BASELINE REPORT

CHAKULA CHETU PROJECT

Grant number: LRP 612-2017/033-00

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Disclaimer

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List of Abbreviations and Acronyms

CC	Chakula Chetu Project
DC	District Council
FAS	Foreign Agricultural Service
FGD	Focus Group Discussion
FFE	Food for Education
GoT	Government of Tanzania
HGSF	Home-grown school feeding
IDI	In-depth interview
IMS	Information Management System
KI	Key Informant
LCS	Local Capacity Strengthening
MEL	Monitoring Evaluation and Learning
M&E	Monitoring and Evaluation
MT	Metric Ton
PCI	Project Concern International
SC	School Committee
SFP	School Feeding Program
SWASH	School Water, Sanitation and Hygiene
ToC	Theory of Change
ToR	Terms of Reference
USDA	United States Department of Agriculture

Executive summary

In October 2017, Project Concern International (PCI) began implementation of a two-year school feeding program, Chakula Chetu (CC) in Mara Region, Tanzania, that provides daily school meals using locally purchased foods and builds sustainable capacity to transition to a locally-led program. The project is funded by the United States Department of Agriculture (USDA) with the following objectives:

1. Increase the capacity of suppliers to effectively and efficiently procure local commodities from local suppliers and supply school feeding programs
2. Strengthen local and regional food market systems, improve access to culturally acceptable foods, increase agricultural productivity and connect suppliers and farmers to school feeding programs
3. Increase access to nutritious foods that meet quality standards for students through school meal distribution and improve production of quality, nutritious, and culturally appropriate foods in school farms and gardens

PCI engaged Empowerment Business Consultant to carry out a baseline study to establish baseline values for selected project indicators that serve as a basis to measure project progress and provide information to refine program strategies, activities, targets and milestones. The study was conducted in three districts in the Mara region: Bunda, Butiama and Musoma over 21 days in January 2018. Funded by USDA, this assessment focused on 15 primary indicators with four target groups, including schools, students, parents and farmers.

Baseline study scope and methodology

The baseline study used a mixed methods approach, utilizing both quantitative and qualitative data. The study sampled participants by stratifying whether they are beneficiaries in the intervention (CC project in Butiama), in the comparison Food for Education programme (FFE) in Bunda or in the counterfactual group (non-PCI in Musoma). The purpose of including FFE in the baseline study is to allow for direct comparison of two school feeding programs (CC and FFE) with different models but similar project goals. A total of 1,625 participants took part in the study—1,410 in the quantitative component and 215 in the qualitative portion. Participants included primary school students, teachers, members of school committees, parents, farmers, local government officials, community leaders and PCI staff.

Key Results

Table 1 presents the indicator values across project and comparison areas. Refer to Section 3 in the report for disaggregated values for relevant indicators.

Table 1. Indicators for the baseline study

#	Indicators	Baseline values		
		Chakula Chetu	FFE	Non-PCI
1	Number of schools with farms and/or vegetable gardens	16	16	14
2	Quantity of food harvested on the school farm plots (MT/acre)	0.4	0.3	0.4
3	Average school score of PCI's sustainability readiness checklist (perfect score = 100%)	53.9%	N/A	N/A
4	Percentage of students demonstrating at least 3 good health/hygiene practices	40.2%	42.3%	53.4%
5	Percentage of students who report school food as culturally acceptable	39.10%	49%	N/A
6	Percentage of parents who can identify at least 3 good hygiene practices	55.50%	42.60%	44.70%
7	Percentage of parents who can identify at least 3 benefits of their child's education	41.50%	32.70%	10.60%
8	Percentage of farmers purchasing quality seeds	31.6%	23.0%	32.0%
9	Percentage of farmers with knowledge of:			
	Integrated Crop Management (ICM)	24.3%	35.7%	7.4%
	Post-harvest handling & storage	20.9%	28.6%	14.8%
	Business skills & market access	22.40%	19.60%	28.40%
10	Percentage of farmers who demonstrate:			
	Integrated Crop Management (ICM)	31.6%	23.0%	32.0%
	Post-harvest handling & storage	66.3%	34.5%	97.5%
	Business skills & market access	66.3%	87.1%	51.9%
11	Number of farmers who utilize proper storage	62.20%	59.50%	66.70%
12	Quantity of food harvested (MT) on farmer group individual plots			
	Maize	0.70	0.30	0.40
	Millet	0.40	0.20	0.20
	Beans	0.02	0.05	0.00
	Cassava	0.50	0.50	0.70
	Cotton	0.10	0.20	0.20
13	Percentage of farmers who sell commodities to local food suppliers	66.3%	87.1%	51.9%
14	Value of sales (USD) by beneficiaries			
	Maize	0.08	0.06	0.02
	Millet	0.08	0.08	0.02
	Beans	0.11	0.29	0.002
	Cassava	0.05	0.09	0.03
	Cotton	0.09	0.18	0.09
15	Volume (MT/acre) of commodities sold by beneficiaries			
	Maize	0.30	0.20	0.07
	Millet	0.20	0.20	0.06
	Beans	0.20	0.40	0.003
	Cassava	0.10	0.20	0.06
	Cotton	0.20	0.40	0.20
16	Average sale price farmer group members receive (USD/MT)			
	Maize	0.3	0.3	0.3
	Millet	0.4	0.4	0.4
	Beans	0.6	0.7	0.6
	Cassava	0.5	0.5	0.5
	Cotton	0.5	0.4	0.5

Key findings

Relevance. The Chakula Chetu project (CC) is relevant to national policies, national strategic plans and local government strategic plans. Planned food commodities in the CC project are nutritious and culturally-acceptable for school meals, and they meet minimum standards of nutrient diversification. The project's design addresses many self-identified challenges for farmers through capacity building, training, and linking farmers to basic agricultural services. Given the limited use of quality seeds due to high prices and lack of availability, the project's focus on linking farmers with seed companies is an appropriate strategy to increase access to high-yield seeds for improved productivity.

Performance. In the baseline, parents expressed a willingness to participate in school feeding programs, but food insecurity in the region may make consistent community contribution a challenge. Strong government support of SFP represents an opportunity for the project. Unreliable weather patterns and disease/pest outbreaks remain a threat to agricultural productivity. In addition, shortage of clean water for drinking and cooking in many CC schools is a barrier to increased health and hygiene practices among students. There are several key gaps in skills and knowledge among beneficiaries identified through this study, including limited knowledge on nutrition, health and hygiene among parents. In addition, school committees currently lack sufficient knowledge on management of school feeding programs, which is a critical component of project sustainability.

Sustainability. The project's sustainability plan to transition school feeding management to communities and rely on food contributions is appropriate but has potential implementation challenges. District officials understand and emphasize that parents are responsible for feeding children in primary school per government directive, but this is likely to be a challenge for food-insecure families.

Effectiveness. The project's Theory of Change (TOC) is realistic in its approach to increase food production to improve food security and the nutritional status of children. Partnership with the Government of Tanzania (GoT) as planned is critical to enable effective transfer of ownership at the end of CC. The two-year life of the project may be too short to realize expected outcomes, but it can demonstrate applicability of local procurement processes for school feeding.

Efficiency. Findings from the study indicate that Chakula Chetu will be an efficient model of school feeding as compared to food importation because it is expected to reduce the time and costs associated with food delivery, as well as time lost due to shipment and transfer from ports to warehouses.

Gender. In the Mara region, there is currently low female participation in formal agriculture and business trainings. The project's TOC prioritizes women as agents of change, which will require tailoring activities and implementation to meet the needs of women.

Recommendations

Government support. At present, no district councils in the CC project area have allocated funds to support school feeding programs (SFP). Consequently, the Chakula Chetu project should advocate for increased government support and community contribution to SFP using available national events, policy forums and relevant high-level committees at ministerial, parliamentary and regional levels.

Community education. The project should educate parents and communities on the importance of improved student nutrition, hygiene and health practices using the project's community meetings.

Access to safe water. The Chakula Chetu project should negotiate with local government and school committees to construct, rehabilitate and maintain schools' water storage tanks and hand washing facilities.

Micronutrients. The project should further increase consistent intake of micronutrients in schools by promoting diversity in crop production and supporting the cultivation of nutrient-rich crops such orange-fleshed sweet potatoes ('viazi lishe') and nutritional maize ('mahindi lishe'), which are both locally grown and culturally-acceptable foods.

Gender mainstreaming. Chakula Chetu should mainstream gender roles across all implemented project activities through identifying specific actions that will promote and enhance gender equality. Given low female involvement in existing agriculture and business trainings, PCI should identify and eliminate barriers for female farmers to participate.

Capacity building in record-keeping. Training for farmers and agriculture teachers should emphasize the importance of record-keeping for crops harvested and sold, as well as for tracking productivity and profit. Neither farmers nor teachers kept consistent records of the quantity of crops harvested and/or sold, relying instead on memory to provide self-reported estimates.

Sustainability. The short length of this project is a threat to long-term sustainability. CC should prioritize strengthening farmers' working relationships with local food suppliers and consider extending the project time to ensure farmer groups are skilled and well-organized.

1.0 INTRODUCTION

1.1 Project Background

In 2013, an estimated 368 million school children participated in a school feeding programme (SFP) globally; 50% of them live in middle income countries and 18% in low income countries (WFP, 2013). According to a 2012 global school feeding survey, approximately 15% of school children in Tanzania were covered by a SFP (WFP, 2013). SFP is an important school health intervention that helps reduce malnutrition and short-term hunger by promoting healthy eating through dietary diversification and improving hygiene and sanitary practices (WFP, 2016; UNSCN, 2017;). Micronutrient deficiency, especially that of iron and vitamin A, affects about 2 billion people globally (Tulchinsky T., 2010; Development Initiative Policy Research LTD, 2017; International Food Policy Research Institute, 2016). Among young children, micronutrient deficiency can have deleterious effects on physical and mental development (Kristjansson et al. 2006), which can lead to poor school performance (Micronutrient Initiative and UNICEF Vitamin &Mineral L Deficent, 2004; Tulchinsky T., 2010). SFP is a critical entry point to address chronic hunger and micronutrient deficiencies in school children, particularly when it is integrated with fortified food and deworming interventions (Alderman & Bundy, 2011; WFP, 2010).

To encourage school attendance and improve educational achievement, several countries in the developing world utilize government-subsidized school meals, including India, Bangladesh, Brazil, Swaziland and Jamaica (Vermeersch & Kremer, 2005). In some settings, school meals are also supported by donor funds. School feeding programs have multiple benefits regardless of the funding source. There is some evidence that SFPs improve student enrolment, attendance and performance (WFP, 2013; Light Ethiopia, 2015) as evidenced in Burkina Faso (Kazianga et al., 2009), Uganda (Adelman et al., 2008), Kenya (Vermeersch & Kremer, 2005), Bangladesh (Ahmed, 2004; Ahmed & Del Ninno, 2002), and Jamaica (Grantham-McGregor et al., 1998; Simeon, 1998). When SFP is linked to local food production and supply, it provides additional benefits to communities by increasing local agriculture production, improving food security among farmers, strengthening the capacity of smallholder farmers, and increasing community ownership and sustainability of the programme (Sumberg & Sabates-Wheeler, 2011; WFP, 2016; WFP, 2017; UNSCN, 2017).

In Tanzania, Project Concern International (PCI) is implementing the Chakula Chetu (CC) project, which provides school meals from locally-purchased foods in Tanzania. The project has three broad aims: increase the capacity of local suppliers to effectively and efficiently supply school feeding programs; strengthen local and regional food market systems to increase agricultural productivity and improve

access to culturally acceptable foods for school feeding programs; and increase access to nutritious foods for students through school meal distribution. The United States Department of Agriculture (USDA) funds the project through PCI–Tanzania.

The CC project is implemented in 16 government-owned primary schools in Butiama district, and beneficiaries of the project include 16,135 students and 237 school employees (teachers, cooks, and security guards). The project is also designed to support 27 farmer groups (655 members) and 65 GoT officials. CC plans to purchase 399 Metric Tons (MT) of food products from local suppliers in Tanzania. In the first year, CC will support three meals per week in each school and transition to two meals per week in the second year. Parents will contribute food for meals during the other days of the week.

1.2 Chakula Chetu Theory of Change

The Theory of Change (ToC) is based on an overall premise that strengthening the capacity of individuals and institutions to respond to context-specific challenges and opportunities will lead to sustainable, locally-owned school feeding. Enlisting leadership and support from Government of Tanzania (GoT) officials, project partners and private-sector actors will further enable achievement of the Chakula Chetu project's goals. In addition, the ToC states that the project will strengthen the social capital of participants, particularly women and youth, to serve as positive agents of change in their households and communities.

1.3. Chakula Chetu drivers of change

The Chakula Chetu project is focused around three key drivers of change for a sustainable, locally-procured, school feeding program:

i. Improve local food production through increased agricultural productivity on individual farmer and school farming plots and in school vegetable gardens to strengthen the ability to supply food for school feeding;
ii. Reduce food insecurity and improve nutritional status of students through the provision of culturally acceptable and nutritious school meals;
iii. Effectively manage local procurement and school feeding activities though strengthening the capacity of GoT officials, school administration, and community members.

1.4. Purpose of Baseline Study

The overall purpose of the baseline study was to inform clear benchmarks that support project monitoring, evaluation, and learning. This information will serve as a reference point to track progress

for later comparison and to assess the project's impact. End-line evaluation will utilize baseline information to measure progress and changes the project catalyzed. Key audiences of the report are PCI, project partners, beneficiaries and stakeholders, USDA and key Government of Tanzania (GoT) actors.

1.4.1. Specific baseline study objectives

i. To collect and report on baseline values for key project indicators in order to inform refinement of indicator targets,
ii. To establish baseline information for comparative analyses to measure change over the life of the project and for the final evaluation,
iii. To identify opportunities and threats to project implementation,
iv. To develop strategies to maximize project implementation strengths and mitigate challenges,
v. To assess beneficiaries' knowledge and skills and refine project activities, such as capacity strengthening and training activities, accordingly,
vi. To validate and/or refine project strategies and assumptions.

1.5. Key baseline questions

Key baseline questions were focused on project relevance, performance, sustainability, effectiveness, and gender. See Annex P for a list of required indicators included in the Consultant TOR.

2. METHODOLOGY

2.1 Study design and sites

The baseline study employed a quasi-experimental evaluation design, consistent with the USDA-approved project evaluation plan that allows for rigorous impact and attribution analysis and also accounts for confounding factors. The study utilized a mixed-method, cross-sectional design that includes quantitative and qualitative (e.g., focus groups, in-depth interviews and observations) methods. The baseline study included two comparison groups: one comparison with PCI's Food for Education (FFE) project area, which is employing a different model of SFP, as well as a counterfactual group comprising a sample of schools and individuals not participating in the FFE or CC projects.

This study was conducted in three districts within the Mara region: Butiama, Bunda, and Musoma. As the location of the CC project, Butiama district was the intervention arm. Neighbouring Bunda and Musoma rural districts served as the comparison and counterfactual groups, respectively. PCI currently implements a Food for Education (FFE) program using imported commodities for school feeding in

Bunda, and thus this district was selected as a comparison group. Musoma served as a counterfactual because there are no current school feeding programs in the district.

2.2 Sampling procedure

The study first stratified potential participants by district to separate them into intervention, comparison, or counterfactual groups. PCI and district officials provided the list of wards, villages, and schools for all three districts. Schools from the comparison groups were selected using systematic interval sampling, proportional to the size of the school enrolment; 16 schools from FFE and 16 schools from counterfactual sites were selected. In Butiama district, PCI provided the list of all 16 schools which will implement the CC project.

At the school level, 10 students from standards five, six, and seven were randomly selected to take part in the baseline survey. For each student selected to participate in an interview, one of his/her parents or guardians was invited for the baseline survey. In each study area, 27 producer groups were selected to participate in the survey, and each group was represented by 5 farmers. The list of wards, village and schools sampled in the baseline survey is included as Annex A.

Table 2.1: Number of Interviews (Proposed and Actual)

	Study Areas (Actual)			Respondents	
Survey tool	Chakula Chetu	FFE	Non-PCI	Actual	Planned
Students	164	163	178	505	480
Parents	159	162	161	482	480
Farmers	98	148	81	327	405
Teachers	32	32	32	96	96
Total per District	**453**	**505**	**452**	**1410**	**1461**

2.3 Data collection methods

The baseline study utilized both quantitative and qualitative data collection; mobile devices (tablets) were used to collect quantitative data.

Quantitative data collection

Survey interviews were conducted with project beneficiaries, including students, school head teachers, agriculture teachers, parents and farmers using semi-structured questionnaires (Annex S). The student

survey tool was used to interview both boys and girls on knowledge and practice of health, nutrition, hygiene, SFP and agriculture activities in schools. Head teachers were interviewed about school characteristics, as well as school feeding program implementation and challenges. Agriculture teachers were interviewed on demonstration plots, vegetable gardens and school agricultural activities. Parents were asked about knowledge and practice of health, nutrition, hygiene, as well as participation in school feeding programs. The farmer survey assessed knowledge and practice of improved agriculture techniques and post-harvest handling, as well as access to markets.

The baseline survey also included a sustainability readiness checklist for intervention schools in the CC project; it assessed each school's progress towards managing an SFP once the project ends. Prior to data collection, all eligible participants signed information sheets and consent forms. Parents approved the interview before their child's participation in the baseline study.

Qualitative data collection

The baseline utilized qualitative data to better understand perceptions about the program among key stakeholders and beneficiaries, as well as to identify opportunities and threats to the project. In addition, qualitative data contextualised the quantitative findings. Data collection tools included in-depth interviews (IDIs) and focus group discussions (FGDs). IDI interviews were conducted with a total of 56 leaders, PCI staff and other key informants representing regional, district and community levels. FGDs included 73 members of school committees (47 males and 26 females) and 86 smallholder farmers (57 males, 29 females). See annex B for details.

2.4 Team composition and quality assurance

The survey team was comprised of 5 consultants, 1 information technology (IT) personnel and 9 enumerators. Consultants trained the survey team to understand the purpose of the study and how to conduct FGDs, IDIs and all field procedures. In addition, consultants organised the survey team into 3 subgroups each with 4 people to represent a district. Enumerators used tablets and/or mobile devices to collect survey data.

Each supervisor was responsible for ensuring tablets contained complete data and an interview summary sheet for every day. Qualitative data collectors followed up all questions and probed for more information using the interview guide. During each FGD and IDI, the baseline study team used both digital recording and rapid note taking to capture information.

2.5 Data analysis

2.5.1 Quantitative data analysis

Quantitative data analysis used STATA version 14.0 (STATA Corp, Texas-USA) software. A statistician cleaned the data by checking data consistency, proper labelling, and coding values. Descriptive statistics described project indicator variables and other variables of interest; they were summarized by calculating mean values and standard deviations. Summary statistics were then compared between intervention and comparison or counterfactual groups, and the differences were tested to see if they were significant from zero using a one-way ANOVA approach. One-way ANOVA was used to compare the difference in school indicators between the three study areas. Project indicator variables were disaggregated by sex. Differences between variables were considered statistically significant at $p < 0.05$.

2.5.2 Qualitative data analysis

Qualitative data was manually analysed using thematic or content analysis on identified key themes. Transcripts were checked against recorded audio files before translation and analysis to ensure all information was captured accurately. For each overarching theme, a list of categories was identified by organizing the collected information. Transcripts and field notes were coded to match with identified themes and discern the key findings. A grounded theory approach guided the analysis process.

2.6. Study limitations

During the baseline study, we faced difficulties in collecting accurate data on the volume of harvested and sold crops for several reasons, including:

- Both farmers and school teachers did not keep records of volume or quantity of crops harvested and/or sold. Thus, farmers and teachers relied on memory to provide self-reported estimates.
- Farmers often sell their crops using non-standardized measurements. For example, they sell cereal crops using a tin known as *'amboni'* which was estimated to have a weight of approximately 4 kg. Cassava and sweet potatoes were sold using unweighted bags.

3. MAIN FINDINGS

3.1 Characteristic of schools and study participants

3.1.1 School Indicator Levels

School composition and infrastructure

The survey team recorded a total of 29,822 students in the sampled schools (16 schools in each group) during the study period—12,349 students from Chakula Chetu (CC), 9,386 from FFE and 8,087 from the non-PCI arm. There was a total of 495 teachers – 184 in CC, 172 in FFE, and 139 in the non-PCI area. Among all areas, 10 schools provided schools meals: 8 schools in FFE provided lunch and 2 schools in CC provided breakfast/porridge (see annex C). All 16 CC schools in Butiama are in final stages of constructing kitchens and stores. In Bunda, 13 FFE schools (82.3%) have functioning kitchens and 11 (68.8%) have functioning stores. No schools in Musoma had either functioning kitchens or stores. Access to clean and safe water is a challenge in all visited schools; Most of the schools, especially those in the Chakula Chetu project, do not have water reserve tanks or functioning rainwater harvest systems. Students use water from ponds, rivers, and shallow wells for school use (see annex D).

Student demographic characteristics

A total of 505 students (257 males and 248 females) from standards five, six and seven participated in the baseline study. The mean age for students interviewed was 12, with a minimum of 11 years and a maximum of 18 years (See annex E).

Parent demographic characteristics

A total of 482 parents (162 in Bunda, 159 in Butiama and 161 in Musoma) participated in the baseline study. Parents' average age was 44 years, and the range was 35 to 54 years. The baseline study findings indicated that 95% of parents engage in farming, livestock, and fishing as primary income generating activities. Furthermore 94% of respondents had some formal education; they can read, write and count. Please see annex F for details.

Farmer demographic characteristics

A total of 327 farmers (148 in Bunda, 98 in Butiama, and 81 in Musoma) participated in the survey; an additional 149 farmers participated in the focus group discussion. The mean age of farmers interviewed was 45 years, with a minimum of 21 and maximum of 76. Among these participants, the main occupations are farming and livestock keeping, and 96% of those interviewed had some formal education. Annex G contains detailed farmer demographic characteristics.

3.2 Baseline values Information

3.2.1 School level indicators

Indicator 1: Number and percentage of school farms and vegetable gardens established, by type

Table 3.1 Number of school farm plots and/or vegetable gardens

School indicators	Chakula Chetu		FFE		Non-PCI	
	Number	Percent	Number	Percent	Number	Percent
School farms	16	100	16	100	14	87.5
Vegetable gardens	2	12.5	16	100	5	31.5
Both farms & vegetable gardens	2	12.5	16	100	5	31.5

Findings from the baseline study show that all schools in the CC project and all sampled schools in FFE have farm plots (school farm land); 87.5% of sampled schools outside the project areas in Musoma have school farm land. Vegetable gardens are less frequent among CC and non-PCI schools, though all FFE schools have school gardens. (See annex H for details). There is potential for school gardens in the intervention area, as 14 out of 16 schools in the CC project have seasonal water access to enable vegetable garden irrigation. Across visited schools, cultivated farm plots averaged five acres and vegetable gardens averaged one acre. Many schools, however, had additional potentially arable land, which was not cultivated due to limited resources.

Indicator 2: Quantity of food harvested on the school farm plots

Maize is the primary food crop grown across visited schools. Other crops in the study areas include millet, beans, cassava and cotton. The average quantity of maize harvested on school farms was 0.4 MT/acre in Chakula Chetu, 0.3 MT/acre in FFE, and 0.4 MT/acre in the non-PCI area for the 2016/2017 harvesting season. In FGDs with school committees, participants in all three districts attributed low harvest yields to limited access to agricultural skills and quality seeds.

Indicator 3: Scores for PCI's Sustainability Readiness Checklist among CC schools

The study team in Butiama district administered PCI's sustainability readiness questionnaire to all 16 targeted schools in Chakula Chetu. The purpose of the checklist is to identify those schools on track to sustainable school feeding programs, as well as those schools lacking the structures or processes to manage SFPs after the completion of the project. PCI will use information from this tool on an annual basis to customize support according to each school's needs. The checklist has a total of 100 possible points split into 4 thematic sections; schools were scored based on interviews, observations and interactions with school teachers, school committees, community leaders, and ward/division leaders.

School teachers: All 16 CC schools currently conduct student reading assessments and participate in ward committee meetings. Head teachers document budgets, report school-related activities to their school committees and village councils and look for alternative school income. Schools could improve documentation of classroom and teacher observations, providing students with supplementary reading materials and giving feedback to parents on school farm harvests.

Table: 3.2 Scores for sustainability readiness checklist in 16 Chakula Chetu schools

Description	Total possible score (N)	Average score (N)	Minimum score (N)	Maximum score (N)	Average score against total possible (%)
School teachers	52	30	24	34	57.7%
School committee members	24	12.3	11	18	51.3%
Community leaders	8	5.9	4	6	73.7%
Ward & Division leaders	16	5.8	4	6	36.3%
Overall score	**100**	**53.9**	**51**	**68**	**53.9%**

School committee: All 16 schools are holding quarterly meetings and giving feedback to village councils. However, they are less proficient in ensuring clean water is available at school and that existing water tanks and rain water harvest system are well-maintained.

Community leaders: In all 12 CC villages, community leaders excelled in organising project sensitization meetings and mobilizing community resources for construction of school kitchens and stores. Community contributions for school meals had not yet started at the time of the baseline.

Ward and Division leaders: Ward Education Coordinators are more proficient at conducting routine school visits and attending school committee meetings than Ward Executive Officers and Division Secretaries. However, ward offices are relatively weak in educating parents on the benefits of education, health, SWASH, nutrition, possibly because they lack Health and Nutrition Officers to perform these activities. In addition, they are unable to identify local development partners, since this function is done at the district level.

3.2.2 Student survey results

Indicator 4: Percentage of students demonstrating at least three good health/hygiene practices

The findings in Table 3.2 show that there is little difference in students' knowledge of at least three good hygiene practices between the study areas, disaggregated by both age and sex. In discussions with teachers across the study areas, they reported that hygiene lessons are included in the primary education syllabus for standards three and four. The most commonly named hygiene practice identified by students across all three study areas was hand-washing before eating (see Annex I).

Table 3.2. Baseline values for student-level indicators

Student indicators	**Chakula Chetu** N (%)	**FFE** N (%)	**Non-PCI** N (%)
4. Percentage of students who can identify at least three good hygiene practices			
Male students	83 (40.2%)	82 (45.0%)	92 (52.3%)
Female students	80 (40.2%)	82 (39.8%)	86 (54.4%)
Students aged 11 -12 years	43.0	41.3	52.3
Students aged 13+ years	37.7	43.2	54.4
5. Percentage of students who reported the food provided at school is culturally acceptable			
Male students	83 (46.1%)	82 (49.1%)	N/A
Female students	80 (30.0%)	82 (49.0%)	N/A
Percentage of students who reported they like the food provided at school	163 (87.0%)	164 (93.2%)	N/A

Indicator 5: Percentage of students who report food provided at school meals as culturally acceptable

During FGDs with FFE school committees and farmers, many said that meals provided at school are culturally acceptable. In FFE areas, schools cook rice and beans, and they also provide porridge and 'Kande' (a mixture of maize and beans) using food harvested from school farms. Survey findings show that 49% of FFE students affirm that school meals are similar to what they typically eat at home; 93.2% of FFE students reported they like the food provided at school. Among the two CC schools that provided porridge for breakfast, 87% of students reported to like the food (Table 3.2).

3.2.3. Parent survey indicators

Indicator 6: Percentage of parents who can identify 3 or more important health/hygiene practices

The survey team assessed parents' knowledge of important health/hygiene behaviours by asking them to name at least three important practices (Table 3.3). Washing hands before eating was the most

commonly identified hygiene practice by parents in all three study areas; washing hands after using the toilet was the second most frequent answer. See Annex J for details.

Table 3.3: Baseline values for parent knowledge indicators

Parent indicators	Chakula Chetu (N=159)	FFE (N=162)	Non-PCI (N=161)
6. Percentage of parents who can identify at least three important hygiene practices	55.5	42.6	44.7
7. Percentage of parents who can identify at least three benefits of their children's education	41.5	32.7	10.6

Indicator 7. Percentage of parents who can identify at least three benefits of their child's education

Table 3.3 shows the percentage of parents who could identify at least three benefits of their child's education. The analysis revealed that parents in the CC area were more knowledgeable about the benefits of their child's education than parents from FFE and Non-PCI areas. Future employment was the most commonly cited benefit of education, as identified by 67% of parents in CC, 76% of parents in FFE, and 87% of parents in non-PCI study areas.

3.2.4 Farmer survey indicators

Indicator 8. Percentage of farmers purchasing quality seeds

The study assessed the use of quality seeds, which are defined as high-yield seeds that are resistant to drought, pests and disease. Among the 327 interviewed farmers in all three study areas, more female respondents reported purchasing quality seeds from agro-shops as compared to their male counterparts (Table 3.4). On average across all three areas, 37.2% of female respondents and 26.5% of male respondents purchase quality maize and/or vegetable seeds. For other crops, farmers relied on local seed recycled from previous harvests or from the market. During FGDs with farmers, the majority identified high prices and lack of availability as major barriers to purchasing quality seeds.

Table 3.4: Percentage of farmers purchasing quality seeds

Farmer indicator	Chakula Chetu		FFE		Non-PCI	
	Male (N=47)	Female (N=51)	Male (N=90)	Female (N=58)	Male (N=34)	Female (N=47)
8. Percentage of farmers purchasing quality seeds	25.5	37.2	22.2	24.1	26.5	36.2

Indicator 9: Percentage of farmers with knowledge on:

a) **Improved Integrated Crop Management (ICM),**
b) **Post-harvest handling and storage practices,**
c) **Business skills and market access**

The study assessed farmer knowledge of ICM, post-harvest handling and storage, as well as business skills by asking if farmers had been trained on any of these practices. The results suggest that male farmers are more knowledgeable (as measured by training participation) than female farmers on all three of the areas of knowledge assessed in each of the study areas (Table 3.5). Additional gender analysis indicates that men are frequently the primary decision-maker in the household, and they also have greater access to agriculture trainings (Annexes K and L).

Table 3.5: Baseline values for farmer knowledge and practices

Farmer indicators	**Chakula Chetu**		**FFE**		**Non-PCI**	
	Male (N=47)	Female (N=51)	Male (N=90)	Female (N=58)	Male (N=34)	Female (N=47)
9. Percentage of farmers, by sex, with knowledge of:						
a. Integrated Crop Management (ICM)	28.9	19.6	42.6	25.9	8.8	6.4
b. Post-harvest handling and storage practices	25.6	15.7	34.0	20.7	22.5	8.5
c. Business skills and market access	31.9	13.7	17.8	22.2	44.1	17.0
10. Percentage of farmers, by sex, who demonstrate:						
d. Integrated Crop Management (ICM)	25.5	37.2	22.2	24.1	26.5	36.2
e. Post-harvest handling and storage practices	59.6	72.5	26.7	46.6	97.1	97.9
f. Business skills and market access	59.6	72.6	87.8	86.2	52.9	51.1

Indicator 10. Percentage of farmers who demonstrate:

a) Improved Integrated Crop Management (ICM),
b) Post-harvest handling and storage practices,
c) Business skills and market access

In addition to knowledge of key agriculture skills, the study asked farmers if they currently practice ICM and/or post-harvest handling and storage, as well as whether they have access to selling goods in the market. It is important to note that in many cases, farmers reported practicing a given skillset, though they have not received formal training in that area. This may be because organizations often train a small

group of farmers in a region, who are in turn, tasked with training other group members in their community.

Female farmers reported to practice all three skill areas more often than male farmers (Table 3.5). This finding is particularly notable given that the previous indicator (9) showed higher levels of self-reported knowledge through training among men as compared to women across all the same topics. A gender analysis found that women typically perform most of the households farming activities (Annexes K and L). In addition, women are often responsible for other related household activities including food storage, as well as purchasing and selling household commodities.

Indicator 11. Number of farmers who utilize proper storage

Many farmers in the study areas utilize both traditional storage facilities (Vihenge) and improved storage techniques, such as synthetic bags or PICS bags. While PICS bags are good for storage purposes, they are often prohibitively expensive for poor farmers (sold at $2.20-2.60/piece). In general, women utilize proper storage facilities more often than men (Table 3.6). This may be because women are typically responsible for managing household and property chores. Further analysis shows that farmers from the non-PCI area utilize proper storage facilities more frequently than farmers from CC and FFE farmers, as compared to the total number of respondents. During the field study, farmers in the non-PCI region reported that the African Inland Church heavily promoted PICs for storage, which could possibly explain the high utilization rates in the region.

Table 3.6: Baseline values on farmer storage practices

Farmer indicator	Chakula Chetu		FFE		Non-PCI	
	Male (N=47)	Female (N=51)	Male (N=90)	Female (N=58)	Male (N=34)	Female (N=47)
11. Number of farmers who utilize proper storage	28	37	24	27	33	46

Indicator 12. Quantity of food harvested on farmer group individual plots

Farmers in the study areas (CC, FFE and Non-PCI) grow maize, millet, beans, cassava, sweet potatoes and cotton. Table 3.7 shows that farmers within the Chakula Chetu project area harvest higher crops yields as compared to FFE III and non-PCI areas. In FGDs, farmers identified inadequate extension services, low use of quality seeds, poor soil fertility, erratic weather, and frequent outbreaks of crop diseases/pests as the contributing factors to low agricultural production on their farms. Similar statements were repeated by different farmers who participated in the survey.

Table 3.7: Quantity of food harvested (MT/acre)

Farmer indicator	Chakula Chetu		FFE arm		Non-PCI	
	Male (N=47)	Female (N=51)	Male (N=90)	Female (N=58)	Male (N=34)	Female (N=47)
Maize	0.9	0.4	0.3	0.2	0.5	0.2
Millet	0.5	0.2	0.1	0.3	0.2	0.2
Beans	0.3	0.1	0.07	0.03	0.005	0.005
Cassava	0.6	0.4	0.4	0.6	0.7	0.6
Cotton	0.2	0.01	0.2	0.1	0.2	0.1

In addition to the local government, several organizations support farmers in the region, such as MEDA, Buhemba Rural Agricultural Centre, SWISS Consult, Ukiriguru research Institute, and E-Link (USAID) (see Annex M). Capacity building activities include training in land preparation, use of quality seeds, weeding, farm management and post-harvest handling and storage. According to the Ministry of Agriculture, quality maize breeds (WEMA 2109, WEMA 1212, WEMA 2113) can increase yields up to 4 MT per acre[1].

Indicator 13: Percentage of farmers who sell commodities to food suppliers

Table 3.8 Percentage of farmers selling food commodities to the local market

Farmer indicator	Chakula Chetu		FFE		Non-PCI	
	Local market N (%)	Project suppliers	Local suppliers N (%)	Project suppliers	Local suppliers N (%)	Project suppliers
Male farmers	47 (59.6%)	N/A	90 (87.8%)	N/A	34 (52.9%)	N/A
Female farmers	51 (72.6%)	N/A	58 (86.2%)	N/A	47 (51.1%)	N/A

When asked where they sell food commodities, a majority of farmer respondents across all three areas reported to sell their food commodities at local markets (Table 3.7). During focus group discussions with farmers in CC, female respondents reported to sell crops to the local market more often than men because they do shopping for the household after selling crops (see Annex Q for photos of the local market. Many farmers also described selling crops to middle men. No sales were made to local suppliers as Chakula Chetu is still at its initial stage and has not yet engaged with suppliers.

[1] Daily News 9th Feb 2018.

Indicator 14. Value of sales (USD/MT) by project beneficiaries

Data analysis revealed low value of sales for farmers across the baseline study areas (Table 3.9). Agriculture extension officers attributed smallholder farmers' low value of sales to low crop yield per acre, low sale volumes, and low sale prices. In FGDs, farmers elaborated that they sell at low prices because they lack collective bargaining power and negotiation skills. Furthermore, they cited that the government does not control food crop prices during volatile periods. Many farmers reported to sell their crops at farm gate prices using non-standardized measurements. Finally, farmers rely on memory to estimate value of sales; they report that they lack knowledge and skills to keep records.

Table 3.9 Beneficiaries' Value of Sales (USD/MT) in 2016/17 harvest season

Farmer indicator	Chakula Chetu		FFE		Non-PCI	
	Male	Female	Male	Female	Male	Female
Maize	0.07	0.56	0.06	0.06	0.00	0.01
Millet	0.08	0.02	0.08	0.08	0.02	0.03
Beans	0.09	0.13	0.18	0.19	0.01	0.02
Cassava	0.09	0.05	0.05	0.32	0.03	0.03
Cotton	0.09	0.01	0.01	0.22	0.09	0.04

Indicator 15. Volume of commodities sold by project beneficiaries

Table 3.10 shows the average volume of commodities sold by project beneficiaries, by sex and commodity type in each district. For many commodities, farmers in Butiama sold more crops per acre than farmers in Bunda and Musoma. According to farmers, Butiama reportedly experienced more favourable weather conditions during the 2016/17 harvest season as compared to neighbouring regions, which could explain an increased harvest and thus more surplus commodities to sell.

Table 3.10 Volume (MT/acre) of commodities sold by project beneficiaries in 2016/17 harvest season

Farmer indicator	Chakula Chetu		FFE		Non-PCI	
	Male (N=47)	Female (N=51)	Male (N=90)	Female (N=58)	Male (N=34)	Female (N=47)
Maize	0.3	0.2	0.2	0.2	0.001	0.05
Millet	0.2	0.05	0.2	0.2	0.04	0.08
Beans	0.3	0.2	0.4	0.3	0.008	0.03
Cassava	0.2	0.1	0.1	0.7	0.06	0.06
Cotton	0.2	0.003	0.003	0.5	0.2	0.1

Indicator 16: Average sale price farmer group members receive

Table 3.11 Average sales price (USD/MT)

Crop	Chakula Chetu	FFE	Non-PCI
Maize	0.27	0.30	0.31
Millet	0.42	0.39	0.4
Beans	0.55	0.72	0.64
Cassava	0.47	0.45	0.46
Cotton	0.45	0.44	0.45

Note: the exchange rate used was 1 USD equal to TZs 2,250

Table 3.11 shows average crop sales price in USD per MT in the Chakula Chetu, FFE and Non –PCI regions for January 2018. In general, food and cash crop prices are similar across the study areas. As in many areas, crop prices fluctuate throughout the year with the lowest prices offered immediately after harvest.

3.3 Baseline research questions

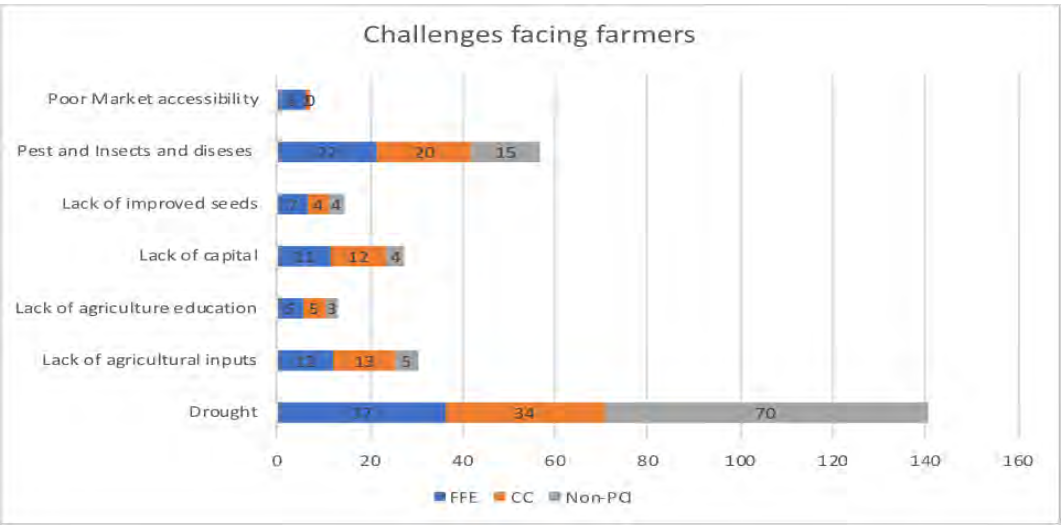
3.3.1. Project Relevance

The baseline study findings underscore that Chakula Chetu is relevant for target communities in the Mara region. By promoting access to quality education for all boys and girls, the project is in line with the National Education and Training Policy (2014) and National Vision 2025. The project promotes access to nutritious food as well as school hygiene and sanitation, which aligns with the National Multi-Sectoral Nutritional Action Plan 2016-2021 (October 2016)[2]. The project plan to increase access to agricultural inputs and foster business skills supports both the National Strategy for Youth Involvement in Agriculture 2016-2021 (October 2016)[3] and the National Youth Development Policy (December 2007)[4]. By facilitating access to agriculture training and extension services, Chakula Chetu furthers the principles of the National Agriculture Policy (October 2013)[5]. CC reinforces the Government's National Education Circular No. 3 of November 2016, which declares parents responsible for feeding primary students (Haki Elimu 2017). Finally, the project's support of school farms reinforces the Butiama District Strategic Plan by ensuring all schools cultivate at least two acres of food crops through school plots.

[2] URT, October 2016). National Multi-Sectoral. Nutritional Action Plan 2016-2021
[3] URT, October 2016. National Strategy for Youth Involvement in Agriculture 2016-2021
[4] URT, December 2007. National Youth Development Policy
[5] URT ,October 2013. National Agriculture Policy

Baseline findings demonstrate that Chakula Chetu is designed to address self-identified challenges for farmers in Butiama (Figure 1), while also increasing agricultural production to benefit schools. By promoting use of quality seeds and training farmers, the project aims to mitigate the impacts of drought, pests, and diseases on crop production. Finally, the project will train farmers on post-harvest handling and storage facilities to prevent post-harvest loss, and it will link farmers to markets.

Figure 1: Self-reported challenges among smallholder farmers, by percentage



3.3.2 Project Performance

3.3.2.1 Assessment of baseline values and target indicators:

The study generated baseline values for 15 key project indicators for CC as compared to neighbouring regions, as summarized in Tables 3.1 through 3.11. Our assessment found that target communities in CC have been identified, engaged and sensitized to project activities. Table 3.12 compares the project's planned targets against findings through the study; it is important to note that registration of new students was occurring during the data collection period.

Table 3.12 Chakula Chetu beneficiary target assessment

Indicator Target	Planned	Actual
Number of primary schools	16	16
Number of students	16,135	12,349
Number of teachers	237	184
Agriculture extension officers	25	37
Farmer groups	27	26
Number of farmers	655	510

3.3.2.2 Assessment of beneficiary knowledge and skills gaps

The following gaps in skills and knowledge among beneficiaries were identified through FGDs and IDIs with key informants:

- Students and parents have inadequate knowledge on nutrition and hygiene practices.
- School committees have insufficient knowledge on school management and school feeding programs.
- Head teachers have limited knowledge on use of cash books for proper documentation and accounting of school budgets.
- Agriculture teachers are inadequately trained on agriculture and post-harvest handling and storage practices.
- Producer group members have limited skills in the areas of group dynamics, postharvest handling and storage, record keeping, business and marketing.
- Agriculture extension officers have inadequate information on quality seeds, pesticides, insecticides and agriculture market strategies.
- Some Ward Education Coordinators and district PCI contact personnel tasked with data collection and reporting for CC are not competent in utilizing digital technologies to collect data.

3.3.2.3. Project opportunities and threats/challenges

This baseline study used FGDs and IDIs with key informants to identify opportunities and threats for the Chakula Chetu project.

i. Improved agricultural production

Key result areas: Increased production, productivity, food and income security

Opportunities	Threats & Challenges
• Potential agricultural land on school grounds • Irrigation schemes • Extension services available at district levels • Support from development partners	• Prolonged droughts and erratic weather • Outbreaks of pest and disease • Low soil fertility • Producer groups lack leadership and organizational skills • High prices for quality seeds, fertilizers and herbicides • Gender inequalities in agricultural skills • Unreliable crop prices

ii. Post-harvest handling and storage practices

Key result areas: Proper food handling and storage**;** Reduced post-harvest losses

Opportunities	Threats & Challenges
• Government, private sector and development partner support on post-harvest and storage systems • Extension services available at district and ward levels	• Outbreaks of crop diseases and pests • Use of improper packaging materials • Improper drying platforms • High prices for packaging materials • Use of traditional storage facilities

iii. Food procurement

Key result areas: Strengthening farmer to local supplier linkages, timely delivery of school food

Opportunities	Threats & Challenges
• Stable local government structures • Available guidelines for public-private partnership agreements • Partners support capacity building	• Limited current food supply from farmers • Bureaucracy within the procurement and tendering system • Limited stakeholder forums on market information exchange • Lack of crop warehouses in rural areas

iv. Project monitoring and evaluation

Key result areas: Improved project efficiency, effectiveness and sustainability

Opportunities	Threats & Challenges
• All head teachers can use tablets for data collection in targeted communities. • Existing information Management systems (EMIS, BEST, BEMIS, MIS)	• Un-harmonized IMS systems • Limited financial resources for M&E • Many of the key stakeholders tasked with digital data collection lack the skills to do so

v. Nutrition, health and hygiene practices

Key result areas: Improved nutrition, health, sanitation and hygiene practices among students

Opportunities	Threats & Challenges
• Established district health system • Availability of SWASH guidelines • Availability of trained personnel on health, nutrition, and hygiene practices at district level	• Lack of safe and clean water for school use • Poor maintenance of school sanitation facilities • Inadequate vegetable supply to targeted schools throughout the year • High students to toilet holes ratio of > 50:1 • Inadequate provision of health and nutrition education to communities

vi. Community involvement and participation

Key result areas: Parent contributions to school feeding programs (cash and in-kind)

Opportunities	Threats & Challenges
• Parents are willing to participate in school feeding programs • Other school feeding program (FFE) motivates communities to participate	• Household food and income insecurity • Mistrust: parents believe teachers benefit more than students from school-harvested crops • Some parents do not understand the benefits of school feeding programs

vii. Financial stability, mobilization and management

Key result areas: Availability of funds and other resources for school feeding after project end

Opportunities	Threats & Challenges
• Presence of development partners funding school feeding programs • Presence of school committee to manage school feeding funds • Parents are willing to support school feeding programs	• Limited national budget for SFP • Limited community contribution to SFP • Communities have high donor dependency • Limited community knowledge about free education and expectations for parent contributions for school feeding

viii. Partnerships and inter-sectoral coordination

Key result areas: Strengthening stakeholder partnerships

Opportunities	Threats & Challenges
• District government supports school feeding activities • PCI has good relationships with key ministries, regional partners and district departmental sectors	• Lack of technical working group or task force that can create working plans for key school, health, agriculture, and nutrition issues • Partners lack resources and knowledge to fully support school feeding projects or coordinate periodic monitoring visits

ix. Institutional capacity buildings and strengthening

Key result areas: Knowledge and skill development for Chakula Chetu school feeding project

Opportunities	Threats & Challenges
• Availability of trained personnel in agriculture, health, nutrition and education at district levels • Presence of development partners supporting institution capacity building and development	• Inadequate resources for institutional capacity development in schools and local government • Key stakeholders lack skills in partnership management, information management, producer groups, procurement, postharvest handling and storage, and business • Shortage of extension workers

3.3.3 Project sustainability assessment

Chakula Chetu's sustainability plan is realistic and sustainable if the following activities are implemented as planned: effective meal phase over/transition plan; local government enhances capacity to procure food and manage feeding programs; local government budget allocation to the feeding program; increased agricultural productivity both at household and school levels; and linkages between farmers and agribusiness (seed companies and financial institutions). Local capacity strengthening across all project activities is essential to ensure long-term community ownership.

3.3.3.1 Challenges of sustainability strategies

- The plan to handover school feeding to communities is appropriate but has potential implementation challenges. Out of the 16 FFE schools visited, 8 schools (50%) participated in early iterations of the project where SFP activities have been fully transitioned to community leadership. Of these, 3 schools reported feeding students five days per week. Lessons from FFE suggest that low household food production and income are obstacles for meaningful community contributions in terms of both food and money to pay cooks.
- Project funding through local government authorities is not guaranteed after donor funding ends. As a result, school feeding programs will depend on community contributions and harvests from school farms, which may still be inadequate for SFP by the 2nd year of CC implementation.
- Many farmers in the region attribute low agricultural productivity to conditions that this project will address but cannot completely solve: drought, pests, low soil fertility, limited extension services, lack of access to capital, and high prices for agricultural inputs.
- Lack of multi-stakeholder forums for information exchange may be an obstacle to fostering connections between farmers, seed companies and financial institutions. Creating business linkages between farmers and agribusiness sectors is important to facilitate a consistent supply of cost-effective, locally grown and culturally acceptable foods.

3.3.3.3. Benchmark for tracking sustainability plan

The study assessed the current implementation of sustainability strategies by January 2018. The sustainability plan is summarised in Annex N.

3.3.4. Project effectiveness

The study attests that the Chakula Chetu project Theory of Changes (TOC) is realistic, appropriate and practical.

- The project's focus on capacity building of farmers and creating linkages to private sector actors will address existing challenges in agricultural production and marketing, as well as facilitate the long-term supply of culturally acceptable food and ownership of school feeding programs.
- The TOC emphasizes local capacity strengthening (LCS), which is essential for enabling long-term ownership and sustainability of SFP. In discussions with government officials, they affirmed the GoT's commitment to leading SFP once this project ends through coordination, implementation and management of programs.
- In sum, the TOC will contribute to the achievement of sustainable, locally-owned and procured SFPs by improving local food production, reducing food insecurity, improving the nutritional status of children, and ensuring effective management of school feeding activities.

3.3.4.1. Limitations of the TOC

- The TOC identified women and youth as positive agents of change in the Chakula Chetu project, however the document does not explicitly address how women and youth will be empowered and engaged throughout the project.
- In interviews, district officials underscored that parents are responsible for feeding their children in primary school, according to a government directive. However, given pervasive food insecurity in the region, it may be challenging for parents to contribute food for school feeding.
- The two-year life of the Chakula Chetu project may be too short for the interventions to realize expected TOC outcomes. It can, however, demonstrate the applicability of local procurement processes for school feeding.

3.3.4.2. Project strategies and assumptions validation

Project strategies and assumption validations have been summarized in Annex O.

3.3.5. Project efficiency

The baseline study indicated that Chakula Chetu will be an efficient model of school feeding as compared to food importation because it will reduce the time and costs associated with food delivery. The project will reduce time lost during food shipment and transfer from ports to warehouses.

3.3.6. Gender

The project's Theory of Change has identified women and youth as agents of change, but analysis of study data illustrated that only 3.4% of farmers in producer groups are under 25 years of age and 14.9%

are between 25 and 34 years old. We also found that youth in the study areas have limited access to means of production, such as land and financial resources. The study has revealed that female farmers across the study areas have limited access to agricultural training opportunities as compared to their male counterparts. For example, in Butiama, 19.6% of female farmers and 28.9% of male farmers have access to ICM and agricultural technique trainings. A similar pattern emerges with business skills; 13.7% female farmers have demonstrable knowledge in business versus 31.9% of male farmers in Butiama. Annexes K and L illustrate possible explanatory factors for this pattern, including male dominance over most household decisions and gendered division of labour at the household level.

4. CONCLUSIONS AND RECOMMENDATIONS

The main purpose of this study was to provide baseline indicators to track progress, inform targets and provide a foundation to evaluate outcomes of Chakula Chetu at the end of the project. Findings show that schools selected to participate in CC have not been consistently providing school meals prior to CC and have limited infrastructure at present to support school feeding programs. All surveyed schools have potential land for establishing farm plots and vegetable gardens. Limited access to clean, safe water and sanitation facilities are a challenge for CC schools.

Across the study areas, parents and students have demonstrated low knowledge of health and hygiene practices. Female farmers have limited access to existing training opportunities, though they are often the main cultivators and custodians of household commodities. Prolonged rain shortages, crop diseases, pests, low soil fertility and inadequate access to agriculture inputs and agriculture extension services have collectively led to low food production and high food insecurity in the region.

Project activities will address many of the challenges facing schools and smallholder farmers by increasing agriculture production for home consumption and SFP. Linking smallholder farmers to local suppliers can create a mutually-beneficial program that enables both increased farmer income and a sustainable supply of locally-procured and culturally acceptable school meals for primary students. Chakula Chetu complements national policies and meets local community needs. The approach is efficient in the delivery of food commodities, but its sustainability relies on an effective transition to community ownership in a short time period.

5.2. Recommendations

The Chakula Chetu project aims to provide nutritious daily schools meals using locally-procured food and to build sustainable capacity for transitioning to locally-led school feeding programs. To achieve these objectives, we recommend the following:

Project relevance

- Chakula Chetu needs to make use of available opportunities to advocate for a comprehensive school feeding policy. The project should be involved with relevant stakeholders and use the available multi-sectoral forums to advocate for school feeding programs. The main agenda should be to include school feeding programs in the district planning and policy frameworks.
- The project should negotiate with local government, school committees and communities to construct, rehabilitate and maintain water storage tanks and hand washing facilities.

P**roject performance**

- To ensure a sustainable supply of locally-produced food, the project should target farmers and producer groups with access to land, labour and inputs, and it should support local food suppliers with capacity building activities.
- CC should partner with microfinance institutions to develop financial products that meet the needs of smallholder farmers (e.g. agriculture input loans).
- The project should prioritize linking farmers with agriculture research institutions/seed companies to increase access to seeds that are resistant to drought, pests and diseases for improved yield production.
- CC should advocate for use of standard commodity measurements to improve farmers' value of sales.
- Chakula Chetu should educate parents and communities on the importance of student nutrition, as well as hygiene and health practices using community sensitization meetings.
- The project should work with other partners to promote soil and water conservation, along with irrigation technologies to schools and communities for increased agriculture productivity.

Project Sustainability

- The project should advocate for increased government support for school feeding programmes using available national events, policy forums and relevant high-level committees at the ministerial, parliamentary and regional levels.

- Chakula Chetu should advocate for increased resource mobilization from the local government and community at large by involving political leaders, such as ward councillors, in project implementation sensitization activities.
- The project should increase the consistent intake of vitamins and minerals (micronutrients) in schools by promoting and supporting the cultivation of nutrient-rich crops such orange-fleshed potatoes ('viazi lishe') and nutritional maize ('mahindi lishe').

Project Effectiveness

- The project should prioritize gender across activities to empower women and youth to be agents of change.
- Chakula Chetu should facilitate a multi-stakeholder forum at community, district and regional levels as an information exchange and advocacy platform.

Project efficiency

- Chakula Chetu should identify key factors related to improved food supply and demand, as well as work to foster good working relationships between farmers and suppliers.
- The project should consider extending the project time to ensure farmers are well-organized and have strong agricultural skills, improved access to agricultural inputs and capital loans, and quality working relationships with suppliers.

Gender relationships

- Gender mainstreaming should be considered throughout all program activities by identifying and prioritizing actions that will enhance gender equity. For example, the location and time of project trainings must be appropriate to the needs and schedules of women.

Monitoring and evaluation

- PCI should investigate how best to harmonize the project's M&E system with existing information and management systems (IMS) at the government level to increase data collection efficiency and reduce head teachers' reporting workload.
- Chakula Chetu should develop participatory monitoring systems to ensure sustainability and quality monitoring beyond the length of the project; this may require additional resources for local government officials.

5. ANNEX

Annex A: Table 1. List of study school and communities

Butiama District (CC programme)			
Wards #	**Wards**	**Villages**	**Schools**
1	Busegwe	Busegwe	Busegwe
2		Busegwe	Zanaki
3		Kigori	Kigori
4		Nyanza	Nyanza
5	Butiama	Butiama	Butiama
6		Butiama	Butiama "B"
7		Butiama	Makore
8		Buturu	Buturu
9		Rwamkoma	Rwamkoma
10	Nyamimange	Kyankoma	Kiagata
11		Kyankoma	Nyamihuru
12		Kwisaro	Kwisaro
13	Sirorisimba	Kitaramanka	Kitaramanka
14		Rwasereta	Rwasereta
15		Nyambili	Nyambili
16		Sirorisimba	Sirorisimba

Musoma District (Non-PCI)			
	Wards	**Villages**	**Schools**
1	Tegeruka	Mayani	Tegeruka A
2		Nyaminya	Nyaminya A
3		Nyaminya	Nyaminya B
4	Nyamrandirira	Chumwi	Chumwi A
5		Chumwi	Chumwi B
6		Nyamrandirira	Nyamrandirira

7		Kasoma	Kasoma A
8		Kasoma	Kasoma B
9	Bugoji	Bugoji	Bugoji
10		Kanderema	Kanderema
11	Nyambono	Nyambono	Nyambono A
12	Musanja	Mabwimerafuru	Mabwimerafuru
13		Nyabaengere	Nyabaengere
14	Nyegina	Kurukerege	Bukwaya
15	**Busambara**	Mwiringo	Mwiringo
16		Maneke	Maneke

Bunda District (FFE programme)			
	Wards	**Villages**	**Schools**
1	Nyamang'uta	Kambubu	Kambubu
2	Katare	Marambeka	Marambeka
3	Salama	Kurusanga	Kurusanga
4	Mugeta	Tingirima	Tingirima
5	Mihigo	Mahanga	Mikomariro B
6	Hunyari	Bunyunyi	Bunyunyi
7	Butimba	Buzimbwe	Buzimbwe
8		Bulamba	Bulamba
9	Namuhula	Karukekere	Karukekere A
10			Karukekere B
11	Neruma	Mumagunga	Mumagunga
12		Neruma	Chamakapu
13	Chitengule	Chitengule	Nansuruli
14		Bunere	Bunere
15	Nampindi	Sunsi	Sunsi A
16			Sunsi B

Annex B: Table 2. List of qualitative participants

Key informants					
Level	**Title**	**CC**	**FF**	**Non-PCI**	**Total**
Village	Village Executive/ Chairperson	5	4	9	18
Ward	WEO/WC	2	1	4	7
	WEC	4	4	0	8
	WAEO / VAEO	0	4	4	8
District	DED/planning	1	1	1	3
	DAICO	1	1	1	3
	DEO	1	1	1	3
	District ISM - personnel	1	0	0	1
	PCI –District Rep	1	1	1	3
Region	PCI -Regional Rep			1	1
	PCI contact Mkoa			1	1
Total		16	17	23	56
Farmers FGD					
District	**Number of FGD**	**Male**	**Female**	**Total**	
Butima	4	15	13	28	
Bunda	4	16	11	27	
Musoma	4	26	5	31	
Total	**12**	**57**	**29**	86	
School committee FGD					
Butima	4	21	8	29	
Bunda	4	17	13	30	
Musoma	2	9	5	14	
Total	**10**	**47**	**26**	73	

Annex C :Table 3. School characteristic-feeding and hygiene practices

Category/ characteristics	Butiama (n=16)	Bunda (n=16)	Musoma (n=16)	ANOVA test (p-value)
A: School feeding activities				
School with a SFP, N (%)	2 (12.5)	8 (50.0)	0 (0)	0.001***
Types of meals school provides				
Breakfast, N (%)	2 (100)	0 (0)	0 (0)	
Lunch, N (%)	0 (0)	8 (100)	0 (0)	
Use of fortified cooking oils	0 (0)	8 (100)	0 (0)	
B: Funding for supporting SFP				
SFP fund allocated N (%)	0 (0)	2 (12.5)	0 (0)	0.129
Hygiene fund allocated N (%)	0 (0)	4 (25.0)	0 (0)	0.011**

Annex D : Table 4 . School characteristic and infrastructure

Category/ characteristics	Butiama (n=16)	Bunda (n=16)	Musoma (n=16)	ANOVA test (p-value)
A: Head teacher characteristics				
Female (%)	3 (18.8)	1 (6.3)	3 (18.8)	0.529
B: Infrastructure/ facilities				
Water availability (%)	0 (0)	6 (37.5)	1 (6.3)	
Source of Water supply				
Surface/ rainy water N (%)	4 (25.0)	8 (50.0)	7 (43.8)	0.337
Piped/well hole N (%)	6 (37.5)	6 (37.5)	9 (56.2)	0.484
Other sources N (%)	6 (37.5)	2 (12.5)	0 (0)	0.013
Functioning Food store, N (%)	2 (12.5)	16 (100)	0(0)	0.000***
Functioning Kitchen structure, N (%)	1 (6.3)	13 (81.3)	0 (0)	0.000***
C. Hand washing facility with water and soap, N (%)				
Yes	1(6.3)	10(62.5)	0(0)	
Partial	4(25.0)	1(6.3)	7(53.8)	

Notes: SD=Standard Deviation; ANOVA test aimed to test whether the mean values are not different across study districts; *** denotes significance at 1% and ** at 5% level.

Annex E: Table 5. Demographic characteristics of students

Variable	Categories	CC, N (%)	FFE, N (%)	Non-PCI, N (%)
Sex	Male	83(32.3)	82(31.9)	92(35.8)
	Female	80(32.3)	82(33.1)	86(34.7)
Age	Mean	12.6	12.7	12.8
	Stud	1.12	1.38	1.39
	Min-age	11	11	11
	Max-age	15	18	17
Class	Standard 5	61(32.1)	57(30.0)	72(37.9)
	Standard 6	70(36.8)	54(28.4)	66(34.7)
	Standard 7	32(25.6)	53(42.4)	40(32.0)

Annex F: Table 6. Demographic characteristic of parents

Variable Name	Categories	CC, N (%)	FFE, N (%)	Non-PCI N (%)
Gender	Male	76(46.9)	85(53.5)	81(50.3)
	Female	86(53.1)	74(46.5)	80(49.7)
Age summary statistics	Mean age	44.8	44.1	42.6
	Standard deviation	11.8	10.9	10.8
	Minimum age	18	21	23
	Maximum age	82	78	78
Age	<24	6(3.7)	4(2.5)	1(0.6)
	25-34	24(14.8)	27(17.0)	44(27.3)
	35-44	51(31.5)	54(34.0)	47(29.2)
	45-54	52(32.1)	50(31.4)	46(28.6)
	55 or More	29(17.9)	24(15.1)	23(14.3)
Education level	No Education	12(7.4)	10(6.3)	7(4.3)
	Primary level	133(82.1)	127(79.9)	125(77.6)
	Secondary level	17(10.5)	17(10.7)	26(16.2)
	College	0(0.0)	5(3.1)	3(1.9)

Marital status	Married/ living together	35(84.3)	125(78.6)	139(86.3)
	Divorced/ separated	6(3.7)	12(7.5)	5(3.1)
	Widowed	12(7.4)	12(7.5)	12(7.5)
	Never married	9(5.6)	10(6.3)	5(3.1)
Occupation	Farming/ livestock	135(85.1)	107(67.3)	137(85.1)
	Employed	6(3.7)	4(2.5)	12(7.4)
	Small business/Trading	10(6.2)	8(5.0)	5(3.1)
	Both farming / small business	3(1.8)	36(22.6)	1(0.6)
	Fishing	3(1.8)	0(0.0)	1(0.6)
	Other	2(1.2)	4(2.5)	5(3.1)

Annex G: Table 7. Demographic characteristics of farmers

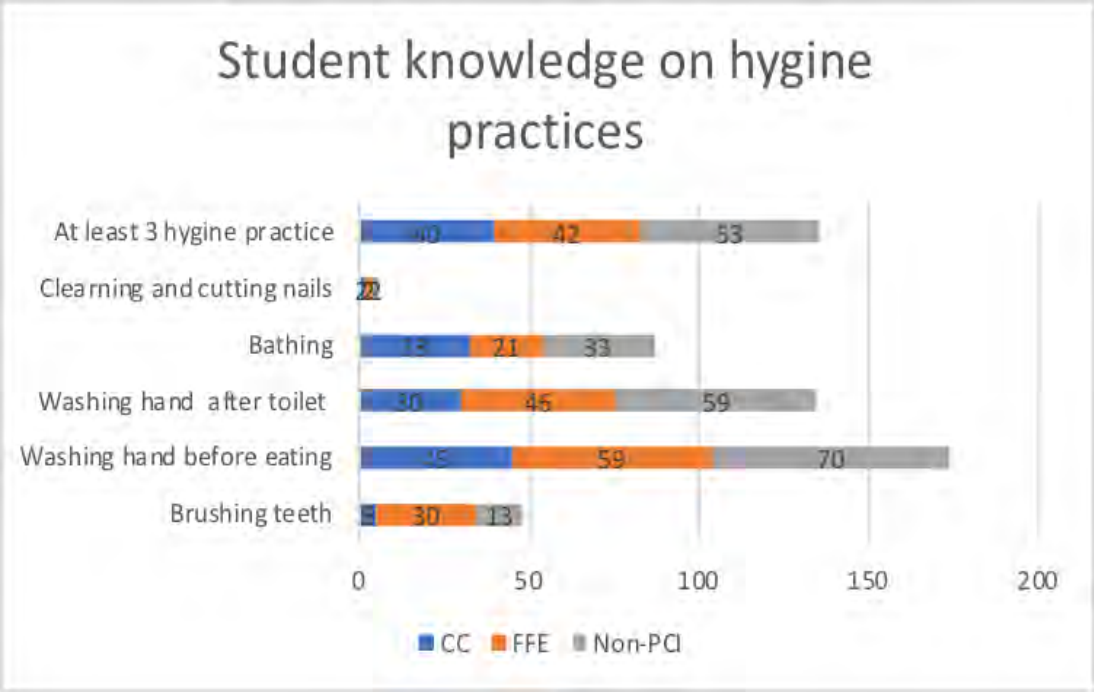
		District (N=327)		
Variable Name	**Categories**	**CC, N (%)**	**FFE, N (%)**	**Non-PCI N (%)**
Gender	Female	51(52.0)	58(39.2)	47(58.0)
	Male	47(48.0)	90(60.8)	34(42.0)
Age Summary Statistics	Mean age	45.3	46.1	44.7
	Standard deviation	10.4	12.6	11.9
	Minimum age	20	20	23
	Maximum age	72	86	72
Age	<24	1(1.0)	5(3.4)	5(6.2)
	25-34	10(10.2)	22(14.9)	14(17.3)
	35-44	39(39.8)	41(27.7)	16(19.7)
	45-54	29(29.6)	45(30.4)	30(37.0)
	55 or More	19(19.4)	35(2)	16(19.8)
Education level	No Education	3(3.1)	7(4.7)	3(3.7)
	Primary level	78(79.6)	123(83.1)	65(80.2)
	Secondary level	15(15.3)	18(12.2)	8(9.9)
	College	2(2.0)	0(0.0)	5(6.2)

Marital status	Married/ living together	79(80.6)	121(81.8)	66(81.5)
	Divorced/ separated	6(6.1)	8(5.4)	6(7.4)
	Widowed	9(9.2)	6(4.0)	5(6.2)
	Never married	4(4.1)	13(8.8)	4(4.9)
Occupation	Farming/ livestock	68(69.4)	131(88.5)	81(100.0)
	Employed	0(0.0)	1(0.7)	0(0.0)
	Small business/Trading	0(0.0)	4(2.7)	0(0.0)
	Both farming and small business	30(30.6)	12(8.1)	0(0.0)

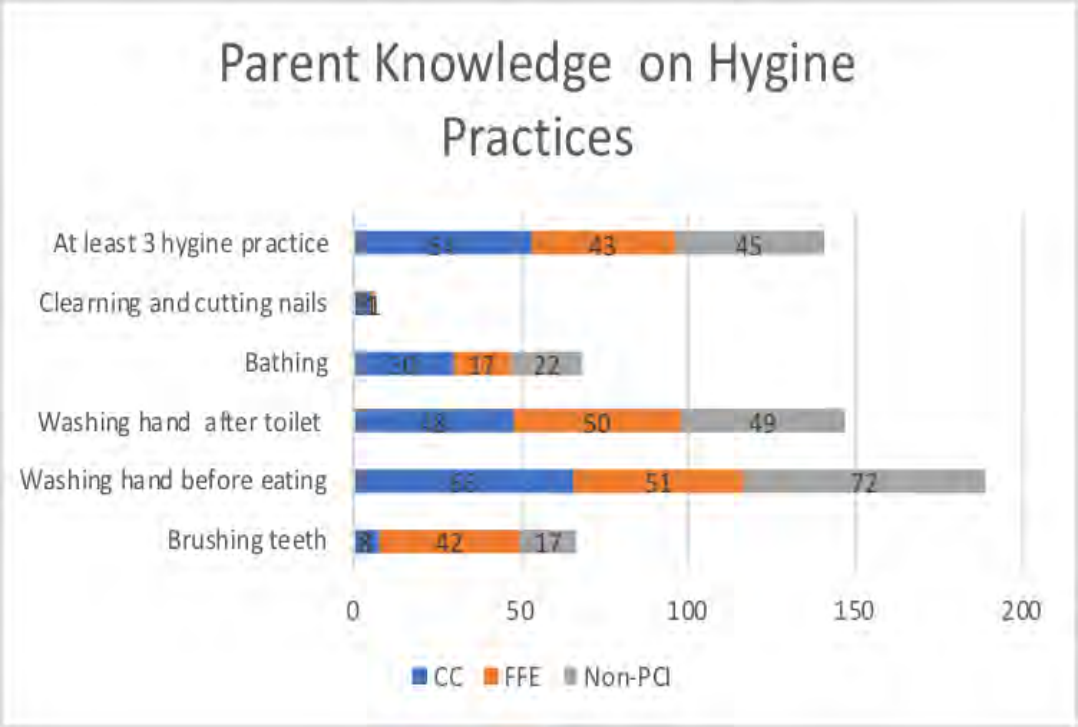
Annex H: Table 8. School characteristics- Agriculture practices

Category/ characteristics	Butiama (n=16)	Bunda (n=16)	Musoma (n=16)	ANOVA test (p-value)
Vegetable Garden, N (%)	2 (12.5)	16 (100.0)	5 (31.3)	0.000***
School farm, N (%)	16 (100.0)	16 (100.0)	14 (87.5)	0.129
Use of improved seed				
Vegetable Garden, N (%)	4 (25.0)	11 (68.8)	5 (31.3)	0.024**
School farm, N (%)	13 (81.3)	12 (75.0)	11 (68.8)	0.730
Uses of harvested food				
Both Feeding and selling, N (%)	12 (75.0)	12 (75.0)	12 (75.0)	1.000
Feeding the school only, N (%)	0 (0)	0 (0)	3 (18.8)	0.040**
Selling for school only, N (%)	3 (18.8)	4 (25.0)	0 (0)	0.118

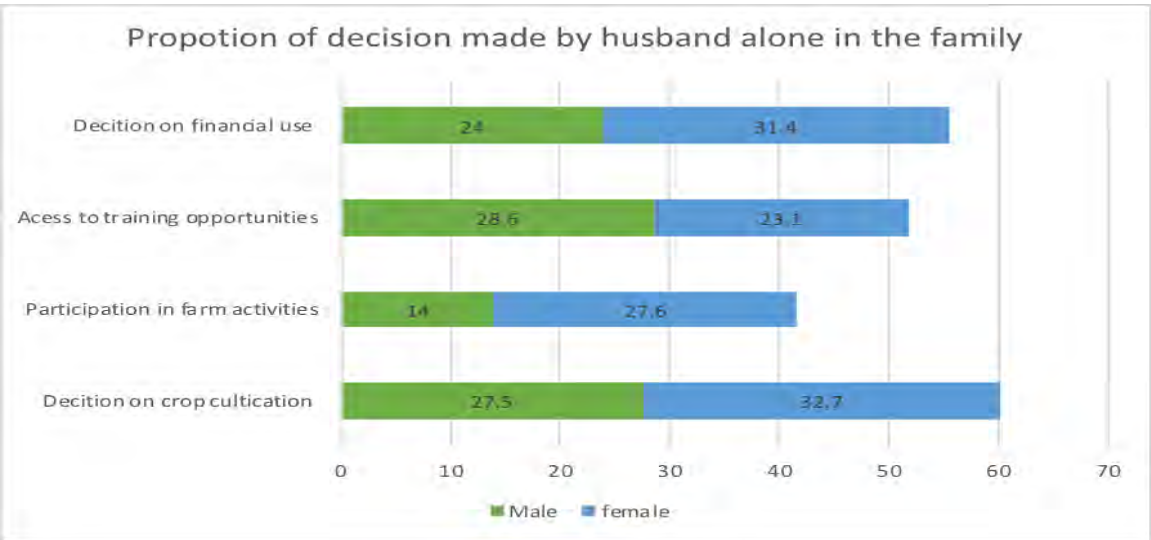
Annex I: Students' knowledge of hygiene, by percentage



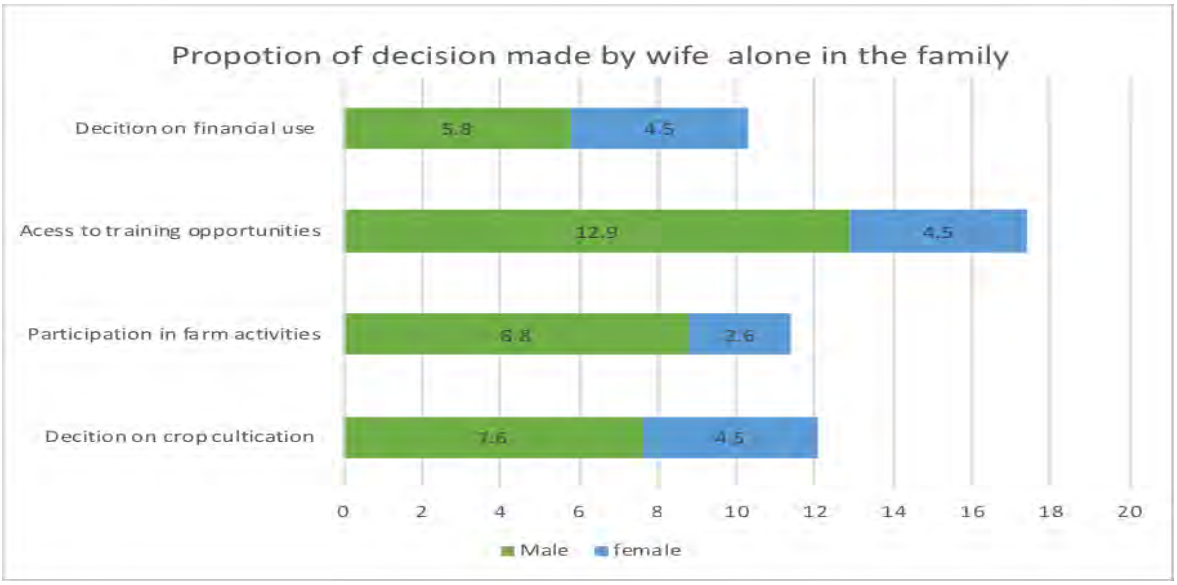
Annex J: Figure 2. Parents' knowledge of hygiene, by percentage



Annex K: Figure 3. Husband decision-making at the household level



Annex L: Figure 4. Female decision-making at the household level



Annex M: Table 9. Organizations currently supporting farmers in study communities

Organisation Name	Organization working in the district			Primary type of support
	FFE (YES)	CC (YES)	No-PCI (YES)	
AICT	Yes	Yes	Yes	Farmers training
Agriculture Extension officer	Yes	Yes	Yes	Farmers training
BLAC-Buhemba	Yes	Yes	Yes	Support to agriculture maize production
E-link (USAID)	Yes	Yes	Yes	Support skills in cassava cultivation, green houses, cassava processing machine, Bajaji(TOYO), water pumps and irrigation pipe
MIVAP	Yes	Yes	Yes	Farmers training
SIPA	Yes	Yes	Yes	Farmers training
TPR	Yes	Yes	Yes	Farmers training
TGT Group	Yes	Yes	Yes	Farmers training
VIFAFIO	Yes	Yes	Yes	Agriculture training and gender violence issues
Equip	Yes	Yes	Yes	Support education training to teachers and capital for income generation in schools
Ukiriguru agricultural college			Yes	Distribute cutting for planting nutritional orange sweet potatoes ('Viazi lishe') in 32 schools in Butiama DC
Growth Grain Foundation (GGF) (Office Musoma)			Yes	Supporting famers groups in animal keeping and agriculture technical advice. Supporting extension officer with fuel-50,000Tsh per month (for 25 days)
SWISS Consult (Zonal office-Musoma)			Yes	Supports youth aged 15-26 years with training on agriculture and animal keeping & Vocation training such as welding, carpentry tailoring
MEDA			Yes	Provided cassava seedling (mkombozi type)
Buhemba DVN (Buhemba rural agric Center)			Yes	Agriculture training
Anglican church Diocese of Mara			Yes	School feeding (porridge) in Nyanza primary school

Annex N: Table 10.Sustainability benchmark plan

Strategy	Indicator for assessing progress	Indicator target	Current status
1)Meal phase over/transition plan	Number of schools providing meals for 2 days in year 1	16	0
	Number of schools providing meals for 3 days in year 2	16	0
2)Strengthen the capacity of local government in procuring food locally & managing school feeding programme;	Number of local suppliers who supply food to SFP	1	0
	Number of school committee actively managing SFP	16	1
3)Advocate for local government to allocate budget for SFP	Number of schools with Government allocated budget for SFP	16	0
4)Creating linkages between small holder famers with agribusiness (a)seed company	Number of MOU signed between seed company and producer groups leaders /village government	12	0
Creating linkages between small holder famers with agribusiness (b)financial institution	Number of MOU signed between financial institution and producer groups leaders/village government	12	0
	Percentage of famers receiving loans from Financial institution linked to the village	-	0
	Percentage of famers purchasing seeds from seed company linked to the village	-	0

Annex O: Table 11.Project strategies and assumptions validation

Strategy validation conducted to assess whether Chakula Chetu proposed strategies will contribute to the achievement of project objectives as per the project Theory of Change.

	Project strategies	Assumption
1	Purchase commodities from suppliers	Price stability
2	Train stakeholders on Integrated Crop Management, post-harvest practices, business skills and marketing	Availability of financial Resources and required skills
3	Promote linkages between farmers and agribusiness/food suppliers	Good project partnerships with agribusiness and food suppliers
4	Establish demonstration plots	Availability of fertile land

5	Establish vegetable gardens	Availability of fertile land and reliable sources of irrigation water
6	Provide school meals	Availability of acceptable nutritious food
7	Strengthen Local capacity: Local, Regional, and National level	Availability of resources
8	Monitoring, Learning and Evaluation	Availability of resources
	Additional strategies	
	Establish multi-stakeholder forum at Local, Regional and National level	Presence of partnership

Annex P. Required indicators in consultant Terms of Reference (TOR)

School-level indicators:

1. Number and percent of school demonstration plots and vegetable gardens established, by type
2. Quantity of food harvested on the school demonstration plots (MT)
3. Administer PCI's Sustainability Readiness Checklist at the 16 project schools

Student-level indicators:

4. Percent of students demonstrating at least three good health/hygiene practices, by sex and age
5. Percent of students who report the food provided at school meals is culturally acceptable, by sex

Parent-level indicators:

6. Percent of parents who can identify at least three important health/ hygiene practices
7. Percent of parents who can identify at least three benefits of their children's education

Farmer-level indicators:

8. Percent of farmers purchasing quality seeds, by sex
9. Percent of farmers, by sex, with knowledge on:
    a. improved Integrated Crop Management (ICM) agricultural techniques,
    b. post-harvest handling and storage practices,
    c. business skills and market access
10. Percent of farmers, by sex, who demonstrate:
    d. improved Integrated Crop Management (ICM) agricultural techniques,
    e. post-harvest handling and storage practices,
    f. business skills and market access
11. Number of farmers who utilize proper storage (metal silos, PICS bags, etc), by sex
12. Quantity of food harvested (MT) on farmer group individual plots, by commodity type and sex
13. Percent of farmers who sell commodities to food suppliers, including project identified local food suppliers, by sex and commodity type
14. Value of sales (USD) by project beneficiaries, by sex and commodity type
15. Volume (MT) of commodities sold by project beneficiaries, by sex and commodity type
16. Average sale price farmer group members receive, by commodity type

Annex Q: Field Photo gallery

Affected maize crops by drought and disease

Local storage facility –'Kihenge'

Un-functioning rainy water harvest system

Water collected by student for school use

Local cooking stove in Butiama DC

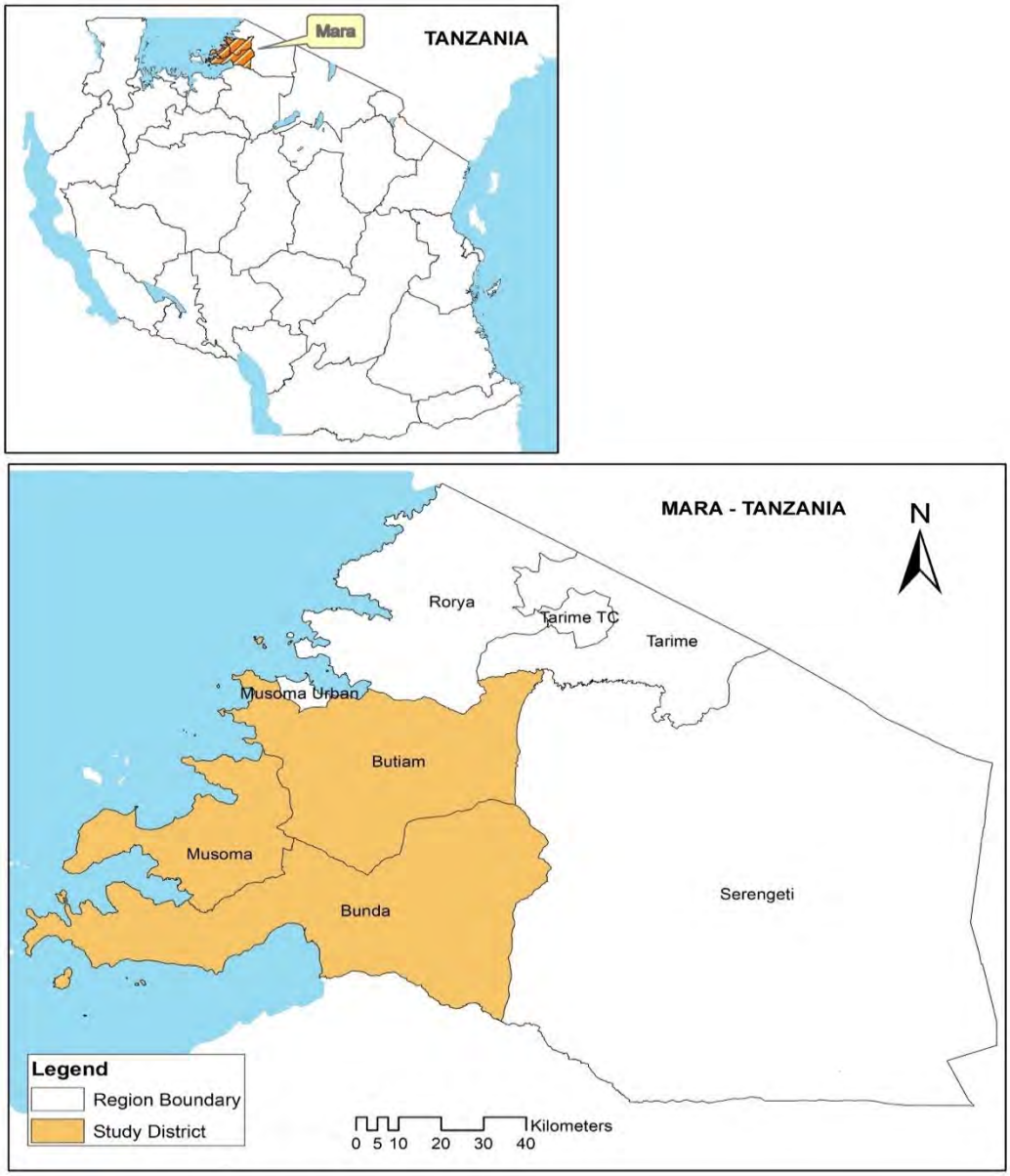
PCI supported improved cooking stoves- Bunda DC

Children having porridge at school-Butiama

Children washing cups at school-Butiama

Women buying and selling food crops at Butiama village market day (January 2018)

Annex R: Map 1. Map of Baseline study areas in Mara region



Annex S: Study questionnaires

Local Regional Government Procurement Project (Chakula Chetu project)

Baseline Assessment Survey in Mara Region

School Survey Questionnaire

Part A-Head of School

Date _____(dd/mm/yyyy)

Section 1: Basic school information

No	Question	Coding	
1	District name	1. Butiama 2. Bunda 3. Musoma	
2	Ward name		
3	School name		
4	Title of the respondent	1. Head teacher 2. Agriculture teacher 3. Health teacher 4. Other teacher	
5	Sex of the respondent	1. Male 2. Female	
6	Age (years)	----------	

SECTION 2: SCHOOL CHARACTERISTICS

No	Question	Coding	
	School population		
7	Number of Female teachers	_____	
8	Number male teachers	_____	
9	Number of cooks		
10	Number of girl students	_____	
11	Number of boy students	_____	
	School infrastructures		
12	Number of functioning toilets holes for girls	_____	
13	Number of functioning toilets holes for boys	_____	
14	Number of class rooms	_____	
15	Number of teachers' offices		
16	Type of energy supply used by the school	1.Electrical 2.Solar 3.Generator 4.None	

17	Type of fuel used for cooking in the school	Firewood. 2. Charcoal 3.Bio-gas 4.Other	
18	Have clean water supply throughout school calendar	1.Yes 2. No	
19	Main source of water	1.Spring /Surface water (Pond/dam/lake/stream/river) 2. Rainy harvest 3.Piped water system 4. Shallow Well 5. Borehole 4.Other (specify)_	
20	Functioning School food store	1.Yes, 2. No	
21	Function School kitchen superstructure	1.Yes, 2. No	
22	School have /uses improved energy saving stoves	1.Yes 2. No	
23	What kind of the toilets used in the school?	1.Traditional pit latrine 2. Ventilated Pit Latrine 3.Flush system 4.Other (specify_____	
	School administration and management		
24	Active school governing committee	1.Yes 2. No	
25	Active bank account	1.Yes 2. No	
26	Updated records for school budget and expenditure	1.Yes 2. No	
27	Allocated fund for School feeding program	1.Yes 2. No	
28	Allocate fund for Hygiene and sanitation activities	1.Yes 2. No	

SECTION 3: SCHOOL FEEDING PROGRAM

29	Does this school provides meals /participate in the school feeding program? *If No ,Go section 4*	1.Yes, 2. No	
30	For how long does school participated in school feeding program (years)	Mention_____	
31	Who are eats the meals prepared in the school? (Tick all apply)	1. Pupils 2.Teachers 3.Cooks 4.Gurds 5.Others	
31	Which type of the meals does the school provides?	1. Breakfast 2. Lunch 3. Snacks 4. Both1&2	
32	What is the main composition of the school meals (Tick all apply)	1. Cereals (e.g Maize, millet) 2. Legumes and nuts (e.g Beans, groundnuts.) 3. Vegetables (eg Spinach)	

		4. Fruits (e.g Mango, papaya 5. Meats /Fish e.g. beef, 6. Roots and tubers eg cassava and sweet potatoes 7. Dairy products (e.g Milk) 8. Other, explain	
21	Does your school use fortified fat/oils in school meals?	1.Yes 2 No	
	What determines the amount of food to be prepared in a day?	1.Number of students who contributed for the school meals 2.Number of student who attended school in a particular day 2. Average school attendance in week/months. 3.Registered children in the school 4.Other _____	
	Do all students who attend the school eat the meals prepared?	1.Yes 2. No	Skip to next
	b) If No ,Explain		
22	Who supports (contributes) to school feeding program in your school? (Tick all apply)	1. Parents 2. School 3. Local government 4. PCI 5. Other, specify_____	
23	What kind of support or contribution do you receive from each of the mention above?	1 Parents-_____ 2 School 3 Local Government__ 4 _ PCI _ 5 Other, specify	
SECTION 4 PROCUREMENT AND SUPPLY OF SCHOOL MEALS			
24	What kind of the system is used to procure /supply food for school meals (Tick all apply)	1. Direct purchase by tender or local supplier 2.Local government supply 3.Direct supply from PCI 4.Direct supply from other Partners 5.Other –Explain	
25	Does the school receive the amount of food products as demanded/ requested/required	1.Yes 2. No	
26	Does the supply process ensure timely delivery of procured commodities	1.Yes 2. No	
27	Does food products received/ supplied meet acceptable quality standard?	1.Yes 2. No	

28	Are food products supplied to your school are culturally acceptable?	1.Yes 2. No	
29	Does food product supplied ensure nutrient diversification/multiple nutrients composition?	1.Yes 2. No	
30	Is the local procurement /supply process managed properly?	1.Yes 2. No	
31	Does the school supply /procumbent system use agriculture products produced in your community / district/ region (	1.Yes 2. No 3.I don't Know	If 2 and 3 skip
	b)If Yes ,which products	Mention _____	
SECTION 5. COMMUNITY PARTICIPATION MANAGEMENT AND COORDINATION CAPACITY			
32	Does the school have any guideline which is used in managing school feeding program?	1.Yes 2.No 3.I don't know	
33	Is the school committee involved in day to day management of school feeding program?	1.Yes 2. No	
	b) If, Yes, What specific activities are committee members involved in?	1. Community mobilization meeting 2. Planning and budgeting meeting 3. Collection of community contribution 4. Supervision of food preparation 5. Supervision of food distribution 6. Other, explain	
34	Does the school committee have adequate skills to manage the feeding program?	1.Yes 2.No	
	b)If ,No Explain the missing skills	Explain _____	
35	Does the school keep updated records of all supplied and issued food products	1.Yes 2.No	
36	What activities of the school feeding programme involves the community members /parents (tick all apply)	1. Community mobilization meeting 2. Planning and budgeting meeting 3. Collection of community contribution 4. Supervision of food preparation 5. Supervision of food distribution 6. Other, explain	
SECTION 6:IMPORTANCE ,OPPORTUNITIES , OBSTACLES FOR SCHOOL FEEDING PROGRAM			

37	What is the importance of school feeding program to the school	1. Improvement of children health 2. Increase school attendance 3. Increase school performance 4. Increases school enrolment 5. Increases school completion 6. Teachers are Motivated/ easy teaching 7. Other, mention	
38	What are the strength or opportunities for establish or strengthening school feeding program	Explain	
39	What are the obstacles/ challenges for establishing or strengthening school feeding program	Explain	
40	What suggestion do you have to overcome the obstacles / challenges facing school feeding program	Explain	
41	What suggestion do you have to make the school feeding sustainable (i.e. if there is no donor support)	Explain	
		Explain	

THE END

Local Reginal Government Procurement Project (Chakula Chetu Project)

Baseline Assessment Survey In Mara Region

School Survey Questionnaire

Part B-Agriculture

Date _____(dd/mm/yyyy)

SECTION 1: BASIC SCHOOL INFORMATION

No	Question	Coding	
1	District name	1. Butiama 2. Bunda 3. Musoma	
2	Ward name		
3	School name		
5	Title of the respondent	1. Head teacher 2. Agriculture teacher 3. Health teacher 4. Other teacher	
6	Sex of the respondent	3. Male 4. Female	
7	Age (years)	----------	

SECTION 2: AGRICULTURE PRACTICES AND SCHOOL FEEDING PROGRAMME

8	Does your school have a garden plot?	1.Yes 2. No	
	b) If Yes , What type of vegetable are grown?	1.Spinarch 2.Tomatoes 3. Cabbage 4.Amarathuns (Mchicha) 5. Others, mention------	
9	Does this school have agriculture demonstration plot veg	1.Yes 2. No	
	b) If Yes , What type of crops are grown?	1. Maize (maize) 2. Millet(Mtama) 3. Sorghum (Ulezi) 4. Beans(Maharage) 5. Cassava(Mihogo) 6. Sweet potatoes (Viazi vitamu)	

		7.Fruit trees (Miti ya matunda) 8.Sesame (Ufuta) 9.Ground nuts(Karanga) 10.Peanut stones (Njugu mawe) 11. Others (mention)	
10	Who are engaged in various activities in school demonstration plots?	1.Students & teachers 2. Parents /farmers 3.Both 1 &2 4.Other Explain	
11	Which activities are student engaged in the demo plots (tick all apply)	1. Land preparation 2. Planting 3. Irrigation 4. Weeding 5. Harvesting 6. Sorting and storing 7. None 8. Other, explain____	
12	Do you teach students improved agricultural technologies?	1. Yes, theory classes 2. Yes, both theory and practical classes 3.No	
13	Do you teach students skills on post-harvest handling and storage of crops?	1. Yes, theory classes 2. Yes, both theory and practical classes 3.No	
14	How does the harvest from demo plots/ farm used for?	1.Feeding the school only 2.Selling for school income 3.Both 1 &2 4.Other explain	If the answer is 1 skip
	b) What type of crops were sold from the harvesting season (multiple answers)	Mentioned	
	c) Amount gained for selling each crop mentioned above (Tsh) (Multiple answers)		
	c.) Does the school keep records of all crops harvested and sold	1 Yes 2. No 3.Partial	
14	Does the school demo plot/farm provide fresh vegetables to the school feeding program?	1 Yes 2. No	
15	What type of seeds does the school garden uses?	1.Local seed (home collection) 2Improved seed (from agro-shop)	

		3. Both 2 and 3 4. Other, mention	
	What type of seeds does the school crop farm /demo-plots uses?	1. Local seed (own-farm/home collection) 2. Improved seed (from agro-shop/donor su) 3. Both 2 and 3 3	
SECTION3: LEARNING AND CAPACITY FOR MANAGING DEMO-PLOTS			
16	Is the existing agriculture teacher trained in agriculture?	1. Yes 2. No	
17	Does the existing agriculture teacher have adequate skills for good agricultural practices?	1. Yes 2. No	
18	Does the existing agriculture teacher have adequate skills for good practices for post-harvest handling and storage of crops?	1. Yes 2. No	
19	Does this school provide lessons on good agricultural lessons and practicals to students?	1. Yes, theory classes 2. Yes, both theory and practical classes 3. Very rarely 4. Not at all	
	Does this school provide lessons on good post-harvest handling and storage lessons and practicals to students?	1. Yes, theory classes 2. Yes, both theory and practical classes 3. Very really 4. Not at all	
20	Does the school provide nutrition education / lesson and practicals to students?	1. Yes, theory classes 2. Yes, both theory and practical classes 3. Very really 4. Not at all	
SECTION 4:OPPORTUNITIES , OBSTACLES ,RECOMMENDATION FOR IMPROVING DEMO-PLOTS			
21	What are the opportunities to establish or strengthening school demonstration plots/farm?	Mention	
22	What are there any obstacles/threat for establishing or strengthening demonstration plots/farm?	Mention	
	If Yes, Explain		
23	What suggestion do you have to overcome the obstacles	Mention	
	What suggestion do you have to make the school feeding program (i.e if there is donor support)	Mention	
SECTION 5: GOOD HYGIENE AND SANITATION PRACTICES			
24	Does the school have waste disposal points	1. Yes 2. No	
25	Does the school have hand washing facilities with running water and soap for students always?	1. Yes 2. Partially 3. No	

26	Does the school provide hygiene and sanitation lessons/massages to students?	1. Yes, theory classes 2. Yes, both theory and practical classes 3. No	

SECTION 6: SCHOOL OBSERVATION CHECKLIST			
1	Availability of functioning kitchen superstructure	1.Yes.2. Partial 3. No	
2	Availability of energy serving stoves	1.Yes.2. Partial 3. No	
3	A clean and well-arranged kitchen	1.Yes.2. Partial 3. No	
4	Clean and well arranges cooking and eating utensils	1.Yes.2. Partial 3. No	
5	Availability of a functioning food store room	1.Yes.2. Partial 3. No	
6	A clean and well-arranged store room	1.Yes.2. Partial 3. No	
7	Availability of up-to-date store records (receiving and issuing)	1.Yes.2. Partial 3. No	
8	Availability of school feeding schedule *(Take a copy)*	1.Yes.2. Partial 3. No	
9	Availability of clean water reserves /supply	1.Yes.2. Partial 3. No	
10	Availability of active school demonstration plots	1.Yes.2. Partial 3. No	
11	Availability of records for school harvest from demo plots	1.Yes.2. Partial 3. No	
12	Availability Records for school harvest sales from demo plots	1.Yes.2. Partial 3. No	
13	Availability of hand washing facility with running water and soap	1.Yes.2. Partial 3. No	
14	Availability of soap at the hand washing facility	1.Yes.2. Partial 3. No	
15	Observed children cleaning hands with running water and soap after toilets	1.Yes.2. Partial 3. No	
16	Observed children cleaning hands with both running water and soap after toilets	1.Yes.2. Partial 3. No	
17	Observed children cleaning hands with running water before eating	1.Yes.2. Partial 3. No	
18	Observed children cleaning hands with both running water and soap before eating	1.Yes.2. Partial 3. No	
19	Availability of school feeding guideline	1.Yes.2. Partial 3. No	

THE END

Local Regional L Government Procurement Project (Chakula Chetu Project)

Baseline Assessment Survey In Mara Region

Student Survey Questionnaire

Date _____(dd/mm/yyyy)

Section 1: Basic school information

No	Question	Coding	
1	District name	1. Butiama 2. Bunda 3. Musoma rural	
2	Ward name		
3	School name		
4	Student Class	1.Std IV 2. Std V 3.VI. 4.Std VIi	
5	Sex of the respondent	5. Male 6. Female	
6	Age (years)	----------	

SECTION 2: HEALTH AND NUTRITION KNOWLEDGE

7	What are key important things that are needed for a student/ person to be in good health (Tick all apply)	Access to 1.Nutritios food 2 Good Personal hygiene 3. Good Health services. 4.Clean home 4.Clean toilets 5.Use clean and safe water 7.Clean air 8.Use clean and safe food 8.Body Exercise 9Other, mention….	
8	A well balanced nutritious food is good for our health and proper body function What do you think are the main food types that comprise nutritious/diversified meals? (Tick all apply)	1. Cereals (Maize, millet) 2. Legumes(Pulses) e.g Beans, 3. Vegetables eg spinach 4. Fruits e. Mango, Papaya 4. Meats /Fish e.g. beef, 5. Roots and tubers eg cassava and potatoes 6.Fortified cooking oil 7. Other, explain	
9	Do you learn about good nutrition in school?	5. Yes, theory classes 6. Yes, both theory and practical classes 5. No 6.	
SECTION 3: SCHOOL FEEDING PROGRAMME			
10	Does your school provide meals to student during the week? *(If No……Go to section 4)*	1.Yes 2.No	skip to sect 3
11	Does your school provide meals to students from Monday to Friday most of the times?	1.Yes 2.No	
12	Who eats school meals? (Tick all apply)	1.Students 2.Teachers 3.Cooks 4.Guards 5. Other	
13	Do all students who attends the school eats the prepared meals?	1.Yes 2.No	
14	Which type of the meals does your school provide?	1. Breakfast 2. Lunch 3. Snacks 4. Both 1 &2	

15	What is the main food composition of the school meals (Tick all apply)	5. Cereals (e.g Maize, millet) 6. Legumes and nuts (e.g Beans, groundnuts.) 7. Vegetables (eg Spinach) 8. Fruits (e.g Mango, papaya 4. Meats /Fish e.g. beef, 5. Roots and tubers eg cassava and sweet potatoes 6. Dairy products (e.g Milk) 7. Other, explain	
16	Does the school meals preparation include additional cooking oil /fat?	1 Yes 2. No. 3.I don't know	
17	Do you like the meals provided in school?	1.Yes 2. Partially 3. No	
18	Is the meal provided similar to what is prepared at home at home?	1.Yes 2. No	
19	Do you think meals provided at school are nutritious / or have diversified nutrients?	1.Yes 2. Partially 3. No 4. I don't know	
20	Do your parents contribute or participate in school feeding program?	1.Yes 2.No	If no skip
	b) If Yes, what does your parents contribute? (tick all apply)	1.Cash 2.Beans 3.Maize flour/grains 4.In kind (cooking, distribution, security, Kitchen construction) 5.Firewood 6.Parents planning meeting 7.Other, Mention	
21	How does students participate or engaged in schools feeding program? (Tick all apply)	1.Cooking (on occasion) 2.Cleaning the kitchen 3.Cleaning the utensils 4.Fetching water 5.Fetching firewood 6.Cultivating school garden 7. Other, explain	
22	What do you think are the benefits of school meals to students? (tick all apply)	8. Becoming alert/active 9. Understand lesson better 10. Improve my health 11. Motivate class attendance 12. Increase school performance 13. Other, mention	

SECTION 3: AGRICULTURE KNOWLEDGE &PRACTICES VS SCHOOL FEEDING PROGRAMME			
23	Do you learn improved agricultural practices at school?	3. Yes, theory classes 4. Yes, both theory and practical classes 3.No	
24	Do you learn post-harvest handling and storage of crops at school?	5. Yes, theory classes 6. Yes, both theory and practical classes 3.No	
25	Does your school have a garden plot?	1.Yes 2. No	Skip if No
	b) If Yes, What type of vegetable are grown?	1.Spinarch 2.Tomatoes 3. Cabbage 4.Amarathuns 5. Others, mention-------	
26	Does this school have agriculture demonstration plot?	1.Yes 2. No	if No Skip to sect 4
	b) If Yes, What type of crops are grown?	1. Maize (maize) 2. Millet(Mtama) 3. Sorghum (Ulezi) 4. Beans(Maharage) 5. Cassava(Mihogo) 6. Sweet potatoes (Viazi vitamu) 7.Fruit trees (Miti ya matunda) 8.Sesame (Ufuta) 9.Ground nuts(Karanga) 10.Peanut stones (Njugu mawe) 11. Others (mention)	
27	How does the school use the crops harvested from demonstration plots and vegetable gardens?	1.Feeding the school 2.Selling for school income 3.Both 1 &2 4.Other explain	
28	Who are engaged in various activities in school demonstration plots?	1.Students & teachers 2. Parents /farmers 3.Both 1 &2 4.Other Explain	
29	Which activities are student engaged in the demo plots (tick all apply)	1. Land preparation 2. Planting 3. Irrigation 4. Weeding 5. Harvesting 6. Sorting and storing 7. None	

		8. Other, explain____	
SECTION 5: HYGIENE AND SANITATION KNOWLEDGE AND PRACTICES			
30	Which are personal hygiene practices that are important for human protection from disease you know? (Tick all apply)	1.Brushing teeth 2.Washing hand before eating with water and soap 3.Washing hands after toilet with water and soap 4.Bathing every day with clean water and soap 5.Cleaning and cutting nails 7. Others, Explain	
31	Where do you learn about personal hygiene practices? (Tick all that apply)	1.Home 2.School 3.Health care facility 4. Friends 5. Other places	
32	Does the school have hands washing facilities with running water most of the times?	1. Yes 2. No	If no skip
	b) How often the hand washing facilities provide soaps?	1.Most of the times 2.Sometimes 3.Very rarely 4.Not at all	
33	How often do you clean you hand with running water only after using school toilet?	1.Most of the times 2.Sometimes 3.Very rarely 4.Not at all	
34	How often do you clean hands with both running water and soap after using school toilet	1.Most of the times 2.Sometimes 3.Very rarely 4.Not at all	
35	How often do you clean hands with running water only before eating at school meal?	1.Most of the times 2.Sometimes 3.Very rarely 4.Not at all	
36	How often do you clean hands with both running water and soap before eating at school?	1.Most of the times 2.Sometimes 3.Very rarely 4.Not at all	
37	Does most of the student in this school wash their hands with both running water and soap after using the toilet?	1.Most of the times 2.Sometimes 3.Very rarely 4.Not at all	

38	Do students most of the students in this school wash their hands with both soap and water before school meals?	1.Most of the times 2.Sometimes 3.Very rarely 4.Not at all	
39	Are hand washing facilities adequate in number when compared to student number in this school?	1. Yes 2. No 3.I don't know	
40	What can you say about the cleanness of the school toilets?	1.Well Cleaned 2. Partially cleaned 3.Dirty	
49	Are toilet holes adequate in number when compared to student number in this school?	1. Yes 2. No 3.I don't know	If Yes, no end
50	If No, are there some students in your school who urinate/defecate outside the school toilet?	1.Very few 2.Most children 3. Not at all	

THE END

Local Regional Government Procurement Project (Chakula Chetu Project)

Baseline Assessment Survey In Mara Region

Parents Survey Questionnaire

Date _____(dd/mm/yyyy)

Section 1: Demographic information

No	Question	Coding	
1	District name	1. Butiama 2. Bunda 3. Musoma	
2	Ward name		
3	School name (of his/her child)		
4	Title of the respondent	1. Parents 2. Care Taker	

5	Sex of the respondent	1. Male 2. Female	
6	Age (years)	----------	
7	Marital status	1. Married/ living together 2. Divorced/ separated 3. Widowed 4. Never married	
8	Educational level	1. No schooling 2. Primary school level 3. Secondary school level 4. College/ University level	
9	Main occupation/source of income	1.Farming/ livestock 2.Employed 3.Small business/Trading 4.Both farming and small business 5.Fishing 6.Other, Explain	

SECTION 2: KNOWLEDGE AND PRACTICE ON HEALTH, NUTRITION AND SCHOOL FEEDING PROGRAMME.

10	What can you say about the importance of your child's education? (tick all apply)	1. Improve literacy (writing and reading) 2. Future employment 3. Economic development 4. Future assistant to parents 5. Other Explain	
11	What are key important things that are needed for a health student/ family member (Tick all apply)	Access to 1.Nutritrious food 2 Good Personal hygiene 3.Good Health services. 4.Clean home 5.Clean toilets 6.Use clean and safe water 7.Clean air 8.Use Clean and safe food 9.other, mention….	
12	A well balanced nutritious food is good for our health and proper body function What do you think are the main food types that comprises a nutritious / diversified meals?	1. Cereals (e.g Maize, millet) 2. Legumes and nuts (e.g Beans, groundnuts.) 3. Vegetables (eg Spinach)	

	(Tick all apply)	4. Fruits (e.g Mango, papaya 4. Meats /Fish e.g. beef, 5. Roots and tubers eg cassava and sweet potatoes 6. Dairy products (e.g Milk) 7. Other, explain	
13	Does your school provide meals to student during the week? *(If No……Go to section 3)*	1.Yes 2.No	
14	Which type of the meals does the school provide?	1. Breakfast 2. Lunch 3. Snacks 4. Both 1 and 2	
15	What is the main food composition of the school meals (Tick all apply)	1. Cereals (e.g Maize, millet) 2. Legumes and nuts (e.g Beans, groundnuts.) 3. Vegetables (eg Spinach) 4. Fruits (e.g Mango, papaya 5. Meats /Fish e.g. beef, 6. Roots and tubers eg cassava and sweet potatoes 7. Dairy products (e.g Milk) 7. Other, explain	
16	Are the meals provided in school are culturally acceptable or similar to what you normally eat at home?	1.Yes 2. Partial 3. No	
17	Do you think the meals provided in school are nutritious / have multiple nutrients?	1.Yes 2. Partially 3. No 4.I don't know	
18	As parents do you participate in school feeding program?	1.Yes 2.No	
19	If Yes, what how do you participate in school feeding program? (tick all apply)	1.Cash 2.Beans 3.Maize flour/grains 4.In kind (cooking, distribution, security, kitchen construction) 5F re wood 6.Parents planning meeting 7.Other, Mention	
20	a) Does your school receive any support or contribution from other sources for improving school feeding program?	1.Yes 2.No 3. I don't know	

	b) If Yes, who are they	1 Parents-_____ 2 School 3 Local Government__ 4 _ PCI _ 5 I don't know 6 Other, specify	
	d) If, Yes, mention kind of any support received from each of the above?	Mention	
21	What do you think are the benefits of school's meals to you child /students? (tick all apply)	1. Becoming alert/ active 2. Understand lesson better 3. Improves health 4. Motivate school /class attendance 5. Increase number of student in school 6. Improve school performance 7. Other, mention	
SECTION 3: AGRICULTURE PRACTICES VS SCHOOL FEEDING PROGRAMME			
22	Does your school have an agriculture demonstration plot? ***(If No go to Section 4)***	1. Yes, 2. No	
23	a) Who is involved the activities of the demonstration plots?	1.Student /teacher 2. Parents /farmers 3.Both 1 &2 4.Other Explain	If one skip
	b) If the answer is (2 or 3) above, how do parents participate? (tick all apply)	1. Land preparation 2. Planting 3. Irrigation 4. Weeding 5. Harvesting 6. Sorting and storing 7. Learning sessions 8. Other, explain____	
	c)If the answer is yes (2 or 3)	1. Maize (maize) 2. Millet(Mtama)	

	What are the common crops cultivated by the parents in that demo plot? (tick all apply)	3. Sorghum (Ulezi) 4. Beans(Maharage) 5. Cassava(Mihogo) 6. Sweet potatoes (Viazi vitamu) 7. Fruit trees (Miti ya matunda) 8. Sesame (Ufuta) 9. Ground nuts(Karanga) 10. Peanut stones (Njugu mawe) 11. Others (mention)	
24	How does the harvested products from demo plots are used for?	1.Feeding the school 2.Selling for school income 3.Both 1 &2 4.Other explain	
SECTION 4: HYGIENE AND SANITATION KNOWLEDGE AND PRACTICES			
25	What are personal hygiene practices that are important for human protection from disease you know? (Tick all apply)	1. Brushing teeth 2. Washing hand before eating with water and soap 3. Washing hands after toilet with water and soap 4. Bathing every day with clean water and soap 5. Cleaning and cutting nails 6. Others, Explain	
26	Do you have access to adequate water for domestic uses?	1. Yes 2. Partial 3. No	
27	What is the main source of water for domestic uses?	1.Spring /Surface water (Pond/dam/lake/stream/river) 2. Rainy harvest 3.Piped water system 4. Shallow Well 5. Borehole 6.Other (specify	
	a) Do you have a functioning toilet at home?	1. Yes 2. No	
	b) If Yes, what kind of the toilet?	1. Composite (traditional) 2. Simple pit latrine with slab 3. Ventilated Improved Pit Latrine 4. Pour Flush Other (specify_____	
	c)If no, Explain		
28	Does your home toilet have clean water and hand washing soap always?	1. Yes 2. Partial 3. No	
29	How often do you clean you hand with running water only after using your home toilet?	1.Most of the times 2.Sometimes	

		3.Very rarely 4.Not at all	
30	How often do you clean you hand with both running water and soap after using your home toilet	1.Most of the times 2.Sometimes 3.Very rarely 4.Not at all	
31	How often do you clean your hands with running water only before eating at home?	1.Most of the times 2.Sometimes 3.Very rarely 4.Not at all	
32	How often do you clean your hands with both running water and soap before eating at home?	1.Most of the times 2.Sometimes 3.Very rarely 4.Not at all	
SECTION 5: OPPORTUNITIES, OBSTACLES, RECOMMENDATION			
33	What are the challenges/ obstacles for establishing or strengthening school feeding programmers in your village?	Mention	
34	What should be done to improve the school feeding program if there is no donor funding?	Mention	
35	What suggestion do you have to make the school feeding? sustainable (i.e if there is no donor support)	Mention	

END

Local Regional Government Procurement Project (Chakula Chetu Project)

Baseline Assessment Survey In Mara Region

Farmers Survey Questionnaire

Date _____(dd/mm/yyyy)

Section 1: Demographic information

No	Question	Coding	Remarks
1	District name	1. Butiama 2. Bunda 3. Musoma	
2	Ward name		
3	Village name		
	Are you the head of the household?	1.Yes 2 No	Skip if Yes
4	Relationship to the head of the household	1.Head of the household 1. Husband 2. Wife	

		3. Adult Daughter/ son	
5	Sex of the respondent	3. Male 4. Female	
6	Age (years)	----------	
7	Marital status	1. Married/ living together 2. Divorced/ separated 3. Widowed 4. Never married	
8	Educational level	1. No schooling 2. Primary school level 3. Secondary school level 4. College/ University level	
9	Main occupation/source of income	1.Farming/ livestock 2.Employed 3.Small business/Trading 4.Both farming and small business 5.Fishing 6.Other, Explain	
10	In your household do you have a student studying at your school community?	1.Yes 2. No	

SECTION 2: HEALTH AND NUTRITION KNOWLEDGE AND PRACTICES.

11	What do you think are key important things that are needed for a student/ family member to be in good health? (Tick all apply)	Access to 1.Nutritrious food 2 Good Personal hygiene 3. Good Health services. 4.Clean home 4.Clean toilets 5.Use clean and safe water 7.Clean air 8.Use Clean and safe food 8.other, mention….	
12	A well balanced nutritious food is good for our health and proper body function What do you think are the main food types that comprises a nutritious/diversified meal? (Tick all apply)	1. Cereals (e.g Maize, millet) 2. Legumes and nuts (e.g Beans, groundnuts) 3. Vegetables (eg Spinach) 4. Fruits (e.g Mango, papaya 5. Meats /Fish e.g. beef, 6. Roots and tubers eg cassava and sweet potatoes 7. Dairy products (e.g Milk)	

		8. Other, explain	
13	a) How many meals do your family eats per day on average?	1.One 2. Two 3. Three	
	b) Is there a season in a year where your family eats less than 3 meals a day ?	1.Yes 2.Very rare 3. No	
14	What is the main source of the seeds used in your farm?	1. Local seed /own farm collection 2. Improved seed (from agro-shop) 3. Both 2 and 3 4. Other	
15	Does your farm production provide extra foods for cash selling?	1.Yes 2. Partially 3. No	If yes skip
	If no, what are factors contributes to low land productivity? (tick all that apply)	1.Drought/poor rains 2.Use of poor seeds 3.Small land 4.Lack of capital 5. Untimely planting 6.Poor farm management 7.Post harvest looses 8. Other	
16	a) What are the main type of crops do you normally cultivate on you farm? (tick all that apply)	1. Maize (maize) 2. Millet(Mtama) 3. Sorghum (Ulezi) 4. Beans(Maharage) 5. Cassava(Mihogo) 6. Sweet potatoes (Viazi vitamu) 7.Fruit trees (Miti ya matunda) 8.Sesame (Ufuta) 9.Ground nuts(Karanga) 10.Peanut stones (Njugu mawe) 11.Cotton 12. Others (mention)	
	b) What kind of crops do you depend for cash earning?	Mention	
	c.) How much did you harvest per (KG) during the previous season for each of the crop mention above?	Fill in the Kg	
	d)How much did you earn (in T KG) the previous season for each of the above?		
17	Do you access markets (buyers) for your crops?	1. Yes 2. No	If yes skip

	If No Explain!		
18	Where do you normally cell your crops?	1.Home sell 2.Markert place/ farmers auction 3.Cooperative society 4. Other	
19	Have you ever been trained on agro-business? If Yes, Who facilitated /supported the training	1. Yes 2. Partially 3. No	
20	a) Can you easily access financial capital for your agricultural activities?	1. Yes 2. Partially 3. No	
	b) What is the commonly source of your agriculture financial capital?	1.Cash saving/VIKOBA 2.Selling of crops 3.Selling of animals 4.Relatives/friends 5. Taking loan from microfinance institution 6. Other	
	c) Do you face any challenges on accessing financial capital?	1.Yes 2. No	Skip if no
	If Yes explain		
SECTION 4 :KNOWLEDGE ON GOOD AGRICULTURE PRACTICES AND POSTHARVEST HANDLING			
21	Have you ever attended any training on good agriculture practices and technologies?	1. Yes 2. No	If no skip
	b) If yes, what topics or skills were obtained during the training	1.Land preparation 2.Planting(spacing) 3.Water management 4.Use of manure/fertilizer 5.Agro –forest 6.Timely harvesting 7.Post harvest handling and storage 8.Agri-bussness 9.Market 10 Others	
	c)Who facilitated /supported the training	Mention	
22	Have you ever been trained on post-harvest handling and storage facilities	1. Yes 2. Partially 3. No	
23	What type of storage facilities do you normally use for crops storage?	1. Traditional structures 2. Sisal bags 3. Synthetic bags 4. Others, mention-----	
SECTION 5. GENDER GAPS IN AGRICULTURE TECHNOLOGIES ,PRODUCTION AND MARKETING			
24	Who makes most of the final decision in the family to determine which crops should be cultivated?	1.Husband alone 2. Wife alone	

		3.Both husband and wife 4. Family members 5.Head of the household 6. Other explain	
25	Who does most of the farming activities at your home plots?	1.Husband alone 2. Wife alone 3.Both husband and wife 4. Family members 5.Mother and children 6. Other explain	
26	Who mostly access trainings on good agriculture practices offered in your community?	1.Husband alone 2. Wife alone 3.Both husband and wife 4. Family members 5. Head of the household 6. Other explain	
27	Who makes the final decision in the family to determine how much crops should be sold or used?	1.Husband alone 2.Both husband and wife 3.Wife alone 4. Family members 5. Head of the household 6. Other explain	
28	Who mostly does the selling of family crops to local markets in your family? (	1.Husband alone 2.Both husband and wife 3.Wife alone 4.Family members 5. Head of the household 5. Other explain	
29	Who makes the final decision to use the money gained from selling family crops	1.Husband alone 2.Both husband and wife 3.Wife alone 4.Family members 5. Head of the household 6. Other explain	
	SECTION 6: LINKAGE BETWEEN SCHOOL FEEDING PROGRAM AND LOCAL AGRICULTURE MARKET		
30	Does the school in your community provides meals or involved in school feeding program? (If no go to section 32)	1.Yes 2.No	Skip if no
31	Does the local Agriculture market chain linked to the local supplier of the school feeding program at your community school?	1.Yes 2.No 3.Not sure	Skip is 2 & 3
	b) Do you sell any crop to the schools feeding programme?	1.Yes 2 No	
	If Yes, which type of crops?	Explain	

32	Does this school have agriculture demonstration plot ?	3. Yes, 4. No 5. Not sure	Skip to section 7
33	a) Have you ever been involved in activity in the school agriculture demonstration plots/vegetable garden?	1 Yes 2. No	If no skip
	If yes, in which activities have you participated) (tick all that apply)	9. Land preparation 10. Planting 11. Irrigation 12. Weeding 13. Harvesting 14. Sorting and storing 15. Learning sessions 16. Other, explain____	
34	How are the harvests from school demonstration plots/vegetable gardens used for?	1.Feeding the school 2.Selling for school income 3.Both 1 &2 4.I don't know 5.Other explain	
SECTION 7 Challenges / OBSTACLES, RECOMMENDATIONS			
35	What are the main challenge facing you as a farmer?	Mention	
36	What do think are the possible solution to the challenges your facing?	Mention	

END

School Graduation and Sustainability Readiness Tool FINAL

Section 1. Location

District

Ward _____

School _____

Section 2. Instructions

2.1 Instructions

Please complete this survey with the WEC and representatives from each target group. For each of the responsibilities, indicate whether the responsible person/party does everything described (YES), partially does the described responsibility but not fully (PARTIAL), or does not do the responsibility at all (NO). All questions one option among Yes, Partial and No.

Section 3. Teachers

3.1 No 1. Health Teacher, Store Teachers, and/ or TOD ensure clean and sanitary classroom environment, store room, kitchen, latrine, and surrounding school grounds (e.g. hand washing station, trash pit, dish drying rack, water available in latrines)

1☐Yes

2☐Partial

3☐No

3.2 No 2. Utilizing teachers' daily attendance registers, Store Teachers (or Store Assistant) consistently and accurately record school meals, attendance rates, enrolment figures, and food stock to ensure proper management of school feeding

1☐Yes

2☐Partial

3☐No

3.3 No3. Head Teachers oversee the creation of sources for school income, which are used for school expenses, school feeding, and education interventions

1☐Yes

2☐Partial

3☐No

3.4 No**4.** Head Teachers properly document the school budget and expenditures and ensure transparency

1☐Yes

2☐Partial

3☐No

3.5 No5. School Literacy Teaching Coaches/Mentors make and document classroom observations on teachers' teaching and students' learning and also provide feedback to teachers

1☐Yes

2☐Partial

3☐No

3..6 No6. Teachers create and/or provide supplementary reading materials or literacy instruction materials (e.g. newspaper, counting systems, storybooks)

1☐Yes

2☐Partial

3☐No

3.7 No 7. Teachers document student health issues and health-related absences

1☐Yes

2☐Partial

3☐No

3.8 No8. Teachers conduct individual student reading assessments and document results on a quarterly basis

1☐Yes

2☐Partial

3☐No

3.9 No9. Agriculture Teachers utilize school demonstration plots (farms) to promote improved agriculture production practices and harvest food to be contributed to school meals

1☐Yes

2☐Partial

3☐No

3.10 No 10. Agriculture Teachers promote agroforestry practices (fruit trees and/or multipurpose trees) and have tree nurseries on school grounds

1☐Yes

2☐Partial

3☐No

3.11 No**11.** Head Teachers and/or Literacy Coaches/Mentors conduct at least 1 training every 6 months to fellow teachers on literacy instruction and/or commodity management

1☐Yes

2☐Partial

3☐No

3.12 No 12. Head Teacher actively reports to school committee, VGC, and parent groups (e.g. WE groups, farmer groups) on school-related activities, issues, and data

1☐Yes

2☐Partial

3☐No

3.13 No 13. Head Teachers participate in quarterly WDC meetings and in other activities with local, private stakeholders in order to inform, advocate/ develop resources, and raise awareness of school issues and/ or needs

1☐Yes

2☐Partial

3☐No

Section 4. School Committee

4.1 No **14.** PTPs and/ or SF sub-committee handles food management at school: preparation and storage, ensure school food preparation and cooking is safe and hygienic, ensure use of clean water

1☐Yes

2☐Partial

3☐No

4.2 No 15. School Committee handles food management for community-provided commodities: transportation, amount of commodities needed each month, rations/portions, which follow the phasing over school meal plan

1☐Yes

2☐Partial

3☐No

4.3 No 16. PTPs and/ or S'WASH sub-committee actively ensures safe and clean water is used at school for cooking and drinking, and ensures maintenance and hygiene management of school latrines and water tanks/wells

1☐Yes

2☐Partial

3☐No

4.4 No 17. School Committee actively provides feedback on all school activities to VGC and parent groups (e.g. W'E groups, farmer groups)

1☐Yes

2☐Partial

3☐No

4.5 No 18. School Committee develops school needs assessments, creates action plans for resource development, and ensures transparency of budget management/financial records to sustain school feeding and other school needs

1☐Yes

2☐Partial

3☐No

4.6.No19.School committee meet quarterly to respond to school-related activities and issues and ensures at least one member of VGC is involved in meetings (minutes should be available)

1☐Yes

2☐Partial

3☐No

Section 5. Village and Community

5.1 No 20. VGC holds routine community meetings to manage parent contribution support (ensures community is sensitized and parents are contributing the required contributions to the School Committee) and collect and record parent contributions (cash, in-kind, food, inputs) which follow the phasing over school meal plan

1☐Yes

2☐Partial

3☐No

5.2 No21. Parents actively contribute the minimal amounts (determined by school committee) of monetary (i.e. payment of cooks/ guards, contributing money for food commodities and utensils) and in-kind (i.e. firewood, plates, water, sugar, milk, seed inputs, etc.) contributions

1☐Yes

2☐Partial

3☐No

Section 6. Ward and Division

6.1 No 22. W'EC, WEO, and Division Secretary conduct and document routine follow-up visits at the school-level for all activities

1☐Yes

2☐Partial

3☐No

6.2 No23. Ward Officials (e.g. WEC, WEO, CHWs, WAEO, WCDO) actively meet with parents to teach pro-education, health, SWASH, and nutrition messages and routinely monitor at the household level

1☐Yes

2☐Partial

3☐No

6.3 No24. W'EC, WEO, and Division Secretary attend School Committee meetings to provide feedback from routine visits, identify learning exchange opportunities, and provide additional support to schools and feedback/ minutes are given to District Councils

1☐Yes

2☐Partial

3☐No

6.4 No 25. WEC, WEO, and Division Secretary identify other local partners (i.e. EQUIP, religious institutions, local NGOs, etc.), establish roles and responsibilities, and link to cooperative officials (e.g. WE group

1☐Yes

2☐Partial

3☐No

You've reach the end of the assessment. Please press Options and Back to review any answers, or Next to submit

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