

A photograph of a woman with dark hair, wearing a blue shirt, feeding a young child with a spoon. The child is wearing a light blue tank top and has food on their chin. They are sitting in front of a bamboo wall. A plate of food is visible in the bottom right corner.

TOMAK Social and Behaviour Change Strategy

March 2019 – June 2020



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Abbreviations & acronyms

AEW	Agricultural extension worker
CDA	Community development agent
CRS	Catholic Relief Services
CSO	Civil society organisation
DHS	Timor-Leste Demographic and Health Survey
EE	Entertainment-education
FCS	Food Consumption Score
FGD	Focus group discussion
FNG	Family Nutrition Group
FSN	Food security and nutrition
GESIA	TOMAK Gender and Social Inclusion Analysis
HH	Household
HHDM	Household decision-making
IADE	Institute for Business Support and Development
ICS	Information Consumption Survey
IPC	Interpersonal communication
IYCF	Infant and young child feeding
KAP	Knowledge, attitudes and practice
MAD	Minimum Acceptable Diet
MDD-W	Minimum Dietary Diversity for Women
M&E	Monitoring and evaluation
MAF	Ministry of Agriculture and Fisheries
MoH	Ministry of Health
MRM	Monitoring and results measurement
MSG	Mother Support Group
NGO	Non-governmental organisation
NSA	Nutrition-sensitive agriculture
OFSP	Orange flesh sweet potatoes
PGS	TOMAK Program Guiding Strategy
PLW	Pregnant and lactating women
PSF	Promoter Saúde Familiar (community health worker)
S&L	Savings and loans
SBC	Social and behaviour change
SILC	Savings and Internal Lending Communities
SMS	Short message service
TLFNS	Timor-Leste Food and Nutrition Survey
TOMAK	To'os Ba Moris Di'ak (Farming for Prosperity) Program
VSLA	Village Savings and Loan Association
WASH	Water, sanitation and hygiene
WEE	Women's economic empowerment
WFP	World Food Programme
WRA	Women of reproductive age
WVTL	World Vision Timor-Leste

Executive summary

Based on assessments¹ conducted during its inception phase, TOMAK identified six general behavioural themes as the focus for social and behaviour change (SBC) activities. These themes aim to support the program's objectives and underlying Theory of Change. They include:

- Household nutrition;
- Infant & young child feeding and care;
- Maternal nutrition, care and support;
- Household decision-making, responsibilities and male involvement;
- Water, sanitation and hygiene and environmental enteropathy; and
- Profit-seeking and advancement (not included in this SBC strategy).

This SBC Strategy articulates the key behaviours promoted through TOMAK under these behaviour themes, and describes specific approaches, actors, intended audiences, communication channels, materials, and platforms used to create change. Designed for use by the TOMAK program and implementing partner staff responsible for designing, implementing, and monitoring SBC approaches, the strategy is intended to be a living document that will be closely monitored, reflected upon, and updated on a regular basis.

Key features of the SBC strategy include:

- Focusing on a core set of key behaviours aimed at promoting specific changes in practices and social norms related to improved food security and nutrition, and household income;
- Giving priority to women of reproductive age (WRA) and children, with a major focus on the first 1,000 days of life, including gestation;
- Using a variety of approaches that are mutually reinforcing, including: interpersonal communications, print, community mobilisation, entertainment-education, and mass media;
- Actively monitoring the strategy's impact in terms of influencing or prompting changes in attitudes and norms, and the adoption of key behaviours.

In late 2018, after one year of implementation, reflection workshops were carried with TOMAK and implementing partner staff to reflect on how TOMAK and partner communication channels are working to engage intended audiences around the key behaviours as set out in the SBC strategy.

Below are the main findings from the reflection workshops, and subsequent updates to the SBC strategy:

- There is a need to differentiate between purchased eggs and eggs produced by households so as to promote both options to households (HH), particularly because homestead egg production remains low. However, eggs remain the most affordable, accessible, and culturally appropriate animal source protein.²
- As homestead poultry production is currently low, HHs are not in a position to kill their own chickens for family consumption on a regular basis. TOMAK and partners will focus instead on the promotion of egg consumption and re-visit the promotion of regular consumption of homestead poultry once production increases.
- Certain partners recognised the need to address specific practices that were not being promoted during the first year of implementation (e.g. increased feeds for sick children).
- It is challenging to engage men in groups where the primary focus is on nutrition (e.g. Mother Support Groups, Parents Clubs, Family Nutrition Groups). Conversely, it is challenging to engage women in groups where agriculture is the primary focus. While it is not necessary to have equal numbers of men and women in all types of groups, partners agreed to increase efforts to engage men in nutrition (e.g. by integrating nutrition content catered to men in male-dominated agriculture groups).

¹ TOMAK assessments conducted in 2016: Information Consumption Survey, Gender and Social Inclusion Analysis, Knowledge, Attitudes Survey and Practices Qualitative Assessment on Food Consumption.

² TOMAK Egg and Chicken Consumption Study: <http://tomak.org/wp-content/uploads/2019/04/Animal-Protein-Study-English.pdf>

- Grandmothers are hard to reach! As a key influencer of household nutrition and maternal and infant and young child feeding practices, some grandmothers do attend community nutrition groups, but are a challenging audience to engage as they spend the majority of their time within the home and/or in the field. TOMAK and partners will continue to focus attention on communication between couples thus strengthening the couple unit and their ability to influence grandmothers. However, TOMAK and partners will continue to look for opportunities to integrate grandmother characters in training scenarios and their images into visual materials rather than develop separate materials and activities specifically for this audience.
- An increased focus on household decision-making (HHDM) is needed across TOMAK and its partners. TOMAK recently finalised HHDM training modules which partners will trial within their existing community platforms (see Annex 3 for specific partner platforms).

Broader updates to the strategy include:

- Addition of adolescents and their influencers as specific intended audiences (based on in-depth formative research conducted in 2018).
- Addition of agricultural extension workers (AEWs) as a specific intended audience (and key influencer of farmer behaviour).
- Updates to key practices based on implementation experience.
- Updates to national level survey data (Demographic Health Survey) and associated effects on key practices, and addition of TOMAK food security and nutrition (FSN) baseline data.
- Inclusion of behavioural targets based on the TOMAK FSN baseline.

The **key behaviours** described in the strategy and summarised in Table 1 start with promoting a *targeted* set of feasible practices that have been monitored and revised based on audience movement along a continuum of change. Key behaviours take into consideration what audiences are already doing (e.g. mothers are able to make decisions around what vegetables to prepare for family meals) and attempt to prioritise and focus on key practices that audiences are *not* doing and which will have a significant impact on nutrition at household level.

Table 1: Intended audiences and key behaviours

Audience segment	Behaviour theme	Key behaviours for intended audiences
Women of reproductive age³ (WRA) (15-49 years)	Household nutrition	<ul style="list-style-type: none"> WRA consume foods rich in micronutrients (iron, vitamin A, zinc) at least 4 times per week⁴ (e.g. orange flesh sweet potatoes (OFSP), papaya, carrots, kangkung, beans, chicken, moringa). WRA consume beans, and/or soy at least 2 times a week. WRA consume fish (fresh or tinned)⁵ at least once a week. WRA consume eggs (purchased) at least once a week. WRA allocate eggs from homestead chicken production for their own consumption once per week.
	Maternal nutrition	<ul style="list-style-type: none"> Pregnant and lactating women (PLW)⁶ consume additional nutrient rich foods at meals or snacks (specific snacks like eggs, OFSP, bananas).⁷
Mothers of children under 2 years	HH nutrition	<ul style="list-style-type: none"> Mothers incorporate foods rich in micronutrients⁸ into family meals at least 4 times per week (e.g. OFSP, papaya, carrots, dark greens, beans, chicken). Mothers incorporate beans, and/or soy into family meals at least 2 times a week. Mothers incorporate fish (fresh or tinned) into family meals at least once a week. Mothers incorporate eggs (purchased) into family meals at least once a week. Mothers allocate eggs from homestead chicken production for household consumption once per week.
	Infant and young child feeding (IYCF)	<ul style="list-style-type: none"> Mothers breastfeed exclusively until 6 months of age. Mothers initiate complementary feeding at 6 months of age. Mothers continue to breastfeed at least until the child turns 2. Mothers fortify rice porridge with nutrient-rich foods (beans, eggs, soy product, and/or smashed peanut, shredded meat or fish, fruits, vegetables, oil). Mothers increase frequency of breastfeeding children aged 6-24 months during and after illness and offer additional foods.
	WASH and environmental enteropathy	<ul style="list-style-type: none"> Mothers wash hands with soap after defecating, after washing baby's bottom, before feeding children, before preparing food/cooking, eating and wash children's hands before eating.⁹

³ WRA were selected over pregnant and lactating women (PLW) because the program will have a greater impact by focusing on daily, regular, and consistent dietary diversity for all WRA rather than PLW and their specific needs. However, PLW key behaviours are included in Appendix 2 under the full behaviour list to revisit on an annual basis.

⁴ Deficiency rates for WRA: anaemia 42% (DHS 2016), vitamin A 14%, iodine 27% (Timor-Leste Food and Nutrition Survey, 2013)

⁵ Formative research showed that in general mothers found tinned fish: accessible, affordable, and easy to prepare.

⁶ This behaviour is largely focused on PLW as there are multiple barriers for non-PLW who are WRA to negotiate extra nutritious foods for their own consumption.

⁷ Snack options will likely vary per geographic location. Assessments show pregnant women focus on increased quantity during pregnancy, not quality (largely rice and greens) (Formative Research Report on *Household Nutrition and Household Decision-making, Responsibilities, and Male Involvement* in Timor-Leste, Mercy Corps (2017). Further investigation needed around feasibility of husband and mother-in-law support for WRA to consume additional nutritious foods when they are not pregnant.

⁸ Deficiency rates for children under 5: anaemia 40% (62% amongst age 6-8 months) (DHS 2016), vitamin A 8%, zinc 34% (TLFNS, 2013)

⁹ As a nutrition-sensitive agriculture project, TOMAK recognises the importance of other key WASH-related behaviours (e.g. safely dispose of the faeces of all family members, treat water, and cover all drinking water), however has elected to focus on a targeted set of key behaviours for this year.

Audience segment	Behaviour theme	Key behaviours for intended audiences
	Household decision-making and male involvement	<ul style="list-style-type: none"> Mothers initiate conversation with husbands on a weekly basis on allocation of resources for weekly protein purchase. Mothers encourage men's regular participation in household tasks (e.g. cooking, washing dishes/clothes, feeding/bathing children). Mothers show appreciation for men's regular participation in household tasks (e.g. cooking, washing dishes/clothes, feeding/bathing children).
Husbands/ Fathers of children under 2 years	HH nutrition	<ul style="list-style-type: none"> Husbands/fathers purchase or encourage the purchase of beans, soy, eggs, fish, and tinned fish.¹⁰ Husbands/fathers allocate eggs from homestead chicken production for household consumption once per week.
	Maternal nutrition	<ul style="list-style-type: none"> Husbands/fathers purchase or encourage the purchase of 'extra' nutritious food for consumption by PLW.
	IYCF	<ul style="list-style-type: none"> Husbands/fathers actively engage with their children under 24 months of age on a daily basis (e.g. feeding, play). Husbands/fathers support mothers to exclusively breastfeed until the baby is 6 months old. Husbands/fathers support mothers to initiate complementary feeding at 6 months of age. Husbands/fathers support mothers to exclusively breastfeed until the baby is 6 months old.¹¹ Husbands/fathers support mothers continue to breastfeed at least until the child turns 2. Husbands/fathers support mothers to fortify rice porridge with nutrient-rich foods (beans, eggs, soy product, and/or smashed peanut, shredded meat or fish, fruits, vegetables, oil). Husbands/fathers support mothers to increase frequency of breastfeeding children aged 6-24 months during and after illness and offer additional foods.
	WASH and environmental enteropathy	<ul style="list-style-type: none"> Fathers wash hands with soap after defecating, after washing baby's bottom, before feeding children, before preparing food/cooking, eating and wash children's hands before eating.
	HHDM and male involvement	<ul style="list-style-type: none"> Husbands initiate conversation with wives on a weekly basis at minimum on allocation of resources for weekly protein purchase. Husbands/fathers assume some household tasks typically considered mothers' work (washing dishes/clothes etc.). Husbands encourage wives to be involved in decision-making around household resources.
Grandmothers of children under 2 years/ mothers-in-law	HH nutrition	<ul style="list-style-type: none"> Grandmothers purchase or encourage the purchase of beans, soy, eggs, fish, and tinned fish.
	Maternal nutrition	<ul style="list-style-type: none"> Grandmothers purchase or encourage the purchase of 'extra' nutritious food for consumption by PLW. Grandmothers encourage PLW to eat additional nutritious foods at a meal or snack (eggs, OFSP, bananas).

¹⁰ Focus is on animal protein due to widespread deficiencies in protein and also because assessments show that mothers have to ask for permission for purchases over \$1 including one egg.

¹¹ Early initiation of breastfeeding has decreased from 92 % to 75% and exclusive breastfeeding from 62% to 50% (from DHS 2009 to DHS 2016).

Audience segment	Behaviour theme	Key behaviours for intended audiences
	IYCF	<ul style="list-style-type: none"> Grandmothers fortify rice porridge with nutrient-rich foods (beans, egg, soy product, and/or smashed peanut, shredded meat or fish, fruits, vegetables, oil). Grandmothers support mothers to exclusively breastfeed until the baby is 6 months old. Grandmothers support mothers to initiate complementary feeding at 6 months of age. Grandmothers support mothers continue to breastfeed at least until the child turns 2. Grandmothers support mothers to fortify rice porridge with nutrient-rich foods (beans, eggs, soy product, and/or smashed peanut, shredded meat or fish, fruits, vegetables, oil) Grandmothers support mothers to increase frequency of breastfeeding children aged 6-23 months during and after illness and offer additional foods. Grandmothers prioritise eggs from homestead chicken production for grandchildren 6-23 months consumption.
	WASH and environmental enteropathy	<ul style="list-style-type: none"> Grandmothers wash hands with soap after defecating, after washing baby's bottom, before feeding children, before preparing food/cooking, eating and wash children's hands before eating.
	HHDM and male involvement	<ul style="list-style-type: none"> Grandmothers encourage joint decision-making between couples on management of household resources. Grandmothers encourage daughters-in-law to initiate discussions with their husbands around management of household resources. Grandmothers encourage son/son in-law's involvement in household tasks (e.g. cooking, washing dishes/clothes, feeding/bathing children).
Farmers (male and female)	HH nutrition	<ul style="list-style-type: none"> Farmers utilise income to purchase nutrient-rich foods (fresh or tinned fish, eggs etc.) for household consumption. Farmers cultivate nutrient-rich crops (soy, OFSP, beans, peanuts, moringa, etc.) for household consumption. Farmers conserve part of nutrient rich crops (eggs, beans, peanuts, soy etc.) for household consumption.
	HHDM and male involvement	<ul style="list-style-type: none"> Farmers initiate conversations with their spouse regarding crop selection, use of harvested crops (e.g. allocations for both consumption and sale), and income from crops. Farmers discuss resources and labour needed for the cultivation and use of nutrient-rich crops (soy, orange flesh sweet potatoes, beans, peanuts, fruit, moringa, etc.) for household consumption).
Agricultural extension workers (AEWs)	Nutrition-sensitive agriculture (NSA)	<ul style="list-style-type: none"> AEWs facilitate discussions with existing farmer groups and individual households on the nutritional value of different crops as one consideration to be taken into account when deciding what crops to plant. AEWs facilitate discussions with farmer groups and individual households on allocation of a portion nutritious crop production (e.g. iron and vitamin A rich crops) for home consumption. AEWs promote regular chicken vaccination for Newcastle disease with their farmer groups according to MAF's set vaccination schedule (3 times per year- March, July, November).

Audience segment	Behaviour theme	Key behaviours for intended audiences
		<ul style="list-style-type: none"> • AEWs promote the nutritional benefits of eggs in conjunction with promoting chicken vaccination to farmer groups.
Adolescents (10-19 years) ¹²	Adolescent nutrition	<ul style="list-style-type: none"> • Adolescents eat breakfast before going to school. • Adolescents choose clean water as the drink of choice at school. • Adolescents bring clean water from home to drink at school. • Adolescents select and purchase snacks at school that include either an animal or plant-based protein source. • Adolescents utilise pocket money to purchase foods that are rich in macronutrients and micronutrients (e.g. eggs, tempe, peanuts, ripe fruits) that are available for sale at or near school.
Parents of adolescents	Adolescent nutrition	<ul style="list-style-type: none"> • Parents support adolescents to wake up with sufficient time to eat breakfast at home prior to school. • Parents encourage adolescents to bring clean drinking water to school from home. • Parents encourage adolescents to make healthy snack choices at school that include either an animal or plant-based protein. • Mothers prepare or encourage the preparation of traditional dishes that appeal to adolescents for family meals (e.g. <i>batar da'an/marotok</i> that include corn, beans, peanuts, carrots, and dark green leafy vegetables).
Grandmothers of adolescents	Adolescent nutrition	<ul style="list-style-type: none"> • Grandmothers support adolescents to wake up with sufficient time to eat breakfast at home prior to school. • Grandmothers prepare or encourage the preparation of traditional dishes that appeal to adolescents for family meals (e.g. <i>batar da'an/marotok</i> that include corn, beans, peanuts, carrots, and dark green leafy vegetables).

The proposed approach for changing social conditions and individual behaviours focuses on influencing different audiences through multiple and reinforcing channels. TOMAK has established agreements with three 'Lead Partners' (Catholic Relief Services, Mercy Corps and World Vision Timor-Leste) to facilitate the delivery of NSA and SBC activities at community level. The Lead NGO programs involve a varying mix of activities, aimed at increasing production and consumption of nutritious foods (e.g. crop legumes, moringa, orange flesh sweet potato, fish, eggs), targeting the main nutrient deficiencies. Approaches include the establishment of farm demonstration plots, home gardens, and fish ponds, with associated farmer training and promotion activities; facilitation of input supply arrangements; establishment of savings & loans (S&L) groups; and establishment of community nutrition groups as a conduit for promoting improved nutrition practice. These activities are now well established across TOMAK's 66 target suku, with involvement of over 14,000 beneficiary households.

While Lead Partner activities and materials currently differ, the SBC strategy has helped align partner approaches over time by identifying a set of key behaviours and audience segments. As Lead Partners are responsible for the implementation of interpersonal communication (IPC) and community mobilisation components of the SBC strategy, TOMAK supports the re-printing and sharing of IPC materials across the program. TOMAK also complements Lead Partners' IPC and community mobilisation activities through mass media, entertainment-education, and social media channels.

The program has also developed a separate SBC strategy focused specifically on profit-seeking and advancement behaviours.¹³

¹² TOMAK recognises that this is a wide age range and that there are differences between adolescents 10-14 and 15-19 years of age, such as access to mobile phones and the increasing influence of peers with age. This strategy identifies key practices across age groups, but when designing SBC materials and activities, TOMAK and partners will consider key differences between adolescents based on age and gender.

¹³ Profit-Seeking Social and Behaviour Change Strategy: <http://tomak.org/resources/>

1. Introduction

The *To'os Ba Moris Di'ak* (Farming for Prosperity) Program (TOMAK) is a five (plus five) year agricultural livelihoods program funded by the Australian Government in Timor-Leste, with Phase 1 funding of AUD25 million (2016-2021). TOMAK's goal is to ensure rural households live more prosperous and sustainable lives. It will achieve this through parallel and linked interventions that aim to:

- Establish a foundation of food security and good nutrition for targeted rural households (Component 1); and
- Build their capacity to confidently and ably engage in profitable agricultural markets (Component 2).

The program is set in the context of an overwhelmingly subsistence-oriented rural sector with weak market linkages; food insecurity with a regular 'hungry season' that is accentuated by climate change; and serious malnutrition, especially among children.

Component 1 (Food Security and Nutrition) promotes nutrition-sensitive agriculture (NSA) approaches to improve the availability and utilisation of nutritious food. This involves promoting improved production, storage, processing, preservation, and preparation of nutritious food; improved household purchasing and investment power; and more inclusive decision-making around nutrition within the home. Component 2 (Market System Development) promotes the development of commercial agriculture following a market system development approach, focussing on selected higher-potential value chains.

Social and behaviour change (SBC) approaches are being applied across both components. For Component 1 this involves working to influence the behaviour of households towards better nutritional practice; and for Component 2 to promote profit-seeking and self-advancement behaviours. TOMAK's SBC approach aims to understand how individuals and communities in Timor-Leste change, and what they need in order to make those changes lasting.

Gender is embedded in the planning, implementation and monitoring of activities across the program, promoting gender equality and women's economic empowerment.

The primary target area for Phase 1 food security and nutrition activities comprises 66 inland mid-altitude suku (villages) with reasonable agricultural potential, located in Baucau, Bobonaro and Viqueque municipalities.

Implementation is based on a systems approach, working with and through a broad range of partners, including Government (across various Ministries and administrative levels), NGOs, CSOs and the private sector.

TOMAK's Program Guiding Strategy (PGS), finalised in early 2017, identified six general behavioural themes as the initial focus of SBC activities. This SBC strategy articulates the key behaviours that are being promoted through TOMAK and describes specific approaches, actors, intended audiences, communication channels, materials, and platforms that are being used to create change. Designed for use by the program and implementing partner staff responsible for designing, implementing, and monitoring SBC approaches, the strategy is a living document that is being closely monitored, reflected upon, and updated regularly.

Development of the strategy followed several key steps and included input from TOMAK staff and implementing partners. The foundation for the strategy comes from evidence-based public health and food security recommendations. Major steps in developing the strategy have included:

- A desk review of household nutrition and decision-making and male involvement behavioural themes (including TOMAK assessments) conducted in the second half of 2016;
- Formative research on three behaviours under the household nutrition and decision-making behavioural themes;
- A review of various potential audiences and the best communication channels for reaching them; and
- A rapid capacity assessment of communication actors in Timor-Leste.

The original strategy developed in October, 2017 has subsequently been updated to take into account additional formative research conducted by TOMAK on adolescent nutrition and the results of reflection workshops conducted with key implementing partners following one year of implementation. These workshops allowed TOMAK and implementing partner staff to reflect on how TOMAK and partner communication channels are working to engage intended audiences around the key behaviours as set out in the SBC strategy.

This SBC strategy draws on a number of theoretical models that focus on behaviour change at the individual, interpersonal, and community level. At an individual level, the Health Belief Model, Theory of Reasoned Action, and Stages of Change theory emphasise planned individual behaviours (moving along a continuum of change), and rational decision-making (focusing on perceived barriers, benefits, and perceived social norms). At an interpersonal and community level, Social Learning Theory, Theory of Gender and Power, Diffusion of Innovations and Ecological models, focus on the influence of self-efficacy of individuals, social networks, role models and enabling factors to perform a behaviour.¹⁴

2. Situational analysis

Despite significant government and development partner efforts over the last 10 years, overall nutritional status of the Timorese population remains poor. Almost half of all children (46%) under five years of age are stunted (too short for age), 40% are underweight (too thin for age), 40% are anaemic (62% amongst age 6-8 months)¹⁵ and 34% deficient in zinc.¹⁶

It is interesting to note that the 46% overall stunting rate only goes down to 36% for the wealthiest households and mothers educated beyond secondary level (from 2009 DHS to 2016 DHS). This furthers the argument that the reasons for chronic malnutrition are multifaceted and go beyond education and income. Only 13% of children 6-23 months consume a minimum acceptable diet (based on meal frequency and dietary diversity). This is a decrease from 18% in 2009. For women of reproductive age (WRA), 27% are underweight and 24% are anaemic.¹⁷ While malnutrition among children under five is widespread, early initiation of breastfeeding is 75%, with 50% exclusively breastfeeding through to six months. The median duration of any breastfeeding decreased from 17.5 months to 16.2 months from the 2009 DHS to the 2016 DHS.

2.1. Key findings from TOMAK food security and nutrition baseline

TOMAK carried out a baseline study on food security and nutrition prior to implementation of activities.¹⁸ The baseline covered 580 survey respondents (240 women) across three municipalities (Baucau, Bobonaro and Viqueque); as well as 45 women and 39 men participants in 12 focus group discussions, and 13 semi-structured interviews with partners. Data was collected between 21 August and 16 September 2017.

The study aimed to:

- Establish a baseline for dietary diversity for WRA, and dietary diversity and meal frequency for children 6-23 months.¹⁹
- Establish food security levels of households over a 12-month period.
- Describe nutrition-related decision-making roles and responsibilities of men and women.
- Explore specific knowledge, attitudes and practices of WRA and male heads of household.

¹⁴ C-Change. A Short Guide to Social and Behaviour Change Theories and Models (2012).

¹⁵ DHS 2016.

¹⁶ TLFNS 2013.

¹⁷ DHS 2016.

¹⁸ <http://tomak.org/wp-content/uploads/2018/05/20180517-NSA-Baseline-Summary-English-web.pdf>

¹⁹ The following measures were used: **Minimum Dietary Diversity for Women (MDD-W)**: This is measured using a 24-hour recall period; **Minimum Acceptable Diet (MAD)**: the MAD measures the diets of children aged 6-23 months in terms of whether they received the minimum dietary diversity and also the minimum meal frequency. This is measured using a 24-hour recall period; **Food Consumption Score (FCS)**: This tool is intended to reflect access to a range of foods at the household level. The score is calculated on the frequency of consumption of particular food groups over the previous seven days. TOMAK complemented this score with supplementary questions that allow examination of the preceding 12-month period when respondents experienced difficulty accessing sufficient food for consumption.

The study applied mixed methods, collecting quantitative survey and qualitative focus group discussion data from WRA (15-49 years) with a child aged between 6-23 months, grandmothers/mothers-in-law, male heads of household, grandfathers/fathers-in-law and local partners/facilitators/influencers in TOMAK's target municipalities of Baucau, Bobonaro and Viqueque. Survey sampling was designed to be representative at municipal level. Below are key findings from the baseline study.

Minimum Dietary Diversity WRA

The study found that dietary diversity levels for WRA in TOMAK target municipalities is very low, with only 15% of WRA (38 respondents) consuming at least 5 of the 10 food groups. The vast majority of women (81%) consume 2 to 4 food groups a day, falling well short of the recommended 5 groups to reach minimum dietary diversity. The largest proportion in each municipality consume only 3 food groups a day. This highlights the importance of emphasising increased diversity in women's diets.

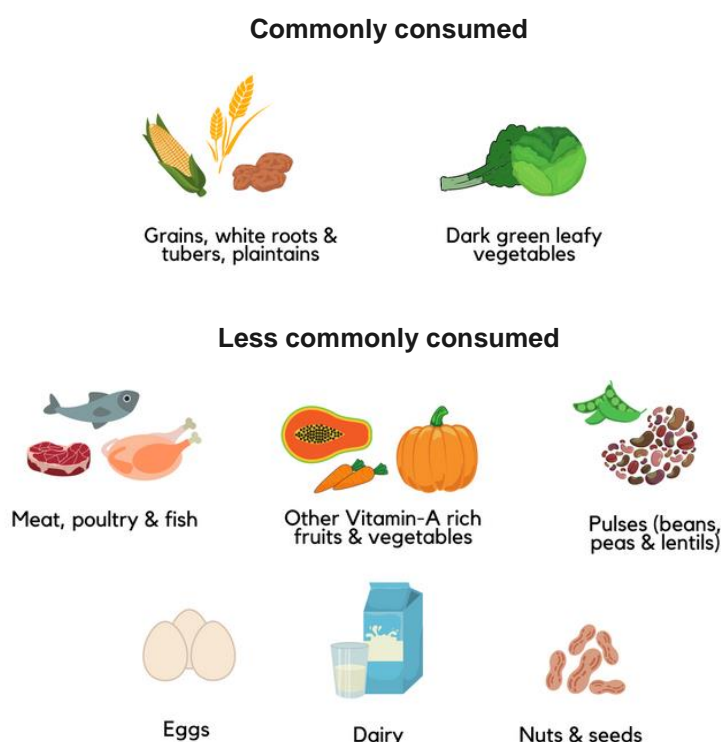


Figure 1: Dietary diversity for WRA (from TOMAK FSN baseline)

Minimum Acceptable Diet

Overall, the proportion of children (breastfed and non-breastfed) aged between 6 and 23 months with minimum acceptable diets in TOMAK target municipalities is very low, at 7.5%. For breastfed children, this is primarily due to low dietary diversity. For non-breastfed children, this is due to low dietary diversity and low minimum meal frequency, particularly for milk feeds.

Food Consumption Score

Within the thresholds of the Food Consumption Score (FCS), only 19% of households in the TOMAK target areas reached an acceptable FCS. Analysis shows a lack of regular diversity and the prevalence of cereals and tubers, dark leafy greens as well as oils/fats and sugar consumption. Meat, eggs, fish, fruit, orange flesh vegetables and pulses are less frequently consumed. The most common perceptions on how often meat, eggs and fish should be consumed was once a month (women 34%, men 47%). Far fewer respondents felt more regular consumption of these foods was needed.

Unlike the results from the minimum dietary diversity and minimum acceptable diet scores, the TOMAK figures on food consumption contrast with the national figures reported in the Timor-Leste Food and Nutrition survey

2013, which included 36.1% of respondents from Baucau reaching acceptable food consumption, 70.3% for Bobonaro and 55% for Viqueque.²⁰

Decision-making in the household

Men tend to lead on farming decisions such as which animals to raise or which crops to grow on the farm, while women initially seemed to lead on decisions relating to food purchases and healthcare. However, findings indicate that women still seek permission from their husbands on these topics. There was a relatively high incidence of reported discussion and joint decision-making across a variety of household decisions, including for food and larger household purchases. This may indicate areas to leverage in terms of providing information on specific, nutritious foods to purchase for the family. Roles within households seem gendered, with women largely responsible for work within the home and men responsible for farming and income generation. Within this context however, men were reportedly involved in a range of household tasks but at low levels of frequency. Overall, women and men reported being satisfied with their roles in the household. Men are engaged in providing advice and decision-making around nutrition, particularly for food that children should be consuming, but less so for their wives.

2.2. Other relevant findings from initial TOMAK nutrition-related surveys

Analysis of secondary data and review of the three nutrition-related surveys conducted by TOMAK in 2016 has identified a range of supply-side food security and nutrition constraints and opportunities outlined in Table 2 below.²¹

Table 2: Food security and nutrition context

Nutrition focus	Constraint	Description and cause	Opportunities
Supply-side	Food Availability	Productivity is constrained by: <ul style="list-style-type: none"> • Reliance on water-intensive, rain-fed agricultural systems. • Limited access to production inputs (e.g. seeds for diverse food crops) • Small farm sizes and low food production capacity • Scarcity of labour, largely at peak times (e.g. harvesting) • Farmers' beliefs/choices to only produce enough food for subsistence and factoring in nutritional needs into crop production • Animals being perceived as assets or savings for cultural ceremonies and not for regular household consumption 	<ul style="list-style-type: none"> • Farmers see 'potential' in farming
	Food Access	<ul style="list-style-type: none"> • Limited access to financial services for farmers (especially female farmers) • Limited affordability of diverse, nutrient-dense foods 	<ul style="list-style-type: none"> • Enabling environment at the national level with multi-sectoral efforts to address malnutrition, including access

²⁰ TLFNS 2013.

²¹ TOMAK Program Guiding Strategy (2016), TOMAK Gender Equality and Social Inclusion Analysis (2016), TOMAK Food Consumption Survey (2017), TOMAK Knowledge, Attitudes, and Practice Survey (2017), Formative Research Report on Household Nutrition and Household Decision-making, Responsibilities, and Male Involvement in Timor-Leste, Mercy Corps (2017), TOMAK-IADE research on *Farmer Entrepreneurs: Attitudes Towards Farming as a Business* (2018).

Nutrition focus	Constraint	Description and cause	Opportunities
		<ul style="list-style-type: none"> Household decision-making behaviours around allocation of scarce resources 	<p>to good quality, nutritious food²²</p> <ul style="list-style-type: none"> Access to markets increasing Families beginning to adopt inland fish farming, utilising production for household consumption (fish is not perceived as an asset for cultural ceremonies)
	Food Stability	<ul style="list-style-type: none"> Improper post-harvest handling and lack of effective storage Lack of climate-smart, drought resistant technology and practices for farming Lack of access to reliable and affordable water for agriculture 	
Demand-side	Food Utilisation	<ul style="list-style-type: none"> Over-reliance on starchy staple foods Strong and highly variable food beliefs and misconceptions across the country Preference for foods that are convenient and easy to prepare Inadequate sanitation and hygiene practices: TOMAK's KAP Survey identified that handwashing practices are unsatisfactory for three out of the five critical handwashing times Low knowledge around mother and IYCF practices 	<ul style="list-style-type: none"> Children are highly valued in Timorese culture Families prioritise feeding young children before the rest of household and children are fed whenever they are hungry Mothers-in-law are deeply involved in decision-making around food preparation and consumption Mothers aspire to feed fish to their children Access to media is increasing (new TV stations, social media) Increased use of family planning and spacing between children allows for more attention given to IYCF per child

2.3. Formative research findings

As part of the SBC strategy development process, additional formative research was conducted to gain a deeper understanding of the context for behaviour change around targeted food and nutrition-related practices.²³ A total of 270 interviews and three focus group discussions (FGDs) were carried out in the three TOMAK municipalities on household nutrition and decision-making practices. Table 3 presents a summary of key findings.

²² Timor-Leste Comoro Declaration, National Council for Food Security, Sovereignty and Nutrition (KONSSANTIL), The Zero Hunger Action Plan for a Hunger and Malnutrition Free Timor-Leste (2014), and Nutrition and Food Security Roundtable (2010)

²³ Formative Research Report on *Household Nutrition and Household Decision-making, Responsibilities, and Male Involvement* in Timor-Leste, Mercy Corps (2017)

Table 3: Key formative research findings

Desired practice studied	Key findings
Mothers of children under 5 prepare meals for their family containing food from 3 food groups.	<ul style="list-style-type: none"> Mothers reported feeling that it is easier to prepare diverse foods when those foods are easy to prepare and can be cooked quickly. Easy to prepare food include leafy vegetables, eggs, rice. Difficult/time-consuming foods to prepare include cassava, corn, beans. Mothers regard eating a variety of foods as good for health. Husbands and children enjoy eating a variety of foods. No cultural taboos on eating a variety of foods.
Mothers of children under 5 prepare meals for the family containing meat, fish, or eggs	<ul style="list-style-type: none"> Mothers think that eating animal protein makes children smart. Husbands and children like to eat eggs, fish, and meat. Eggs are the easiest animal protein to access (either use own or purchase) and prepare (quick cooking time). Household animals, including chickens are rarely killed for consumption. Families with inland fish ponds consume a portion of their production. Mothers that do not consume eggs from household chickens sell them and use profits to pay for school fees. Younger mothers have less autonomy over the use and purchase of animal protein compared to older mothers (finding from FGDs only, comparing responses from FGDs with younger mothers and FGDs with older mothers).
Mothers of children under 5 jointly decide with their husbands about how animals, eggs and cash will be used to support and feed the family	<ul style="list-style-type: none"> Mothers feel the best time to approach their husband on spending is in the evening once he has relaxed from the day. Mothers feel that joint decision-making on household resources contributes to a healthy relationship between husband and wife and prevents conflict. Overall, the entire family and neighbors are supportive of joint decision-making. Husbands said they are willing to increase their role in household tasks and childcare and are already involved in certain tasks in the 'female' sphere. This includes: cooking, washing dishes, washing clothes, feeding and bathing children. Most men were not willing to sweep the house as this is 'women's work'. Mothers want their husbands to take turns with household tasks (cooking, washing dishes, childcare). Men feel that a good husband supports his family, prioritises education for his children, and remains calm during disagreements. Men said neighbours may laugh about men doing household tasks (cooking, washing dishes) behind their back.

Supplementing this earlier formative research, in mid-2018 TOMAK carried out an additional study on adolescent nutrition, in collaboration with the World Food Programme (WFP).

The study was aimed at informing the development of interventions, activities and materials targeted at supporting adolescents' nutrition from an SBC perspective. This qualitative study used multiple methodologies in order to better understand adolescents' nutrition-related experiences, whilst also highlighting social and gender norms which may impact upon these. The sample size included 35 semi-structured interviews with adolescents and influencers, 64 pile sorts to identify and classify foods with adolescents, 4 participatory community workshops to assess nutritional barriers and potential solutions, 11 key informant interviews with community and organisational stakeholders, and four FGDs with adolescents using participatory methods (e.g. roleplay, drawing). Key findings and recommendations from the study are summarised in Table 4²⁴:

²⁴ http://tomak.org/wp-content/uploads/2019/02/Adolescent-Formative-Research_English-Full-web-res.pdf

Table 4: Key findings and recommendations from formative research on adolescent nutrition

Eating habits – frequency and dietary diversity	
<p>Key findings:</p> <ul style="list-style-type: none"> • Adolescents largely eat rice and dark green leafy vegetables for lunch and dinner. • Most adolescents skip breakfast, sometimes because they wake up late for school. • Adolescents prefer to eat breakfast at home so they do not have to share it with their friends at school. • Adolescents want to eat more fish, fruits, and meat. • Adolescents like traditional dishes like <i>batar da'an</i> and <i>marotok</i> (which often include a diverse mix of corn, beans, peanuts, ripe pumpkin and greens). • Adolescents' favourite flavours are sweet and sour. 	<p>Recommendations for SBC approaches:</p> <ul style="list-style-type: none"> • SBC approaches should promote available and affordable animal source and plant-based protein rich foods to increase dietary diversity of adolescents at home. • Promote the benefits of eating breakfast using adolescents' aspirations for the future (breakfast is the most important meal of the day, increased focus in learning). • Promote traditional dishes that adolescents like to eat. Target mothers as food preparers, and grandmothers as promoters of local foods for 'strength' (see section 3.5) • Consider adolescents' flavour preferences when describing and promoting foods as a way to appeal to them.
Snacks at school	
<p>Key findings:</p> <ul style="list-style-type: none"> • Adolescents have full decision-making power over their snack purchases at school (unlike lunch and dinner). • Snacks are highly prized by adolescents. • Adolescents make snack and drink choices based on three key drivers: price, taste, and convenience. • Fruit is a highly desired snack by adolescents, but is highly seasonal and often difficult to access around schools. • Most adolescents will split their pocket money between a snack and a drink. 	<p>Recommendations for SBC approaches:</p> <ul style="list-style-type: none"> • SBC approaches should provide examples of healthy snacks and snack combinations based on what is available around schools. • SBC approaches should emphasise the functions of the 'three food groups' promoted by the Ministry of Health, and their importance for adolescent growth. • Promotion of any snack options needs to consider adolescents' three choice drivers and appeal to their taste preferences. • Capitalise on adolescents' aspirations and link better nutrition to better success in school and attainment of life goals.
Drinks	
<p>Key findings:</p> <ul style="list-style-type: none"> • Adolescents' favourite drinks are fruit-flavoured (and contain little or no actual juice), such as <i>Ale-Ale</i> and <i>Dellos</i> brands. • Adolescents also enjoy drinking water and believe it is healthy and important to consume. • Adolescent boys and girls are not embarrassed to bring drinking water from home, but prefer to purchase it from school because that is what 'their friends do'. 	<p>Recommendations for SBC approaches:</p> <ul style="list-style-type: none"> • SBC approaches should make adolescents more aware of the sugar content of fruit-flavoured drinks. • Emphasise water as the healthiest drink for adolescents. Draw on the benefits of drinking water in helping to maintain focus in class and be healthy. • Draw on concepts of peer support in developing SBC materials to promote drinking water (e.g. friends encourage friends to choose water). • Promote bringing water from home, so adolescents can use their pocket money to buy healthier snacks at school.

Classification of healthy and unhealthy foods	
<p>Key findings:</p> <ul style="list-style-type: none"> Adolescents tend to consider foods along a spectrum of healthy to unhealthy and are unaware of the benefits of different food groups. 	<p>Recommendations for SBC approaches:</p> <ul style="list-style-type: none"> <i>See above on eating habits on promoting dietary diversity.</i> SBC approaches should emphasise the functions of the 'three food groups' promoted by the Ministry of Health and their importance for adolescent growth.
Aspirations – priorities and worries	
<p>Key findings:</p> <ul style="list-style-type: none"> Adolescents want to prioritise career before marriage and children. The majority of male and female adolescents want to have two children so there are sufficient financial resources to provide food and education for each child and provide them with individual attention. Parents prioritise education for their adolescents, both girls and boys. Adolescents' biggest worries include doing well in school and their ability (academic and financial) to attend university. 	<p>Recommendations for SBC approaches:</p> <ul style="list-style-type: none"> Capitalise on adolescents' aspirations and link better nutrition to better success in school and attainment of their plans for the future. Draw upon parental aspirations for their children to do well in school as a way to promote improved nutrition-related behaviours.
Food environment	
<p>Key findings:</p> <ul style="list-style-type: none"> The school food environment does not support adolescents to make healthy choices for snacks. Snack choices are mainly processed, carbohydrate-rich and high in sugar and salt. There are no healthy and affordable drinks available around schools other than water. 	<p>Recommendations for SBC approaches:</p> <ul style="list-style-type: none"> <i>See above for recommendations under 'Snacks at school'.</i> Explore opportunities to engage food vendors around healthier options that would both meet demand and maintain vendor profit margins.
Key influencers of adolescents	
<p>Key findings:</p> <ul style="list-style-type: none"> Parents are the clearly the biggest influencers on adolescent nutrition, with mothers as the organisers of family meals and fathers as the final decision-makers on food purchases and sometimes food allocation. Teachers are trusted sources of information. 	<p>Recommendations for SBC approaches:</p> <ul style="list-style-type: none"> Engage male adolescents as future fathers by praising fathers around their support and involvement in spending money and allocating household resources for nutritious food for the family. Utilise concepts of supportive teachers when promoting healthy snack and drink choices at school.

Trusted sources of information and communication channels

Key findings:

- Health providers are the most trusted source of information by adolescents for nutrition and health-related topics.
- Adolescents want to hear about nutrition and health topics from health providers in person at school.
- Lafaek magazine is a trusted source of information and adolescents like that it is a Timorese magazine.
- Adolescents do not trust social media (e.g. Facebook) for nutrition and health topics as they feel it is easy to post false information on the platform.
- Access to television and radio is variable.

Recommendations for SBC approaches:

- Explore opportunities to develop a special edition of Lafaek covering adolescent nutrition for use at schools and through community channels.
- Any use of social media should be strongly branded with the image of a health provider and the Ministry of Health to increase trust.

2.4. Preferred communication channels

TOMAK carried out an Information Consumption Survey²⁵ (ICS) in 2016 in the three target municipalities to learn more about how households access general and nutrition-related information. The assessment found significant differences between Bobonaro and Baucau/Viqueque:

- Radio: 37% of respondents reported listening to radio (although 17% in Baucau), and 29% of the 37% reported listening to the radio daily.
- Television: 43% reported watching TV (81% in Bobonaro and 13% in Viqueque), with 75% reporting that they watch TV daily.
- Newspaper/magazine: 21% reported reading newspapers or magazines (40% in Bobonaro and 11% in Baucau).
- Internet: 20% reported being internet users (100% of internet users reported being Facebook users).
- Phone: 70% of all respondents across target all areas reporting owning and using a mobile phone (91% in Bobonaro, 63% in Viqueque and 57% Baucau).
- Community groups (interpersonal communication): Approximately 50% of respondents reported participating in a Community Group (70% in Bobonaro, 34% in Viqueque and 41% Baucau), with farming and religious groups reported as having the highest participation.

The ICS also found that while TV coverage is higher than radio, nutrition-related information was reported most 'useful' from radio (85%), followed by TV (71%), magazine/newspaper (67%), internet (57%), health workers (PSF/SISCa) (39%), local leaders/extension workers (22%), religious leaders (8%), and mobile phone (0%).

In terms of language, the ICS found no shared language across TOMAK's three target municipalities other than Tetum. This will be a key consideration for print and mass media approaches. Mass media approaches can be complemented by community-level approaches that allow for nuancing when promoting key practices. The last national media survey conducted in Timor-Leste by the Hirondelle Foundation in 2007 found that informal face-to-face communication (word of mouth) was the second most reliable source of information in the country after national radio.²⁶ While radio and TV coverage has increased over the past 10 years, interpersonal communication (IPC) remains the primary form of communication across the country and therefore needs to be an integral part of any SBC strategy.

²⁵ TOMAK Information Consumption Survey (February 2016)

²⁶ Soares, E. & Mytton, G. *Timor Leste National Media Survey. Final Report*. Foundation Hirondelle, Dili, TL. (2007)

3. Intended audiences

Target audience. In line with TOMAK's goals, intended audiences are categorised into three segments:

- Primary audience (people directly affected): Adolescents²⁷, WRA and mothers of children under two.
- Secondary audience (people directly influencing them): Husbands, mothers-in-law, farmers, parents and grandmothers (of adolescents).
- Tertiary audience (people indirectly influencing them): AEWs, farmers.

Audience profiles are summarised in Appendix 1.

4. Target behaviours

TOMAK aims to influence a variety of nutrition and household decision-making behaviours. Based on the situational analysis of current practice, environmental, and social factors, particular focus is being placed on the following behaviour themes and behaviours. Key selected behaviours (summarised in Table 1) take into consideration the program's limited resources, and focus on core underlying issues that will have the greatest impact on the program's overarching goals. These behaviours are being 'staged', rather than implemented all at once. Key behaviours take into account that TOMAK's intended audiences will move along a continuum of change over the duration of the program. For example, it is expected that audiences will initiate/increase and then eventually maintain key behaviours over time. This is based on the assumption that more people will model the behaviours, and communities will have increased access to markets and income.

4.1. Household nutrition

TOMAK has a strong focus on nutrition during pregnancy until the child's second birthday (i.e. the first 1,000 days of life). The program also recognises that neither adults nor children consume the minimum nutritional requirements, and therefore promotes improved nutrition for the entire household. Timorese adults living in semi-rural to rural settings are a key intended audience for this behaviour theme. Households are heavily reliant on subsistence farming and household food purchases are mainly limited to staples: rice, cooking oil, sugar, and salt. Families consume a monotonous diet that includes rice, starchy staples, and some vegetables. While the diet may permit adequate caloric intake, it is deficient in protein, iron, vitamin A and zinc. This behaviour theme focuses on increasing household demand to prepare and consume a variety of foods each day, including: animal-source foods and eggs; staples and tubers; legumes; and vitamin A-rich fruits and vegetables.

4.2. Adolescent nutrition

It is widely recognised that the first 1,000 days between conception and a child's second birthday are a critical window of opportunity for interventions to reduce stunting. While there is evidence that suggests stunting is mainly irreversible after a child turns two, there is also evidence to show that the adolescent years could be a critical period for interventions to improve the nutritional status particularly of adolescent girls and potentially break the cycle of intergenerational undernutrition²⁸. Despite being a prominent and identifiably separate population group, at present adolescents are neglected in nutrition data and programming in Timor-Leste. As a group, adolescents face considerable malnutrition challenges, represent an important part of the nutrition life cycle, and have the ability to affect national nutrition outcomes as agents of change.

²⁷ TOMAK's component 1 broader goal is to improve the nutritional status of WRA and children 6-23 months. The addition of adolescents as a primary intended audience in this strategy is a reflection that adolescence is also a critical period to improve nutritional status. While there is cross-over between adolescents (aged 10-19 years) and WRA (aged 15-49 years), TOMAK recognises that adolescents have unique preferences and needs that differ from older WRA.

²⁸ Child undernutrition: opportunities beyond the first 1000 days. Lancet. Georgiadis, A. and Penny, M. Volume 2, No. 9. (September 2017) see [https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(17\)30154-8/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(17)30154-8/fulltext)

4.3. Maternal nutrition, care and support

This theme focuses on the promotion of improved care and support for pregnant women, lactating women, and women of childbearing age. In Year 2, the key behaviours will focus specifically on improved consumption of diversified foods. Anaemia and other micronutrient deficiencies are particularly common and the diets of Timorese women are inadequate, particularly during pregnancy when they sometimes eat ‘more’ but do not consume sufficiently nutritious food.²⁹ Improved nutrition during pregnancy is critical to improved nutritional status and optimal growth and development in the first 1,000 days.

4.4. Infant and young child feeding and care

This behaviour theme focuses on improving mothers'/caregivers' skills and practices around infant and young child feeding (IYCF) and care. Promotion of IYCF, complemented by improved household food security and dietary diversity, will ensure that complementary feeding practices are improved for tangible impact on nutritional status of children aged 6-23 months.

4.5. Water, sanitation, and hygiene (WASH) and environmental enteropathy

This behaviour theme is described in TOMAK's PGS as focusing on the promotion of specific behaviours that are likely to lead to a reduction in environmental enteropathy: hand-washing at critical moments, latrine use, the proper disposal of child faeces, and maintaining hygienic household and play areas free of contamination for infants and young children. While this behaviour theme is important and has clear links to child nutrition, many of the specific behaviours are beyond the scope of TOMAK. The behaviours described in this strategy focus just on handwashing at critical times.

4.6. Household decision-making, responsibilities, and male involvement

This theme involves encouraging households to discuss and act to improve the health and well-being of their children and households. This includes a focus on equitable and joint decision-making on the use of household resources (e.g. purchase and preparation of food, use of livestock). An additional focus is the promotion of increased male involvement in those affairs typically associated with women, such as household tasks and childcare, and encouraging the empowerment of women and girls more broadly. Most mothers manage household finances but are also held accountable for shortfalls. Mothers (younger mothers in particular) are not confident to spend money on small quantities of meat/canned fish without permission from their husbands.³⁰ Fathers are already involved in some tasks in the ‘female’ sphere, although frequency is not certain.

Improving women's nutritional status is essential to stopping the intergenerational cycle of undernutrition. A women's labour load affects her ability to earn income, the time she has available for child and infant care, as well as the time available to feed and care for herself.³¹ Supporting joint decision-making between couples will increase the consumption of, and allocation of household resources to acquire, nutritious foods. Supporting male involvement in household tasks and childcare will also decrease women's labour burden, allow women increased time for optimal IYCF, and increase fathers' emotional attachment to their children.

5. Strategic approach

The proposed strategic approach focuses on influencing different audiences through multiple and reinforcing channels. Table 5 summarises the broad strategic approach categorised by the proposed intervention type,

²⁹ Timor-Leste Food and Nutrition Survey (2013); TOMAK Gender Equality & Social Inclusion Analysis (GESIA) (2016)

³⁰ TOMAK GESIA (2016).

³¹ Herforth, Anna, and Jody Harris. *Understanding and Applying Primary Pathways and Principles. Brief #1. Improving Nutrition through Agriculture Technical Brief Series*. Arlington, VA: USAID/Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) Project. (2014)

activities, phase, and timeline. Specific interventions and activities are further broken out by audience and location in Appendix 3.

Table 5: SBC strategy interventions, activities and phases

Intervention	Select activities	Phase	Tentative timeline
	Conduct meetings at municipal level to socialise the SBC strategy and solicit input on municipal to suku nuances.	Stakeholder Consultation	Aug - Sep 2017
	Develop TOMAK SBC Action Plan. Harmonise key behaviours across audience segments among lead NGO partners. Discuss M&E of SBC approaches with Lead Partners to track progress in SBC.	Strategic Planning	Oct 2017 - Jan 2018
Interpersonal Communication (IPC)	Partners: train MAF and MOH in various supply-side NSA approaches, establish field demonstrations and associated training activities.	Capacity Strengthening	Aug 2017- Jun 2018
	Partners: work through existing farming groups, mother support groups, S&L groups, parent groups, Church groups to promote NSA activities and nutrition-related SBC.	Implementation	Ongoing
	TOMAK/partners: Monitor the efficacy of SBC approaches and materials being used, progressively improving and converging around agreed behavioural themes and messages.		
	TOMAK: Support the production and distribution of standardised SBC materials being used for nutrition-related IPC, for use across the program.		
Community mobilisation	Partners: conduct community nutrition events, cooking demonstrations, etc.	Implementation	Ongoing
Advocacy	TOMAK/partners: regularly engage with MAF/MOH counterparts at municipal and post administrative levels to improve coordination across stakeholders working on nutrition-related activities.	Coordination	Ongoing
	WVTL/CARE/TOMAK: Trial use of <i>Lafaek</i> for promotion of dietary diversity for dissemination in Baucau, with content developed together with TOMAK.		Nov 2017
	TOMAK/CARE: Extension of <i>Lafaek</i> trial to other topics based on results.		Sep 2018 Jan 2019 Sep 2019
Monitoring and Results Measurement (MRM)	TOMAK: establish baseline.	MRM	Oct 2017
	TOMAK and Lead NGO partners: regular program monitoring and spot surveys (e.g. egg consumption survey).		Ongoing, spot surveys annually
	TOMAK/partners/stakeholders: facilitate sharing of lessons learned (cross-program field visits; 'Best Practice' workshops).		Cross visits 2x per year, workshops 2x per year

TOMAK has established agreements with three 'Lead Partners' (Catholic Relief Services, Mercy Corps and World Vision Timor-Leste) to facilitate the delivery of NSA and SBC activities at the municipal level. These Lead

Partners (and their local partners) employ a range of interpersonal communication (IPC) approaches that are adapted to the specific context of target suku. While Lead Partner activities and materials differ, the SBC strategy aims to align partner approaches by identifying a set of key behaviours and audience segments. As Lead Partners are responsible for the implementation of IPC and community mobilisation components of the SBC strategy, TOMAK supports the re-printing and sharing of IPC materials across the program and develops new SBC materials based on identification of gaps and needs across municipalities. The following table describes the materials developed by TOMAK and their intended use.

TOMAK complements the IPC and community mobilisation activities of the Lead Partners through mass media, entertainment-education, and social media channels. Appendix 3 summarises Lead Partner approaches and additional TOMAK support.

Table 6: SBC materials coordinated by TOMAK

SBC product	Audience	Promoted behaviour	Intended use
Moringa omelette ³² , two-page insert in <i>Lafaek</i> magazine	General community	Dietary diversity, egg and moringa consumption	<i>Lafaek</i> distribution to communities, in Lead NGO community groups
NSA guides ³³	AEWs	Promote planting and consumption of nutritious crops, balance between consumption and sale of crops	Training
Nutritious crops posters (x4)	AEWs, Lead NGO field staff	Plant and consume iron, protein, vitamin A, zinc rich crops	Farmer groups
NSA AEW story, two-page insert in <i>Lafaek</i> magazine	General community, AEWs	Consider nutritional benefits of crops prior to planting, AEW facilitate discussions with farmers	<i>Lafaek</i> distribution to communities, in Lead NGO community groups
Community nutrition drama script ³⁴	General community	Husband and mother in-law support for dietary diversity for pregnant women, women's participation in community events	Performances at market days, schools
Chicken vaccination calendar	General community	Vaccination chickens 3 times per year	Chicken vaccination campaign events, community centres
Egg sticker, poster, banner	General community	Egg consumption, prioritise egg consumption for pregnant women, children 6+	Chicken vaccination campaign events, community centres
Chicken vaccination and egg promotion radio spot	General community	Egg consumption, prioritise egg consumption for pregnant women, children over 6 months, male support of egg consumption, vaccinate chickens 3x per year according to MAF schedule, contact MAF veterinary technicians for vaccination information	Chicken vaccination campaign events, community centres
Protein radio spot (+discussion guide)	General community	Male involvement in support or purchase of protein	Community radio, in Lead NGO community groups

³² Developed in collaboration with World Vision.

³³ Developed in collaboration with HIAM Health, MAF and MoH.

³⁴ Developed in collaboration with World Vision and Ba Futuru.

6. SBC research and development

While existing research and the formative research conducted during the course of developing this strategy provide valuable insights into motivations and barriers around TOMAK's behaviour themes, there will be an ongoing need for further investigation into specific audience preferences and practices. Targeted ongoing assessments will also be necessary basis to monitor change in behaviours at the community level, and investigate why changes are not occurring if they are not occurring (e.g. are households prioritising the sale of fish over consumption).

7. Monitoring, evaluation, and behavioural targets

At impact level, TOMAK utilises a range of globally recognised indicators³⁵ for nutrition programs, focusing on access to nutritious food and dietary diversity for targeted households, WRA and children aged between 6-23 months. At outcome level, indicators focus on WRA and male head of household knowledge, attitude, and practice changes. Qualitative reflections with partners are carried out at least four times per year to discuss how interventions are influencing or prompting changes in attitudes and norms, and the adoption of key behaviours. Spot surveys are also being carried out to track specific behaviours and intended audience movement along a continuum of change.

The following targets relating to behavioural objectives are based on TOMAK baseline data and projections for field activities that commenced in 2017 and will run through until 2021. These select targets are based on TOMAK's broader Monitoring and Results Measurement Plan.

Nutrition

- By the end of TOMAK Phase I, the proportion of WRA reaching minimum dietary diversity (MDD) will increase from 16% to 26%.
- By the end of TOMAK Phase I, the proportion of children aged 6-23 months reaching the minimum acceptable diet will increase from 7% to 10% of breastfed children aged 6-8 months, and from 17% to 25% of breastfed children aged 9-23 months.³⁶
- By the end of TOMAK Phase I, the proportion of households with acceptable Food Consumption Scores will increase from 19% to 50%.
- By the end of TOMAK Phase I the proportion of women and men who believe if a family only had one egg it should go to the child aged 6-23 months will increase.³⁷
- By the end of TOMAK Phase I the proportion of children 6-23 months who consume eggs will increase.³⁸
- By the end of TOMAK Phase I the proportion of women and men who hear about the nutritional benefits of eggs from agriculture extension workers will increase from 3% to 15%.
- By the end of TOMAK Phase I the proportion of women and men who report having heard nutrition related messages about eggs will increase from 53 to 70%.

Food Security

- By the end of TOMAK Phase I the proportion of farmers that apply NSA knowledge and skills to produce nutritious food will increase from 61% to 80%.³⁹

³⁵ Minimum Dietary Diversity for Women (MDD-W), Minimum Acceptable Diet (MAD), Food Consumption Score, Food Insecurity Experience Scale.

³⁶ Increase in MAD from 3% to 5% of non-breastfed children aged 6-23 months.

³⁷ Targets pending survey data verification.

³⁸ Targets pending survey data verification.

³⁹ At TOMAK baseline: Maize, rice, sorghum, other cereal = 98% producing these crops; Cassava, yam, white potatoes, plantains and tubers = 90%; Orange flesh fruit = 86%; Dark green leafy vegetables = 79%; Orange flesh vegetables = 66%;

- By the end of TOMAK Phase I the proportion of families that buy nutritious food will increase from 27% to 50%.⁴⁰

Household decision-making and male involvement

- By the end of TOMAK Phase I, there will be an increase in the proportion of WRA who report having greater decision-making power over household food production, consumption and related household expenditure by 15%.⁴¹
- By the end of TOMAK Phase I in July 2021, there will be an increase in the proportion of WRA and men reporting male engagement in household nutrition decisions by 20%.⁴²

Legumes = 29%; Other fruit = 24%; Other vegetables = 19%; AVERAGE 61% respondents producing these crops. 100% of respondents reported raising animals.

⁴⁰ At TOMAK baseline: Maize, rice, sorghum, other cereal = 45% respondents purchased; Cassava, yam, white potatoes, plantains and tubers = 9%; Orange flesh fruit = 6%; Dark green leafy vegetables = 31%; Orange flesh vegetables = 23%; Legumes = 41%; Other fruit = 16%; Other vegetables = 27%; Meat, eggs and fish = 32%; Milk, cheese = 37%; AVERAGE 27% purchasing these foods.

⁴¹ This target is a compilation based on 15% from the baseline average score of 4 questions together (e.g. responsibility for which food would be purchased for family consumption, which crops would be eaten/sold).

⁴² This target is a compilation based on 15% from the baseline average score of 3 questions together (e.g. does your spouse provide suggestions or advice on nutritious foods for your child, when pregnant).

8. Resources accessed

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Appendices

Appendix 1: Audience profiles

Audience Segment	Demographic Characteristics	Geographic Characteristics	Socio-Cultural Characteristics	Psychographic Characteristics	Ideational Characteristics
Mothers of children U2	<ul style="list-style-type: none"> - Aged 15-49, married⁴³ - Primary to secondary schooling - Has at least one child - Lower literacy - Has access to a mobile phone - Resides with parents/in-laws - Manages household budget, but must ask for permission for purchases over \$1 - Spends most of her time cooking and taking care of children - Looks after chickens - Works in fields with husband 	<ul style="list-style-type: none"> - Lives in TOMAK target suku in Baucau, Bobonaro, or VQQ - Semi-rural to rural 	<ul style="list-style-type: none"> - Speaks Tetum and local dialect - Catholic - Attends Church on Sundays 	<ul style="list-style-type: none"> - Influenced by mother/mother in-law - Likes socialising with other women - May attend a community group every month - Worries about having enough money for children's school fees 	<ul style="list-style-type: none"> - Wants her husband to be more involved in household tasks and childcare - Wants children to go to school and be smart - Wants to feed family foods that they like - Has poor understanding of good nutrition
Grand-mothers of children U2	<ul style="list-style-type: none"> - Aged 55-75, married - Some primary schooling - Lower literacy skills - Resides with son/son in-law - Helps tend to chickens - Spends most time at home and in the fields - Helps with feeding of younger grandchildren 	<ul style="list-style-type: none"> - Lives in TOMAK target suku in Baucau, Bobonaro, or VQQ - Semi-rural to rural 	<ul style="list-style-type: none"> - May speak some Tetum, but most comfortable in local dialect - Catholic - Attends Church on Sundays 	<ul style="list-style-type: none"> - Values her grandchildren - Influenced by the Church - Participates in a Church group - Gives high priority to cultural commitments - Enjoys going to the weekly market 	<ul style="list-style-type: none"> - Wants her grandchildren to be educated - Does not place priority on nutritious foods for her daughter in-law or grandchildren - Has low knowledge of nutritious foods

⁴³ Marriage is defined as living together with a partner as husband and wife.

Audience Segment	Demographic Characteristics	Geographic Characteristics	Socio-Cultural Characteristics	Psychographic Characteristics	Ideational Characteristics
Fathers of children U2	<ul style="list-style-type: none"> - Aged 18-49 married - Primary to secondary schooling - Has at least one child - Lower literacy - Owns a mobile phone - Resides with parents/in-laws - Head of household - Sometimes helps wife with household duties and childcare but not regularly - Spends most of his time in the fields - Looks after cows, goats, and pigs 	<ul style="list-style-type: none"> - Lives in TOMAK target suku in Baucau, Bobonaro, or VQQ - Semi-rural to rural 	<ul style="list-style-type: none"> - Speaks Tetum and local dialect - Catholic 	<ul style="list-style-type: none"> - Influenced by community leaders and peers - Member of a farming group - Smokes - Likes watching the news on TV - Gives high priority to cultural commitments - Likes to attend cock fights - Respects health provider opinions 	<ul style="list-style-type: none"> - Cares what his neighbours think - Wants to be seen as a good father who provides for his family - Values education for his children - Does not place priority on nutritious foods for his family
Farmers (men and women)	<ul style="list-style-type: none"> - Sells mainly at the weekly local market 	<ul style="list-style-type: none"> - Lives in TOMAK target suku in Baucau, Bobonaro, or VQQ - Semi-rural to rural 	<ul style="list-style-type: none"> - Speaks Tetum and local dialect - Catholic - Returns to working in the fields after child reaches approximately 1 year (female farmer) 	<ul style="list-style-type: none"> - Influenced by community leaders and peers - Member of a farming group - Smokes (males) - Likes watching the news on TV - Gives high priority to cultural commitments 	<ul style="list-style-type: none"> - Enjoys being a farmer - Sees potential in being a farmer
AEWs	<ul style="list-style-type: none"> - Works with farmer groups at suku level - Responsible for agricultural extension services for 1-3 suku 	<ul style="list-style-type: none"> - Lives in TOMAK target suku in Baucau, Bobonaro, or VQQ - Submits monthly reports to MAF municipal level - Provided with a motorbike by MAF (male AEWs only) 		<ul style="list-style-type: none"> - Influenced by other AEWs 	<ul style="list-style-type: none"> - Believe they have a role to play in nutrition in their communities
Adolescents (10-19 years)	<ul style="list-style-type: none"> - Resides with parents 	<ul style="list-style-type: none"> - Lives in TOMAK target suku in Baucau, Bobonaro, or VQQ 	<ul style="list-style-type: none"> - Respect nutrition related information from health professionals - Have little control over what is eaten for family meals - Control what they purchase for snack at school 	<ul style="list-style-type: none"> - 10-14 years largely influenced by parents - 15-19 years influenced by peers 	<ul style="list-style-type: none"> - Want to prioritise career before marriage and children. - Want to have two children - Worry about doing well in school and their ability (academic and financial) to attend university.

Appendix 2: Possible additional behaviours for consideration post- Year 3

Maternal nutrition, care and support

- Early initiation of breastfeeding
- Drink more water during lactation, avoid tea and coffee
- Attend at least 4 antenatal care visits
- Make a birth plan with family members
- Take iron tablets during pregnancy
- Deliver in a health facility with a skilled attendant
- Seek care from a trained health provider within 2 days after delivery for mother and baby

WASH

- Safely dispose of the faeces of all family members
- Treat water and cover all drinking water
- Teach child to wash hands after defecation and before eating

Appendix 3: TOMAK and partner platforms for SBC

Partner	WRA	Mothers of children U2	Husbands/fathers of U2	Mothers in-law/grandmothers of U2	Farmers	AEWs	Adolescents
CRS	<ul style="list-style-type: none"> • Aquaculture groups • Maize & bean groups • Nutrition groups • SILC • Nutrition events 	<ul style="list-style-type: none"> • Aquaculture groups • Maize & bean groups • Nutrition groups • SILC • Nutrition events 	<ul style="list-style-type: none"> • Aquaculture groups • Maize & bean groups • Nutrition groups • SILC • Nutrition events 	<ul style="list-style-type: none"> • Nutrition groups • Sunday mass, Church events • Cooking demos for older women • Nutrition events 	<ul style="list-style-type: none"> • Aquaculture groups • Maize & bean groups • Nutrition groups • Nutrition events 	<ul style="list-style-type: none"> • Trainings • Agriculture groups • TBD 	<ul style="list-style-type: none"> • TBD Schools
World Vision	<ul style="list-style-type: none"> • Parents groups • Mother Support Groups • Church groups • Food processing groups • Integrated crop management groups 	<ul style="list-style-type: none"> • Parents groups • Mother Support Groups • Church groups • S&L groups • Food processing groups • Integrated crop management groups 	<ul style="list-style-type: none"> • Parents groups • Church groups • S&L groups 	<ul style="list-style-type: none"> • Parents groups • Church groups • Market events/theatre • Lafaek ba Komunidade magazine 	<ul style="list-style-type: none"> • Farmer groups • Roadside sellers/banners • Market events/theatre 	<ul style="list-style-type: none"> • Trainings • Agriculture groups 	<ul style="list-style-type: none"> • TBD
Mercy Corps	<ul style="list-style-type: none"> • Care Groups • VSLA • AEW • CDA 	<ul style="list-style-type: none"> • Care Groups • VSLA • AEW • CDA 	<ul style="list-style-type: none"> • VSLA • AEW • CDA 	<ul style="list-style-type: none"> • Care Groups • VSLA 	<ul style="list-style-type: none"> • VSLA • AEW • CDA 	<ul style="list-style-type: none"> • Trainings • Agriculture groups 	<ul style="list-style-type: none"> • TBD Schools
TOMAK	<ul style="list-style-type: none"> • FFS/FFD • HHDM • Mass media (radio spots, short films, billboards, banners) 	<ul style="list-style-type: none"> • FFS/FFD • HHDM • Mass media (radio spots, short films, billboards, banners) 	<ul style="list-style-type: none"> • FFS/FFD • HHDM • Mass media (radio spots, short films, billboards, banners) 	<ul style="list-style-type: none"> • Mass media (radio spots, short films, billboards, banners) 	<ul style="list-style-type: none"> • Mass media (radio spots, short films, billboards, banners) 	<ul style="list-style-type: none"> • Trainings • Agriculture groups 	<ul style="list-style-type: none"> • TBD Schools

*SILC = Savings and Internal Lending Communities (CRS); S&L = Savings and Loans groups (World Vision); VSLA = Village Savings and Loan Association (Mercy Corps); AEW = Agricultural extension worker; CDA = Community Development Agent (Mercy Corps); FFS = Farmer Field School; FFD = Farmer Field Day; HHDM = Household Decision-Making training; TBD = To be decided.



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