing, it has to be treated first to make it safe to drink. Again, water that was treated and is safe to drink should be clearly labeled as such. Clean drinking water should be stored properly (i.e., covered) if not piped.	
<b>Yes</b>	<b>No</b>
4. How many drinking water points are available to students?	
Enter the number of drinking water points available to students. A drinking water point can be a canister or other container from which drinking water is distributed, or a water tap connected to a pipe, standpipe or borehole. A drinking water point does not include bottled water.	
<b>Number:</b> _____	
5. Does the school provide bottled water?	

## Sri Lanka PALAM/A Program Observation Tool

Observe whether the school offers bottled water for drinking. This may be in addition to another source of drinking water.	
<b>Yes</b>	<b>No</b>
6. Is the drinking water source accessible to the smallest students?	
Drinking water source should be accessible to the youngest / shortest students in the school. A high / elevated drinking water source can be made accessible by building steps, providing a step stool or a box for the smallest children to stand on, etc.	
<b>Yes</b>	<b>No</b>
7. Is there one or more <u>functioning</u> latrine on the school grounds?	
A <u>functioning latrine</u> has 3 basic characteristics:	
<ul style="list-style-type: none"> <li>1) The toilet slab (either the portion that the person would sit on or the ground around squat hole is level, solid and stable (no cracks, or additional holes or damage).</li> <li>2) The latrine stalls are sufficiently sturdy to provide full privacy to the user.</li> <li>3) The pit is not full or overflowing.</li> </ul>	
If the latrines are locked and there is no key available, then the latrines are not functioning as the latrine cannot be used.	
<b>YES → Continue to #8</b>	<b>NO → Go to #17</b>
8. How many functioning latrines are on the school grounds?	
<b>Number:</b> _____	
9. Are the functioning latrines within a five minute walk of the school buildings?	
The furthest classroom should not be more than a five minute walk to a latrine or approximately 400 meters from classroom.	
<b>Yes</b>	<b>No</b>

## Sri Lanka PALAM/A Program Observation Tool

10. The latrines can be used by the smallest students.	
The youngest / shortest students should be able to easily access, unlock and lock the latrine. The latrine slab should be designed to fit the youngest / shortest students in the school.	
<b>Yes</b>	<b>No</b>
11. The latrines are accessible to students with disabilities.	
The latrines are accessible to students of different levels of physical ability. For examples, latrines are easy to get to, do not involve climbing many steps, steps have railings for students to hold on to for support if needed, etc.	
<b>Yes</b>	<b>No</b>
12. The functioning latrine stalls are clean and sanitary.	
For latrines, clean and sanitary refers to no piles of feces or urine on the latrine slab or walls, the smell (noxious fumes) are not overwhelming and there are no piles of garbage and there is a container for paper waste or sanitary napkins.	
<b>Yes</b>	<b>No</b>
13. There are separate, private functioning latrines for girls and boys.	
There are clearly labeled latrines for boys and for girls. Each of the latrines are private meaning no one can see into the latrine from the outside.	
<b>Yes</b>	<b>No</b>
14. How many separate, private functioning latrines are there for girls and for boys?	
If there are clearly labeled private latrines for boys and for girls, list the number of latrines designated for boys and for girls.	
<b>Number for Boys:</b> _____	<b>Number for Girls:</b> _____
15. There are separate, private functioning latrines for male and female teachers.	

## Sri Lanka PALAM/A Program Observation Tool

There are clearly labeled latrines for teachers only, separate from the student latrines. Each of the latrines are private meaning no one can see into the latrine from the outside. There are dedicated latrines for male and female teachers.	
<b>Yes</b>	<b>No</b>
16. How many separate, private functioning latrines are there for male and female teachers?	
If there are clearly labeled private latrines for boys and for girls, list the number of latrines designated for boys and for girls.	
<b>Number for Male Teachers:</b> _____	<b>Number for Female Teachers:</b> _____
17. Clean water for hand washing is located in close proximity to the latrines.	
Close proximity for water for hand washing refers to hand washing stations being within 10 meters of the latrines to encourage students and staff to them to use water as often as required. Hand washing points include pitcher of water and basin; small tank/jerry can fitted with a tap; a tippy tap (gourd or plastic bottle with a rope that pours a small stream) or a traditional sink and faucet system. If the school <i>does not</i> have latrines, observe handwashing stations in general (without taking proximity to latrines into account).	
<b>Yes</b>	<b>No</b>
18. Handwashing stations are accessible to the smallest students.	
Handwashing stations should be accessible to the youngest / shortest students in the school. A high / elevated handwashing station can be made accessible by building steps, providing a step stool or a box for the smallest children to stand on, etc.	
<b>Yes</b>	<b>No</b>
19. Soap is available for hand washing at the handwashing stations.	
<b>Yes</b>	<b>No</b>
20. There is functioning wastewater drainage system in use at hand washing and drinking water points.	
All water points should have a functioning drainage system to avoid the collection of standing water which attracts vermin and transmits diseases. Functioning wastewater drainage includes a soak pit (a large collection of rocks at least 4 inches deep under the water point), drains for directing water away from the school, etc. If there are no hand washing or drinking water points on the school grounds then select "No".	

## Sri Lanka PALAM/A Program Observation Tool

<b>Yes</b>		<b>No</b>	
21. WASH facilities are cleaned regularly.			
While the cleaning of handwashing stations and latrines may not happen during your observation, note whether a cleaning schedule for latrines and handwashing stations is posted or otherwise available in the school. You may need to ask the teacher / staff to show you the schedule. Additionally, you can observe where cleaning equipment (e.g., mop, aseptic cleaning liquids) is stored.			
<b>Yes</b>		<b>No</b>	
22. Solid waste is segregated and stored by type.			
Solid waste is sorted and stored by type: paper, glass, plastics, wood, scrap metal, biodegradable waste.			
<b>Yes</b>		<b>No</b>	
23. How often is the solid waste disposed of?			
While solid waste disposal may not occur during your observation, you may talk to the teacher / staff about the frequency of solid waste collection by local authorities (if any). Solid waste disposal includes composting of biodegradable waste.			
<b>Daily</b>	<b>Weekly</b>	<b>Monthly</b>	<b>Other, specify</b>

### D. School Meal Preparation

Most schools in Kilinochchi and Mulaitivu districts have food preparation facilities and SMPs may prepare food on premises. Complete this section if food preparation occurs on school grounds. Otherwise, go to Section E.

You should observe the food preparation for a 15-minute period when ingredients are prepared for cooking and once the cooking is underway to verify that foods are being fully cooked.

## Sri Lanka PALAM/A Program Observation Tool

1. School meal preparation takes place on school grounds.	
<b>Yes → Continue to #2</b>	<b>No → Go to Section E</b>
2. There is no debris, dirt, or standing water in food preparation areas.	
Debris refers to items that do not belong in food preparation areas including trash, food scraps, sticks, grass, animal droppings, etc. which have the potential to contaminate the food being prepared. All water points should have a functioning drainage system to avoid the collection of standing water which attracts vermin and transmits diseases. Functioning wastewater drainage includes a soak pit (a large collection of rocks at least 4 inches deep under the water point), drains for directing water away from the school, etc. Standing water does not include water in pots currently being used for cooking/food preparation purposes, but does include water left in cooking pots one hour or more after cooking/food preparation is complete	
<b>Yes</b>	<b>No</b>
3. The food preparation area is free of free-roaming animals.	
There are no animals in food preparation areas to prevent contamination of the food. “Animals” refers to both domestic and wild animals including chickens/roosters, goats, cows, buffalo, sheep, pigs, dogs, cats, etc. that may wander into/through the food preparation area. If an animal does wander in, the staff should shoo it out immediately and throw away any food items that came in contact with the animal.	
<b>Yes</b>	<b>No</b>
4. The food preparation area is separate from eating, classroom, play and toilet areas.	
There is a clear distinction between where the food is being prepared and where children and staff are eating meals. Similarly, children play and study at least 15 meters from where food is being prepared to reduce risk of injury and food contamination. Latrines should also be at least 15 meters from food preparation areas.	
<b>Yes</b>	<b>No</b>

## Sri Lanka PALAM/A Program Observation Tool

### E. Classroom Infrastructure

**Instructions:**

Observe the physical infrastructure of the classroom.

1. Classrooms are in good physical/structural condition.

Good physical/structural condition includes floors that are free from cracks, holes, there are no problems with dampness, splinters, sliding floor coverings, sharp stones; no broken windows, no holes in the roof, walls are structurally sound (no holes or crumbling), walls have no peeling paint, supports for roof and/or walls are sturdy, etc.

Not at All True	A Little Bit True	Mostly True	Very True
The classrooms have significant physical/structural issues that threaten the safety of students.	The classrooms have several minor physical/structural issues.	The classrooms have one or two minor physical/structural issues.	The classrooms have NO problems with physical/structural conditions.

2. Classrooms are protected from the elements (sun, rain) with a good roof.

Protection from the elements includes protection from rain and protection from the sun while in the classroom.

Not at All True	A Little Bit True	Mostly True	Very True
None or very little (10% or less) of the classroom area is protected from the elements.	Some (11-50%) of the classroom area is protected from the elements.	Most (51-89%) of the classroom area is protected from the elements.	All or almost all (90% or more) of the classroom area is protected from the elements.

3. Classrooms are protected from flying insects with screens on windows.

Not at All True	A Little Bit True	Mostly True	Very True
None or very little (10% or less) of the windows in the classroom are	Some (11-50%) of the windows in the classroom are protected from insects with screens.	Most (51-89%) of the windows in the classroom are protected from insects with screens.	All or almost all (90% or more) of the windows in the classroom are

## Sri Lanka PALAM/A Program Observation Tool

protected from insects with screens.			protected from insects with screens.
4. In classrooms, there is enough light to read a written page.			
<b>Not at All True</b>	<b>A Little Bit True</b>	<b>Mostly True</b>	<b>Very True</b>
None or very little (10% or less) of the classroom area has enough light to read a written page.	Some (11-50%) of the classroom area has enough light to read a written page.	Most (51-89%) of the classroom area has enough light to read a written page.	All or almost all (90% or more) of the classroom area has enough light to read a written page.
5. Students have adequate space to do learning activities.			
Adequate space (at a table or desk or on the floor) means that students would be able to comfortably open a book or work with materials (blocks, puzzle, etc.) without bumping into another student. Rate this item based on the space available in the classroom regardless of whether the teacher does these kinds of activities.			
<b>Not at All True</b>	<b>A Little Bit True</b>	<b>Mostly True</b>	<b>Very True</b>
Students have no table/desk/mat on which to work (could only put materials on their laps).	Students have table/desk/mat on which to work, but classroom too crowded for them to do activities without bumping into each other.	Students have table/desk/mat on which to work, and there is space for some (but not all) to work without bumping into each other.	Students have table/desk/mat on which to work, with adequate space for all students to do activities.
6. Students in the class are protected from outside noise.			
People in the classroom should hear one another when speaking at a normal volume.			
<b>Not at All True</b>	<b>A Little Bit True</b>	<b>Mostly True</b>	<b>Very True</b>
Students in the class are protected from noise 10% or less of the lesson time.	Students in the class are protected from noise some (11-50%) of the lesson time.	Students in the class are protected from noise most (51-89%) of the lesson time.	Students in the class are protected from noise almost all or all (90% or more) of the lesson time.

### F. Literacy Environment



## Sri Lanka PALAM/A Program Observation Tool

**Instructions:**

Observe the reading materials that are relevant and appropriate for primary school children at the school and whether the children engage with these materials.

7. The school has a library or a reading room.

The school has a separate room where children can access and read books, , pamphlets, and other educational material that is relevant and appropriate to primary school children. Materials can be either open access (not locked in cupboard) or restricted access (students have to ask the teacher / librarian for permission to use a book).

**Yes → Go to #33**

**No → Continue to #32**

8. Classrooms in the school have reading corners.

There is a space in the classroom where children can access and read books, pamphlets, and other educational material that is relevant and appropriate to primary school children. Materials can be either open access (not locked in cupboard) or restricted access (students have to ask the teacher / librarian for permission to use a book).

**Yes**

**No → Go to #37 (Health Clubs)**

9. The library or reading room has a book borrowing mechanism that allow children to take books out to read after school or at home.

There is a mechanism through which children can borrow materials from the library or reading room, either to take home or to read on school premises after school.

**Yes**

**No**

10. How many reading materials are available in the library, reading room, or reading corner?

(other than text books – any other suitable/relevant reading materials for primary grade children)

**Less than 5**

**5-10**

**10-15**

**15-20**

**More than 20**

11. The reading materials are available to children in Sinhala, Tamil or English.

## Sri Lanka PALAM/A Program Observation Tool

The library, reading room, or reading corner has books, textbooks, pamphlets, and other educational material that is relevant and appropriate to primary school children in Tamil, Sinhala, or English. Select all that apply.

**Sinhala**

**Tamil**

**English**

## About the American Institutes for Research

Established in 1946, with headquarters in Arlington, Virginia, the American Institutes for Research® (AIR®) is a nonpartisan, not-for-profit organization that conducts behavioral and social science research and delivers technical assistance to solve some of the most urgent challenges in the U.S. and around the world. We advance evidence in the areas of education, health, the workforce, human services, and international development to create a better, more equitable world. The AIR family of organizations now includes IMPAQ, Maher & Maher, and Kimetrica. For more information, visit [AIR.ORG](https://www.air.org).



### **AIR® Headquarters**

1400 Crystal Drive, 10th Floor  
Arlington, VA 22202-3289  
+1.202.403.5000 | [AIR.ORG](https://www.air.org)