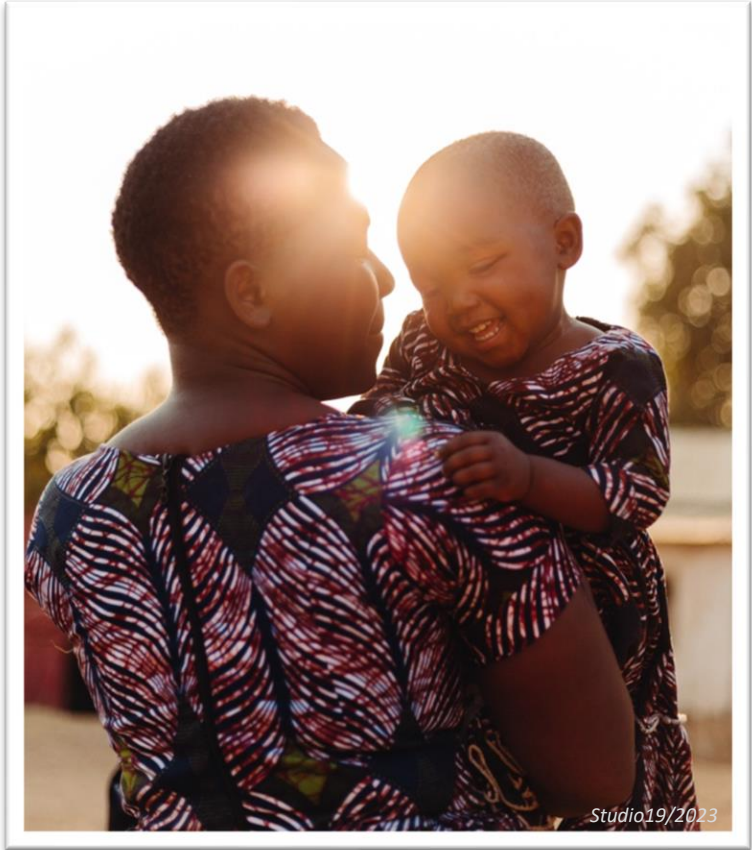


STAWISHA MAISHA ("NOURISHING LIFE")

Impact Evaluation



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ABBREVIATIONS AND ACRONYMS

AFREA	African Evaluation Association
ANC	Antenatal Care
ANCOVA	Analysis of Covariance
ATT	Average Treatment on the Treated
BCC	Behaviour Change Communication
CMC	Community Management Committee
cRCT	Cluster Randomized Controlled Trial
CAPI	Computer Assisted Personal Interview
CITI	Collaborative Institutional Training Initiative
COSTECH	Commission for Science and Technology
CSAE	Centre for the Study of African Economies
DHS	Demographic and Health Survey
ECD	Early Childhood Development
ERG	Evaluation Reference Group
FGD	Focus Group Discussion
GEROS	Global Evaluation Reports Oversight System
GIS	Geographical Information Systems
HLSC	High-level Steering Committee
HR	Human Resources
IDI	In-Depth-Interviews
IPWRA	Inverse Probability Weighted Regression Adjustment
IRF	International Research Firm
ISNP	Integrated Safety Net Programme
ITT	Intent-to-Treat
ICC	Intracluster correlation coefficients
LATE	Local Average Treatment Effect
LLA	Local Listing assistant
LRF	Local Research Firm
MDE	Minimum Detectable Effect
MICS	Multiple Indicator Cluster Surveys
MIYCF	Maternal, Infant and Young Child Feeding
MoHSW	Ministry of Health and Social Welfare
MUAC	Mid-Upper Arm Circumference
MUHAS	Muhimbili University of Health and Allied Sciences
NIMR	National Institute for Medical Research

NSPP National Social Protection Policy
PAA Project Area Authorities
PI Principal Investigator
PII Personally Identifiable Information
PMT Proxy-Means Test
PO-RALG President's Office Regional Administration and Local Government
PRESTO Policy Research Solutions LLC
PSSN II Productive Social Safety Net II
QA Quality Assurance
SBC Social and Behavior Change
TASAF Tanzania Social Action Fund
TFNC Tanzania Food and Nutrition Centre
ToC Theory of Change
UNICEF United Nations Children's Fund

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EXECUTIVE SUMMARY

Introduction

Stunting and malnutrition remain significant problems in Tanzania. Despite decreases nationally from 42 percent in 2010 to 34 percent in 2016, and further decreases in 2020, almost one in three (30 percent) children younger than 5 in Tanzania are stunted. Malnutrition in childhood has adverse consequences across the life course, including child mortality, disability, cognitive impairment, chronic disease, and reduced productivity in adulthood. Malnutrition perpetuates poor health and poverty throughout an individual's life and into the next generation.

The Tanzania Social Action Fund (TASAF) implements Tanzania's largest social safety net programme, the Productive Social Safety Net II (PSSN II), which aims to reduce poverty and enhance human capital development through cash transfers, public works programmes, and livelihood enhancement activities, and will implement a "cash plus" intervention to reduce child malnutrition among extremely poor households participating in the PSSN II programme. The intervention, Stawisha Maisha ("Nourishing Life"), comprises a weekly edutainment radio listening session over 12 months, provision of free solar-powered radios, and peer-led discussion groups. TASAF received technical assistance from UNICEF in the design of Stawisha Maisha.

The evaluation of Stawisha Maisha will provide the Government (including TASAF, the Prime Minister's Office, and other line ministries), UNICEF, and PSSN II participants with evidence to improve the intervention and refine communication strategies with TASAF participants. More specifically, the evaluation aims to (1) enhance understanding of integrating cash transfers and social behaviour change (SBC) to improve maternal and child nutrition, (2) provide insights for current and future programming, and (3) contribute to global debates on the effectiveness of "cash plus" interventions for reducing stunting and wasting among children ages 0 to 5.

Study design

Employing a cluster randomized controlled trial (cRCT) design, this evaluation integrates both quantitative and qualitative data to assess the impact of the Stawisha Maisha intervention. It is important to note that the impact evaluation will measure only the effects of Stawisha Maisha, not the combined impacts of PSSN II and Stawisha Maisha.

This report summarizes results from the baseline data implemented as part of the longitudinal, mixed-method impact evaluation of the Stawisha Maisha intervention. The baseline, commissioned by UNICEF and led by EDI Global, Policy Research Solutions (PRESTO), and Empatheia, was implemented in three regions (Geita, Rukwa, and Ruvuma) across Tanzania. These regions were selected for the intervention and evaluation based on high stunting prevalence and burden and low rates of early antenatal care, exclusive breastfeeding, and

dietary diversity among young children. Baseline data were collected from 2,256 households (respondents were the primary caregiver of a child younger than 5 living in the household; 99.4 percent were female, 87.6 percent were the biological mother, and 11.1 percent were the grandmother) in July and August 2023, and randomization of 150 villages into treatment and study arms (75 villages in each) was conducted by TASAF in October 2023. Qualitative data were collected among mothers and primary caregivers (referred to collectively as “caregivers” in the report) in two of the study regions (Rukwa and Ruvuma). In addition, data were collected on village- and facility-level information in the 150 study villages and 87 health facilities. Study personnel adhered to ethical guidelines, and informed consent and assent was obtained from study respondents. The baseline report serves to describe the study sample and assess whether there is balance (that is, statistical equivalence) across outcomes of interest among the treatment and control arms of the study. If the randomization successfully achieved balance across study arms, then differences between treatment and control groups observed at the follow-up round of data collection (expected in 2025) can be attributed to intervention impacts.

Information collected from households covered multiple topics related to child malnutrition (stunting, wasting, and underweight) and pathways of impact (for example, food and water security; caregiver knowledge, attitudes, norms, self-confidence, and decision-making abilities; and feeding practices) and were based on the intervention’s theory of change. The study region of Geita is located in the Lake Zone of Northern Tanzania, Rukwa is in the southwest highlands, and Ruvuma is situated in the southern highlands (across the lake from Malawi and on the border with Mozambique).

Results

Overall, we find strong balance on key outcomes between the treatment and control groups, indicating successful randomization and contributing to good internal validity of the study. This indicates that the sampled households have similar characteristics at baseline between treatment and control groups, a critical factor in ensuring that any differences in outcomes measured at the endline can be attributed to the treatment, rather than to baseline disparities. Below, we highlight some key findings about the study sample.

Household characteristics and livelihoods

- The average household size was 6.6 members, with 1.6 children per household.
- Only 11 percent of households treated their water, and 32.5 percent had access to improved toilets.
- Agriculture plays a significant role in the livelihoods of the households in our study, with around 93 percent of households engaging in crop cultivation in the past 12 months.
- Approximately one in four households (23.5 percent) operated non-farm enterprises in the past year.
- Over half of households (54.2 percent) own livestock.

- In terms of participation in PSNN II livelihood activities and public works programs, 16.9 percent and 71 percent of households, respectively, have been involved in these programs in the past year.
- Nearly 61 percent of households experienced food insecurity, 17.7 percent experienced moderate food insecurity, and 42.6 percent experienced severe food insecurity. About one in four households (26.2 percent) experienced water insecurity.

Radio and communications

- Household ownership of mobile phones was widespread; approximately 85.3 percent of households in our sample possessed them, underlining the pivotal role of mobile phones in modern communication.
- Radios and radio cassette players were owned by only one in five households (19.8 percent), underscoring how the intervention’s provision of free solar-powered radios to the discussion groups will be crucial in facilitating households’ ability to take up the intervention.
- Only 21 percent of respondents reported listening to the radio on a weekly basis.
- Very few women reported that they accessed the radio on their mobile phones, as many either did not have widespread access to a phone or did not have it activated, if they did. Gender gaps in ownership and use of mobile phones have been highlighted in previous research in Tanzania.
- A large majority of respondents (80 percent) trust nutrition information from the radio, whether they currently own a radio or not; qualitative findings supported this as well.

Caregiver knowledge

- Only about one-quarter of caregivers correctly indicated that pregnant women should eat diverse types of food (23.7 percent) and an extra meal per day (26.6 percent).
- The rate of awareness about early initiation of breastfeeding was fairly high, with 82.2 percent of respondents stating that breastfeeding should begin within one hour of a child’s birth.
- Only 21 percent of caregivers had full knowledge about exclusive breastfeeding—that is, they correctly defined both the phrase and the child age recommendation for it.
- Approximately 61 percent of respondents knew that breastfeeding should continue up to age 2 or beyond.
- In qualitative interviews, respondents reported that they did not know most of the maternal and child nutrition recommendations before they became parents, and that even while they were pregnant, they did not consume nutritious foods.
- In addition, though qualitative data indicated that caregivers understood that they should breastfeed exclusively until children were at least 6 months old, many reported the

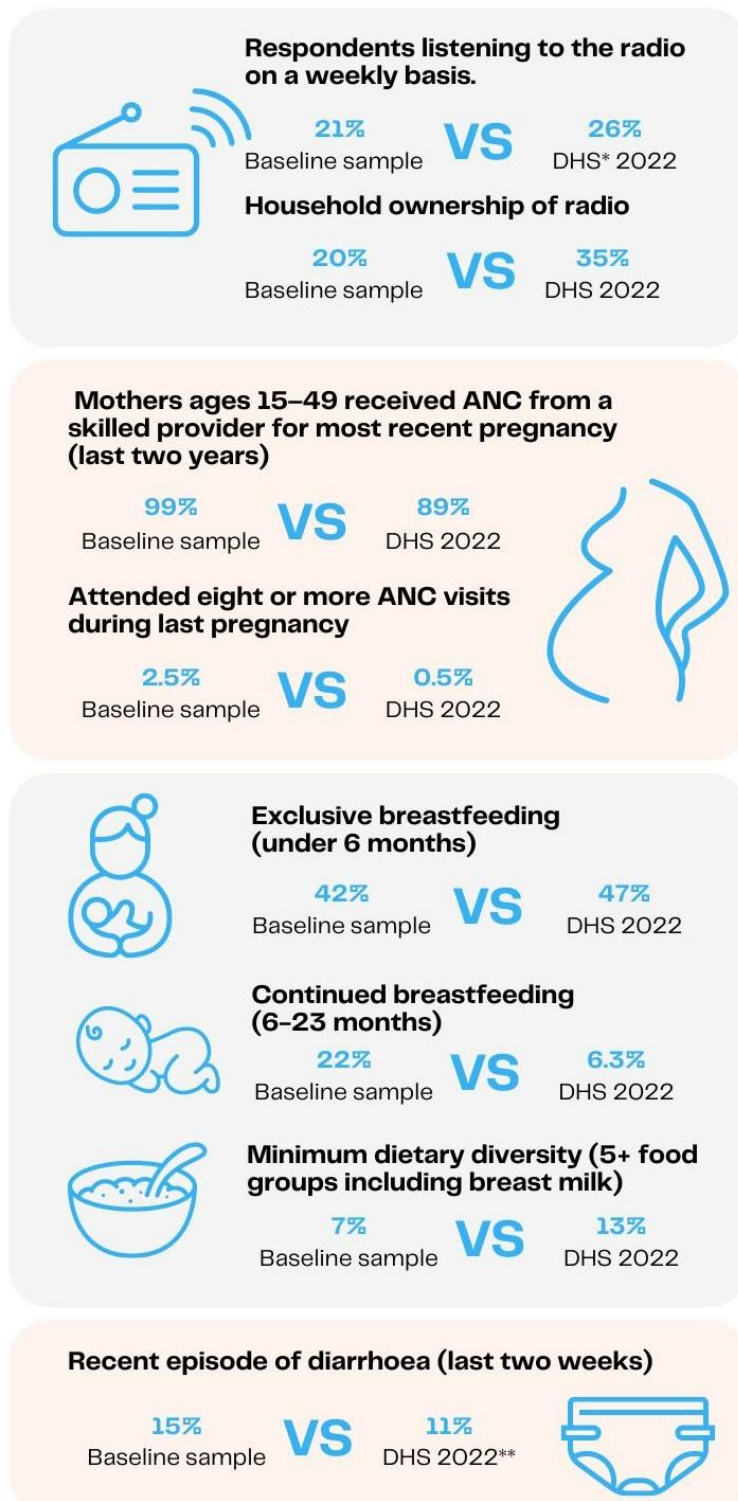
perception that mothers were sometimes unable to produce enough milk to do so (due to lack of good nutrition for the mother) and would supplement thin porridge in these cases.

- A majority of caregivers could identify foods rich in vitamin A (60.7 percent) and iron (54.1 percent).
- Close to 71 percent of caregivers knew that children with diarrhea should be given oral rehydration salts (ORS), but only 3.3 percent knew that they should be given more liquids than usual and the same or more food and breast milk than usual.
- To evaluate whether caregivers knew how to interpret their child's growth curve, we provided a sample card with a marked point and asked what this example says about the child. Only about half of caregivers (51.4 percent) correctly knew what the sample growth curve meant.
- Qualitative responses about child growth and development indicated that caregivers understood that children needed to go to the clinic regularly from one month through age 5, to ensure that they received required vaccinations and that they were healthy and growing properly.

Caregiver attitudes and norms

- Many caregivers (66 percent) reported being stressed about both feeding children more frequently and feeding children more diverse types of food. Qualitative findings echoed this stress and lack of confidence surrounding nutritious food, both in acquiring and preparing it. The caregivers understood the importance of proper nutrition for themselves and their children, but without the necessary resources to access adequate healthy foods or clean water, they were forced to feed their children less nutritious options.
- Less than half of caregivers (48.8 percent) were confident in preparing nutritious foods for their child, though respondents felt they had the appropriate knowledge but lacked the means to provide healthy foods for their families because they did not have the resources to do so. However, 90 percent felt they had the power to make their own decisions regarding their children's health and nutrition.

Figure ES.1. Benchmarking sample statistics against the Demographic and Health Survey (DHS) 2022 data



*DHS refers to means calculated among 3,170 rural households in the study regions (Geita, Rukwa, and Ruvuma) using data from the 2022 Demographic and Health Survey (DHS).
 ** Here, n = 814, as this question was asked of only a subset households.

Social capital, resiliency, and problem solving, and support for breastfeeding mothers

- On a scale of 1 to 4, the average self-efficacy score for problem solving was 2.9.
- About 70 percent of caregivers felt there is a group of peers with whom they have a sense of belonging and membership. Qualitative findings back this sense of support from the community among the women and their neighbors.
- After childbirth, neighbors appeared to be the most supportive, provided that the woman had relationships with them before she gave birth.

Sources of information about nutrition

- Nearly two-thirds (63.7 percent) of respondents heard or saw something about nutrition in the last 12 months from a community health worker, on the radio, on a flyer, or from another source.
- Slightly more than 80 percent of caregivers stated they would trust information about nutrition from a radio program.
- In qualitative interviews, caregivers indicated that they were aware of and listened to a nutrition programme broadcast on a local radio station whenever they were able to. They appeared to find the information on this programme both helpful and trustworthy.

Antenatal care and nutrition

- Nearly all children ages 0 to 36 months had a mother who sought antenatal care (ANC) from a skilled provider (such as a doctor, nurse, midwife, or auxiliary midwife) at some point during their pregnancy (Table 9.1.1). However, early ANC (first trimester) occurred in fewer than half of pregnancies (45.2 percent).
- As with nutrition information, the women placed great trust in the clinics and hospitals for information regarding antenatal care.
- Approximately one in four women (27.7 percent) followed the recommended practice of eating four or more food groups per day during pregnancy.
- About two-thirds of children benefited from mothers who took iron folic acid (IFA) supplements for 90 or more days while pregnant.
- As with their knowledge of nutrition, respondents were not always able to reconcile what they knew to be best for themselves and their children with the reality of their resources. Poverty and lack of money were the major barriers to accessing antenatal care.
- Women also reported they were required to be accompanied by their husbands or male partners or to have an exemption letter from the village executive in order to receive antenatal care. It was often difficult to convince their husbands or partners to go to the clinic with them because the men were afraid of the obligatory HIV test for couples.

Breastfeeding practices

- Fewer than half of children (42.2 percent) were, or are, exclusively breastfed.
- The rate of continued breastfeeding up to age 2 or beyond was fairly low—just over one-fifth (21.9 percent) of children ages 24 to 59 months were breastfed up to age 2 or beyond.
- Qualitative interviews indicated that although women understood the importance of a mother’s nutritional intake while breastfeeding, there was often a lack of access to nutritious food, that limited their ability to eat a healthy diet.

Young child feeding practices

- Among children aged 6–23 months, 30.8 percent had a diet that met the minimum standards for meal frequency.
- Only 7.3 percent of children ages 6–23 months had a diet that met the minimum standards for dietary diversity (that is, they were fed at least five out of eight UNICEF- and WHO-specified food groups during the previous day).
- Only 15.3 percent of children ages 6–23 months had consumed iron-rich or iron-fortified foods in the previous day and night at the time of the survey.
- In qualitative interviews, respondents overwhelmingly cited a lack of money, access to nutritious food, and access to water as the primary challenges preventing them from giving their families nutritious meals.

Care during diarrhea

- Among children in the sample, 15.3 percent had had an episode of diarrhea in the previous two weeks. About 67 percent were given ORS, but only 6.8 percent were given the appropriate feeding and liquid standards.

Early childhood development

- In terms of early childhood development, about one in five children (21.1 percent) were developmentally on track (as defined by the Early Childhood Development indicator), per assessment through various questions covering health, learning, and psychosocial well-being subdomains.

Nutritional status

- Forty-four percent of children in the sample were stunted, and 15.7 percent were severely stunted. This rate is higher than the national stunting average (30 percent).
- The rate of wasting in our sample was 5.5 percent, and 1.7 percent were severely wasted. The wasting rate in our sample was also higher than the national wasting average (3.3 percent) and that of two study regions (2.8 percent in Ruvuma and 3.3 percent in Geita).

- Nineteen percent of children in the sample were underweight (compared to 12 percent nationally), and 4.4 percent were severely underweight.

Health facilities

- Nearly all (99 percent) of the 87 health facilities had electricity, and 69 percent had water available on site.
- Only one in 10 facilities had operating theatres, and only four facilities (4.6 percent) had the means to perform a caesarean section.
- All facilities performed child growth monitoring.
- Ninety-four percent of facilities performed deliveries.

Community characteristics

- Most (97.3 percent) communities reported recent immunization campaigns.
- Respondents overwhelmingly reported that women in their communities gave birth in health facilities (98.7 percent) rather than at home.
- Although a majority of respondents reported that the nearest facility accepted the improved Community Health Fund (iCHF) insurance, one-third (30 percent) reported that community members struggled with inability to pay for health services.

Conclusions

The baseline report describes the evaluation sample and assesses whether randomization of treatment (PSSN II plus Stawisha Maisha) and control (PSSN II only) groups was successful. Data summarized in this report demonstrate that PSSN II households had limited resources for accessing nutritious foods for their children. Nevertheless, many positive aspects were noted. Respondents had high levels of trust in information from health care workers and radio broadcasts. Generally, respondents felt they were knowledgeable about what they need to feed their children, despite often lacking resources to enact this knowledge. In addition, women felt a sense of support from the community among the women and their neighbors and said they help each other in times of need. In this baseline report, we have integrated quantitative and qualitative data analysis. Impacts will be estimated, and more in-depth analysis of the topics will be pursued after follow-up data are collected (expected in 2025). Thus, the evaluation team is pleased to conclude that the randomization was successful, with a balanced distribution between experimental groups. This lays the foundation for accurately estimating effects of the intervention in the forthcoming phases of the study.

1. BACKGROUND

Despite significant progress in human development and poverty reduction between 2012 and 2018 in Tanzania,¹ poverty reduction has slowed in recent years. Based on the international poverty rate of \$2.15 (USD) per person per day, 44.9 percent of Tanzanians live in poverty, and though GDP rose in 2022, high commodity prices and international events have kept economic growth below its potential.² Rapid population growth and fallout from the COVID-19 pandemic have contributed to an increase in the number of Tanzanians falling below the national poverty level.³

Although stunting significantly decreased nationally from 42 percent in 2010 to 34 percent in 2016 and 30 percent in 2022,⁴ Tanzania still suffers from high levels of child malnutrition, with roughly 3 million children younger than 5 experiencing stunting. Poverty, food insecurity, and lack of access to water and good hygiene practices all contribute to malnutrition, which can lead to child mortality, disability, cognitive impairment, chronic disease, and reduced productivity across the life course.⁵ In this way, malnutrition perpetuates the persistence of poverty and poor health not only through an individual's lifespan but across generations.

This study evaluates a “cash plus” approach for nutrition—Stawisha Maisha, or “Nourishing Life”—which was implemented within the Tanzanian government's flagship anti-poverty social protection program, the Productive Social Safety Net (PSSN II), and uses a cluster randomized controlled trial (cRCT) approach to identify causal impacts of the initiative on child malnutrition and pathways of impact. The three regions of the study (Geita, Rukwa, and Ruvuma) were selected based on stakeholder priorities and vulnerability characteristics, including high rates of stunting and low rates of exclusive breastfeeding and antenatal care, particularly among the poorest 20 percent of the population.

Cash transfers and child nutrition

There is strong evidence that cash transfers can improve many mediators of nutrition, including economic security and livelihood activities, food security, and health care visits.⁶⁻¹⁰ However, the evidence on cash transfers and child nutrition status is mixed. The most recent global meta-analysis (covering 129 articles total, including 54 from sub-Saharan Africa) indicates that cash transfers improve linear growth and reduce stunting, but effects are small.¹¹ However, cash transfers largely have no impact on weight-for-age and wasting. In terms of pathways of impact, the meta-analysis found that cash transfers improved dietary diversity, particularly regarding animal-sourced foods, and reduced the incidence of diarrhea.¹¹ A previous study reviewed 20 studies (including 12 in Africa) and found that only two in Africa reported positive impacts on child nutrition outcomes (one each in Malawi and South Africa).¹²

In light of this mixed evidence on cash transfers alone, a cash plus approach—whereby cash is combined with complementary programming (for example, behaviour change communication [BCC] or linkages to existing services¹³)—is often advocated. The evidence on cash plus programmes, particularly in Africa, is still growing, and many initiatives have not been rigorously evaluated. A recent review and meta-analysis of this emerging body of work found that compared to cash transfers only, cash plus food transfers improved height-for-age, but cash plus BCC was not found to improve anthropometrics.¹⁴ Nevertheless, only seven cash plus BCC studies were reviewed, and only three of these studies took place in Africa (one each in Niger, Kenya, and Ethiopia). Thus, more evidence on the topic is urgently needed to draw conclusions to inform future programming. The current report aims to build on that body of evidence by presenting the findings of the baseline evaluation of the Stawisha Maisha intervention.

Social protection in Tanzania

The government has developed and approved a comprehensive National Social Protection Policy (NSPP 2023), with an objective to ensure all persons live at socially acceptable standards and exploit their human capabilities to optimize social and economic development. Four thematic working groups will coordinate programming as follows: contributory programmes (productive inclusion and social insurance [mandatory and voluntary schemes]) and non-contributory programmes (social assistance and social welfare).

As part of the government of Tanzania's poverty reduction strategy, the Tanzania Social Action Fund (TASAF) was established in 2000 and is responsible for implementing the Productive Social Safety Net (PSSN). The PSSN is a large-scale social assistance programme that covers the mainland and Zanzibar.

The United Nations Children's Fund (UNICEF) has supported complementary programming within PSSN I and PSSN II to improve nutrition outcomes. These complementary components include linking beneficiaries to health and nutrition services and/or exempting pregnant women from public works requirements and providing unconditional cash transfers until their child's second birthday. UNICEF has also supported cash plus programming in PSSN I and PSSN II as follows: (1) Ujana Salama, which has additional cash plus components layered on top of the government cash transfer programme focusing on youth, including livelihood and life skills training, mentoring and a productive grant, and linkages to health services¹⁵; and (2) Stawisha Maisha, a cash plus intervention (2018–2019) where the additional plus component was aimed at enhancing nutrition outcomes among children ages 0 to 5.

A qualitative evaluation of the first Stawisha Maisha pilot found that the pilot was well received by participants and that activities were successfully integrated into the social protection workforce. Moreover, the intervention increased maternal, infant, and young child feeding (MIYCF) knowledge among participants.¹⁶ However, some challenges were identified, including an overbroad targeting approach that included many households without young children, low frequency of sessions, limited quality control of facilitation, and use of materials not appropriate for a largely illiterate population. Thus, Stawisha Maisha has been further adapted to address these challenges and is now being implemented in three regions (Geita, Rukwa, Ruvuma) in Mainland Tanzania. The current report summarizes findings from the baseline data collection of an experimental impact evaluation of Stawisha Maisha.

2. INTERVENTION

TASAF and PSSN

The Tanzania Social Action Fund (TASAF) was established in 2000 as part of the government of Tanzania's social protection strategy and has since been expanded twice. Phase I (2000–2005) focused on improving social service delivery, capacity enhancement, and addressing income poverty for food-insecure households. Phase II (2005–2013) built on the Millennium Development Goals and addressed a shortage of social services, income poverty, and capacity enhancement. In the third phase, TASAF started implementing the PSSN, which is a large-scale social assistance programme. The objective of the PSSN II is to increase income and consumption and to strengthen the resilience of vulnerable populations, with an overall aim to reduce extreme poverty and break the intergenerational persistence of poverty. PSSN beneficiaries are identified through a three-stage targeting process, including geographical targeting, community-based targeting, and a proxy-means test.

The first phase of the PSSN (PSSN I) was implemented between 2013 and 2019. The PSSN is now in its second phase (PSSN II, 2020–2025), reaching over 5 million individuals in 1.3 million chronically poor households in 186 project authority areas (PAAs).ⁱ Regular bimonthly (every other month) cash transfers are provided manually at payment pointsⁱⁱ to eligible beneficiaries, with monthly amounts varying depending on their eligibility for the following:

- *A basic (conditional) cash transfer:* This is for all recipient households, conditional on participation in savings groups for households with labour capacity, and unconditional for households without labour capacity (“direct support”). Once a household enrolls in public works, this cash transfer ceases. The fixed transfer per household is 12,000 TZS per month.
- *A vulnerable groups unconditional cash transfer:* This is for all recipient households with a child ages 0 to 18 years and any person with a disability. Additional fixed transfers of 5,000 TZS are available for each of the mentioned categories (maximum one per household).
- *A variable human capital transfer:* This is for all recipient households with children, subject to compliance with health or education co-responsibilities, which vary according to the child's age and education status. Additional variable transfers range from 2,000 TZS for lower primary to 8,000 TZS for upper secondary; the maximum is 55,000 TZS per month.

In addition, a *public works (PW) scheme* offers temporary employment to PSSN households with labour capacity to provide additional income during the lean season(s). Households with labor capacity are defined as those including at least one adult ages 18 to 65 who is able to

ⁱ PAAs are geographical classifications according to TASAF (corresponding to local government authorities in Mainland and Zanzibar district authorities). PAAs generally correspond to districts or town councils.

ⁱⁱ In some areas, cash transfers are made electronically through bank or mobile phone transfers.

work. Eligible households have an entitlement of 60 working days per year that can be spread over a period of six months, which implies working for 10 days each month. A household is entitled to PW implementation for three rounds before enrollment into Enhanced Livelihood Support (ELS). At the start of PSSN II, the daily transfer rate was set at 3,000 TZS, and the PW wages are paid bimonthly. Moreover, eligible households that have only one adult able to work who is pregnant or caring for an infant continue to receive PW wages, but they are granted a temporary waiver from the need to work and are linked with nutrition services such as those provided during clinic attendance.

The average value of bimonthly cash transfers to households varies slightly by payment cycle. In the September to October 2023 payment cycle, the average value transferred was 31,844 TZS (approximately \$12.48 USD).

A livelihood enhancement support (productive inclusion) provides basic skills training in economic activities and enhanced livelihood. A capacity building component centers on households in 51 of the poorest PAAs who are invited to participate in savings groups and awareness-raising and skills training sessions. The basic livelihood support package aims at promoting self-employment (farm and non-farm income generation activities) and wage employment opportunities through (1) awareness-raising sessions that encourage households to invest their transfers productively and inform them about all available livelihood services in the locality, including vocational education, apprenticeships, agricultural extension, financial literacy, small business, and livestock services; (2) support for household participation in savings groups; and (3) linking households to available ward-level extension services by inviting extension staff to deliver training. This support is offered to all households with labor capacity in all PAAs during a two-year period. The ELS provides a more comprehensive set of livelihoods support activities to households. It focuses on households with labor capacity where the three-year PW cycle has been completed. The ELS consists of a sequenced set of activities, designed based on international experience with poverty graduation programming. Attention is given to ensure the support is appropriate to the needs of both women and men in households. It features saving promotion, entrepreneurship skill training, and productive grant provision.

The “plus” intervention

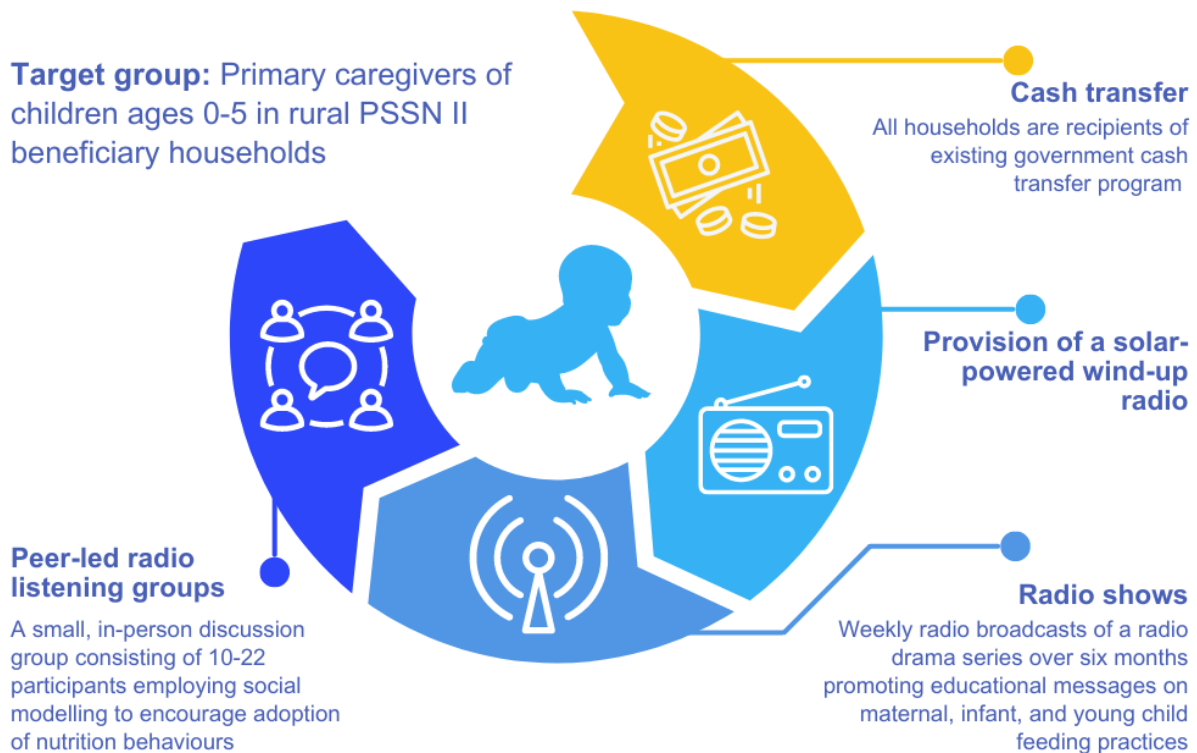
In this cash plus intervention, the “plus” being evaluated is Stawisha Maisha. The primary aim of Stawisha Maisha is to improve caregivers’ knowledge and practices regarding the nutrition of mothers, infants, and young children, with the long-term goal of reducing stunting and malnutrition. Pathways to reach the desired changes include operationalized knowledge, increased self-efficacy, peer support, and openness to learning and change; increased aspiration for self and child(ren); improved skills for planning and goal setting, problem solving, and increased resilience in the face of challenges and setbacks. The intervention was first piloted between 2018 and 2019 and has since been revised based on the findings from a previous evaluation. The Stawisha Maisha intervention focuses on mothers or primary

caregivers (referred to as “caregivers” in the report) from rural PSSN II participating households that include children younger than 5.

As shown in Figure 2.1, Stawisha Maisha comprises the following:

1. Listening to a weekly radio programme either via radio broadcast or downloaded on secure digital (SD) cards (Phase 1 is expected to last 6 months)
2. Provision of free solar-powered radios (one per discussion group)
3. Organization of peer-led discussion groups, which are expected to listen to the weekly radio broadcasts together and discuss; maximum group size is 22 members (thus, some villages will have multiple groups)

Figure 2.1. Features of the cash plus nutrition intervention



Stawisha Maisha intervention features

Target group: The target group includes mothers and primary caregivers from rural TASAF PSSN II cash transfer beneficiary households that include children younger than 5. More than one eligible individual from a PSSN II household can participate in Stawisha Maisha activities. Participation of more than one person per household will be promoted in small villages (that is, those with fewer than 22 eligible households per village). In larger villages, households will be encouraged to designate a group member and an alternate who can participate in activities when the designated group member is not available.

Objective: The objective is to reduce nutritional stunting through improved maternal, infant, and young child feeding (MIYCF) practices. Pathways to reach the desired change include knowledge, self-efficacy, peer support, and openness to learning and change; aspirations for self and children; skills for planning and goal setting, problem-solving, and resilience in the face of challenges and setbacks.

Intervention delivery: Delivery is facilitated through both a radio platform and a network of small in-person, peer-led radio listening groups (10–22 participants per group). Groups are provided with robust solar wind-up radios. A weekly broadcast radio programme uses entertaining content to engage participants, embedding a variety of methodological approaches designed to influence social norms and individual behaviour to promote adoption of nutrition behaviours that reduce and prevent stunting. Social modelling is the principal social behaviour change methodology employed.

Coverage: Stawisha Maisha will engage mothers and caregivers from rural PSSN II beneficiary households with children younger than 5 in 75 villages within three regions (Geita, Rukwa, and Ruvuma).

Stawisha Maisha is implemented through TASAF's field structure and existing human resources. The government develops content and materials, arranges radio broadcasts, supplies radio sets and group toolkits, provides training, and monitors implementation.

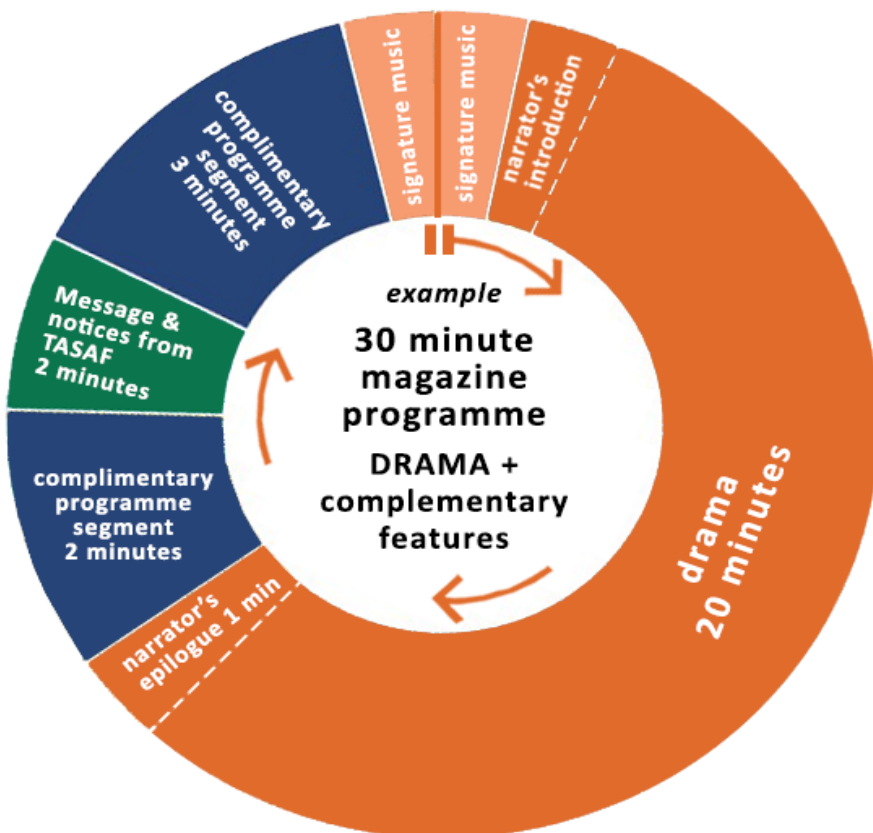
Intervention activities

Stawisha Maisha is delivered through a peer group structure, including peer leadership and self-governance; story-based learning content; life experience content; participatory methods; and use of visuals, games, and manipulatives. A weekly broadcast radio magazine programme will use entertaining content to engage participants, embedding a variety of methodological approaches designed to influence social norms and individual behaviour to promote adoption of nutrition behaviours that reduce and prevent stunting. Social modelling is the principal SBC methodology employed. To facilitate discussion following the radio broadcasts, tested and validated SBC materials will be provided to groups. Interactive radio techniques such as missed call polling, listener call-in and text-in, and interactive voice response (IVR) features will be introduced at no cost to participants, enabling two-way communication that enhances participant learning and engagement.

Stawisha Maisha sessions of approximately 45 minutes will consist of 30 of minutes radio listening plus 15 minutes of discussion. The basic meeting format is a weekly peer-facilitated radio listening group based on edutainment approaches, with additional participatory activities facilitated by peer leaders with pre-recorded audio support. The radio programme is built around story-based learning through a radio drama series featuring the character Bi Stawisha, first developed during the pilot, and offers plenty of scope for strategic integration of the project’s key behavioural objectives. Bi Stawisha will experience enriched storylines and meaningful interactions with other characters that allow for authentic moments referencing maternal and child nutrition. Characters will model key behaviours and discuss challenges related to these behaviours in non-lecturing, naturally occurring exchanges. The format of the radio programme is provided in Figure 2.2.

Supporting materials in this first phase are limited to attendance registers, membership cards, and a couple of visual take-home materials. In the planned second phase (with a duration of six months), an additional activity using pre-recorded audio on SD cards along with a supporting activities and materials toolkit, which will be added to one session a month. The monthly meeting sequence will then consist of three radio plus (radio+) discussion sessions and one radio plus supplementary group activity.

Figure 2.2. Format of the radio programme



3. CONCEPTUAL FRAMEWORK

Behavioural objectives and pathways of change

Stawisha Maisha includes key behavioural objectives for nutrition:

- **Maternal health and nutrition:** Attend antenatal care (ANC) services early in pregnancy; eat and provide (the nutritional equivalent of) one extra, balanced meal each day during pregnancy; attend and access antenatal services, including nutritional counselling
- **Infant and young child feeding:** Exclusive breastfeeding for infants up to 6 months old, with no water supplementation; introduce nutritionally balanced solid foods at six months and continue breastfeeding up to age 2 or beyond; attend and access health services for children younger than 5, including growth monitoring, vitamin A supplementation, and nutrition counselling
- **Early stimulation and development:** Incorporate into daily routines actions and exercises that increase motor, cognitive, and social development of infants and young children (from birth to age 6)

Achievement of each key behavioural objective relies on certain preconditions being in place. A set of cross-cutting preconditions, mostly life skills or social-emotional competencies, that are important to achieving Stawisha Maisha's nutrition-specific aims were identified as follows:

- Increase sense of self-efficacy
- Increase peer support (giving and receiving)
- Increase openness to learning and change
- Develop new aspirations for self and child(ren)
- Improve planning and goal-setting skills
- Improve skills for analyzing and solving problems
- Increase resilience in the face of challenges and setbacks

Although Stawisha Maisha has a clear focus on nutrition, the design—and the Radio+ approach—may enable integrating additional behavioural objectives related to issues other than nutrition, based on PSSN II's other SBC priority issues. The theory of change for Stawisha Maisha (shown in Figure 3.1) builds on the grounds that to increase the adoption of high-impact MIYCF practices, the knowledge, motivations, and feelings of self-efficacy of caregivers need to be improved. The indicators that the intervention aims to change and that are measured in the impact evaluation are listed in Appendix 1. We hypothesize that Stawisha Maisha will improve child nutrition through the pathways outlined in Figure 3.1.

As indicated in Figure 3.1, we hypothesize that the Stawisha Maisha intervention, by providing free radios, discussion groups, and edutainment broadcast programming, will directly

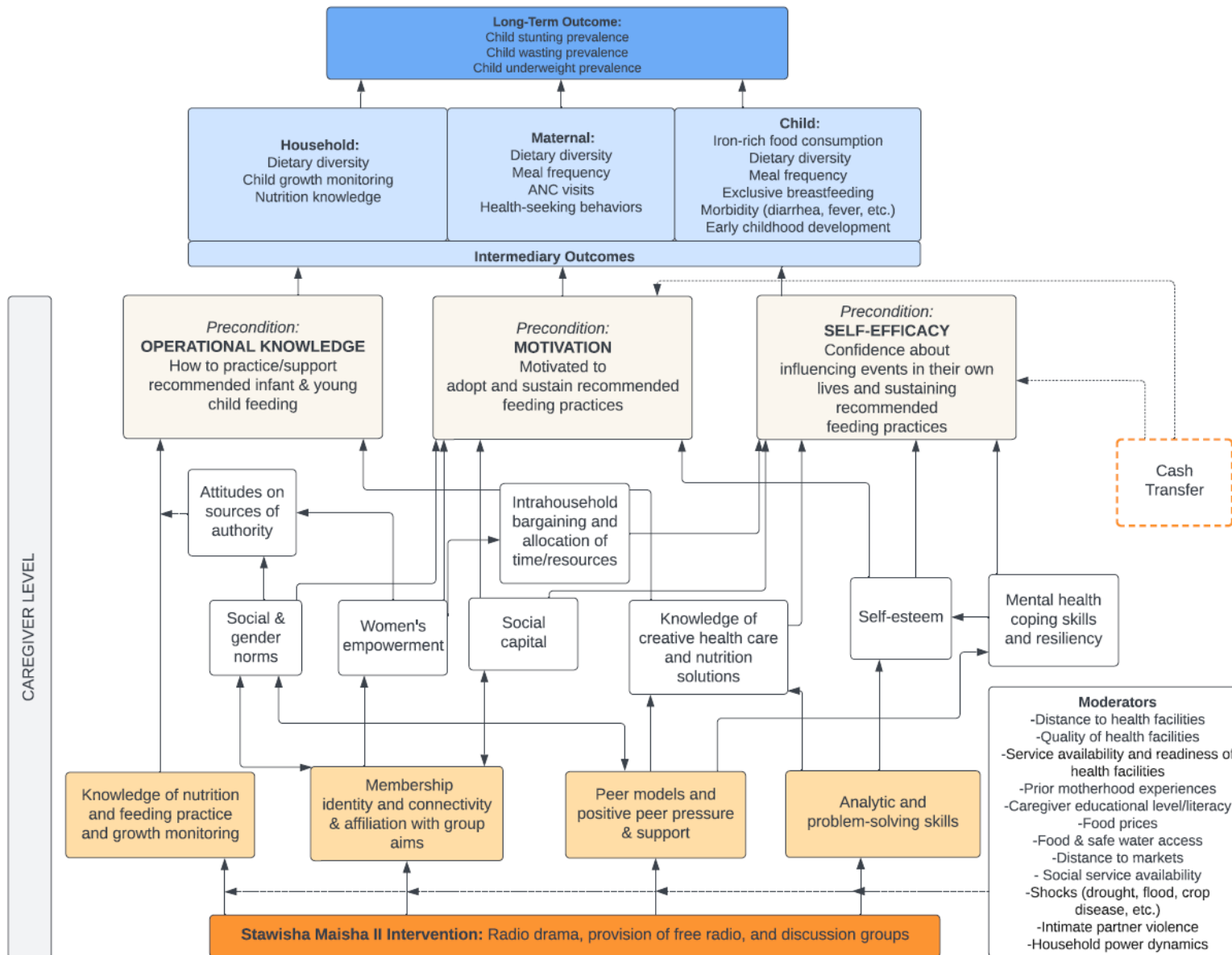
influence beneficiaries' (1) knowledge of maternal and child nutrition and feeding practices, and knowledge of child growth monitoring; (2) membership identity, group connectivity, and affiliation with the group's aims; (3) access to peer models and positive peer pressure and support; and (4) analytic and problem-solving skills. These areas subsequently lead to pathways of change via the following:

- Social and gender norms
- Women's empowerment
- Social capital
- Attitudes on sources of information
- Intra-household bargaining and allocation of time and resources
- Knowledge of creative health care and nutrition solutions
- Self-esteem
- Mental health coping skills and resiliency

Through the highlighted pathways, Stawisha Maisha aims to influence three preconditions: (1) operational knowledge (of nutritional practices), (2) motivation (to adopt and sustain these practices), and (3) self-efficacy (confidence in one's abilities). These preconditions then affect intermediary outcomes at the household level (for example, household knowledge about child growth monitoring), the maternal level (for example, antenatal care visits) and the child level (for example, dietary diversity). These intermediary outcomes are the driving forces for reducing the prevalence of long-term (12+ months) child stunting and wasting.

The theory of change maps out various possible pathways through which the Stawisha Maisha intervention can have a positive impact on maternal, infant, and young child feeding knowledge practices. Furthermore, the theory of change includes pathways that are related to each of the key research questions for impact (see Section 4). Research question 1.1 is presented in the theory of change as the long-term outcome of stunting prevalence. Research questions 1.2, 1.3, and 1.6 are all intermediary outcomes that stem from the intervention and are theorized to impact the long-term outcome of stunting prevalence. Research questions 1.4, 1.5, and 1.7 are related to preconditions and intermediary steps in the theory of change. Finally, research question 1.8 addresses the overall connections and pathways between intermediary steps, preconditions, and outcomes in the theory of change.

Figure 3.1. Stawisha Maisha theory of change



4. STUDY DESIGN AND SAMPLING

4.1. Evaluation stakeholders

The evaluation will provide the government of Tanzania (including TASAF, the prime minister's office, and other relevant ministries), UNICEF, and PSSN II participants with rigorous evidence on the ability of Stawisha Maisha to achieve its objectives. The evaluation stakeholders include TASAF, which implements the PSSN II and Stawisha Maisha programs; and UNICEF, which provides technical assistance around these social protection programs. Findings from the evaluation can be used to assist TASAF in further adapting Stawisha Maisha and/or other cash plus interventions in the future. Moreover, findings around the receipt of information via radio messaging can be used by TASAF to inform its modes of communication with TASAF participants.

4.2. Evaluation objectives

The purpose of the longitudinal mixed-methods impact evaluation of *Stawisha Maisha* is as follows:

1. Improve the learning about synergies between social protection and maternal and child nutrition—in particular, about integrating cash transfers and SBC to improve MIYCF practices and access to nutritious food. This will be accomplished through dissemination (nationally and internationally) of impact evaluation findings related to these outcomes.
2. Generate lessons learned to inform current and future programming. This will be accomplished through national dissemination of findings related to all outcomes.
3. Feed into the broader academic and policy debate at the global level about the effectiveness of cash plus interventions aimed at reducing stunting, underweight, and wasting among children ages 0 to 5. This will be accomplished through dissemination of impact evaluation findings related to stunting, underweight, and wasting.

The overarching objectives of the impact evaluation of *Stawisha Maisha* are as follows:

1. To understand whether an SBC component focused on primary caregivers of children ages 0 to 5 and layered on top of a cash transfer program can improve MIYCF practices and, in turn, reduce stunting in the long term (*impact*)

2. To understand whether radios and/or the use of the Radio+ approach were effective means of communicationⁱⁱⁱ with PSSN II beneficiary households to improve nutrition knowledge and outcomes, and to further understand whether radio can be used for rollout of social and behavioural change on issues in addition to nutrition (*effectiveness*); this will be achieved through examining outcomes related to messaging and via key informant interviews with intervention implementers (TASAF staff) at follow-up rounds

Alignment with sustainable development goals (SDGs)

The intervention and evaluation objectives are related to the following SDGs and targets:

- SDG 2: Zero hunger
 - **Target 2.2:** End all forms of malnutrition—including achieving, by 2025, the internationally agreed targets on stunting and wasting in children younger than 5—and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons.
- SDG 5: Gender equality and women’s empowerment
 - **Target 5.4:** Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate.

In addition to relevance to the SDGs, this intervention and evaluation are aligned with the intent of the Convention on the Rights of the Child (CRC), specifically as it aims to support families and provide them with assistance to fully assume their roles within the community. In particular, Stawisha Maisha promotes full and harmonious development of children.

4.3. Research questions

Drawing on the theory of change, this evaluation was designed to answer the following research questions.

The key research questions for impact (what and how) are as follows:

- 1.1. How has Stawisha Maisha impacted stunting, wasting, and underweight at follow-up(s)?
- 1.2. How has Stawisha Maisha impacted MIYCF practices/diets at follow-up(s)?
- 1.3. How has Stawisha Maisha impacted early childhood development (ECD) outcomes at follow-up(s)?
- 1.4. How has Stawisha Maisha impacted the knowledge of programme beneficiaries on MIYCF at follow-up(s)?

ⁱⁱⁱ Disseminating reminders and new programme information.

- 1.5. At follow-up(s), how has Stawisha Maisha impacted preconditions to achieving Stawisha Maisha's nutrition-specific aims (or intermediate outcomes)? Preconditions may include peer support, participants' sense of self-efficacy, aspirations for self and children, ability to plan and set goals, skills for analysing and solving problems, resilience, and openness to learning and change.
- 1.6. How has Stawisha Maisha impacted household food security at follow-up(s)?
- 1.7. How has Stawisha Maisha impacted women's empowerment at follow-up(s)?
- 1.8. What are the pathways through which Stawisha Maisha has an impact on individual and household level outcomes?

Key research questions for impact effectiveness are as follows:

- 2.1. What was the uptake and operational performance of the Stawisha Maisha cash plus intervention?
- 2.2. Is the radio an effective way to communicate with PSSN II beneficiaries? Has the radio been effective at delivering messages, notices, or reminders to programme beneficiaries?
- 2.3. Can the Radio+ approach be used to roll out social and behavioural change on issues in addition to, or other than, nutrition? Can the Radio+ approach be used to enhance community sessions?

4.4. Study design

This evaluation uses a cluster randomized controlled trial (cRCT) design to estimate causal impacts of the Stawisha Maisha intervention. It is important to note that the study will only estimate impacts of Stawisha Maisha (that is, the "plus" component) and not the combined PSSN II + Stawisha Maisha impacts. This is because both treatment and control groups receive the PSSN II, and the randomized component is Stawisha Maisha.

Eligibility criteria for the intervention and evaluation are as follows:

In the first stage of selection into the intervention, **villages** met the following eligibility criteria:

1. Must be located in a rural area
2. Must have at least nine PSSN II households with a child younger than 5

Second, at the **household level**, eligibility criteria were as follows:

1. Participates in the PSSN II program
2. Has a child younger than 5

Third, at the **individual level**, eligibility criteria were as follows:

1. Status as mothers or primary caregivers of children age 5 or younger (including expecting mothers)

4.5. Power calculations

To determine the required sample size, power calculations were conducted based on the following key indicators (selected by the research team with input from UNICEF and TASAF): stunting among children ages 0 to 5, dietary diversity among children ages 6–23 months, early antenatal care rates among women ages 15 to 49, and consumption of iron-rich foods among children ages 6–23 months. Prevalence of these indicators among the poorest 20 percent of the population in the three selected regions was calculated by the research team using data from 2015–2016 Demographic and Health Surveys (DHS).^{iv} To detect impacts of 5 percentage point differences in the prevalence of these indicators between the study arms with 80 percent power, it was determined that 420 households per study arm would need to be sampled using a simple random sampling (SRS) design. However, since we are using a cluster sampling design (households are selected within villages), we calculated intracluster correlation coefficients (ICC) among the four above-referenced indicators (using data from households in the lowest wealth quintile in rural areas of the selected regions in the 2015–2016 DHS) to determine the design effect. We used an average ICC across the indicators of 0.12. Combined with an expected average of 15 households per cluster (village), we calculated a design effect of 2.68. As a result, it was determined that 75 villages with a minimum sample of 1,126 households per study arm would be needed to detect impacts of 5 percentage points. This resulted in a total sample size of 150 villages and a minimum requirement of 2,252 households.

4.6. Sample selection

Three regions were selected for the evaluation (Rukwa, Ruvuma, and Geita). Selection criteria included high stunting prevalence and burden (both regionally, as measured in the 2015–2016 and 2022 DHS, as well as calculated among the poorest wealth quintile from each region using data from the 2015–2016 and 2022 DHS^v) and low rates of early antenatal care, exclusive breastfeeding, and dietary diversity among children ages 6–23 months. These criteria resulted in a priority list of seven regions: Arusha, Geita, Kagera, Kigoma, Mwanza, Rukwa, and Ruvuma. From this list, the final three regions were selected by UNICEF, TASAF, and the research team based on stunting burden and prevalence, as well as logistical concerns related to intervention implementation and data collection, and timing of recertification activities (ongoing in 2023) by TASAF to evaluate PSSN II households' continuing eligibility for the PSSN II program. This was intended to avoid sampling

^{iv} Data from DHS 2022 were not yet publicly available in March 2023 when we conducted power calculations.

^v We used 2015–2016 data for these calculations, as data from the 2022 DHS were not yet publicly available at the time our sampling strategy was designed.

households for the evaluation that would no longer be eligible to receive the PSSN II or Stawisha Maisha after recertification, which concluded in September 2023.

Once regions were selected, the research team randomly selected one main district and one back-up district per region to include in the evaluation, after excluding any districts that were either (1) very unique and would not be a good representation of the larger region or (2) already participating in an evaluation of the PSSN II program (which is separately being led by the World Bank and National Bureau of Statistics). Back-up districts were selected for sampling additional villages and households if the minimum number of clusters (villages) and households needed per region could not be obtained in the main district. Main districts were as follows: Nkasi in Rukwa, Namtumbo in Ruvuma, and Geita DC in Geita. Backup districts were as follows: Nyasa in Ruvuma and Nyanghw'wale in Geita. In Rukwa, the back-up district selected was Kalambo, but selection from this district was not needed.

Next, we proportionally selected clusters (villages) by region based on the general population of TASAF households, for a total of 150 selected villages. Final distribution was as follows: 54 villages in Geita, 40 villages in Rukwa, and 56 villages in Ruvuma. Villages were eligible for selection into the evaluation if they had at least nine PSSN II households eligible for Stawisha Maisha.

Within selected villages, we aimed to interview an average of 15 households per village. Before data collection, TASAF provided the names and contact information for households in the selected districts and villages, and the study team performed two rounds of verification phone calls. The first was to a local listing assistant who was often a village leader and was identified by the TASAF coordinator in each PAA. This call was to systematically check the entire administrative list of households for their cluster to verify the number and ages of any children younger than 5 in each household. Where the local listing assistant did not know the household, they made in-person visits to confirm the household's details. Second, we called five eligible households from each cluster to confirm the information shared by the local listing assistant. Among 3,155 verified households in the 150 selected villages, 2,250 households were randomly selected for inclusion in the study. The household selection was done in two stages. In the first stage, we selected all households within the 54 villages where there were 15 or fewer eligible households, for a total of 672 households (29.9 percent of the sample). Next, because these villages fell short of the average target cluster size, oversampling was required in larger villages. For equal oversampling in the remaining village clusters, where there were more than 15 eligible households, up to 18 households were randomly selected per village. This sampling achieved a total of 2,241 households. To reach the study target of 2,250, the final nine households were randomly selected from the larger villages that still had potential respondents remaining (that is, cluster size of >18 eligible households).

After baseline data were collected (July to August 2023), research team members from TASAF conducted the randomization into treatment and control arms in October 2023. We randomized half of the villages into the treatment arm and half into the control arm, resulting

in 75 total treatment villages and 75 total control villages. After a 12-month period, we intend to roll out Stawisha Maisha to the control group (delayed entry). The randomization was done in public events to maximize transparency and to mitigate any concerns from officials in villages selected for the control arm. One randomization event was held per region. Randomization events were held on the following dates: October 4 in Geita, October 9 in Rukwa, and October 13 in Ruvuma. At each event, officials from the districts (main and backup districts) and villages were invited to attend. Respondents included the district executive directors, ward executive officers, and TASAF officials. In each region, all study villages were included on individual pieces of paper, which were then rolled up and put in a bucket. The district chairperson selected villages one at a time, the district executive director read out the village names, and the TASAF research team member recorded the village name and study ID number. Once all the villages were selected and noted in order of selection, a coin was tossed. If the coin landed on heads, then the first half of selected villages was selected for treatment, whereas the remaining villages were allocated to the control arm. If the coin landed on tails, then the second half of selected villages was selected for treatment.

4.7. Survey instruments

Five types of questionnaires were implemented (see [online supplementary materials](#) for questionnaires), including the following:

1. Quantitative household surveys with caregivers (n = 2,256 including the anthropometric measurement of children younger than 5 (n = 3,605))
2. Quantitative health facility surveys (one primary health care facility or dispensary per community, where available; n = 87)
3. Quantitative community surveys (n = 150)
4. Qualitative in-depth interviews (IDIs) with caregivers (n = 17)
5. Qualitative focus group discussions (FGDs) with caregivers (n = 8)

Quantitative household questionnaires covered multiple topics and were based on the programme's theory of change. Through these questionnaires, we measured several proximate or pathway indicators (for example, MIYCF knowledge, self-efficacy, food security, and breastfeeding), given that distal outcomes such as stunting may take longer than the period of the evaluation to demonstrate changes. Health facility surveys were administered to staff at each primary health facility in the sample area to capture information on facility characteristics, equipment, services, drugs and medical supplies, and personnel. Community surveys were administered to a group of knowledgeable individuals (such as teachers and village leaders) in each community to assess topics such as access to basic services and health facilities; nutrition information and interventions; village practices and customs surrounding media and alcohol use; and community events, shocks, and conflicts. Survey modules were replicated from existing national survey instruments such as the Multiple

Indicator Cluster Surveys (MICS), the Demographic and Health Surveys (DHS)^{vi}, and the Service Availability and Readiness Surveys (SARA)¹⁷ where feasible.

Semi-structured (qualitative) in-depth interviews and focus groups were conducted with a sample of caregivers to explore mechanisms and pathways for impacts on outcomes of interest. To avoid survey fatigue, caregivers for the qualitative interviews were selected among households not selected for the quantitative sample (but living in selected villages). The qualitative sample covered two out of the three study regions (Rukwa and Ruvuma) because qualitative data collection and analysis aim to explore themes in more depth (not breadth), and findings are not meant to be generalizable to larger populations. Moreover, evidence suggests that qualitative studies tend to reach saturation (the point at which additional knowledge gained is minimal) after approximately nine to 17 interviews.¹⁸ The in-depth interviews followed a subset of topics from the quantitative questionnaire. They were designed to more deeply explore the mechanisms of intervention impacts, with a focus on nutrition, breastfeeding, and antenatal care knowledge and practices, as well as radio information access, household food security and decision making, and sense of community affiliation. Also, in-depth interviews allow for openness and confidentiality, unlike focus group discussions.

Focus group discussions were conducted with intended Stawisha Maisha recipients who were also caregivers, separately from the in-depth interviews (n = 48 respondents, across eight focus groups in eight different villages). The focus group discussion guides centered on the main research questions and loosely followed that of the IDI guide, including the same subset of topics from the quantitative questionnaire: nutrition (including breastfeeding, complementary feeding, diet diversity, and vitamin supplementation) and antenatal care knowledge and practices, as well as radio information access, household food security and decision making, and sense of community affiliation. In addition, the FGD guide was used to explore similarities and shared sentimentalities among group respondents around concepts that were difficult to capture in the in-depth interviews, including openness and barriers to change and group concerns about MIYCF practices. Four focus groups took place in Rukwa and four in Ruvuma.

4.8 Ethical guidelines and study registration

We adhered to Ethical Principles and Guidelines for the Protection of Human Subjects of Research as outlined in the Belmont Report. All study personnel, including principal investigators, co-investigators, data managers, research assistants, and data collection enumerators, received training in the ethical conduct of research from either the Collaborative Institutional Training Initiative (CITI) or FHI360 (<https://www.fhi360.org/expertise/ethical-standards-and-training>). All study members acted in accordance with recommendations and

vi The DHS Program website. Funded by USAID, <http://www.dhsprogram.com>. Accessed March 26, 2023.

guidance around adherence to ethical principles and procedures, principles of “do no harm,” and confidentiality with respect to data collection.

Ethics approval for the study was granted by the National Institute for Medical Research (NIMR/HQ/R.8a/Vol.IX/4367). This study is registered with the Pan African Clinical Trials Registry (PACTR Registration Number PACTR202307882241657). This study adhered to all principles and guidelines outlined by the UNICEF Ethical Research Involving Children (ERIC) program.

Interviewers were trained on ethical data collection and informed consent. Written informed consent was obtained from all study respondents ages 18 or older being interviewed. If a Stawisha Maisha eligible caregiver was a pregnant woman, mother, or caregiver younger than 18 and married, then she was understood to be acting as an emancipated minor (in an adult capacity), and we obtained informed consent from her. However, if a Stawisha Maisha eligible caregiver was a pregnant woman, mother, or caregiver younger than 18 and not married, then we obtained informed consent to interview her from the household head and informed assent from the individual female (see consent forms in [online supplementary materials](#)). This is relevant to the household surveys, where the main respondent may have been an unmarried female younger than 18 (if she was eligible for Stawisha Maisha and the only eligible female in the household). However, for community, health facility, in-depth qualitative interviews, and qualitative focus group discussions, all respondents were adults ages 18 years or older. Informed consent includes the ethical components regarding (1) objectives and content of the study, (2) privacy and data security, (3) voluntary participation, (4) the right to refuse or skip any questions without consequences, and (5) sources to follow up regarding complaints or further information on the study. Copies of consent forms were shared with respondents and were read aloud in Swahili to respondents, and consent was obtained orally and recorded via signature or thumbprint. The reason consent forms are read aloud is that some respondents may be unable or unwilling to read along, so this ensures that they understand the essence of the study and what they are agreeing to.

4.9. Data collection training and fieldwork

Quantitative and qualitative data collection trainings were held separately. Both trainings included information on the study topic, in-depth review of study tools and consent forms, and research ethics. The quantitative (including anthropometric) data collection training was held June 30 to July 8, 2023, in Bukoba. This included supervisor (n = 6), interviewer (n = 33), and anthropometric (n = 13) trainings and an outdoor field practice (July 8, 2023). The quantitative training was led by EDI Global, with support from PRESTO and TASAF study team members. Qualitative interviewer (n = 3) training was led by Empathea and was held in Dar es Salaam from July 10 to 14, 2023.

Data collection was carried out between July 11 and August 26, 2023, by EDI Global (quantitative fieldwork), with support from PRESTO personnel and Empathea (qualitative fieldwork). All data collection was carried out in Kiswahili. Before all interviews, informed

consent and assent (for children) was obtained from respondents. The respondents were informed that they could withdraw consent and cease participation at any time without any penalty. Respondents provided written consent or a thumbprint (in the case of individuals who could not write or sign their name). Quantitative data collection was carried out using computer-assisted personal interviewing (CAPI), and qualitative interviews and focus group discussions were audio-recorded and then manually transcribed and translated from Kiswahili to English. Anthropometric measurements of children younger than 60 months were taken using digital standing scales and portable measuring boards. We followed recommended methods to account for children's clothing weight in our analysis.¹⁹ If a child was clothed during their weight assessment, we subtracted 100 grams from weight measurements before calculation of anthropometric outcomes. Household questionnaires took approximately 68 minutes, on average, to complete in-depth interviews, and focus groups were conducted in person by research assistants, with a note taker present at each of the eight focus group discussions. In-depth interviews lasted approximately 60 minutes, and the focus group discussions were approximately 90 minutes long.

5. DATA ANALYSIS

5.1. Quantitative methods

Baseline analyses

This baseline report serves to (1) describe the sample used in this evaluation and (2) report baseline balance between treatment and control arms^{vii} of the study to determine whether randomization was successful. To assess the latter, we have tested whether the randomization resulted in statistically equivalent treatment and control groups. We tested all primary outcome measures and control variables for statistical differences between the treatment and control groups using ordinary least squares (OLS) regression, controlling for stratification variables on the level at which randomization was implemented (region). Sampling weights were utilized and standard errors adjusted for clustering at the village level to account for the nested nature of our data, because the survey design clustered households within communities (that is, the unit of randomization). In the results section, we present pooled means (treatment and control groups together), treatment group means, control group means, and a *p*-value for each indicator's mean comparison test (as calculated by OLS regression). We define statistical significance as a *p*-value lower than 0.05 ($p < .05$). Differences that are not statistically significant indicate a successful randomization and baseline balance. This indicates good internal validity of the study (that is, successful randomization), which means that we can attribute observed differences at follow-up to impacts of the intervention. In contrast, statistically significant differences between study arms at baseline would indicate that the sample is not “balanced” on that outcome, and thus differences observed at follow-up waves on that same outcome may be attributable to the intervention or to systematic differences that already existed at baseline between the treatment and control groups.

Follow-up analyses

After follow-up data are collected (planned for 2025), we will analyse intervention impacts by comparing baseline data to follow-up data using analysis of covariance (ANCOVA) models. In ANCOVA models, intervention impacts are estimated as a function of the treatment indicator and a set of control variables, including the baseline value of the outcome of interest.

ANCOVA models will be specified as follows:

$$Y_{1ij} = \alpha_0 + \alpha_1 T_j + \alpha_2 Y_{0ij} + \alpha_3 X_{ij} + \varepsilon_{ij} \quad (1)$$

where Y_{1ij} is the follow-up value of the outcome of interest for the child (or caregiver) i living in community j . T_j is a dummy (binary) variable equal to one if the households resided in a

vii Treatment arms refer to which group of the study a village or individual is assigned to. In this study, there are two groups: treatment and control. The treatment arm gets the intervention, and the control arm does not.

community where Stawisha Maisha was being implemented (treatment group), and zero if the household resided in a community receiving only the PSSN II (control group). Y_{0ij} is a variable measuring the baseline value of the considered outcome, and X_{ij} is a vector of controls including sex, age at baseline, and region fixed effects. Finally, ε_{ij} is the error term. The estimated coefficient of interest is $\hat{\alpha}_1$, which measures the impact of Stawisha Maisha on the outcome of interest. In equation (1), the variable T_j is equal to one for all households living in a treatment village, even if that household's caregiver did not participate in the intervention. In this way, we will estimate intent-to-treat (ITT) impacts.

As a robustness check, we will also estimate average treatment on the treated (ATT) effects using self-reported information on attendance at the intervention activities. Although all PSSN II participating women living in a household with a child younger than 5 in treatment villages are eligible to participate in Stawisha Maisha, the decision to participate in intervention activities may be related to unobservable characteristics,^{viii} which may also influence the outcomes of interest. A simple specification using participation instead of the village-level treatment indicator in equation (1) would provide biased impact estimates. Thus, we will assess ATT impacts using an instrumental variable approach, where the endogenous Stawisha Maisha participation variable will be instrumented with the exogenous village-level treatment indicator.

We will use the following two-stage least squares instrumental variable specification:

$$\text{First stage: } \textit{Attend Stawisha Maisha}_{ij} = \beta_0 + \beta_1 T_j + \beta_3 X_{ij} + \varepsilon_{ij} \quad (2a)$$

$$\text{Second stage: } Y_{1ij} = \gamma_0 + \gamma_1 \widehat{\textit{Attend Stawisha Maisha}}_{ij} + \gamma_2 Y_{0ij} + \gamma_3 \gamma_{ij} + \varepsilon_{ij} \quad (2b)$$

where $\textit{Attend Stawisha Maisha}_{ij}$ is a binary variable equal to one if the caregiver attended at least one Stawisha Maisha session, and zero otherwise. In the first stage, this is estimated as a function of whether the household lived in a Stawisha Maisha village ($T_j = 1$) and the vector of controls X_{ij} . The predicted value from the first stage ($\widehat{\textit{Attend Stawisha Maisha}}_{ij}$) is then used in the second stage, in which the estimated coefficient γ_1 measures the impact of participating in Stawisha Maisha.

For anthropometric outcomes among children younger than 5, we will estimate programme impacts at endline in two ways: (1) longitudinal analysis of the panel sample of children measured at baseline and endline and (2) comparison analysis of the cross-sections of children younger than 5. In the first approach, approximately one-fifth of the children measured at baseline will age out of the eligible age range each year. Thus, the longitudinal analysis will be estimated among a subsample who were interviewed at both baseline and endline and remained younger than 5 at both rounds. In the second approach, use of ANCOVA is not possible because some children will be missing baseline measures (those

viii Unobservable characteristics refer to those which are not easily measured and may include internal motivation or other such characteristics.

who were born between rounds or who moved into study households between rounds). In the second approach using the pooled cross-sections, we will implement a difference-in-differences modelling approach.

5.2. Qualitative methods

Data analyses

An initial codebook was developed using a priori themes from the semi-structured interview and discussion guides. The codebook was tested for reliability by three research assistants through the blind test coding of one IDI and two FGDs each. After completion of the blind coding exercise, the research team discussed their findings and further refined the codebook using thematic content analysis²⁰ to reflect changes in the primary categories and themes, and to create the addition of sub-themes.

Once consensus was reached regarding preliminary categories and themes, transcribed and translated IDIs and FGDs were divided evenly among three research assistants and coded line by line. The categories were cross-analyzed to identify further themes and sub-themes, summarizing patterns, merging related codes into larger themes and categories, and collapsing or discarding irrelevant categories and themes. Tables were utilized to compare and ground themes across categories and to trace pathways between experiences described in the interviews.²¹ Illustrative quotes were used to reflect and support key themes and sub-themes. A final codebook was established with six primary categories: (1) community composition; (2) feelings of affiliation to community; (3) household decision making and gender dynamics; (4) mother, infant, and young child feeding knowledge and practices; (5) future aspirations for children; and (6) openness to learning and change.

6. SAMPLE CHARACTERISTICS

Figure 6.1. Study regions



The regions comprised in our study sample are illustrated in Figure 6.1. The Geita region is located in the Lake Zone of Northern Tanzania; Rukwa and Ruvuma are both situated in the southern highlands on the border with Zambia. All three regions border one of the great lakes (Lakes Victoria, Tanganyika, and Malawi, respectively). According to DHS data, in all regions there is high stunting prevalence and burden and low rates of early antenatal care, exclusive breastfeeding, minimum meal frequency, and minimum dietary diversity among children ages 6–23 months.²²

Results from the quantitative and qualitative analysis are summarized in Chapters 6 through 11. This section describes baseline characteristics for each surveyed household, including demographics of caregivers interviewed and household heads. Overall, there were no statistically significant differences between treatment and control groups. So, unless otherwise specified, the pooled mean is used when describing the sample.

6.1. Composition

Household composition is presented in Table 6.1.1. The average household size was 6.6 members with 1.6 children per household. The majority of all households interviewed at baseline ($N = 2,256$) had a female caregiver/survey respondent (99.4 percent). The majority of respondents were the biological mother of a child younger than 5 in the household (87.6 percent), some were the grandmother (11.1 percent), and a few were fathers, adoptive parents or stepparents, other relatives, or a non-relative. The average age of caregivers was 36.2 years old (the age range was 12 to 87). There were no statistically significant differences between the treatment and control groups for these sample characteristics.

In the qualitative sample, in-depth interview respondents were all women, nine of whom were from Ruvuma and eight from Rukwa. Respondents had a mean age of 36 (the youngest was 19, and the oldest was 70). Among in-depth interview respondents, the mean number of household members was six, the mean number of children per household was four, and the mean number of children younger than 5 per household was two. Three interview respondents were widowed, four were currently not married (they either had been separated or had never been married), and 10 were married. Eleven women had completed primary school, two had received some primary schooling, and four reported that they had received no formal education. None of the women interviewed had received formal education beyond primary school.

The mean age of focus group respondents was 37 (the youngest respondent was 18, and the oldest 78). As with the in-depth interview respondents, none of the women in the focus groups had received education beyond primary school: 25 women had completed primary school, eight reported they had some primary school education, and 15 had received no formal education.

Table 6.1.1. Sample characteristics

	Pooled mean	Treatment mean	Control mean	p-value
# Household members	6.634	6.595	6.674	0.657
# Children in household	1.578	1.568	1.588	0.722
Caregiver/respondent				
Age	36.199	36.221	36.175	0.837
Female	0.994	0.996	0.993	0.411
Male	0.006	0.004	0.007	0.411
Head of household				
Age	45.503	45.529	45.476	0.720
Female	0.365	0.365	0.366	0.944
Male	0.635	0.635	0.634	0.944
N	2,256	1,137	1,119	

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

6.2. Living conditions

To compare respondents to the general Tanzania population, and to understand how living conditions may influence the success of the Stawisha Maisha intervention, we asked questions related to housing conditions, water and hygiene, and sanitation.

Table 6.2.1 provides a comprehensive overview of baseline dwelling indicators, providing insights into the living conditions of the households in our baseline study. The households in our sample have an average of 2.9 rooms. Most households (more than 99 percent) had improved outer walls, whereas only 13.5 percent of households had improved flooring. Access to improved roofing materials is widespread at 63 percent.

However, piped water remains a rare commodity for most households, with just 1.3 percent having access, and 11 percent of households actively treat their water. Approximately 32.5 percent have improved toilet facilities, and the average number of households with which the households in our sample share a toilet facility is 0.5. Only 22 percent of households had soap in the dwelling.

In qualitative interviews and focus group discussions, some women reported being able to purchase water access from their neighbors. If they did not have the money to purchase water access, however, they would need to go some distance to obtain water. Respondents also pointed out that wild animals were a nuisance, and sometimes an outright threat, to their communities.

“... if an individual volunteer[s] to dig a well at their home ... we as citizens contribute and draw water from it ... if we don't have the money to contribute, then we have to go to a distant place for water.” (Respondent 6, FGD 6, Songambebe, Ruvuma)

In terms of cooking fuels, firewood is predominant in most households (91.8 percent), and torches are the most common lighting source (16.9 percent).

In summary, the baseline characteristics of living conditions in the sample show that there are no statistically significant differences between the treatment and control groups across all dwelling indicators.

Table 6.2.1. Baseline means of dwelling indicators by treatment status

	Pooled mean	Treatment mean	Control mean	p-value	DHS mean
Number of rooms	2.896	2.835	2.961	0.103	
Improved outer walls (mud, burnt bricks, concrete)	0.995	0.997	0.994	0.505	0.989
Improved floor (concrete/cement wood, tile) [∇]	0.135	0.155	0.115	0.244	0.369
Improved roof (metal sheets, tiles) ^α	0.631	0.654	0.607	0.221	0.833
Piped water (into dwelling, yard/plot/compound) ^β	0.013	0.012	0.014	0.798	0.026
HH actively treats water	0.110	0.105	0.116	0.510	
Improved toilet ^θ (ventilated improved pit latrine, pit latrine with slab, flush to pit (latrine), flush to piped sewer system, composting toilet)	0.325	0.312	0.338	0.658	0.585
Number of households sharing the toilet	0.497	0.490	0.504	0.760	
Household's main fuel for cooking: firewood	0.918	0.902	0.936	0.487	0.863
Dwelling main lighting source: torch	0.169	0.171	0.167	0.785	
Dwelling main lighting source: main electricity	0.062	0.069	0.054	0.559	
Dwelling main lighting source: Kerosene/paraffin lamp	0.051	0.067	0.035	0.193	
Soap in household for handwashing	0.213	0.223	0.202	0.499	
N	2,256	1,137	1,119		3,170

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. DHS means refer to means calculated among rural households in the study regions (Geita, Rukwa, and Ruvuma) using data from the 2022 DHS. Not all values of interest had an equivalent question in DHS (i.e., DHS asks the number of dwelling rooms for sleeping only).

[∇] In DHS, the flooring material categories are named wood planks, parquet or polished wood, ceramic tiles, and cement.

^α Not all survey answer categories match those in DHS; here, we calculate for “metal” and “ceramic tile.”

^β The DHS figure does not include a piped into compound option—only piped into dwelling yard and plot.

^θ For DHS, improved toilet includes ventilated improved pit latrine (VIP), pit latrine with slab, flush to pit (latrine), flush to piped sewer system, and composting toilet.

In summary, the treatment and control groups were balanced with respect to living conditions.

6.3. Livelihoods

Next, we delve into the livelihoods of households within our sample, beginning with an examination of baseline socioeconomic and livelihood indicators. We then explore the range of activities in which households engaged over the past year, connecting these activities to the data we collected about crops, livestock, and other relevant factors. Last, we investigate household asset ownership.

In Table 6.3.1, we present a detailed overview of baseline economic indicators. These indicators encompass essential aspects of household livelihoods, including home ownership, livestock ownership, crop cultivation in the last 12 months, participation in fish farming, operation of non-farm enterprises, the number of non-farm enterprises, involvement in TASAF livelihood activities, participation in TASAF public works programs, and food purchases made on credit over the past year.

The majority of households in our study (79.4 percent) own their dwelling. Approximately one in four households (23.5 percent) operated non-farm enterprises in the past year.

Agriculture plays a significant role in the livelihoods of the households in our study, with around 93 percent of them engaging in crop cultivation in the past 12 months. Regarding livestock ownership, most households in our sample (54.2 percent) own livestock. However, fish farming is less common (0.8 percent engage in this).

In qualitative interviews, respondents indicated that the main source of business or income in their villages involved farming enterprises. The majority of women did not own farms or land, but they cultivated crops for land that was either rented or owned by someone else in the family and took pride in the fact that they could sell and earn money from those crops. However, the price for many crops was reported to be very low, making it difficult for respondents to earn a living wage from what they sold. The crops varied marginally between villages but consisted primarily of maize, soy, sunflowers (for oil), sorghum, and tobacco (in Ruvuma).

“The difficulty is in the business ... you cultivate, but you don’t succeed, the price is too low ... that is, even if you farm, the price we have for sale is not the supposed price.”
(Respondent 7, FGD 4, Mwinuko, Ruvuma)

Some respondents reported animals eating their crops or causing major destruction to their farmland, which left them without both food and the potential for income.

“If you cultivate corn, you succeed, but this year we have hit the wall, there is nothing because of these elephants. If elephants [hadn’t] been here we would have reaped a lot.” (IDI 14, Likuyu, Ruvuma)

Overall, poverty was cited as the primary challenge in the communities. Without income, it was nearly impossible to purchase essential farming equipment—such as plowing cows, fertilizer, or pesticides, which would have made it easier to farm or cultivate crops—leaving respondents with little recourse to lift themselves out of poverty. Because respondents were unable to save food or money at any point in time, they were left with low food stores during the rainy season. Almost one in 10 households (9.2 percent) resorted to buying food on credit in the last year. They could not rely on purchasing food in town, as that required money (to pay for the food) and transportation, which many respondents lacked. Furthermore, markets did not always stock the type of food respondents liked, so even if they could afford to purchase food and find transportation to a market (which many could not), preferred foods still might not be available.

“[Markets] don’t have the capacity to stock everything. But if you have money, you can find someone ... availability-wise, things like bananas and groundnuts, you need to plan a trip to find someone who has the specific type of bananas you need for the dish and mix it with meat. You can get meat if you board a van or motorcycle and travel to the next place, but here, it is not readily available.” (Respondent 6, FGD 6, Songambebe, Ruvuma)

In terms of participation in TASAF livelihood activities and public works programs, 16.9 percent and 71 percent of households, respectively, have been involved in these programs in the past year.

Table 6.3.1. Socioeconomic and livelihood indicators, by treatment status

	N	Pooled mean	Treatment mean	Control mean	p-value
Own the dwelling	2,256	0.794	0.785	0.804	0.662
Own livestock	2,256	0.542	0.536	0.547	0.777
Grown crops in last 12 months	2,256	0.930	0.932	0.927	0.833
Engaged in fish farming in last 12 months	2,256	0.008	0.010	0.005	0.284
Operates a non-farm enterprise in last 12 months	2,256	0.235	0.233	0.237	0.722
Number of non-farm enterprises [∇]	483	1.087	1.081	1.092	0.743
Participated in TASAF livelihood activity in last 12 months	2,244	0.169	0.193	0.142	0.184
Participated in TASAF public works program in last 12 months	2,244	0.710	0.720	0.701	0.982
Bought food on credit in last 12 months	2,256	0.092	0.097	0.087	0.551

Notes: * Significant at $p < .05$; ** $p < .01$. p-values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. Observations where respondents refused to answer or didn’t know the answer were dropped.

[∇]Conditional on a household reporting it operated any non-farm enterprises within the last 12 months, including operating a store, transport service, home brewing, or trade.

Table 6.3.2 displays the participation rates in various livelihood activities over the past 12 months. Households in the treatment group showed higher engagement in livelihood and entrepreneurial training than those in the control group, with participation rates of 46.9 percent and 25.6 percent, respectively (the difference is statistically significant). All other activities were balanced between treatment and control groups.

Table 6.3.2. Activities the household participated in over the last 12 months[∇]

	Pooled mean	Treatment mean	Control mean	p-value
Savings groups	0.014	0.018	0.009	0.205
Livelihood/entrepreneurial training	0.064	0.090	0.036	0.029*
Received a productive grant	0.137	0.150	0.123	0.441
Linkages to agricultural extension officer or other livelihood services	0.017	0.022	0.011	0.158
N	2,256	1,137	1,119	

Note: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village-level.

[∇] Conditional upon a household reporting that any member participated in livelihood enhancement activities under TASAF in the past 12 months.

Table 6.3.3 offers a comprehensive overview of the crops cultivated, consumed, and sold by sample households within the past 12 months, providing insights into their agricultural practices and dietary habits.

Maize emerged as the most widely cultivated crop, with 93.3 percent of households having participated in its cultivation. The second and third most commonly grown crops were beans and pulses (42.2 percent) and sweet potatoes (32.9 percent). When it comes to consumption, maize remains the dominant crop, with 88.8 percent of households having included it in their diets, reinforcing its central role as a staple food source. The second most consumed crop was beans or pulses, with 38.1 percent of households incorporating them into their meals, followed by sweet potato at 31.8 percent. Maize emerges as the top crop sold, with 19.8 percent of households having participated in its sale. These data underscore the significance of maize, beans or pulses, and sweet potato in both cultivation and consumption, while also emphasizing the potential income-generating opportunities presented by maize within our study population. The only significant disparity between treatment and control groups is the proportion of households selling the beans and pulses that they grew.

Table 6.3.3. Baseline means crops grown, eaten, and sold by households in the last 12 months[∇]

	Crops grown				Crops grown and eaten				Crops grown and sold			
	Pooled	Treated	Control	<i>p</i> -value	Pooled	Treated	Control	<i>p</i> -value	Pooled	Treated	Control	<i>p</i> -value
Bananas	0.133	0.130	0.136	0.979	0.119	0.120	0.117	0.717	0.020	0.024	0.015	0.119
Barley	0.001	0.000	0.001	0.313	0.001	0.000	0.001	0.313	0.000	0.000	0.000	-
Beans or pulses	0.422	0.449	0.393	0.212	0.381	0.399	0.362	0.390	0.083	0.112	0.053	0.005**
Cassava	0.315	0.282	0.350	0.244	0.270	0.246	0.295	0.395	0.043	0.036	0.051	0.407
Coffee	0.015	0.016	0.014	0.894	0.006	0.008	0.004	0.502	0.009	0.010	0.009	0.897
Cowpeas	0.068	0.073	0.064	0.510	0.061	0.062	0.059	0.658	0.006	0.005	0.008	0.586
Groundnut	0.217	0.241	0.192	0.122	0.202	0.226	0.177	0.118	0.040	0.047	0.031	0.189
Irish potato	0.036	0.047	0.025	0.275	0.033	0.043	0.023	0.268	0.005	0.006	0.004	0.670
Maize	0.933	0.938	0.926	0.463	0.888	0.884	0.891	0.891	0.198	0.209	0.187	0.459
Millet	0.048	0.050	0.046	0.720	0.043	0.045	0.041	0.725	0.007	0.008	0.006	0.623
Rice	0.237	0.220	0.255	0.511	0.223	0.206	0.241	0.509	0.069	0.066	0.073	0.822
Sorghum	0.002	0.002	0.003	0.623	0.002	0.002	0.002	0.823	0.000	0.000	0.001	0.306
Soybean	0.110	0.097	0.124	0.390	0.059	0.050	0.068	0.332	0.075	0.059	0.091	0.182
Sweet potato	0.329	0.329	0.330	0.721	0.318	0.314	0.321	0.864	0.047	0.041	0.053	0.378
N	2,091	1,049	1,042		2,091	1,049	1,042		2,091	1,049	1,042	

Note: * Significant at $p < .05$, ** $p < .01$. *p*-values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

[∇] Five percent of households also reported growing other crops, though categories were not specified.

In summary, our data highlight the similarity between the treatment and control groups with respect to livelihood-related indicators, enhancing internal validity of the study.

6.4. Assets

Table 6.4.1 summarizes typical household items and assets owned by any member of the household and in good working condition, providing further information on the economic status of our sample households.

Ownership of mobile phones was widespread; approximately 85.3 percent of households in our sample possessed them, underlining the pivotal role of mobile phones in modern communication. Radios and radio cassette players in good working condition were only owned by one in five households (19.8 percent).

Livestock ownership also stands out; roughly 54.2 percent of households engaged in this economic activity, illustrating its centrality in households' livelihoods. In contrast, assets such as smartphones (owned by approximately 2 percent) and electric stoves (owned by about 0.4 percent) were less commonly found, reflecting disparities in access to more modern technology and household appliances.

In summary, we observe no statistically significant differences between the treatment and control groups, emphasizing the overall consistency in asset ownership patterns across the two groups.

Table 6.4.1. Mean ownership of assets, by treatment status

	Pooled mean	Treatment mean	Control mean	p-value	DHS mean ^v
Radio/radio cassette player	0.198	0.196	0.200	0.847	0.349
Mobile phone (any kind)	0.853	0.855	0.850	0.936	0.503
Smartphone	0.020	0.022	0.017	0.612	0.170
Refrigerator/freezer	0.002	0.001	0.002	0.638	0.007
Iron (charcoal or electric)	0.013	0.011	0.015	0.521	
Table	0.263	0.273	0.253	0.409	
Television	0.021	0.021	0.021	0.917	0.139
Chair	0.534	0.556	0.510	0.226	
Sofa	0.028	0.032	0.024	0.399	
Bed	0.410	0.423	0.396	0.482	
Cupboard	0.016	0.014	0.018	0.490	
Watch	0.023	0.024	0.021	0.654	
Hoe	0.906	0.903	0.910	0.556	
Motorcycle	0.026	0.026	0.027	0.956	0.148
Bicycle	0.150	0.148	0.152	0.898	0.433
Books	0.044	0.054	0.034	0.203	
Livestock	0.542	0.536	0.547	0.777	
Charcoal stove	0.148	0.167	0.128	0.419	
Electric stove	0.004	0.005	0.002	0.503	
N	2,255	1,137	1,118		3,170

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. DHS means refer to means calculated among rural households in the study regions (Geita, Rukwa, and Ruvuma) using data from the 2022 DHS.

∇ Not all items were available in DHS data for comparative analysis.

6.5. Food and water insecurity

Table 6.5.1 illustrates households' experiences with food and water insecurity. Measures were drawn from the Household Food Insecurity Access Scale (HFIAS)²³ and the Household Water Insecurity Experiences (HWISE) Scale.²⁴ Nearly 61 percent of households experienced food insecurity; 17.7 percent experienced moderate food insecurity (defined as eating the same foods or undesirable foods sometimes or often, and/or reducing the size of meals or number of meals, rarely or sometimes²³), and 42.6 percent experienced severe food insecurity (defined as cutting back on meal size or number of meals often, and/or running out of food, going to sleep hungry, or going a full day and night without food²³). About one in four households (26.2 percent) experienced water insecurity. There were no statistically significant differences between the treatment and control groups in either food or water security indicators.

Qualitative findings suggest that when water or food was difficult to obtain for the household, it put strain on marital relationships. None of the women indicated that the strain was an unbearable amount, however, nor that it was detrimental to their relationships overall. They suggested that they were able to work through the conflict with their partners.

“... there is a conflict ... in the middle, now, because you can't live happily together without food in the house.” (IDI 11, Isale, Rukwa)

Table 6.5.1. Food and water insecurity

	Pooled mean	Treatment mean	Control mean	p-value
Proportion of households experiencing any food insecurity	0.606	0.601	0.612	0.658
Mild food insecurity	0.004	0.007	0.001	0.228
Moderate food insecurity	0.177	0.177	0.176	0.955
Severe food insecurity	0.426	0.420	0.433	0.675
Proportion of households experiencing water insecurity	0.262	0.287	0.234	0.120
N	2,256	1,137	1,119	

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

7. ACCESS TO MEDIA

An underlying assumption of the Stawisha Maisha intervention is that edutainment messages can be communicated and received via radios and, consequently, contribute to social behavioural changes. Moreover, TASAF is increasingly interested in understanding whether radio can be better utilized to communicate important messages to PSSN II participants. To better understand access to and use of media, particularly radios, we asked questions of individual respondents in the household questionnaire, as well as community leaders in the community questionnaires (see Chapter 11 for more information on communities).

7.1. Household-level access

As noted in Section 6.4, only one in five households (19.8 percent) own a radio or radio cassette player in working condition. This is an important statistic for the current intervention and evaluation, as it shows that a large majority of households do not own a radio. Thus, the intervention's provision of free solar-powered radios to the discussion groups will be crucial in facilitating households' ability to take up the intervention.

Approximately 21 percent of caregivers reported listening to the radio at least once per week or more (Table 7.1.1). Although a little more than half of respondents reported using a mobile phone (56 percent), only 22 percent of those with a mobile phone used it to listen to radio broadcasts. The treatment and control groups were similar in terms of radio use and had no statistically significant differences. Previous research from Tanzania underscores the gender gap in mobile phone ownership and usage in Tanzania, as well as considerable turnover of mobile phone ownership.²⁵ Even when a household owns a phone, women may not have equal access to its use, and this gender gap has important implications for phone-related intervention programming as well as for financial inclusion and the potential for women's control over e-payments of cash transfers.

When asked about whether respondents trust information from the radio, a little more than 80 percent of caregivers stated they would trust information about nutrition from a radio program, whether they currently owned a radio or not (Table 8.4.1). This suggests that although access to radios is a barrier, once households have a radio or can access one, they trust the information provided through this method of communication.

As highlighted in Section 8.4, qualitative findings support this trust in information from the radio. However, the majority of respondents in both focus groups and interviews reported that they did not own a radio; when they did, it often appeared to be broken or there was limited access to stations because the villages were so remote. Among focus group respondents, 12 of the women reported they did not own a radio, five women owned a radio (of those, two women indicated that their radios were currently broken), and none of the interview respondents reported listening to the radio on their mobile phones.

In the qualitative findings, respondents reported that when they were able to listen to the radio, it was primarily either music or the news, often citing night programmes from TBC Taifa, Radio Free Africa, or Seluz FM. Occasionally, respondents mentioned listening to

mother and child nutrition programmes as well. Qualitative findings also support the quantitative results in that respondents said they trusted information from the radio. However, access to radios was limited, and many respondents reported that they could not listen at all or listened to whatever their neighbors had playing on their radio.

“Sometimes ... you can't follow because a radio is in other people's house.” (IDI 15, Swaila, Rukwa)

Very few women reported that they accessed the radio on their mobile phones, as many did not have a phone. Considering the rural population we interviewed, challenges with charging the phone due to lack of electricity may also contribute to low utilization of a phone to listen to the radio.

“I don't have a radio, can you get a radio with all this poverty?” (IDI 1, Swaila, Rukwa)

These findings on lack of ownership of radios or ability to access radio broadcasts on their phones suggest that TASAF efforts to rely on radio as a major method of communication may exclude many households from receiving important messages, unless efforts are made to increase access.

Table 7.1.1. Radio use

	Pooled mean	Treatment mean	Control mean	p-value	DHS mean
Listens to radio at least once per week	0.211	0.207	0.215	0.772	.260 ^a
Uses a mobile phone	0.558	0.550	0.566	0.651	-
N	2,256	1,137	1,119		925
Listens to radio broadcast on mobile phone at least once per week	0.229	0.254	0.203	0.192	-
N	1,297	632	665		

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. DHS means refer to means calculated among rural households in the study regions (Geita, Rukwa, and Ruvuma) using data from the 2022 DHS.

^a Calculated among women ages 15 to 49 years.

7.2. Community-level access

According to community leaders, radio and television were the most common media outlets in the majority of sample villages. Community leaders estimated that one in three community members regularly tuned in to a radio broadcast on their mobile devices, and almost half the community listened to physical radios. ^{ix}

Notably, there was little difference between the treatment and control groups, suggesting that listening patterns, without additional encouragement to listen to the Stawisha Maisha

^{ix} These are estimates for the entire community, whereas the program targets those in the lowest socioeconomic decile, so this may not directly reflect the behaviour of sample respondents.

programming, are likely to be similar across all communities. Furthermore, two in three villages also reported the internet as a source of media for their community members.

Interestingly, lack of radio and internet signal were the most common barriers to media consumption, reported by around half of the study communities.

Table 7.2.1. Media consumption habits by community members

	Pooled mean	Treatment mean	Control mean	p-value
Sources				
Radio	0.987	1.000	0.973	0.155
Television	0.960	0.933	0.987	0.096
Newspaper	0.053	0.080	0.027	0.142
Internet	0.660	0.600	0.720	0.111
Proportion of community listening to radio broadcast on the radio each week	0.464	0.466	0.461	0.904
Proportion of community listening to radio broadcast on a mobile phone each week	0.338	0.32.3	0.352	0.452
Barriers				
Lack of internet	0.460	0.387	0.533	0.066
Lack of radio signal	0.513	0.493	0.533	0.614
Lack of electricity	0.407	0.373	0.440	0.409
Lack of power sources to charge devices	0.187	0.213	0.160	0.404
Language/literacy barriers	0.140	0.160	0.120	0.480
N	150	75	75	

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the community level.

8. CAREGIVER KNOWLEDGE AND ATTITUDES

Improving child caregivers' nutrition-related knowledge and attitudes is an important first step in spurring behaviour change. Thus, knowledge and attitude are key pathways for improving long-term child nutrition outcomes in Stawisha Maisha. We examined baseline caregiver

r nutrition knowledge, attitudes towards nutrition-related practices, normative beliefs about nutrition-related behaviours, and related facilitators of nutrition-related behaviour change.

8.1. Nutrition knowledge

Table 8.1.1 presents caregivers' knowledge about antenatal care and nutrition-related recommendations for pregnant women, infants, and young children. Indicators in this section were analyzed according to UNICEF and WHO infant and young child feeding (IYCF) best practices.²⁶

Maternal nutrition knowledge

Maternal nutrition knowledge was assessed with a question asking how pregnant women should eat in comparison to non-pregnant women to provide good nutrition for their baby and help them grow. Only about one-quarter of caregivers correctly indicated that pregnant women should eat diverse types of food (23.7 percent) and an extra meal per day (26.6 percent) (Table 8.1.1). We also asked caregivers to name any supplements or tablets that are beneficial during pregnancy. Only slightly more than half (52.0 percent) identified folic acid supplements or a pill containing iron and folic acid as a beneficial supplement for pregnant women. Knowledge of maternal nutrition, as measured by quantitative data, was relatively low, indicating considerable potential for the intervention to improve this outcome.

Qualitative findings indicated that women knew it was important to eat a healthy diet while pregnant, and for them, antenatal care appeared to be synonymous with getting proper nutrition for the pregnant woman.

"[Antenatal care services are] to give her foods that support her body." (IDI 3, Likuyuseka, Ruvuma)

Table 8.1.1. Maternal nutrition knowledge

	Pooled mean	Treatment mean	Control mean	p-value
Eat a diverse diet during pregnancy	0.237	0.215	0.260	0.204
Extra daily meal during pregnancy	0.266	0.282	0.249	0.232
Folic acid supplementation	0.520	0.501	0.539	0.425
N	2,256	1,137	1,119	

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. Means refer to the proportion of caregivers who answered correctly for each knowledge indicator.

Infant nutrition knowledge

The rate of awareness about early initiation of breastfeeding was fairly high, with 82.2 percent of respondents stating that breastfeeding should begin immediately or within one hour of a child's birth (Table 8.1.2). We assessed knowledge of exclusive breastfeeding by first asking caregivers if they knew what the phrase meant (a correct answer was defined as “no foods or liquids other than breast milk”). We then asked all caregivers how long a child should be exclusively breastfed (correct response was six months). Only 21 percent of caregivers had full knowledge of exclusive breastfeeding—that is, they correctly defined both the phrase and age recommendation. Approximately 61 percent of respondents knew that breastfeeding should continue up to age 2 or beyond. Accurate knowledge of recommended breastfeeding practices, as measured by quantitative data, was relatively low, indicating considerable potential for the intervention to improve this outcome.

Descriptions of maternal nutrition knowledge and exclusive breastfeeding knowledge in the qualitative interviews were similar to responses from the surveys. Respondents reported that they did not know about maternal and child nutrition before they became parents, and that even while they were pregnant, they did not consume nutritious foods.

“... before becoming a parent, I still didn't understand [nutrition] well.” (Respondent 4, FGD 4, Mwinuko, Ruvuma)

“When I was pregnant, I never had nutritious food, I have never eaten nutritious food.” (IDI 1, Swaila, Rukwa)

Qualitative findings indicated high knowledge of the recommended breastfeeding practices, including early initiation of breastfeeding (immediately after birth), exclusive breastfeeding, and continued breastfeeding up to age 2 or beyond, with the majority of respondents understanding that mothers should exclusively breastfeed their babies until they were least 6 months old. After that, it was considered acceptable to start feeding the child porridge, but that one could continue supplementing breastfeeding a child up to 24 months or beyond.

“Eehh, when [the baby] gets to six months, I start giving him porridge.” (Respondent 1, FGD 2, Lunyala, Rukwa)

Furthermore, though qualitative data indicated that caregivers understood they should breastfeed exclusively until children were at least 6 months old, many reported that mothers were sometimes unable to produce enough milk to do so (due to lack of nutritious foods for the mother) and would start giving porridge in these cases.

“First the mother is [supposed] to eat enough food ... nowadays the food is not ... available, it is you and ugali ... now that baby, first the milk doesn't come out. So, you find the baby gets sad ... all the time he cries.” (Respondent 4, FGD 5, Mgombasi, Ruvuma)

Respondents perceived that a mother's lack of nutritious food can lead to reduced milk production, and this sometimes leads women to breastfeed less—a response that will reduce milk supply. Moreover, the pressure to start giving supplemental food to infants as

reported by caregivers in qualitative interviews could be coming from other adults, especially those who consider themselves more experienced with parenting. The idea that breast milk alone is not sufficient for babies is a common myth that sometimes leaves new mothers confused about whether to listen to recommendations from health care professionals about exclusive breastfeeding for six months or whether to listen to older women who may be insisting that the baby is not full with breast milk only.

Young child nutrition knowledge

Regarding knowledge about young child nutrition, we asked respondents to indicate which foods provide key nutrients for children—specifically, iron and vitamin A. Caregivers had a slightly higher rate of knowledge of vitamin A-containing foods (60.7 percent) than iron-rich foods (54.1 percent). Qualitative interviews showed that respondents understood nutritious food to be a combination of several types of food—such as corn, sorghum, groundnuts, beans, sardines, and rice—for both themselves and their children. Though higher than in some outcomes, knowledge of vitamin-rich foods, as measured by quantitative data, was relatively low, indicating considerable potential for the intervention to improve this outcome.

“For us, we do like eating ugali with just beans and ... green vegetables.” (IDI 15, Swaila, Rukwa)

We also evaluated caregivers’ knowledge about how to feed children during illness. Diarrhea episodes can have detrimental effects on child growth, so it is important for caregivers to know how to treat and feed children with this illness. Close to 71 percent of caregivers knew that children with diarrhea should be given oral rehydration salts (ORS), but only 3.3 percent knew that they should be given more liquids than usual and the same or more food and breast milk than usual.

Child growth monitoring knowledge

Monitoring a child’s growth typically involves health visits where a health care provider marks the child’s status on a standard growth curve card. To evaluate whether caregivers knew how to interpret their child’s growth curve, we provided a sample card with a marked point and asked what this example says about the child. Only about half of caregivers (51.4 percent) correctly knew what the sample growth curve meant. This indicates considerable potential for the intervention to improve this outcome.

Qualitative responses about child growth and development indicated that caregivers understood that children needed to go to the clinic regularly from the time they were about 1 month old through age 5, to ensure that they were healthy and growing properly. They felt that good development meant the child should be behaving “normally” (as compared with other children or siblings) and equated increased weight with better growth for children.

“After that [the child] increases six kilograms, seven kilos, eight, nine, up to ten. I am there and I know my child is growing well.” (Respondent 5, FGD 5, Mgombasi, Ruvuma)

In addition, participants suggested that measuring their children’s height against other children their age was a good indicator for understanding whether their child was stunted or healthy.

“You see that your child is not growing, you will find that they were born on the same date, but the other person’s child grows well while yours is stunted, you start questioning why is my child stunted, he is not growing.” (Respondent 3, FGD 2, Lunyala, Rukwa)

In summary, there were no statistically significant differences in caregivers’ knowledge of baseline nutrition between the treatment and control groups across all indicators.

Table 8.1.2. Infant and child nutrition knowledge

	Pooled mean	Treatment mean	Control mean	p-value
Immediate breastfeeding or within one hour of birth	0.821	0.842	0.799	0.168
Exclusive breastfeeding (correct age and definition)	0.213	0.237	0.187	0.163
Continued breastfeeding to 24 months	0.611	0.597	0.626	0.471
ORS treatment for child diarrhea	0.709	0.693	0.725	0.386
Increase fluid during episode of diarrhea in children	0.033	0.030	0.037	0.550
Correct interpretation of growth curve	0.514	0.502	0.528	0.384
Iron-rich foods	0.541	0.559	0.523	0.262
Vitamin A-rich foods	0.607	0.613	0.600	0.640
N	2,256	1,137	1,119	

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. Means refer to proportion of caregivers who answered correctly for each knowledge indicator.

8.2. Attitudes and norms

In addition to improving understanding of nutrition guidelines and best practices, Stawisha Maisha aims to improve caregivers’ positive attitudes, norms, self-confidence, and decision-making abilities as they each relate to maternal and child nutrition. Improving these facilitators of change is key to translating knowledge into behaviour.

Social norms can heavily influence nutrition-related behaviours. To assess caregivers’ perceptions of norms, we developed questions based on the U.S. Agency for International Development’s (USAID) “Focusing on Social Norms: A Practical Guide for Nutrition Programmers to Improve Women’s and Children’s Diets.”²⁷ Given the importance of eating additional food during pregnancy to ensure a baby’s healthy growth and development, we assessed caregivers’ perceptions of norms about this recommended maternal nutrition practice. We created a positive norm indicator based on three questions assessing perceptions of descriptive norms (what caregivers believe other mothers do), injunctive norms (what others think is suitable), and injunctive norm sanctions (what negative consequences could occur if they ate more during pregnancy). Only 17.1 percent of women perceived positive social norms about eating extra food during pregnancy, and

only 31.6 percent have the perception that many mothers bring their child for health services that include growth monitoring (Table 8.2.1).

In alignment with the “Guidelines for Assessing Nutrition-Related Knowledge, Attitudes and Practices”²⁸ from the Food and Agriculture Organization (FAO) of the United Nations, we asked caregivers questions related to perceived benefits of nutrition practices. We also adapted items from the Montreal Children’s Hospital Feeding Scale²⁹ to assess stress and worry around changing feeding practices. Nearly all caregivers stated it was “good” to feed children a diverse diet and to feed them several times a day. However, many caregivers reported being stressed (66 percent) about both feeding children more frequently and feeding children more diverse types of food. Less than half of caregivers (48.8 percent) were confident in preparing nutritious foods for their child, but more than 90 percent felt they had the power to make their own decisions regarding their child’s health and nutrition. There were no statistically significant differences between treatment and control groups for any attitude or norm indicators.

Qualitative findings echo this stress and lack of confidence surrounding nutritious food, both in providing and preparing it. The caregivers understood the importance of proper nutrition for themselves and their children, but without the necessary resources to access adequate foods or clean water, they were forced to feed their children less nutritious options. The respondents felt they had the appropriate knowledge but lacked the means to provide healthy foods for their families because they did not have the resources to do so. Despite this perceived knowledge, quantitative findings demonstrated some lack of nutrition-related knowledge, including which foods are rich in iron and vitamin A, only 54 percent and 60.7 percent of the sample, was knowledgeable about each nutrient respectively.

*“Self-confidence is there, nutrition itself is the same, when you get ugali you eat ugali, when you get bananas eat bananas, other days you don’t have anything.”
(Respondent 1, FGD 4, Mwinuko, Ruvuma)*

In terms of decision-making power regarding children’s health and nutrition, qualitative findings were mixed. Caregivers in interviews and focus groups did not appear to feel pressured to make decisions based on what the community wanted. Even when it came to their elders, the women would listen but act on their own knowledge or experience; they trusted their knowledge and made decisions for themselves and their families based on what they felt was right, not what they were expected to do.

“If I am not satisfied with the matter itself, I just refuse, I mean, I can probably answer them that it is okay, I can agree, but can’t do what they say.” (IDI 8, Mgombasi, Ruvuma)

However, decision-making dynamics within households were more complicated. Although most women identified men as the primary decision makers in their households, there was some complexity surrounding decision-making dynamics. Men universally controlled the money for the household (being head of household) and thus ultimately controlled how to spend the money. However, women felt they knew the needs of the household and the children better (such as when food ran out in the household, or what kind of food children

need), so they informed their husbands of household needs. The man could then decide what to spend the money on based on the woman’s advice.

“... I don’t have the ability to find money ... I’m here asking for money from my husband so I can buy vegetables.” (Respondent 5, FGD 5, Mgombasi, Ruvuma)

When their husbands were not responsible with money, or were dismissive when the women attempted to be involved in decision making (for example, schooling for the children or the children’s health), the women felt as though they needed to step in and act as decision makers in the household. They did this because the children would suffer (they would go hungry or not attend school) if the women did not step up.

“He [my husband] takes the money and goes to do as he wants, or takes it to the pub to do whatever pleasure he wants—would you continue involving him [in your decisions]?” (Respondent 2, FGD 8, Mabatini, Rukwa)

In households where both a husband and mother-in-law were present, they appeared to make decisions jointly. When a woman was head of household because her husband or the father of her children had left or passed away, she was usually solely responsible for all household decisions, including those surrounding childcare and food procurement.

“My husband ... and my mother-in-law [make decisions] ...” (IDI 6, Songambebe, Ruvuma)

Table 8.2.1. Nutrition attitudes and norms

	Pooled mean	Treatment mean	Control mean	p-value
Good to feed child several times a day	0.965	0.956	0.975	0.054
Good to feed child diverse diet	0.966	0.959	0.973	0.240
Stressed about feeding child more frequently	0.660	0.662	0.658	0.850
Stressed about feeding child more diverse foods	0.661	0.665	0.656	0.731
Confidence in preparing nutritious foods for child	0.488	0.492	0.483	0.863
Power to make own decisions about child health and nutrition	0.911	0.919	0.903	0.373
Positive social norms about eating extra during pregnancy	0.171	0.179	0.163	0.615
Positive social norms about bringing child for growth monitoring	0.316	0.333	0.298	0.378
N	2,256	1,137	1,119	

Notes: * Significant at $p < .05$; ** $p < .01$. p-values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. Means refer to the proportion of caregivers who answered affirmatively for each attitude or norm.

8.3. Social capital, resiliency, and problem solving

Stawisha Maisha respondents live in rural households experiencing high levels of poverty. Given the setting of the intervention, it is important to understand caregivers’ resiliency, or their ability to adapt to and overcome difficult life situations as well as their connection to

social networks, including peers and groups, and belief in their own ability to solve nutrition problems.

Table 8.3.1 reports social capital, resiliency, and problem-solving indicators. We assessed baseline resilience with the Connor-Davidson Resilience Scale-10.³⁰ This scale includes items such as, “I think of myself as a strong person when dealing with life’s challenges and difficulties” and asks respondents to rate the statements from “Not true at all” to “True nearly all the time.” The mean caregiver resiliency rating was 3.2, where 1 is the lowest resiliency and 10 is the highest (Table 8.3.1).

Respondents were also asked three questions about their confidence in coming up with solutions to problems related to feeding children and their own nutrition during pregnancy. These three items were combined to create an indicator for self-efficacy in nutrition problem solving. The average self-efficacy in problem solving was a little more than 2.9, where 1 is the lowest and 4 is the highest self-efficacy. Finally, about 70 percent of caregivers felt there is a group of peers with whom they have a sense of belonging and membership. There were no statistically significant differences between the treatment and control groups for any of the indicators in this subsection.

Qualitative interviews and focus group discussions explored general community support and feelings of affiliation to community groups. There was a sense of support from the community among the women and their neighbors. Funerals, disasters, and life celebrations were all reasons for the community to come together and help one another. The women reported that even if they were unable to assist their neighbors financially, they would provide food, advice, or moral support instead. They also indicated that community members aided one another in farming or agricultural work to ensure the success of the crops for the entire village.

“There is support, when I am in hard condition, I don’t have flour, I borrow flour from my neighbor, and I cook for my children.” (Respondent 1, FGD 5, Mgombasi, Ruvuma)

Formal community groups and organizations seemed to require dues, and many respondents indicated that they could not always afford to spend the money or did not have it to begin with. These groups primarily operate on what is socially known as “merry go round” policies, where members pay a small sum weekly and can then borrow against their savings. The women who did participate in and pay dues to an organization felt as though the group was mispending their money and that it was not worth the cost to be involved. Overall, a majority of the respondents appeared to have a negative perception about the groups, and the majority did not participate in them.

“There are groups, but they are often conflictual ... I really tried my best last year and joined ... but I saw that there is a certain necessity ... that ... those who have business, you are ... needed to ... contribute one thousand every month.” (IDI 4, Lunyala, Rukwa)

However, the qualitative respondents’ reported negativity towards the groups may also be due to the lack of funds for the weekly contributions, which work best for those with more

secure income streams. This may be hard to achieve for those in PSSN II households, which are very low income.

Table 8.3.1. Social capital, resiliency, and problem solving

	Pooled mean	Treatment mean	Control mean	p-value
Proportion who feel a sense of belonging and membership with a group of peers	0.701	0.703	0.698	0.867
Self-efficacy in solving child and maternal nutrition problems (1-4)	2.974	2.964	2.984	0.666
Self-rated resiliency (1-10)	3.176	3.139	3.214	0.152
N	2,256	1,137	1,119	

Note: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

8.3.2. Support for breastfeeding mothers

Qualitative data also explored whether and how breastfeeding mothers received support. Most women indicated that they received postpartum and breastfeeding support for a few days to a week, at most, after they had given birth, if they received support at all.

“After giving birth you get helped for one week (seven days), thereafter, you should know where to look for food and the man doesn’t know that he should look for vegetables for his partner to eat and recover her body, that thinking is not there ... this is not a lie.” (IDI 3, Likuyuseka, Ruvuma)

Husbands provided some support in terms of taking over the woman’s duty of getting water (which was often very far away) or chopping wood. Mothers-in-law, while seen as helpful in varying degrees, occasionally would help with cleaning or water provision in the days following a birth as well. Neighbors appeared to be the most supportive, provided that the woman had relationships with them before she gave birth. Once the mother and newborn arrived at home, neighbors supported the woman by cooking, watching her other children, helping her to shower, bathing the baby, or bringing water or food to her house.

“I want to cook, the child starts crying, the neighbor says, stay, I will cook for you ...” (Respondent 2, FGD 1, Lyele, Rukwa)

Regardless of whether they had support, there was a general expectation that women would resume working a short time after giving birth, with insufficient time for recovery. Respondents indicated that new mothers would take their babies with them while they went to work cultivating the farms just days after giving birth. If a woman did not work, she did not eat.

“Or you put her [the newborn] there, like under the tree, you pass by to watch her while working.” (Respondent 3, FGD 5, Mgombasi, Ruvuma)

In a few cases, women reported that no one helped them.

“When I give birth, everything [work] is on me.” (Respondent 3, FGD 4, Mwinuko, Ruvuma)

8.4. Sources of nutrition information

This subsection presents baseline findings for caregivers' current trust and recall of nutrition information from various sources. Stawisha Maisha involves radio and discussion group components, and it is important to understand where caregivers are learning about nutrition and which sources they trust. Table 8.4.1 displays nutrition information indicators. Nearly two-thirds (63.7 percent) of respondents had heard or seen something about nutrition in the last 12 months (for example, from a community health worker, on the radio, or on a flyer). Slightly more than 80 percent of caregivers stated they would trust information about nutrition from a radio program. There were no statistically significant differences between the treatment and control groups in terms of sources and trust in nutrition information. Given that a high percentage of respondents already received nutrition information from the radio, the potential for the intervention to improve this outcome is somewhat limited.

Qualitative findings support this trust in information from the radio. Caregivers indicated that they were aware of and listened to a nutrition programme broadcast on a local radio station whenever they were able to. They appeared to find the information on this programme both helpful and trustworthy.

"... they [the radio programme] usually talk about nutrition ... you hear a bit and then you move on ... I trust them." (Respondent 3, FGD 7, Isale, Rukwa)

In addition, qualitative respondents nearly unanimously indicated that they received their nutrition information from the clinics or dispensaries near their villages, and that they trusted the clinic workers and the information received from them. The women felt as though they could see results in the health of their children from the nutritious foods recommended by the clinic workers, and it made them trust in the advice they received there.

"Let's give children one of the nutritious items, a well-balanced diet that includes peanuts ... rice, banana, meat, and soy ... we are advised at the health center." (Respondent 3, FGD 6, Songambebe, Ruvuma)

"Mm, truly for me, any advice, I take them from the health centers." (Respondent 2, FGD 8, Mabatini, Rukwa)

There was general agreement that clinic staff members were well trained and that they could be trusted because of their education and their experience traveling to many places.

"The nurse has studied ... many things ... she has gone through all the places, she knows all those things, that's why we trust them." (Respondent 3, FGD 4, Mwinuko, Ruvuma)

Table 8.4.1. Nutrition information

	Pooled mean	Treatment mean	Control mean	p-value
Heard about nutrition from any source in last 12 months	0.637	0.635	0.640	0.827
Trust in nutrition information on radio	0.805	0.816	0.794	0.347
N	2,256	1,137	1,119	

Note: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

8.5. Aspirations and openness to change

The majority of caregivers (90 percent) agreed or strongly agreed that they aspired for their child to have a better life than them (Table 8.5.1). A similar proportion (89 percent) agreed or strongly agreed that they were open to learning and change regarding maternal and child nutrition.

Qualitative data explored what caregivers felt they and their children would need to improve their lives. Nearly unanimously, the women stated that they wished for their children to have better education than they had received, for their children to be healthy, and to marry eventually. Some women wanted better lives for their children, especially their daughters, so that they did not grow up in relationships like the women had experienced.

"[I want my daughter to study] ... at university ... so that she can also get a job, so that she won't be oppressed like how I am with her father." (Respondent 2, FGD 5, Mgombasi, Ruvuma)

Skills and resources needed

Universally, lack of money and access to the means to make money was a significant barrier to nearly everything in the women's lives. It prevented them from being able to acquire farming equipment (such as plowing cows or fertilizer) in order to make more money and obtain economic security; it stymied their access to healthy or plentiful food; and it was a barrier to obtaining proper antenatal care. Lack of money drove most decisions related to food and health care.

"The problem is money ... because if we had money, we could do all this [get access to food]." (Respondent 1, FGD 7, Isale, Rukwa)

Caregivers indicated that they needed more support in general, in terms of provision of food, agricultural training, and money, so that both they and their children could survive.

"What we get, a child to eat, to not die for hunger ... we need to be helped ..."
(Respondent 2, FGD 5, Mgombasi, Ruvuma)

They also suggested that more training in agricultural skills would be necessary to become economically stable and better able to provide food for their families. They listed fertilizer, plowing cows, and other farming equipment as essential resources if they were to achieve

economic stability in the future. They indicated that shops and markets closer to their villages would allow them to both buy food and sell their crops with greater ease.

“I must be able to keep money little by little. I don’t have a plowing cow, thus, when I want to do farming, I have to look for two people to help me ...” (IDI 4, Lunyala, Rukwa)

Table 8.5.1. Aspirations and openness to change

	Pooled mean	Treatment mean	Control mean	p-value
“I have aspirations for my child to have a better life than me.”	0.902	0.895	0.909	0.510
“When it comes to maternal and child feeding practices, I am open to learning and change.”	0.890	0.891	0.889	0.910
N	2,256	1,137	1,119	

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

9. CAREGIVER AND CHILD BEHAVIOURAL OUTCOMES

This section presents baseline results for child health, nutrition, developmental, and anthropometric outcomes. We include several key Stawisha Maisha indicators assessed at the child level: maternal nutrition during pregnancy and antenatal care (ANC), infant and young child feeding practices, care during diarrhea, early childhood development, and nutritional status. The indicators in this section are particularly important given Stawisha Maisha's focus on improving child nutrition and reducing long-term stunting prevalence.

9.1. Antenatal care and nutrition

Child health, nutrition, and development begin during pregnancy. Stawisha Maisha encourages women to take adequate steps in ensuring the health of both themselves and their fetus during this critical time period. We asked caregivers about their healthcare-seeking behaviours and nutrition during the pregnancy of each of their biological children ages 0 to 36 months living in their household. Baseline findings on caregiver antenatal care and nutrition are reported in Table 9.1.1.

Antenatal care

During their gestational period, nearly all children ages 0 to 36 months had a mother who sought ANC from a skilled provider (such as a doctor, nurse, or midwife) (Table 9.1.1). However, early ANC (first trimester) occurred in fewer than half of pregnancies (45.2 percent). About three in four children had a mother who received four or more ANC visits (the national recommendation before 2018) during their pregnancy, but only 2.5 percent had a mother who attended eight or more ANC visits (the national recommendation since 2018, in alignment with the 2016 WHO ANC Model¹⁹).

Qualitative findings suggest that the women were aware they needed to get regular check-ups and care from the clinic during their pregnancies. The majority of respondents believed that a pregnant woman should go to the clinic as soon as she is aware that she is pregnant—which could be as early as one month or as late as three—and that she should continue with regular checkups until she delivers the baby. Respondents knew that they needed to receive monthly antenatal care until their due date, and if the baby was late, they indicated that weekly appointments were required until the baby was born.

“Eeh, if you went in July, then August you have to go too, September you will go till the end. When the expected date of delivery has [passed] and you haven't delivered, you attend ... week[ly] [until the baby is born].” (Respondent 2, FGD 5, Mgombasi, Ruvuma)

Nevertheless, there also appeared to be some level of superstition that disclosing a pregnancy too early would curse the pregnancy, causing the women to become sick or miscarry the baby.

“They [community members] bewitch you [if you tell them you are pregnant] ... when you give birth, you are going to die right there.” (Respondent 4, FGD 2, Lunyala, Rukwa)

Evidence from qualitative studies across Africa suggests that these superstitions are commonly held beliefs^{31,32}. However, while those studies indicated that superstition is correlated with a delay in antenatal care, in our findings it did not appear to be a barrier to respondents receiving care or disclosing pregnancy to doctors and nurses at the clinics. It did appear to foster further mistrust around traditional healers and midwives, while serving to increase trust in the care the clinic provided.

“We’re afraid to seek traditional remedies.” (Respondent 3, FGD 7, Isale, Rukwa)

In-depth interviews and focus groups also explored where caregivers received their antenatal information, and whether they trusted the source of that information. As with nutrition information, the women placed great trust in the clinics and hospitals for information regarding antenatal care. Again, respondents attributed this to the education and experience of the doctors and nurses, which was trusted more than the advice or wisdom of friends or elders.

“... we go to seek advice from nurses because nurses provide good advice. They are more educated than us ... I can't ask someone who hasn't studied like me to guide me, they might say, 'Go to the grandmother, she's educated.' I have no idea where she got her education from.” (Respondent 6, FGD 6, Songambe, Ruvuma)

Traditional birth attendants were noted as a source of information and support during pregnancy, particularly for very remote villages that were far from hospitals or other health care. However, because the traditional birth attendants were not educated in the same way as the clinic staff, they were not well trusted. Furthermore, some of the babies they delivered reportedly did not survive the birthing process, especially if those births occurred far from a hospital.

“I don't believe [traditional birth attendants] because I can't know if they educate themselves well, so I hesitate to follow their advice ...” (IDI 2, Kitanda, Ruvuma)

Qualitative findings suggest that none of the caregivers, nor anyone they were aware of, had experienced a negative interaction with a clinic or hospital that would have caused them to stop trusting or attending the clinic for care. They knew that the clinics provided them better access to safe births, and they were grateful to be able to utilize them.

“Even I wanted to say that we have never heard, first of all it is a matter of thanking God and our government, they have brought us a doctor who is good, that is, as soon as you arrive, if you are sick, that is, he is very attentive, God bless him very much, and he takes good care of us, we give birth safely.” (Respondent 4, FGD 3, Kitanda, Ruvuma)

Maternal nutrition

Meal frequency and diversity of consumed food groups impact fetal health and development. Women are encouraged to eat at least one extra meal per day while pregnant, but only half of respondents stated they followed this guideline during the pregnancy of their children younger than 3 (Table 9.1.1). Moreover, only slightly more than

one in four (27.7 percent) stated that they ate four or more food groups per day during pregnancy. Finally, about two-thirds of children benefited from their mothers taking IFA supplements for 90 or more days while pregnant. The treatment and control groups were similar for all antenatal care and nutrition indicators and had no statistically significant differences.

It was common knowledge among women interviewed that pregnant women would receive micronutrient supplements (IFA) at the clinic during their antenatal appointments.

“This is a must if you go to the clinic, they will give you these nutritional pills meaning that there are some vitamins that they give us, different than giving other people.”
(Respondent 5, FGD 8, Mabatini, Rukwa)

However, a few of the women experienced challenges with some of the nutritious food, especially early on in a pregnancy, when morning sickness made it difficult to eat or certain types of food elicited nausea.

“When the heart refuses [what] you eat, you vomit ... you will consider ... in making porridge, you will continue with the porridge and a food that ... you will consider ... eating.” (Respondent 5, FGD 8, Mabatini, Rukwa)

Challenges and barriers

As with their knowledge of nutrition, respondents were not always able to reconcile what they knew to be best for themselves and their children with the reality of their resources. The majority of qualitative respondents expressed the need to work, often engaging in activities that caused physical strain. Poverty and financial constraints emerged as primary obstacles to accessing antenatal care timely. Although women recognized the importance of receiving adequate antenatal care, they reported having to face expenses for delivery, including for a number of *khangas* (fabrics), *vitenges*, and other birthing necessities. These services are supposed to be provided for free in public facilities in Tanzania, but expectant mothers are expected to provide some of their own necessities, including clothing items for after the delivery. This dilemma results in significant challenges for many low-income women during pregnancy.

“... our challenge is on how to get money and start going to the clinic.” (Respondent 1, FGD 4, Mwinuko, Ruvuma)

Women also reported that the clinics require husbands or male partners to accompany the women or have an exemption letter from the village executive in order to receive antenatal care. It is often difficult to convince their husbands to go to the clinic with them because the men are afraid of the compulsory HIV test. This makes it difficult for some of the women to access proper care during their pregnancies.

“If I do not go with my husband for [HIV] testing, there I am not treated. Now my husband is afraid because he says if I will be treated here, tested. I will be discovered with the virus [HIV] here.” (Respondent 2, FGD 5, Mgombasi, Ruvuma)

Given high rates of any receipt of ANC from a skilled provider, there is little room for the intervention to improve this outcome. However, there is more room for the intervention to

influence receiving ANC in the first trimester, attending eight or more ANC visits, and consumption of an extra meal or four or more food groups per day.

Table 9.1.1. Antenatal care and nutrition

	Pooled mean	Treatment mean	Control mean	p-value	DHS mean
ANC from skilled provider	0.986	0.981	0.991	0.336	0.889
N	2,073	1,006	1,067		457
ANC in first trimester	0.452	0.456	0.449	0.952	0.300
N	2,069	1,004	1,065		402
ANC 4 times or more	0.775	0.800	0.750	0.111	0.605
ANC 8 times or more	0.025	0.027	0.023	0.623	0.005
N	2,039	989	1,050		457
Consumed at least one extra meal per day	0.502	0.506	0.498	0.847	-
N	2,070	1,006	1,064		
Consumed 4+ food groups per day	0.277	0.295	0.258	0.199	-
N	2,070	1,004	1,066		
Took iron folic acid (IFA) tablets for 90+ days	0.661	0.670	0.652	0.801	0.763 ^a
N	1,965	954	1,011		

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. DHS means refer to means calculated among rural households in the study regions (Geita, Rukwa, and Ruvuma) using data from the 2022 DHS.

^a The DHS item did not specify 90+ days.

9.2. Infant and young child feeding practices

This subsection reports baseline results for infant and young child feeding (IYCF) practices. Indicators in this subsection assess the proportion of children younger than 5 who are fed in alignment with WHO and UNICEF guidelines for breastfeeding, minimum dietary diversity (a proxy for adequate micronutrient density of foods), and minimum meal frequency.²⁶ Following these feeding recommendations is critical to promoting healthy growth and cognitive development in children. Baseline findings for IYCF indicators are presented in Table 9.2.1.

Breastfeeding practices

Breastfeeding indicators include exclusive breastfeeding for the first six months of life, continued breastfeeding up to age 2 or beyond, and complementary feeding of solid, semi-solid, or soft foods in addition to breast milk for children ages 6–23 months. Exclusive breastfeeding refers to a child receiving no additional water or food besides breast milk until they are 6 months old. Of the 3,343 children for whom feeding practices were assessed, 42.2 percent were, or are, exclusively breastfed (Table 9.2.1). For children currently younger than 6 months ($n = 245$, 7.3 percent), this meant they were still being exclusively breastfed, as reported by the primary-caregiver respondent. For children currently ages 6 months and older, this meant the caregiver respondent indicated the child

stopped being exclusively breastfed at age 6 months or after. Next, we report on two breastfeeding indicators for a subsample of children currently ages 24 to 59 months (n = 2,393). The rate of continued breastfeeding until at least 23 months was fairly low—just over one-fifth (21.9 percent) of children ages 24 to 59 months were breastfed until 23 months or later. Even fewer (17.6 percent) children began receiving complementary feeding of solid, semi-solid, or soft foods no later than 8 months in addition to being breastfed until at least 23 months.

Qualitative findings highlighted some of the challenges caregivers faced in trying to adequately breastfeed their children. Caregivers understood the importance of breastfeeding (this information came from both clinics and the other women in their lives) and believed that it made their babies healthier.

“His mother’s milk is enough for him because his mother eats various things ... without breastfeeding, children become weak ...” (Respondent 4, FGD 3, Kitanda, Ruvuma)

They also understood that a mother’s nutritional intake was critical while breastfeeding in order to produce enough milk, but there was often a lack of access to food that limited their ability to feed themselves and thus continue adequately breastfeeding their baby. Lack of access to food stemmed from a variety of factors, with respondents citing poverty, markets not being well stocked, and distance from their homes to markets.

“If I have more vitamins, that’s what the baby gets when I breastfeed him, he gets from my milk.” (Respondent 5, FGD 4, Mwinuko, Ruvuma)

“I myself I’m breastfeeding but I don’t get good food ... milk does not come out.” (IDI 5, Lyele, Rukwa)

The primary difficulty surrounding breastfeeding is that a woman might not be able to provide enough milk for her baby, leaving the baby hungry. There was an understanding that the mother would give the child supplemental food before the age of 6 months. The supplements varied, but they ranged from porridge to water to cow’s milk. Some women indicated that they received support from the clinics in the form of bottles and formula, but this was not a common occurrence.

“... you just prepare light porridge ... so the baby can drink and at least sleep.” (Respondent 5, FGD 5, Mgombasi, Ruvuma)

There was also concern that if a mother’s health was “not safe” (implying that the mother was HIV positive or suffered from frequent and/or persistent fevers), she would not be able to breastfeed because she would pass the illness on to the baby.

“Because there are many diseases ... that’s why the advice [is not to breastfeed] if your health is not safe ... if ... your health is safe you can breastfeed for a year and a half or two.” (Respondent 2, FGD 8, Mabatini, Rukwa)

Complementary and young child feeding practices

Stawisha Maisha caregivers were asked to indicate the foods their children had eaten in the previous day and night. Children ages 6–23 months require different minimum meal frequencies based on their breastfeeding status. Breastfed children meet the minimum

meal frequency guidelines if they receive solid, semi-solid, or soft foods at least twice a day at age 6–8 months and at least three times a day for those ages 9–23 months. Non-breastfed children ages 6–23 months meet minimum meal frequency standards if they receive solid, semi-solid, or soft foods at least four times a day. In the sample, among children ages 6–23 months (n = 683), 30.8 percent met the minimum meal frequency (Table 9.2.1). The rate of meeting dietary diversity standards was far lower; only 7.3 percent of children ages 6–23 months were fed at least five out of eight UNICEF- and WHO-specified food groups during the previous day. The eight food groups include breast milk; grains, roots, and tubers; legumes and nuts; dairy products (milk yogurt, cheese); flesh foods (meat, fish, poultry, and organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables. Furthermore, only 15.3 percent of children ages 6–23 months consumed iron-rich or iron-fortified foods in the previous day and night at the time of the survey. Given that fewer than half of caregivers reported exclusive breastfeeding until the age of 6 months and continued breastfeeding beyond this age, there is considerable room for the intervention to improve this outcome.

Qualitative data indicate that the most commonly consumed foods in respondents' households were ugali, rice, potatoes, maize, porridge, soya, and leafy vegetables. The composition of porridge varied and appeared to be a combination of any number of things, depending on who was eating it and what foods were available in the moment (for example, maize, sorghum, groundnuts, sardines). When peanuts (or other groundnuts) and sardines were available, they were usually combined to make a porridge for younger children. Many respondents felt that children younger than 5, or those who were still breastfeeding, should receive a different diet than those older than 5, who appeared to be grouped with adults in terms of nutrition needs. Once a child turned five, there was less attention paid to what they were eating.

“In our house, we don't care too much [who eats what kind of food], maybe when the child is small, he is sucking [breastfeeding] a little bit, [he'll] eat differently, but when he stops breastfeeding, we just eat together.” (Respondent 1, FGD 4, Mwinuko, Ruvuma)

The only statistically significant difference between the treatment and control group for infant and young child feeding indicators is exclusive breastfeeding among children ages 0 to 5 months; however, this is a small sample size, and the overall exclusive breastfeeding prevalence for children ages 0 to 59 months is balanced.

Challenges and barriers

Qualitative interviews explored nutritional challenges and access to food. Overwhelmingly, respondents cited a lack of money, food, and access to water as the primary challenges preventing them from giving their families nutritious meals. They understood these barriers to be extremely detrimental to their well-being and that of their children, tantamount to sickness or even death.

“There are many problems [when we do not have food or water]... children become sick, sometimes they are so tired that they don't have the strength to live.” (IDI 1, Swaila, Rukwa)

Interview and focus group respondents understood the importance of proper nutrition for themselves and their children, but without the necessary resources to access food or clean water, they were forced to feed their children less nutritious options.

“[the clinic worker] will only direct you to go take this and this, that’s it ... he doesn’t give you money or help you with anything ... you really have to fight yourself.” (IDI 2, Kitanda, Ruvuma)

When households experience a food shortage and there is no money or means to purchase food, qualitative interviews suggest that the mother is always the last to eat, behind the children and the father. It was unclear whether this decision was made by the mother or father, or if it was just tacitly expected of the mother to sacrifice.

“I am the one who sacrifices [so the children can eat when there is no food].” (IDI 4, Lunyala, Rukwa)

Table 9.2.1. Infant and young child feeding practices

	Pooled mean	Treatment mean	Control mean	p-value	DHS mean
Children 0–59 months (N)	3,343	1,658	1,685		
Exclusive breastfeeding until 6 months	0.422	0.424	0.420	0.920	
Among children ages 0–5 months	0.668	0.588	0.754	0.027*	0.474 ^a
n	245	125	120		517
Among children ages 6–12 months	0.372	0.415	0.335	0.216	
n	294	130	164		
Among children ages 12–23 months	0.607	0.624	0.588	0.589	
n	389	197	192		
Among children ages 24–59 months	0.371	0.372	0.370	0.988	
n	2,415	1,206	1,209		
Children ages 6–23 months (n)	683	327	356		253
Minimum meal frequency	0.308	0.328	0.288	0.343	0.176
Minimum diet diversity (5+ food groups, including breast milk)	0.073	0.079	0.066	0.657	0.125
Consumption of iron-rich or iron-fortified foods	0.153	0.175	0.131	0.284	0.226
Children ages 24–59 months (n)	2,393	1,197	1,196		157
Continued breastfeeding 6–23 months	0.219	0.209	0.230	0.368	0.063
Breastfeeding and complementary feeding 6–23 months	0.176	0.172	0.180	0.698	-

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. DHS means refer to means calculated among rural households in the study regions (Geita, Rukwa, and Ruvuma) using data from the 2022 DHS. There

are fewer observations for the sample in this subsection due to missing data from an incorrect skip pattern issue during data collection.

^a DHS exclusive breastfeeding is assessed only among children younger than 6 months

9.3. Care during diarrhea

Diarrhea illness in children should be adequately managed to avoid potential long-term impacts to child growth. Stawisha Maisha aims to educate mothers on how to best care for children when they have diarrhea, including giving oral rehydration salts (ORS), feeding the same or more food than usual, and providing more liquids than usual.

Table 9.3.1 presents overall diarrhea prevalence in the two weeks preceding the survey, as well as two Stawisha Maisha indicators: ORS treatment and appropriate diarrhea feeding and liquid quantities. Of all 3,605 children in the sample, 15.3 percent had had an episode of diarrhea in the previous two weeks. Of those children, about 67 percent were given ORS, but only 6.8 percent were given the appropriate feeding and liquid standards. The low rate of appropriate diarrhea feeding practices is largely driven by the small portion of children, 9.8 percent, who are given more liquids than usual as recommended. There were no statistically significant differences between treatment and control group for any diarrhea indicators.

Table 9.3.1. Care during diarrhea

	Pooled mean	Treatment mean	Control mean	p-value	DHS mean
Child had diarrhea in last two weeks	0.153	0.163	0.142	0.366	0.057
N	3,605	1,783	1,822		814
Given ORS (among those with diarrhea)	0.669	0.645	0.697	0.342	0.480
N	492	266	226		44
Given more liquids than usual (among those with diarrhea)	0.098	0.098	0.099	0.966	0.250
N	492	265	227		44
Given more or the same food as usual ^a (among those with diarrhea who eat solid foods)	0.680	0.702	0.656	0.446	0.567
N	467	251	216		44
Given both more liquids and the more or same food (among those with diarrhea)	0.068	0.080	0.052	0.488	0.133
N	491	264	227		44

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. DHS means refer to means calculated among rural households in the study regions (Geita, Rukwa, and Ruvuma) using data from the 2022 DHS.

^a Fewer observations are due to excluding children who had not yet been given solid foods.

9.4. Early childhood development

We administered the Early Childhood Development Index 2030 (ECDI2030) module³³ to capture the achievement of key child developmental milestones. ECDI2030 was created and validated for children ages 24–59 months and thus was only assessed for the subgroup of children in that age range. The module consists of 20 questions across three subdomains: health, learning, and psychosocial well-being. Children are considered to be developmentally on track if they achieved the minimum number of milestones for their age group. For example, children ages 24–29 months are expected to achieve at least seven milestones, whereas children ages 36–41 months are expected to achieve 11 milestones. ECDI2030 is reported as a single indicator: the percentage of children ages 24–59 months who are developmentally on track. About one in five children (21.1 percent) were developmentally on track at the time of the baseline survey (Table 9.4.1). There were no statistically significant differences for early childhood development between the treatment and control group.

Table 9.4.1. Early childhood development (children ages 24–59 months)

	Pooled mean	Treatment mean	Control mean	p-value	DHS mean
Developmentally on track	0.211	0.208	0.214	0.637	0.240
N	2,578	1,289	1,289		504

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. DHS means refer to means calculated among rural households in the study regions (Geita, Rukwa, and Ruvuma) using data from the 2022 DHS.

9.5. Nutritional status

Key objectives of Stawisha Maisha are to reduce stunting, wasting, and underweight prevalence among children in Tanzania. We collected height and weight measurements for all children younger than 5 living in the surveyed households and calculated the levels of stunting, wasting, and underweight using the 2006 WHO child growth standards as the reference population.³⁴ Stunting is calculated with height-for-age. Children with a height-for-age z-score^x below minus two standard deviations (–2 SD) from the median of the reference population³⁴ are classified as stunted. Children below minus three standard deviations (–3 SD) are considered severely stunted. Wasting is calculated with weight-for-age. Children with a weight-for-age^{xi} z-score below minus two standard deviations (–2 SD) from the median of the reference population are considered wasted. Children with a weight-for-height z-score below minus three standard deviations (–3 SD) from the median of the reference population are considered severely wasted. Underweight is assessed with weight-for-age. Children with a weight-for-age z-score below minus two standard deviations (–2 SD) from the median of the reference population are classified as

^x Z-scores are calculated against the 2006 WHO child growth standards as follows: $z = (x - \mu) / \sigma$, where x is the individual's height (weight), μ is the mean height (weight) in the reference group, and σ is the standard deviation of heights (weights) in the reference group.

^{xi} In accordance with recommended practices, we subtracted 100 grams from the weight measurements of children who were clothed (95.2%) or children for whom clothing status was not obtained (2.6%) before calculating of anthropometric outcomes.

underweight. Children below minus three standard deviations (-3 SD) are considered severely underweight.

Baseline child nutritional status is presented in Table 9.5.1. Among the sample of measured children younger than 5, 44.1 percent were stunted and 15.7 percent were severely stunted. This rate is higher than the national stunting average (30 percent) and higher than the stunting average in two of the three study regions covered (36 percent in Ruvuma and 39 percent in Geita).⁴ The rate of wasting in our child sample was 5.5 percent, and 1.7 percent were severely wasted. The wasting rate in our sample was also higher than the national wasting average (3.3 percent) and that of two study regions (2.8 percent in Ruvuma and 3.3 percent in Geita). The rate of underweight children in our sample was 19.0 percent, and 4.4 percent were severely underweight. The underweight rate in our sample was higher than the national underweight average (12.1 percent) and that of two study regions (12.2 percent in Ruvuma and 10.3 percent in Geita). There were no statistically significant differences between the treatment and control groups across all child nutritional status indicators. The higher rates of stunting, underweight, and wasting found in our sample as compared to national averages were not surprising, as the study regions were selected in part due to high rates of stunting.

Table 9.5.1. Child nutritional status

	Pooled mean	Treatment mean	Control mean	p-value	DHS mean
Height-for-age z-score (HAZ)	-1.744	-1.765	-1.723	0.631	-1.858
Proportion stunted (HAZ < -2 SD)	0.441	0.450	0.431	0.483	0.485
Proportion severely stunted (HAZ < -3 SD)	0.157	0.151	0.164	0.290	0.144
N	3,481	1,719	1,762		402
Weight-for-height z-score (WHZ)	-0.054	-0.061	-0.048	0.898	0.105
Proportion wasted (WHZ < -2 SD)	0.055	0.057	0.052	0.741	0.041
Proportion severely wasted (WHZ < -3 SD)	0.017	0.017	0.016	0.967	0.021
N	3,476	1,721	1,755		404
Weight-for-age z-score (WAZ)	-1.041	-1.051	-1.031	0.849	-1.009
Proportion underweight (WAZ < -2 SD)	0.190	0.191	0.189	0.919	0.137
Proportion severely underweight (WAZ < -3 SD)	0.044	0.042	0.046	0.602	0.030
N	3,492	1,726	1,766		403

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level. DHS means refer to means calculated among rural households in the study regions (Geita, Rukwa, and Ruvuma) using data from the 2022 DHS. Missing observations are due to inability to collect height or weight for some children during fieldwork or a calculated z-score outside a biologically plausible range.

10. HEALTH FACILITY CHARACTERISTICS

In Chapters 10 and 11, we provide contextual information on health facilities and community characteristics. The intervention is not expected to change these characteristics. However, we report them to provide context for the intervention and to potentially examine how these characteristics influence intervention impacts. For example, the intervention might have larger effects in communities with access to better health services or in communities with more equitable gender attitudes. There are many additional characteristics that may moderate intervention impacts, and these are outlined in the conceptual framework (Figure 4).

We surveyed primary health care facilities and dispensaries (n = 87)^{xii} in villages where Stawisha Maisha respondents resided to understand the services available to women and children. Facilities were identified in consultation with village leaders and cross-checked against the Ministry of Health's administrative list from 2020. At each health facility, we administered the World Health Organization (WHO) Service availability and readiness assessment (SARA).³⁵

In total, the field teams interviewed 87 facilities spread across 150 rural villages. When multiple facilities were present within a village, field teams purposively selected health centers over other smaller facilities such as dispensaries, and where there were only dispensaries, one facility was randomly selected.^{xiii}

10.1. Facility characteristics

The majority of health facilities surveyed were village dispensaries (85.1 percent). This was expected, as the Ministry of Health's administrative list from 2020 indicated the presence of only 27 public health centers across the entire three sample regions, with fewer expected within the sample wards and villages. Notably, 63 villages, representing 42 percent of the total, had neither a dispensary nor a health center. Table 10.1.1 shows the distribution of health facilities.

^{xii} Not all villages had a health facility.

^{xiii} We lack precise data on the total number of health facilities in our study area. However, we can assume that 63 clusters do not have a health facility within their boundaries. This assumption is based on the fact that the health facility survey was not carried out only when there were no health facilities listed on the Ministry of Health roster for that area. Furthermore, village leaders confirmed to field supervisors there were no health facilities in their respective villages, although this confirmation was not explicitly stated in the questionnaire. Nonetheless, it is noteworthy that out of the 150 communities surveyed, 67 reported insufficient access to health care (too far/too few) as one of the largest health issues, aligning with our assumption about the distribution of health facilities.

Table 10.1.1. Health facility type, by treatment status

	Pooled frequency	Treatment frequency	Control frequency
Dispensary	74	36	38
%		0.487	0.514
Health center	13	8	5
%		0.615	0.385
N	87	44	43
%		0.545	0.494

Baseline means for broad characteristics around the operations and amenities of the health facilities are shown in Table 10.1.2. Each facility provided information about the number of communities it served, with 16 health facilities serving more than one community. Approximately 71.3 percent of facilities provided housing accommodation for staff. The average age of the facilities was 26.9 years. Although almost all facilities had access to electricity (98.9 percent) and a refrigerator for storing vaccines and medication (96.6 percent), only about half had a functioning computer (49.4 percent) or their own vehicle for emergencies (12.7 percent). On average, health facilities were open 5.5 days a week, with two facilities operating for only four days (fewest number of days open in the sample).

Table 10.1.2. Health facility basic characteristics

	Pooled mean	Treatment mean	Control mean	p-value
Estimated catchment population	10,827.556	8,717.675	12,885.976	0.092
Provides housing to staff	0.713	0.651	0.773	0.189
Number of days a week for outpatient care	5.609	5.581	5.636	0.849
Age of health facility building	26.875	28.732	24.923	0.350
Has electricity	0.989	1.000	0.977	0.309
Has functioning refrigerator (to store biomedical samples, vaccinations, medications)	0.966	0.953	0.977	0.544
Has access to vehicle	0.885	0.837	0.932	0.144
Has functional computer	0.494	0.488	0.500	0.785
Has land line telephone that is available outside of hours	0.034	0.047	0.023	0.555
Has private cellular phone supported by the facility	0.862	0.907	0.818	0.242
Has water available from source on-site	0.692	0.647	0.742	0.343
Has functional flush toilet	0.713	0.744	0.682	0.516
N	87	43	44	

Note: *Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region.

Table 10.1.3 reveals that, on average, only one in 10 facilities had operating theatres, and only four facilities (4.6 percent) had the means to perform a caesarean section. However, three-quarters of facilities had a laboratory where they could perform tests.

Table 10.1.3. Surgical and testing services, by treatment group

	Pooled mean	Treatment mean	Control mean	p-value
Has an operating theatre	0.103	0.047	0.159	0.085
Performs C-section	0.046	0.023	0.068	0.333
Has laboratory	0.759	0.767	0.750	0.822
N	87	43	44	

Note: *Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region.

10.2. Availability of services

The provision of services offered by facilities is summarised in Table 10.2.1. All clinics provided antenatal care and child growth monitoring. Many pregnancy-related services such as providing supplements, hypertension monitoring, and intermittent preventative treatment of malaria were widely available. In 86.2 percent of facilities, there was around-the-clock presence of a health care provider. There were no significant differences in the provision of any health services between facilities in the treatment and control villages.

Table 10.2.1 Availability of services

	Pooled mean	Treatment mean	Control mean	p-value
Health care provider always present (24 hours)	0.862	0.860	0.864	0.990
Facility has guidelines for infection prevention	0.989	1.000	0.977	0.314
Provides ANC	1.000	1.000	1.000	
Pregnancy hypertension monitoring	0.989	1.000	0.977	0.309
IPTp malaria treatment	1.000	1.000	1.000	
Iron supplement	0.977	0.977	0.977	0.940
Folic acid supplement	1.000	1.000	1.000	
Deliveries	0.943	0.953	0.932	0.648
Provides preventative/curative care for children younger than 5	0.977	0.977	0.977	0.954
Diagnoses child malnutrition	0.918	0.952	0.884	0.263
Child growth monitoring	1.000	1.000	1.000	
N	85	42	43	

Note: *Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region.

11. COMMUNITY CHARACTERISTICS

Community-level characteristics, such as access to services and social norms, are likely to impact the health of people living in that village. To gain insights into these dynamics, we surveyed 549 community leaders across 150 villages located in three regions and five districts. The community questionnaires asked local experts about access to services, nutritional knowledge, attitudes, and practices. Understanding these characteristics is crucial to understanding the context and moderating impacts on effects of the Stawisha Maisha intervention.

11.1. Access to basic services

Table 11.1.1 provides information on communities' access to basic services. Two in five of the sample communities had dirt tracks as their main access road surface; however, the communities reported they were accessible by vehicle for an average of 11.5 months per year. Table 11.1.1 shows that although 78 percent of communities had access to grid electricity, less than one-third of households had adopted this means of power. There were no statistically significant differences between treatment and control groups in these population and access to services indicators.

According to qualitative respondents, infrastructure issues made it difficult to access basic amenities. Electricity was unavailable or inconsistent, water sources were often two hours' walk away or more (one way) from the villages, and markets to purchase food or sell crops were not always accessible. Even if water or markets were relatively close, respondents frequently lacked funds for transportation, and roads were in bad condition.

"... improper street roads cause travelling difficulties during rain[y] reasons. So, now, the vehicles cannot cross [the flooded road] ... so the crops end up the other side, while you are here. Therefore, the cars cannot go [across the flooded road] to pick up the crops, and you have to carry them from there to this side. So, if there are many crops, it becomes challenging to transport them ..." (Respondent 7, FGD 6, Songambebe, Ruvuma)

Table 11.1.1. Baseline means of community services, by treatment status

	Pooled mean	Treatment mean	Control mean	p-value
Roads				
Road type: bitumen	0.207	0.213	0.200	0.837
Road type: gravel	0.380	0.413	0.347	0.397
Road type: dirt track	0.413	0.373	0.453	0.323
Distance to nearest bitumen road (km)	29.548	26.386	32.710	0.180
Vehicles pass main road year round	0.753	0.707	0.800	0.186
Number of months road was passable by minivan (in last 12 months)	11.575	11.811	11.367	0.090
Power				
Electricity via public grid	0.780	0.760	0.800	0.557
Estimated proportion of households connected to public grid	29.718	26.684	32.600	0.137
Piped water in community	0.433	0.453	0.413	0.618
N	150	75	75	

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region.

11.2. Access to nutrition and health services

Table 11.2.1 offers additional insights into community health care and related issues. Most communities (97.3 percent) reported recent immunization campaigns. Respondents reported that women in their communities overwhelmingly gave birth in health facilities (98.7 percent) rather than at home. The table also highlights various challenges related to health care, including issues such as perceived insufficient access to health facilities (44.7 percent), insufficient health care resources (62 percent), insufficient health care personnel (50.7 percent), and inadequate health care facilities (8.7 percent). Although a majority of respondents reported that the nearest facility accepted the improved Community Health Fund (iCHF) insurance, one-third reported that community members struggle with inability to pay for health services (30 percent). When they were asked about why community members might not enroll in iCHF, the most common reasons were lack of funds to pay the premium (60.7 percent) and lack of awareness of the benefits of having health insurance (67.3 percent). In summary, this table underscores the similarity in health care practices and challenges between the treatment and control groups (no statistically significant differences were observed) and sheds light on the shared health care landscape in the studied communities.

Table 11.2.1. Baseline means for access to health services

	Pooled mean	Treatment mean	Control mean	p-value
Recent immunisation campaign (last 6 months)	0.973	0.973	0.973	1.000
Social assistance program in last 12 months	0.380	0.427	0.333	0.226
Most women give birth: at home	0.013	0.013	0.013	1.000
Most women give birth: in health facility	0.987	0.987	0.987	1.000
Issues reported with available health care				
Insufficient access to health facilities (too far/too few)	0.447	0.467	0.427	0.622
Insufficient resources (supplies/medication)	0.620	0.587	0.653	0.401
Insufficient personnel	0.507	0.467	0.547	0.323
Inadequate facilities (e.g., no oral rehydration, lack of running water/electricity)	0.087	0.120	0.053	0.145
Inability to pay for health services	0.300	0.293	0.307	0.856
Payment for health services				
Nearest facility accepts ICHF	0.940	0.920	0.960	0.302
Perceived barriers to enrolling in ICHF				
No money to pay premium	0.607	0.653	0.560	0.235
Distance to register is too far	0.087	0.120	0.053	0.135
No money for transport to travel for registration	0.027	0.027	0.027	1.000
Unaware of eligibility for ICHF	0.373	0.333	0.413	0.310
Unaware of benefits of health insurance	0.673	0.680	0.667	0.862
Don't believe it's worth the cost	0.187	0.227	0.147	0.198
N	150	75	75	

Note: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region.

Table 11.2.2 provides a comprehensive overview of baseline means for access to nutrition services. Notably, the data reveals that there was a statistically significant difference in the perception of facing challenges in adequately nourishing children, with the treatment group having experienced fewer difficulties (84 percent vs. 95 percent). However, when it comes to discussions with friends and family about nutrition, and the sources of information about child nutrition, there were no significant differences between the groups.

Specifically, 91.3 percent of respondents said that community members sourced information about child nutrition from health facilities. In terms of barriers to child nutrition, the most common responses were lack of knowledge of what to feed children (68.7 percent) and lack of adequate foods for good nutrition (42.7 percent). In addition, 15 percent of community leaders perceived that lack of time to provide nutritious foods was a barrier to good nutrition in their communities. There were no statistically significant

differences between treatment and control groups with respect to barriers to good nutrition.

Table 11.2.2. Baseline means for access to nutrition services

	Pooled mean	Treatment mean	Control mean	p-value
There are months when harder to adequately nourish the child	0.893	0.840	0.947	0.034*
Ever talks about nutrition with friends and family	0.947	0.960	0.933	0.452
Source of information on child nutrition				
Health facilities	0.913	0.907	0.920	0.772
Friends/families/neighbours	0.193	0.240	0.147	0.145
Village leaders	0.513	0.480	0.547	0.416
NGOs	0.053	0.067	0.040	0.462
Faith	0.000	0.000	0.000	
Radio	0.113	0.093	0.133	0.439
Newspapers/magazines	0.020	0.027	0.013	0.561
Internet	0.000	0.000	0.000	
Television leaders/religious institutions	0.067	0.053	0.080	0.511
Barriers				
Lack of knowledge about what to feed children	0.687	0.667	0.707	0.596
Lack of adequate amount of food	0.400	0.440	0.360	0.316
Lack of adequate types of food for good nutrition	0.427	0.360	0.493	0.096
Lack of time to devote to preparing nutritious food	0.153	0.133	0.173	0.497
Pressure from family (e.g., mothers-in-law) to follow certain feeding practices	0.013	0.013	0.013	1.000
N	150	75	75	

Notes: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region.

11.3. TASAF participation

Each community had a TASAF Community Management Committee (CMC), which oversees and administers TASAF activities within the area. In our sample, villages had an average of 13.5 CMC members, 45 percent of whom were female (Table 11.3.1).

In terms of NGO engagement, the most commonly mentioned NGO was Plan International, which is active in one in five of the sample communities regarding the most common services relating to water, sanitation, and hygiene, as well as youth services. We saw an overall balance between the treatment and control groups in terms of the organizations present and services implemented in these communities.

Table 11.3.1. Baseline means for provision of government and NGO services

	Pooled mean	Treatment mean	Control mean	p-value
Number of TASAF Community Management Committees (CMCs)	13.520	13.587	13.453	0.654
Number of female CMCs	6.080	6.080	6.080	1.000
Distance to TASAF collection point (km)	0.280	0.040	0.520	0.303
Organisations active				
Save the Children International (SCI)	0.027	0.040	0.013	0.293
Catholic Relief Services (CRS)	0.007	0.013	0.000	0.315
Centre for Counselling, Nutrition and Health care (COUNSENUTH)	0.007	0.000	0.013	0.314
Jhpiego	0.007	0.000	0.013	0.313
Plan International	0.220	0.267	0.173	0.097
Services provided				
Provision of information relating to nutrition, water, or sanitation	0.168	0.213	0.122	0.109
Cash grants to households	0.134	0.133	0.135	0.995
In-kind transfers to households	0.114	0.093	0.135	0.407
Medical care	0.054	0.027	0.081	0.138
Youth-specific interventions	0.154	0.173	0.135	0.517
Other	0.128	0.173	0.081	0.089
N	149	75	74	

Note: * Significant at $p < .05$; ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region.

11.4. Social and cultural aspects of community life

One of the key components of Stawisha Maisha involves empowering women to make decisions about nutrition within the household. Table 11.4.1 captures some broad community-level indicators on the role of women and social norms (of which gender norms are a subset). On average, men tended to marry slightly older—at 20.6 years, on average, compared to women at 18.3 years old. Women were able to inherit their husband's property in 88.7 percent of communities. Generally, the pattern of inheritance was consistent across the different types of a husband's property (house, land, or livestock). There were no statistically significant differences between the treatment and control communities for marriage age or inheritance practices. We also asked individuals questions about gender equitable attitudes in the household questionnaires (see Appendix 2 for more information). Gender norms dictate the social understanding of cultural roles, behaviours, activities, and attributes expected of people based on their sex or gender,³⁶ which can influence the ways in which men and women interact with one another—including how women are empowered (or not) to make decisions for their families. Gender attitudes are an individual person's opinion about a norm, and they can be either aligned with or in opposition to the accepted norm.³⁷ Understanding attitudes toward gender norms is important for understanding how men and women are valued within a community, and what types of social sanctioning could occur if an individual steps out of the prescribed community gender norms. Thus, interventions that seek to empower women must first

also understand attitudes toward gender norms in the communities in which they are implemented, particularly if those norms indicate a bias against women.

Although regular alcohol consumption was rare among youth younger than 18, community leaders in more than half of the communities perceived that more than half of the men and one in five women consumed alcohol at least once per week.

Table 11.4.1. Community social norms

	Pooled mean	Treatment mean	Control mean	<i>p</i> -value
Gender Practices				
Typical marriage age for women (years)	18.333	18.507	18.160	0.179
Typical marriage age for men (years)	20.553	20.600	20.507	0.826
Wife inherits husband's property	0.887	0.867	0.907	0.435
Inherit: house	0.873	0.840	0.907	0.215
Inherit: land	0.887	0.867	0.907	0.435
Inherit: livestock	0.880	0.853	0.907	0.312
Inherit: other	0.053	0.040	0.067	0.460
Alcohol consumption norms in the community				
Men drinking on a regular basis: 50% or more	0.587	0.573	0.600	0.721
Women drinking on a regular basis: 50% or more	0.213	0.200	0.227	0.672
Under 18 youth drinking on a regular basis: 50% or more	0.033	0.027	0.040	0.652
N	150	75	75	

Note: * Significant at $p < .05$; ** $p < .01$. *p*-values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region.

12. CONCLUSION

This report documents the design of the impact evaluation of the Stawisha Maisha (“Nourishing Life”) intervention being integrated within PSSN II and implemented by TASAF within the government of the Republic of Tanzania’s PSSN II programme, with technical assistance from UNICEF. The intervention aims to increase knowledge and motivation for improved maternal, infant, and young child feeding; increase self-confidence and self-efficacy; and strengthen family goals and aspirations for child development. The impact evaluation examines intervention impacts on these outcomes and pathways of change. Key innovations of this intervention include delivery through a national social protection programme, targeting some of the most vulnerable households, and use of edutainment to promote children’s nutrition through behaviour change at scale (via radio or audio material). This evaluation will further contribute to understanding of how “plus” components within national cash transfer programmes can promote children’s nutrition in Tanzania and regionally in Africa. Strengths of the evaluation design include high internal validity^{xiv} through a cluster RCT design, mixed methods (quantitative and qualitative), and multiple levels of data collected from individuals, health facilities, and communities.

The baseline report describes the evaluation sample and assesses whether randomization of treatment (PSSN II plus Stawisha Maisha) and control (PSSN II only) groups was successful. We show that implementation of randomization was highly successful, with baseline equivalence confirmed over almost all indicators assessed. This contributes to the good internal validity of the study, and suggests that differences between treatment and control groups that we may observe at follow-up rounds of data collection can be attributed to intervention impacts. Moreover, in this report, we have provided contextual information on health facilities and community characteristics, which may moderate intervention impacts.

Data summarized in this report demonstrate that PSSN II households lack resources for many of their basic needs, including nutritious foods for their children. Of relevance to the Stawisha Maisha intervention and future TASAF messaging, 80 percent of PSSN II households surveyed did not own a radio or a functioning cell phone that can receive radio broadcasts. Thus, despite receiving assistance from PSSN II, which has been previously demonstrated to have strong, positive impacts on households’ economic security and well-being,³⁸ households often still struggle to meet their basic needs and face challenges with respect to their livelihood options and their ability to improve their lives.

Children in our study sample were stunted at a much higher rate (44.1 percent) compared to children nationally (30 percent). This statistic indicates the heightened vulnerability among the study sample, but it also indicates that the programme is well targeted to households in need of additional nutrition interventions. Indeed, 15.7 percent of the children in the sample were severely stunted. Relatedly, households in this sample experienced high rates of food insecurity. Over 40 percent of households were severely

^{xiv} Other factors that will confirm the internal validity of the study include adherence to randomization procedures and high follow-up and retention rates.

food insecure. In the results section, we highlighted indicators that suggested room for improvement by the intervention, including early antenatal care visits, adequate number of antenatal care visits, exclusive breastfeeding rates, knowledge regarding the need for pregnant women to eat an extra meal per day, and knowledge of child growth monitoring, among others. However, given preexisting food insecurity in these households, some indicators—such as exclusive breastfeeding and pregnant women eating an extra meal per day—may be challenging for the intervention to tackle, as it is a knowledge-based intervention and does not provide additional economic strengthening (beyond what households are already receiving from PSSN II), which might further improve food security.

Several positive aspects were noted in our findings. Respondents had high levels of trust in information from health care workers and radio broadcasts. Generally, respondents felt they were knowledgeable about what they need to feed their children, despite often lacking resources to enact this knowledge. In addition, women felt a sense of support from the community among the women and their neighbors and said they help each other in times of need.

This evaluation has a rigorous study design. However, there are some potential threats to the evaluation, which the team is monitoring closely and taking steps to minimize. First, the intervention implementation was originally planned to roll out in September 2023, immediately after the baseline data collection. However, there have been delays in rollout, and the first radio broadcasts are now expected to start in June 2024. This means that 10 months will have passed between the baseline implementation and the start of the intervention. These delays could potentially threaten the validity of the evaluation if control and treatment villages experience different trends or activities (for example, different rates of drought or flooding, or differential implementation of other interventions by non-governmental organisations). However, the strong baseline balance between treatment and control groups and the fact that villages were randomized within districts (which are limited geographic areas) indicate that the experience of differential trends and activities is unlikely between treatment arms.

Second, because of these delays, the research team will now have to wait almost two years after baseline instead of the originally planned one year to follow up with households. This delay in timing of follow-up increases the risk of attrition. The research team has extensive experience in following households longitudinally and minimizing attrition rates. Detailed contact information of study participants and people who can get in touch with them were collected at baseline, and the team will implement careful tracking activities at follow-up to minimize attrition. Using our tried-and-tested approaches, our tracking strategy for the endline will consist of three steps: (1) a pre-field phone survey to check respondent availability and make appointments, when possible; (2) in-field tracking using information collected at baseline and working with community leaders when required; and (3) extra sweeping days for additional surveys at the end of the data collection phase.

Finally, our plan is to analyze anthropometric outcomes for children younger than 5 at endline in two ways: (1) longitudinal analysis of the panel sample of children measured at baseline and endline and (2) comparison analysis of the cross-sections of children

younger than 5. The second approach is not affected by delays, but the delays mean that the first approach is feasible with a much smaller sample than was possible were the endline to occur after only one year. This is because more children will age out of the under 5 window in two years, as compared to one year. Thus, our longitudinal sample of children younger than 5 is reduced, which, in turn, reduces our power to detect changes attributable to the intervention.

In this baseline report, we have integrated quantitative and qualitative data analysis. We will estimate impacts and pursue more in-depth analysis of the topics after follow-up data are collected (expected in 2025). Over a range of key household and community indicators, we found that the control and treatment groups were largely similar. Thus, the evaluation team is pleased to conclude the randomization was successful, with a balanced distribution between experimental groups. This lays the foundation for accurately estimating effects of the intervention in the forthcoming phases of the study.

Based on our findings, we provide the following programmatic and research recommendations for the intervention and evaluation moving forward.

Programmatic recommendations

1. Efforts should be made to start intervention rollout as soon as possible, as further delays may further threaten the validity of the evaluation.
2. Due to low rates of radio ownership and low rates of listening to radio on mobile phones, future TASAF programming involving radio messaging should consider provision of radios to communities.
3. The next iteration of edutainment programming should consider addressing gender norms in feeding practices (for example, the idea that boys expend more energy and need supplemental feeding before the age of 6 months, or practices that disadvantage adolescent girls from equitable shares of food).

Research recommendations

1. Given delays between baseline data collection and intervention implementation, it will be important at the follow-up data collection round(s) to assess any other nutrition-related programming and interventions implemented in study areas, and whether coverage of treatment and control villages was different.
2. Maximum efforts should be made to follow up with households and study participants to minimize attrition.
3. Follow-up rounds of data collection should consider including (1) key informant interviews with TASAF personnel in districts, (2) qualitative interviews or focus groups with spouses of caregivers, and (3) key informant interviews with clinic staff to verify the information from the women.
4. Future qualitative interviews should explore the relationship between gender norms and feeding practices (including breastfeeding), given higher rates of stunting among boys found in this sample—a finding that is consistent with existing evidence from the region.

5. Future qualitative interviews should explore requirements for pregnant women at the clinic, including updates from the government regarding husband/partner accompaniment.
6. Follow-up rounds of data collection should include detailed modules on intervention take-up, including timing of listening sessions, issues with radios, and related information.

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APPENDIX 1. EVALUATION INDICATORS

Stawisha Maisha evaluation indicators				
OECD DAC criteria	Research question	Indicator	Source	SDG
Programme participation, exposure, and attitude indicators				
Effectiveness	2.1	Percentage of caregivers who can recall specific character names	Household surveys, qualitative focus groups, interviews	N/A
Effectiveness	2.1	Percentage of caregivers who can recall character sayings	Household surveys, qualitative focus groups, interviews	N/A
Effectiveness	2.1	Percentage of caregivers who can recall specific plot line	Household surveys, qualitative focus groups, interviews	N/A
Effectiveness	2.1	Percentage of caregivers who can sing Stawisha Maisha song	Household surveys	N/A
Effectiveness	2.1	Percentage of caregivers with positive attitudes towards Stawisha Maisha programme content	Qualitative focus groups, interviews	N/A
Effectiveness	2.1	Percentage of caregivers with positive opinions of Stawisha Maisha characters	Qualitative focus groups, interviews	N/A
Effectiveness	2.2, 2.3	Percentage of caregivers with positive attitudes about radio broadcast quality/channel ease of access	Household surveys, qualitative focus groups, interviews	N/A
Nutrition knowledge, attitude, and efficacy indicators				
Impact	1.4	Percentage of caregivers with knowledge of maternal dietary diversity	Household surveys, qualitative focus groups, interviews	2
Impact	1.4	Percentage of caregivers with knowledge of maternal extra meal a day	Qualitative interviews	2
Impact	1.5	Normative expectations of maternal nutrition	Qualitative focus groups, interviews	2
Impact	1.4	Percentage of caregivers with knowledge of early initiation of breastfeeding within 1 hour of birth	Household surveys	2
Impact	1.4	Percentage of caregivers with knowledge of exclusive breastfeeding to 6 months	Household surveys, qualitative focus groups, interviews	2
Impact	1.4	Percentage of caregivers with knowledge of continued breastfeeding at age 6–23 months	Household surveys, qualitative focus groups, interviews	2

Stawisha Maisha evaluation indicators				
OECD DAC criteria	Research question	Indicator	Source	SDG
Impact	1.4	Percentage of caregivers reporting that it is "good" to feed child age 6+ months several times each day	Surveys, focus groups, interviews	2
Impact	1.4	Percentage of caregivers reporting that it is "good" to feed child age 6+ months different types of food each day	Household surveys, qualitative focus groups, interviews	2
Impact	1.4	Percentage of caregivers reporting they are stressed/worried about feeding child more frequently	Household surveys, qualitative focus groups, interviews	2
Impact	1.4	Percentage of caregivers reporting they are stressed/worried about feeding child different types of food	Household surveys, qualitative focus groups, interviews	2
Impact	1.4	Percentage of caregivers reporting they feel confident in preparing nutritious foods for their child	Household surveys, qualitative focus groups, interviews	2
Impact	1.4	Percentage of caregivers who feel they can make their own personal decision on child health/feeding	Household surveys, qualitative focus groups, interviews	2
Impact	1.4	Percentage of caregivers with knowledge of ORS treatment during diarrhea	Household surveys	2
Impact	1.4	Percentage of caregivers with knowledge of continued or increased breastfeeding, meal frequency, and increased fluid/water during diarrhea	Household surveys	2
Impact	1.4	Percentage of caregivers with knowledge of which foods provide certain nutrients (iron, Vitamin A)	Household surveys	2
Impact	1.5	Percentage of caregivers with ability to interpret growth monitoring card	Household surveys	2
Impact	1.5	Percentage of caregivers who believe many moms bring their children to health services that include growth monitoring and nutrition counseling	Household surveys	2

Stawisha Maisha evaluation indicators				
OECD DAC criteria	Research question	Indicator	Source	SDG
Impact	1.4	Percentage of caregivers identifying sources of nutrition information for infant and young child feeding and maternal nutrition/breastfeeding and complementary feeding and maternal nutrition	Household surveys	2
Impact	1.5	Percentage of caregivers reporting at least a moderate amount of trust in nutrition information from radio programs	Qualitative focus groups, interviews	2
Impact	1.5	Average caregiver self-efficacy rating for problem-solving child nutrition and maternal health/nutrition problems	Household surveys, qualitative focus groups, interviews	5
Impact	1.5	Average caregiver resiliency rating	Household surveys, qualitative focus groups, interviews	5
Impact	1.5, 1.7	Percentage of caregivers reporting social connectedness, feelings of affiliation/sense of belonging	Household surveys, qualitative focus groups, interviews	5
Behaviour and Anthropometric Indicators				
Impact	1.2	Percentage of children who were exclusively breastfed until age 6 months	Household surveys	2
Impact	1.2	Percentage of children who continued breastfeeding at age 6–23 months	Household surveys	2
Impact	1.2	Percentage of children who received complementary feeding + breastfeeding at age 6–23 months	Household surveys	2
Impact	1.2, 1.6	Percentage of children with minimum meal frequency for children ages 6–23 months	Household surveys	2
Impact	1.2, 1.6	Percentage of children with minimum dietary diversity for children ages 6–23 months	Household surveys	2
Impact	1.2	Percentage of children who consume iron-rich or iron-fortified foods for children ages 6–23 months	Household surveys	2

Stawisha Maisha evaluation indicators				
OECD DAC criteria	Research question	Indicator	Source	SDG
Impact	1.2, 1.6	Percentage of pregnant women who consume at least four food groups per day	Household surveys	2
Impact	1.2, 1.6	Percentage of pregnant women who consume at least one extra meal a day	Household surveys	2
Impact	1.5	Percentage of pregnant women who consumed iron folic acid (IFA) tablets for 90+ days during most recent pregnancy	Household surveys	2
Impact	1.5	Percentage of pregnant women who sought ANC visit first trimester	Household surveys	2, 5, 3
Impact	1.5	Percentage of pregnant women who sought 4+ ANC visits	Household surveys	2, 5, 3
Impact	1.1	Percentage of children who are stunted	Household surveys/anthropometric measurement	2
Impact	1.1	Percentage of children who are wasted	Household surveys/anthropometric measurement	2
Impact	1.2	Percentage of children with diarrhea who report ORS use	Household surveys	2
Impact	1.2	Percentage of children with diarrhea who report appropriate diarrhea feeding	Household surveys	2
Impact	1.3	Average value on early childhood development scale	Household surveys	2

APPENDIX 2. GENDER EQUITABLE ATTITUDES

The Gender Equitable Men (GEM) Scale was used to measure individual attitudes toward gender norms among individuals in participating villages.³⁹ Rooted in social constructivist theory, the scale assumes that norms are taught in childhood and reinforced and internalized throughout adolescence and adulthood through peer groups and institutions (such as schools). It acknowledges the root of gender as based in power relations between men and women and the interaction between them. The 24-item scale addresses four domains within the construct of gender norms: intimate partnerships, reproductive health and disease prevention, domestic and daily life, and violence.³⁹ It consists of two subscales, which measure support for both equitable and inequitable norms that can reliably be used together or individually. Response options were 1 = agree, 2 = somewhat agree, 3 = disagree. Higher scores indicate more gender equitable attitudes.

Table A.2.1. Gender Equitable Men (GEM) module

	Pooled mean	Treatment mean	Control mean	<i>p</i> -value
Total GEM score (24–72)	46.181	47.488	44.802	0.005**
N	2,256	1,137	1,119	

Note: * Significant at $p < .05$, ** $p < .01$. *p*-values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

APPENDIX 3. HEALTH FACILITY CHARACTERISTICS

Respondent characteristics

As shown in Table A.2.1, respondents for these interviews were staff from the facility, the majority of whom were health care practitioners such as nurses (42.2 percent) or doctors (22.6 percent). Respondents had an average of 5.25 years' work experience at that facility, and 51.0 percent of respondents were male.

Table A.3.1. Role and gender of facility questionnaire respondents

Respondent characteristic	Pooled frequency	%
Doctor	23	22.55
Nurse	43	42.16
Medical assistant	14	13.73
Midwife	2	1.96
Facility in charge	17	16.67
Deputy in charge	3	2.94
Male	50	49.0
Female	52	51.0
Total	102	100.00

Note: Multiple respondents were interviewed within 15 facilities.

As shown in table A.3.2, malaria rapid diagnostic tests and HIV testing are consistently available (100 percent), and testing for pregnancy and sexually transmitted diseases are also widely available (98.5 percent). The availability of anemia and Papanicolaou (Pap) testing, however, is more mixed.

Table A.3.2. Tests carried out at the facility by treatment group

	Pooled mean	Treatment mean	Control mean	p-value
Anemia	0.621	0.576	0.667	0.4542
Malaria (RDT)	1.000	1.000	1.000	-
Malaria (MPS)	0.242	0.212	0.273	0.573
HIV	1.000	1.000	1.000	-
Haemoglobin	0.682	0.606	0.758	0.192
Pap smear (HPV)	0.212	0.121	0.303	0.073
Pregnancy test	0.985	1.000	0.970	0.321
Other STI	0.985	1.000	0.970	0.321
N	66	33	33	

Note: * Significant at $p < .05$, ** $p < .01$. p-values refer to t-tests with a null hypothesis of balance between treatment statuses.

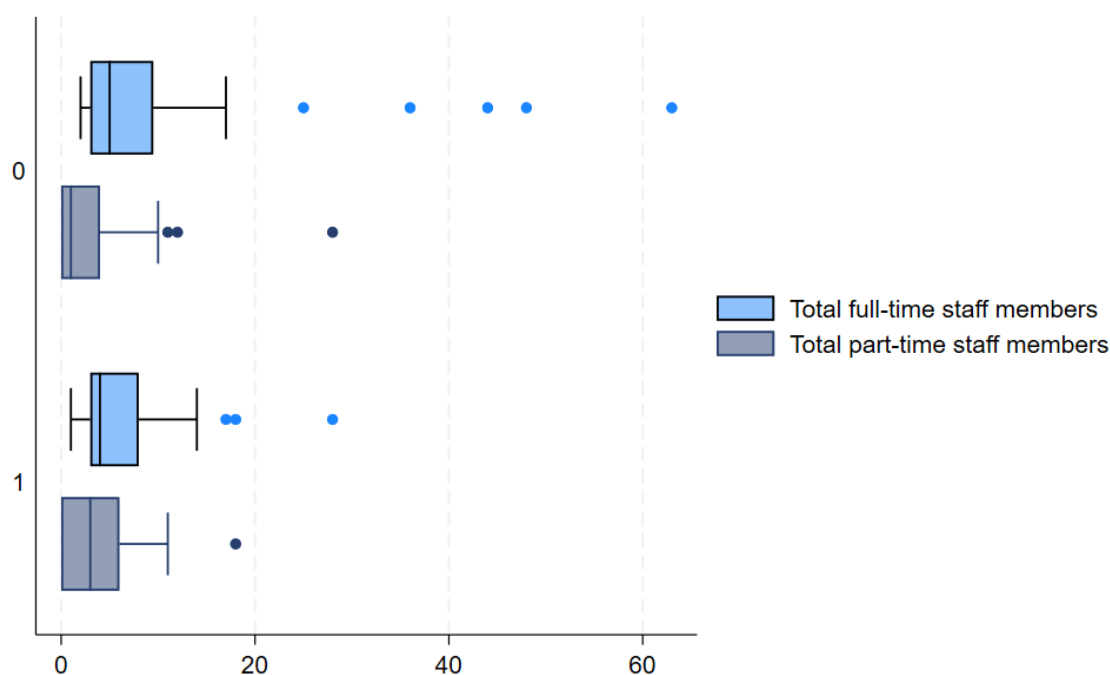
Personnel and training

Table A.3.3 presents data on the average and total number of personnel engaged by health facilities on a full-time or part-time basis. Control facilities have a significantly higher count of full-time staff compared to the treatment facilities. Figure A.3.3 shows the imbalance in the distribution of total staff members across the treatment statuses, with some outlier large facilities belonging to the control groups.

Table A.3.3. Total staffing levels across facilities, by treatment status and staff category

Row labels	Total full-time staff			Total part-time staff		
	Pooled	Control	Treatment	Pooled	Control	Treatment
Community health workers	216	104	112	179	73	106
Generalist (non-specialist) medical doctors	56	40	16	23	19	4
Laboratory technicians (medical and pathology)	49	36	13	7	6	1
Midwifery professionals	120	91	29	26	18	8
Non-physician clinicians/paramedical professionals	50	27	23	6	4	2
Nursing professionals	166	99	67	43	22	21
Pharmacists	14	12	2	11	2	9
Specialist medical doctors	57	48	9	10	5	5
N	728	457	271	305	149	156

Figure A.3.1. Distribution of total staff numbers within a facility, by contract type and treatment status



Community health workers, nursing professionals, and midwives constitute the largest staff groups across both treatment statuses. Pharmacists and lab technicians were less common, with a statistically significant difference in numbers of full-time staff in these positions between treatment and control facilities.

Table A.3.4. Staffing category, by treatment status and contract type

	Full-time				Part-time			
	Pooled mean	Treatment mean	Control mean	p-value	Pooled mean	Treatment mean	Control mean	p-value
Community health workers	2.483	2.605	2.364	0.743	2.057	2.465	1.659	0.259
Generalist (non-specialist) medical doctors	0.644	0.372	0.909	0.065	0.264	0.093	0.432	0.345
Laboratory technicians (medical and pathology)	0.563	0.302	0.818	0.045*	0.08	0.023	0.136	0.145
Midwifery professionals	1.379	0.674	2.068	0.075	0.299	0.186	0.409	0.182
Non-physician clinicians/paramedical professionals	0.575	0.535	0.614	0.662	0.069	0.047	0.091	0.513
Nursing professionals	1.908	1.558	2.25	0.263	0.494	0.488	0.5	0.841
Pharmacists	0.161	0.047	0.273	0.006**	0.126	0.209	0.045	0.386
Specialist medical doctors	0.655	0.209	1.091	0.094	0.115	0.116	0.114	0.948
N	87	43	44		87	43	44	

Note: * Significant at $p < .05$, ** $p < .01$. p-values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region.

In terms of training, as seen in Table A.3.5, just over half of facilities have received ANC training within the past two years, with 40.2 percent receiving training on intermittent preventive treatment in pregnancy (IPTp). However, there is a significant difference between control and treatment villages, with control facilities more likely to report that a health care provider had recent specialised training within the last two years. This indicates an imbalance in the recent efforts to build staff capacity in health facilities in the treatment villages. Less frequently reported across both treatment groups was training on integrated management of childhood illnesses (28.2 percent) and growth monitoring (29.4 percent), despite these services being delivered in nearly all health facilities. Also, just under one-third of facilities have already participated in training provided by UNICEF or an NGO; 27.6 percent of facilities had health care providers who participated in specialized training on improving maternal, infant and young child feeding practices.

Table A.3.5. Participation in training, by treatment group

	Pooled mean	Treatment mean	Control mean	p-value
Any ANC provider received ANC training in last two years	0.540	0.442	0.636	0.043*
Any ANC provider received IPTp training in last two years	0.402	0.233	0.568	0.001**
Training in the integrated management of childhood illnesses (IMCI) in the last two years	0.282	0.286	0.279	0.976
Any provider(s) have received training in growth monitoring for children in the last two years	0.294	0.333	0.256	0.450
Any provider(s) participated in training provided by NGO/UNICEF	0.310	0.326	0.295	0.820
Health workers trained by NGO/UNICEF on improving maternal, infant and young child feeding practices	0.276	0.302	0.250	0.612
N	87	43	44	

Note: * Significant at $p < .05$, ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

Regarding the stock of medications and vaccinations available at the clinic, 88.5 percent of clinics carry antiretroviral medication for adults, and antibiotics such as penicillin (94.3 percent) and amoxicillin tablets (94.3 percent) are almost universally carried and in stock. Although paracetamol is common, only 18.4 percent of clinics carry aspirin, and only 14.9 percent had any in stock at the time of the survey. The clinics carried many modern medical contraceptives, including condoms (97.7 percent), the contraceptive pill (90.8 percent), a contraceptive implant (95.4 percent), and injectable contraceptives (87.4 percent). These were largely stocked wherever a facility usually carried this method, except for slightly lower in-stock availability of injectables (78.2 percent).

APPENDIX 4. COMMUNITY CHARACTERISTICS

Community respondent characteristics

An average of 2.4 individuals responded on behalf of each village cluster. Respondents had lived in the community for an average of 18.7 years, though this varied from 0 to 69 years. The majority of respondents were village administrators, including village committee members (30.4 percent), village chairmen (24.2 percent), and village executive officers (21.3 percent).

Table A.4.1. Role of respondents

	N	%
Village committee member	167	30.42%
Village chairman	133	24.23%
Village executive officer	117	21.31%
Social worker	65	11.84%
Other	37	6.74%
Farmer	20	3.64%
Volunteer	5	0.91%
Politician	4	0.73%
Health facility in charge/worker	3	0.55%
Teacher	2	0.36%
Total	553	100.73%

Note: Multiple respondents per community, and in four cases, one respondent had multiple roles.

Community population

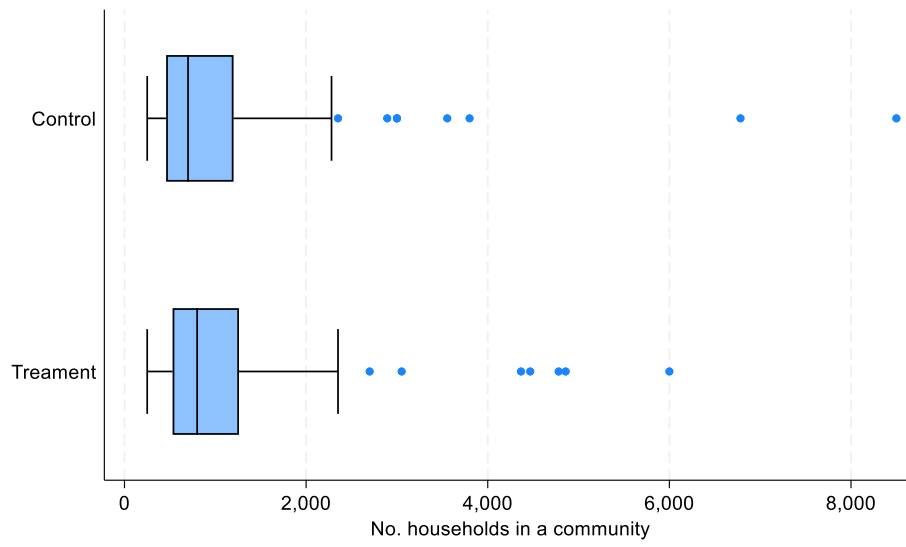
To give a sense of the overall size of sample villages, Table A.4.2. shows the average estimated number of households and overall population living in each community. On average, there are 1,145 households per community. However, the size of communities exhibits some variation, with a few significantly larger outlier communities, as illustrated in Figure A.4.1. In this context, the median estimates are lower for both the treatment communities, at 800 households and 4,216 residents, and the control communities, at 700 households and 4,814 residents.

Table A.4.2. Population characteristics

	Pooled mean	Treatment mean	Control mean	p-value
Population of community	6,341.040	6,199.867	6,482.213	0.777
No. of households in a community	1,145.120	1,153.813	1,136.427	0.930
N	150	75	75	

Notes: * Significant at $p < .05$, ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region.

Figure A.4.1. Spread of estimated number of households in sample villages, by treatment status



APPENDIX 5. KEY INDICATORS STRATIFIED BY CAREGIVER DISABILITY STATUS AND CHILD SEX

We report key indicators disaggregated by caregiver disability status and child sex for descriptive purposes. To assess caregiver disability, we administered the Washington Group on Disability Statistics Short Set on Functioning (WG-SS) and created a binary disability indicator using the Washington Group's guidelines.⁴⁰ Overall, fewer than one in five caregivers (18.8 percent) had a disability.

Table A.5.1. Caregiver nutrition knowledge and beliefs among caregivers with disability

	Pooled mean	Treatment mean	Control mean	p-value
Knowledge of extra daily meal during pregnancy	0.256	0.273	0.240	0.482
Knowledge of exclusive breastfeeding (correct age and definition)	0.165	0.199	0.132	0.108
Belief that it's good to feed child several times a day	0.975	0.974	0.976	0.898
Knowledge of ORS treatment for child diarrhea	0.678	0.632	0.722	0.133
Feel a sense of belonging and membership with a group of peers	0.692	0.676	0.708	0.558
Self-efficacy in solving child and maternal nutrition problems (1-4)	2.938	2.946	2.930	0.758
N	423	205	218	

Note: * Significant at $p < .05$, ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

Table A.5.2. Caregiver nutrition knowledge and beliefs among caregivers without disability

	Pooled mean	Treatment mean	Control mean	p-value
Knowledge of extra daily meal during pregnancy	0.269	0.285	0.251	0.299
Knowledge of exclusive breastfeeding (correct age and definition)	0.224	0.245	0.201	0.289
Belief that it's good to feed child several times a day	0.963	0.952	0.974	0.027*
Knowledge of ORS treatment for child diarrhea	0.716	0.707	0.726	0.604
Feel a sense of belonging and membership with a group of peers	0.703	0.710	0.695	0.670
Self-efficacy in solving child and maternal nutrition problems (1-4)	2.983	2.968	2.998	0.558
N	1,833	932	901	

Note: * Significant at $p < .05$, ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

Table A.5.3. Child feeding practices and outcomes among children who have a caregiver with a disability

	Pooled mean	Treatment mean	Control mean	p-value
Mother took iron folic acid (IFA) tablets for 90+ days during pregnancy	0.701	0.699	0.702	0.895
<i>Children ages 0–36 months</i>	273	124	149	
Minimum meal frequency	0.267	0.225	0.312	0.445
Minimum diet diversity (5+ food groups, including breast milk)	0.064	0.124	0.000	0.006**
Consumption of iron-rich or iron-fortified foods	0.127	0.137	0.116	0.716
<i>Children ages 6–23 months</i>	103	51	52	
Exclusively breastfed until age 6 months	0.346	0.339	0.353	0.917
<i>Children ages 0–59 months</i>	592	294	298	
Child is developmentally on track	0.233	0.251	0.216	0.488
<i>Children ages 0–59 months</i>	468	228	240	
Child is stunted	0.423	0.442	0.405	0.517
<i>Children ages 0–59 months</i>	605	294	311	
Child is wasted	0.066	0.074	0.058	0.551
<i>Children ages 0–59 months</i>	606	295	311	

Notes: * Significant at $p < .05$, ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

Table A.5.4. Child feeding practices and outcomes among children who have a caregiver without a disability

	Pooled mean	Treatment mean	Control mean	p-value
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Mother took iron folic acid (IFA) tablets for 90+ days during pregnancy	0.655	0.665	0.644	0.755
<i>Children ages 0–36 months</i>	1,690	830	860	
Minimum meal frequency	0.316	0.348	0.284	0.184
Minimum diet diversity (5+ food groups, including breast milk)	0.074	0.071	0.078	0.720
Consumption of iron-rich or iron-fortified foods	0.158	0.182	0.134	0.307
<i>Children ages 6–23 months</i>	580	276	304	
Exclusively breastfed until age 6 months	0.438	0.442	0.435	0.842
<i>Children ages 0–59 months</i>	2,751	1,364	1,387	
Child is developmentally on track	0.206	0.198	0.213	0.387
<i>Children ages 0–59 months</i>	2,110	1,061	1,049	
Child is stunted	0.444	0.451	0.437	0.674
<i>Children ages 0–59 months</i>	2,876	1,425	1,451	
Child is wasted	0.052	0.053	0.051	0.893
<i>Children ages 0–59 months</i>	2,870	1,426	1,444	

Note: * Significant at $p < .05$, ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

Table A.5.5. Child feeding practices and outcomes among female children

	Pooled mean	Treatment mean	Control mean	p-value
Mother took iron folic acid (IFA) tablets for 90+ days during pregnancy	0.669	0.690	0.646	0.470
<i>Children ages 0–36 months</i>	964	488	476	
Minimum meal frequency	0.286	0.265	0.308	0.513
Minimum diet diversity (5+ food groups, including breast milk)	0.068	0.077	0.059	0.613
Consumption of iron-rich or iron-fortified foods	0.170	0.188	0.151	0.620
<i>Children ages 6–23 months</i>	322	158	164	
Exclusively breastfed until age 6 months	0.428	0.439	0.415	0.504
<i>Children ages 0–59 months,</i>	1,625	820	805	
Child is developmentally on track	0.212	0.207	0.218	0.601
<i>Children ages 0–59 months,</i>	1,251	629	622	
Child is stunted	0.402	0.423	0.379	0.233
<i>Children ages 0–59 months</i>	1,688	844	844	
Child is wasted	0.046	0.043	0.050	0.514
<i>Children ages 0–59 months</i>	1,690	848	842	

Notes: * Significant at $p < .05$. ** $p < .01$. p-values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

Table A.5.6. Child feeding practices and outcomes among male children

	Pooled mean	Treatment mean	Control mean	p-value
Mother took iron folic acid (IFA) tablets for 90+ days during pregnancy	0.653	0.648	0.657	0.743
<i>Children ages 0–36 months</i>	1,001	466	535	
Minimum meal frequency	0.330	0.391	0.271	0.030*
Minimum diet diversity (5+ food groups, including breast milk)	0.077	0.082	0.072	0.852
Consumption of iron-rich or iron-fortified foods	0.138	0.163	0.115	0.223
<i>Children ages 6–23 months</i>	361	169	192	
Exclusively breastfed until age 6 months	0.416	0.408	0.424	0.576
<i>Children ages 0–59 months</i>	1,718	838	880	
Child is developmentally on track	0.209	0.208	0.210	0.888
<i>Children ages 0–59 months</i>	1,327	660	667	
Child is stunted	0.478	0.476	0.479	0.809
<i>Children ages 0–59 months</i>	1,793	875	918	
Child is wasted	0.063	0.071	0.054	0.238
<i>Children ages 0–59 months</i>	1,786	873	913	

Note: * Significant at $p < .05$. ** $p < .01$. p -values refer to linear probability model (LPM) or ordinary least squares (OLS) regressions controlling for treatment status and region, with standard errors adjusted for clustering at the village level.

APPENDIX 6. QUANTITATIVE HOUSEHOLD SURVEYS WITH CAREGIVERS (N=2,256)

HOUSEHOLD INSTRUMENT

DEFINITIONS

Main respondent – The main respondent is the primary female caregiver of young children in the household (usually the children’s mother but can also be another caregiver if the mother does not live with the child). This caregiver is the most informed about the child’s day-to-day health and nutrition.

Household member - (HHM) A household member is: Any person who usually lives in the household, regardless if he/she is temporarily absent. For example, someone who is on vacation or has left the household temporarily (for less than one year) for labor reasons is considered a household member. A person who has lived in the household for one year or more or who has lived in the household for less than one year but is planning to stay in the household for a year or more is considered a household member.

The guests who fulfill the criteria mentioned above and who sleep in the household’s dwelling, share the meals prepared in the household’s dwelling and use the kitchen freely. Domestic servants or any other household workers who fulfill the criteria mentioned above are considered to be a household member. Persons in places like boarding schools and hospitals who qualify to be usual members of a household, according to the definition, should be listed as members of the household, with the exception of those who have been away for 6 consecutive months or more.

Head of household - (HOH) The household head is defined as any adult who is recognized by others in the household (adult and child) as the head of the household. This person is usually responsible for contributing to the household income and decision-making. There must be only one household head per household.

COVER SHEET

METADATA		Cluster ID	__ __
1	Date of interview	__ __ - __ __ - __ __	Household ID
			__ __ __ __
2	Time start (MM:HH) clock	__ __ : __ __ 24-hour clock	3 Time end interview
			__ __ : __ __ 24-hour clock
4	Region	_____	12 Enumerator
		__ __	
			name and code

			__ __
5	District	_____	
		__ __	

SECTION 1: HOUSEHOLD ROSTER

Instruction: Please give me the names of all persons who usually live with this household and eat from the same pot. Start with the head of the household and include visitors who have lived with the household for six months or more. Include usual members, who are away visiting, in hospital, at boarding schools or college or university, etc.

1		2	3	4																																																																										
How many people live in your household?	<u>ID</u>	<u>Name of the member</u>	<u>Sex</u> 1 = Male 2 = Female	How old is [NAME] now? Record exact age in completed years for all household members. For those under five record date of birth. Please prompt respondent to locate the child health book/birth certificate for the anthropometric visit.																																																																										
				a. IF >=5YRS: RECORD AGE IN YEARS	b. IF <5 YRS: RECORD DATE OF BIRTH	c. IF <5 YRS: AGE SOURCE OF AGE? 1=Child Health Book 2=Child Birth Certificate 3=Verbal Report																																																																								
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SECTION 1: HOUSEHOLD ROSTER (CONTINUED)

	5a	5b	5c	6	7	8	9
			For children <5	For those 12 years or older	For respondent only		For respondent only
ID	What is [NAME'S] relationship with the head of household? 1 = Head 2 = Spouse/Partner 3 = Biological Child 4 = Grandchild 5 = Parent/Parent-in-law 6 = Son/Daughter-in-law 7 = Other relative 8 =Adopted/ Foster/Stepchild 9 = House help 10 = Non-relative -96 = Other (specify)	What is [NAME'S] relationship with the main caregiver of children under 5? 1 = Self 2 = Spouse/Partner 3 = Biological Child 4 = Grandchild 5 = Parent/Parent-in-law 6 = Son/Daughter-in-law 7 = Other relative 8 =Adopted/ Foster/Stepchild 9 = House help 10 = Non-relative -96 = Other (specify)	Name of main caregiver of this child SELECT PID	What is (NAME'S) present marital status? 1 = Married, monogamous 2 = Married, polygamous 3 = Consensual Union/Co-habiting 4 = Separated (>> Q9, if [name] is respondent otherwise next person/Q10) 5 = Divorced (>> Q9, if [name] is respondent otherwise next person/Q10) 6 = Widowed (>> Q9, if [name] is respondent otherwise next person/Q10) 7 = Never Married (& <18 years old>> Q10 & ≥18>>Section 2)	Does (NAME'S) spouse/partner live in this household? 0 = NO>> Q9 1 = YES	COPY THE I.D. CODE OF THE SPOUSE/PARTNER (IF MORE THAN ONE SPOUSE, THE FIRST ONE)	At what age did you first get married or started living with a partner? (AGE IN YEARS)
01							
02							
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							

SECTION 1: HOUSEHOLD ROSTER (CONTINUED)

	10a	10b	10c	11	11b	12	13	14
For those aged 0 – 17 years								
ID	Is the biological mother of [NAME] alive? 1 =YES, MOTHER LIVES IN HOUSEHOLD 2=YES, BUT MOTHER NOT IN HOUSEHOLD >>11 3=NO, MOTHER IS DEAD >>1 -99=DON'T KNOW >>11	WRITE PID of Biological Mother >>11	Why is the biological mother who lived in the household not the main caregiver? 1=Physically illness 2=Mental Health 3=Temporarily away from home (i.e. 1 week – 6 months) -96= Other, specify	Is the biological father of [NAME] alive? WRITE PID =YES, FATHER LIVES IN HOUSEHOLD 2=YES, BUT FATHER NOT IN HOUSEHOLD 3=NO, FATHER IS DEAD -99=DON'T KNOW	WRITE PID of Biological Father	Does [NAME] have a pair of shoes or sandals? 0=NO 1=YES -99=DON'T KNOW	Does [NAME] have at least 2 sets of clothes? 0=NO 1=YES -99=DON'T KNOW	Does [NAME] have at a blanket (either owned or shared)? 0=NO 1=YES -99=DON'T KNOW
01								
02								
03								
04								
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07								
08								
09								
10								
11								
12								

SECTION 2: EDUCATION

2		3	
Household Head And Caregiver			
ID	What is the highest grade you ([respondent name]) attained? [SEE CODES BELOW] [Enter 00 if did not complete any grade]	What is the highest grade the head of this household[name] attained? [SEE CODES BELOW] [Enter 00 if did not complete any grade]	
01			
02			
	Codes for Q2 & Q3: None.....00 Nursery/kindergarden.....01 Grade 1.....02 Grade 2.....03 Grade 3.....04 Grade 4.....05 Grade 5.....06 Grade 6.....07 Grade 7.....08 Form 1 (O level).....09 Form 2 (O level).....10 Form 3 (O level).....11	Form 4 (O level).....12 Form 5 (A level).....13 Form 6 (A level).....14 Diploma/Cerificate (Vocational).15 Diploma/ Certificate.....16 Postgraduate Diploma.....17 University / Bachelor.....18 University / Master.....19 University/Phd.....20 Other (specify).....-96 Refused.....-97 Don't know.....-99	

4		5	
For all children ages 3 and up			
ID	Does [NAME] participate in a school feeding programme? [ANY KIND] 1=NO 2=YES, FREE PROGRAM 3=YES, PAID FOR IN CASH 4=YES, PAIF FOR IN KIND	Has [NAME] ever participated in any early childhood development program? 1=NO 2=YES, FREE PROGRAM 3=YES, PAID FOR IN CASH 4=YES, PAIF FOR IN KIND	
01			
02			
03			

SECTION 4A: HOUSING CONDITIONS, WASH AND SANITATION

[Module informed by MICS and TDHS 2022]

ENUMERATOR: Thanks for the information about household members. We now want to ask you a few questions about your residence, i.e. the dwelling/household where you sleep the majority of the time.

Respondent for this section is main respondent / adult female caregiver

	Question	Answers	Skip
1	How many rooms does this dwelling occupy? Count living rooms, dining rooms, bed rooms but not bathrooms, toilet & kitchen	ROOMS __ __	
2	At night, what does your household <u>mainly</u> use to <u>light</u> the household?	Electricity (mains).....1 Electricity (private generator)2 Kerosene or paraffin lamp3 Gas lamp.....4 Biogas lamp6 Solar energy/lantern7 Rechargeable flashlight, torch or lantern.....8 Battery powered flashlight, torch or lantern9 Candle10 Charcoal11 Wood.....12 Crop residue/grass/straw/shrubs13 Animal dung/waste14 Other (specify)..... -96 No lighting in household-95	
3	What is the main construction material used for the outer wall? OBSERVED BY ENUMERATOR	Mud/Mud bricks/Earth1 Wood.....2 Metal Sheet/ Slate/Asbestos.....3 Stone4 Burnt bricks5 Cement blocks/Concrete.....6 Landcrete7 Bamboo8 Palm leaves/Thatch (Grass/Raffia)9 Other (specify)..... -96	
4	What is the main material used for the roof?	Mud/Mud bricks/Earth1 Wood.....2 Metal sheet3 Slate/Asbestos.....4 Cement/Concrete.....5 Bamboo6 Palm leaves/Thatch (Grass/Raffia)7 Roofing tile8 Other (specify)..... -96	
5	What is the main construction material used for the floor?	Earth/Mud.....1 Cement/Concrete.....2 Stone3 Burnt brick.....4 Wood.....5 Vinyl tiles.....6 Ceramic/Porcelain/Granite/Marble tiles7 Terrazzo/Terrazzo tiles8 Other (specify)..... -96	

6	<p>What is the <u>main</u> source of <u>drinking water</u> for members of your household?</p> <p><i>If unclear, probe to identify the place from which members of this household most often collect drinking water (collection point).</i></p>	Piped water Piped into dwelling.....11 → Q10 Piped into compound, yard or plot12 → Q10 Piped to neighbor13 → Q8 Public tap / standpipe14 → Q8 Tube Well, Borehole.....21 → Q8 Dug well Protected well31 → Q8 Unprotected well.....32 → Q8 Spring Protected spring.....41 → Q8 Unprotected spring42 → Q8 Rainwater collection51 → Q8 Tanker-truck61 → Q9 Cart with small tank / drum71 → Q9 Surface water River/ stream.....81 Dam, lake, pond, canal, irrigation channel82 Packaged water Bottled water91 → Q8 Sachet water92 Other (specify)..... -96	
7	<p>What is the <u>main</u> source of water used by your household for <u>other purposes such as cooking and hand washing</u>?</p> <p><i>If unclear, probe to identify the place from which members of this household most often collect water for other purposes.</i></p>	Piped water Piped into dwelling.....11 → Q10 Piped into compound, yard or plot12 → Q10 Piped to neighbor13 Public tap / standpipe14 Tube Well, Borehole.....21 Dug well Protected well31 Unprotected well.....32 Spring Protected spring.....41 Unprotected spring42 Rainwater collection51 → Q9 Tanker-truck61 → Q9 Cart with small tank / drum71 Surface water River/ stream.....81 Dam, lake, pond, canal, irrigation channel82 Packaged water Bottled water91 Sachet water92 Other (specify)..... -96	
8	<p>Where is the source of drinking water located?</p>	In Own Dwelling1 → Q10 In Own Yard/Plot.....2 → Q10 Elsewhere3	
9	<p>How long does it take for members of your household to go there, get drinking water, and come back?</p>	Members Do Not Collect.....0 → Q10 Number of Minutes..... __ __ __ Don't Know..... -99	
10	<p>Do you do anything to the water to make it safer to drink?</p>	Yes1 No.....2 → Q12 Don't know..... -99 → Q12	

11	<p>What do you usually do to make it safer to drink?</p> <p>Anything else?</p> <p>RECORD ALL ITEMS MENTIONED</p>	<p>Boil1</p> <p>Add bleach/water guard/chlorine.....2</p> <p>Strain it through a cloth3</p> <p>Use water filter (ceramic, sand, composite, etc.) 4</p> <p>Solar disinfection.....5</p> <p>Let it stand and settle.....6</p> <p>Cover the container7</p> <p>Add camphor/naphthalene.....8</p> <p>Add water tablet9</p> <p>Other (specify).....10</p> <p>Don't know..... -99</p>	
12	<p>In your household, what type of cookstove is <u>mainly</u> used for <u>cooking</u>?</p>	<p>Electric stove1</p> <p>Solar cooker2</p> <p>Liquefied petroleum gas (lpg)/cooking gas stove 3</p> <p>Piped natural gas stove4</p> <p>Biogas stove5</p> <p>Liquid fuel stove6</p> <p>Manufactured solid fuel stove7</p> <p>Traditional solid fuel stove8</p> <p>Three stone stove / open fire.....9</p> <p>Other (specify).....-96</p> <p>No food cooked in household-95</p>	<p>→ Q14</p> <p>→ Q14</p> <p>→ Q14</p> <p>→ Q14</p> <p>→ Q14</p> <p>→ Q13</p> <p>→ Q13</p> <p>→ Q13</p> <p>→ Q14</p>
13	<p>What type of fuel or energy source is used in this cookstove?</p> <p>Probe to specify the exact type if energy used.</p> <p>If more than one, record the main energy source for this cookstove.</p>	<p>Alcohol/ethanol1</p> <p>Gasoline/diesel.....2</p> <p>Kerosene/paraffin3</p> <p>Coal/lignite4</p> <p>Charcoal5</p> <p>Wood.....6</p> <p>Crop residue/grass/straw/shrubs7</p> <p>Animal dung/waste8</p> <p>Processed biomass (pellets) or woodchips/briquettes9</p> <p>Garbage/plastic10</p> <p>Sawdust.....11</p> <p>Other (specify).....-96</p>	
14	<p>Please show me where members of your household most often wash their hands.</p>	<p>Observed1</p> <p>Not observed</p> <p> Not in dwelling / plot / yard2</p> <p> No permission to see.....3</p> <p> Other reason -96</p>	<p>→ Q16</p> <p>→ Q16</p> <p>→ Q16</p>
15	<p>Observe presence of water at the specific place for hand washing.</p> <p>VERIFY BY CHECKING THE TAP/PUMP, OR BASIN, BUCKET, WATER CONTAINER OR SIMILAR OBJECTS FOR PRESENCE OF WATER</p>	<p>Water is not available0</p> <p>Water is available.....1</p>	
16	<p>Do you have any soap or detergent or any other traditional detergents in your household for washing hands?</p>	<p>No.....0</p> <p>Yes1</p>	<p>→ Q18</p>

17	Can you please show it to me? ENUMERATOR: Record if soap or detergent or other traditional detergents are present at the specific place for hand washing. SELECT ALL THAT APPLY	Washing Soap.....1 Detergent (Powder / Liquid / Paste)2 Liquid hand washing soap3 Ash.....4 Toilet Soap (e.g. Lux)5 Other (specify)..... -96 Not able / Does not want to show -97	
18	What type of toilet facility is usually used by members of your household? <i>If “flush”, probe: WHERE DOES IT FLUSH TO?</i> <i>If necessary, ask permission to observe the facility.</i>	Flush Flush to piped sewer system11 Flush to septic tank12 Flush to pit (latrine)13 Flush to open drain.....14 Flush to somewhere else.....15 Flush, don’t know where16 Pit latrine Ventilated Improved Pit latrine (VIP)21 Pit latrine with slab.....22 Pit latrine without slab / Open pit.....23 Composting toilet.....31 Bucket41 Hanging toilet, Hanging latrine51 Mobile Toilet61 No facility, Bush, Field, Beach.....-95 Other (specify)..... -96	→ Q21 → Q21 → Q21 → Q21 → Q21 → Q21 → Q21 → next section → Q21
19	Has your (answer from Q18) ever been emptied?	No, never emptied0 Yes, emptied.....1 Don’t Know..... -99	→ Q21 → Q21
20	The last time it was emptied, where were the contents emptied to? <i>Probe:</i> <i>Was it removed by a service provider?</i>	Removed by a Service Provider To a treatment plant11 Buried in a covered pit12 Don’t know where.....13 Emptied by Household Buried in a covered pit24 To uncovered pit, open ground, water body, or elsewhere25 Other (specify)..... -96 Don’t know..... -99	
21	Where is this toilet facility located?	In own dwelling1 In own yard/plot2 Elsewhere3	
22	Do you share this facility with others who are not members of your household?	No0 Yes1	→ next section
23	Do you share this facility only with members of other households that you know, or is the facility open to the use of the general public?	Shared with known households (not public)1 Shared with general public.....2	→ next section
24	How many households in total use this toilet facility, including your own household?	Number of households if less than 10 ___ 10 or more households2 Don’t know..... -99	

SECTION 4B: HOUSEHOLD ASSETS OWNERSHIP

ENUMERATOR READ: Our next few questions are about items that you or a member of your household may own. Please remember this information will be safeguarded and not shared with anyone.

Respondent for this section is adult female caregiver

	Question	Answers	Skip
1	Does any household member own any of these items in <u>good working condition</u> ? Meaning that it is still something you can use.		
a	Radio/radio cassette	No0 Yes1 Don't Know..... -99 Refuse.....-97	
b	Mobile phone (any kind)	No0 Yes1 Don't Know..... -99 Refuse.....-97	
c	Smartphone	No0 Yes1 Don't Know..... -99 Refuse.....-97	
d	Refrigerator/freezer	No0 Yes1 Don't Know..... -99 Refuse.....-97	
e	Iron (Charcoal or electric)	No0 Yes1 Don't Know..... -99 Refuse.....-97	
f	Tables	No0 Yes1 Don't Know..... -99 Refuse.....-97	
g	Television	No0 Yes1 Don't Know..... -99 Refuse.....-97	
h	Chairs	No0 Yes1 Don't Know..... -99 Refuse.....-97	
i	Sofas	No0 Yes1 Don't Know..... -99 Refuse.....-97	
j	Beds	No0 Yes1 Don't Know..... -99 Refuse.....-97	
k	Cupboards	No0 Yes1 Don't Know..... -99 Refuse.....-97	

l	Watches	No0 Yes1 Don't Know..... -99 Refuse.....-97	
m	Hoe(s)	No0 Yes1 Don't Know..... -99 Refuse.....-97	
n	Motorcycle	No0 Yes1 Don't Know..... -99 Refuse.....-97	
o	Bicycle	No0 Yes1 Don't Know..... -99 Refuse.....-97	
p	Books (not schoolbooks)	No0 Yes1 Don't Know..... -99 Refuse.....-97	
q	Livestock	No0 Yes1 Don't Know/Refuse -99	
r	Charcoal Stove	No0 Yes1 Don't Know..... -99 Refuse.....-97	
s	Electric Stove	No0 Yes1 Don't Know..... -99 Refuse.....-97	
2	Which of the following best describes the ownership of the dwelling you currently occupy?	Owned by household1 Lived in without paying any rent.....2 Rented privately3 Rented from public rental estate company (NHC, NSSF, PPF, etc.)..... 4 Rented from employer including government.....5 Rented from a relative or a friend.....6 Other (specify)..... -96	

SECTION 4C: FOOD AND WATER SECURITY

[Modules include Household Food Insecurity Access Scale (HFIAS) and Household Water InSecurity Experiences (HWISE)]

	Question	Answers	Skip
<i>Now we want to understand about the food you and your household have eaten over the last four weeks.</i>			
1	In the past four weeks , how often did you worry that your household would not have enough food?	Never 1 Rarely (once or twice) 2 Sometimes (3 – 10 times) 3 Often (more than 10 times) 4	
2	In the past four weeks , how often were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?	Never 1 Rarely (once or twice) 2 Sometimes (3 – 10 times) 3 Often (more than 10 times) 4	
3	In the past four weeks , how often did you or any household member have to eat a limited variety of foods due to a lack of resources?	Never 1 Rarely (once or twice) 2 Sometimes (3 – 10 times) 3 Often (more than 10 times) 4	
4	In the past four weeks , how often did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?	Never 1 Rarely (once or twice) 2 Sometimes (3 – 10 times) 3 Often (more than 10 times) 4	
5	In the past four weeks , how often did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	Never 1 Rarely (once or twice) 2 Sometimes (3 – 10 times) 3 Often (more than 10 times) 4	
6	In the past four weeks , how often did you or any other household member have to eat fewer meals in a day because there was not enough food?	Never 1 Rarely (once or twice) 2 Sometimes (3 – 10 times) 3 Often (more than 10 times) 4	
7	In the past four weeks , how often was there ever no food to eat of any kind in your household because of lack of resources to get food?	Never 1 Rarely (once or twice) 2 Sometimes (3 – 10 times) 3 Often (more than 10 times) 4	
8	In the past four weeks , how often did you or any household member go to sleep at night hungry because there was not enough food?	Never 1 Rarely (once or twice) 2 Sometimes (3 – 10 times) 3 Often (more than 10 times) 4	
9	In the past four weeks , how often did you or any household member go a whole day and night without eating anything because there was not enough food?	Never 1 Rarely (once or twice) 2 Sometimes (3 – 10 times) 3 Often (more than 10 times) 4	
10	In the past four weeks , was there a time when any of the children younger than 5 years old did not eat healthy and nutritious foods because of a lack of money or other resources?	Never 1 Rarely (once or twice) 2 Sometimes (3 – 10 times) 3 Often (more than 10 times) 4	
11	In the past four weeks , was there a time when any of the children younger than 5 years old was not given enough food because of a lack of money or other resources?	Never 1 Rarely (once or twice) 2 Sometimes (3 – 10 times) 3 Often (more than 10 times) 4	
<i>Now we want to understand about the water you and your household have drunk over the last four weeks.</i>			
12	In the past four weeks , how frequently did you or anyone in your household worry you would not have enough <u>water</u> for all of your household needs?	Never 0 Rarely (once or twice) 1 Sometimes (3 – 10 times) 2 Often (11-20 times) 3 Always (More than 20 times) 4	

13	In the past four weeks , how frequently has your main water source been interrupted or limited (eg, water pressure, less water than expected, river dried up)?	Never 0 Rarely (once or twice) 1 Sometimes (3 – 10 times) 2 Often (11-20 times) 3 Always (More than 20 times) 4	
14	In the past four weeks , how frequently have problems with water meant that clothes could not be washed?	Never 0 Rarely (once or twice) 1 Sometimes (3 – 10 times) 2 Often (11-20 times) 3 Always (More than 20 times) 4	
15	In the past four weeks , how frequently have you or anyone in your household had to change schedules or plans due to problems with your water situation? (Activities that may have been interrupted include caring for others, doing household chores, agricultural work, income-generating activities, etc.)	Never 0 Rarely (once or twice) 1 Sometimes (3 – 10 times) 2 Often (11-20 times) 3 Always (More than 20 times) 4	
16	In the past four weeks , how frequently have you or anyone in your household had to change what was being eaten because there were problems with water (eg, for washing foods, cooking, etc.)?	Never 0 Rarely (once or twice) 1 Sometimes (3 – 10 times) 2 Often (11-20 times) 3 Always (More than 20 times) 4	
17	In the past four weeks , how frequently have you or anyone in your household had to go without washing hands after dirty activities (eg, defecating or changing diapers, cleaning animal dung) because of problems with water?	Never 0 Rarely (once or twice) 1 Sometimes (3 – 10 times) 2 Often (11-20 times) 3 Always (More than 20 times) 4	
18	In the past four weeks , how frequently have you or anyone in your household had to go without washing their body because of problems with water (eg, not enough water, dirty, unsafe)?	Never 0 Rarely (once or twice) 1 Sometimes (3 – 10 times) 2 Often (11-20 times) 3 Always (More than 20 times) 4	
19	In the past four weeks , how frequently has there not been as much water to drink as you would like for you or anyone in your household?	Never 0 Rarely (once or twice) 1 Sometimes (3 – 10 times) 2 Often (11-20 times) 3 Always (More than 20 times) 4	
20	In the past four weeks , how frequently did you or anyone in your household feel angry about your water situation?	Never 0 Rarely (once or twice) 1 Sometimes (3 – 10 times) 2 Often (11-20 times) 3 Always (More than 20 times) 4	
21	In the past four weeks , how frequently has there been no useable or drinkable water whatsoever in your household?	Never 0 Rarely (once or twice) 1 Sometimes (3 – 10 times) 2 Often (11-20 times) 3 Always (More than 20 times) 4	
22	In the past four weeks, how frequently have problems with water caused you or anyone in your household to feel ashamed/excluded/stigmatised ?	Never 0 Rarely (once or twice) 1 Sometimes (3 – 10 times) 2 Often (11-20 times) 3 Always (More than 20 times) 4	
23	When was the last time you ate anything, including snacks or drinks other than water?	__ __ : __ __ date and time (24-hour clock)	

SECTION 4E: PRODUCTIVE LIVELIHOODS

	Question	Answers			Skip		
1	In the past 12 months, has anyone in this household participated in livelihoods enhancement activities under TASAF?	No0	Yes.....1	Don't Know.....-99	Refuse.....-97	If no, don't know or refuse >3	
2	What activities did they participate in? DO NOT INCLUDE PUBLIC WORKS	Savings groups..... 1	Livelihoods/entrepreneurial training 2	Received a productive grant 3	Linkages to agricultural extension officer or other livelihoods services..... 4	Don't Know-99	Refuse.....-97
3	In the past 12 months, has anyone in this household participate in TASAF public works programs?	No0	Yes.....1	Don't Know-99	Refuse.....-97		
4	Did the household cultivate any crops in the last 12 months? <i>[HINT: Respondent should only answer about crops grown on the household's owned or rented lands. Not those in any employment capacity]</i>	No 0	Yes 1				→ Q8
		5. Was this crop <u>grown</u> by the household in the past 12 months? (No....0; Yes...1)	6. During the past 12 months, has your household <u>eaten</u> [CROP ITEM] which was grown by the members of your household? (No....0; Yes...1)	7. During the past 12 months, has your household <u>sold</u> [CROP ITEM] which was grown or raised by the members of your household? (No....0; Yes...1)			
A	Maize						
B	Soybean						
C	Groundnut						
D	Coffee						
E	Cowpeas						
F	Rice						
G	Millet						
H	Cassava						
I	Beans or pulses						
J	Sweet Potato						
K	Irish Potato						
L	Bananas						
M	Sorghum						
N	Barley						
O	Other (Please specify)						
	Question	Answers			Skip		
8	Does this household own any livestock, herds other farm animals or poultry?	No 0	Yes 1	→ Q10			

9	Does your household have any of the following animals?	IF UNKNOWN, RECORD '-98'.]		
	(a) Draught animals e.g. donkey, horse, bullock	(No....0; Yes...1)		
	(b) Cattle, including calves	(No....0; Yes...1)		
	(c) Sheep, goats and pigs	(No....0; Yes...1)		
	(f) Chicken or other poultry	(No....0; Yes...1)		
	(h) Fish	(No....0; Yes...1)		
	(i) Other animals	(No....0; Yes...1)		
		10. During the past 12 months, has your household <u>eaten</u> <u>meat</u> from [LIVESTOCK ITEM BELOW] which was raised by the members of your household? (No....0; Yes...1)	11. During the past 12 months, has your household <u>eaten</u> <u>produce</u> from [LIVESTOCK ITEM BELOW] which was raised by the members of your household? (i.e., milk, yoghurt, eggs) (No....0; Yes...1)	12. During the past 12 months, have the members of your household <u>sold</u> [LIVESTOCK ITEM BELOW] which was raised by the members of your household? (No....0; Yes...1)
A	Cows			
B	Sheep, Goats and pigs			
D	Chickens			
	Question	Answers		Skip
13	Did this household engage in fishing/fish farming in the last 12 months?	No 0 Yes 1		
14	In the last 12 months, has anyone in your household purchased food on credit?	No 0 Yes 1		
15	In the last 12 months has anyone in your household asked to purchase on credit and been denied?	Yes 1 No, never applied 2 No, Applied and was approved 3		
16	Does your household have any outstanding debts to other households or institutions obtained in last 12 months (excluding purchases on credit)?	No 0 Yes 1		

SECTION 4F: NON-FARM ENTERPRISES

- Did you or anyone in your household operate any non-farm enterprises or provide any services (store, transport, home brewing, trade, etc) in the last 12 months?
 - 1=Yes
 - 0=No → NEXT SECTION
- How many non-farm enterprises or service-related activities (such as stores, transportation, home brewing, trade, etc.) did the household operate in the last 12 months? (-97=Refused; -99=Don't Know)

	3
BUSINESS ID	<p>What type of non-farm enterprises did the household operate in the last 12 months?</p> <p>[SEE CODE SHEET BELOW (Q2)]</p> <p>[RECORD UP TO TWO IN ORDER OF IMPORTANCE]</p>
01	
02	
ISIC BUSINESS CODES (Q2) Formal and informal sector trade/skills/classifications codes	Fishing 001 Trading and wholesale.....002 Merchant/retail.....003 Transport.....004 Agricultural processing.....005 Skilled Trades.....006 Services.....007 Tractor and machine rentals.....008 Other (Specify).....-96

SECTION 5A: REPRODUCTIVE HEALTH OF ALL WOMEN 12 – 49 YEARS OLD

	1	2	3	4	5	6	7	8
ID	Is [NAME] pregnant now? If YES, record number of weeks pregnant 0=NO>>Q7 -99= UNSURE>>Q7	Did (NAME) see anyone for antenatal care during this pregnancy? 0=NO 1=YES>>Q4	Why didn't (NAME) go for antenatal care? 1=Can't afford 2=No health care available 3=Health care too far 4=Not necessary 5=Health personnel not friendly 6= Do not trust health facility 7=Didn't know -96=Other (specify) (>>Q7)	Whom did (NAME) see? Health professional: 1=Doctor 2=Nurse / Midwife 3=Auxiliary midwife Other person: 4=Traditional birth attendant 5=Community health worker -96=Other (specify) [SELECT ALL THAT APPLY]	How many months pregnant was (NAME) when she first received antenatal care for this pregnancy? [MONTHS] -99= DON'T KNOW	How many times did (NAME) receive antenatal care during this pregnancy? [NUMBER] -97= REFUSED -99= DON'T KNOW	Has [NAME] ever given birth? [Live birth] 0=NO>>5B 1=YES	How many children to whom [NAME] has given birth were born alive? [number] -97= REFUSED -99= DON'T KNOW
				1 2 3 4 5 -96				
				1 2 3 4 5 -96				
				1 2 3 4 5 -96				
				1 2 3 4 5 -96				
				1 2 3 4 5 -96				
				1 2 3 4 5 -96				
				1 2 3 4 5 -96				
				1 2 3 4 5 -96				
				1 2 3 4 5 -96				

SECTION 6: MATERNAL AND NEWBORN HEALTH

These questions need to be asked to the Stawisha Maisha eligible woman for each child aged 0 – 36 months. Include only children of the Stawisha Maisha eligible woman and children for which she is the primary caregiver.

Enter ID Code of Stawisha Maisha eligible woman: |__|__|

	1	2	3	4	5	6	7	8					
	Where respondent is biological Mother only												
ID of child [FROM HOUSE - HOLD ROSTER]	During this pregnancy, did your husband/partner do any of the following? 0=NO 1=YES -99=DK				Did you see anyone for antenatal care during your pregnancy with (NAME)? 0=NO 1=YES>>Q4 -99=DK>>Q9	Why didn't you go for antenatal care? 1=Can't afford 2=No health care available 3=Health care too far 4=Not necessary 5=Health personnel not friendly 6=Husband discouraged -96=Other (specify) (>>Q9)	How many times did you receive antenatal care during this pregnancy? [RECORD NUMBER OF VISITS]	Whom did you see? Health professional: 1=Doctor 2=Nurse / Midwife 3=Auxiliary midwife Other person: 4=Traditional birth attendant 5=Community health worker -96=Other (specify) [CIRCLE ALL THAT APPLY]	How many months pregnant were you when you first received antenatal care for this pregnancy? [MONTHS] -99= DON'T KNOW	How many times did you receive antenatal care during this pregnancy? [NUMBER] -97= REFUSED -99= DON'T KNOW	As part of your antenatal care during this pregnancy, did a healthcare provider do any of the following at least once: 0=NO 1=YES -99=DON'T KNOW	Talk with you about which foods you should eat?	Talk with you about breastfeeding?
	a. Stopped you from receiving ANC?	b. Encourage you to receive ANC?	c. Had no interest in you receiving ANC?	d. Accompany you to receive ANC?									
						1 2 3 4 5 -96							
						1 2 3 4 5 -96							
						1 2 3 4 5 -96							
						1 2 3 4 5 -96							
						1 2 3 4 5 -96							

SECTION 6: MATERNAL AND NEWBORN HEALTH (CONTINUED)

	9	10			11				12			13			14
	Where respondent is biological Mother only														All
ID of child [FROM HOUSE - HOLD ROSTER]	During this pregnancy did you participate in a Maternal Child Health and Nutrition program? 0=NO 1=YES -99=DON'T KNOW	During this pregnancy, did you do any of the following? 0=NO 1=YES -99= DON'T KNOW			During the pregnancy with [NAME], did you take any of the following? 0=NO >>Next Item >>Q14 1=YES -99= DON'T KNOW				How many times did you take each of these during your pregnancy with [NAME]? [NUMBER]			Where did you get each of these medications: during an antenatal care visit, during another visit to a health facility or at another source? 1=ANC visit 2=Another health facility visit 3=Another source -96=Other (specify)			Who assisted with the delivery of [NAME]? [IF RESPONDENT SAYS NO ONE, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY. RECORD ALL PERSONS MENTIONED <i>Health professional:</i> 1=Doctor 2=Nurse / Midwife 3=Auxiliary midwife <i>Other person:</i> 4=Traditional birth attendant 5=Community health worker 6=Relative or friend -96=Other (specify) -95=No one -99=Don't know
		a. Eat at least one more meal per day than you usually would when not pregnant?	b. Try to eat different types of food each day?	c. Eat at least four different types of food groups per day?	a.SP/Fansidar to keep you from getting malaria?	b.Iron tablet or syrup?	c.Consumption of Iron Folic Acid Tablets (IFA) for 90+ days?	d.Medicine for intestinal worms?	a.SP/Fansidar to keep you from getting malaria?	b.Iron tablet or syrup?	c.Medicine for intestinal worms?	a.SP/Fansidar to keep you from getting malaria?	b.Iron tablet, syrup or IFA?	c.Medicine for intestinal worms?	

SECTION 6: MATERNAL AND NEWBORN HEALTH (CONTINUED)

	15	16	17	18		19		20	21
ID of child [FROM HOUSE - HOLD ROSTER]	Where did you give birth to [NAME]? 1=Hospital 2= Health Facility 3= Village Health Post 4= Dispensary Or Pharmacy, 5=At Home Of Traditional Birth Attendant Or Midwife, 6=At Own Home, Neighbor Or Friend's Home, 7=Outside, -96=Other (Specify) -99=Don't know	When [NAME] was born, was s/he very big, bigger than average, average, smaller than average, or very small? 1=Very big 2=Bigger Than Average 3=Average 4=Smaller Than Average 5=Very Small -99=Don't know	Was [NAME] weighed at birth? 0=NO >Q14 1=YES - 99=DK >Q19	How much did [NAME] weigh at birth? RECORD WEIGHT FROM HEALTH CARD, IF AVAILABLE. RECORD IN KG AND USE APPROPRIATE CODE: 1=From health card 2=From recall -97=REFUSED -99=DON'T KNOW		How long after birth did you first put [NAME] to the breast? If less than 1 hour, record '00' hours. If less than 24 hours, record hours. Otherwise, record days. 0=Never breastfed 1=Immediately 2=Hours 3=Days -99=Don't know		In the first three days after delivery, was [NAME] given anything to drink other than breast milk? 0=NO (>>NEXT CHILD/SECTION) 1=YES -99=DK (>>NEXT CHILD/SECTION)	What was [NAME] given to drink? Probe: Anything else? [RECORD ALL MENTIONED] 1=Milk (other than breast milk) 2=Plain water 3=Sugar or glucose water 4=Gripe water 5=Sugar-salt-water solution 6=Fruit juice 7=Infant formula 8=Tea / Infusions 9=Honey 10=Herbal drink -96=Other (specify)
				Kilograms	Code	Code	Number		
									1 2 3 4 5 6 7 8 9 10 -96
									1 2 3 4 5 6 7 8 9 10 -96
									1 2 3 4 5 6 7 8 9 10 -96
									1 2 3 4 5 6 7 8 9 10 -96

SECTION 7: CHILD UNDER 5 ILLNESS AND MEDICAL CARE

This part covers all children under 5 (0- 59 months) in the household.

	1	2	3	4	5	6	7					8
ID of child [FROM HOUSE - HOLD ROSTER]	Did you or someone else take [NAME] to a health facility in the past 12 months? 0=NO >>Q3 1=YES	How many times was [NAME] there for consultations in the past 12 months? [0-12] -97= REFUSED -99=DON'T KNOW	In the last two weeks, has [NAME] had diarrhea? 0=NO>>Q10 1=YES	Where did you seek advice or treatment for [NAME'S] diarrhea? 1=Government Parastatal hospital/clinic/centre 2=Religious/voluntary hospital/clinic/centre 3=Private hospital/clinic/centre 4=Pharmacy 5=Relative/Friend 6=Traditional Herbalist -95=did not seek -99= other (specify)	During the time [NAME] had diarrhea, was he/she given less than usual to <u>eat</u> , <u>drink</u> , about the same amount, or more than usual? If less, probe: Was he/she given much less than usual to drink, or somewhat less? 1=Much less 2=Somewhat less 3=About the same 4=More 5=Nothing to drink -99=Don't Know	During the time [NAME] had diarrhea, was he/she given less than usual to <u>eat</u> , about the same amount, more than usual, or nothing to eat? If less, probe: Was he/she given much less than usual to eat, or somewhat less? 1=Much less 2=Somewhat less 3=About the same 4=More 5=Stopped food -95=Never gave food -99=Don't Know	During the episode of diarrhea, was [NAME] given to drink any of the following:					Was anything else given to treat the diarrhea? 0=NO >>Q10 1=YES
							a. Fluid made from a sachet ORS (oral rehydration salt)? 0=NO 1=YES -99= Don't Know (DK)	b. A pre-packaged ORS fluid for diarrhea? 0=NO 1=YES -99= Don't Know (DK)	c. Coconut water? 0=NO 1=YES -99= Don't Know (DK)	d. Rice water? 0=NO 1=YES -99= Don't Know (DK)	e. Other fluids? 0=NO 1=YES -99= Don't Know (DK)	

SECTION 7: CHILD UNDER 5 ILLNESS AND MEDICAL CARE (CONTINUED)

This part covers all children under 5 (0- 59 months) in the household.

	9	10	11	12	13	14	15	16	17
ID of child [FROM HOUSE - HOLD ROSTER]	What else was given to treat the diarrhea? Pill or Syrup 1=Antibiotic 2=Antimotility (anti-diarrheal) 3=Zinc 4=Other (Not antibiotic, antimotility or zinc) 5=Unknown pill or syrup Injection 6=Antibiotic 7=Non-antibiotic 8=Unknown injection 9=Intravenous 10=Home remedy / Herbal medicine -96=Other (specify)	At any time in the last two weeks, has [NAME] had an illness with a cough? 0=NO>>Q14 1=YES	When [NAME] had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing? 0=NO>>Q13 1=YES	Was the fast or difficult breathing due to a problem in the chest or a blocked or runny nose? 1=Problem in chest only 2=Blocked or runny nose only (>>Q14) 3=Both 6=Other (specify) (>>Q14) -99=Don't know	Where did you seek treatment or advice for [NAME'S] cough? 1=Government Parastatal hospital/clinic/centre 2=Religious/voluntary hospital/clinic/ centre 3=Private hospital/clinic/ centre 4=Pharmacy 5=Relative/Friend 6=Traditional Herbalist -95=did not seek -99= other (specify)	Has [NAME] been ill with fever in the last 2 weeks? 0=NO>>Q16 1=YES	Where did you seek treatment or advice for [NAME'S] fever? 1=Government Parastatal hospital/clinic/centre 2=Religious/voluntary hospital/clinic/ centre 3=Private hospital/clinic/ centre 4=Pharmacy 5=Relative/Friend 6=Traditional Herbalist -95=did not seek -99= other (specify)	Has [NAME] been diagnosed with intestinal worms in the past 6 months? 0=NO 1=YES	Has [NAME] been diagnosed with malaria in the past 6 months? 0=NO 1=YES
	1 2 3 4 5 6 7 8 9 10 -96								
	1 2 3 4 5 6 7 8 9 10 -96								
	1 2 3 4 5 6 7 8 9 10 -96								
	1 2 3 4 5 6 7 8 9 10 -96								
	1 2 3 4 5 6 7 8 9 10 -96								
	1 2 3 4 5 6 7 8 9 10 -96								

SECTION 8: CHILD UNDER 5 IMMUNIZATIONS, MONITORING AND PREVENTIVE CARE

This part covers all children under 5 (0- 59 months) in the household.

	2	3	4	5	6	7	8	9	10
	For Children >=6 months								
ID of child [FROM HOUSE - HOLD ROSTER]	Has (NAME) received a Vitamin A dose like this within the last 6 months? [SHOW COMMON TYPES OF AMPULES /CAPSULES / SYRUPS] 0=NO 1=YES -99=DON'T KNOW	In the last 7 days was (NAME) given micronutrient powder like this? [SHOW MICRONUTRIENT POWDER PACKAGE] 0=NO 1=YES -99=DON'T KNOW	The last time [NAME] passed stools, what was done to dispose of the stools? 1=Child used toilet / latrine 2=Put / Rinsed into toilet or latrine 3=Put / Rinsed into drain or ditch 4=Thrown into garbage (solid waste) 5=Buried 6=Left in the open -96=Other (specify) -99=Don't Know	Did [NAME] sleep under a mosquito net last night? 0=NO 1=YES -99=DON'T KNOW	Has (NAME) been given any medicine for intestinal worms within the last 6 months? 0=NO 1=YES -99=DON'T KNOW	Has (NAME) been tested for anaemia within the last 6 months? 0=NO 1=YES, TESTED NEGATIVE 2=YES, TESTED POSITIVE -99=DON'T KNOW	Has [NAME] received an iron supplement, tablet or syrup in the past 6 months? 0=NO 1=YES -99=DON'T KNOW	In the last 3 months has any healthcare provider or community health worker measured [NAME'S] height? Please do not include today's measurements done by our team (Antro team) 0=NO 1=YES	In the last 3 months has any healthcare provider or community health worker measured [NAME'S] weight? Please do not include today's measurements done by our team (Antro team) 0=NO 1=YES

SECTION 9: CHILD UNDER 5 NUTRITION AND FEEDING

This part covers all **children for which the respondent is the main caregiver under 5 (0- 59 months) in the household.**

	1	2	3	4	5								6	7	
	Children under 4				Children aged 0 – 23 months only										
ID of child [FROM HOUSE - HOLD ROSTER]	Are you currently breast-feeding (NAME)? 0=NO 1=YES (>>Q3)	At what age did you stop breast-feeding (NAME)? Record age in completed months; -95=never breastfed -97= Refused -99= Don't know (>>Q4)	How many times did you breastfeed (NAME) yesterday, during the day and night? [Record number of times] -95= none or N/A -97= Refused -99= Don't know	At what age (in months) did you first give (NAME) water or other fluids besides breast milk? [00=LESS THAN ONE MONTH] -95=Not yet>>Q7 -97= Refused -99= Don't know	Now I would like to ask you about liquids or foods that (NAME) had yesterday during the day or at night. I am interested in whether your child had the item I mention, even if it was combined with other foods. [For milk products, infant formula and baby cereal, ask how many times the child had the item] 0=NO 1=YES								Did (NAME) drink anything from a bottle with a nipple yesterday during the day or night? 0=NO 1=YES	At what age (in months) did you first give (NAME) solid or semi-solid food? [00=LESS THAN ONE MONTH] [-95=NOT YET] >> NEXT CHILD/ SECTION	
					a. Plain water ?	b. Milk such as tinned, powdered, or fresh animal milk?	b2. How many times? -95= None or N/A -97= Refused -99= Don't know	c. Infant formula (Infacare , NAN, S-26 SMA, Lactogen , ...)?	c2. How many times? -95= None or N/A -97= Refused -99= Don't know	d. Baby cereal (Nestle Cerelac, Unga wa lishe, thin porridge, made with maize, sorghum, millet, cassava or finger millet)	d2. How many times? -95= None or N/A -97= Refused -99= Don't know	e. Tea or coffee ?	f. Any other liquids (soda, koko, juice, cocoa, coconut water ...)?		

SECTION 9: CHILD UNDER 5 NUTRITION AND FEEDING (CONTINUED)

This part covers all children for which the respondent is the main caregiver under 5 (0- 59 months) in the household.

8												
All children 0 – 59 months old												
ID of child [FROM HOUSE - HOLD ROSTER]	Now I would like to ask you about (other) liquids and foods that (NAME) may have had yesterday during the day or the night. I am interested to know whether your child had the item even if combined with other foods. Did (NAME) eat (name of food) during the day or the night before: 0=NO 1=YES											
	a.	b.	c.	d.	e.	f.	g.	h.	i.	j.	k.	l.
	Mtindi or roshoro?	Ugali, porridge, rice, pasta, bread, chapati, or kitumbua?	Carrots or orange flesh sweet potato (viaze lishe)?	Cassava, cassava ugali, makopa, yam, green banana, Irish potato, white-flesh sweet potato?	Collard greens, spinach, chainizi, mchicha, majani ya kunde, au kisamvu?	Nightshade leaves (mnafu), spider flower (mgagani), jute mallow (mlenda), sweet potato leaves (matembele), pumpkin leaves (majani ya maboga), or Malabar spinach (delega)?	Any other vegetables, such as cabbage, tomato, African eggplant, eggplant, sweet pepper, cucumber, okra, or other vegetables?	Mango, papaya, or passionfruit?	Any other fruits, such as bananas, oranges, watermelon, avocado, baobab, or other fruits?	Liver, kidney, heart, or gizzard?	Sausages/hot dogs, ham, or bologna?	Any other meat, such as beef, mutton, goat, pork, chicken, ducks, guinea fowl, or bush meat?

SECTION 9: CHILD UNDER 5 NUTRITION AND FEEDING (CONTINUED)

This part covers all children for which the respondent is the main caregiver under 5 (0- 59 months) in the household.

8									
All children 0 – 59 months old									
ID of child [FROM HOUSE - HOLD ROSTER]	Now I would like to ask you about (other) liquids and foods that (NAME) may have had yesterday during the day or the night. I am interested to know whether your child had the item even if combined with other foods. Did (NAME) eat (name of food) during the day or the night before: 0=NO 1=YES								
	m.	n.	o.	p.	q.	r.	s.	t.	u.
	Eggs?	Fish, dried small fish (dagaa), dried small tilapia, shrimp, prawn, shellfish, or octopus?	Beans, green peas, cowpeas, green gram, pigeon peas, sesame kashata, groundnuts, or groundnut paste?	Cheese?	Grasshopper, flying termites, or termites?	Sweet foods such as cakes, cookies, vishetti, sweet biscuits, candies, chocolates, or ice cream?	Chips, bagia, mandaazi, fried potatoes, fried cassava, fried sweet potato, or instant noodles?	Red palm oil?	Any other solid, semi-solid, or soft food? IF YES: What was the food?"

SECTION 9: CHILD UNDER 5 NUTRITION AND FEEDING (CONTINUED)

This part covers all children for which the respondent is the main caregiver under 5 (0- 59 months) in the household.

	9	10	11	12	13
ID of child [FROM HOUSE -HOLD ROSTER]	<p>IF ALL 'NO' IN Q8 >> Q10</p> <p>IF AT LEAST 1 'YES' IN Q8:</p> <p>How many times did (NAME) eat solid or semi-solid (soft, mushy) food yesterday, during the day or night?</p> <p>[RECORD NUMBER OF TIMES]</p> <p>-97= Refused -99= Don't know</p>	<p>How often does (NAME) refuse the food you offer him/her?</p> <p>1=Often 2=Sometimes 3=Never (>>Q12)</p>	<p>What do you normally do when (NAME) refuses to eat?</p> <p>1=Do nothing 2=Force him/ her to eat 3=Sing, tell stories, play with my child 4=Try different food -96=Other (Specify)</p>	<p>How much do you talk directly to [NAME] when you are feeding him/her complementary food?</p> <p>1=I talk rarely while feeding 2=I talk sometimes while feeding 3=I talk most of the time while feeding</p>	<p>Did (name) drink or eat vitamin or mineral supplements or any medicines yesterday, during the day or night?</p> <p>0=NO 1=YES -99=Don't Know</p>

SECTION 10: CHILD UNDER 5 DEVELOPMENT

This part covers children aged 24- 59 months in the household.

ENUMERATOR READ: I would like to ask you about certain things (name) is currently able to do. Please keep in mind that children can develop and learn at a different pace. For example, some start talking earlier than others, or they might already say some words but not yet form sentences. So, it is fine if your child is not able to do all the things I am going to ask you about. You can let me know if you have any doubts about what answer to give.

	1	2	3	4	5	6	7	8	9
Children 24-59 months									
ID of child [FROM HOUSE -HOLD ROSTER]	Can [NAME] walk on an uneven surface, for example, a bumpy or steep road, without falling? 0=NO 1=YES -99=Don't Know	Can [NAME] jump up with both feet leaving the ground? 0=NO 1=YES -99=Don't Know	Can [NAME] dress (him/herself), that is, put on pants and a shirt, without help? 0=NO 1=YES -99=Don't Know	Can [NAME] fasten and unfasten buttons without help? 0=NO 1=YES -99=Don't Know	Can [NAME] say 10 or more words, like 'mama' or 'ball'? 0=NO 1=YES -99=Don't Know	Can [NAME] speak using sentences of 3 or more words that go together, for example, "I want water" or "The house is big"? 0=NO 1=YES -99=Don't Know	Can [NAME] speak using sentences of 5 or more words that go together, for example, "The house is very big"? 0=NO 1=YES -99=Don't Know	Can [NAME] correctly use any of the words 'I,' 'you,' 'she,' or 'he,' for example, "I want water" or "He eats rice"? 0=NO 1=YES -99=Don't Know	If you show [NAME] an object (he/she) knows well, such as a cup or animal, can (he/she) consistently name it? <i>By consistently we mean that (he/she) uses the same word to refer to the same object, even if the word used is not fully correct</i>

SECTION 10b: CHILD UNDER 5 DEVELOPMENT (CONTINUED)

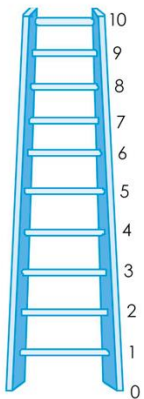
This part covers children aged 36- 59 months in the household.

ENUMERATOR READ: I would like to ask you about certain things (name) is currently able to do. Please keep in mind that children can develop and learn at a different pace. For example, some start talking earlier than others, or they might already say some words but not yet form sentences. So, it is fine if your child is not able to do all the things I am going to ask you about. You can let me know if you have any doubts about what answer to give.

	10	11	12	13	14	15	16	17	18	19	20
	Children 36-59 months										
ID of child [FROM HOUSE - HOLD ROSTER]	Can [NAME] recognize at least 5 letters of the alphabet?	Can (name) write (his/her) name? 0=NO 1=YES -99=Don't Know	Can (name) recognize all numbers from 1 to 5? 0=NO 1=YES -99=Don't Know	If you ask (name) to give you 3 objects, such as 3 stones or 3 beans, does (he/she) give you the correct amount? 0=NO 1=YES -99=Don't Know	Can (name) count 10 objects, for example 10 fingers or 10 blocks, without mistakes? 0=NO 1=YES -99=Don't Know	Can (name) do an activity, such as colouring or playing with building blocks, without repeatedly asking for help or giving up too quickly? 0=NO 1=YES -99=Don't Know	Does (name) ask about familiar people other than parents when they are not there, for example, "Where is Grandma?"? 0=NO 1=YES -99=Don't Know	Does (name) offer to help someone who seems to need help? 0=NO 1=YES -99=Don't Know	Does (name) get along well with other children? 0=NO 1=YES -99=Don't Know	How often does (name) seem to be very sad or depressed? Would you say: daily, weekly, monthly, a few times a year, or never? 1=Daily 2=Weekly 3=Monthly 4=A few times a year 5=Never -99=Don't Know	Compared with children of the same age, how much does (name) kick, bite, or hit other children or adults? Would you say: not at all, the same or less, more, or a lot more? 1=Not at all 2=The same or less 3=More 4=A lot more -99=Don't know

SECTION 11: WOMEN'S EMPOWERMENT, SOCIAL CAPITAL AND RESILIENCE

Respondent for this section should be the Stawisha Maisha eligible woman in the household (i.e. the mother/caregiver of a child < 5 year old or a pregnant woman)

	Record PID for respondent	_ _ _ _	
	Question	Answers	Skip
1	Some people try to save some money for emergencies or to buy something special in the future. Are you currently saving (in cash)?	No 0 Yes..... 1	→ Q3
2	How much have you saved in cash in the last one month?	Tanzanian Shillings: _____	
3	<p><i>Show the picture of the ladder.</i></p> <p>Now, look at this ladder with steps numbered from 0 at the bottom to 10 at the top. Suppose we say that the top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you.</p> <p>On which step of the ladder do you feel you stand at this time?</p> <p>Probe if necessary: Which step comes closest to the way you feel?</p> <p>Best Possible Life</p>  <p>Worst Possible Life</p>	Ladder Step..... _ _	
4	Compared to this time last year, would you say that your life has improved, stayed more or less the same, or worsened, overall?	Improved1 More or less the same2 Worsened3	
5	People sometimes look for companionship, assistance or other types of support. If you needed it, how often is someone available...	Circle answer categories for each item below: None of the time..... 1 A little of the time..... 2 Some of the time 3 Most of the time 4 All of the time 5	
a	to help you if you were confined to bed?	1 2 3 4 5	
b	to take you to the doctor if you need it?	1 2 3 4 5	
c	to prepare your meals if you are unable to do it yourself?	1 2 3 4 5	
d	to help with daily chores if you were sick?	1 2 3 4 5	

f	to turn to for suggestions about how to deal with a personal problem?	1	2	3	4	5	
i	Help you when you do not have enough food at home?	1	2	3	4	5	
6	Do you meet with a group of other women in the community to discuss the following issues?	No	0				
		Yes.....	1				
A	Issues related to the community?	No	0				
		Yes.....	1				
B	Issues related to education?	No	0				
		Yes.....	1				
C	Issues related to health?	No	0				
		Yes.....	1				
D	Issues related to finances?	No	0				
		Yes.....	1				
E	Issues related to agriculture or livestock?	No	0				
		Yes.....	1				
F	Issues specific to women?	No	0				
		Yes.....	1				
G	Issues related to nutrition?	No	0				
		Yes.....	1				
7	How often do you see your relatives (relative that does not live in your household)?	Everyday	1				
		Every week at least once	2				
		Every 2 weeks at least once	3				
		Every month at least once	4				
		Less than once a month	5				
		Never	6				
8	How often do you see your friends?	Everyday	1				
		Every week at least once	2				
		Every 2 weeks at least once	3				
		Every month at least once	4				
		Less than once a month	5				
		Never	6				
9	In the last 12 months, how often did you feel that ...	Answer categories:					
		None of the time.....	1				
		A little of the time.....	2				
		Some of the time	3				
		Most of the time	4				
		All of the time	5				
A	Your life is determined by your own actions	1	2	3	4	5	
B	You have the power to make important decisions that change the course of your own life	1	2	3	4	5	
C	You have the power to make important decisions that change the wellbeing of your children	1	2	3	4	5	
D	You have the power to make important decisions that change the wellbeing of your household	1	2	3	4	5	
E	You are capable of protecting your own interests within your household	1	2	3	4	5	
F	You are capable of protecting your own interests outside of your household (e.g. in the community, in groups in which you participate)	1	2	3	4	5	
G	You are satisfied with your life	1	2	3	4	5	
10	I now want to know whether you agree or disagree with the following statements:	Answer categories:					
		Strongly disagree	1				
		Disagree	2				
		Agree.....	3				
		Strongly agree.....	4				

A	The majority of people in this community generally get along with each other.	1	2	3	4		
B	I feel part of this community.	1	2	3	4		
C	The majority of people in this community would try to take advantage of you if they got the chance.	1	2	3	4		
D	There is a group of my peers that I feel a sense of belonging and membership with. (Examples include civic groups, community groups, women groups, trade groups, etc.)	1	2	3	4		
E	There is a group of my peers that I both give support and receive support from.	1	2	3	4		
F	When it comes to maternal and child feeding practices, I am open to learning and change.	1	2	3	4		
G	I have aspirations for my child to have a better life than me.	1	2	3	4		
H	When it comes to solving problems related to feeding my children, I feel confident coming up with solutions.	1	2	3	4		
I	When it comes to solving problems related to my own nutrition and healthcare during pregnancy, I feel confident coming up with solutions.	1	2	3	4		
11	How often are the following statements true for you?	Not true at all..... 0 Rarely true 1 Sometimes true 2 Often true 3 True nearly all the time..... 4					
A	I am able to adapt when changes occur.						
B	I can deal with whatever comes my way.						
C	I try to see the humorous side of things when I am faced with problems.						
D	Having to cope with stress can make me stronger.						
E	I tend to bounce back after illness, injury or other hardships.						
F	I believe I can achieve my goals, even if there are obstacles.						
G	Under pressure, I stay focused and think clearly.						
H	I am not easily discouraged by failure.						
I	I think of myself as a strong person when dealing with life's challenges and difficulties.						
j.	I am able to handle unpleasant or painful feelings like sadness, fear, and anger.						

	Question	Answers	Skip
	<p>ENUMERATOR: Please share the tablet with the respondent and ask them to read aloud the following passage:</p> <p>“Leo schule yetu wamefika wageni. Wageni hao ni wanafunzi kutoka shule iliyo jirani na shule yetu. Ilipofika jioni, time za shule hizi zilicheza mpira wa miguuu. Shule yetu ilishinda kwa kufunga magoli mawili kwa goli moja. Juma lijalo kutakuwa na mechi ya marudiano.”</p> <p>English meaning: Today, guests have arrived at our school. The guests are students from a school neighboring our school. When the evening came, the teams of these schools played football. Our school won by scoring two goals to one goal. Next week there will be a rematch.</p>		
1 3	Did the respondent read the sentence?	Cannot read anything..... 1 Insecure reader, hesitant and many mistakes 2 Standard reader, some mistakes... 3 Good reader, fluent with understanding 4	

SECTION 12a: MATERNAL NUTRITION KNOWLEDGE AND ATTITUDES

Respondent for this section should be the Stawisha Maisha eligible woman in the household (i.e. the mother/caregiver) DO NOT PROMPT OR PROVIDE CODES, ALLOW RESPONDENT TO ANSWER AND THEN MARK ALL THAT APPLY

	Record PID for respondent	__ __ __	
	Question	Answers	Skip
1	How should a pregnant woman eat in comparison with a non-pregnant woman to provide good nutrition to her baby and help him grow? [DO NOT READ RESPONSES; RECORD ALL MENTIONED]	Eat more food (more energy) 1 Eat more at each meal (eat more food each day). 2 Eat more frequently (eat more times each day) ... 3 Eat more protein-rich foods 4 Eat more iron-rich foods..... 5 Use iodized salt when preparing meals 6 Eat more diverse foods..... 7 Other (specify) -96 Don't know -99	
2	How good do you think it is to eat more food during pregnancy?	Not good 0 Good 1 Don't know -99	
3	How difficult is it for you to eat more food during pregnancy?	Not so difficult 0 So-so 1 Difficult 2	
4	Most women would benefit from nutritional supplements, or tablets, during pregnancy. Which are they? [DO NOT READ RESPONSES; RECORD ALL MENTIONED]	Iron supplements..... 1 Folic acid supplements 2 IFA pill containing Iron & Folic Acid 3 Other (specify) -96 Don't know -99	
5	How many months pregnant should a woman be when she first seeks antenatal care from a clinic or skilled medical provider/doctor?	0-3 months 1 3-6 months 2 6+ months..... 3 Not until labour/delivery 4 Not at all/doesn't need to 5 Don't know -99	
6	How good do you think it is to go to a doctor/clinic in the first three months of pregnancy?	Not good 0 Good 1 Don't know -99	
7	How difficult is it to go to a doctor/clinic in the first three months of pregnancy?	Not so difficult 0 So-so 1 Difficult 2	
8	How many times should a pregnant woman seek antenatal care from a clinic or skilled medical provider/doctor?	0 times 0 1-3 times 1 4+ times 2 Don't know -99	
9	How good do you think it is for a pregnant woman to go to a doctor/clinic four or more times during her pregnancy?	Not good 0 Good 1 Don't know -99	
10	How difficult do you think it is for a pregnant woman to go to a doctor/clinic four or more times during her pregnancy?	Not so difficult 0 So-so 1 Difficult 2	
11	How serious a problem do you think it is for your baby to have a low birth weight?	Not serious 0 Serious 1 Don't know -99	
12	When a pregnant woman is undernourished, she is at risk of having a low-birth-weight baby, meaning	No 0 Yes 1 Don't know -99	→next section

	that the baby is small or has a low birth weight. Are there any health risks for low birth weight babies?		→next section
13	<p>What are the health risks for these babies?</p> <p>[DO NOT READ RESPONSES; RECORD ALL MENTIONED]</p>	<p>Slower growth and development 1</p> <p>Risk of infections/being sick 2</p> <p>Risks of being undernourished/having micronutrient deficiencies 3</p> <p>Risks of being sick once adult/chronic diseases in adulthood 4</p> <p>Other (specify) -96</p> <p>Don't know -99</p>	

SECTION 12b: CHILD NUTRITION/FEEDING KNOWLEDGE AND ATTITUDES

Respondent for this section should be the Stawisha Maisha eligible woman in the household (i.e. the mother/caregiver) DO NOT PROMPT OR PROVIDE CODES, ALLOW RESPONDENT TO ANSWER AND THEN MARK ALL THAT APPLY

	Record PID for respondent	__ __ __	
	Question	Answers	Skip
1	What is the first food a newborn baby should receive? [DO NOT READ RESPONSES]	Only breastmilk..... 1 Other (specify) -96 Don't know -99	
2	How long after birth should a baby be first put to the breast?	Immediately/ within one hour..... 1 Within one day 2 After more than one day 3 Don't know -99	
3	Have you heard of something called "exclusive breastfeeding"?	No 0 Yes 1	→Q5
4	What does exclusive breastfeeding mean? [DO NOT READ RESPONSES]	Exclusive breastfeeding means that the infant gets only breastmilk and no other liquids (even water) or foods 1 Other response -96 Don't know -99	
5	How long should a baby receive nothing more than breastmilk?	From birth to 6 months 1 Other (specify) -96 Don't know -99	
6	How good do you think it is to breastfeed your baby exclusively for six months?	Not good 0 Good 1 Don't know -99	
7	How difficult is it for you to breastfeed your baby exclusively for six months?	Not so difficult 0 So-so 1 Difficult 2	
8	How much do you agree or disagree with the following statement? A baby should be given plain water before they turn 6 months old. READ RESPONSE OPTIONS	Disagree 1 Somewhat Disagree 2 Somewhat Agree 3 Agree 4	
10	What are the benefits for a baby if he or she receives only breastmilk during the first six months of life? [DO NOT READ RESPONSES; RECORD ALL MENTIONED]	He/she grows healthily 1 Protection from diarrhea and other infections 2 Protection against obesity and chronic diseases in adulthood 3 Protection from other diseases 4 Other (specify) -96 Don't know -99	
11	What are the physical or health benefits for a mother if she exclusively breastfeeds her baby? [DO NOT READ RESPONSES; RECORD ALL MENTIONED]	Delays fertility 1 Helps her lose the weight she gained during pregnancy 2 Lowers her risk of cancer (breast and ovarian) 3 Lowers risk of losing blood after giving birth (less risk of post-partum haemorrhage) 4 Improves the relationship between the mother and baby 5 Other (specify) -96 Don't know -99	

12	<p>Many times, mothers complain about not having enough breastmilk to feed their babies. Please tell me different ways a mother can keep up her milk supply</p> <p>[DO NOT READ RESPONSES; RECORD ALL MENTIONED]</p>	<p>Breastfeeding exclusively on demand 1</p> <p>Manually expressing breastmilk 2</p> <p>Having a good nutrition/eating well/having a healthy or diversified diet..... 3</p> <p>Drink enough liquids during the day 4</p> <p>Other (specify) -96</p> <p>Don't know -99</p>	
13	<p>Now we want to discuss breastfeeding in general. If a mother has difficulties feeding breastmilk what should she do to overcome them?</p>	<p>Seek professional help from health-care services: doctors, nurses, midwives or other health professionals 1</p> <p>Seek advice from friends/family/neighbours 2</p> <p>Seek advice from community health workers 3</p> <p>Other..... -96</p> <p>Don't know -99</p>	
14	<p>Thinking about your youngest living child, how confident did you/do you feel about breastfeeding your child?</p>	<p>Not confident..... 0</p> <p>Okay/So-so 1</p> <p>Confident 2</p>	
15	<p>How long is it recommended that a woman breastfeeds her child?</p> <p><i>Probe if necessary:</i> Until what age is it recommended that a mother continues breastfeeding?</p>	<p>Six months or less 1</p> <p>6–11 months..... 2</p> <p>12–23 months..... 3</p> <p>24 months or beyond (correct response)..... 4</p> <p>Other..... -96</p> <p>Don't know -99</p>	
16	<p>How good do you think it is to continue breastfeeding beyond six months?</p>	<p>Not good 0</p> <p>Good 1</p> <p>Don't know 2</p>	
17	<p>How difficult is it for you to continue breastfeeding beyond six months?</p>	<p>Not so difficult 0</p> <p>So-so 1</p> <p>Difficult 2</p>	
18	<p>There is a nutrient found in food called 'iron' which helps children 'accumulate' blood (nutrient that makes blood strong).</p> <p>Can you tell me some foods that are a good source of iron?</p> <p>[DO NOT READ RESPONSES; RECORD ALL MENTIONED]</p>	<p>Meat 1</p> <p>Fish..... 2</p> <p>Eggs..... 3</p> <p>Breast milk 4</p> <p>Cow's milk..... 5</p> <p>Beans/lentils 6</p> <p>Blood from cattle or other animals 7</p> <p>Other (specify) 8</p> <p>Don't know -99</p>	
19	<p>Vitamin A is a nutrient that helps children see better. Can you tell me some of the foods that are rich in vitamin A?</p> <p>[DO NOT READ RESPONSES; RECORD ALL MENTIONED]</p>	<p>Orange colored fruits/vegetables..... 1</p> <p>Green leafy vegetables 2</p> <p>Eggs..... 3</p> <p>Liver 4</p> <p>Breast milk 5</p> <p>Cow's milk..... 6</p> <p>Palm Oil..... 7</p> <p>Other (specify) 8</p> <p>Don't know -99</p>	
20	<p>How confident do you feel, or would you feel when child is eating solid foods, in preparing nutritious food for your children?</p>	<p>Not confident..... 0</p> <p>Okay/So-so 1</p> <p>Confident 2</p>	
21	<p>How good do you think it is to give different types of food to your child each day when they are 6 months and older?</p>	<p>Not good 0</p> <p>Good 1</p> <p>Don't know 2</p>	
22	<p>How difficult is it (or will it be) for you to give different types of food to your child each day?</p>	<p>Not so difficult 0</p> <p>So-so 1</p> <p>Difficult 2</p>	

23	How stressed or worried does it make you to think about feeding your child different types of food?	Not at all stressed/worried..... 0 Somewhat stressed/worried 1 Very stressed/worried 2	
24	How good do you think it is to feed your child several times each day?	Not good 0 Good 1 Don't know -99	
25	How difficult is it (or will it be) for you to feed your child several times each day?	Not so difficult 0 So-so 1 Difficult 2	
26	How stressed or worried does it make you to think about feeding your child more frequently?	Not at all stressed/worried..... 0 Somewhat stressed/worried 1 Very stressed/worried 2	
28	I am going to read a list of seven food groups. How many of these food groups (out of seven) should a child 6-23 months old eat each day? grains, roots, and tubers legumes and nuts dairy products (milk yogurt, cheese) flesh foods (meat, fish, poultry, and liver/organ meat) eggs vitamin A-rich fruits and vegetables and other fruits and vegetables.	Zero..... 1 At least one..... 2 At least two..... 3 At least three 4 At least four 5 Five or more..... 6 Don't know -99	
29	Who do you <u>most often go to</u> for support and information on nutrition during your most recent pregnancy?	Husband/partner 1 Family (mother, mother-in-laws, aunts)..... 2 Friends/other women in community..... 3 Doctors/clinics 4 Community programs/organizations..... 5 No one -95 Don't know -99	
30	Who <u>do you most often go to</u> for support and information on feeding your children?	Husband/partner 1 Family (mother, mother-in-laws, aunts)..... 2 Friends/other women in community..... 3 Doctors/clinics 4 Community programs/organizations..... 5 No one -95 Don't know -99	
31	How much do you/would you trust nutrition information that comes from family members (mother, mother-in-law, aunts)? [DO NOT READ RESPONSES; RECORD ALL MENTIONED]	Completely..... 1 A lot 2 A moderate amount 3 A little 4 Not at all 5 Don't know -99	
32	How much do you/would you trust nutrition information that comes from a clinic or doctor? [DO NOT READ RESPONSES; RECORD ALL MENTIONED]	Completely..... 1 A lot 2 A moderate amount 3 A little 4 Not at all 5 Don't know -99	
33	How much do you/would you trust nutrition information that comes from peers, friends or other women in your community? [DO NOT READ RESPONSES; RECORD ALL MENTIONED]	Completely..... 1 A lot 2 A moderate amount 3 A little 4 Not at all 5 Don't know -99	

34	<p>How much do you/would you trust nutrition information that comes from radio programs?</p> <p>[DO NOT READ RESPONSES; RECORD ALL MENTIONED]</p>	<p>Completely..... 1 A lot 2 A moderate amount 3 A little 4 Not at all 5 Don't know -99</p>	
35	<p>What needs to be done when a child has diarrhea?</p>	<p>Give ORS (oral rehydration salt) 1 Give less food than usual..... 2 Give same quantity of food as usual 3 Give more food than usual 4 Give less liquids than usual..... 5 Give the same amount of liquid as usual..... 6 Give more liquid than usual..... 7 Keep breastfeeding..... 8 Increase breastfeeding 9 Give syrup 10 Give traditional medication 11 Give treated water 12 Give carrot juice or rice water 13 Give zinc..... 14 Other (Specify)..... 96 Don't know -99</p>	
36	<p>[SHOW SAMPLE GROWTH MONITORING CARD]</p> <p>What does this growth curve mean?</p>	<p>The child is about average height for his/her age 1 The child is smaller than the height of the average child his/her age 2 The child is taller than the height of the average child his/her age 3 I don't understand it..... 4</p>	

SECTION 12c: HEALTH AND NUTRITION DECISION MAKING AND NORMS

Respondent for this section should be the Stawisha Maisha eligible woman in the household (i.e. the mother/caregiver) DO NOT PROMPT OR PROVIDE CODES, ALLOW RESPONDENT TO ANSWER AND THEN MARK THE ONE WHICH APPLIES

Record PID for respondent		__ __ __	
Question	Answers		Skip
Decision Making			
1	During your most recent (or current) pregnancy, who usually made decisions about your health care: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	Respondent 1 Husband/Partner 2 Respondent and Husband/Partner Jointly 3 Other (specify) 96 Don't know -99	
2	During your most recent (or current) pregnancy, who usually made decisions about what you ate and how often you ate?	Respondent 1 Husband/Partner 2 Respondent and Husband/Partner Jointly 3 Other (specify) 96 Don't know -99	
4	Do you feel you can make your own personal decision regarding your health care and feeding practices during pregnancy if you wanted to?	No 0 Yes 1 Don't know 998	
5	After giving birth to your youngest child, who usually made decisions about how long you breastfed that child for?	Respondent 1 Husband/Partner 2 Respondent and Husband/Partner Jointly 3 Other (specify) 96 Don't know 998	
6	Who usually makes decisions about health care for your child/children (including seeking treatment for illness)?	Respondent 1 Husband/Partner 2 Respondent and Husband/Partner Jointly 3 Other (specify) 96 Don't know 998	
7	Who usually makes decisions about what foods your child/children eat and how often they eat?	Respondent 1 Husband/Partner 2 Respondent and Husband/Partner Jointly 3 Other (specify) 96 Don't know 998	
9	Do you feel you can make your own personal decision regarding your child's/children's health care and feeding practices if you wanted to?	No 0 Yes 1 Don't know 998	
10	Who usually decides how the money you receive from TASAF/PSSN will be used?	Respondent 1 Husband/Partner 2 Respondent and Husband/Partner Jointly 3 Other (specify) 96 Don't know 998	
Social Norms			
11	How many mothers in your community attend their first antenatal care visit before they are three months pregnant?	None 0 Some 1 Many 2	
12	How many mothers in your community attend at least four antenatal care service visits during their pregnancy?	None 0 Some 1 Many 2	
13	How many mothers in your community eat one extra meal each day during pregnancy?	None 0 Some 1 Many 2	

14	How many mothers in your community breastfeed their child for at least six months without giving them any other food or liquids?	None 0 Some 1 Many 2	
15	How many mothers in your community introduce nutritionally balanced solid foods to their babies at six months and continue breast feeding to 24 months?	None 0 Some 1 Many 2	
16	How many mothers in your community regularly bring their under 5 year old children to health services that include growth monitoring and nutrition counseling?	None 0 Some 1 Many 2	
To what extent do you agree or disagree with the following statements? [READ RESPONSE OPTIONS]			
17	It is suitable for women to eat more and better food than other family members during pregnancy.	Disagree 1 Somewhat Disagree 2 Somewhat Agree 3 Agree 4	
18	Avoiding bad treatment by a nurse is an acceptable reason for a pregnant woman to delay ANC visits.	Disagree 1 Somewhat Disagree 2 Somewhat Agree 3 Agree 4	
19	It is appropriate in my community for women to exclusively breastfeed their child for six months without giving water or other foods.	Disagree 1 Somewhat Disagree 2 Somewhat Agree 3 Agree 4	
20	It is appropriate in my community for families to feed their children diverse diets with many different types of nutritious foods beginning when they are six months old.	Disagree 1 Somewhat Disagree 2 Somewhat Agree 3 Agree 4	
	If you were to decide to attend at least four antenatal care appointments throughout your pregnancy, starting in the first three months, how likely would these situations be to occur? [READ OPTIONS]		
21	You will be criticized by your husband/partner.	Very likely 1 Somewhat likely 2 Not likely 3	
22	You may encounter more arguments and conflict with your elders.	Very likely 1 Somewhat likely 2 Not likely 3	
23	You may be considered greedy and selfish.	Very likely 1 Somewhat likely 2 Not likely 3	
	If you were to decide to eat extra food and better food during pregnancy how likely would these situations be to occur?		
24	You will be criticized by your husband/partner.	Very likely 1 Somewhat likely 2 Not likely 3	
25	You may encounter more arguments and conflict with your elders.	Very likely 1 Somewhat likely 2 Not likely 3	
26	You may be considered greedy and selfish.	Very likely 1 Somewhat likely 2 Not likely 3	

SECTION 13: MEDIA AND COMMUNICATION

The next few questions will all be about the type of media and information you may know of or use
Respondent for this section should be the Stawisha Maisha eligible woman in the household (i.e. the mother/caregiver)

	Record PID for respondent	_ _ _ _	
	Question	Answers	Skip
1	How often do you listen to the radio? [READ RESPONSE OPTIONS]	Not at all0 Less than once a week1 At least once a week2 Almost every day3	
2	How often do you use a computer or tablet?	Not at all0 Less than once a week1 At least once a week2 Almost every day3	
3	How often do you access the internet?	Not at all0 Less than once a week1 At least once a week2 Almost every day3	
4	How often do you watch television?	Not at all0 Less than once a week1 At least once a week2 Almost every day3	
5	How often do you read the newspaper?	Not at all0 Less than once a week1 At least once a week2 Almost every day3	
6	How often do you use a mobile telephone?	Not at all0 Less than once a week1 At least once a week2 Almost every day3	→Q8
7	How often do you listen to radio broadcasts on a mobile phone?	Not at all0 Less than once a week1 At least once a week2 Almost every day3	
	In the last 12 months have you:		
8	Heard anything about nutrition on the radio?	No0 Yes1	
9	Seen anything about nutrition on a television?	No0 Yes1	
10	Read anything about nutrition in a magazine or newspaper?	No0 Yes1	
11	Seen anything about nutrition on a poster, leaflet or brochure?	No0 Yes1	
12	Seen anything about nutrition on an outdoor sign or billboard?	No0 Yes1	
13	Heard anything about nutrition at community meetings or events?	No0 Yes1	
14	Heard anything about nutrition from a community health worker?	No0 Yes1	
15	Discussed nutrition with other women in your community?	No0 Yes1	
16	Discussed nutrition with anyone else in your family or household?	No0 Yes1	
17	Have you ever heard of 'Stawisha Maisha'?	No0 Yes1	

SECTION 14a: GENDER EQUITABLE MEN (GEM) MODULE

Now we want to ask you your opinion about what you believe around the norms for men and women

Respondent for this section should be the Stawisha Maisha eligible woman in the household

	Record PID for respondent	_ _ _ _	
	Question	Answers	Skip
	Please rate the extent to which you agree with the following statements.		
1	There are times a woman deserves to be beaten.	Agree 1 Partially agree 2 Do not agree 3	
2	A woman should tolerate violence in order to keep her family together.	Agree 1 Partially agree 2 Do not agree 3	
3	If someone insults a man he should defend his reputation with force if he has to.	Agree 1 Partially agree 2 Do not agree 3	
4	It is okay for a man to hit his wife if she will not have sex with him.	Agree 1 Partially agree 2 Do not agree 3	
5	A man using violence against his wife is a private matter that should not be discussed outside the couple.	Agree 1 Partially agree 2 Do not agree 3	
6	It is alright for a man to beat his wife if she is unfaithful.	Agree 1 Partially agree 2 Do not agree 3	
7	It is a woman's responsibility to avoid getting pregnant.	Agree 1 Partially agree 2 Do not agree 3	
8	A man should be angered/shocked if his wife asks him to use a condom.	Agree 1 Partially agree 2 Do not agree 3	
9	Women who carry condoms on them are easy.	Agree 1 Partially agree 2 Do not agree 3	
10	Only when a woman has a child is she a real woman.	Agree 1 Partially agree 2 Do not agree 3	
11	A real man produces a male child.	Agree 1 Partially agree 2 Do not agree 3	
12	It disgusts me when I see a man acting like a woman.	Agree 1 Partially agree 2 Do not agree 3	
13	A woman should not initiate sex.	Agree 1 Partially agree 2 Do not agree 3	
14	You do not talk about sex, you just do it.	Agree 1 Partially agree 2 Do not agree 3	
15	A woman who has sex before she marries does not deserve respect.	Agree 1 Partially agree 2 Do not agree 3	

16	Men need sex more than women do.	Agree 1 Partially agree 2 Do not agree 3	
17	Men are always ready to have sex.	Agree 1 Partially agree 2 Do not agree 3	
18	A man needs other women, even if things with his wife are fine.	Agree 1 Partially agree 2 Do not agree 3	
19	It is the man who decides how he wants to have sex.	Agree 1 Partially agree 2 Do not agree 3	
20	Giving the kids a bath and feeding the kids are the mother's responsibility.	Agree 1 Partially agree 2 Do not agree 3	
21	A woman's most important role is to take care of her home and cook for her family.	Agree 1 Partially agree 2 Do not agree 3	
22	A man should have the final word on decisions in his home.	Agree 1 Partially agree 2 Do not agree 3	
23	The husband should decide what major household items to buy.	Agree 1 Partially agree 2 Do not agree 3	
24	A woman should obey her husband in all things.	Agree 1 Partially agree 2 Do not agree 3	

CONTACT INFORMATION FOR TRACKING

ENUMERATOR READS: In case you are not at the current address when we return, please tell us the names of two of your closest friend or family member who are sure to know where you are, and how to contact you. These should be friends or family that would stay in their current residence if this household moved away. *Hint: Contacts should usually not be husbands or children, since these contacts often move along with the respondent. We want contacts that are likely to stay in the same place when the respondent moves.*

1	2	3	4
Is there a mobile phone number where I can reach you? Yes.....01 No.....02	Please share with me that number	Is there a landline phone number where I can reach you? Yes.....01 No.....02	Please share with me that number

5	Contact 1	Contact 2
1. Name of contact people 2. 1b. Nickname of contact		
2. Relationship to you		
3. Where does [CONTACT] currently live?		
Landmarks Description of address Village Region		
4a. Primary phone number of [CONTACT] 4b. Secondary phone number of [CONTACT]		

END OF VISIT 1

APPENDIX 7. ANTHROPOMETRIC MEASUREMENT OF CHILDREN UNDER 5 YEARS OLD (n=3,605)

SECOND VISIT

METADATA	
Date of interview	_ _ - _ _ - _ _
Time start	_ _ : _ _ 24-hour clock
Time end interview	_ _ : _ _ 24-hour clock
Enumerator name and code	_____ _ _
Supervisor name and code	_____ _ _
Cluster ID	_ _
Household ID	_ _ _ _

SECTION 15: ANTHROMOPETRY

MEASURE ALL CHILDREN 0 – 59 MONTHS OLD.

Record weight and length/height below, taking care to record the measurements on the correct line for each child. Check the child's name and line number on the household listing before recording measurements. Also observe and record whether the child has oedema or not.

[FOR CHILDREN 0-24 MONTHS MEASURE HEIGHT LYING DOWN. FOR CHILDREN AGE 25-59 MONTHS MEASURE HEIGHT STANDING UP]

[INSTRUCTIONS: Two measurements of height and weight will be taken for each individual and if the difference is > 0.5 cm or 0.5 kg a third measurement should be taken to verify the first two measurements. Take the average of the two most reliable measurements and record in the table.]

	1	2	3	4	5	6	7	8	9	10	11	12
ID	Name	Sex 1 = Male 2 = Female	Age Record exact age in complete <u>months</u>	Record Date of Birth	Was (NAME) measured? 1=YES (>>Q3) 0=NO	Why not? 1=Not home during survey period, 2=Too ill, 3=Has Disability 4=Mother not willing 5=Child not willing -96=Other (specify) (>> NEXT PERSON)	Weight in kilograms [USE ONE DECIMAL PLACE]	Was (NAME) weighed with clothes on or off? 1=Clothes on 2=Clothes off	Height in centimetres [USE ONE DECIMAL PLACE]	How was height captured? 1=Lying down 2=Standing up	Check for oedema 1=Oedema present 2=Oedema not present 3=Unsure -96=Not checked (specify reason)	For children 3 months-5years, measure upper arm circumference in centimetres [USE ONE DECIMAL PLACE]

END OF VISIT 2 INTERVIEW

Respondent Name	Gender	Role/Status	Years Worked at Facility

PART A: CHARACTERISTICS OF FACILITY

	QUESTION	CATEGORY AND CODE	RESPONSE
BASIC CLIENT AMENITIES			
1	What year was this facility built?	(YYYY)	_ _ _ _
2	Do you have an estimated size of the catchment population that this facility serves, that is, the target population or total population living in the area served by this facility?	(Enter estimated catchment population) Don't Know-99	_ _ _ _ _ _ _ _
3	Is housing provided by this facility for its employees?	Yes, all.....1; Yes, Some....2, No.....3	_
4	How many days per week is this facility open for outpatient adult and/or child curative services?	(Enter number of days) Don't know.....-99	_
5	On average, how many hours per day is this facility open?	4 hours or less.....1 5 to 8 hours.....2 9 to 16 hours.....3 17 to 23 hours.....4 24 hours.....5	_
6	Is there a trained health provider present at the facility at all times (24 hours/day)	Yes, always present 1>>Q8 No 2	_
7	Is there a trained health provider available on call at all times after hours? IF YES, ASK TO SEE DUTY SCHEDULE	Yes, duty schedule seen.....1 Yes, duty schedule not seen2 No3	_
8	Is there a room with auditory and visual privacy available for patient consultations?	Auditory privacy only1 Visual privacy only2 Both auditory and visual privacy.....3 No privacy4	_
9	What is the <i>most commonly used</i> source of water for the facility <i>at this time</i> ?	Piped into facility 1>>Q11 Piped onto facility grounds..... 2>>Q11 Public tap/standpipe3 Tubewell/borehole4	_

	OBSERVE THAT WATER IS AVAILABLE FROM THE SOURCE OR IN THE FACILITY ON THE DAY OF THE VISIT. E.G. CHECK THAT THE PIPE IS FUNCTIONING.	Protected dug well5 Unprotected dug well6 Protected spring7 Unprotected spring.....8 Rainwater collection9 Bottled water 10>>Q11 Cart w/small tank/drum 11>>Q11 Tanker truck..... 12>>Q11 Surface water.....13 Other (specify)-96 Don't know.....-98>>Q11 No water source.....-95>>Q11	
10	Is water available from this source on facility premises?	Yes, inside the facility1 Yes, within the ground of the facility2 No, outside the facility grounds.....3	_
11	Is there a toilet (latrine) on premises in functioning condition that is accessible for general outpatient client use? IF YES: What type of toilet? IF MULTIPLE TOILETS ARE AVAILABLE, CONSIDER THE MOST MODERN TYPE OBSERVE THAT THE TOILET (LATRINE) IS ACCESSIBLE (UNLOCKED OR KEY AVAILABLE) AND FUNCTIONING	Flush toilet1 Ventilated improved pit latrine (vip).....2 Pit latrine with slab3 Pit latrine without slab/open pit.....4 Composting toilet.5 Bucket6 Hanging toilet/ hanging latrine.....7 No facilities on premises/bush/field..8	_
12	Does this facility have any guidelines on standard precautions for infection prevention? IF YES, ASK TO SEE THE DOCUMENT	Yes, observed1 Yes, reported not seen.....2 No3	_
POWER SUPPLY			
13	Does your facility have electricity from any source (e.g. electricity grid, generator, solar, or other) including for stand-alone devices (EPI cold chain)?	Yes.....1 NoQ23	_
14	What is the facility's main source of electricity?	Central supply of electricity (national1>>Q18 Central supply of electricity (community grid2>>Q18 Fuel-based generator..... 3	_

		Battery-operated generator 4 Solar system 5>>Q Other (specify6>>Q18	
15	Is the generator functional?	Yes.....1 No2 Don't Know9	_
16	Is there fuel or a charged battery available today?	Ye1>>Q18 N2>>Q18 Don't Know9>>Q18	_
17	Is the solar system functional?	Yes, functioning1 Partially, battery needs Servicing/replacement.....2 No, not functional3 Don't know9	_
18	Other than the main or primary source, does the facility have a secondary or backup source of electricity? SELECT ALL THAT APPLY	No secondary source 1>>Q22 Central supply of electricity (national2 >>Q22 Central supply of electricity (community grid3>>Q22 Fuel-based generator..... 4 Battery-operated generator 5 Solar syste6>>Q21 Other (specify-96>>Q22	_
19	Is the generator functional?	Yes.....1 No2 Don't Know9	_
20	Is there fuel or a charged battery available today?	Yes 1>>Q22 No 2>>Q22 Don't Know 9>>Q22	_
21	Is the solar system functional?	Yes, functioning1 Partially, battery needs Servicing/replacement.....2 No, not functional3 Don't know9	_
22a	During the past 7 days, was electricity available at all times from the main source when the facility was open for services?	Always available (no interruptions) 1>>Q23 Often available (interruptions of less than two hours per day) 2 Sometimes available (frequent or prolonged interruptions of more than 2 hours per day)..... 3	_
22b	During the past 7 days, when electricity was not available from the main source, which backup source did you use?	No secondary source 0>>Q23 Central supply of electricity (national) 1	_

		Central supply of electricity (community grid) 2 Fuel-based generator..... 3 Battery-operated generator 4 Solar system..... 5 Other (specify) 6	
22c	Was this backup a reliable source of electricity during all outages?	(Yes.....1; No.....2)	_
COMMUNICATIONS			
23	Does this facility have a <u>functioning land line telephone</u> that is available to call outside at all times client services are offered?	(Yes.....1; No.....2)	_
24	Does this facility have a <u>functioning cellular telephone</u> or a private cellular phone that is supported by the facility?	(Yes.....1; No.....2)	_
25	Does this facility have a <u>functioning short-wave radio</u> for radio calls?	(Yes.....1; No.....2)	_
26	Does this facility have a <u>functioning computer</u> ?	(Yes.....1; No.....2)	_
27	Is there access to email or internet within the facility today?	(Yes.....1; No.....2)	_
AMBULANCE/TRANSPORT FOR EMERGENCIES			
28	Does this facility have a functional ambulance or other vehicle for emergency transportation for clients that is stationed at this facility or operates from this facility?	Yes.....1 No2	_
29	Does this facility have access to an ambulance or other vehicle for emergency transport for clients that is stationed at another facility or that operates from another facility in near proximity?	Yes.....1 No2	_
30	Is fuel for the ambulance or other emergency vehicle available today?	Yes.....1 No2 Don't Know9	_

PART B: FACILITY EQUIPMENT

	QUESTION	CATEGORY AND CODE	RESPONSE
1	Is there any operating room/theatre at this facility?	Yes.....1 No.....2 >>Q4	_
2	Can caesarean sections be performed in this facility?	Yes.....1 No.....2 >>Q4	
3	How much is the surgical fee?	In Tanzanian Shillings (Write 0 if there is no fee)	_ _ _ _
4	Is there a laboratory to do tests?	Yes.....1 No.....2 >>Q6	_
5	Do you perform the following tests? (Yes.....1; No.....2) READ EACH OPTION....	A. General microscopy/wet-mounts B. Haemoglobin testing C. Stools D. Blood test for malaria - RDT E. Blood test for malaria – MPS F. HIV test G. Pregnancy test H. Urine test I. Skin snip test J. STIs other than HIV (Chlamydia, RPR for syphilis, etc.) K. Pap smear (HPV) L. Anemia M. Other test not listed	A. _ B. _ C. _ D. _ E. _ F. _ G. _ H. _ I. _ J. _ K. _ L. _ M. _
6	Does this facility have malaria rapid diagnostic test kits (with valid expiration date) in stock in this service site today? CHECK TO SEE IF VALID (NOT EXPIRED)	Yes, Observed.....1 Yes, Reported not seen.....2 No.....3	_

7a	Does this facility have a working refrigerator to store biomedical samples, vaccinations, or medications?	Yes.....1; No.....2	_
7b	Does this facility have a working refrigerator for any other facility needs (non biomedical)?	Yes.....1; No.....2	_
8	<p>Please tell me if the following basic equipment and supplies used in the provision of client services are available and functional in this facility today.</p> <p>ASK TO SEE THE ITEMS</p> <p>Yes, Observed.....1 Yes, Reported not seen.....2 No.....3</p>	<p>A. Adult weighing scale</p> <p>B. Length/height measuring equipment</p> <p>C. Child weighing scale- 250 gram gradation</p> <p>D. Infant weighing scale – 100 gram gradation</p> <p>E. Measuring tape-height board/stadiometer</p> <p>F. Growth charts</p> <p>G. Thermometer</p> <p>H. Stethoscope</p> <p>I. Blood pressure apparatus (may be digital or manual sphygmomanometer with stethoscope)</p> <p>J. Light source (flashlight acceptable)</p> <p>K. Light microscope</p> <p>L. Glass slides and cover slips</p> <p>M. Latex gloves in stock</p>	<p>A. _ </p> <p>B. _ </p> <p>C. _ </p> <p>D. _ </p> <p>E. _ </p> <p>F. _ </p> <p>G. _ </p> <p>H. _ </p> <p>I. _ </p> <p>J. _ </p> <p>K. _ </p> <p>L. _ </p> <p>M. _ </p>

9	<p>What methods are used for disinfecting other medical equipment (e.g. surgical instruments)?</p> <p>Check categories A-C</p> <p>Yes, Observed.....1</p> <p>Yes, Reported not seen.....2</p> <p>No.....3</p>	<p>A. Autoclave</p> <p>B. Dry heat sterilization</p> <p>C. Steam sterilization</p> <p>D. Boiling only</p> <p>E. Chemical only</p> <p>F. Boil and chemical</p> <p>G. Other _____</p> <p>H. None</p>	<p>A. __ </p> <p>B. __ </p> <p>C. __ </p> <p>D. __ </p> <p>E. __ </p> <p>F. __ </p> <p>G. __ </p> <p>H. __ </p>
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PART C: SERVICES

Now I would like to know about the services offered at this facility.

	QUESTION	CATEGORY AND CODE	RESPONSE
ANTENATAL SERVICES			
1	Does this facility offer antenatal care (ANC) services?	Yes 1 No2 >>Q6	__
2	Do ANC providers provide any of the following services to pregnant women as part of routine ANC services? (Yes.....1, No.....2)	A. Iron supplementation B. Folic acid supplementation C. Intermittent preventive treatment in pregnancy (IPTp) for malaria D. Tetanus toxoid immunization E. Monitoring for hypertensive disorder of pregnancy F. HIV Testing	A. __ B. __ C. __ D. __ E. __
3	Have you or any provider(s) of ANC services received any ANC training in the last two years?	Yes 1 No 2	__
4	Have you or any provider(s) of ANC services received any training in IPTp in the last two years?	Yes 1 No 2	__
5	Please tell me if the following documents are available in the facility today: IF AVAILABLE, ASK TO SEE THE DOCUMENT Yes, Observed.....1 Yes, Reported not seen.....2 No.....3	A. National ANC guidelines B. Any ANC check-lists and/or job-aids C. IPTp guidelines, check-lists and/or job-aids (including wall charts) ACCEPTABLE IF PART OF ANC GUIDELINES.	A. __ B. __ C. __
OBSTETRIC AND NEWBORN CARE SERVICES			
6	Does this facility offer delivery (including normal delivery, basic emergency obstetric care, and/or comprehensive emergency obstetric care) and/or newborn care services?	Yes 1 No2 >>Q8	__
7	Please tell me if the following interventions are routinely carried out by providers of delivery services in this facility: (Yes.....1, No.....2)	A. Administration of oxytocin injection immediately after birth to all women for the	A. __

		prevention of post-partum haemorrhage B. Monitoring and management of labour using partograph C. Immediate and exclusive breastfeeding D. Hygienic cord care (cut with sterile item and apply disinfectant to tip and stump, and no application of other substances) E. Thermal protection (drying baby immediately after birth and wrapping)	B. __ C. __ D. __
CHILD PREVENTATIVE AND CURATIVE CARE SERVICES			
8	Does this facility offer preventative and curative care services for children under 5?	Yes 1 No 2>>Q13	__
9	Please tell me if this facility provides the following services: (Yes.....1, No.....2)	A. Diagnose and/or treat child malnutrition B. Provide vitamin A supplementation C. Provide iron supplementation D. Provide ORS to children with diarrhea E. Provide zinc supplementation to children with diarrhea F. Child growth monitoring G. Treatment of pneumonia H. Administration of amoxicillin for the treatment of pneumonia in children I. Treatment of malaria in children	A. __ B. __ C. __ D. __ E. __ F. __ G. __ H. __ I. __
10	Please tell if the following documents are available in the facility today: IF AVAILABLE, ASK TO SEE THE DOCUMENT Yes, Observed.....1 Yes, Reported not seen.....2 No.....3	A. IMCI (Integrated management of childhood illness) guidelines for the diagnosis and management of childhood illnesses B. National guidelines for growth monitoring	A. __ B. __ C. __

		C. Any check-lists and/or job-aids for IMCI	
11	Have you or any provider(s) of curative care services for sick children received any training in the Integrated Management of Childhood Illnesses (IMCI) in the last two years?	Yes 1 No 2	_
12	Have you or any provider(s) of growth monitoring services for children received any training in growth monitoring in the last two years?	Yes 1 No 2	_
COLLABORATIONS			
13	Did the facility participate in a child health day/immunization campaign in the last 6 months?	Yes 1 No 2	_
14	Does your facility participate in or collaborate with NGOs or health outreach providers for nutrition related services?	Yes 1 No 2	_
15	Does your facility participate in or collaborate with NGOs or health outreach providers for antenatal care services?	Yes 1 No 2	_
16	Did any of your health workers participate in any type of training provided by any NGO or UNICEF?	No 00 Yes, (enter number of staff trained)	_ _
17	Does your facility participate in or collaborate with any NGO or UNICEF to specifically improve maternal, infant and young child feeding practices?	Yes 1 No 2	_
18	Did any of your health workers participate in a training provided by any NGO or UNICEF to improve maternal, infant and young child feeding practices?	No 00 Yes, (enter number of staff trained)	_ _
19	What were the topics of these trainings? (Yes.....1, No.....2)	A. IMAM (Integrated Management of Acute Malnutrition) B. IYCF (Infant and Young Child Feeding practices) C. NACS (Nutrition Assessment, Counselling and Support) D. Nutrition Care and Support for PLHIV E. Other (Specify)	_ _ _

20. Do you offer.....? Yes.....1 No.....2 >>next service	21. How many hours do you offer each service during a regular week? (Not including on call hours) [Indicate number of hours each day. Round to nearest hour. Enter 0 for no service on that day.]						
	SUN	MON	TUE	WED	THU	FRI	SAT
A. Outpatient consultations							
B. Deliveries							
C. Well baby clinics							
D. Antenatal clinics							
E. Family Planning							
F. Mobile clinics							
G. Treatment for acute malnutrition for children							
H. Gender Based Violence (GBV) services							
I. Immunization services							
I. OTHER (Specify)							

PART D: DRUGS AND MEDICAL SUPPLIES

1. Does this facility normally carry.....? (Yes.....1, No.....2 >>next item)	2. Is [.....] in stock today? (Yes.....1 >> next item No.....2)	3. How many days does it normally take to replenish the stock?
A. Condoms	__	__ __
B. Spermicides	__	__ __
C. Contraceptive Pills	__	__ __
D. Intra-uterine device (IUD)	__	__ __
E. Injectable contraceptive (Depro-provera, etc.)	__	__ __
F. Contraceptive implants (Implanon, nexplanon, etc.)	__	__ __
G. Paracetamol/Panadol	__	__ __
H. Aspirin	__	__ __
I. Oral Rehydration Salt	__	__ __
J. Amoxicillin 250 mg or 500 mg dispersible K. tablet or syrup/suspension	__	__ __
L. Coartem	__	__ __
M. Fansidar	__	__ __
N. Iron tablets for pregnant women	__	__ __
O. Folic Acid tablets	__	__ __
P. Oxytocin injection (maternal health) (If no, Q>>)	__	__ __
Q. Is the oxytocin stored in cold storage?	__	__ __
R. Magnesium sulphate injection	__	__ __
S. Misoprostol 200µg tablets	__	__ __
T. SP (Sulfadoxine + Pyrimethamine)	__	__ __
U. Normal saline IV solution	__	__ __
V. Ringers lactate IV solution	__	__ __
W. 5% dextrose IV solution	__	__ __

X. Penicillin injection/tablets	_	_	_
Y. Co-trimoxazole syrup/suspension	_	_	_
Z. ARVs for adults	_	_	_
AA. BCG injection	_	_	_
BB. DPT injection	_	_	_
CC. Tetanus toxoid vaccine	_	_	_
DD. Measles injection	_	_	_
EE. Polio injection	_	_	_
FF. Meningitis injection	_	_	_
GG. Zinc sulphate tablets	_	_	_
HH. Zinc sulphate syrup or dispersible tablets	_	_	_
II. Insecticide treated bed nets for patients and their families and households	_	_	_
JJ. Micronutrient Powder (MNP)	_	_	_
KK. Ready-to-use Therapeutic Food (RUTF)	_	_	_
LL. Deworming medicines (mebendazole /albendazole)	_	_	_
MM. Vitamin A (retinol) capsules	_	_	_
NN. Vitamin A droplets	_	_	_
OO. Antibiotic eye ointment for newborn	_	_	_
PP. Ampicillin powder for injection	_	_	_
QQ. Gentamicin injection	_	_	_
RR. Ceftriaxone injection	_	_	_
SS. Procaine benzylpenicillin injection	_	_	_
TT. Dexamethasone injection	_	_	_
UU. Betamethasone injection	_	_	_
VV. Skin disinfectant	_	_	_
WW. Newborn bag and mask size 1 for term babies (for newborn resuscitation)	_	_	_
XX. Newborn bag and mask size 0 for pre-term babies (for newborn resuscitation)	_	_	_
YY. Electric suction pump (for suction apparatus)	_	_	_
ZZ. Suction catheter (for suction apparatus) for suctioning newborn	_	_	_
AAA. Suction bulb, single use	_	_	_
BBB. Suction bulb, sterilizable multi-use	_	_	_

PART E: PERSONNEL

<p>1. I have a few questions on staffing for this facility. Please tell me how many staff with each of the following qualifications are currently assigned to, employed by, or seconded to this facility. Please count each staff member only once, on the basis of the highest technical or professional qualification. For doctors, I would also like to know, of the total number, how many are part-time in this facility.</p>		
	<p>ASSIGNED/ EMPLOYED/ SECONDED (INCLUDING PART TIME)</p>	<p>PART TIME ONLY</p>
A. Generalist (non-specialist) medical doctors	_ _ _ _	_ _ _ _
B. Specialist medical doctors	_ _ _ _	_ _ _ _
C. Non-physician clinicians/paramedical professionals	_ _ _ _	
D. Nursing professionals	_ _ _ _	
E. Midwifery professionals	_ _ _ _	
F. Pharmacists	_ _ _ _	
G. Laboratory technicians (medical and pathology)	_ _ _ _	
H. Community health workers	_ _ _ _	

ROSTER OF INFORMANTS

ID	Age [Years]	Sex 1 = Male 2 = Female	For how many years have you lived in this community? [CUMULATIVE YEARS]	What is your role/status in the community? 1=Village chairman 2=Village Executive Officer 3=Teacher 4=Youth leader 5=Politician 6=Volunteer 7=Social worker 8=Religious leader 9=Village committee member 10=Health facility in-charge/worker 11=A farmer -96=Other (specify)
1				
2				
3				
4				
5				

SECTION 1: BASIC INFORMATION

1	1a	2	3	4	5	6
What is the population of this community?	Where does this estimate come from? 1=Local government records (if so, specify date recorded) 2=Community leader's administrative records 3=Estimate based on knowledge of community	How many households are found in this community?	What proportion of WOMEN aged 18-25 in this community were married before age 18? 1=Almost none 2=25% 3=50% 4=75% 5=Almost all -99=Don't Know	At what approximate age do women in this community typically get married? [RECORD NUMBER OR NUMBER RANGE]	At what approximate age do men in this community typically get married? [RECORD NUMBER OR NUMBER RANGE]	If her husband dies, can the wife inherit their or his inproperty? 1=Yes 2=No (>>Q8)

7	8	9	10a	10b	11a	11b
What types of property is the wife entitled to inherit? <i>[Select all that apply]</i> 1=House 2=Land 3=Livestock 4=Other, specify	What are the TWO most common problems with health services delivery for the people of this community? <i>[Enumerator: read list and ask respondent to rank top two]</i> 1. Insufficient access to health facilities (too far/too few) Regarding existing facilities: 2. Insufficient resources (supplies/medication) 3. Insufficient personnel	Where do most of the women in this community give birth? 1=At home 2=Maternity home 3=Hospital/Clinic/Health post/Community-based Health Planning and Service, etc. 4=Other, specify	Has there been an immunisation campaign in this community in the last 6 months for children? 1=Yes 2=No	Approximately when was the last immunisation campaign for children? 1=Less than a year ago 2=1-2 years ago 3=3+ years ago 4=Never/no memory of one	In the past 6 months, have there been any NGOs or other groups providing interventions related to maternal or children's nutrition in this village or the surrounding areas? 1=Yes, please specify 2=No	In the past 6 months, have there been any other social assistance programs in your community? 1=Yes, please specify 2=No

	4. Inadequate facilities (e.g. no OR, lack of running water/electricity) 5. Inability to pay for health services -96=Other					
	1 st	2 nd				

12				13		14		15	
What is the average daily wage for men, women and children doing casual labour in this community? [SPECIFY THAT WAGE SHOULD NOT INCLUDE FOOD WHILST WORKING, SHOULD BE FOR 100% PAY-IN-CASH (NOT PAID IN-KIND) AND BE FOR SOMEONE IN NO DEBT WITH THE EMPLOYER] Wage in TZS In range 500-100,000 -98=Not applicable				Is it easy to purchase alcohol (spirits/clear or opaque beer/traditional brew such as LOCAL NAMES) in this area? 1=No, not available 2=Yes, but have to travel to another village 3=Yes, one shop/place 4=Yes, several shops/places		What proportion of MEN in this community drink alcohol on a regular basis (at least once a week)? 1=Almost none 2=25% 3=50% 4=75% 5=Almost all		What proportion of WOMEN in this community drink alcohol on a regular basis (at least once a week)? 1=Almost none 2=25% 3=50% 4=75% 5=Almost all	
Type of activity	Men	Women	Children						

16	17
<p>What proportion of UNDER 18 YEAR OLDS in this community drink alcohol on a regular basis (at least once a week)?</p> <p>1=Almost none 2=25% 3=50% 4=75% 5=Almost all</p>	<p>How concerned would you say you are about the problem of drinking alcohol in this community?</p> <p>1=Very concerned 2=Somewhat concerned 3=Not at all concerned</p>

SECTION 2: ACCESS TO BASIC SERVICES

1	2	3	4	5	6	7
<p>What is the type of main access road surface in this community?</p> <p>1=Bitumen>>2 2=Gravels 3=Earth 4=None</p>	<p>How far is the nearest bitumen road?</p> <p>[KM]</p>	<p>Do vehicles pass on the main road in this community throughout the year?</p> <p>1=YES 2=NO>>Q5</p>	<p>During the past 12 months, how many months was the main road passable by a mini-bus?</p> <p>[number]</p>	<p>Does the community have access to electricity through the public grid?</p> <p>1=YES 2=NO>>Q7</p>	<p>What percentage of households are connected to the public grid?</p>	<p>Does the community have access to public piped water?</p> <p>1=YES 2=NO</p>

8		8a	8b	9		9a
<p>What is the travel time using the most common mode of transport to the nearest government health clinic?</p>		<p>Regarding the closest/most utilised health facility servicing this community, generally how satisfied are members of the community with the health facility's ability to meet their healthcare needs?</p> <p>1=Very dissatisfied 2=Dissatisfied 3=Neither satisfied nor dissatisfied 4=Satisfied 5=Very satisfied</p>	<p>Does this health facility admit people who have been covered under the Community Health Fund?</p> <p>1=Yes 2=No 3=Don't Know</p>	<p>What is the travel time (using the most common mode of transport) to the nearest office/center/clinic where one can register for the Community Health Fund?</p> <p>IF IN COMMUNITY, WRITE '0'</p>		<p>What are the main reasons that residents in this area do not have a valid Community Health Fund?</p> <p>1=No money to pay premium 2=Distance to register is too far 3=No money for transport to travel for registration 4=Unaware of eligibility for CHF 5=Unaware of benefits of health insurance 6=Don't believe it's worth the cost <i>[Select all that apply]</i></p>
HOURS	MIN			HOURS	MIN	

SECTION 3: NUTRITION

1	2a	2bi	2bii	3	4a	4b
<p>Where do people in this community get their information about maternal and child nutrition? <i>[Select all that apply]</i></p> <p>1= Health facilities 2=Friends/families/neighbours 3=Village leaders 4=UNICEF or NGOs 5 = Faith 6=Radio 7=Newspapers/Magazines 8=Internet 9=Television Leaders/Religious institutions -96=Other (specify)</p>	<p>What are some of the biggest barriers in this community to children receiving adequate nutrition and food? <i>[Select all that apply]</i></p> <p>1=Lack of knowledge of what to feed children 2=Lack of adequate amount of food 3=Lack of adequate types of food for good nutrition 4=Lack of time to devote to preparing nutritious food 4=Pressure from family (e.g., mother in laws) to follow certain feeding practices 5=Other (specify)</p>	<p>Are there certain times of year when it's harder for children to receive adequate nutrition and food?</p> <p>1= Yes 0=No>>Q3</p>	<p>which times of year or which months are hardest?</p> <p>SELECT ALL WHICH APPLY</p> <p>01 = January 02 = February 03 = March 04 = April 05 = Mau 06 = June 07 = July 08 – August 09 = September 10 = October 11 = November 12 = December</p>	<p>Do people in this village ever talk about issues related to nutrition with their friends and family?</p> <p>1=Yes, frequently 2=Yes, occasionally 3=No, never</p>	<p>How common is it for people in the village to talk about issues related to child growth and development with their friends and family?</p> <p>1=Very common>>Next section 2=Somewhat common 3=Not at all common</p>	<p>Why do you think people may not discuss issues related to child growth and development?</p> <p>1=stigma 2=not seen as a problem 3=other (specify)</p>

SECTION 4: MEDIA

1	2a	2b	3	4	4b	5
What types of media to community members consume? (Select all that apply) 1=Radio 2=Television 3=Newspapers 4=Internet 5=Other (specify)	What percentage of community members listen to radio broadcasting on a weekly basis on a physical radio? [number]	What percentage of community members listen to radio broadcasting on a weekly basis on a mobile phone? [number]	What are some barriers to media consumption in this village (select all that apply)? 1=Lack of internet 2=Lack of radio signal 3=Lack of electricity 4=Lack of power sources to charge devices 5=Language/literacy barriers	Do people in this village typically trust information/educational programming that they hear on a physical radio? 1=Not at all 2=Maybe/Somewhat 3=Yes, they trust it 4=Depends/other (specify)	Do people in this village typically trust information/educational programming that they hear on a mobile phone radio broadcast? 1=Not at all 2=Maybe/Somewhat 3=Yes, they trust it 4=Depends/other (specify)	Which types of channels do people in this community typically trust? 1=Government 2=NGOs 3=Other (specify)

SECTION 5: COMMUNITY EVENTS, SHOCKS AND CONFLICTS

	Type of event	2021		2022		2023	
		Was there any [...] in 2021?	Did this event have a significant impact on many (more than half) members of the community? 1=yes 2=no	Was there any [...] in 2022?	Did this event have a significant impact on many (more than half) members of the community? 1=yes 2=no	Was there any [...] in 2023 to date?	Did this event have a significant impact on many (more than half) members of the community? 1=yes 2=no
1	Drought or too little rain						
2	Flood or too much rain						
3	Crop disease/pests						
4	Livestock disease						
5	Human epidemic disease (COVID-19, HIV, Ebola, etc.)						
6	Interruption in water supply						
7	Sharp change in prices						
8	Massive job lay-offs						
9	Loss of key social service(s)						
10	Power outage(s)						
11	Religious conflict						
12	Political conflict						
13	Ethnic/tribal conict						
14	Attacks on a minority group						
15	New employment opportunity						
16	New health facility						
17	New road						
18	New school						
19	Improved transportation						
20	Improved electricity						
21	Development programme (specify)						

SECTION 6: STAWISHA MAISHA

1	2	3		4
How many TASAF Community Management Committee (CMCs) do you have in this community? RECORD NUMBER	How many CMCs are female?	When was the last payment of TASAF done?		How far is the nearest collection point for TASAF? [KM] IF IN COMMUNITY, WRITE '0'
		MONTH	DAY	

5	6
What organisations are providing support in this community? 1=Save the Children International (SCI) 2=Catholic Relief Services (CRS) 3=Interchurch medical Assistance (IMA) 4=Partnership for Nutrition in Tanzania (PANITA) 5=Centre for Counselling, Nutrition and Health care (COUNSENUH) 8=Jhpiego 9=CUAMM 10=Action Against Hunger (AAH) 12=FHI 360 13=Plan International 14=World Vision 20=Other (specify) 97=None >>End survey	What services do these organizations provide? MARK ALL THOSE THAT APPLY 1=Provision of information in relation to nutrition, water, or sanitation 2=Cash grants to households 3=In-kind transfers to households 4=Medical care 5=Youths specific interventions 6=Other (specify)

APPENDIX 10. QUALITATIVE IN-DEPTH INTERVIEWS WITH CAREGIVERS (N=17)

Stawisha Maisha II Baseline In-depth Interview Guide

Intended Respondents: Mothers/caregivers who are PSSN recipients and Stawisha Maisha II participants

Region: Mwanza/Arusha

District name:

Interview date:

Name of interviewer:

Interview time: from..... to

Socio-demographic Information:

How old are you? _____

How many people live in your household? _____

How many children do you have? _____

How many of those children are 5 years old or younger? _____

What is the highest level of school you completed? _____

What is your marital status? _____

Is there a radio at your family home? YES / NO

How often do you listen to it?

What is your program of choice?

How often do you listen to it?

Do you ever listen to the radio on your mobile phone? YES / NO

Introduction

Thank you very much for agreeing to talk with me today. I would like to remind you again that participating in this discussion is voluntary. I am eager to learn more about your community, what you know about food choices for yourself and your young children, where you learn about nutrition, other child health information including early childhood development, and what barriers you perceive to getting healthy food for your family. This is an informal conversation and there are no right or wrong answers. I am interested in anything that you want to share with me to help us learn more about you and your family.

1. To begin, I would like to learn about your community. How would you describe this community to me?

- What do most people do in this community?
- What is interesting about this community?
- What are the main challenges faced by people living in this community?
- What does a typical day look like for you? Can you walk me through it?

2. Perceived self-efficacy for MIYCF (maternal, infant, and young child feeding) practices

Next, I would like to ask you about your knowledge of and access to nutritional food, including for your children, antenatal care, and breastfeeding.

General Nutrition Information:

What kind of food do you typically eat in your house? Please elaborate.

- Please tell me about how your household obtains food? [*Probe: on any other ways they get food after first response*]
- Follow up questions –
 1. When you have to buy food, what types of foods are typically purchased?
 2. Where are these purchased?
 3. How far away is this market and how often do you go there?
 4. What types of foods does your household grow for consumption?
- How does your household decide the types of food to buy and how much is needed?
- How much of your household income is allocated for groceries?
 - Follow up questions –
 1. Who makes these decisions?
 2. Are these decisions made together (and by whom), or does one person decide without discussion?
- What difficulties does your household have getting food? [*Probe: access to food – transportation, seasonal availability, etc.*]
- What happens in your household if there is not enough food and no money to buy it?
 - Follow up questions –
 1. Who takes priority in terms of distribution of food?
Probe: Who gets first, second and third priority?
 2. What experience do you have of some household members skipping meals or eat less to ensure there is enough food for the children? Who does that?
- What do you do for a child less than 5 years old when there is not enough food?

- What happens to your breastfeeding practices when there is not enough food?
- *What difficulties does getting water or lack of sufficient water cause in your household?*
- How does a lack of food or water or ways to procure food or water impact your marriage/partnership?
 - In general, what kind of challenges do you face when feeding your young children? [*Probe: is there enough food, do you think the food is nutritious enough, other issues such as clean water, etc.*]

3. Maternal Health and nutrition

I would now like to discuss about maternal health and nutrition.

- What does nutritious foods mean to you?
- In your experience, what is nutritious food for a pregnant woman?
- How confident do you feel about you getting enough nutritious food? Tell me more.

Probe: if you are not getting nutritious food, what do you think is preventing you from doing so? How else have you tried to get nutritious food?

- During your current/last pregnancy, what did you do if there was not enough food?
- Where do you and other community members get most of your knowledge/information on a specific diet about maternal nutrition and health from?
- *Probe: other mothers, your own mother, mother-in-law, clinic staff, NGOs, other village members, radio program*
- Please describe the information you get about nutrition, maternal and child health from these sources.
- Of all these, what is your most trusted source of maternal diet/nutrition?
- What makes this information source reliable/unreliable to you?
- How often do you listen to the radio, and where do you listen? Please elaborate.

I would now like to hear your ideas and experience about antenatal care.

- What do you think is the right time for others to know when a woman is pregnant?
 - *Probe: Who should know? At what stage of the pregnancy should they know?*
- Please tell me what you know about antenatal care.
- In your knowledge/experience, why do you think it is important for pregnant women to seek antenatal care?
- How comfortable do you feel in asking questions of a health care worker or going to the clinic if you have concerns about your or your child's health?

- What are some barriers that may prevent you from seeking timely antenatal care? [*Probe: cost, distance to facility, superstition, lack of trust of doctors, husbands controlling medical care, too busy with other children at home etc.*]

Follow up question –

1. Please share an experience you or someone you know faced to make you feel mistrustful or uncomfortable with a nurse or other medical staff?

Breastfeeding:

I would now like to hear our thoughts and experience about breastfeeding:

- In your opinion, what are some of the benefits of exclusive breastfeeding?
- How long should babies be breastfed without supplementing with water or other foods?
- What are some challenges about exclusive breastfeeding?
- What has been your experience with exclusive breastfeeding? Please tell me about this...
 - Follow up questions – Who supported you when you were exclusively breastfeeding? [*Probe: other mothers, your own mother, a nurse*]
 - *What kind of support did you get? (with breastfeeding, support with chores and household tasks)*
- What challenges did you experience with exclusive breastfeeding?
- What did you do when these challenges occurred?
- How many months old was the baby when you started giving him/her anything other than breastmilk?
- What made you start giving other food or liquids?

Child

- Where did you learn about nutrition and feeding your children? Tell me more. [*Probe: did you learn from family, in-laws, friends, health care workers, the radio?*]
- From the information you received, what is considered nutritious food for young children?
- How do you know what kind of food to give your young child/children?
 - Follow up question –
 1. How does this differ for different ages of children?
- Who else makes decisions about what food to give your young child/children? [*Probe: e.g., your mother, mother-in-law, husband*]
- Where does the information about making these decisions come from? [*Probe: the radio, doctor, other village members, generational knowledge*]

- What kinds of food would you like to prepare for your young child/children? [*Probe: How did you learn to prepare these types of food? How do these foods differ for the difference ages of children? Please elaborate*]
- Who is involved in feeding young children in your household? (*Are males and females engaged?*)
- Do you feel like your young children are eating enough nutritious food on a regular basis? [*Probe: if they are not, what do you think is preventing them from doing so?*]
- What kind of challenges do you face in feeding your young children nutritious food?
- What resources are available in this community related to nutrition and feeding young children? [*Probe: information sessions, plumping nuts at health facilities, school feeding programs, etc.*]

Feelings of affiliation

Now, I would like to get an idea of what your community is like and how it influences your knowledge and decision-making about nutritional food and overall health for your family. I would like to understand your community and how community members might influence your knowledge and decision-making.

General community relationships and sense of belonging

- How do people get along in this community?
 - Follow up questions –
 1. How do you get along with the people in this community?
 2. How do you think people in this community view you?
- Could you tell me about any groups, clubs, or organizations that exist in your community?
 - Follow up questions –
 1. How do you participate in these groups/organizations/clubs?
 2. What form of help have you or any member of your household ever received help or support from them? Tell me about this...
- Which activities have you participated in to help others in your community? Tell me about this.

Community influence on decision-making

- Who influences the decisions you make for yourself and your children? [*Probe: peers, your own family*]
- Who else in the community or your family influences decisions about antenatal care or feeding your child?
- How do you think you influence people around you to make decisions? [*Probe: do your friends look up to you for information, do you have a peer group that leans on each other for support?*]

- Who are you most likely to seek support or information from regarding caring for your child(ren) or yourself during pregnancy? Why? [*Probe: who do you count on for support in your community? e.g., support with child care, someone you can turn to for family advice, who can help you with food or money if you are having trouble*]
- If you disagree with someone about how to care for your child, or yourself during pregnancy, how do you address the situation? Please elaborate.

Openness/barriers to change and future aspirations

Last, I'd like to understand what things might help or hinder your ability to make decisions about feeding yourself and your young children, and how you access food.

- How well do you trust yourself/how confident are you in your decision-making surrounding nutrition for yourself and your young child(ren)?
- What do you see as the biggest challenge related to *maternal, infant, and young child feeding practices* affecting your family right now? [*Probe: lack of access to food, not knowing where to obtain healthy food, not understanding which foods are healthy, lack of autonomy/decision-making in the household*]
- What would you need to ensure that your young children receive proper nutrition at every stage of development from 0-5 years? [*Probe: more financial stability, accessibility to clean water & sanitation, better decision-making power at home, more education about nutrition, access to food*]
- What barriers do you face to providing enough nutritious food to yourself and your young child(ren)?

Follow up questions –

1. What skills/information do you possess to overcome these barriers?
 2. What else you need to overcome these barriers *in adapting maternal, infant, and young child feeding practices*
- From which age do you need to take your child to the clinic?
 - What would prevent you from taking your child to the clinic?
 - Follow up questions –
 1. Have your family or friends ever made you question decisions about your child caring?) Please elaborate.
 2. Have your family or friends ever made you question decisions about your health?
 - What do you think is the most important thing you can do to make sure your young child(ren) grow up healthy? [*Probe: eat well, go to school*]

Other personal concerns that may hamper the adoption of MIYCF practices

- Can you share with me any other concerns you may have about how you feed yourself or your child(ren)?

Do you have any questions?

Thank you for your time!

APPENDIX 11. QUALITATIVE FOCUS GROUP DISCUSSIONS WITH CAREGIVERS (N=8)

STAWISHA MAISHA BASELINE FOCUS GROUP DISCUSSION GUIDE

Intended Respondents: Mothers/caregivers who are PSSN recipients and Stawisha Maisha II participants (N=8)

Number of beneficiaries per group: 6-8

Demographic Information:

Region: Mwanza/Arusha

District name:

(ii) Interview date:

(iii) Number of respondents:

(iv) Name of interviewer:

(v) Interview time: from..... to

(vi) Age of child(ren):

Introduction

Thank you very much for joining us all today. I would like to remind you again that participating in this discussion is voluntary. We are eager to learn more about your community, what you know about food choices for yourself and your young children, where you learn about nutrition, other child health information including early childhood development, and what barriers you perceive to getting healthy food for your family. This is an informal conversation and there are no right or wrong answers. We are interested in anything that you want to share with us to help us learn more about you and your family.

1. To begin, I would like to learn about your community. How would you describe this community to me?

- What do most people do in this community?
- What is interesting about this community?
- What are the main challenges faced by people living in this community?

2. Information Seeking

Next, I would like to understand where you learn about nutrition and maternal and child health from in your community.

- Where do you and other community members get most of their knowledge/information on nutrition for both themselves and their child(ren) from?
 - *Probe: other mothers, your own mother, mother-in-law, clinic staff, NGOs, other village members, or other interventions*
- Please describe the information you get about nutrition, maternal and child health.

- What makes this information source reliable/unreliable?
- What did you know about nutrition before becoming a mother?
- What have you learned about nutrition since becoming a mother?
- When you listen to the radio, how do you feel about the information you receive from it?

Probe:

- do you trust the information from the radio?
- *How do you listen to the radio? Please describe*
 - *With whom do you listen to the radio?*
 - *What makes information trustworthy (or not)?*
- What information regarding nutrition, maternal and child health do you miss when listening to the radio?

3. Perceived self-efficacy for MIYCF (maternal, infant, and young child feeding) practices: group differences and similarities

Next, I would like to ask you about your knowledge of and access to nutritional food, including for your children, antenatal care, and breastfeeding.

General Nutrition Information:

What kind of food do you typically eat in your house? Please elaborate.

- Follow up questions –
 1. What do young children typically eat?
 1. How about adults?
 2. What does nutritious foods mean to you?
 3. How confident do you feel about feeding your child enough nutritious food? Tell me more.
- In general, what kind of challenges do you face when feeding your young children? [*Probe: is there enough food, do you think the food is nutritious enough, other issues such as clean water, etc.*]

Antenatal care

I would now like to discuss about antenatal care.

- What is the right time for others to know when a woman is pregnant? Who should know? At what stage of the pregnancy?
- Please tell me what you know about antenatal care.

- In your knowledge/experience, why do you think it is important for pregnant women to seek antenatal care?
- When should a woman seek antenatal care? How often? Please share your experience.
- Where are you and others in this community most likely to seek antenatal care?
- Who are you most likely to seek advice, care and support from regarding caring for your child(ren) or yourself during pregnancy? Why? [*Probe: who do you count on for support in your community? e.g., support with child care, someone you can turn to for family advice, who can help you with food or money if you are having trouble*]
- What are some barriers that prevent women in this community from seeking timely antenatal care? [*Probe: cost, distance to facility, superstition, lack of trust of doctors, husbands controlling medical care, too busy with other children at home etc.*]
 - Follow up questions –
 1. Please share an experience you or someone you know faced to make you feel mistrustful or uncomfortable with a nurse or other medical staff?

Breastfeeding

I would now like to discuss about breastfeeding:

- In your opinion, what are some of the benefits of breastfeeding?
- How long should babies be breastfed without supplementing with water or other foods?
- What has been your experience with breastfeeding? Tell me about this...
 - Follow up question –
 1. What kind of support did you get when you were breastfeeding *e.g., support with breastfeeding, support with chores and household tasks?*
 2. Who supported you when you were breastfeeding? [*Probe: other mothers, your own mother, a nurse*]
- What challenges do you or other women in the community experience with breastfeeding?
 - Follow up questions –
 1. What did you do when these challenges occurred?
 2. What are some traditional beliefs that prevent mothers to exclusively breastfeed their baby for the first 6 months? Please elaborate.
 3. According to traditional beliefs, when should a child stop breastfeeding?
- Can you tell me about your experience with mixed breastfeeding (combining breastmilk with formula or other liquids) compared to exclusive breastfeeding?
- Who gave you advice or support while you were breastfeeding? [*Probe: other mothers, your own mother, a nurse, a friend, neighbor*]

4. **Signs of good growth / development:** I would now like to discuss about signs of good development for young children.

- How do you know if your child is growing well? Please elaborate the signs.
- What are the signs if a child is not growing well?

Openness to learning and change: group differences and similarities

Now, I would like to get an idea of what your community is like and how it might support or hinder better access to nutritional food and overall health for your family.

Gender, Community Norms and Household Dynamics

I would now like to hear your perceptions about *Gender, Community Norms and Household Dynamics*.

- How do people get along in this community? [*Probe: e.g., are people supportive of and helpful to one another, does it feel like everyone keeps to themselves*]
- In your households, who makes decisions about large, unusual purchases (e.g., a new roof)? [*Probe: please elaborate how this decision is made?*]
 - Follow up questions –
 1. What happens if you have differing opinions from others in your household (e.g., your husband)?
 2. What kind of support do you get in the decisions you make in feeding your children?
- In instances when you disagree with the information you've been given about antenatal care or feeding your child, what do you do?
- How comfortable do you feel asking questions/advocating for yourself and/or your child if you disagree? [*Probe: what if it's a family member versus a doctor who you disagree with?*]
- What skills do you need in order to become more so?
- Who else in the community or your family influences decisions about antenatal care or feeding your child?
- How do you think you influence people around you to make decisions? [*Probe: do your friends look up to you for information, do you have a peer group that leans on each other for support?*]

General barriers/facilitators to change

I would now like to discuss about the *general barriers/facilitators to change in adapting maternal, infant, and young child feeding practices*

- What do you see as the biggest challenge related to *maternal, infant, and young child feeding practices* affecting your community right now? [*Probe: lack of access to food, not knowing*]

where to obtain healthy food, not understanding which foods are healthy, lack of autonomy/decision-making in the household]

- What would you need to ensure that your children receive proper nutrition at every stage of development from 0-5 years? [*Probe: more financial stability, accessibility to clean water & sanitation, better decision-making power at home, more education about nutrition, access to food*]
- What barriers do you face to providing enough nutritious food to yourself and your young child(ren)?
 - Follow up questions –
 1. What skills/information do you possess to overcome these barriers?
 2. What else you need to overcome these barriers *in adapting maternal, infant, and young child feeding practices*

5. Aspirations for self and child: similarities and differences in group

At this point, I would like to discuss what you think is important to the health and future goals of both you and your young child(ren).

- What do you think is the most important thing you can do to *adapt maternal, infant, and young child feeding practices*?
- What skills or knowledge do you need to achieve this goal?
- What is your wish for your child when they grow up? *Probe: What job do in the future in terms of work and family?*
- What are your long-term aspirations for your children's education? Health? Nutrition? Relationships, Etc.

6. Solutions/skills and how head of households influenced these

Last, I would like to discuss the kind of skills you have for planning and goal setting about your health and that of your young child(ren).

- How do you plan and set goals about the nutrition and health of your young child(ren)?
 - Who in your household is involved in the planning and goal setting about the nutrition and health of your young child(ren)? Please elaborate.
- Probe: The involvement of husband, parents/in-laws, elders, other community members, nurses*
- Which skills do you need for analysing and solving problems related to the nutrition and health of your young child(ren)?
 - How can you improve skills for analysing and solving problems related to the nutrition and health of your young child(ren)?

Does anyone have any final thoughts or questions?

Thank you for your time!

APPENDIX 12. TERMS OF REFERENCE

Terms of Reference for

(i) (Assessing the feasibility and) Designing the longitudinal impact evaluation of a UNICEF cash plus intervention ('*Stawisha Maisha – Nourishing Life*' programme) and

(ii) conducting of Baseline Survey

Summary

Title	(Assessing the feasibility and) Designing the longitudinal impact evaluation of a UNICEF cash plus intervention ('<i>Stawisha Maisha – Nourishing Life</i>' programme) and conducting of Baseline Survey
Purpose	<ol style="list-style-type: none"> 1. To improve the learning on synergies between social protection and maternal and child nutrition, in particular on integrating cash transfers and Social Behaviour Change (SBC) to improve maternal, infant and young child feeding practices (MIYCF) and access to nutritious food; 2. To generate lessons learned to inform current and future programming; 3. To feed into the broader academic and policy debate about the usefulness of cash plus interventions aimed at reducing stunting.
Location	Tanzania
Duration	Over 18 months
Anticipated start Date	November 2022
Anticipated completion date	April 2024
Reporting to	Research & Evaluation Manager, Social Policy, UNICEF Tanzania Country Office

BACKGROUND

Country context

In 2020, following two decades of sustained economic growth, the Tanzanian economy graduated to lower-middle income status, thereby achieving one of the key milestones of the Tanzania Development Vision 2025 and the Zanzibar Vision 2020. Sustained economic prosperity has also contributed to significant progress in human development. However, despite the country's impressive economic growth rate of the past decade, the pace of poverty reduction has slowed down. In Mainland Tanzania, the poverty headcount ratio at the national poverty line has declined modestly over time (from 28.2 to 26.4 percent over the period 2011-2018), but rapid population growth has added another 1.3 million people to the ranks of the poor. Furthermore, one million Tanzanians are estimated to have fallen below the national poverty line in 2020 as COVID-19 affected the economy. In Zanzibar, while the basic needs

poverty headcount declined by 4.7 percentage points between 2014/15 and 2019/20 (from 30.4 to 25.7 percent), the absolute number of poor people remained relatively stable due to population growth.

Both monetary and multidimensional child poverty rates remain high in URT. Three in 10 children experienced basic needs poverty while 1 in 10 suffered from food (extreme) poverty (in 2017/18 in Tanzania Mainland, and in 2019/2020 in Zanzibar). In 2014/15, nearly 8 and 9 out of 10 children lived in multidimensional poverty in Zanzibar and Mainland Tanzania respectively, deprived in three or more deprivations.

URT remains in the bottom half of UNDP's 2020 Human Development Index, at 163 out of 189 surveyed countries and territories. It ranks poorly in terms of income inequality (99 out of 153 based on the Gini coefficient¹) and ranks weakly on the Sustainable Development Goal (SDG) Index 2020, at 131 out of 193 countries. Significant gender gaps in human development also exist, with UNDP's 2020 Gender Inequality Index ranking URT 140 out of 162 countries.

Nutrition situation

Although stunting has significantly decreased by roughly 3 percentage points over the period 2014-2018, children in Tanzania still suffer from high levels of malnutrition: approximately 3 million children under five years of age (31.8%¹⁵) were stunted in 2018. Key drivers of which are poverty and food insecurity, poor IYCF practices as well as the absence of universal WASH coverage. Chronic malnutrition during early childhood may lead in the short-term to mortality, morbidity and / or disability; and in the long-term may have impacts on adult height, cognitive ability, economic productivity, reproductive performance, overweight and obesity, metabolic and cardiovascular diseases (UNICEF, 2013)¹⁶. As a result, chronic malnutrition perpetuates the cycle of poverty, ill health, poor nutrition and human capital which is transmitted across generations¹⁷.

State of evidence on the effects of cash transfers on child nutritional status

Existing evidence on the impacts of cash transfers on child nutritional status is mixed.¹⁸ Although there tends to be a bias towards publishing significant impacts, one meta-analysis reports only a slightly positive

¹⁵ MoHCDGEC [Tanzania Mainland], Ministry of Health [Zanzibar], Tanzania Food and Nutrition Centre, NBS [Tanzania Mainland], OCGS [Zanzibar] and UNICEF. 2018. Tanzania National Nutrition Survey using SMART Methodology (TNNS) 2018. Dar es Salaam, Tanzania.

¹⁶ UNICEF. 2013. Improving Child Nutrition: The achievable imperative for global progress. United Nations Children's Fund; 2013. p. 4 Fig.1 [The UNICEF conceptual framework of undernutrition].

¹⁷ Many studies exist on the impacts of stunting; for instance, studies on the impacts of stunting on cognitive impacts include among others: Liu J, Raine A, Venables PH, Dalais C, Mednick SA. Malnutrition at Age 3 Years and Lower Cognitive Ability at Age 11 Years: Independence From Psychosocial Adversity. *Arch Pediatr Adolesc Med*. 2003;157(6):593–600. doi:10.1001/archpedi.157.6.593

Alam, Md Ashraful, et al. "Impact of early-onset persistent stunting on cognitive development at 5 years of age: Results from a multi-country cohort study." *PLoS one* 15.1 (2020): e0227839.

¹⁸ Manley, J., and Slavchevska, V. 2017. "Are Cash Transfers the Answer for Child Nutrition in Sub-Saharan Africa? A Literature Review." *Development Policy Review* 37 (2), 204–224.

Owusu-Addo, E., Renzaho, A. M. and Smith, B. J. 2018. "The Impact of Cash Transfers on Social Determinants of Health and Health Inequalities in sub-Saharan Africa: A Systematic Review." *Health Policy and Planning* 33 (5): 675–696.

but not statistically significant impact of cash transfers on stunting.¹⁹ Another review, with a focus on sub-Saharan Africa, provides a summary of the literature on the impacts of cash transfers on child nutrition and on the potential pathways through which cash could affect nutritional status: the environment, food intake and health behaviours.²⁰ The study confirms the lack of systematic positive effects on stunting, but does highlight positive impacts on intermediate outcomes such as food security and the use of health services.

To sum up, the evidence seems to suggest that cash alone may not be enough to address long-term chronic malnutrition. As a result, cash plus initiatives or integrated social cash transfer programming (which combine cash transfers with complementary interventions – such as the provision of information and the improvement in access to and/or the quality of supply-side services) are becoming more and more common in the effort to address child nutritional deficiencies. While the evidence base on such cash plus initiatives is still scant, there are some promising results (Barry, Maïdoka, and Premand 2017; Roelen et al. 2017; Roy et al. 2017).

Nutrition and social protection policy context²¹

Both nutrition and social protection policies are anchored within the Government’s five-year Development Plan III (2021-2025). In terms of nutrition, the National Multi-Sectoral Nutrition Action Plan (NMNAP) 2021-2026 provides a framework for the outworking of the 1992 National Food and Nutrition Policy (NFNP). In September 2021, the Government also launched a framework to improve the diets of children aged 6-23 months by improving access to and consumption of nutritious, affordable, safe, and sustainable diets. Both this and the NMNAP include social protection as a key strategy. Nutrition policy and action are coordinated across multiple ministries and stakeholders by the High-level Steering Committee for Nutrition, convened by the Prime Minister’s Office. The Tanzania Food and Nutrition Centre (TFNC) is the technical nutrition arm of government under the Ministry of Health and Social Welfare (MoHSW) that spearheads the national response to malnutrition and ensures a coordinated approach. Social protection programmes in Tanzania are multi-sectoral and implemented by several line ministries, departments, and agencies. A 2015 Social Protection Policy and 2016 implementation plan guide social protection programming in Zanzibar. On mainland Tanzania, UNICEF is supporting the transformation of the National Social Security Policy (2003) into a comprehensive National Social Protection Policy. Under the new policy a High-level Steering Committee (HLSC) on National Social Protection will be responsible for inter-ministerial coordination and implementation monitoring, with technical support from a multi-sectoral NSPP technical committee, and implementation support from a Social Protection Secretariat under the Prime Minister’s Office - Labour, Youth, Employment and Persons

¹⁹ Manley, J., Gitter, S. and Slavchevska, V. 2013. “How effective are cash transfers at improving nutritional status?” *World development*, 48, pp.133-155.

²⁰ de Groot, R., Palermo, T., Handa, S., Ragno, L. P. and Peterman, A. 2017. “Cash Transfers and Child Nutrition: Pathways and Impacts.” *Development Policy Review* 35 (5): 621–643.

²¹ Directly extracted from: UNICEF. 2022. Integrated social protection and nutrition case study; improving infant and young child nutrition through the Productive Social Safety Net Programme (PSSN) II in Tanzania, UNICEF Eastern and Southern Africa Regional Office, 2022.

with Disability (PMO-LYED). Four thematic working groups will coordinate programming in i) contributory programmes, ii) productive inclusion, iii) social services and iv) non-contributory programmes.

Social assistance and its integration with nutrition programming in Tanzania

The Tanzania Social Action Fund (TASAF), established in 2020 as part of the government of Tanzania's social protection strategy under the President's Office, implements the Productive Social Safety Net (PSSN). PSSN is a large-scale social assistance programme (cash transfers and public works) in its second four-year phase (2020-2023). PSSN II currently targets 1.2 million beneficiaries in chronically poor households in 187 project implementation areas (PAAs) identified by a common targeting system. Regular bi-monthly cash transfers are provided in hand at payment points²² to poor and vulnerable households depending on their eligibility for:

- *A basic (conditional) cash transfer* - for all recipient households, conditional on participation in savings groups for households with labour capacity, and unconditional for households without labour capacity ("direct support"). Once a household enrolls in public works, this cash transfer ceases. *Fixed transfer* per household of 12,000 TZS per month;
- *A vulnerable groups unconditional cash transfer* - for all recipient households with a child aged 0-18 years and any person with a disability. *Additional fixed transfers* of 5,000 TZS for each of the mentioned categories (maximum one per household);
- *A variable human capital transfer* – for all recipient households with children, subject to compliance with health or education co-responsibilities, which vary according to the child's age and education status (*additional variable transfers* ranging from 2,000 for lower primary to 8,000 for upper secondary; maximum 55,000 TZS per month).

A public works scheme offers temporary employment to PSSN households with labour capacity to provide additional income. *A livelihoods enhancement and capacity building component* is targeted to households in 44 of the poorest PAAs who are invited to participate in savings groups and awareness-raising/ skills training sessions.

UNICEF supported the inclusion of design elements within the PSSN II – which aims at improving household food security as one of its primary objectives – to improve nutrition outcomes (such as linking beneficiaries to health and nutrition services and/or excluding pregnant women from public works and providing unconditional cash transfers until their child's second birthday).

Between 2018 and 2019, UNICEF and TASAF piloted two cash plus interventions as part of PSSN: 1) *Ujana Salama*, where the additional plus component layered on top of the government cash transfer program was targeted to youth to improve their future economic opportunities and facilitate their safe, healthy, and productive transitions to adulthood; and 2) *Stawisha Maisha* Cash Plus programme (discussed in more details below) where the additional plus component was targeted to children 0-5 and aimed at enhancing their nutrition outcomes.

²² In some areas, cash transfers are made electronically through bank or mobile phone transfers.

STAWISHA MAISHA (Nourishing life) Cash Plus Programme

Stawisha Maisha I: pilot programme description

Between 2018 and 2019, TASAF and UNICEF piloted a small-scale pilot programme to test whether it was possible to improve maternal nutrition and IYCF practices and increase access to nutritious foods by delivering additional SBC sessions to PSSN beneficiaries. The primary objectives were to: increase knowledge and motivation for improved MIYCF; increase self-confidence and self-efficacy; strengthen family goals and aspirations for child development (the theory of change – TOC – of *Stawisha Maisha I* is provided in Figure A1 in the Annex). The *Stawisha Maisha* pilot programme consisted of peer-led SBC sessions targeted to caregivers and other household members of PSSN beneficiary households at 127 payment points on the six payment days throughout the year²³. It was initially implemented in two areas with high levels of stunting – Kaskazini B district in Zanzibar and Mbeya DC in Mainland.

Beneficiaries were organized into groups of 10 to 12 and led by a volunteer peer through a series of sessions aimed at improving MIYCF, self-efficacy, knowledge, attitudes, skills, and motivations. Sessions made extensive use of story-based content; visual and manipulative tools; contextualisation of new information/knowledge through structured sharing and reflection on personal life experience; discovery and mastery experiences embedded in games and other participatory learning activities.

Groups were provided with written SBC materials and facilitation was supported by Community Management Committees (CMC) and government district extension officers. Indeed, the co-ordination and technical support needs of the project were integrated into TASAF's existing human resource field structure.

Around 11,000 beneficiaries were covered by the *Stawisha Maisha* pilot, 90 percent of which women. Eighty-five percent of participants attended all six sessions.

Qualitative evidence from an endline review (Kajula, 2020²⁴) showed that the approach was well received by participants (especially stories featuring the Bi Stawisha character), activities were successfully integrated into the social protection workforce, and MIYCF knowledge of participants increased. Main challenges included: 1) overbroad targeting with the inclusion of older household members who were often too old to play a role in childcare (and feeding children); 2) low frequency of sessions (aligned with bi-monthly payment days); and 3) limitation on the quality and consistency of session facilitation due to the reliance on a facilitation model requiring literacy (i.e. the use of written materials) among a largely illiterate population.

However, weaknesses in evaluation methodology meant that firm conclusions could not be drawn on programme impacts.

²³ SBC sessions were aligned with community sessions.

²⁴ Kajula, L. 2020. Strengthening infant and young child feeding (IYCF) practices. Endline review of the *Stawisha Maisha* pilot programme implemented under TASAF's Productive Social Safety Net Programme. Mimeo.

Stawisha Maisha II: redesign and scale up

In PSSN II, *Stawisha Maisha* will continue to promote the adoption of high-impact MIYCF practices. However, the programme design has now been revised based on the learning from *Stawisha Maisha I*. The design changes envisaged for *Stawisha Maisha II* to enhance impact include:

- 1) An improvement of the targeting strategy by exclusively focusing on PSSN beneficiary households with children under 5 years²⁵. Within the household, the primary target group are mothers and primary caregivers (including expecting mothers). SM will also target, as a secondary group, adolescent girls to increase their knowledge in future parenting but also grandmothers/active senior women and fathers / grandfathers who have a role in young childrearing;
- 2) Increase the frequency of sessions by having weekly group meetings within communities rather than at payment sites (i.e. bi-monthly);
- 3) Improvement of session facilitation through the use of a Radio+ approach, entailing the replacement of written materials and the introduction of pre-recorded audio through weekly radio broadcasts. To this end, *Stawisha Maisha II* groups will be provided with solar wind-up radios given that radio access among PSSN beneficiaries is still low.

To facilitate discussion following the radio broadcasts, (tested and validated) high quality SBC materials will be provided to groups. Mobile phone messages, at no cost to beneficiaries, will be used to reinforce concepts/themes and allow feedback from recipients.

The new design however retains the overall programme concept and features that worked well in *Stawisha Maisha I*, namely peer groups structure; peer leadership and self-governance; story-based learning content; life experience content; participatory methods; and use of visuals, games, manipulatives²⁶.

The basic meeting format is a weekly peer-facilitated radio listening group based on edutainment approaches, with additional participatory activities facilitated by peer leaders with pre-recorded audio support²⁷. The radio programme is built around story-based learning through a radio drama series, featuring the character Bi Stawisha first developed during the pilot, that offers plenty of scope for strategic

²⁵ There are approximately 15 percent of PSSN beneficiary households (i.e. ~300,000) with children under 5 years.

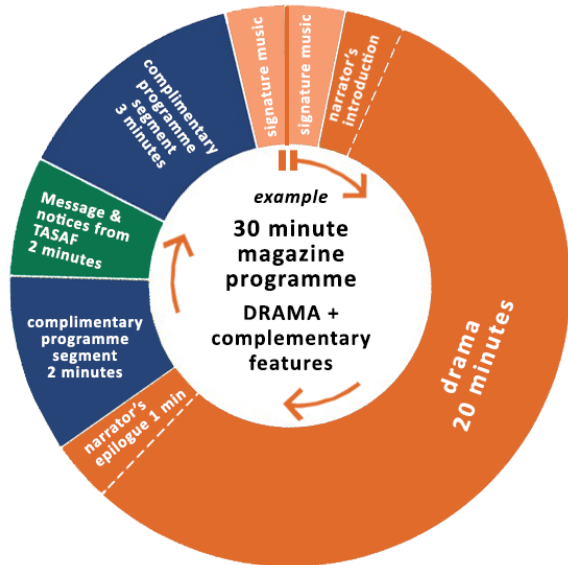
²⁶ TASAF is still finalizing the details on the roll-out and scale up of the programme and so there are still no information with respect to the budget. However, based on a recent costing exercise, total costs were estimated based on four multiple implementation scenarios of scope and scale. "Cost projections for *Stawisha Maisha* were based on variations in program scale and the scope was kept constant. The estimated cost to deliver the program ranged from \$335,900-\$535,800 per year to reach 900 beneficiaries to \$943,800-\$1.8M per year to reach nearly 10,000 beneficiaries at national level scale. The cost per beneficiary ranged from \$6-\$22 per year, depending on the scale and program maturity" (Development Pathways. 2022. Cost Projections of UNICEF-led Livelihoods, Health, and Behaviour Change Communication Programs in Tanzania: *Ujana Salama* and *Stawisha Maisha* Final Report, Page ii).

²⁷ To provide further details:

- In its first phase, *Stawisha Maisha II* sessions of approximately 45 minutes will consist of 30 minutes radio listening + 15 minutes discussion. Supporting materials in this initial phase are limited to attendance registers, membership cards, and a couple of visual take-home materials as aide memoire;
- In the planned second phase, an additional activity using pre-recorded audio on SD cards along with a supporting activities/ materials toolkit will be added to one session a month. The monthly meeting sequence will then consist of 3 radio+ discussion sessions and 1 radio+ supplementary group activities.

integration of the project's key behavioural objectives. The format of the radio programme is provided in Figure 1.

Figure 1. Format of the radio programme



Stawisha Maisha II also retains key behavioural objectives for nutrition as follows:

- *Maternal health and nutrition*: attend antenatal care (ANC) services early in pregnancy; eat/provide [nutritional equivalent of] one extra, balanced, meal each day during pregnancy; attend / access antenatal services including nutritional counselling;
- *Infant and young child feeding*: exclusive breast feeding for infants up to 6 months, with no water supplementation; introduction of nutritionally balanced solid foods at six months and continuation of breast feeding up to 24 months; attend / access U5 health services, including growth monitoring and nutrition counselling;
- *Early stimulation and development*: incorporate into daily routines actions and exercises that increase motor, cognitive and social development of infants and young children (from birth to 6 years).

Achievement of each key behavioural objective relies on certain preconditions being in place. A set of cross-cutting preconditions, mostly life skills or social-emotional competencies, that are important to achieving *Stawisha Maisha's* nutrition-specific aims were identified as follows:

- Increase sense of self-efficacy
- Increase peer support (giving and receiving)
- Increase openness to learning and change
- Develop new aspirations for self and child(ren)
- Improve planning and goal-setting skills
- Improve skills for analyzing and solving problems
- Increase resilience in the face of challenges and setbacks

Although *Stawisha Maisha II* has a clear focus on nutrition, the new design – and the Radio+ approach – potentially allows integrating additional behavioural objectives related to issues other than nutrition based on TASAF's other SBC priority issues.

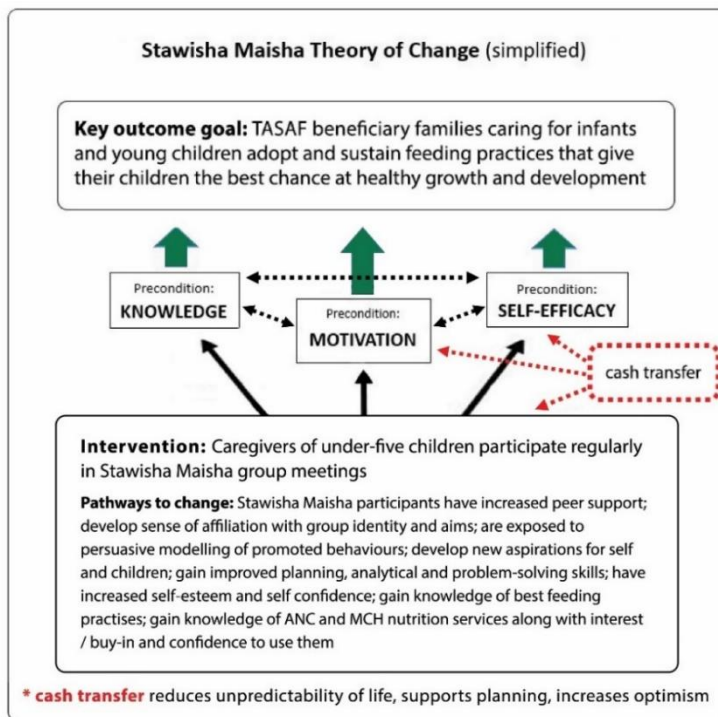
The box below provides a snapshot of key features of the *Stawisha Maisha II* cash plus programme.

***Stawisha Maisha II* programme features**

- **TARGET:** mothers / primary caregivers from rural TASAF PSSN cash transfer beneficiary households that include under five children;
- **OBJECTIVE:** The main objective is to reduce nutritional stunting through improved MIYCF practices. Pathways to reach the desired change include, in addition to knowledge, increased self-efficacy, peer support, and openness to learning and change; increased aspiration for self and child(ren); improved skills for planning and goal-setting, problem-solving, and increased resilience in the face of challenges and setbacks;
- **INTERVENTION:** *Stawisha Maisha* is both a radio platform and a network of small in-person peer-led radio listening groups (10-15 participants per group). A weekly broadcast radio magazine programme uses entertaining content to engage participants, embedding a variety of methodological approaches designed to influence social norms and individual behaviour to promote adoption of nutrition behaviours that reduce and prevent stunting. Social modelling is the principal SBC methodology employed. Groups are provided with robust solar wind-up radios;
- **COVERAGE:** TASAF plans to engage mothers / caregivers from the approximately 300,000 rural beneficiary households with under-five children, with enrolment spread over 3 waves;
- **WAVE ONE** will target selected regions in Lake Zone, engaging approximately 40,000 households;
- **GOVERNMENT RUN/IMPLEMENTED:** *Stawisha Maisha* is implemented through TASAF's field structures and existing human resources. Government develops content and materials, arranges radio broadcasts, supplies radio sets and group toolkits, provides training, and monitors implementation.

The ToC for *Stawisha Maisha II* (shown in Figure 2) builds on the grounds that to increase the adoption of high-impact MIYCF practices, the knowledge, motivations, and feelings of self-efficacy of caregivers should be improved. To ensure the SM II ToC does not miss any key aspects, the selected Evaluation team will reconstruct and /or further develop the ToC for the programme by also reviewing globally accepted ToC for child / maternal nutrition and diets.

Figure 2. The theory of change for *Stawisha Maisha II*



Roll out of *Stawisha Maisha II*

Content for a six-month cycle of weekly radio broadcasts has already been prepared and recorded; the content promotes positive health and nutrition practices – such as uptake of ANC visits, and practices to support maternal diet and dietary diversity – and includes a drama series. The stylized implementation model for scale-up is provided in Figure A2 in the Annex.

TASAF initially planned to rollout phase II of *Stawisha Maisha* in Lake Zone, where a third of the country’s nutritionally stunted children live. The plan was for the rollout to happen in three waves aligned with the start of each new 6-month radio programme cycle. The first wave would set up 2,000 *Stawisha Maisha* groups covering approximately 40,000 PSSN beneficiary households with children under five years in three regions of the Lake Zone, namely Kagera, Geita, and Shinyanga²⁸ (see Table 1). The roll-out plans however are still to be finalized and details of the (timeline and) geographical expansion are expected to undergo changes. Funding is key in finalizing the roll-out plan; indeed, at the time of writing these TORs, the World Bank communicated their support for the national scale-up through IDA. The impact evaluation will need to be aligned with the finalized national scale-up which is likely to take place over a few years; the

²⁸ Geographical targeting for the first wave was based on: the prevalence of stunting; the overall number of stunted children; the number of PSSN beneficiary households with children under five; the availability of well-performing radio station with broadcast coverage reaching 100% of the targeted population.

Evaluation team will need to closely coordinate with TASAF re the roll-out timing and geographical expansion and ensure that the baseline is carried out before the start of the implementation.

Table 1. Possible scenario for the geographical expansion during phase II of *Stawisha Maisha*

Stawisha Maisha II Wave ONE: Lake Zone (partial coverage)					
Region		Stunting prevalence²⁹	N° of stunted children per TNNS	N° of PSSN rural beneficiary households with children under 5	Planned number³⁰ SMGs
Wave One	Kagera	39.8	224,634	17,128	750
	Geita	38.9	185,894	13,696	600
	Shinyanga	32.1	107,954	12,872	550
	<i>Wave 1 partial coverage (3 regions)</i>			43,696	1,900
Simiyu		31.2	152,291	16,369	750
Mara		29.3	133,507	10,660	400
Mwanza		26.2	193,046	17,358	750
			997,326 (33.5 % of all stunted children in Tanzania)	88,083 (approx. 30% of total PSSN rural U5 BHHS)	3,800

The initial plan (expected to undergo changes) was to reach national coverage in only two waves within 6-12 months of launch of the first wave. The second wave would expand coverage to all regions and districts nationally, engaging roughly 300,000 primary caregivers of some 425,000 under-five children in PSSN rural beneficiary households through approximately 15,000 *Stawisha Maisha* Groups.

RATIONALE

The evidence from Sub-Saharan Africa suggests that cash alone may not be enough to address long-term chronic malnutrition; as a result, cash plus initiatives or integrated social cash transfer programming (which combine cash transfers with complementary interventions – such as the provision of information and the improvement in access to and/or the quality of supply-side services) are becoming more and more common in the effort to address child nutritional deficiencies. The evidence base on such cash plus initiatives is still scant, although there are some promising results.

²⁹ Nutrition data are extracted from the *Tanzania National Nutrition Survey 2018* report (TNNS), p 57.

³⁰ *Stawisha Maisha* Groups. Calculations approximate, based on region-specific payment site characteristics.

In Tanzania, between 2018 and 2019, UNICEF and TASAF piloted *Stawisha Maisha* Cash Plus programme, a cash plus intervention where the additional plus component layered on top of the government cash transfer program was targeted to children 0-5 and aimed at enhancing their nutrition outcomes.

Due to weaknesses in the evaluation methodology used for the *Stawisha Maisha* pilot programme, the endline review could not draw robust conclusions on the impacts of the programme. Moreover, the design of *Stawisha Maisha* has now been heavily revised to enhance impacts. UNICEF Tanzania and TASAF are therefore interested in using this timely opportunity to carry out a rigorous impact evaluation of the recently redesigned *Stawisha Maisha* programme – including the plan for geographical expansion, the new eligibility criteria, and the modality of the new programme (i.e. via radios) – and in learning about the impacts of this initiative.

Beyond measuring programme impacts, there is also a specific interest in understanding, more broadly, whether the radio could be used in the future as the main communication channel of TASAF with PSSN beneficiary households in terms of programme announcements and messages to beneficiaries,³¹ to improve community sessions and/or to rollout social and behavioural change on issues in addition to nutrition.

The *Stawisha Maisha II* impact evaluation will involve a highly qualified international research firm/University (IRF), and a local research firm/University (LRF) to design the impact evaluation, the baseline data collection and support the implementation of the research. This TORs seek to hire both the IRF and LRF; the selected IRF will act as the lead institution and is expected to partner with a LRF in this assignment; the IRF and LRF will therefore apply as a consortium. The IRF and the LRF will be required to collaborate very closely; the contract will be one, the leading agent will be the one who is going to have the contract with UNICEF; the vendor should indicate who is the leading agent in the technical bid. The consortium made up of the IRF and LRF is later on also referred to as the Evaluation team. In all stages of the evaluation process, the universally recognised values and principles of human rights – including child rights, gender equality and equity will be integrated ensuring that these lenses are applied across the analysis even in areas where programme design may not have specifically aimed at greater gender equality, human rights, or equity.

³¹ Indeed, a recommendation from a 2021 payment report (Zuilkowski et al., 2021) highlighted the need for better communication and transparency for PSSN's implementation: "Some participants did not know where the money was coming from, why their household specifically had been chosen, or why they got the amount they received. When delays occurred, participants had no recourse or source of information. No one contacted them to explain what was happening. One participant said that they had assumed that PSSN had ended, for lack of any other communication." Zuilkowski, S., Waidler, J., Marwerwe, G., Kihanzah, H., Palermo, T., & Tanzania Adolescent Cash Plus Evaluation Team. (2021). *"Life is unstable": how households cope with delays in PSSN payments*.

PURPOSE, including primary audience, utilization and dissemination

The purpose of the longitudinal mixed-methods impact evaluation of *Stawisha Maisha* is:

1. To improve the learning on synergies between social protection and maternal and child nutrition, in particular on integrating cash transfers and SBC to improve MIYCF practices and access to nutritious food;
2. To generate lessons learned to inform current and future programming;
3. To feed into the broader academic and policy debate at global level about the effectiveness of cash plus interventions aimed at reducing stunting.

The Government of Tanzania, specifically TASAF, PMO and Zanzibar Second Vice President's Office are the primary audience of this evaluation. Other important stakeholders include the Ministry of Health Community Development, Gender, Elderly and Children (MoHCDGEC); the Tanzania Food and Nutrition Centre (TFNC) – the technical nutrition arm of government under the Ministry of Health and Social Welfare (MoHSW) and the Zanzibar Ministry of Health. The evidence generated from this evaluation will provide them with rigorous evidence:

- (1) on the impacts of the intervention. Results will demonstrate how and to what extent cash plus interventions improve nutrition outcomes for young children, and how nutrition-specific SBC sessions can complement and provide synergies with the existing government social safety net. By also considering enabling factors and barriers to improve child nutrition beyond the SBC sessions³², this evaluation will enable the Government of Tanzania to assess what other measures or interventions are necessary to reduce stunting and to improve the design of the current programme;
- (2) on the use of radios as an effective means of communication with beneficiary households of the national social safety net. Results will demonstrate whether this approach could be used in the future to extend TASAF's communication outreach, disseminate reminders and new programme information, use the Radio+ approach to improve PSSN community sessions, and/or rollout social and behavioural change on issues in addition to nutrition;

The evaluation will also help to draw further political support to expand the *Stawisha Maisha* programme to more extremely poor households nationwide.

UNICEF will aim to make the evaluation report fully accessible to all organizations that might make use of the findings. The findings from the baseline of the impact evaluation will be presented through meetings (workshop launch) to the government, donors, and other key stakeholders. The findings will also be disseminated widely through reader-friendly policy briefs as well as online posting and discussions, and in academic and policy arenas. The policy briefs will also be shared and used in discussion with parliamentarians, high-level political leaders, the Ministry of Finance, President's Office – Finance and Planning (Zanzibar) and line ministries, and civil society organizations. The Evaluation Team should therefore ensure that the reports are of publishable quality as per UNICEF/UNEG standards and UNICEF Guidance on Quality Assurance for Evaluation.

³² Such as quality and quantity of available health and nutrition services, care seeking practices, access to affordable foods, household sanitation and hygiene, etc.

OBJECTIVE

The overarching objectives of the impact evaluation of *Stawisha Maisha II* are to understand: i) the extent to which an SBC component targeted to primary caregivers of 0-5 children and layered on top of a cash transfer program can improve IYCF practices and in turn reduce stunting in the long term (*impact*); ii) whether radios and/or the use of the Radio+ approach could be used as an effective means of communication³³ with PSSN beneficiary households, to improve PSSN community sessions, and/or rollout social and behavioural change on issues in addition to nutrition (*effectiveness*). Further details are found in the Key Evaluation Questions section below.

The IRF and LRF will be recruited:

- to assess the feasibility and design a rigorous longitudinal mixed-method impact evaluation to provide evidence of impacts (and operational insights) of *Stawisha Maisha II* in close collaboration with UNICEF TCO, TASAF and key national stakeholders;
- to ensure a baseline survey is carried out based on a robust evaluation design and sample to ensure that future follow-up surveys can determine impacts on key outcome indicators;

There is a strong possibility to extend this impact evaluation collaboration beyond baseline as covered in the current RFP, but due to current funding availability, this RFP currently covers only the design of the IE, baseline and related activities.

SCOPE OF THE WORK

Geographical scope: The impact evaluation will take place in 2-3 selected regions in the Lake zone, where the *Stawisha Maisha II* will first be rolled out.

*Timing*³⁴: Three waves of data collection will be implemented, namely:

- Baseline: the baseline data collection will take place before the start of the intervention;
- 6-12 month follow-up: a first follow-up planned after the first six-month radio programme cycle and mostly focusing on output level impacts and effects on intermediate and underlying determinants of child nutrition and caretaker behaviour and knowledge;
- 18-24 months follow-up: depending on the exact development of the programme, this follow-up will either gather impacts after 18-24 months of intervention, or it will provide the first post-intervention impacts (i.e. capturing sustainability of impacts).

The impact evaluation timeline, and related data collection activities, will be closely aligned with the finalization of TASAF roll-out plan and may result in changes. Only the design of the IE and baseline data collection is covered in these TORs.

Thematic scope: The overarching research question to be answered by the accompanying impact evaluation addresses how and to what extent *Stawisha Maisha II* – a ‘plus component’ integrated in government structures within a cash transfer programme – affects nutrition outcomes of mothers and

³³ Disseminating reminders and new programme information.

³⁴ The exact timing of follow-ups may be adjusted to ensure full alignment with the reconstructed theory of change as well as implementation and rollout plans for *Stawisha Maisha II*.

young children and their intermediate and underlying determinants³⁵; impacts will not only be measured on nutrition outcomes but also across the results chain / nutrition impact pathway and across different sectors including health, women's empowerment and so forth, based on the programme's reconstructed ToC. This evaluation will also further investigate the effectiveness of radios as the main communication channel with PSSN beneficiaries and as an approach to rollout social and behavioural change on issues in addition to / other than nutrition. While these questions will only be responded at follow-up/s, the baseline will gather all necessary information to later estimate impacts of the intervention. The thematic scope of the evaluation is clearly explained in the 'rationale' section; given the scope of this impact evaluation is quite vast³⁶, key evaluation questions listed below cover only the impact and effectiveness OECD-DAC standard evaluation criteria. The evaluation inception phase may allow for further evaluation criteria to be taken into account.

Key Evaluation Questions

Impact (what and how):

- How has *Stawisha Maisha II* impacted stunting and other anthropometric indicators³⁷ at follow-up/s?
- How has *Stawisha Maisha II* impacted MIYCF practices / diets at follow-up/s?
- How has *Stawisha Maisha II* impacted ECD outcomes after a six-month cycle (established follow-ups)?
- How has *Stawisha Maisha II* impacted the knowledge of programme beneficiaries on MIYCF at follow-up/s?
- At follow-up/s, how has *Stawisha Maisha II* impacted preconditions to achieving *Stawisha Maisha's* nutrition-specific aims (or intermediate outcomes)? Preconditions may include peer support, participants' sense of self-efficacy, aspirations for self and children, ability to plan and set goals, skills for analyzing and solving problems, resilience, openness to learning and change;
- How has *Stawisha Maisha II* impacted household food security at follow-up/s?
- How has *Stawisha Maisha II* impacted women's empowerment at follow-up/s?
- What are the pathways through which *Stawisha Maisha II* has an impact on individual and household level outcomes?

Effectiveness:

- What was the uptake and operational performance of the *Stawisha Maisha II* cash plus programme?

³⁵ The 6-12 month follow-up may focus (depending on the time elapsed since the start of the SM II) mostly on output level impacts and effects on intermediate and underlying determinants of child nutrition and caretaker behaviour and knowledge rather than impacts on outcomes which may take longer to substantiate.

³⁶ As indicated earlier, impacts will not only be measured on nutrition outcomes but also across the results chain/nutrition impact pathway and across different sectors including health, women's empowerment and so forth.

³⁷ The conditionality of monthly clinic visits for children under 5 years and the related growth monitoring taking place at each may present an opportunity for anthropometric measurement for the evaluation; this however rests on the accessibility and reliability of the data.

The estimation of impacts on stunting / anthropometric measures will need to be aligned with the reconstructed theory of change and will also need to be based on sample size calculations.

- Is the radio an effective way to communicate with PSSN beneficiaries? Has the radio been effective at delivering messages, notices or reminders to programme beneficiaries?
- Can the (Radio+) approach be used to rollout social and behavioural change on issues in addition to/ other than nutrition? Can the Radio+ approach be used to enhance community sessions?

The evaluation will also include as much as possible enabling factors and barriers to improving child nutrition beyond the SBC sessions (i.e. quality and quantity of available health and nutrition services, care seeking practices, access to affordable foods, household sanitation and hygiene, etc.).

As further discussed in the methodology section, the Evaluation team will closely coordinate with TASAF, UNICEF and other stakeholders to further refine the evaluation questions to ensure, among other things, that they address child rights, equity, and/or gender equality. The evaluation team will also explore/discuss the possibility to assess spillovers to the wider community.

METHODOLOGY

The methodology will be split into two components: (1) Assess feasibility and design of longitudinal mixed-methods impact evaluation; and (2) design and collect baseline data.

1. Assess feasibility and design of longitudinal mixed-methods impact evaluation: The Evaluation team will have meetings with UNICEF Tanzania Country Office, TASAF, and relevant stakeholders to gather most updated information on the status of *Stawisha Maisha II* and plans for the roll-out; the current roll-out and scale-up plan in 3 waves should allow for a rigorous impact evaluation. At the time of writing, the *Stawisha Maisha II* roll-out plan has still not been fully finalized, providing room and flexibility from the implementation side and ensuring the impact evaluation can be integrated and aligned with the implementation. These initial meetings will allow the Evaluation team to develop an inception report with options for a rigorous longitudinal mixed-methods impact evaluation and finally agree on the evaluation design that is most feasible according to timelines, geographical expansion, and any other operational and financial constraints. During this process, the Evaluation team will establish a credible counterfactual (control or comparison group) and define a timeline for the longitudinal impact evaluation that would include ante- and post-intervention data collection (baseline, a follow-up after the first six-month cycle of the intervention and a 18-24-month follow-up³⁸). The Evaluation team will consider the pros and cons of different approaches, present options and related implications to UNICEF, TASAF and key stakeholders to reach consensus on the best impact evaluation design for *Stawisha Maisha II*. Among potential options to be considered are both experimental and quasi-experimental approaches; spillovers (including broadcast coverage considerations) and the risk of underestimating impacts should be carefully considered³⁹. The study

³⁸ As indicated above, the exact timing of follow-ups may be adjusted to ensure full alignment with the reconstructed theory of change as well as implementation and rollout plans for *Stawisha Maisha II*.

³⁹ Potential design options to be explored by the Evaluation team include (but are not limited to):

- Cluster RCT – Considerations: if the control group is provided with radios and an alternative radio programme (i.e. placebo control group), there is the risk it might still end up listening to the *Stawisha Maisha II* programme broadcast, potentially leading to severely underestimating the impacts. Potential solution: cluster RCT where control group is not

groups will include: 1) treatment group, namely beneficiaries of *Stawisha Maisha II*; and 2) control (or comparison) group, namely PSSN beneficiaries who are similar in key demographics and other variables to *Stawisha Maisha II* beneficiaries but who do not receive the SBC component of *Stawisha Maisha II*⁴⁰. Such approach would allow to establish the impact of the specific ‘plus’ component but not whether there are synergistic impacts with cash.

These meetings combined with the review of programme documents and any other relevant documentation, will also provide the Evaluation team with the necessary information to reconstruct the ToC for the programme to be evaluated, contextualize the evaluation and further refine the evaluation questions. This will also allow to further refine what aspects of the evaluation will be better investigated using a qualitative approach. The use of quantitative and qualitative approaches will be complementary and will support triangulation of findings.

2. Design and collect baseline data: The baseline data should provide a representative sample of the targeted population, namely of PSSN beneficiary households with children under five years (control and treatment); power and effect calculations and estimated sample size based on the key outcomes of interest will be carried out by the impact evaluation team. The precise timing and geographical areas to be covered will be defined on the basis of the final roll-out plan for *Stawisha Maisha II* and design approach selected. However, as soon as the sample is drawn for the study, a baseline quantitative survey and qualitative interviews will be conducted immediately prior to the start of the intervention; the data will be collected in two-three regions of the Lake zone.

The quantitative survey instruments will be multi-topical based on the program’s reconstructed ToC and will measure key outcome and impact indicators as well as intermediate outcomes, those that lie along the causal pathway; whenever possible survey items will be pulled from existing national survey instruments. The instruments will also gather information on the operational performance of the programme and will include a specific ‘radio+ module’ to understand the effectiveness of this approach not only as a communication channel for PSSN beneficiaries but also as an approach for SBC communication beyond nutrition. Collection of data on basic household and child characteristics will allow to disaggregate data in terms of sex, age, disability, etc.

Beyond the quantitative *household survey* with the household head / PSSN intended recipient (~2,000 households, ~60 minutes), the selected institution will also design a *community survey* to capture spatial differences in prices, access to markets, health facilities, etc. in the study areas (~100 communities, ~30 minutes) and a *health facility survey* will also be conducted in study areas (~100 facilities, ~30 minutes). GPS coordinates will be captured for each household in the sample,

provided with a radio. Implications: the impact evaluation would provide the impact of giving radios AND the cash plus component (i.e. not the cash plus component only);

- Geographical RDD:
 - o Using a geographic / administrative boundary to split units into treated and control areas. To avoid spillovers and the risk of underestimation, the control group is not given radios.
 - o Using the radio broadcast radius as the boundary to split units into treated and control areas. Avoiding the risk of spillovers, the control group could be provided with radios and a placebo radio programme;
- Matching methods:
 - o where control group is provided with radios and placebo broadcast.

⁴⁰ As discussed in the ‘Key evaluation questions’, the evaluation team will also explore/discuss the possibility to assess spillovers to the wider community which may involve the inclusion of a further arm covering non PSSN II households.

community and health facility questionnaire. A qualitative protocol will be developed to interview PSSN household heads / intended recipients (~30 respondents, ~60 minutes); it is expected that some impacts may be better captured qualitatively (for instance, concepts that are difficult to be measure such as feeling of affiliation, etc.) and that some aspects of the Radio+ approach experience may be further delved into with the use of qualitative methods.

The specific sample and duration of surveys / interviews will be finalized with the evaluation design. These indicative estimates are provided to ensure homogeneity among applying firms and comparability of the proposed budgets. The final budget for the data collection would be finalized after the inception period.

The baseline sample of households will be re-interviewed to determine the impacts of the programme at 6 and at 18-24 months; as such, the evaluation team will collect data and put in place a strategy to maximize the ability to follow-up households at later waves of data collection.

All ethical principles and guidelines are discussed in the 'Ethical principles and ethical evaluation clearance' section.

The bulk of the evaluation / analysis will rely on primary data collection; however, during the inception phase the availability and reliability of further complementary data (such as anthropometric data from growth monitoring / health clinics; other available health facility data to triangulate beyond growth monitoring, such as caretaking / health seeking behaviours, nutritional status, etc., or other relevant complementary administrative data) may be further investigated.

Limitations of the evaluation – risks and challenges

- *Uncertainty on program expansion modality:* At the time of writing these TORs, there is still no final plan in terms of the roll-out of *Stawisha Maisha II* – both in terms of timeline and geographical coverage. The final goal of TASAF is to scale-up nationally, however due to funding constraints, the scale up is expected to happen over a few years. The roll-out in waves ensure the possibility of being able to carry out a rigorous impact evaluation but uncertainty on the specifics of the roll-out and scale-up plan have implications for the evaluation design and may have time constraints implications. For this reason, the evaluation team should be brought on board as early as possible to discuss with TASAF and key stakeholders the details at a time in which there is still room and flexibility to make changes in the implementation plan (in line with ethical principles) to ensure the design of a rigorous impact evaluation and robust and credible results;
- *Spillover effects and placebo considerations:* due to the features of *Stawisha Maisha II* and the radio as one of the main elements of the Plus component, the risk of spillover effects to the control group is likely higher than in other programmes especially if provided with a radio (i.e. risk of underestimation); at the same time, the provision of radios and a placebo broadcast program and the organization of individuals in groups also in the control would allow to estimate the impact of the specific Plus component programme features rather than the impact of providing a radio, the group socialization and the plus component. The evaluation team will carefully discuss with TASAF, take into account different trade-offs, and gather data needed (such as the broadcast coverage, etc.) to make an informed decision with

respect to the preferred evaluation design (more information in footnote 25 that provides potential evaluation design options);

- *No estimation of synergistic impact of cash plus programme:* Ideally, when evaluating a cash plus type intervention, one would like distinguish the impact that cash alone has, what impact the 'plus' component alone has, what the overall impact of the Cash plus programme is and whether this overall impact (i.e. of the cash and plus components together) is larger than the sum of the "cash alone" and "plus alone" impacts (i.e. synergistic impacts). The impact evaluation will allow a rigorous evaluation of the impacts of the Plus component alone but not whether there are any synergistic impacts with cash⁴¹.

Broadly speaking, budget constraints may have implications on some of the evaluation design decisions that will need to be made; for instance, the ability to: explore spillover effects (and adding an extra arm to the impact evaluation), capture precise anthropometric measures (and its implications on the sample size), or capture synergistic impacts will be likely affected by budget constraints.

⁴¹ In order to estimate the synergistic impact of the cash and plus components together, 4 arms would be needed; three treatment arms: 1) cash alone; 2) plus alone; 3) cash plus; and one control arm 4) receiving no treatment (neither cash nor plus).

ROLES and RESPONSIBILITIES; SPECIFIC ACTIVITIES and DELIVERABLES TO BE COMPLETED TO ACHIEVE THE OBJECTIVES AND EXPECTED DELIVERY DATE

The *Stawisha Maisha II* impact evaluation will involve an IRF and a LRF. The table below provides a list of activities (and deliverables) to be completed to carry out this impact evaluation; it provides an indication on the expected role of the IRF and LRF in this process, as well as the expected delivery dates. Although the timeline is tentative, and will be updated based upon the roll out plans for SM II, the applying consortium will still be requested to provide an indicative/tentative timeline.

	Lead SCP = Secondary Contributing Partner ⁴²	Local Research Firm	International Research Firm	Expected implementati on/delivery dates (duration in weeks)
DESIGN OF LONGITUDINAL MIXED-METHOD IMPACT EVALUATION				
1	Meetings with UNICEF Tanzania Country Office, TASAF, and other relevant stakeholders as needed to gather latest information on the status of <i>Stawisha Maisha II</i> and plans for the roll-out.	SCP	Lead	November 2022 (weeks: 1-4)
2	Finalize longitudinal mixed-method impact evaluation design, including sampling strategy, power and effect calculations and sample selection, in close coordination with TASAF to ensure compatibility with rollout plans (timelines, geographical expansion, and any other operational and financial constraints). Prepare and submit <u>inception report</u> (20-40 pages excluding Annexes) with evaluation design.	SCP	Lead	By mid-December 2022 (weeks: 1-6)
3	Present evaluation design and alignment with SM II rollout plan to UNICEF TCO, TASAF, ERG and other key stakeholders (<u>PPT</u>).	SCP	Lead	By mid-December 2022 (weeks: 1-6)
DESIGN, IMPLEMENTATION AND QA OF BASELINE DATA COLLECTION, ANALYSIS AND DISSEMINATION				
4	Review and finalize evaluation design, sampling strategy, power and effect calculations and sample selection based on feedback received and revise inception report	SCP	Lead	By mid-January 2023 (weeks: 7-10)

⁴² Secondary contributing partner implies that the firm will be directly supporting the lead firm in developing/completing certain tasks.

5	Develop <u>data collection plan and procedures</u> (summary note to be submitted)	Lead	SCP	By mid-January 2023 (weeks: 7-10)
6	Develop <u>survey instruments/protocols</u> (quantitative HH/community/health facility surveys and qualitative protocols for PSSN beneficiaries) and <u>supervisor/enumerators manuals</u>	Lead	SCP	By mid-January 2023 (weeks: 7-10)
7	Finalize <u>survey instruments/protocols</u> (quantitative HH/community/health facility surveys and qualitative protocols for PSSN beneficiaries) and <u>supervisor/enumerators manuals</u>	SCP	Lead	By mid-January 2023 (weeks: 7-10)
8	Secure <u>permits and ethical clearance</u> from the appropriate agency prior to fieldwork implementation	SCP	Lead	By mid-February 2023 (weeks: 11-14)
9	Preparation for fieldwork (including recruitment and training of fieldwork personnel; renting of training facilities; procurement of all fieldwork equipment and supplies including vehicles, use of tablets, and other supplies; piloting, mapping and listing of households)	Lead	SCP	By mid-March 2023 (weeks: 11-18)
10	Field work and data collection (individual quantitative surveys, qualitative interviews, community surveys and health facility data collection efforts). <u>Raw data</u> provided	Lead	SCP	By end of May 2023 (weeks: 19-28)
11	Data cleaning (<u>clean data</u> provided)	Lead	SCP	By end of June 2023 (weeks: 29-32)
12	Data Analysis - specific sections will be agreed upon between partners	Lead	Lead	By mid-September 2023 (weeks: 31-42)
13	<u>Draft fieldwork report</u>	Lead	SCP	By mid-July 2023 (weeks: 29-34)
14	<u>Draft quantitative and qualitative baseline Report</u> and a <u>PowerPoint presentation</u> to facilitate a stakeholder consultation exercise including to ERG	SCP	Lead	By mid-September 2023 (weeks: 31-42)
15	Present and disseminate findings of baseline at workshop (to UNICEF TCO, TASAF and other key stakeholders) at national level. Prepare related <u>PPTs and research and policy briefs</u>	Lead	Lead	By mid-November 2023 (weeks: 43-50)

	intended for a broader, non-technical and non-UNICEF audience			
16	<u>Final quantitative and qualitative baseline Report</u> (approximately 60 pages, exclusive of ~5 pages Executive Summary and Annexes) and <u>fieldwork report</u> (40-60 pages)	SCP	Lead	By mid-January 2024 (weeks: 51-58)

UNICEF Tanzania will provide overall direction of the impact evaluation; UNICEF ESARO Evaluation will provide advice and quality assurance of main deliverables; the Evaluation Reference Group role and responsibilities are further discussed below (Section “Management oversight of the impact evaluation and quality assurance”).

The Evaluation team will be required to participate in needed meetings (in-person or via teleconferencing) with UNICEF Tanzania, TASAF and other key stakeholders prior, during and after fieldwork to present and discuss the evaluation design but also other issues such as the supervisor and enumerator manuals, training tools and plans, ethical procedures, study instruments, research tools and data collection plans.

All working documents and the final reports shall be submitted in English. Outlines and descriptions of the following evaluation products (inception, draft and final evaluation reports) are meant to be indicative, and include:

- Inception report: The inception report will be key in confirming a common understanding of what is to be evaluated, including a full evaluation design for the impact evaluation aligned with the roll out of the programme. At this stage evaluators will refine and confirm evaluation questions, confirm the scope of the evaluation, propose the preferred impact evaluation design and indication of the evaluation instruments to be used. The report will include, among other elements: i) evaluation purpose and scope, confirmation of objectives and the main themes of the evaluation; ii) evaluation questions; iii) impact evaluation design and methodology (i.e., sampling criteria), a description of data collection methods and data sources, list of data collection instruments, for example questionnaires, and a discussion on the limitations of the methodology and ethical considerations; iv) proposed structure of the final report; v) evaluation work plan and timeline, including a revised work and travel plan; vi) resources requirements (i.e., detailed budget allocations, tied to evaluation activities, work plan) deliverables; v) annexes. The inception report will be 20-40 pages in length (excluding annexes), and will be presented at a formal meeting of the Evaluation Reference Group (ERG).
- Draft evaluation report: This report will present the baseline findings from primary quantitative and qualitative data collection, comprising an introduction and background (inclusive of related desk-based review of cash plus programmes to improve young children nutritional outcomes); a conceptual framework; impact evaluation framework and sample; data analysis by domain; conclusions; references; annexes.
- Final evaluation report: The report will be approximately 60 pages, excluding the executive summary and annexes.

Inception, draft and final reports will be reviewed. If we sub-contracted UB we would also have to deduct 15% Withholding Tax from UB which is probably what Tia is thinking of.

sed until approved (incl. review by UNICEF Evaluation Management Team; the ERG and Regional Evaluation Adviser within UNICEF ESARO).

Other interim products may include among others: minutes of key meetings with the evaluation management team and the ERG; and presentation materials for the meetings with the evaluation management team and the ERG.

Study working documents, including hard-copies of confidentiality agreements, consent forms, and master lists of household and study participants shall be submitted to UNICEF Tanzania prior to the final payment. All raw and clean data files should be submitted securely stored as per IRB (Institutional Review Board) regulations and shared with UNICEF TCO.

Manuscripts developed for peer-reviewed publication are not included as deliverables under this contract. However, proposals for manuscripts can be submitted to UNICEF Tanzania and may be co-/developed, with prior approval from UNICEF Tanzania, without payment or reimbursement for related staff and other costs⁴³.

Travel

A number of trips are foreseen for the principal investigator for the training and dissemination workshops:

Purpose	Duration
<i>Stawisha Maisha II</i> baseline training of enumerators and field work observations	~10 days
<i>Stawisha Maisha II</i> baseline findings workshop	~2 days

⁴³ UNICEF guidance on external academic publishing (2017) are available [here](#).

MANAGEMENT OVERSIGHT OF THE IMPACT EVALUATION and QUALITY ASSURANCE

The evaluation will be managed by the Research and Evaluation Manager at UNICEF Tanzania, in close collaboration with the Chief of Social Policy and the Social Policy Specialist. Oversight on this evaluation will be provided by the TCO Representative. An ERG will be established specifically for this evaluation, to guide the evaluation process and ensure adequate participation of key stakeholders. The Research and Evaluation Manager will chair the ERG with members including Social Policy colleagues at UNICEF Tanzania (Chief of Social Policy, a representative of PMFC and Social Policy Specialists Mainland and Zanzibar), Government and other key partners. For quality assurance of this evaluation, the TORs, draft inception and final evaluation reports will be shared with ESARO Evaluation and Social Policy Sections, to obtain their technical input and quality assurance. All evaluative products need to be Quality Assured by ESARO Evaluation Section, as per QA Regional Guidelines. Receiving at least a satisfactory review from ESARO Evaluation Section is a precondition for moving from one evaluation phase to the next.

The main roles of the ERG are:

- To contribute to the design and execution of the evaluation
- To monitor and facilitate implementation of the evaluation
- To share available information (data, documentation, etc.)
- To provide feedback/comments on key evaluation deliverables
- To assist with the interpretation of findings and co-creation of recommendations
- To disseminate the results of the evaluation to key stakeholders
- To support the development of the management response plan

At a minimum, the ERG will meet / provide comments in three stages: the inception report, the draft report and the final report for validation.

The Evaluation team should adhere to [Revised Evaluation Policy of UNICEF](#); [UNEG Ethical Guidelines for Evaluation](#) ; to [UNEG Code of Conduct for Evaluation](#), to [UNICEF Reporting Standards](#) and UNICEF's [Global Evaluation Reports Oversight System \(GEROS\)](#) quality standards.

CONTRACT MANAGEMENT AND SUPERVISION ARRANGEMENTS

The IRF and LRF will work under the general guidance and supervision of Research and Evaluation Manager of UNICEF Tanzania. The Evaluation team will work closely also with the Social Policy Specialist and Chief of the Social Policy Section at UNICEF Tanzania. The Evaluation team will seek regular contact and closely coordinate with TASAF and other government counterparts as needed.

Compliance with the contract terms and timely delivery of the expected outputs/results will be closely monitored. Upon satisfactory completion of contract deliverables, the supervisor will certify relevant document, evaluate the Evaluation team's work and process/follow-up on payments.

ETHICAL PRINCIPLES AND ETHICAL EVALUATION CLEARANCE

The Evaluation team should adhere to the following UNEG and UNICEF norms and standards and is expected to clearly identify any potential ethical issues and approaches⁴⁴, as well as the processes for ethical review and oversight of the evaluation process in their proposal. Copies of all these documents will be provided upon request:

- United Nations Evaluation Group (UNEG) Standards for Evaluation in the UN System⁴⁵;
- United Nations Evaluation Group (UNEG) Norms for Evaluation in the UN System, including impartiality, independence, quality, transparency, consultative process;
- UNICEF's revised Evaluation Policy, and UNICEF Procedure for Ethical Standards in Research, Evaluation and Data Collection and Analysis will guide the overall process;
- UNICEF adapted evaluation report standards and GEROS;
- The evaluation should incorporate the human rights-based and gender perspective and be based on results-based management principles and logical framework analysis, in compliance with UNEG guidelines on gender and human rights.

Good practices not covered therein are also to be followed. Any sensitive issues or concerns should be raised with the Research and Evaluation Manager as soon as they are identified.

⁴⁴ A response plan will be developed and implemented to ensure that those respondents who need it receive timely and appropriate referrals and support.

⁴⁵ The evaluation shall be carried out in accordance with the ethical principles and standards defined by the United Nations Evaluation Group:

- **Confidentiality:** The assessment must respect the rights of the persons providing information, guaranteeing their anonymity and confidentiality. Information collected will be treated as strictly confidential, and the institution will need to ensure that identities of participants are not disclosed before, during and after the study through data anonymization procedures. The rights of distribution and/ or publication will reside solely with UNICEF. The contracted institution will not retain any data collected under this assignment and will not make use of such data for any other purposes than those stated in the TORs.
- **Accountability:** The report should identify any conflicts or differences of opinion that may have arisen within the Evaluation team and/or between the Evaluation team and those responsible for the programme component regarding the findings and/or recommendations of the evaluation. The entire Evaluation team must confirm the results presented, with any disagreements to be indicated.
- **Integrity:** The Evaluation team will need to highlight issues not specifically identified in the Terms of Reference, in order to obtain a more complete analysis of the program.
- **Independence:** The evaluation team must ensure that it remains independent of the program under evaluation, and should not be associated with its management, implementation or any other element of it.
- **Incidents:** If problems arise during fieldwork, or at any other time during the evaluation, they should be reported immediately to the Research and Evaluation Manager. If this is not done, the existence of such problems can in no way be used to justify the impossibility of achieving the results foreseen by UNICEF in these terms of reference.
- **Validity of information:** The Evaluation team must ensure the accuracy of the information collected during the preparation of the reports and will be responsible for the information presented in the final report.
- **Intellectual property:** Using the different sources of information, the Evaluation team must respect the intellectual property rights of the institutions and communities consulted.
- **Submission of reports:** If the submission of reports is postponed, or in the event that the quality of the reports submitted is significantly lower than what has been agreed, the sanctions provided for in these terms of reference will apply.

Owing to the envisaged participation of human subjects in the evaluation (and in accordance with the "Criteria for Ethical Review Checklist"), the evaluation team will take the lead in securing ethical clearance either from a recognized Institutional Review Board in Tanzania or via UNICEF's LTA for ethical approval as per UNICEF Procedure for Ethical Standards in Research, Evaluation and Data Collection and Analysis (2021). Please see link to the UNICEF Evaluation Resource Centre. <https://www.unicef.org/evaluation/resources>.

REQUIRED SKILLS AND QUALIFICATIONS

As indicated above, the IRF and LRF will apply as a consortium. Details of the firms' profiles are provided below followed by the skills and qualifications for each Evaluation team member.

International Research Firm

Institutions, including Universities, with strong background in (impact) evaluation are encouraged to submit a proposal.

Local Research firm

Company profile

1. Description of the local firm

- Extensive experience conducting large, multi-topic field surveys using electronic tablets, including the deployment, oversight and management of research teams
- Demonstrated experience in ethical research practices
- Demonstrated experience conducting social science or public health research
- Years of experience, organization's structure, areas of expertise, and financial capacity
- Proven record in delivering timely, quality results
- Demonstrated ability to produce high-quality datasets
- Demonstrated ability to produce high-quality reports in English and manage quality translations from English to Swahili

2. List of past and current research projects

- Bidders shall provide information for a minimum of three assignments for which its firm and its personnel were legally contracted in the past five years, for carrying out services of a similar nature to the assignment outlined in the TOR. Experience working with UN Agencies, Government, or other bilateral or multilateral development agencies and international NGOs are preferred references.

Bidders shall use the below headings for providing references:

Name of client:

Contact details:

Assignment name:
Duration of assignment (months):
Start and end date (month/year):
Value of the contract (USD):
Total number of staff of the assignment:
Narrative description of the project:

- 3. License:** Copy of a valid government business license or NGO registration to operate in Tanzania.

Qualifications and experience of key personnel (core Evaluation Team)

The Evaluation team should be gender balanced, culturally diverse and composed of both national and international members. The suggested Evaluation team composition includes a lead PI for the quantitative component and a co-investigator for the qualitative component, two research assistants (one quantitative – initial handling of data, quality and consistency checks and validation/cleaning – and one qualitative), a project manager and a data manager. Field staff personnel will include supervisors and enumerators of quantitative surveys, and qualitative interviewers/researchers.

The successful consortium will have to deploy and manage a team with the following expertise⁴⁶:

1. Principal investigator (quantitative) [IRF]
 - Advanced degree (PhD) in relevant disciplines such as Public Health, Economics, Public Policy, Sociology or related disciplines.
 - Seven to ten years of experience and a publication record commensurate with her/his years of experience and field of expertise, with significant work in low- and middle-income countries. A work record in East Africa with experience in Tanzania is desirable.
 - Sound knowledge of quantitative and qualitative methods particularly those typically applied for impact evaluations⁴⁷.
 - Sound experience in designing and implementing evaluation studies.
 - Experience of evaluation of social protection programmes supported by UN or UNICEF.
 - Substantive knowledge of health, nutrition and poverty in Africa, and ideally have first-hand experience evaluating large-scale social programs in developing countries.
 - Expertise in child health and nutrition and interventions to improve these outcomes, particularly in Africa.
 - Strong English report writing skills and a track record of producing high quality publications.
 - Expertise in gender equality and human rights, including child rights, with a demonstrated understanding of the evaluation team's responsibilities in this regard and how these issues relate to Social Protection / Assistance.

⁴⁶ In square brackets is reported a *suggestion* for each Evaluation team member origin (i.e. IRF or LRF).

⁴⁷ In particular, for quantitative methods: randomization, propensity score matching, double difference, instrumental variables, regression discontinuity and so forth.

The quantitative principal investigator will also be the team leader for the evaluation.

2. Research Assistant (RA), quantitative [IRF]
 - Master's degree in relevant disciplines such as Public Health, Economics, Public Policy, Sociology or related disciplines.
 - Sound experience managing large datasets.
 - Sound knowledge of STATA and quantitative data analysis methods.
3. Research Assistant (RA), qualitative [IRF]
 - Graduate student (Master's or PhD level) in relevant disciplines such as Public Health, Economics, Public Policy, Sociology or related disciplines.
 - Background in theory of qualitative analysis.
 - Sound experience coding and analysing qualitative data.
4. Co-principal investigator (co-PI), qualitative [LRF]
 - Advanced degree (PhD) in relevant social science disciplines such as Public Health, Economics, Public Policy, Sociology or related disciplines.
 - Seven to ten years of worldwide experience on qualitative research (impact evaluation) including experience in the African context, a publication record commensurate with her/his years of experience and field of expertise, with significant work in low- and middle-income countries.
 - Sound knowledge of qualitative methods.
 - Substantive knowledge of health, nutrition and poverty in Africa, and ideally have first-hand experience evaluating large-scale social programs in developing countries. Solid understanding of development issues specific to children in Tanzania.
 - Strong English report writing skills and a track record of producing high quality publications.
 - Fluent in written and spoken English and Swahili.
5. Project manager [LRF] – should have experience with managing survey teams on studies; longitudinal study designs; mixed method data collection.
6. Data manager [LRF] – experience with household listings, survey design and implementation toolkits, and longitudinal surveys.

Qualification and experience of field staff personnel (supervisors and enumerators of quantitative surveys, and qualitative interviewers/researchers) [LRF]

Expected qualifications and experience for field supervisors:

- At least a secondary education.
- Experience overseeing the implementation of large household surveys.
- Experience working with electronic tablets for data collection.
- Professional, respectful and fully committed to maintaining the survey protocol and ethical procedures.

- Does not subscribe to harmful gender attitudes.
- Field supervisors should not supervise in areas where they know the community members because this would jeopardize the confidentiality of respondents.
- Fluent in written and spoken English and Swahili.

Expected qualifications and experience for enumerators:

- At least a secondary education.
- Experience conducting surveys in the past.
- Experience working with electronic tablets for data collection.
- Where possible, a background in health, social science, social work or counselling is preferred.
- Friendly, respectful attitude and able to establish a supportive interview environment.

Expected qualifications and experience for qualitative interviewer(s):

- Experience with qualitative data collection
- Able to establish a supportive interview environment and fully committed to maintaining the survey protocol and ethical procedures
- Professionalisms
- Fluency in English and Swahili
- Positive attitude

PAYMENTS TERMS AND SCHEDULE

Payments will be made only upon UNICEF's acceptance of the work performed in accordance with the contractual milestones. The terms of payment are net 30 days, after receipt of invoice and acceptance of work. Payments will be effected upon satisfactory submission of deliverables and done by bank transfer.

Tentative payment will be finalized with the selected evaluation team; below is the proposed payment structure:

- 15 percent upon submission and presentation of the longitudinal mixed-method impact evaluation design and plans [deliverables 1-3];
- 35 percent upon finalization of evaluation design details and development of data collection plan [deliverables 4-7] to allow activities to proceed which must be completed in advance of fieldwork, to pay for translation, programming of questionnaires, and training and pilot;
- 20 percent upon approved deliverables 8-9, which will allow the firm/university to pay for fieldwork costs;

- 10 percent upon approved deliverables 10-11;
- 20 percent upon approved deliverables 12-16.

EVALUATION CRITERIA

The final score for each responsive proposal shall be obtained through a weighted aggregation of the technical and financial scores in a 70% (technical)-30% (financial) ratio.

The Technical Proposal should provide sufficient information to demonstrate compliance with the requirements set out in these TORs.

The technical proposal shall include:

- 1.0 – Executive summary: A Section summarizing the main features and benefits of the proposer's solution and the value it will bring to UNICEF.
- 2.0 – Introduction: A section that introduces the Technical Proposal.
- 3.0 – Approach: A section that adequately describes the project management, methodology and practices that guide the proposer overall approach to meeting UNICEF's requirements as described in this TORs. Samples or links to samples of previous work in this field should be included in Annex to the proposal.
- 4.0 – Delivery: A section that describes in detail the strategy and work plan with milestones of how the proposal will fulfill the services, scope and schedule described in the Terms of Reference. Responses should not be a restatement of the requirements, but should be comprehensive, well-conceived and include detailed approaches to accomplishing tasks and providing the deliverables. The section should clearly describe the proposed team, including a description of the team roles, the number of resources who will fill each role and the timeline of their involvement in the project.
- 5.0 - Project team credentials: A section that summarizes the credentials, experience and capabilities of the delivery team on related projects and clearly shows how their expertise matches the requirements described in the Terms of Reference. Curriculum vitae of the people who will be directly involved in all facets of the delivery of the required services must be included. Please note that substitution of team members during Project implementation shall be subject to the approval of UNICEF.
- 6.0 - Corporate profiles A section that summarizes and describes the experience of the companies/Institutions in relation to delivery of similar services on similar projects, including project scope, duration, number and geographic location and the years in which the work was undertaken. The section should clearly show that the Institutions' expertise matches the requirements described in the TOR.

The consortium must provide the name of at least three clients to whom each institution (IRF and LRF) has provided similar services. UNICEF reserves the right to contact these references, without notifying the consortium. The section should also briefly summarize any previous or present contracts of the firm, with the UNITED NATIONS or any UN agencies, programmes or funds. All references to descriptive material and brochures should be included in the appropriate response paragraph, though the material/ documents themselves may be provided as annexes to the proposal/ response.

The technical proposals shall be evaluated against the following criteria:

N	Criteria	Max points obtainable
1	Quality of the proposed evaluation team [Team experience and qualifications as mentioned in the ToR]	25
2	Expertise in child health and nutrition and interventions to improve these outcomes [Publication record in peer-reviewed journals on relevant topics and recognition in the field]	10
3	Corporate profiles (IRF + LRF) [Lead and local institutionS’ experience in conducting similar types of assignments as mentioned in the TORs] Expertise in impact evaluations more specifically [Experience and knowledge of health and social protection interventions], and data collection of similar evaluations.	10
4	Overall quality of the technical proposal / proposed approach to meeting the deliverables: -Quality of the overall methodology proposed to tackle the assignment, design the evaluation and conduct the evaluability assessment and the baseline survey	15
5	Overall response Understanding of, and responsiveness to, UNICEF requirements; Understanding of scope, objectives and completeness of response; overall concord between UNICEF requirements and the proposals.	5
6	References -3 references for similar assignments (price and scope) carried out within 5 years from the moment of the tender submission need to be submitted for the consortium/company to qualify	5
	TOTAL MAXIMUM ATTAINABLE SCORE FOR TECHNICAL PROPOSAL	70
	MINIMUM ACCEPTABLE SCORE	49

Financial Proposal

Only the corresponding financial proposals from bidders whose technical proposals pass a predetermined threshold mark shall be opened.

The Financial Proposal must provide a description of all costs related to the technical proposal submitted, including the following cost indications, indicated in US Dollar only.

1. Costs of services and deliverables. The section should provide the costs of labor that are proposed to meet each of the services and deliverables of this RFPS as described in the TOR in a format similar to the table below. A similar table should be provided for travel costs as well as for the cost of other services and deliverables. The section should include a list of the proposer's standard rates that were used to calculate the cost of services and deliverables.

	Daily fees	Input (n of days)	Total fees
PI quantitative (lead)			
Research Assistant (quant.)			
Research Assistant (qual.)			
Co-PI qualitative			
Project Manager			
Data Manager			
Field staff personnel (quantitative)			
Field staff personnel (qualitative)			
Other personnel (specify)			
TOTAL (before overhead)			
Overhead (%)			
TOTAL (after overhead)			

2. Estimated travel costs: a section that provides the total estimated cost for travel (as per the Travel details in section 8 of these TORs). The section should describe how the cost estimate was calculated and clearly indicate any assumptions made in the calculation. Travel should be estimated at economy class rates and maximum of UNICEF applicable per diem rates which can be found on this link <http://icsc.un.org/> (all countries and destinations can be found by navigating on the map).

3. Overhead cost rate on this contract is limited to 20% (please indicate the total amount including and excluding the overhead cost).
4. Total cost: a section summing the cost of labor, services and deliverables and estimated travel costs (including and excluding VAT).

The total amount of points allocated for the price component is 30. The maximum number of points will be allotted to the lowest price proposal that is opened and compared among those invited firms/institutions which obtain the threshold points in the evaluation of the technical component (i.e. the lowest price scores the maximum score for the financial proposal). All other price proposals will receive points in inverse proportion to the lowest price, i.e.:

Max. Score for price proposal (30) * Price of lowest priced proposal

Score for price proposal X = -----

Price of proposal X

All prices/rates quoted must be exclusive of all taxes as UNICEF is a tax-exempt organization.

Award of Contract - The award of contract will be made to the contractor(s) whose offer has been evaluated and determined as: (i) responsive / compliant / acceptable, and (ii) having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to this tender i.e. Cumulative Analysis evaluation (point system with weight attribution).

The final selection of the winning proposal will be based on which proposals will give UNICEF the best overall value in terms of technical score/ merit and cost, considering trade-offs between price/ cost and technical factors.

