



To'os ba Moris Di'ak Farming for Prosperity

## Nutrition-Related Information Consumption Survey Results

Technical Report 11 9 February 2017







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# Abbreviations & Acronyms

ACIAR Australian Centre for International Agricultural Research

ASI Adam Smith International Pty Ltd AVANSA Avansa Agricultura Project (USAID)

AWPB Annual workplan and budget

BA Barrier analysis

BESIK Community Water, Sanitation and Hygiene Program (Australian Aid)

CA Conservation agriculture

CDE Centre for Enterprise Development

CD-NIP Community Driven Nutrition Improvement Program (Catholic Relief Services)

COMPAC-TL Combatting Malnutrition and Poverty through Inland Aguaculture in Timor-Leste

Program (Mercy Corps)

DBC Designing for behaviour change

DFAT Australian Department of Foreign Affairs and Trade

DLC District Liaison Committee

FAO Food and Agriculture Organisation

FGD Focus group discussion
GBV Gender-based violence
GoTL Government of Timor Leste

GESIA Gender & social inclusion analysis

HH Household
H&S Health & safety
H&SP Health & safety plan

IADE Institute for Business Support
IAS Independent Advisory Services
ICS Information and Consumption Survey

IDD Investment design document

IFF Integrated fish farming

KAP Knowledge, attitudes & practice

KHG Keyhole garden

KII Key informant interview

KONSTANTIL National council for food security, sovereignty and nutrition in Timor Leste

LTA Long term adviser

M4P Making markets work for the poor MAF Ministry of Agriculture and Fisheries

MCIE Ministry of Commerce, Industry and the Environment

MDF Market Development Facility (Australian Aid)

MEP Monitoring & evaluation plan
MEP Monitoring & evaluation framework
MIYCN Mother infant & young child nutrition

MoH Ministry of Health

MRG Monitoring review group MSG Mother Support Group

NGO Non-government organisation
NPO National Program Office
NSA Nutrition sensitive agriculture
OFM Operations & finance manager

PD Program Director

PGS Program Guiding Strategy

PHD Partnership for Human Development (Australian Aid)

PLW Pregnant and lactating women

PM Program manager

PNDS National Program for Village Development Support (GoTL executed, Australian

TA support)

PSF Programa Saude Familia (Family Health Program R4D Roads for Development Program (Australian Aid)

RMF Results measurement framework

RMP Risk management plan
RPM Regional Program Manager
RPO Regional program office
RTTL Radio and Television Timor

SBCC Social behaviour change communication

SEM Secretariat of State for the Socio-Economic Support of Women

SISCa Sistema Integradu Saude Comunitaria (Community Health Outreach Service)

SOL Seeds of Life Program (ACIAR)

ST Short term

STA Short term adviser TL Team leader

TLFNS Timor Leste Food and Nutrition Survey

ToR Terms of reference

TRG TOMAK Reference Group

VC Value chain
VfM Value for money

VSLA Village Savings and Loans Activities
WEE Women's economic empowerment

WFP World Food Program
WSS Water supply & sanitation

## **Executive Summary**

The *To'os Ba Moris Diak* (TOMAK) Program is a 5-year agricultural livelihoods program funded by the Australian government in Timor-Leste. TOMAK's goal is to ensure rural households live more prosperous and sustainable lives. TOMAK will achieve this through parallel and linked interventions that aim to: (i) establish a foundation of food security and good nutrition for targeted rural households, and (ii) build their capacity to confidently and ably engage in profitable agricultural markets. TOMAK adopts a nutrition sensitive agriculture (NSA) approach, including a focus on social behaviour change communication (SBCC), in its efforts to improve food security and nutrition.

TOMAK's Inception Phase will run through to mid-2017. Its initial focus has been on program establishment, developing a more detailed design, and identifying initial field activities. Implementation of field activities will commence in the second half of 2017.

To enable development of a more detailed design for TOMAK's NSA component, three foundational assessments were carried out. This Information Consumption Survey (ICS) is the third of the three assessments. It was designed to gain a broader understanding of the information channels used by TOMAK's target households to acquire nutrition-related information. Data and information were collected through household surveys in three clustered areas, encompassing 15 suku and 39 aldeias across Bobonaro, Baucau and Viqueque Municipalities. A total of 129 households were randomly selected and interviewed for the assessment.

Key conclusions are as follows:

- <u>Grandmothers matter</u>. Preliminary findings from the TOMAK Gender and Social Inclusion (GESI) assessment indicate that mothers and mothers-in-law are frequently deeply involved in decision-making around food preparation and consumption. In addition, between 57% to 98% of respondents reported living with their mother. Therefore, grandmothers appear to be a key target audience and stakeholder in household decision-making concerning health and nutrition.
- Outside of Tetum, there is no shared language across all three target areas. The survey results revealed substantial variations in languages spoken across the three target areas. While Tetum was strong in Baucau and Viqueque, it was not as widely spoken by respondents in Bobonaro. Similarly, Portuguese was reportedly heavily understood in Bobonaro but not in Baucau or Viqueque. A nuanced approach to messaging will therefore be important.
- > <u>Slightly less than 50% of respondents reported participating in any community group</u>. However, the data varies widely from 70% of respondents in Bobonaro to 34% and 41% in Viqueque and Baucau respectively.
- Low participation in Mother Support groups. Respondents reported between 0-18% participation in Mother Support groups across the three districts.
- > <u>Farming and religious groups have the greatest participation</u>. Respondents consistently reported participation in farming/fishing/aquaculture and religious groups. Close to 50% of respondents reported participating in such groups across all three districts.
- Radio access is relatively low, and people listen together. Only 37% of respondents reported listening to radio. That figure dropped to 17% in Baucau. Comparing this finding to results from the SBCC Assessment conducted by FAO in 2015 which found that only 27% of households own radios, one could also conclude that people listen to radios together.
- Radio is reportedly a 'useful' source of nutrition and health-related messaging for those who can access it. 85% of respondents who stated ever receiving health or nutrition-related information from radio stated the information was 'useful.'
- There is no clear 'good time' for radio messaging. Across all 3 districts, respondents greatly varied in terms of the time at which they listen to the radio (i.e. morning, afternoon and evening)

- Sixteen community radio stations are organized under the Assosiasaun Radio Komunidade Timor-Leste (ARKTL). However, the Radio and Television Timor-Leste (RTTL) has reportedly better coverage, and in some targeted communities RTTL was reported as the favourite station.
- TV access is higher than for radio. According to the 2015 Census data, 37% of households own a television. From this survey, 43% of respondents reported watching TV. However, these figures greatly varied across districts with 81% of respondents in Bobonaro reporting watching television compared to only 13% in Vigueque. This is consistent with the data regarding energy access.
- <u>Lafaek Magazine</u> is the only magazine with regular distribution. Lafaek Magazine was the only magazine mentioned by respondents as being available and accessible across surveyed areas. Lafaek is a magazine produced by CARE International in Timor-Leste. It is distributed freely to school students and community members on a quarterly basis.
- Magazine readership is relatively low. Only 21% of all respondents across the three target districts reported reading magazines or newspapers. However, 68% of respondents reported being able to easily read magazines or newspapers. A main challenge reported was availability and accessibility to either medium.
- 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%).
- Facebook is the internet social media platform. While a relatively small percentage of the overall population reported using the internet, they consistently and exclusively referenced Facebook as their main internet destination. Roughly 50% of internet users reported checking their Facebook frequently (i.e. every 2 days or less). However, due to respondents reportedly low access to the internet, TOMAK might consider Facebook a powerful 'additional medium' but likely not its main one.
- > <u>Health or nutrition information accessed via the internet is not very useful</u>. Only 57% of respondents who reported accessing information on health or nutrition via the internet reported it was useful. This is much lower than those who accessed similar types of information via radio, TV, magazines or newspapers.
- Mobile phone ownership is as high as 81% of households (as per the 2015 census). However, this survey found phone ownership was closer to 70% of households.
- Debonaro local leaders/extension workers are an example of message dissemination. 53% of respondents reported receiving nutrition or health-related information from local leaders and/or extension workers in Bobonaro, compared to an average of 18% in Baucau and Viqueque. 100% of respondents in Bobonaro reported the nutrition-related information provided by local leaders was useful, compared to an average of 49% for the other two districts.
- The Community Health System (SISCa) and Family Health Program (Programa Saude Familia/PSF) reach 39% of respondents. While outreach of SISCa and PSF health workers was almost double in Viqueque (47%) compared to Bobonaro (28%), 100% of respondents in Bobonaro reported the health and nutrition-related information 'useful' as compared to an average of 53% in Viqueque and Baucau.

Based on the conclusions from the secondary data analysis and this assessment, recommendations for TOMAK include:

- 1. Try, learn, iterate. There are no obvious silver bullets for mass media information consumption. TOMAK will likely need to try a range of information dissemination options, monitor these closely and look for a few high-value options. This survey found a very wide range of information consumption patterns, all with relatively low respondent numbers. Only half of all respondents reported being a member of a group, and participation in Mother Care groups was especially low (0-18%). No single media channel (TV, radio, magazine, etc) reached more than 50% of the population. Audience consumption times and programs also varied widely, as did the language of consumption.
- 2. **Highly contextualised and specific messaging is critical**. Given the substantial variation in information consumption, TOMAK will likely find greatest impact, at least initially, through a more labour intensive investment in highly nuanced messages that are customised in terms of channel, language and target audience.

- 3. **Community Radio Station option**. While community radio penetration was less (37%) than for TV (43%), given the need to have highly customized message delivery TOMAK may want to explore potential relationships with relevant community radio stations (ARKTL). With Radio and Television Timor-Leste (RTTL) reportedly having better coverage, and with some targeted communities reporting RTTL as their favourite station, a multi-channel approach may be most appropriate.
- 4. Social media (i.e. Facebook) is a potential gateway for targeting youth audiences, but needs online nutrition-related content. Despite the fact that it was identified as the channel with lowest outreach at the moment, it is projected that with the sharp and continuous increase in mobile broadband networks as well as a more affordable mobile data price, internet use through mobile/smartphones will continue to rapidly increase. However, with relatively lower numbers of respondents reporting finding health and nutrition-related information via internet 'useful,' one conclusion could be that there is insufficient relevant content available in Tetum.
- 5. Messaging needs to target grandmothers. There is ample reason for TOMAK to include grandmothers as key a target audience and stakeholder. Preliminary findings from the TOMAK GESI assessment indicates that mothers and mothers-in-law are frequently strongly involved in decision-making around food preparation and consumption. This is reinforced by the fact that a large proportion of respondents live with their mother.
- 6. Religious leaders may be overlooked as a key stakeholder. Religious groups were the second most common type of group respondents reported belonging to, but Religious Leaders were one of the least referenced sources of health and nutrition-related information. This could be that the Church is opposed to discussing any health or nutrition-related issues. It could also be that insufficient (or ineffective) effort has been invested in bridging the religion-nutrition gap. If that gap can be successfully bridged, it may be possible for TOMAK to reach scale through such partnerships.
- 7. **Bobonaro is doing something right and should be studied for potential replication**. The study found Bobonaro to be a positive outlier in relation to health and nutrition outreach by extension workers. Why and how Bobonaro's local leaders, extension workers and health workers appear to be so much more effective at delivering health and nutrition messaging, and why the respondents interviewed through this study were so highly satisfied with the messages they receive, is unclear. As is the question of whether what Bobonaro appears to be doing right can be replicated to other districts.

## Main Report

### 1. Introduction (or Background)

#### 1.1. Background

The *To'os Ba Moris Diak* Program (TOMAK) is a A\$25 million, 5-year agricultural livelihoods program funded by the Australian government in Timor-Leste. Its goal is to ensure rural households live more prosperous and sustainable lives. TOMAK will achieve this through parallel and linked interventions that aim to:

- Establish a foundation of food security and good nutrition for targeted rural households.
- > Build their capacity to confidently and ably engage in profitable agricultural markets.

As set out in the *Investment Design Document* (IDD), TOMAK will adopt a nutrition sensitive agriculture (NSA) approach in its efforts to improve food security and nutrition. TOMAK will work on both the supply and demand sides of nutrition. On the supply side, TOMAK will aim to improve the supply and availability of nutritious food. On the demand side, TOMAK will work to influence nutrition-related knowledge and behaviour of target households through social behaviour change communication (SBCC) approaches. To build the capacity of target households to engage profitable agricultural markets in order to increase household incomes, TOMAK will develop value chains (VCs) that are assessed to have high commercial potential. TOMAK will emphasize application of the making markets work for the poor (M4P) approaches.

TOMAK's primary target area defined in the IDD comprises of inland (non-coastal) suku that have reasonable

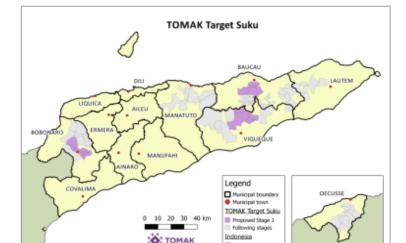


Figure 1: TOMAK target communities

agricultural potential. Agricultural potential was defined as access to irrigation resources. This zone<sup>1</sup> includes 70-80 suku (villages). They are located in three clusters; (1) the Maliana basin (including most of Bobonaro municipality); (2) the eastern mountain regions (including large parts of Baucau and Viqueque districts and parts of Lautem and Manatuto); and (3) Oecussi municipality.

Adam Smith International (Australia) Pty Ltd (ASI), in partnership with Mercy Corps, was awarded the contract for management of TOMAK in May 2016. Core staff were mobilised to Dili at the beginning of June 2016 to commence start-up of TOMAK's one-year Inception Phase.

As specified in the contract, TOMAK's Inception Phase will run through mid-2017. The Inception Phase will focus on program establishment, developing a more detailed design, and identifying of major field activities to commence in 2017.

To enable development of a more detailed design of TOMAK's NSA component, three foundational assessments were carried out. This Information Consumption Survey (ICS) is the third of the three assessments. It was designed to gain a broader understanding of the information channels used by TOMAK's target households to acquire nutrition-related information.

The assessment is based on a review of existing secondary data, supplemented with a field survey to fill identified knowledge gaps. The field assessment comprised a combination of focus group discussions

<sup>&</sup>lt;sup>1</sup> Identified in the IDD as the 'Inland Irrigable Watersheds' Zone (IIWZ).

(FGDs), key informant interviews (KIIs) and surveys aimed at gaining an overall understanding of target households and their members' nutrition-promoting behaviours.

The findings will be used by TOMAK to develop a theory of change to trigger household demand for year-round production and utilisation of diverse and sufficient foods.

#### 1.2. Objective

Establishing a foundation of food security and good nutrition requires stimulating household demand for year-round production, purchase and utilisation of nutritionally-diverse and sufficient foods. To effectively stimulate this demand, TOMAK needs to understand the demographic profile and context in which choices are made around nutrition of its target beneficiaries.

The objective of the ICS was therefore to capture basic information to help determine the channels that TOMAK should use for reaching communities with key nutrition messages. The ICS aims to gather up-to-date and gender-specific information about the channels households currently use for accessing nutrition-related information for a broad cross-section of the proposed target group.

The specific objectives of the ICS were to:

- > Identify the most common sources of nutrition-related information in the TOMAK implementation areas.
- > Explore the targeted communities' preferred channels for receiving information, including home-grown information sharing mechanisms.
- Understand common media reach and effectiveness (i.e. viewership and listenership).

### 2. Methodology

**Geographic locations rationale:** Following the program targeting logic, the survey was conducted in three districts within TOMAK priority implementation areas, including: (i) Maliana Basin in Bobonaro Municipality; (ii) West Viqueque-Baucau Districts; and (iii) East Viqueque-Baucau Districts. Each geographic area represents distinct, but relatively homogeneous socio-cultural practices. Clustering of participants was focused around these regions.

**Sampling methodology and respondents:** Data and information were collected through household surveys in three clustered areas that encompassed 15 suku and 39 aldeias in Bobonaro, Baucau and Viqueque Districts. A total number of 129 households were interviewed using the questionnaire provided in Appendix 1.

The survey was designed to capture dynamics across the different TOMAK target areas and target beneficiary households. The survey was not designed to be statistically significant nor to unveil underlying constraints or barriers on behavioural-level determinants.

As far as possible, the number of respondent households were distributed equally among selected suku. Households were randomly selected, starting from the first household in the centre of the suku. Subsequent households were selected by taking a right turn from the first household and then selecting every other household. Inclusion criteria included households with women of reproductive age and women with children under-5 years of age. The number of respondents per suku is detailed in Table 1. The survey also targeted youth (single, aged 15-19 years old) male and female respondents (see Table 2).

Table 1: Number of households & population of surveyed suku and number of respondents

	Post Adm	Suku	Aldeia	Household	Population	■ Male ■ Female	Respondent	■ Male ■ Female
	Balibo	Batugade	Batugade	139	771		10	
Bobonaro	Cailaco	Purugua	Heda	77	447		5	
	Canaco	rurugua	Lesu-pu	95	483		4	
Bol	Maliana	Raifun	Raifun Villa	317	2220		12	
	ivialialia	Ritabou	Ritabou	21	157		12	
			Buibau	180	1000		10	
		Buibau	Builai	112	674		1	
			Loidua	221	1252		1	
			Gariuai	105	558		2	
_	Baucau	Gariuai	Uaturau	92	487		4	
Baucau			Maukale	116	614		5	
Bau		Samalari	Ossuluga	120	593		6	
			Sorulai	119	571		2	
			Samalari	73	381		2	
	Quelicai	Laisorulai-	Batikasa	87	333		8	
		Leten	Uataliu	24	77		2	
		Lelalai	Dauaduka	71	256		11	
			Raimuti	36	167		4	
		Ossurua	Uatulawa	65	322		3	
		Ossaraa	Uaibobo	21	95		3	
			Umabere	35	190		1	
Viqueque			Baka-isi	71	380		7	
ane	Ossu	Ossu-Leten	Belas	106	529		2	
ž			Borala	87	447		1	
			Dolibati	30	128		1	
		Uagia	Manulari	41	187		1	
		Capia	Uatumanutuku	86	435		5	
			Uaitutumata	34	184		4	
All				2581	13,938		129	

Table 2: Respondents: youth vs adult, by district

Category	Sex	Baucau	Bobonaro	Viqueque	Total
Youth	Female	6	7	5	18
	Male	5	6	3	14
Adult	Female	20	17	11	48
	Male	23	13	13	49
Total		54	43	32	129

Enumerators were trained at Mercy Corps' office during 18-21 October 2016. This training was facilitated by the Survey Team Leader, the Co-Team Leader and the M&E Specialist. During the training, the Mercy Corps Program Director and TOMAK Nutrition Specialist provided technical guidance. Participants were

familiarised with the survey tools, household selection procedure, as well as the inclusion and exclusion criteria. Tools were refined for language clarity, and again during translation to Tetum

A total of seven enumerators attended the training. Four enumerators were designated to conduct the survey in Baucau and Viqueque, and three in Bobonaro.

One coordinator was appointed for each cluster. The coordinators were Mercy Corps' staff, selected based on their familiarity with the target area and their past experience with this kind of survey. Coordinators participated in training, conducted field-level coordination of survey activities, and crosschecked data on the surveyors' tablets.

#### **Survey Limitations:**

- The sample size was chosen to provide a cross section of the target households and not for statistical significance.
- The timing of the survey clashed with suku elections and this meant that some suku in the Baucau and Viqueque clusters had to be selected outside of TOMAK's primary target suku.
- Additional supervision was required for some enumerators who were not familiar with using a tablet device for data collection.
- The data collected was based on respondent recall.
- > The respondents included men or women living with at least one child under five years of age. An assumption was made that respondents were responsible for providing care to the children but this was not validated.

**Ethical Clearance:** Clearance was gained from the *Instituto Saude Nasional* (INS) with permission also obtained from local authorities including the municipal administration, postu administrativu (sub-district), and the suku (village). Participation was voluntary. Respondents were questioned only after they gave their informed consent. All data was treated confidentially and used only for the purpose of this study.

### 3. Secondary Data Analysis

While data and information about food consumption in Timor-Leste is abundantly available, information and data about channels used for disseminating and receiving nutrition-related information, how that information is being accessed and if it is effective, is far more limited.

In 2006, a national survey of media was carried out called the Timor-Leste National Media survey, funded by USAID and implemented by Foundation Hirondelle in support of Radio Television Timor-Leste (RTTL). Key findings are presented in Appendix 3, but after 11 years most findings are no longer relevant. In addition, coverage did not represent most TOMAK target communities.

It is important to note that both government and non-government organizations have developed large amounts of nutrition messaging and communication materials which are used to promote healthy nutrition-related behaviours.

However, the SBCC Assessment conducted by the FAO in 2015 highlights redundancies and a lack of harmonization across government agencies and non-governmental organizations in their approaches to SBCC. This was attributed, in part, to the absence of a central repository for nutrition-related communication and training materials.

The 2016 'Malnutrition in Timor-Leste Report2' funded by the World Bank called for a far more harmonized and convergent approach to SBCC, training, and programming.

The 2015 Timor-Leste Census preliminary report provides data on communication amenities owned by households. 27% of households own radios; 36.8% have televisions; 81.3% have mobile phones.

<sup>&</sup>lt;sup>2</sup> Provo, A. et all, 2016, Malnutrition in Timor-Leste: A review of the burden, drivers, and potential response, World Bank

Telkomcel<sup>3</sup>, a leading telecom provider in Timor-Leste, reports that there is a total of over 128,000 telecommunications customers in the country with access to the 3G network. There are three telecom providers: Telkomcel (68,000); Telemor (52,600); and Timor-Telecom (7,500 subscribers).

#### 4. Research Questions

Responding to the Terms of Reference (ToR) developed by TOMAK, the following research questions were developed by Mercy Corps. These research questions were discussed and approved by TOMAK:

- > What channels are used by the target households to access both general and nutrition-related information?
- At what times during the day do TOMAK's target households access information from each channel?
- > Are there any challenges faced accessing information from each channel?
- > What kind of nutrition information, if any, is accessed by households from each channel?
- What is the perception by households of the information provided from each channel?

Since no clear information was available about different channels accessed by target communities, the team decided to pre-select the following channels to be explored during the survey:

- Radio
- > Television
- > Magazine and newspaper
- Internet
- > Mobile phone
- > Religious leaders
- Local government leaders
- > Health and nutrition extension officers
- Other sources

Findings have been presented in line with five sub-themes, reflecting the research questions:

- > Respondent profile and housing condition
- Radio
- > Television
- > Internet and mobile phone
- Individuals and other sources.

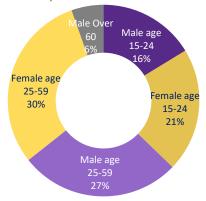
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<sup>&</sup>lt;sup>3</sup> http://telkomcel.tl/page/article-2/

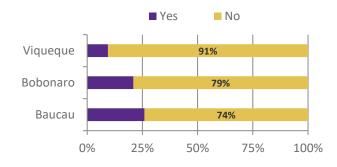
### 5. Findings

#### 5.1. Respondents' profiles and housing conditions

Graph 1: Respondents based on sex and age groups



Graph 2: Respondents with pregnant or lactating women (PLW) present in their houses, by district



#### Age

The majority (57%) of respondents were aged between 25-59 years. Due to the specific inclusion of youth, a further 37% of respondents were aged 15-24 years old (Graph 1). Additional effort was given to include households with pregnant and lactating women (PLW), which represented 9-26% of respondents depending on municipality (Graph 2).

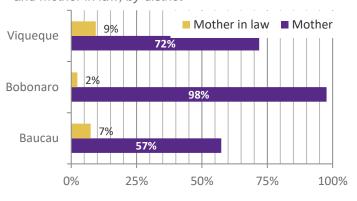
#### Household size

The average household size of respondents in all target areas was 6.1 (5.7 in Baucau, 6.3 in Bobonaro, and 6.7 in Viqueque). These figures are higher than recorded by the 2015 Census which was 5.7.

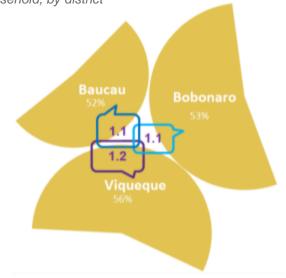
#### Live-in extended family

The overwhelming majority of respondents (57%-98%) reported living with their mother. Much smaller percentages (2%-9%) reported living with a mother-in-law. (Graph 4). Preliminary findings from the TOMAK GESI assessment indicated that mothers and mothers-in-law are frequently strongly involved in decision-making concerning food preparation and consumption.

Graph 3: Proportion of respondents living with mother and mother in law, by district



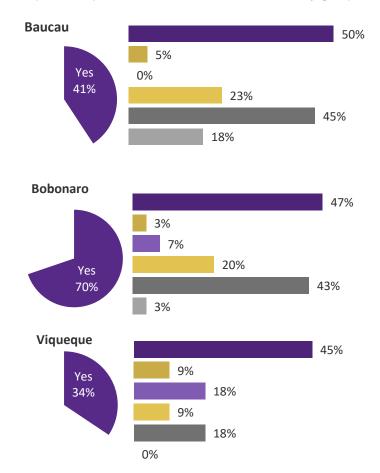
Graph 4: Proportion of respondents with children under-5 years of age average number of under-5 per household, by district



#### Presence of children under 5-years

Just over half of respondents across the three areas reported having at least one child under 5-years of age (Graph 4). On average across all respondents, on average each household had 1.1 children under 5-years. Among those households who have children under-5 of age, on average the number of the under-5 children is 2.1 per household – relatively equal across all three areas surveyed.

Graph 5: Respondents that are active in community groups and types of community groups, by municipality



## Participation in community groups

■ Small-business/food processing/handicraft group

■ Farming/fisheries/aquaculture group

■ Mother support group

■ Sport/art group

■ Religious group

■ Village and saving/micro-finance group

To test if there may be a correlation between involvement in community groups and nutrition-related outcomes, the survey asked respondents about their participation in community groups (Graph 5).

In Bobonaro, 70% of respondents reported actively participating in at least one community-based group. However, there was much lower reported participation in Baucau (41%) and Vigueque (34%).

Farming/fisheries/aquaculture groups were the ones most commonly reported groups (45%-50%). Participation in religious groups was next, though this was lowest in Viqueque. Involvement in sports/art groups also scored high in both Bobonaro and

Baucau (20%-23%). This may be due to the high involvement by youth as respondents for this survey.

Other than farming groups, respondents in Viqueque did not report being involved in many other community groups.

#### Languages

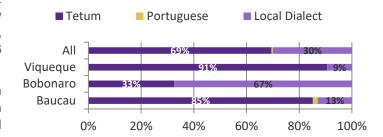
Recognising the important role of language in communication and information sharing, the assessment asked respondents about languages they use to communicate with families, neighbours, friends and others (Graphs 6 and 7).

The results revealed substantial variation in languages spoken. In terms of Tetum versus other local dialects, in Baucau and

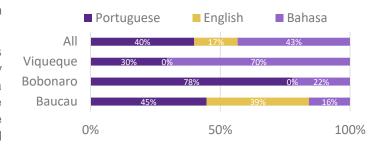
Viqueque, Tetum was reported the dominant language (85%-91%). However, in Bobonaro the use of local dialects featured prominently with 67% of respondents reporting speaking Bunak in their day-to-day communications.

Amongst the three main foreign languages spoken in Timor-Leste, again the survey results were mixed. In Viqueque, Bahasa dominates (70%) followed by Portuguese (30%). In Bobonaro, Portuguese dominates (78%), with only a small percent of respondents reporting speaking

Graph 6: Respondents reported main languages spoken

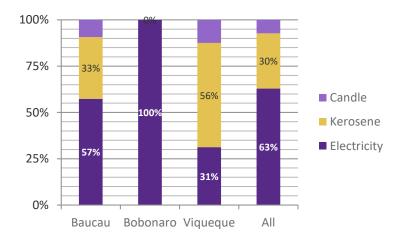


Graph 7: Respondents reporting also speaking/ understanding the following languages



Bahasa. In neither Viqueque nor Bobonaro did respondents report speaking or understanding English. Those who reported speaking or understanding English were predominantly youth respondents.

Graph 8: Main source of energy for lighting of respondents



Unsurprisingly, there is a strong correlation between access to electricity and television ownership, further discussed in Section 5.3 below.

#### 5.2. Radio

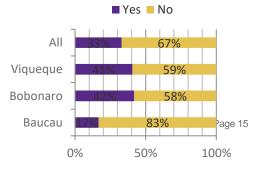
#### Listenership

The 2015 Census data reports that 27% of Timorese households own a radio. The ICS survey found that, on average, 33% of respondents listen to radio. This suggests that people tend to

#### **Energy sources**

Electricity is increasingly available across Timor-Leste. 100% of Bobonaro respondents reported living in a house with electricity as the main source of energy for lighting. Baucau followed with 57%, then Vigueque with 31%. These findings were much lower than indicated in TOMAK's KAP survey. That survey found 73% of respondents in Baucau and 61% in Viqueque reported electricity within the home. This inconsistency is likely a result of the KAP and ICS surveys being implemented in different aldeias. The aldeias targeted for the ICS are located in more remote areas.

Graph 9: Proportion of radio listener respondents



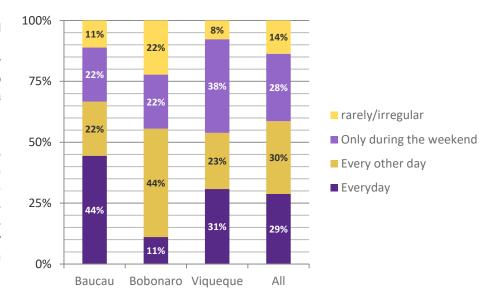
listen to radio with others. By municipality, listenership varied from a high of 42% (in Bobonaro) down to 17% in Baucau.

#### Frequency and timing

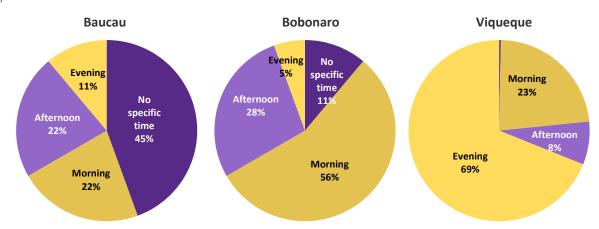
Those who reported listening to radio were then asked about the frequency of listening (Graph 10). On average, 29% reported listening to radio every day, with 30% reported listening every other day. Weekends were also reported as a period with a largest audience.

There was great variation amongst respondents' answers to the question about their favourite time of day to listen to the radio (Graph 11). Morning appears universally popular, afternoon. Evening time was very popular amongst respondents in Viqueque only.

Graph 10: Frequency of listening to radio



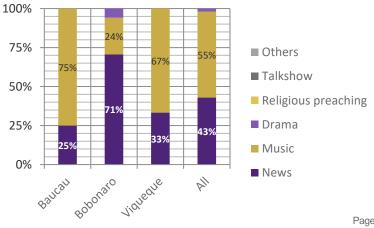
Graph 11: Favourite time to listen to radio



#### **Favourite radio programming**

Music and news programs were reported by respondents as being their favourite type of radio program (Graph 11). Radio dramas fared poorly. Unexpectedly, with such a strongly religious population, no respondents reported favouring religious programs in radio

Graph 11: Specific favourite radio program



#### **Radio stations**

In Timor-Leste, Radio and Timor-Leste Television (RTTL) and Radio Maubere national are two radio that can be stations accessed in most, but not all, municipalities. RTTL is a state-owned radio station. Radio Komunidade is community-based radio network located station across 13 municipalities, but with a more limited outreach variety of programs. Currently, there are 16 Radio Komunidades

Figure 2: Names and Locations of Radio Komunidade in Timor-Leste



across Timor-Leste (see Figure 2). They are organized by *Assosiasaun Radio Komunidade Timor-Leste* (ARKTL)<sup>4</sup>.

Table 3: Favorite Radio Stations

Station	Baucau	Bobonaro	Viqueque
RTTL	••••	••••	•••
Radio Maubere	••	••••	••••
Radio Komunidade	••••	••••	•••

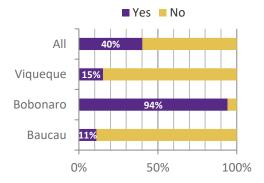
• represents one respondent

#### Nutrition messages via radio

Respondents were asked if they had ever received any health or nutrition information via radio (Graph 12). In Bobonaro, 94% of respondents reported they had. However, in Viqueque and Baucau it was much lower at 11% and 13% respectively. When probed further about the range of health or nutrition topics received via radio, respondents reported a varied array of messages with general health and nutrition information and family planning the most commonly identified (Table 3). Importantly, 85% of respondents who stated ever receiving health or nutrition-related information from radio said the information was useful.

There appears to be substantial differences amongst respondents in each municipality in terms of preferred radio stations. In Baucau and Bobonaro, the majority of respondents reported preferring RTTL. Meanwhile in Viaueaue. preference was reported for Radio Maubere. Radio Komunidade, despite being a community-based radio, was favoured by fewer respondents. This may be due to its limited outreach and programs being on air for only about 4-6 hours per day as compared to RTTL and Radio Maubere which both air almost 24 hours per day.

Graph 12: 'Have you ever had any health/nutrition information from radio?'



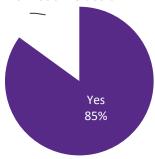
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<sup>4</sup> https://arktl.org/

Table 4: Type(s) health/nutrition information provided

Combinations of resp	Percentage	
1. General health/nutrition	1	20%
information 2. Maternal & Infant/young	1, 2	15%
child feeding	1, 2, 3, 4	15%
3. Water and sanitation	1, 3, 4	20%
4. Family Planning	1, 4	25%
	2	5%

Graph 13: "If the information is useful?"

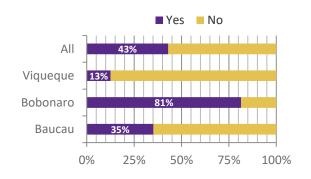


#### 5.3. Television

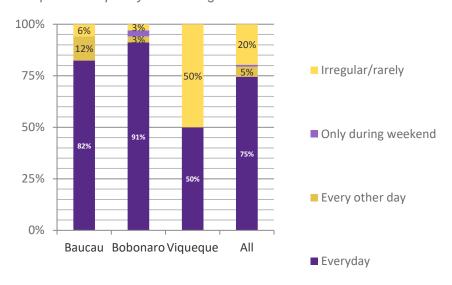
According to the 2015 Census data, 36.8% households in Timor-Leste own a television. From this survey, an average of 43% of respondents indicated watching TV (Graph 14), ranging from 81% in Bobonaro down to 13% in Viqueque. This is consistent with the data regarding primary household energy source. Those who watch TV are tend to be households which also report electricity as the main source of energy for lighting.

Similar with surveyed radio listeners, surveyed TV viewers reported watching TV either with themselves or with other family members.

Graph 14: Proportion of respondents who watch TV



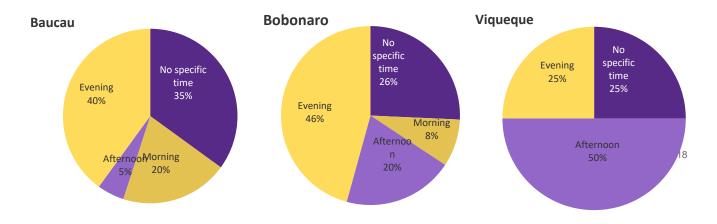
Graph 15: Frequency of watching TV



Frequency and timing

Amongst those who watch TV, 75% reported watching it on a regular basis (Graph 15). Evening is the most common time for watching (Graph 16).

Graph 16: Favourite time to watch TV



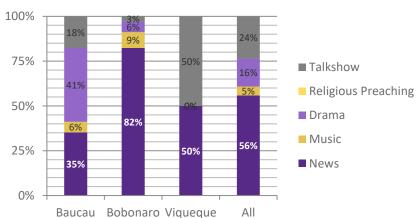
#### **Favourite TV stations**

Of the two national TV stations, TVTL and STL, the clear preference of respondents is for TVTL (Graph 17).

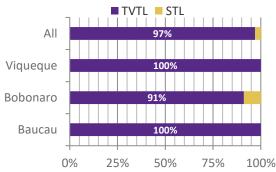
#### **Favourite TV programming**

While respondents reported news programs as being their favourite programming, a large percentage of respondents also reported TV Talk shows as being popular (Graph 18). Further cross analysis of favourite viewing time and programming indicates that the evening news program of TVTL is the most popular TV program.

Graph 18: Specific favourite TV program



Graph 17: Favourite TV Channel



## Health or nutrition-related programming

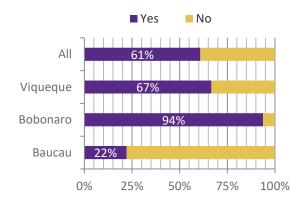
When asked if they ever received any health or nutrition information from TV, 61% of viewers answered yes (Graph 19). Similar with radio, the proportion who said yes was highest for Bobonaro (94%); and lowest for Baucau (22%).

As with radio, the majority of

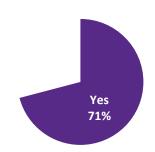
respondents who reported watching television reported receiving general health or nutrition information via television, as well as information about family planning.

When further asked if the information was useful, 71% of respondents indicated it was.

Graph 19: "Have you ever had any health/ nutrition information from TV?"



Graph 20: "If the information is useful?"



#### 5.4. Magazine and newspaper

#### Readership

On average only 21% of respondents across the three municipalities reported reading magazines or newspapers, ranging from a high of 40% for Bobonaro dropping to 13% and 11% for Viqueque and Baucau respectively (Graph 20).

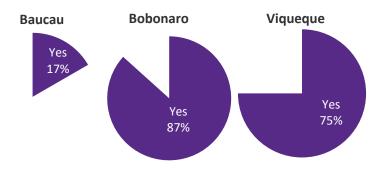
#### Readership proficiency

Among respondents who reported reading magazines or newspapers, 68% reported being able to easily read magazines or newspapers. The main challenge they reported was the availability and accessibility of magazines or newspapers (indicated by 32% of magazine or newspaper readers).

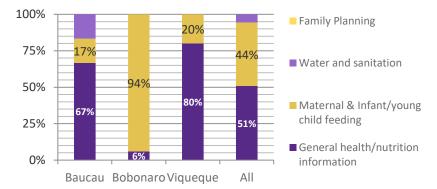
#### Magazines

Lafaek Magazine was the only magazine mentioned as being available and accessible across all surveyed areas (Graph 21). Lafaek is the magazine produced by CARE International in Timor-Leste. It is distributed free to school students and community members on a quarterly basis. However, in Baucau readership was reported as very low (17%) as compared to Viqueque (100%) and Bobonaro (88%).

Graph 22: "Have you ever had health or nutrition information from magazine/newspaper that you read?"



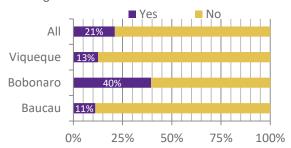
Graph 23: Health/nutrition information read



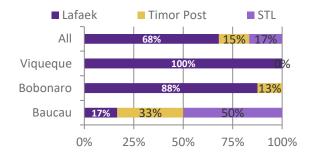
Graph 24: "If the information is useful?"



Graph 20: Proportion of respondents who read magazine



Graph 21: Name of magazine/newspaper read



#### **Newspapers**

There were only two newspapers indicated by respondents—the Timor Post and the *Suara Timor-Lorosae* (STL). Interestingly, while the STL TV program had very low reported viewership by respondents, its printed media was reportedly the most read by respondents in Baucau.

## Health or nutrition-related programming

There was а large variation between municipalities respondents' reported reading of nutrition-related health  $\circ$ r information from newspapers or magazines (Graph 22). This ranged from 75% for Viguegue down to 17% for Baucau. This is unexpected aiven the few magazines newspapers or available across all target areas.

Information regarding types of health or nutrition information gathered from magazines or

Page 20

newspapers as recalled by respondents can be seen in Graph 24. General health and nutrition information and maternal and infant young children feeding (MIYCF) were among the most commonly reported types by respondents. 67% of respondents reported the information was useful.

#### 5.5. Internet

#### Internet users

Internet access through mobile or smart phone is likely accessed via mobile data connections. On average across all target communities, 20% of respondents reported being internet users. This was fairly consistent across all three municipalities (Graph 25).

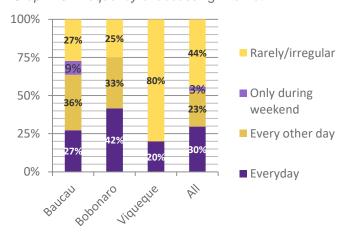
#### Internet connection devices

Respondents reported using mobile/smart phones to access the internet only.

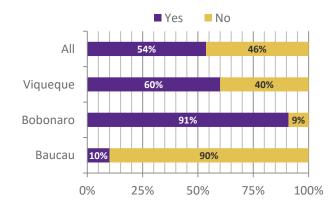
#### Internet social media and websites

100% of respondents accessing the internet reported accessing Facebook by using their smart/mobile phone. No other social media or specific web address was

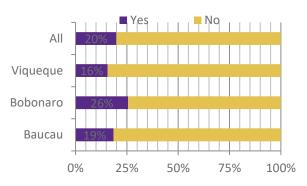
Graph 26: Frequency of accessing internet



Graph 27: Proportion of respondents who reported having health/nutrition information from internet



Graph 25: Proportion of respondents who access internet



No other social media or specific web address was referenced by respondents.

#### Internet usage

30% of respondent internet users reported accessing Facebook every day, with a further 23% reporting every other day. 44% indicated that they accessed Facebook irregularly or very rarely (Graph 26).

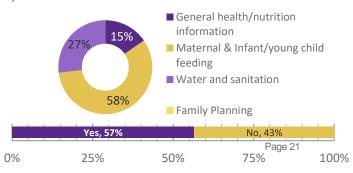
## Accessing health or nutrition information via the internet

A large proportion of respondents that use the internet reported using it to access health or nutrition information (Graph 27). However, the percentage varied widely between municipalities, from a high of 91% in Bobonaro down to 10% in Baucau.

The majority of health and nutrition information accessed via the internet related to MIYCF practices, water and sanitation, and general health and nutrition (Graph 28).

Only 57% of users reported the health or nutrition information they accessed via the internet was useful.

Graph 28: Types of nutrition information accessed and if perceived as useful or not



#### 5.6. Mobile phone (non-internet)

#### Phone ownership

The 2015 Census reported that 81.3% of households in Timor-Leste own a mobile phone. This survey indicated a lower figure with 70% of all respondents across target all areas reporting owning and using a mobile phone. In Bobonaro, the ownership is very high at 91%, while in Viqueque and Baucau it falls to 63% and 57% respectively.

#### Phone usage (non-internet)

100% of respondents who reported having a mobile phone are using it for communications (SMS, phone call, and WhatsApp).

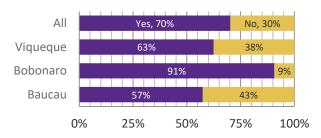
Amongst respondents who reported owning and using a mobile phone, only 7% reported having ever accessed nutrition-related information through their phone. Note that this does not include using mobile phones to access such information via the internet. Respondents indicated all nutrition-related information was transmitted through short message services (SMS).

Almost all respondents who reported receiving a nutrition-related message via phone stated that they no longer remember the message. Only one respondent could recall a specific health-related message.

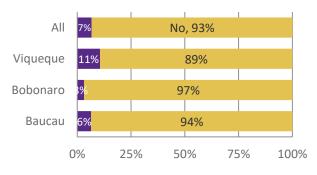
#### Trends

World Bank data<sup>5</sup> indicates significant increases in mobile cellular subscriptions and internet users in Timor-Leste in recent years (Graphs 31 and 32), with Telkomcel reporting that a total of over 28,000 telecommunications customers in 2015 had access to its 3G network. It is therefore not surprising that the ICS survey found 20% of respondents (mostly youth)

Graph 29: Ownership of mobile phone



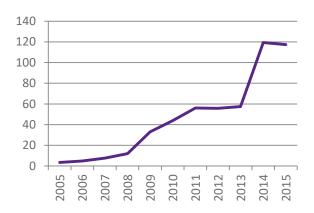
Graph 30: "Have you ever had any nutrition information transmitted through your phone?"



accessing the internet (Facebook) on a daily basis. Despite this, the internet is also identified as the media/communications channel with lowest outreach at present. However, with continual improvement in mobile broadband network coverage as well as a more affordable mobile data, internet use via mobile/smartphones is projected to steadily increase.

<sup>&</sup>lt;sup>5</sup> http://data.worldbank.org/indicator/IT.NET.USER.P2?display=graph&end=2015&locations=TL&start=2003 and http://data.worldbank.org/indicator/IT.CEL.SETS.P2?display=graph&end=2015&locations=TL&start=2003 (accessed on November 26, 2016)

Graph 31: Mobile cellular subscriptions (per 100 people)



#### 5.7. Other channels

#### 5.7.1. Religious Leaders

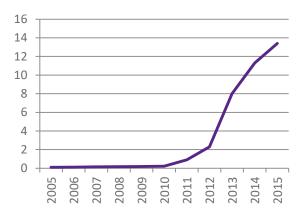
Despite that fact that no respondents indicated religious programs were their favourite TV/radio/other mass media program, an average of 8% of respondents reported having had health and nutrition information provided by a religious leader (Graph 33).

However, amongst the respondents who reported receiving nutrition information from religious leaders, there was wide variation as to the frequency that

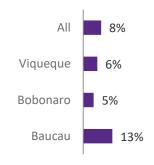
information was delivered by religious leaders. For example, respondents in Bobonaro reported receiving it every other month or quarterly (29%) or very irregular or rarely (also 29%).

No respondent reported receiving nutrition information from religious leader on daily basis, but in Bobonaro (50%) and Baucau (18%), respondents reported receiving nutrition information from a religious

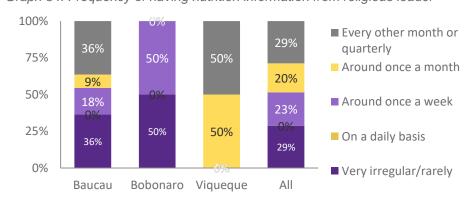
Graph 32: Internet users (per 100 people)



Graph 33: 'Have you ever had any health/ nutrition information from religious leader?'



Graph 34: Frequency of having nutrition information from religious leader



leader on a weekly basis. These respondents indicated that information was transmitted either through one-on-one meetings, or through church sermons.

Graph 35: Perception if the information provided in useful



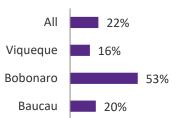
When asked what types of information were provided, 88% of respondents who reported receiving information from a religious leader stated that it was general health and nutrition information. The remaining 12% indicated the information they received was about MIYCF, water and sanitation, or about family planning.

In Viqueque, almost none of respondents who accessed nutrition information from religious leaders indicated that the information provided was useful. This is the opposite perception in Bobonaro, where 100% of respondents indicated that the information provided was useful, while Baucau was split 50%:50%.

#### 5.7.2. Local Leaders/Extension Workers

22% of respondents on average reported receiving nutrition or health-related information from local leaders and/or extension workers. This ranged from a high of 53% for Bobonaro, down to 16% and 20% for Viqueque and Baucau respectively (Graph 36).

# Graph 36: 'Have you ever had any health/ nutrition information from local leader/ext. worker?'



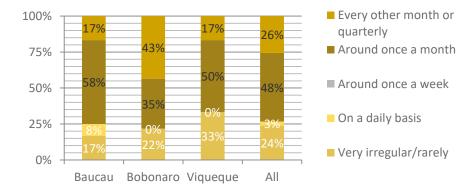
#### Frequency

Respondents receiving information from local leaders and/or extension workers reported receiving this around once a month (48%), every other month (26%), or rarely or irregularly (24%). Only 3% of respondents across areas reported receiving health or nutrition information from local

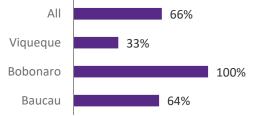
leaders or extension workers on a daily basis (Graph 37).

Respondents reported information was transmitted through different methods including through the community system health (Sistema Integradu Saude Comunitaria or SISCa), one-on-one meetings with leaders, or public speaking occasions.

Graph 37: Frequency of receiving health/nutrition information from local leaders or ext. workers



Graph 38: Perception of respondents regarding usefulness of nutrition-related information provided by local leaders was useful



Similar with information from religious leaders, respondents reported nutrition-related information provided by local leaders was mostly about general health and nutrition.

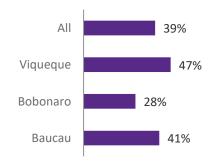
Asked whether they perceived the nutrition-related information provided by local leaders was useful or not, two-third reported that it was useful.

#### 5.7.3. Health Workers/PSF

The community health system (SISCa) and Family Health Program (*Programa Saude Familia or* PSF) are the main government channels for providing community members with access to nutrition-related services and information. In this survey, 39% of respondents reported having ever received health and nutrition information from health workers, PSF or nutrition extension officers – either from government or NGOs (Graph 39).

This was highest for Viqueque (47%), followed by Baucau

Graph 39: "Have you ever received any health or nutrition information from health workers or PSF?

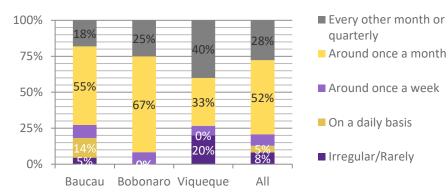


(41%) and Bobonaro (28%).

#### Frequency

Across all three municipalities, respondents reported accessing nutrition-related information regularly from health workers (SISCa) and PSF. Most reported receiving health or nutrition-related information monthly, every other month or quarterly (Graph 40).

Graph 40: Frequency of receiving health/nutrition information from health workers



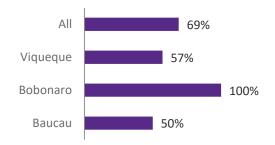
# Types of health or nutrition-related information provided

According to respondents, health workers and PSF share a more diverse range of health information including general health and nutrition information, MIYCF, water and sanitation, and family planning.

#### Usefulness of Information

On average 70% of respondents reported that health or nutrition-related information provided by SISCA or PSFs was useful (Graph 41). This ranged from a high of 100% for Bobonaro, falling to 57% and 50% for Viqueque and Baucau respectively.

Graph 41: Perception if the information provided in useful



### 6. Conclusions

Key conclusions are as follows:

- Grandmothers matter. Preliminary findings from the TOMAK Gender and Social Inclusion (GESI) assessment indicate that mothers and mothers-in-law are frequently deeply involved in decision-making around food preparation and consumption. In addition, between 57% to 98% of respondents reported living with their mother. Therefore, grandmothers appear to be a key target audience and stakeholder in household decision-making concerning health and nutrition.
- Outside of Tetum, there is no shared language across all three target areas. The survey results revealed substantial variations in languages spoken across the three target areas. While Tetum was strong in Baucau and Viqueque, it was not as widely spoken by respondents in Bobonaro. Similarly, Portuguese was reportedly heavily understood in Bobonaro but not in Baucau or Viqueque. A nuanced approach to messaging will therefore be important.
- Slightly less than 50% of respondents reported participating in any community group. However, the data varies widely from 70% of respondents in Bobonaro to 34% and 41% in Viqueque and Baucau respectively.
- Low participation in Mother Support groups. Respondents reported between 0-18% participation in Mother Support groups across the three districts.

- > <u>Farming and religious groups have the greatest participation</u>. Respondents consistently reported participation in farming/fishing/aquaculture and religious groups. Close to 50% of respondents reported participating in such groups across all three districts.
- Radio access is relatively low, and people listen together. Only 37% of respondents reported listening to radio. That figure dropped to 17% in Baucau. Comparing this finding to results from the SBCC Assessment conducted by FAO in 2015 which found that only 27% of households own radios, one could also conclude that people listen to radios together.
- Radio is reportedly a 'useful' source of nutrition and health-related messaging for those who can access it. 85% of respondents who stated ever receiving health or nutrition-related information from radio stated the information was 'useful.'
- There is no clear 'good time' for radio messaging. Across all 3 districts, respondents greatly varied in terms of the time at which they listen to the radio (i.e. morning, afternoon and evening)
- Sixteen community radio stations are organized under the Assosiasaun Radio Komunidade Timor-Leste (ARKTL). However, the Radio and Television Timor-Leste (RTTL) has reportedly better coverage, and in some targeted communities RTTL was reported as the favourite station.
- > TV access is higher than for radio. According to the 2015 Census data, 37% of households own television. From this survey, 43% of respondents reported watching TV. However, these figures greatly varied across districts with 81% of respondents in Bobonaro reporting watching television compared to only 13% in Vigueque. This is consistent with the data regarding energy access.
- Lafaek Magazine is the only magazine with regular distribution. Lafaek Magazine was the only magazine mentioned by respondents as being available and accessible across surveyed areas. Lafaek is a magazine produced by CARE International in Timor-Leste. It is distributed freely to school students and community members on a quarterly basis.
- Magazine readership is relatively low. Only 21% of all respondents across the three target districts reported reading magazines or newspapers. However, 68% of respondents reported being able to easily read magazines or newspapers. A main challenge reported was availability and accessibility to either medium.
- 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%).
- > <u>Facebook is the internet social media platform</u>. While a relatively small percentage of the overall population reported using the internet, they consistently and exclusively referenced Facebook as their main internet destination. Roughly 50% of internet users reported checking their Facebook frequently (i.e. every 2 days or less). However, due to respondents reportedly low access to the internet, TOMAK might consider Facebook a powerful 'additional medium' but likely not its main one.
- Health or nutrition information accessed via the internet is not very useful. Only 57% of respondents who reported accessing information on health or nutrition via the internet reported it was useful. This is much lower than those who accessed similar types of information via radio, TV, magazines or newspapers.
- Mobile phone ownership is as high as 81% of households (as per the 2015 census). However, this survey found phone ownership was closer to 70% of households.
- Debonaro local leaders/extension workers are an example of message dissemination. 53% of respondents reported receiving nutrition or health-related information from local leaders and/or extension workers in Bobonaro, compared to an average of 18% in Baucau and Viqueque. 100% of respondents in Bobonaro reported the nutrition-related information provided by local leaders was useful, compared to an average of 49% for the other two districts.
- The Community Health System (SISCa) and Family Health Program (Programa Saude Familia/PSF) reach 39% of respondents. While outreach of SISCa and PSF health workers was almost double in Viqueque (47%) compared to Bobonaro (28%), 100% of respondents in Bobonaro reported the health and nutrition-related information 'useful' as compared to an average of 53% in Viqueque and Baucau.

#### 7. Recommendations

Based on the conclusions from the secondary data analysis and this assessment, recommendations for TOMAK include:

- 1. **Try, learn, iterate**. There are no obvious silver bullets for mass media information consumption. TOMAK will likely need to try a range of information dissemination options, monitor these closely and look for a few high-value options. This survey found a very wide range of information consumption patterns, all with relatively low respondent numbers. Only half of all respondents reported being a member of a group, and participation in Mother Care groups was especially low (0-18%). No single media channel (TV, radio, magazine, etc) reached more than 50% of the population. Audience consumption times and programs also varied widely, as did the language of consumption.
- 2. **Highly contextualised and specific messaging is critical**. Given the substantial variation in information consumption, TOMAK will likely find greatest impact, at least initially, through a more labour intensive investment in highly nuanced messages that are customised in terms of channel, language and target audience.
- 3. Community Radio Station option. While community radio penetration was less (37%) than for TV (43%), given the need to have highly customised message delivery TOMAK may want to explore potential relationships with relevant community radio stations (ARKTL). With Radio and Television Timor-Leste (RTTL) reportedly having better coverage, and with some targeted communities reporting RTTL as their favourite station, a multi-channel approach may be most appropriate.
- 4. Social media (i.e. Facebook) is a potential gateway for targeting youth audiences, but needs online nutrition-related content. Despite the fact that it was identified as the channel with lowest outreach at the moment, it is projected that with the sharp and continuous increase in mobile broadband networks as well as a more affordable mobile data price, internet use through mobile/smartphones will continue to rapidly increase. However, with relatively lower numbers of respondents reporting finding health and nutrition-related information via internet 'useful,' one conclusion could be that there is insufficient relevant content available in Tetum.
- 5. Messaging needs to target grandmothers. There is ample reason for TOMAK to include grandmothers as key a target audience and stakeholder. Preliminary findings from the TOMAK GESI assessment indicates that mothers and mothers-in-law are frequently strongly involved in decision-making around food preparation and consumption. This is reinforced by the fact that a large proportion of respondents live with their mother.
- 6. Religious leaders may be overlooked as a key stakeholder. Religious groups were the second most common type of group respondents reported belonging to, but Religious Leaders were one of the least referenced sources of health and nutrition-related information. This could be that the Church is opposed to discussing any health or nutrition-related issues. It could also be that insufficient (or ineffective) effort has been invested in bridging the religion-nutrition gap. If that gap can be successfully bridged, it may be possible for TOMAK to reach scale through such partnerships.
- 7. **Bobonaro is doing something right and should be studied for potential replication**. The study found Bobonaro to be a positive outlier in relation to health and nutrition outreach by extension workers. Why and how Bobonaro's local leaders, extension workers and health workers appear to be so much more effective at delivering health and nutrition messaging, and why the respondents interviewed through this study were so highly satisfied with the messages they receive, is unclear. As is the question of whether what Bobonaro appears to be doing right can be replicated to other districts.

# **Appendices**

# Appendix 1: Comparison information channels reported by respondents

Type of Channels	% users	Frequency of using the channel	Specific favourite contents	Favourite time	Preference to specific sources	% users received nutrition info	Types of nutrition info	% users perceiving provided info as useful
Radio	33%	Every other day (30%); every day (29%); weekend (28%)	Music (55%) and news (43%)	Morning (34%); Evening (29%)	RTTL (48%); Maubere (33%)	40%	General health/ nutrition info	85%
TV	43%	Everyday (75%)	News (56%)	Evening (37%)	TVTL (97%)	63%	General health/ nutrition; family planning info	71%
Magazine/ newspaper	21%	Irregular/ rarely/ quarterly	Not specified	Not specified	Lafaek (68%)	60%	General health/ nutrition info, MIYCF	67%
Internet	20%	Everyday (30%); Irregular (44%)	Not specified	Not specified	Facebook (100%)	54%	General health/ nutrition info, MIYCF	57%
Mobile-phone (non-internet uses)	70%	Every day	Used mostly for comms. (call, SMS)	Not specified	Not specified	7%	Not specified	Not specified
Religious leader	Not specified	Every other month or quarterly (29%); irregular (29%)	Not specified	(transmit- ted one on one or through sermon)	Not specified	8%	General health/ nutrition info	50%
Local leaders/ Extensions workers	Not specified	Around once a week (48%)	Not specified	(transmit- ted one on one or through public speaking)	Not specified	22%	General health/ nutrition info	66%
PSF & health workers	Not specified	Around once a month (52%)	Not specified	(transmit- ted through SISCa)	Not specified	39%	General health/ nutrition info	50%

### **Appendix 2: ICS Questionnaire**

Do you have children under 5 years of

#### **Section 1: Introduction** (Note for enumerator: please fill out this section before the interview) Enumerator code Interview date 1.2 1.3 GPS Point of the household 1.4 Respondent Code 1.5 Is the respondent head of the household? 1.6 Municipality Administrative Post Suku 1.8 1.9 Aldeia **Section 2: Respondent Consent** (Note for enumerator: please read this very loudly and if the respondent agrees to participate please ask him/her to sign below consent) Hi, good morning/afternoon/evening. My name is and I am here on behalf of Mercy Corps/TOMAK Program. I am here to understand how people access nutrition and health information. We will use this information to target nutrition messages and work out the best way these can be delivered to meet vour needs. You've been selected randomly and your identity and responses will be kept confidential, which means we will remove anything that could identify you as taking part in this survey . Your answers to my questions will be combined with answers from many other people, so that no one will know that the answers you give me today belong to you. You can stop the interview at any time, you can also decide not to answer any question you wish, or you can request that your answers are removed from the survey at any time. The survey will take less than 60 minutes. Do you have any question? Can we have your consent? YES/NO (Note for enumerator: if NO, please stop the interview and move to next respondent) If agree, please sign here: \_\_\_ **Section 3: Background Information** How old are you now? Don't know/not years sure 3.2 Are you/your spouse currently pregnant YES /lactating? 3.3 How many people reside/live in this 3.4 Who usually lives in this house with you? Father Father in law (Note for enumerator: tick all that apply) Mother Mother in law Wife Sister in law П Husband Brother in law ☐ Children Other relatives

☐ Sister(s)

Yes

Bother(s)

Non-other relatives

3.5b If yes, how many?

	age?	No (go to 3.6)		
3.6	What is your highest educational level?	No school		Secondary school (SMA)
	(Only one answer allowed)	Elementary		Tertiary (diploma/university)
		Pre-secondary		
		school (SMP)		
3.7	Who owns the house that you use now?	Our-own/my		
	(Select one answer only)	family		Other, please specify:
		Community/suk owned	Ku	<del></del>
		Government		
		owned		
3.8	Main sources of energy for lighting	Electricity		Candle nut/berry tree
	(Multiple answers allowed)	Kerosene		Solar
		Candle		Diesel generator
		Firewood		Others, specify:
3.9	Main sources of fuel for cooking	Electricity		O .
	(Multiple answers allowed)	Kerosene		Others, specify:
2.40		Firewood		
3.10	Main sources of drinking water	Protected		Non Protected source(s)
	(Multiple answers allowed)	sources(s)		
	Note:			
	Protected drinking water sources : water			
	piped or pumped indoors, piped or			
	pumped outdoors, public tap, tube			
	well/borehole, protected well, protected			
	spring, rainwater collection and bottle			
	water.			
	Unprotected: not protected well or			
	spring, water vendors/tank, river, lake or			
	stream and other.			
3.11	Type of human waste disposal used	Improved		No facility (go to bush)
	(Multiple answers allowed)	latrine(s)		
		Latrine without		
3.12	What types of groups are active in this	slab/open pit		Deliaious areus
3.12	community?	Farming/fisherion group	es ⊔ □	Religious group Small-business/food
	(Multiple answers allowed)	Village and		processing/handicraft group
	, , , , , , , , , , , , , , , , , , , ,	savings/micro-		
		finance group		
		Mother support	t	
		group		
		Sport/art group		
3.13	Which of these groups are you currently	Farming/fisherie	es 🗆	0 0 1
	participating in?	/aquaculture		
	(Multiple answers allowed)	group	_	processing/handicraft group
		Village and		Others, specify:

What is your main spoken language? (Only one answer allowed)	savings/micro- finance group Mother support group Sport/art group Tetum Local dialect, please specify:	Portuguese English Bahasa Indonesia/Melayu
What language do you also understand well? (Multiple answers allowed)	Tetum Local dialect, please specify:	Portuguese English Bahasa Indonesia/Melayu

#### Section 4: Radio

Section	n 4. Radio				
4.1	Do you listen to radio?		Yes		Never/NO (Go to Section 5)
4.2	How frequent do you watch TV?		Everyday		Only during the
	(Only one answer allowed)		Every other day		weekend
					Irregular/Rarely
4.3	If regular, do you have any specific		News		Talk show
	favourite radio program(s) that you		Music		Other (1), please
	listen to?		Drama/ Soup Opera		specify:
	(Multiple answers allowed)		Religious preaching		
					Other (1), please
					specify:
4. 4	At what time do you usually listen to		No specific time		Afternoon
	radio?		Morning		Evening
	(Except if selecting 'No specific time',				
	multiple answers allowed)				
4.5	Addition of the state of the st				0.1 (1)
4.5	Which radio station(s) do you listen to?		RTTL		Other (1), please
	(Multiple answers allowed)		Radio Maubere		specify:
			Radio Komunidade, specify:		Other (2) place
			<del></del>		Other (2), please specify:
					specify.
4.6	Do you get any nutrition/health related		YES		NO (Go to Section
	information from radio?				5)
4.7	If yes, what information do you ever		General health/nutrition		Family Planning
	get? (Note for enumerator: If you can		information		Other (1), please
	categorize the response(s) to the		Maternal & Infant/young		specify:
	relevant answer(s) below please do so,		child feeding		
	otherwise select other and specify the		Water and sanitation		Other (2), please
	response(s))				specify:
4.8	Did you find the nutrition/health	П	YES	П	NO
	information provided on the radio				

	useful?				
Socti	on 5: Television				
5.1	Do you listen to TV?		Yes		Never/NO (Go to
3.1			163		Section 5)
5.2	How frequent do you watch TV?		Everyday		Only during the
	(Only one answer allowed)		Every other day		weekend
					Irregular/Rarely
5.3	Do you have any specific favourite TV		News		Talk show
	program(s) that you listen to?		Music		Other (1), please
	(Multiple answers allowed)		Drama/ Soup Opera		specify:
			Religious preaching	П	— Other (1), please
					specify:
5.4	At what time do you usually listen to TV?		No specific time		Afternoon
	(Except if selecting 'No specific time',		Morning		Evening
	multiple answers allowed)				
5.5	Which TV station(s) do you listen to?		TVTL	П	Other (1), please
3.3	(Multiple answers allowed)		STL		specify:
	()		Indonesian channel(s),		opcoy.
			specify:		Other (2), please
					specify:
		_			
5.6	Do you get any nutrition/health related information from TV?		YES		NO (Go to Section
5.7	If yes, what information do you ever		General health/nutrition		5) Family Planning
3.7	get? (Note for enumerator: If you can		information		Other (1), please
	categorize the response(s) to the		Maternal & Infant/young		specify:
	relevant answer(s) below please do so,		child feeding		
	otherwise select other and specify the		Water and sanitation		Other (2), please
	response(s))				specify:
<b>-</b> 0	Did a Calibra a tella de la		\/FC		
5.8	Did you find the nutrition/health information provided on the TV useful?		YES		NO
	mornation provided on the 17 decidi.				
Conti	on G. Magazina/Nawananar				
6.1	on 6: Magazine/Newspaper  Do you read any magazine/newspaper?		YES		NO (Go to Section
	- c , c a · c a · a · a · , · · · · · · · · · · · · ·				7)
6.2	Can you read the magazine/newspaper		YES		NO
	easily?				
6.3	Do you have any specific favourite		Opinions/ideas		Farming/agriculture
	section in the magazine/newspaper? (Multiple answers allowed)		Politics and crimes		Other (1), please
	(Martiple answers anowed)	Ш	Sports, arts and entertainment		specify:
			Religious		– Other (1), please
			Economics/business	_	specify:
6.4	Which magazine/newspaper do you		Lafaek		Other newspaper

	usually read?		Timor Post		(1), please specify:
	(Multiple answers allowed)		Other magazine specify:		
		\			Other newspaper
		>			(2), please specify:
6.5	Do you get any nutrition/health related		YES		NO (Go to Section
	information from				7)
	magazine/newspaper?				
6.6	If yes, what information do you ever		General health/nutrition		Family Planning
	get? (Note for enumerator: If you can		information		Other (1), please
	categorize the response(s) to the		Maternal & Infant/young		specify:
	relevant answer(s) below please do so,		child feeding		
	otherwise select other and specify the		Water and sanitation		Other (2), please
	response(s))				specify:
6.7	Did you find the nutrition/health		YES		NO
	information provided on the TV useful?				
Secti	on 7: Internet				
7.1	Do you ever us the internet through		YES		NO (Go to Section
	smart phone, computer, tablet at your				8)
	home friends home or public venue?				
7.2	If yes, what device(s) do you use to		Smartphone/mobile phone		Computer/laptop
	access internet?		Tablet		Other, specify:
7.3	Any specific internet links/social media		Facebook		Any specific link
	that you visited regularly?		Twitter		(1), please
	(Multiple answers allowed)		Other social media, specify:		specify:
					— Any specific link
					(2), please
					specify:
7.4	How frequent do you connect		Everyday		Only during the
	internet/social media?		Every other day		weekend
	(Only one answer allowed)				Rarely/irregularly
7.5	At what time do you usually use		No specific time		Noon/Afternoon
	internet/social media?		Morning		Evening
	(Note for enumerator: except if selecting				
	'No specific time', multiple answers				
7.0	allowed)		VEC		NO /Corto Cortico
7.6	Do you get any nutrition/health related information from internet/social media?		YES		NO (Go to Section 8)
7.7	If yes, what information do you ever		General health/nutrition		Family Planning
	get? (Note for enumerator: If you can		information	П	Other (1), please
	categorize the response(s) to the		Maternal & Infant/young		specify:
	relevant answer(s) below please do so,		child feeding		- P · · · ·
	otherwise select other and specify the		Water and sanitation		Other (2), please
	response(s))				specify:
7.8	Did you find the nutrition/health		YES		NO

	information provided on the TV useful?			
Section	on 8: Use of mobile phone			
8.1	Do you use mobile/smart phone nowadays?		YES	NO (Go to Section 9)
8.2	In a day, on average how many times do		Not always	5-10 times
	you use mobile phone?		1-3 times	More than 10 times
	(Only one answer allowed)		3-5 times	
8.3	What do you use mobile phone for?		SMS	Whatsapp/Messen
	(Multiple answers allowed)		Call	ger/Line/etc.
	,		Accessing internet/social	Other(1), specify:
			media (Facebook, etc)	
			, , , , , , , , , , , , , , , , , , , ,	Other(2), specify:
8.4	Do you get any nutrition/health related		YES	NO (Go to Section
	information through mobile phone?			9)
8.5	If yes, what information do you ever		General health/nutrition	Family Planning
	get? (Note for enumerator: If you can		information	Other (1), please
	categorize the response(s) to the		Maternal & Infant/young	specify:
	relevant answer(s) below please do so,		child feeding	
	otherwise select other and specify the		Water and sanitation	Other (2), please
	response(s))			specify:
8.6	How the information was transmitted?		Forget about it/not so sure	Through
	(except if selecting 'Forget about it/not		Through SMS	Whatsapp/
	so sure', multiple answers is possible)		Through a phone call	Messenger/Line/et
			Trough internet/social	C
			media (Facebook, etc)	Other(1), specify:
			, ,	
				Other(2), specify:
8.7	Do you find the nutrition/health		YES	NO
	information provided is useful?			
	(Select only one answer)			
9. Oth	er sources of health/nutrition information: (1)	reli	gious leader	
9.1	Do you get any nutrition/health related		YES	NO (Go to Section
	information from any religious leader			10)
	nowadays?			
9.2	How regular do you receive		Very irregular/rarely	Around once a
	nutrition/health related information		On a daily basis	month
	from any religious leader?		Around once a week	Every other month
				or quarterly
9.3	What information do you ever get?		General health/nutrition	Family Planning
	(Note for enumerator: If you can		information	Other (1), please
	categorize the response(s) to the		Maternal & Infant/young	specify:
	relevant answer(s) below please do so,		child feeding	
	otherwise select other and specify the		Water and sanitation	Other (2), please
	response(s))			specify:
9.4	How the information was transmitted?		Forget about it/not so sure	Other(1), specify:

	(except if selecting 'Forget about it/not so sure', multiple answers is possible)		Through sermon in church One on one meeting		Other(2), specify:			
9.5	Do you find the nutrition/health information provided is useful? (Only select one)		YES		NO			
10. Ot	10. Other sources of health/nutrition information: (2) local leader/extension officer							
10.1	Do you get any nutrition/health related information from any local leader?		YES		NO (Go to Section 11)			
10.2	How regular do you receive nutrition/health related information		Very irregular/not so sure On a daily basis		Around once a month			
	from any local leader?		Around once a week		Every other month or quarterly			
10.3	What information do you ever get? (Note for enumerator: If you can		General health/nutrition information		Family Planning Other (1), please			
	categorize the response(s) to the relevant answer(s) below please do so,		Maternal & Infant/young child feeding		specify:			
	otherwise select other and specify the response(s))		Water and sanitation		Other (2), please specify:			
10.4	How was the information transmitted?		Forget about it/not so sure		Other(1), specify:			
	(except if selecting 'Forget about it/not so sure', multiple answers is possible)		Through public speaking One on one meeting		Other(2), specify:			
10.5	Do you find the nutrition/health information provided is useful? (Only select one)		YES		NO			
11 0+	her sources of health/nutrition information: (3	۱۱ ba		all'				
11. Ot 11.1.a	ner sources of health/nutrition information: (3  Do you get any nutrition/health related information from any health worker/PSF/nutrition officer?	B) he	YES	er	NO (Go to Section 12)			
11.1.a	Do you get any nutrition/health related information from any health		YES Nurse		12) Nutrition officer			
11.1.a	Do you get any nutrition/health related information from any health worker/PSF/nutrition officer?		YES		Nutrition officer MOH Nutrition officer of			
11.1.a	Do you get any nutrition/health related information from any health worker/PSF/nutrition officer?		YES  Nurse PSF		Nutrition officer MOH			
11.1.a	Do you get any nutrition/health related information from any health worker/PSF/nutrition officer?		Nurse PSF Health worker, specify: —— Very irregular/not so sure		Nutrition officer MOH Nutrition officer of an NGO			
11.1.a	Do you get any nutrition/health related information from any health worker/PSF/nutrition officer?  If yes, who are they  How regular do you receive		Nurse PSF Health worker, specify:		Nutrition officer MOH Nutrition officer of an NGO Other, specify:  Around once a			
11.1.a	Do you get any nutrition/health related information from any health worker/PSF/nutrition officer?  If yes, who are they  How regular do you receive nutrition/health related information from any health worker/PSF/nutrition		YES  Nurse PSF Health worker, specify:  Very irregular/not so sure On a daily basis		Nutrition officer MOH Nutrition officer of an NGO Other, specify:  Around once a month Every other month			
11.1.k	Do you get any nutrition/health related information from any health worker/PSF/nutrition officer?  If yes, who are they  How regular do you receive nutrition/health related information from any health worker/PSF/nutrition officer?  Do you still remember what kind of health/nutrition information was that about?  If yes, what information have you ever		Nurse PSF Health worker, specify: ——  Very irregular/not so sure On a daily basis Around once a week  YES  General health/nutrition		Nutrition officer MOH Nutrition officer of an NGO Other, specify:  Around once a month Every other month or quarterly NO/forget about it/not so sure (Go to Section 12) Family Planning			
11.1.a 11.1.b 11.2	Do you get any nutrition/health related information from any health worker/PSF/nutrition officer?  If yes, who are they  How regular do you receive nutrition/health related information from any health worker/PSF/nutrition officer?  Do you still remember what kind of health/nutrition information was that about?		Nurse PSF Health worker, specify: ——  Very irregular/not so sure On a daily basis Around once a week  YES		Nutrition officer MOH Nutrition officer of an NGO Other, specify:  Around once a month Every other month or quarterly NO/forget about it/not so sure (Go to Section 12)			

	response(s))				specify:		
11.5	How the information was transmitted? (except if selecting 'Forget about it/not		Forget about it/not so sure Through SISCA		Other(1), specify:		
	so sure', multiple answers is possible)		One on one meeting		Other(2), specify:		
11.6	Do you find the nutrition/health information provided is useful? (Only select one)		YES		NO		
12. Oth	er sources of health/nutrition information: (4)	) oth	er sources				
12.1	Do you get any nutrition/health related information from any other source not mentioned previously?  (Please probe with any events maybe – i.e. cooking demos, SISCA, or any brochures provided by MOH/NGO, etc. Please put in a note box below if there's any relevant information that is not captured here)		YES, specify:		NO (Go to Section 13)		
12.2	How regular do you receive nutrition/health related information		Irregular/one-off/not so sure		Around once a month		
	from this source? (Select one only)		On a daily basis Around once a week		Every other month or quarterly		
12.3	What information have you ever get? (Note for enumerator: If you can categorize the response(s) to the relevant answer(s) below please do so,		General health/nutrition information Maternal & Infant/young child feeding		Family Planning Other (1), please specify:		
	otherwise select other and specify the response(s))		Water and sanitation		Other (2), please specify:		
12.4	How the information was transmitted?		Forget about it/not so sure		Other(1), specify:		
	(except if selecting 'Forget about it/not so sure', multiple answers is possible)		Group conversations One on one conversations		Other(2), specify:		
12.5	Do you find the nutrition/health information provided is useful? (Only select one)		YES		NO		
13. Any note							

# Appendix 3: Summary of the Timor-Leste 2006 National Media Survey

The first fully representative national survey of media use to be conducted in Timor-Leste took place during the last quarter of 2006. Funding was provided by USAID through its grant to Fondation Hirondelle to support Radio Television Timor-Leste (RTTL) which ended December 31, 2006. The survey was headed by Eduardo Soares and his team at INSIGHT Timor-Leste, with Graham Mytton, a retired BBC audience research expert. The sample of 1,272 adult (age 15+) respondents, selected using random methods, is from all districts and sub-districts in the country.

The survey confirmed that radio is the most important source of information in Timor-Leste. RTTL radio is the single most relied on source, and nearly two in three Timorese listen to radio at some time compared with about one in three who read a newspaper at some time (STL is the most read, followed by Timor Post). Most people are well aware of the existence of the national broadcaster RTTL. Most respondents view RTTL positively in terms of its public service role. Approximately 35% had heard at least some radio programs from RTL in the previous week. Of the other East Timorese radio stations, the most listened to in the previous week are Radio Timor Kmanek (16%) and Radio Rakambia (9%). Reception of RTTL radio is a problem for many listeners. 43% of RTL listeners report good reception. The remaining 57 % have varying degrees of difficulty. Regarding RTTL's perceived programming performance, there was both praise and criticism of the service provided by the national TV and radio broadcaster. However, praise outweighed criticism so far as the radio service was concerned. Specifically, approximately 39% of those who had used RTTL services during the crisis in the spring of 2006 expressed praise or approval of RTL radio reporting, while approximately 30%were critical. Opinions about TVTL were evenly divided between approval and criticism. RTTL radio and TV played a major role in informing citizens of the April-May 2006 crisis.

The highest levels of use of RTTL during the crisis were in Dili, Aileu, Baucau, Oecusse and Liquisa, and lowest in Viqueque, Cova Lima and Ermera.

Additional major findings were as follows:

- RTL radio was the primary media source for information about the crisis of April/May 2006. While more people relied on informal face to face communication, RTL was the single most important source of news. It was also seen as the most reliable source. TVTL also was viewed as a reliable source by many.
- The daily reach of radio is just under 30%. Weekly reach is just under 50%.
- Nearly half (47%) have a radio set at home. Two thirds of all radio sets are powered by batteries. Just less than one in five lives in a home with a television. One in ten has a cell/mobile phone. Only one in a hundred has a computer at home and only half of these have Internet access.
- Nearly everyone listens to Tetum program on radio. A majority of listeners (63%) also listen to Bahasa Indonesia broadcasts. Just over half of all radio listeners listen to program in Portuguese. Tetum is the preferred language of listening for nearly all radio listeners.
- Nearly nine in ten respondents say that they speak Tetum "well." No other language is spoken well by more than a minority. Well over half say that they can read Tetum. The main barrier to radio listening is the cost of or difficulty in obtaining batteries. This is followed by reception problems power outages and the cost of buying a set. The Internet is ever used by only 4%. Weekly use is 2%. Most users rely on Internet cafes.
- About two in five ever watch television. The daily reach of TV is 19%; weekly reach is 25%. TV use is highest in Dili where weekly reach is 79% and lowest in Manufahi, Ainaro and Ermera. Three in four daily TV viewers are in Dili.
- There is a lot of out-of-home TV viewing. Only 45% usually watch TV at their own home. Others watch at friends or neighbour's homes or through various means of communal viewing.
- Nearly one in five had seen at least some coverage on TV of the 2006 World Cup. 15% had watched the final 2006 match.
- Radio Australia and BBC are the most listened to international radio stations.

- > News and music are the most listened to program on radio.
- > Sport is also popular; football and volleyball are the most sought after sports for coverage on radio.
- Although the survey did not directly ask questions about radio listening of children under 15, parents were asked about their children's listening. 37% had children who listen to radio. The most popular program genres were sport followed by music.
- > The most viewed program on TVTL were Telejornal and Palku Muzikal
- > The most favoured language to be on TV is Tetum. However, just over 40% would like also to hear Bahasa Indonesia.
- The peak times for radio listening are between 0600 and 0900, and between 1600 and 2000. For TV there is one peak, between 1830 and 2030. These times also coincide with listeners' and viewers' preferred times.
- > The survey showed that most East Timorese live in poverty; 75% of respondents report having less than \$1 per day income.

