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Date

Approval Sheet

Social and behavior change strategies implemented in the context of nutrition sensitive agriculture: A scoping exercise to identify current practice, gaps and resource needs

By

Garang Buk Buk Piol MPH

Hubert Department of Global Health

Amy Webb Girard, PhD Committee Chair

Emily Faerber, PhD MPH RD Committee Member Social and behavior change strategies implemented in the context of nutrition sensitive agriculture: A scoping exercise to identify current practice, gaps and resource needs

By

Garang Buk Buk Piol

B.A Sustainable Human Development Catholic University of Eastern Africa 2015

> Amy Webb Girard, PhD Thesis Committee Chair

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## Abstract

Background

**Introduction:** The UN Food and Agriculture Organization (FAO) estimates 690 million people remain undernourished in 2019 (FAO, 2020). Globally, one out of three children under 5 years-of-age is not getting adequate nutrition for optimum growth and development (*Food Insecurity Information Network*, 2020). In 2019, 2.6 million Kenyans faced acute food insecurity. Turkana region in northwest Kenya is one of the worst affected regions, with Turkana South and North placed under phase 5 of Integrated Food Security Phase Classification with Global Acute Malnutrition (GAM) WHZ  $\geq$  30%. Although there was improvement in 2020, this region is still in critical stage 4 of Integrated Food Security Phase Classification (IPC 2020). Food security and nutrition are incredibly complex problems affecting diverse populations across the globe and as such, it require interdisciplinary understanding and approach.

**Objectives:** This study aims to identify approaches used to improve food security and nutrition, identify challenges to implementation, lessons learned, best practices, and clarify needs for nutrition social and behavior change. It will identify the unique features which characterize social and behavioral change in regards to nutrition interventions used in the context of agriculture programs in Kenya's Turkana region.

**Methods:** A qualitative implementation research study was conducted. The implementing partner was selected based on the Nutrition-sensitive agriculture project it was implementing. Different data abstraction tools were used to obtained secondary data from formative research, baseline Survey, periodic reports and communication tools. Equally two project staff from implementing organization were interviewed. Data analysis started with identification of key thematic areas in abstracted data from the project documents. The key behaviors and behavioral determinants are presented in Microsoft excel against the project activities. The COM-B model is used during analysis to categorize and code key targets of SBC approaches.

**Results**: A situational analysis using baseline survey and formative research was conducted. There is no record on how identified behavioral determinants and barrier were used. A community based approach, Care Group methodology was adapted. Six lessons for a total of 139 Care group trainings through the year 2017 were reported, which is the most recent reporting available for this review. Job trainings for 834 Care Group Volunteers/Community Health Volunteers on intensive case finding, referrals and follow-up of children under five CU5 after discharge from either stabilization centers MOH sponsored community outreaches recorded. Collaboration between MoH, department of Agriculture, Save the Children, and communities was reported.

**Conclusion:** The Project has incorporated SBC best practices such as a Care Group methodology which is unique community based approach which engage community at household level, use of pictorial characters to depicted healthy and unhealth child, formative research and baseline survey, and collaborating with other partners on the ground but little is known how these approaches were developed and implemented.

Key: Nutrition-Sensitive Agriculture, Care Group, Implementing Organization,

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BC	Behavior change
CDRs	Community Disease reporters
CG	Care Group
CGV	Care Group Volunteer
CHW	Community health worker
CMAM	Community Based Management of Acute Malnutrition
FAO	Food and Agriculture Organization
FGD	Focus group discussion
FR	Formative research
GAM	Global Acute Malnutrition
IDI	In-depth interview
IPC	Integrated Food Security Phase Classification
IYCF	Infant and young child feeding
KII	Key informant interview
KNBS	Kenyan Population and Housing Census
MCHN	Maternal and Child Health and Nutrition
M&E	Monitoring and Evaluation
МоН	Ministry of Health
NGO	Non-Governmental Organizations
NSA	Nutrition sensitive agriculture
SBC	Social and behavior change
SDGs	Sustainable Development Goals
SMART	Standardized Monitoring and Assessment of Relief and Transition
U5	Under-five (children)
UNICEF	The United Nations Children's Fund
WASH	Water, sanitation, and hygiene
WRA	Women of reproductive age

## List of Acronym

#### **Chapter 1: Introduction**

#### Context of Problem

Although global food security has improved since 2014, the UN Food and Agriculture Organization (FAO) estimates 690 million people remain undernourished in 2019 (FAO, 2020). In the same year, the Food Security Information Network (FSIN) classified 135 million people across 55 countries as "in crisis" or worse; which is categorized as Food Security Integrated Phase Classification (IPC) phase 3 or above. Africa and Asia continue to be the two regions with the most undernourished populations, at 250.3 and 381.1 million, respectively (FAO, 2013).

Globally, one out of three children under 5 years-of-age is not getting adequate nutrition for optimum growth and development (*Food Insecurity Information Network*, 2020). The United Nations Children's Fund (UNICEF) indicates at least 340 million children under five years is suffering from hidden hunger as result of micronutrient deficiency (UNICEF, 2019). The Food and Agriculture Organization estimated 21.3% (144 million) of children under 5 years of age show stunted growth, while 6.8% are considered wasted (FAO, 2020).

#### **Problem Statement**

According to the IPC (July, 2019), 2.6 million Kenyans faced acute food insecurity in 2019. The Turkana region in northwest Kenya is one of the worst affected regions, with Turkana South and North placed under phase 5 of Integrated Food Security Phase Classification with Global Acute Malnutrition (GAM) WHZ  $\geq$  30%. Although there was improvement in 2020, this region is still in critical stage 4 of Integrated Food

Security Phase Classification (IPC 2020). Some of the problems that exacerbate food insecurity include drought, communal conflicts, lack of road infrastructures and high illiteracy level.

#### Purpose

Global food security and nutrition are incredibly complex problems affecting diverse populations across the globe and as such, it require an interdisciplinary understanding and approach. This study aims to identify approaches used to improve food security and nutrition in the Turkana region of Kenya. Furthermore, we plan to identify challenges to implementation, lessons learned, best practices, and clarify needs for nutrition social and behavior change (SBC) globally. This study will also identify the unique features which characterize social and behavioral change in regards to nutrition interventions used in the context of agriculture programs in Kenya's Turkana region.

#### The objectives of this study include:

- Describe approaches to nutrition SBC, as it relates to the content, behavior change approaches, techniques, dose and delivery platforms, in nutrition-sensitive agriculture in the Turkana region of Kenya.
- Characterize program experiences with the design, implementation and monitoring of nutrition social and behavior change strategies, including challenges, innovations, successes, and lessons learned.

#### **Chapter 2: Literature Review**

#### Food Security and Nutrition Background

Food security was defined during the 1996 World Food Summit as the state "when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary need and food preference for active and healthy life" (*Committee on World Food Security*, 2017). This definition encompasses the complexity of food security on individual and household levels, gender, and different cultures (Pietzsch et al., 2018). The concept is divided into four pillars which are availability of food, access to food, utilization to food, and stability of food through the year (*Committee on World Food Security*, 2017). To achieve food and nutrition security, each of the four pillars must be satisfied all times without neglecting one in favor of another (Simelane & Worth, 2020). Depending on factors such as conflict, natural and man-made disasters, the four pillars of food security might affect the level of food insecurity of a household on varying degrees (FAO, 2013; Simelane & Worth, 2020). When one of the pillars is compromised, food insecurity will exist. Food security can be transitory in nature, seasonal, or chronic, and can affect the whole society (Pietzsch et al., 2018).

The second goal of Sustainable Development Goals (SDGs) calls on all stakeholders to commit themselves to end hunger and all forms of malnutrition, as well as to ensure access by all people, particularly the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round (UN, 2017). This commitment is to address the global food security in each country.

Food security and nutrition are closely intertwined, and each can manifest the lack of other. Malnutrition refers to state of physiological disruption resulting from inadequate or deficient dietary intake (Navarro-Colorado et al., 2018). Undernutrition includes "acute, chronic, micronutrition, malnutrition, and intrauterine growth restriction" (Talley & Boyd, 2018).

#### State of food security

The total number of people suffering from hunger and undernutrition was decreasing till 2015 and since then, there has been a significant global increase in number of people who are undernourished from 777 million to 815 million people (Pietzsch et al., 2018). Similarly, the FAO (2020) reported a global increase of severe food insecurity between 2014 and 2019. This increase in food insecurity suggests an increase in prevalence of undernourishment and the number of people suffering from food insecurity. An estimate of nearly 2 billion people were reported to have suffered from severe and moderate food insecurity in 2019 (FAO, 2020). An Estimate from World Food Program and FAO suggests the numbers of people experience food insecurity and undernutrition are likely to dramatically increase in the coming years.

Malnutrition is a global problem that has directe and devastating effects on the health of people at all ages, at both individual and population levels. In 2011, 45% of deaths (3.1 million) for under five children were globally attributed to undernutrition (Black et al., 2013). In 2019, an estimate of 21.3% (144 million) of children under 5 years were stunted, 6.8% (47 million) were wasted and 5.6% (38.3 million) were overweight (FAO, 2020, p. 26).

#### Nutrition-Sensitive Agriculture

Nutrition sensitive agriculture (NSA) is an emerging development concept which is receiving wide-spread support governments, non-governmental organizations (NGO), and private donors to combat food insecurity and malnutrition (Ruel et al., 2018). It is an approach aimed at improving production of affordable, nutritious, and safe food in quantities and quality to meet and sustain the dietary intake of a given population (Uccello et al., 2017). NSA takes a multidisciplinary approach, drawing from different fields such as agriculture, health, water and sanitation, early child development, social protection and education to address determinants related to nutrition, food insecurity and health. (Ruel & Alderman, 2013).

NSA is aimed at addressing underlying determinants of malnutrition, which can include maternal caregiving resources, health services, food insecurity, and water, sanitation and hygiene (WASH) (Ruel et al., 2018; Ruel & Alderman, 2013). To consider an agricultural intervention "nutrition sensitive", all activities such as quality inputs, production, pre- and post-harvest handling, are aimed at providing safe and nutrition food through the year (Uccello et al., 2017).

Past studies highlights contribution of NSA to nutrition through impact pathways such as "production and knowledge, production and income, knowledge and women's empowerment, and knowledge and income" (Sharma et al., 2020). Program impact evaluations in low- and middle-income countries indicates improvement in maternal and child nutrition outcomes as a result of NSA (Bold et al., 2020; Ruel et al., 2018). Maternal knowledge and empowerment, production of nutrition-rich foods, and infant and young child feeding (IYCF) are intermediate outcomes that can have impacts on health and nutrition as result of nutrition sensitive interventions (Bird et al., 2019; Bold et al., 2020; Ruel et al., 2018; Ruel & Alderman, 2013). Sharma et al., (2020) found NSA to address causes of undernutrition in UNICEF framework: "household food insecurity, inadequate care practices, lack of access to health services and unhealthy household environment".

### Nutrition-sensitive Impact pathways

Sharma et al., (2020) has developed a five-pathway framework to understand how NSA interventions improve nutrition outcomes: knowledge pathway, production pathway, women's empowerment pathway, income pathways, and strengthening existing institution pathway. This framework will be used to explore the different ways in which NSA can improve food security and nutrition outcomes.

#### Knowledge Pathway

According to Sharma et al., (2020), 11 of 15 nutrition-sensitive agricultures intervention studies reviewed indicated improved knowledge on WASH and nutrition, which contributed to better dietary practices and improved care practice. Nutrition behavior change communication has contributed to improvement in child dietary diversity and reduced diarrhea among children (Kuchenbecker et al., 2017). Other related knowledge pathways include introduction of the solar-powered drip irrigation technology and emphasis on incorporating a behavior change communication to improve diets through direct consumption and increased income (Ruel et al., 2018).

#### Production Pathways.

Sharma et al., (2020) found improved food production has contributed to improved dietary practices and better food consumption. A review of different studies in Burkina Faso, Nepal and Uganda on production (biofortification and homestead food production) found that NSA programs have positively impacted nutritional outcomes (Ruel et al., 2018). A study by Hoddinott et at., (2015) found dairy production associated with increased milk consumption and low prevalence of stunting among children in Ethiopia.

#### Women's Empowerment Pathway

Greater inclusion and involvement of women in decision making, ownership of assets, and time spent on production are components that affect impact of NSA at the household level. Sharma et at., (2020) point out that interventions targeted at intrahousehold decision making and asset ownership strategies for increasing women's empowerment reveals 1.9% out of 7.9% reduction in wasting. Ruel et al., (2018) found significant associations between the empowerment of women in these capacities, IYCF practices, dietary diversity and child nutrition outcomes. The time spent on implementing these programs will determine it success or not. Higher levels of women's empowerment helped mitigate the effect of low production diversity on maternal and child dietary diversity (Ruel et al., 2018).

NSA interventions directed toward households and specifically targeting women as stakeholders become very important parts in the success of the program. While interventions targeting male knowledge of undernutrition led to increase in household diverse food consumption (Sharma et al., 2020), Ruel et al. (2018) also suggests that women's social, health and nutrition status has long term impacts on their families and future of their children.

#### Income Pathways

Sharma et al., (2020) found that sales from agriculture and other associated products enable households to purchase items such as eggs, cloth, and important services such as health care and education.

#### Strengthening Existing Institution Pathways

This pathway includes capacity building and strengthening of local institutions that implement NSA interventions. Improving services delivery through recruitment of qualified staff, training, and motivation can contribute to successful delivery of NSA interventions and subsequently improve nutrition outcomes (Nordhagen et al., 2019; Sharma et al., 2020). Programs and projects that take a more grassroots approach, encouraging participation and ownership among the local population while taking into account relevant culture and practices have been shown to improve nutrition outcomes (Bold et al., 2020; Sharma et al., 2020).

#### Social Behavior Change Communication

A behavior change communication strategy is a strategy used in "health programs to tailor messages and supportive environment which persuade individuals and community to make a positive health behavior change" (Briscoe & Aboud, 2012). Sharma et al. (2020) suggests knowledge-based behavior change strategy as an essential component during NSA program design and implementation. A suggestion is made for integration of nutrition related behavior change communication strategy to enhance impact of nutrition outcomes (Ruel, 2018). However, lack of theory-based behavior communication in complementary feeding interventions has been shown to limit efforts to improve and scale up programs to reduce burden malnutrition (Girard et al., 2020). The COM-B model is a model for behavior comprised of capability, motivation and opportunity. Capability is defined as having the necessary skills or knowledge to perform an activity (Michie et al., 2011). *Capability* is divided into *physical capability* and *psychological capability*. *Opportunity* are factors that lie outside individual that influences one's ability to perform a behavior (Michie et al., 2011). It is also divided *physical opportunity* and *social opportunity*. According to Michie (2011), *capability* and *opportunity* need to be addressed before moving on to *motivation*.

#### Food Security and Nutrition Background in Turkana

Kenya, an East African country is administratively divided into forty-seven counties. As per 2019 Kenyan Population and Housing Census (KNBS), the country has a population of 47,564,296 (Kenya National Bureau of Statistics, 2019). Turkana County where the project is implemented, is the second largest county in the country and is inhabited by 926,974 people; 478,087 males and 448,868 females. This population is estimated to be in 164,519 household with an average of 6 members per a household. Turkana County is predominantly inhabited by Turkana tribe who are mostly nomadic. According to 2019 census, 7.1 million of the total population have never attended school and Turkana is one of the counties with highest illiteracy rate of 68.7%. Women are disproportionately affected. Although Turkana county experiences sporadic rainfall, a total of 61,209 household of 164,519 (73.2%) practices farming. The agriculture activities include maize, sorghum and green gram. Majority of households keep indigenous cattle, sheep, goat, donkeys and camels.

According to Integrated Food Security Phase Classification (July, 2019), 2.6 million Kenyans faced acute food insecurity with deteriorating malnutriton varying in

different counties. As of September 2020, an estimate of 531,000 children aged 6 to 59 months and 98,400 cases of lactating and preganant mothers required treatment for acute malnutrition in Kenya (*Integrated Food Security Phase Classification*, 2020). Majority of these vulnerable group come from Turkan region. Many extrenal factors have contributed to worsening malnutrition in the Turkana county, including: major drought in 2016, factors such poor infant and young child feeding practices (IYCF), co-morbid health conditions, and other events such as flooding and locusts (*Integrated Food Security Phase Classification*, 2020). While Turkana County has high rates of malnutrition and food insecurity, it is far from the only region experiencing these problems. The region experienced long drought, high depend on livestock which are also affect by drought and communal conflicts. Other counties within Kenya such as Wajir, Mandera, Garissa, Samburu and Isiolo also have vulnerable communities experiencing high rates of malnutrition (*Integrated Food Security Phase Classification*, 2020).

Turkana region is one the worse affected regions in Kenya, especially Turkan South and North, which were placed under phase 5 of Integrated Food Security Phase Classification with GAM WHZ  $\geq$  30%. Although there was improvement in 2020, this region is still in critical stage 4 of Integrated Food Security Phase Classification (*Integrated Food Security Phase Classification*,2020.)

### **Chapter 3: Methodology**

#### Study Design

This qualitative implementation research study is aimed at understanding the features that characterize nutrition-social and behavior change interventions used in the context of agriculture programs in developing countries, and to what extent do they align with identified global best practices. The implementation research described here, in particular, focuses on one project implemented in Turkana, Kenya, and is part of a larger study involving multiple NSA projects. The larger study is led by researchers at Emory University.

#### **Participants Selection and Recruitment**

The implementing partner was selected based on the Nutrition-sensitive agriculture project it was implementing. Projects for the larger study were recruited through emails to listservs and announcements on relevant sites. After the identification of the partner, the communication was initiated with the head office in the United State of America. Upon agreement to participate in the research study, written informed consent was sought at a management level. This process involved the high management in the global headquarters and country office. For in-depth interviews, the participant recruitment was limited to project staff. After the key project staff were identified through information obtained from abstracted documents and the project organogram, communication was initiated to seek their consent and once the agreement was sought, interviews were arranged.

## **Data Collection and Tools**

The project team developed the abstraction tools to elicit different information from project documents, and an in-depth interview guide for interviews with implementing project staff. The following abstraction tools: formative research, core design document abstraction, delivery guides, gender, monitoring and evaluation, and ongoing implementation document abstractions were used to collect different information from project documents and implementing staff.

S/No	Abstraction tool	Purpose of Abstraction tool	
		The in-depth interviews were used to understand	
		and explore: key behaviors the project was	
		promoting, the collaboration with stakeholders,	
1	In-Depth Interview Guide	the social behavior change strategies and the	
		nature in which project activities were	
		implemented. Interviews were done in English	
		either on zoom or Skype.	
		A formative research abstraction form was a tool	
2	Formative Research	used to understand the key behaviors and	
2	Abstraction	behavior determinants investigated in the	
		formative research report.	
		Core document Abstraction tool was used to	
3	Core document Abstraction	abstract data from monthly, quarterly and annual	
		reports	

4	Monitoring and Evaluation	Monitoring and Evaluation document abstraction was used to collect data from Monitoring and Evaluations reports, and baseline survey reports
5	Gender Document Abstraction	For collection information related to mainstreaming the project. Abstracting the roles of gender.
6	Communication Tools	Used to understand how the information is convey. What are the key messaging and quality of message and tools use
7 Ongoing implementation document abstractions		Use to documents to activities implemented and their output/outcome

## **Ethical Considerations**

All the abstraction tools, informed consent and standard operating protocols were reviewed and approved by Emory University's Internal Review Boards. All project documents are confidential and only accessible to the project team. Though no identifiable information was purposefully collected on project staff, interviews are deidentified in transcriptions. The research participants were emailed to ask for their participation in an interview and after the agreement, the schedule was set and a mode of interview (zoom or skype) was established. Before each interview, the informed consent was read out to participants to gain their verbal informed consent. The interviews were approximately one hour long. There were at most two interviewers and one interviewee in each interview. During the interview, participants could voluntarily opt to answer the question or decline. They were in liberty to leave the interview if they felt they could not continue to participate. Interviews were recorded and only accessible to the project team. They will be destroyed after the research.

To protect the confidentiality of the participating project and its staff, the name of the project, implementing organization, and other potentially identifiable information has been removed from this thesis.

#### **Iterative Process**

Iterative process is an important process in qualitative research study. It is the process whereby researcher reviews their existing data and modifies research tools and approaches to enrich the quality of data being collected. The reflections on data abstracted from project documents informed necessary questions during in-depth interviews to understand the nuance on each document or activity.

#### Data Analysis

Data analysis started with identification of key thematic areas in abstracted data from the project documents. The key behaviors and behavioral determinants are presented in Microsoft excel against the project activities. The COM-B model is used during analysis to categorize and code key targets of SBC approaches.

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#### Chapter 4. Results

#### Introduction

Global food security and nutrition are incredibly complex problems affecting diverse populations across the globe and as such, require an interdisciplinary understanding and approach. This study aims to identify approaches used to improve food security and nutrition in the Turkana region of Kenya. It also intends to identify challenges to implementation, lessons learned, best practices, and clarify needs for nutrition SBC globally. It will classify unique features that characterize social and behavioral change in regards to nutrition interventions used in the context of agriculture programs in Kenya's Turkana region.

The project of the focus is a three-year project, initially funded by a foundation grant and implemented by an international non-governmental organization (henceforth referred to as the implementing organization) to sustainably reduce malnutrition and underlying food insecurity in northern Turkana County. Upon termination of the grant funding, the project used their own internal fundraising to support ongoing implementation, albeit at a smaller scale than originally designed. The project utilizes the Care Group Model to improve caregiver child feeding and care practices, as well as sanitation and hygiene practices. The primary intention is to empower women of reproductive age through nutritional knowledge and participation in nutritional activities to improve infant and young child feeding and care practices, sanitation and hygiene practices as well as health seeking behaviors. The project was designed to target 7,256 households with young children under 5 years old, 13,860 women of reproductive age, 8,603 men over 15 years, and 60 church and community leaders.

A Care Group methodology developed in 1995 in Mozambique by the implementing organization has been adapted for this project. The structure of Care Groups is shown in Figure 1. The Care Group method was chosen to increase the effectiveness of the Ministry of Health's volunteer network by linking mothers through CMAM with health facilities near them, identifying malnourished child through screening and referring them. The Care Group methodology is to expand case finding, referrals and behavior change efforts relating to nutrition at the household level. The Lead Care Group Volunteer reach out to 5 Care Group Volunteers (CGVs), each CGV is responsible for delivering messages to six mothers, and each mother reach six household. The purpose is to enable community saturated with health and nutrition messages. Care Group also target households with vegetable gardening training and trainings on how to increase their food supply and diversify their diets. As of 2017, 139 Care Groups were recruited, and each planned six neighborhood women per care group volunteers. It is noted that Care group coordinators and supervisors who are the paid employees of the implementing organization, trained and supervised CGVs. They are local staff who live in project areas. CGVs conducted house-to-house awareness creation meetings. Each CGV was responsible for delivering nutrition and health message to six households. Also CGVs were trained by Lead Farmers on vegetable gardening. The implementing organization distributed variety of vegetable seeds for kitchen gardening. The gardening is seasonal and depend available of water sources. The aim of vegetable garden was to supplement nutrition as well as source of food security.



## **Baseline Survey**

Between June and July 2016, the implementing organization conducted a baseline survey in Turkana region to assess situation on the ground. This needs assessment has found high prevalence of malnutrition, food security, poor hygiene which corresponded to the findings of a survey conducted in the same year by MOH. The following were proposed project activities to the funding agent; but there is indication that changes were made based on identified key behaviors and behavioral determinants in formative research.

## Table 2 Designed Intervention

Designed Interventions based on request for proposal

WRA and other caregivers are increasing adoption of key Maternal and Child Health and Nutrition (MCHN) practices, especially Infant and Young Child Feeding (IYCF), taught in Care Groups, Nutrition Weeks, and other community events.

- Train Care Group Volunteers on hygiene
- Train Care Group Volunteers on Dietary Diversity
- Train Care Group Volunteers Malnutrition signs and symptoms
- Train Care Group Volunteers on Nutrition for Pregnant and breastfeeding
- Train CGVs on complementary feeding, meal frequency and active feeding
- Train Care Group Volunteers on Diarrhea (Refresher hygiene training)
- Train Care Group Volunteers on feeding the sick child
- Train Care Group Volunteers on HIV and Nutrition
- Train Care Group Volunteers on Family planning
- Link Care Groups to MoH and HIS via Community Health Volunteers
- Build Capacity of Moh staff including Community Health Volunteers

Community leaders, especially religious leaders, are increasing their promotion of the importance of proper nutrition for WRA and CU5 in the community

Conduct community and church events and training about women and children's nutrition, HIV testing, and prenatal care. (MoH-sponsored events, church messages, sensitization meetings for men, messages at health facilities)

Community members are increasingly able to identify acute malnutrition WRAs and CU5 and seek for treatment services:

- Continue community sensitization meetings on signs and symptoms of malnutrition in WRA and Children Under 5 and seek treatment services

	HF staff and CHVs have increased capacity to refer and treat malnourished WRA
	and Children Under 5: Collaborate with HF, SAVE and Catholic Diocese staff
	and CHVs on CMAM and maternal nutrition to mobilize the community and
	refer and treat malnourished women and children
	Households with WRA and Children Under 5 are using produce from improved
	kitchen gardens and local foods to improve household nutrition
-	Train Care Group Volunteers on Kitchen garden production and local food
	preparation
-	Train Care Group Volunteers on Kitchen garden harvesting and seed storage
	Breeding groups and rotation program for improved bucks
-	Develop buck breeding groups and rotation program for improved bucks
-	Conduct a baseline survey for the goat breeding component
-	Train para-vets on improved herd heath management (vaccination, deworming,
	dehorning, hoof trimming, etc)

## Formative Research

In 2016, the implementing organization hired a consultant to conduct formative research to inform execution of Care Group intervention, positive deviance/hearth nutrition week implementation strategies for the project. The objectives of formative research are stated as: "(1) Understand common practices relating to nutrition behaviors and determine cognitive positive deviant patterns surrounding food and nutrition including access, food sources and security, feeding beliefs and practices and hand washing practices, (2) Provide input into the development of the care group curriculum

including compliance and adaptation to local context of the curriculum provided by the MOH for nutrition and infant and young child feeding, (3) Inform the development of Care Groups, PD/ Hearth sessions and nutrition weeks, and (4) To provide the [project] management team with comprehensive up-to-date information from key audiences in order to re-design where needed parts of the work plan, Care Group structure and implementation plan."

The formative research uses Focus Group Discussions (FGDs), Key Informant Interview (KIIs), Market Survey, Positive Deviance, and Direct Observation Methods to gather information. The research participants include lactating and pregnant mothers, grandmothers, church leaders, community leaders, Community Health Volunteers, government local authorities and positive deviance families. The following table provides detailed information

Participants	Method	Number of Participants
Community Health Volunteers	FGD	1
Pregnant/lactating Mothers	FDG	2
Grandmothers	FGD	2
Church Leaders	FDG	1
Community Leaders	KII	1
Church Leaders	KII	3
CHEW	KII	1
CHSFP	KII	3
Nutrition officers	KII	1

Table 3: Formative Research Participants

Sub County MOH	KII	3
Sub County Nutrition Officer	KII	1
Visit to road side Markets and shops	Market	1
in randomly selected Villages,	Survey	
Family of children age 6-36 months	Positive Devi	ant inquiry
with WAZ >-1 from poor HHs		

The formative research was conducted in twelves project proposed sites and facilitated by staff at the head office and sub office in Turkana County. The participants were purposively selected, and Care Group coordinators in collaboration with community health volunteer mobilized the participants. The table shows identified key behaviors and behavioral determinants.

Behavior ( Idle Behavior)	Current Practice	Barriers identified	Enablers identified	Other behavioral determinants/factors/socio- cultural influences
Mothers initiate breastfeeding within 30 minutes of delivery	Generally infants are not introduced to breastfeeding within 30 minutes of delivery, but those Mothers who deliver in health centers May initiate breastfeeding immediately Infants are given small port of fat/cream three times a day (Boiled and cooled fat from camel hump or milk cream from goat) two weeks Some mothers get rid of colostrum Infants are given gripe water bonnisan	<ul> <li>Belief that milk production and follow begin when baby's umbilical stump dry and drop off.</li> <li>Other competing tasks do not give women time to breastfeed their children on demand</li> <li>Belief that nipples are unlock by washing them with soap. Cultural belief that a child is given a name before feeding it. "The child has to accept the name by holding the nipple"</li> <li>Colostrum is belief to contain germ</li> <li>Belief that fat hasten child growth</li> <li>One focus group reported that when infants are given gripe</li> </ul>	Grandmothers belief colostrum contain vitamins and help in child growth	Depending on whether traditional rituals were performed during marriage, a mother may be allowed to initiate breastfeeding early or not. Moreover, mothers are considered dirty after delivery hence need to cleanse themselves first before breastfeeding" pge 27 Belief insufficient Milk production is due to inadequate food intake (Food insecurity)

 Table 4: Identified Key behaviors and Behavioral Determinants

		water and bonnisan, it		
		prevent and treat		
Mothers exclusively breastfeed their infants for period of Six months Mother initiating complementary feeding to children within 6 months	Infants are introduced to complementary foods (liquid) at one day. Mothers pre-chew the solid food and feed their infants Semi-solid foods given to a child vary depending on availability A child is feed on porridge made from a mixture of pounded maize, sugar, salt milk (goat and camel) Children are feed with small amount of food and it increases with the age of a child	Mothers are discouraged from breastfeeding a child after they get pregnant. It is culturally believe that a child will get sick if it is breastfed while mother is pregnant Other competing tasks do not give women time to breastfeed their children on demand Belief that fat hasten child growth One focus group reported that when infants are given gripe water and bonnisan, it prevent and treat gastrointestinal disorders Sickness may also prevent mothers from breastfeeding	Mothers are aware about exclusive breastfeeding	There is perception that when a mother does not get enough to continue breastfeeding an infant, early weaning become an optional Food diversity and frequency for children depend on available of food Belief that when a mother is eating and infant stares at her, it deem inappropriate It signifies that an infant is ready to eat. A mother introduces her infant to complementary feeding after noticing an infant remain hungry.
Optimal amount and idle frequency for complementary feeding a child	Meal frequency for a child is once or twice a day Children are feed with small amount of food and it increases with the age of a child	Availability of food dictate the frequency and amount of food given to a child "In response to why children are not fed as recommended, mothers seemed to imply that the child had an	"With the traditional bowl, caregivers know how much to give a child at different ages"	

	understanding of the		
Support and care for			
11			
e			
as from 6 month of age.	11		
	0		
		Grandmothers	Men prioritized in food
	6	encourage pregnant	serving leaving others with
2	e		little or no.
aside for them	such as eggs, goat meat,	available to maintain	
Broth a mixture of milk	liver and beans during	healthy pregnancy.	
and blood, and porridge	pregnancy and lactation.	Grandmothers advise	
are first foods for mothers	Lack of awareness on	pregnant mothers to do	
on the first day of	importance of vegetables	exercise and avoid	
delivery	to pregnant and lactating	heavy duties. They offer	
Consumption of	mothers.	therapy to reduce to	
vegetable is low among	Pregnant and lactating	discomfort from	
pregnancy among	mothers assume that	pregnancy	
	Vegetables are for		
mothers	e	e	
Pregnant and lactating		ANC and to deliver in	
5 5		health facilities,	
2	0	· · · · · · · · · · · · · · · · · · ·	
•	cannot access nutritious	e	
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	[Many pregnant mothers	6	
mothers	0 00		
	and blood, and porridge are first foods for mothers on the first day of delivery Consumption of vegetable is low among pregnancy among pregnant and lactating mothers Pregnant and lactating Mothers feed once a day High consumption Tobacco among these community Consumption of egg is limited among pregnant	home and the mothers' situation"Support and care for feeding a child diminish as from 6 month of age.A child at 6 months is considered an adult and no care or support is given to them while feeding "Further a child's refusal to eat was mainly associated with sickness"Pregnant and lactating mothers eat whatever is available, no food set aside for themTraditional beliefs that discourage women from eating nutritious food such as eggs, goat meat, liver and beans during pregnancy and porridge are first foods for mothersBroth a mixture of milk and blood, and porridge are first foods for mothers on the first day of deliveryTraditional beliefs that discourage women from eating nutritious food such as eggs, goat meat, liver and beans during pregnancy and lactation. Lack of awareness on importance of vegetables to pregnant and lactating mothers.Pregnant and lactating mothersPregnant and lactating mothers.Pregnant and lactating mothersSould a demonition mothersPregnant and lactating mothersSould a demonition 	home and the mothers' situation"Support and care for feeding a child diminish as from 6 month of age.A child at 6 months is considered an adult and no care or support is given to them while feeding "Further a child's refusal to eat was mainly associated with sickness"Pregnant and lactating mothers eat whatever is available, no food set aside for them Broth a mixture of milk and blood, and porridge are first foods for mothers on the first day of delivery Consumption of pregnant and lactating mothersTraditional beliefs that discourage women from eating nutritious food such as eggs, goat meat, liver and beans during pregnancy and lactation. Lack of awareness on importance of vegetables to pregnant and lactating mothers.Grandmothers encourage pregnant mothers assume that Vegetables are for wealthy and educated individuals, and they are foreign and harmful. Economic hardship. They cannot access nutritious food.Grandmother encourage pregnancy Grandmother encourage pregnancy Grandmother encourage pregnancy of dividuals, and they are foreign and harmful. Economic hardship. They cannot access nutritious food.Grandmother encourage pregnant mothers health facilities, There is general understanding of malnutrition being caused by lack of food

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The nomadic nature of			defaulting children from	
communities limit access			The nomadic nature of	
			communities limit access	
to CMAM			to CMAM	

WASH Households accessing clean water	Women and girls are responsible for collecting water Water is fetched from unprotected boreholes, protected borehole such as handpump, shallow wells, sand dams, dams and powered boreholes within a radius of 500M to 2km (5mins to 2hrs) Mothers collect water twice a day mostly in the	Incidences in the past where health staff sell RUFT to make profit There is perception that water from the source (untreated) is clean, sweet and satisfying Assumption that they have grown drinking untreated water, and so there is no problem with it Lack of chemicals for treat drinking water	Mothers know the benefit of treating water to prevent water borne disease such as diarrhea and cholera Participants know different ways of treating water including boiling, use of chemicals, and use of traditional methods such as ash and cloth filtration "page 35"	The same water container is used for water collection and storage At the sand dams, people step into water sources while collecting water Water containers (jerry cans and buckets) are not covered in <i>Manyatta</i>
	morning and/or afternoon		filtration "page 35"	
	but this depends the usage, distance to water			
	source and queuing time			
	"Most of Participants" use water without treating			
	it			
	Quality of water is			
	determined by its color			
	and presence of insects/worms			
WASH	Community Use open	Believe that there is vast		The county is rocky which
Household members	defecation. "River bed is	land with many rivers		makes it difficult to dig deep
practice appropriate	place use page 36"	available for open		pit latrine. "A Latrine
sanitization practice	Children under 5 years	defecation		constructed by Ministry of
(Safe disposal of	accompany their mothers to riverbed or use	There is believe that toilets are not for		health filled up very fast due to its depth Pge 38"
to soap by the				
-----------------				
etermine by				
arcoal for sale				
etermine				

		buying soap for handwashing.		
Food insecurity and coping strategies	Overdependence on livestock and the harsh climatic conditions that do not favor farming and food production contribute to Food insecurity Reliance on Market, relief assistance from the government	Click or tap here to enter text.	Click or tap here to enter text.	Coping Strategies during food insecurity borrowing or sharing with families and relatives, buying from shops and markets, reducing meal amount and sometimes frequency, foregoing food on some days and sale of livestock
Livestock management	Livestock are central to Turkana culture and identity. Five types of animals are kept including goats, sheep, donkeys, camels and cows and chicken. The rare for milk, meat, income, and skins for clothing	Low production because of Lack of pasture and animals being stress to produce milk because of long journey. Drought and Diseases also contribute to low production. Goat milk production is influenced by lack of water and pasture, low genetic breeds, high prevalence of animal disease and lack access to technical information.		

#### **Collaboration**

The implementing organization and MOH has jointly implemented different aspects of Care Group training and in the identification and referral of malnourished children. Distribution of Ready to Use Therapeutic Food (RUFT) and follow-up visits to the target families were done in collaboration with MOH. Project staff cooperated with government senior agricultural and animal officers to train lead farmers on post-harvest handling, seed banking, and routine management practices that improve herd health and breeding. There was coordination between the implementing organization and other international nongovernmental organizations working in the region on activities such health outreach, areas of operations and possible scalability of Care Group model in other areas. Data was shared with stakeholders for county programing. Community leaders and church leaders help in identification and selection of volunteers as well as target families but the activities were managed but implementing organization through CG structure.

#### Donor and Stakeholders involvement

The county government Ministry of Health (MOH) was one of the major stakeholders involved in trainings of Care Group Supervisors, Lead Care Group Volunteers, Care Group Volunteers, Lead Farmers and outreach activities. Other international nongovernmental organizations working in the country were collaborating on nutritional related outreach activities, agreed on areas of operation and share information amongst. Religious leaders (Catholic Church, Ful Gospel Church, Salvation Army and Calvary Temple) provided platforms for reaching out to communities with nutrition message.

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### **Support**

Six lessons for a total of 139 Care group trainings through the year 2017 were reported, which is the most recent reporting available for this review. Job trainings for 834 Care Group Volunteers/Community Health Volunteers on intensive case finding, referrals and follow-up of children under five CU5 after discharge from either stabilization centers or from OTP or MOH sponsored community outreaches recorded. Trainings for community and religious leaders was conducted with main aim of creating awareness to support care groups and women. Five trainings for Community Health Extension workers To increase knowledge among Health Facilities staffs of implementing / integrating CMAM services within other programs in the facility. The following table show the training conducted and number reached.

Training	Purpose of	Target	Planned	Final	% of
Topics	Training	Population	Number	Number	Target
			of	of	Trainees
			Training	Training	completed
	To become	Care Group	139	139	
	active	Volunteers			
	partners in				
	community				
	based				
	management				
	of				
	malnutrition				
	(CMAM)				
	through				
	community				
	screening,				
	referral, and				
	house hold				
	treatment				
	follow up of				
	malnourished				
	children				

Table	5:	Training	Schedule
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Care Group messages and approach	To Understand the program's objectives	Religious leaders	22	22	100%
CMAM/IMAM training	To increase knowledge among HF staffs of implementing / integrating CMAM services within other programs in the facility	Health Facility staff	15	13	86%
Establishment of Kitchen gardens	To acquire skills for production and utilization of kitchen gardens	Lead Care Group Volunteers	46	15	33%
Establishment of Kitchen gardens	To provide support on seed planting, harvesting and preservation	Lead farmers	7	7	100%
Gapping and thinning		Lead Farmers and LCGVs	53	34	63%
Improving herd health knowledge and skills	To identify early signs of livestock diseases and reporting for action	Community Disease reporters (CDRs)	25	18	72%

SBC best practices exhibited by the project

Best Practices for SBC initiatives	J 8	
Follow a systematic process	Baseline Survey was conducted to understand the situation. A Formative Research was implemented following the approval of grant. There are communicated tools (pictorial) and a planned M&E	Nothing much is known how the findings from Formative research were incorporated. There is no reported which indicate M&E has been conducted.
Base design and implementation on evidence.	The activities designed on proposal were based on baseline survey findings.	There is no much information on adjustment made afterward
Ground design and implementation in theory	Care Group methodology was adapted	
Identify and prioritize key behavior aims and address behavioral determinants	Formative research identified key behaviors and behavioral determinants, and barriers	The identified behavioral determinant and barriers were not addressed in project activities.
Target multiple audiences	Mothers, men, community/church leaders, community health workers were targeted. Grandmothers are important audience but not mentioned	
Target interventions at different levels in the social system	Local government institutions, Agriculture department and MOH help with trainings, Community and church leaders provided platform for mobilization and also facilitated delivery of health and nutrition message.	
Engage local stakeholders and multidisciplinary team of experts	Care Group coordinators and supervisors are local staff. Staff from MOH and Agriculture department	

Table 6: SBC best practices exhibit	ted by the project
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	who help with trainings are from within	
Integrate projects with existing programs and/or systems	The implementing organization use the existing volunteer system	
Use multiple, various approaches and communication channels	Care Group is an approach and also a channel of communication, Church provides platforms, health centers.	
Use audience-focused, participatory methods	Care group is hierarchy in its nature but it is participatory. Community leaders were consulted on identification and selection of volunteers	Nothing is explicit about the participation in decision makings, planning and development of communication tools

#### **Chapter 5: Discussion, Conclusion and Recommendations**

#### Discussion

The findings for this study show that baseline survey and formative research were conducted in 12 proposed sites to understand situation on the ground. The baseline survey findings concurred with 2016 SMART survey conducted by MOH in Turkana Regions which identified high prevalence of malnutrition, food insecurity and poor hygiene practices. The formative research found delayed breastfeeding initiation, pregnant and lactating mothers poor feeding habits, low uptake of CMAM services, poor hygiene practices and high food insecurity. The findings also show positive deviant households who practiced exclusive breastfeeding, feeding children on demand and proper use of utensil to feed their children. The aim of formative research was to understand common practices relating to nutrition behaviors and determine cognitive positive deviant patterns surrounding food and nutrition including access, food sources and security, feeding beliefs and practices, and hand washing practices which will inform development of CG curriculum and implementation strategies. However, there is no indication on how identified key behaviors and behavioral determinants from formative research study were used in improving project implementation. The formative research has identified barriers and enablers but the proposed/implemented activities do not correspond with the barriers and enablers identified in formative research.

The data show that Care Groups , a community based approach was used to empower WRA through nutritional knowledge and participation in nutritional activities to improve infant and young child feeding and care practices, and sanitation and hygiene practices. This approach used the local to implement activities and has its roots in community level. This approach strengthen trust between volunteers and communities and enable them to identify health and nutrition issues such as malnutrition at household level and on time. It empower communities to deal with health and nutrition issues within their communities. Besides, it links communities to health facilities via CMAM. It is noted that Care group coordinators and supervisors are paid employees of the implementing organization, trained and supervised CGVs. They are local staff who live in project areas. CGVs conducted house-to-house awareness creation meetings. The payment enable local staff to spend more time on supporting CGVs. Being within communities, closed communication gap between implementing organization and MOH.

Although there was community involvement, nothing is mentioned about the level of engagement in decision making. It is not also explicit what were the contents of trainings conducted and the feedback from trainees and communities. Dose delivered (how many households reached) was stated but the outcome of sensitization meetings and outreaches is not specified. There is need for further research to understand whether the desire outcome has been achieved as a result of SBC approaches used and how they were developed and used.

The findings suggest that the implementing organization has been closely working with Ministry of Health and Agriculture representatives at county level to develop training curriculum, conducted trainings to care groups, lead Farmers, Community Disease reporters, community/Church leaders and Community Health volunteers. The implementing organization has been collaborating with other implementing partners such as Save The Children and UNICEF in cluster meetings. Although the level of coordination between these agencies is not clear, the implementing organization coordinates its activities with other partners implementing food security and nutrition projects. A further understanding is needed to find out how collaboration among partners contribute to CG implementation.

#### Limitation

The study was limited to source data from desk reviews and remote interviews, but many project documents were not provided for abstraction. In particular, documents such as monitoring and evaluation, monthly progress reports, and training manuals were not accessible. Several staff were unavailable for remote interviews. Thus, the focus of this analysis has been on the project's formative research and design.

#### Conclusion

The Project has incorporated SBC best practices such as a Care Group methodology which is unique community based approach which engage community at household level, use of pictorial characters to depicted healthy and unhealth child, formative research and baseline survey, and collaborating with other partners on the ground but little is known how these approaches were developed and implemented.

### **Recommendations**

The NSA project has a unique approach which is rooted at community level and use local capacity. The CG methodology empower locals to be the solution for their problems. The trained individuals are members of the community and will always remain within communities regardless the status of the project. This NSA approach is worth careful study for its scalability in context which are similar to Turkana.

The Formative Research findings reflect the situation on the ground and there is no explanation on how these findings were incorporated in project activities to improve the project roll out. Follow up interviews with project staff to understand how the identified behaviors determinant in Formative Research were used is important. The project has a developed monitoring matrix supposedly for tracking progress but there is no monitoring report available at the time. Study team need to follow up with country project team to access monitoring and evaluation as well as progress report such activity, monthly, quarterly and annuals reports. One of participants mentioned that implementing organization is working on an end-line. This could be important documents to determine which change has been made and how implementation strategies were effective.

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# Appendices

Appendix 1: SBC in NSeA – Aim 2 Staff Interview Guide

## Preparation

Before the interview, review what you know from documents and previous interviews, and what you know about the interviewee, then tailor the guide accordingly. Identify sections/questions that may not be relevant, and those that are priorities. Note any new questions you have that are specific to the person to be interviewed.

### Introduction

As you know, we are interested in learning about this project, in particular, anything that focused on promoting behavior change related to nutrition. I'll be asking you about different aspects of the project and want to hear your honest perspectives, based on your own experience. If you aren't familiar with something I ask about, don't worry – we can just pass those topics and focus on what you're comfortable talking about. If at any point you want to suggest colleagues who you think could shed more light on a particular issue, just let me know and we can follow up with them later.

So, let's start with clarifying your role and experience...

What exactly is your role in the project? I just want to make sure I understand what you work on—your area of expertise--and how your role may have changed since you joined the project. Role of SBC in the program

And since we are focused on behavior change aspects of programming, can you tell me.. What are the behaviors that the project is trying to change?

Among which groups of people?

I know different projects may use different terms to describe things related to social and behavior change. What term does your team use in referring to this aspect of your project related to behavior change? Ask this only if you aren't sure already how they refer to this aspect of project. If it's not obvious that they are familiar with the term 'SBC', explain that we're interested in whatever they may be doing that aims to change behaviors, social norms, knowledge and practices. If they use another term instead of SBC, e.g. BCC, or health promotion, adjust your language as appropriate.

How would you describe the role of SBC [substitute their term as needed] in the project? How significant is this aspect of the overall project implementation--the effort to promote those [whatever they identified in question 2] behavior or social changes? SBC Approaches

SDC Approaches

So, what are the actual methods or approaches used in the project for SBC?

For each approach they mention, probe to clarify: Who? What? Where? When/how often? Probe & prompt to make sure you understand any & all community-based approaches used, any peer group approaches, any kind of media based or advocacy approaches.

Finish by asking if there's anything else: 'Are there any other things you do to promote social or behavior change?'

What approaches do you think work best?

Can you give an example of how those activities contribute to behaviors you mentioned the project wants to change?

Why do you think they worked?

What approaches have not worked so well?

Can you explain what was difficult? Why do you think it didn't bring about the behavior changes targeted?

Strategic SBC/Project Design

So, in implementing those different activities you've described...

What does the team use to guide its work?

Probe to clarify whether there is any written SBC strategy or plan. If so, proceed with questions below, using their term.

If they say there is no guiding document, probe to discover how the activities were designed? what was the basis or reason for certain approaches? what guides their work on those social and behavior change activities?

When was the strategy developed?

How was the strategy developed? (e.g. via stakeholder workshop? Team activity? An evolving process? One person just wrote it?)

Were there any challenges in that process?

Who produced it? Were you involved with its development?

To whatever extent you are familiar with the content of the strategy, can you tell me about: What theories/frameworks are used in the SBC strategy/design of SBC approaches? Why? What are the main behavior change objectives?

Who are the main target groups?

What are the main behavioral determinants the project aims to address? (*Elaborate if needed:* That is, what factors in people's lives make it difficult for them to adopt the key behaviors— what are the barriers to change? And, if your strategy identifies factors that support those behavior changes—what are those enabling factors?)

Are there any [other] cultural or social factors you think the strategy is trying to address? To what extent does the project focus on individual vs. social change?

To what extent was the project designed to integrate with existing structures or build upon previous work? [if needed, elaborate, for example, coordinating project activities with local initiatives, linking with local institutions or building on existing resources]

How has it been used to guide project implementation? Can you give examples of how you or other staff use the SBC strategy, or refer to it in your work?

Formative Research

Can you tell me what the SBC strategy (or design/plan of activities) was based on? Was there any formative research done before the project's SBC approach was developed? Any kind data collection or research that formed the basis for the SBC strategy/plan? *Probe to clarify what exactly they did, any kind of assessments/research, so you can follow up using their terms.* Who conducted the research? What, if any, was your role?

What was the goal of the formative research? Why do you think it was done?

What kind of desk research/literature review was done prior to project design? *If they have no idea, skip the rest. If they are familiar, probe:* 

Describe what kind & how much of the gray literature was reviewed?

Was published literature reviewed? Are you aware of how much? And what the focus of literature reviewed was?

Do you know if any socio-cultural studies (anthropological research reports) were reviewed? Any effort to learn from existing research on cultural values and social factors related to nutrition practices?

Then, what about any community level data collection--What methods were used in formative research?

[If the respondent has not specified any FR methods, but you already know, you can prompt:] I understand \_(TIPS, community assessment, barrier analysis, KAP studies, social network analysis, FGDs, etc.) was used, is that right?

Why was that (those) approach(es) selected? Any other methods used? What groups/populations were studied?

*If they weren't able to answer any questions about the FR methods, skip this.* Do you know whether that research collected any kind of socio-cultural data? For example, did they use qualitative methods to collect data on social networks, social roles, family and community systems, social norms or cultural values? Probe to have them describe.

Overall, what were key findings of the formative research?

Was the staff given any kind of orientation to the formative research findings and how to apply them? (*Probe, for example, maybe they had some kind of dissemination workshop, or team meetings to process findings, or \ a training that explained how results would be applied?*) How have findings been used in designing and implementing the project?

Can you give an example of something learned during the research that influenced the design of your activities or materials?

SBC Implementation

Now I want to focus the rest of my questions on issues related to implementation.

Collaboration

Who do you work most closely with on this project? (e.g. government or NGO entities? local or international partners?)

Are there particular partners you work with for the SBC aspects of the project?

How do you collaborate? What is the nature of that working relationship?

*Probe about communication:* How often do you communicate? How? (via what method) About what?

What would you say is the value or benefit of the project's collaboration with partners? What are some challenges you've faced in those collaborations?

Donor & Stakeholder involvement

How has your donor been involved with the project implementation? (e.g., maybe they mandated certain approaches, request involvement with certain aspects of program...etc.)

What technical guidance do you get from your donor or other experts on SBC implementation? What guidance do you <u>wish</u> you received?

Do you hear of any concerns raised by external stakeholders? How has the project addressed those concerns?

SBC capacity

How would you rate the capacity of your country team (both staff and volunteers) to implement SBC activities? What are their strengths and weaknesses? Give examples.

Do any project staff members live in communities they support? Do you think that makes a difference? (whether answer is yes or no)

Are incentives provided to community volunteers? To participant/beneficiaries? (e.g., food, fertilizer, cash, transport reimbursements) What impact do you think those incentives have had on performance?

Training

What SBC-related training did staff receive (yourself and others)? For example, was there any training on interpersonal communication skills, group facilitation, guidance on the SBC process, etc. *If there are multiple trainings, have them list each training they're aware of. Then, ask* 

So, regarding those different trainings, to what extent would you say they used different approaches—or essentially the same training approach/methods? *If they say 'basically the same' then the following questions cover all training in general; but if they say they used different methods e.g. for FLW vs program managers, gender vs agri trainings, etc., then you need to take time to distinguish the who/what/when/how for any distinctions they've made.* I'd like to ask a bit more about the training content and approaches, so as we go, please let me know if your responses pertain to all trainings generally, or only specific trainings.

Who did the training? When was it?

What kind of training methods were used? *If they don't mention any adult learning approaches, probe:* Did training use any participatory methods? Describe.

Did the training include orientation to the SBC strategy? If so, how?

What skills did the training teach?

What % of time during the training would you say was spent practicing skills?

How do you think the training went? Rate it on scale from 1-5 -- 1=worst to 5=best.

How do you know if the training was successful?

In your own experience, can you think of SBC skills you learned in training that you continue to use in your work?

When new staff have joined the project, have they been trained/oriented to the SBC strategy? If so, how/when?

Support

Has the project delivered any kind of follow-up to training?

Is there any kind of ongoing supportive supervision/coaching provided? How, when, and by whom is support given?

*If interviewee is an out-of-country staff:* What kind of support do you provide to the in-country staff?

*If interviewee is an in-country staff* What kind of technical support do you receive from (main organizational HQ)?

What other support do you <u>wish</u> you received to help the project team perform better? SBC Quality

How do you ensure quality SBC /any interpersonal communication activities? (*Probe:* For example, do you have any system for performance assessment, mentoring & coaching, quality assurance etc?)

*If not yet obtained, request:* Could you share any tools you use for capacity development or QA/QI? (e.g. guides on how to facilitate peer group sessions, quality checklists, etc.)

Have you observed activities in the community? Which activities? How many/how often? *If they have not observed activities, skip the next 2 questions.* 

Can you describe how much interaction there was during these activities? *Probe:* Think about how the beneficiaries were participating—how much time do they spend just listening? Do they talk a lot? To what extent are they doing some activity?

How do you rate the quality of interpersonal communication skills you observed (facilitating group discussion, conducting counseling and education, etc.)? Rate on scale from 1-5 (1=worst to 5=best).

What would you say are the main challenges to implementing your SBC activities? What do you think should be done to improve quality and success of these activities? Monitoring and Evaluation Has there been any kind of evaluation done yet for the project? (whether outcome or process eval). If so, what are key results (even if preliminary)?

Why do you think you are seeing those results?

What are the main indicators (monitoring and/or outcome) being used to track social and behavior change in the project?

Can you give an example of how those indicators are being collected and used?

Sometimes projects change or adapt during implementation. Has there been anything about your project's implementation of SBC that has changed? Anything the project team decided to modify?

What was that decision based on? (e.g., monitoring data, feedback from stakeholders, other conditions in the community, etc.)

How did it go making those changes?

What challenges to monitoring and evaluation of SBC have you faced? What would make it easier?

Follow-up Qs from document review

Clarify anything from document review as needed. *Before interview, insert here any questions* you flagged for follow-up based on your document review. If they haven't been answered already, ask now.

Closing

This has been so helpful! I appreciate your taking time to talk. Before we finish, can you suggest anyone else you think I should talk to? And are there any other documents you think I should review?

*IF you can take a bit more time, you can say:* Can I take a moment to glance through my notes in case there is anything I missed? ...*and proceed with questions.* 

*BUT IF you're already over time, just ask:* Would you be willing to respond to email later, if I discover something I missed or need to clarify? What is the best way to reach you? *Confirm email address or other means.* 

Thank you!

# Appendix 2: FORMATIVE RESEARCH DOCUMENT ABSTRACTION

#### Name of person abstracting this data: Click or tap here to enter text. PROJECT DESCRIPTIVES

PROJECT DESCRIPTIVES						
Project NameCodeCountry			Country			
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DOCUMENTS REVIEWED						
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### FORMATIVE RESEARCH METHODS

What was the aim of the research?

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Did the project conduct desk research/literature review?

Choose an item.

Describe the kind of literature they reviewed. (e.g. academic publications, project gray lit, sociocultural, health & nutrition, etc.).

Click or tap here to enter text.

Did the project conduct primary research?

Choose an item.

Who is/are the group(s) being investigated with the primary research (which groups' behaviors are of interest to the primary research)?

Click or tap here to enter text.

What was the season/month of the primary research?

Click or tap here to enter text.

What were the primary research methods?

Method (e.g. FGD, KII)	Population	Number
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Any other primary research methods that are *not* captured in the table above? Click or tap here to enter text.

Did the primary research methods clearly build upon the literature review findings? How? (explain any clear link between the literature review findings and the design of the primary research)

Click or tap here to enter text.

Describe any other formative research conducted.

Click or tap here to enter text.

Describe any methods used to synthesize findings from literature review and primary methods.

Click or tap here to enter text.

How are the data processed/analyzed?

Click or tap here to enter text.

# FORMATIVE RESEARCH FINDINGS

What were the key behaviors investigated and behavioral determinants identified from the literature review? (fill table below)

Behavior	Current Practice	Barriers identified	Enablers identified	Other behavioral determinants/factors/socio-cultural influences
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Behavior	Current Practice	Barriers identified	Enablers identified	Other behavioral determinants/factors/socio-cultural influences
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# What were the key behaviors investigated and behavioral determinants identified from the primary research? (fill table below)

## FORMATIVE RESEARCH FINDINGS (CONTINUED)

Key findings on social networks (e.g. social dynamics, influential social roles in community/family, who is trusted, etc): Click or tap here to enter text. Key findings on context (anything significant about the socio-cultural, political, environmental context, e.g. "Area has been experiencing conflict for the last 5 years" or "There is a new president who is speaking up more for women's rights") Click or tap here to enter text. Other key findings from the literature review? Click or tap here to enter text. Other key findings from the primary research? Click or tap here to enter text. Are there stated recommendations for SBC strategy design, based on the FR? If so, summarize briefly, with examples (e.g. priority behaviors, selected target groups, or activities recommendations based on formative research): Click or tap here to enter text. Overall, how do you assess the quality and clarity of the report? Explain. Click or tap here to enter text. OTHER List/state any questions or points of clarification to be addressed in interviews. Click or tap here to enter text.

## Appendix 3: MONITORING AND EVALUATION DOCUMENT ABSTRACTION

Name of person abstracting this data:

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PROJECT DESCRIPTIVES

Project Name	Code	Country
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DOCUMENTS REVIEWED		

### What tools/documents were reviewed? Include the link(s).

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### EVALUATION DESIGN

What is the overall evaluation design (for example, cluster randomized controlled trial, pre/post design, etc)?

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What are the outcome indicators identified for the evaluation?

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What are the basic evaluation tools/methods?

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Was a baseline survey/study done?

Click or tap here to enter text.

Describe major findings/conclusions of the baseline.

Click or tap here to enter text.

Describe any changes to evaluation or monitoring indicators made as a result of the baseline survey/study?

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Was a midterm evaluation done?

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Describe major findings/conclusions of the midline?

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Describe any changes to evaluation or monitoring indicators made as a result of the midline survey/study?

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What monitoring and/or evaluation plans or metrics does the project collect that would quantify the dose of exposure of individual participants? For example, do survey instruments inquire about the number of sessions/activities attended or whether the respondent heard particular radio messages? Click or tap here to enter text. PROCESS MONITORING Monitoring indicators used in the project? Click or tap here to enter text. . List and briefly describe basic monitoring methods/tools used. Click or tap here to enter text. How often are monitoring data collected? Click or tap here to enter text. How are monitoring data used? Click or tap here to enter text. COACHING/SUPPORTIVE SUPERVISION Who supports FLWs' activities? Click or tap here to enter text. What system/approach do they use for monitoring/supporting FLW's activities? Click or tap here to enter text. How often do they conduct performance monitoring/supportive supervision checks? Click or tap here to enter text. Describe any checklist/guide they use for monitoring performance [quality]? Click or tap here to enter text. Describe any system they use to guide coaching/giving feedback? Click or tap here to enter text. Based on information available, summarize progress on performance quality to date. Click or tap here to enter text. PROCESS EVALUATION Was a process evaluation done? Click or tap here to enter text. What were the goals? (if applicable) Click or tap here to enter text. What were the basic methods/approach? (if applicable) Click or tap here to enter text. What were the main findings/conclusions? (if applicable) Click or tap here to enter text. If no process evaluation has been done, is one planned/anticipated? (if applicable) Click or tap here to enter text. LEARNING AND ADAPTATION Does the project note any system they use for ongoing learning and adaptation? If so, describe. Click or tap here to enter text. Describe examples of any other learning and adaptation the project has undertaken. (This means, beyond M & E changes noted above, any aspects of implementation that were changed based on data from any monitoring or evaluation sources). Note the change and the impetus or data source driving the change.

Click or tap here to enter text.

OTHER

If applicable, describe any key accomplishments touted by the program through "success stories" or other public documents. Click or tap here to enter text. Clarifications needed / key questions for staff interviews Click or tap here to enter text.