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This is a living document that was last updated in June 2019. For further information or to access other TOMAK resources, please visit www.tomak.org/resources or email info@tomak.org.

Social and behaviour change strategy

1. Introduction

The To'os Ba Moris Di'ak (Farming for Prosperity) Program (TOMAK) is a five (plus five) year agricultural livelihoods program funded by the Australian Government in Timor-Leste. 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 rural households (Component 1); and
- Build their capacity to confidently and ably engage in profitable agricultural markets (Component 2).

Based on assessments² conducted during its inception phase, TOMAK identified six general behavioural themes as the focus for social and behaviour change (SBC) activities:

- 1. Household nutrition;
- 2. Infant & young child feeding and care;
- 3. Maternal nutrition, care and support;
- 4. Household decision-making, responsibilities and male involvement;
- 5. Water, sanitation and hygiene, and environmental enteropathy;
- 6. Profit-seeking and advancement.

This document focuses on the profit-seeking and advancement behavioural theme under TOMAK's Component 2, which promotes the development of commercial agriculture following a market systems development (MSD) approach, focussing on selected higher-potential value chains. The majority of farmers in Timor-Leste are subsistence-oriented: they are often food-deficit and generate very little cash income from farming. To make the shift into commercial farming, they need to improve their technical skills and capacity, create and maintain stronger links with buyers, and develop a greater understanding of market systems in general. This shift is mostly likely to be achieved by more entrepreneurial farmers who are motivated to invest in their own farms and who are thinking about longer term gains. Such farmers (and their children) are more likely to stay in agriculture if the status and importance of farming is raised, so that it is seen as a respectable and profitable vocation for the future.

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

Key features of the SBC strategy include:

- Focusing on a core set of key behaviours aimed at promoting specific changes in practices and social norms related to farm investment;
- Giving priority to entrepreneurial farmers and their key influencers;
- Using a variety of approaches that are mutually reinforcing: interpersonal communication, , community mobilisation, entertainment-education, and mass media;

¹ With a funding commitment of AUD25 million for the first phase (2016-2021).

² TOMAK assessments conducted in 2016, including: Information Consumption Survey; Gender and Social Inclusion Analysis (GESIA); Knowledge, Attitudes and Practices Survey; and Qualitative Assessment on Food Consumption.

 Actively monitoring the strategy's impact in terms of influencing or prompting changes in attitudes and norms, and the adoption of key behaviours.

Development of the strategy draws on a number of theoretical models that focus on social and behaviour change at the individual, interpersonal, and community level. At an individual level, Stages of Change theory emphasises planned individual behaviours (moving along a continuum of change) and rational decision-making (focus on perceived barriers, benefits, and perceived social norms). At an interpersonal and community level, Social Learning Theory, Theory of Gender and Power, Diffusion of Innovations and Socio-Ecological models focus on the influence of self-efficacy of individuals, social networks, role models and enabling factors to perform a behaviour.³ These models also emphasise how innovations are spread through social networks over time, and how people learn and make decisions about how to act by observing others and considering the consequences of those actions in their own lives.

2. Situational analysis

Making decisions around how to spend money is not easy. It often involves making predictions about the future that are quite uncertain (e.g. future income, cash availability). Many times, financial decision-making is not rational or logical and can be driven by emotions, temptation, and procrastination.⁴ There are also often stark differences in what individuals plan on doing, say they are going to do, and then what they actually do. This is particularly relevant to financial decision-making.

A nationally representative survey conducted in 2010 revealed that just one in four Timorese people find taking risks stimulating (versus stressful) and only one in eight said they like taking risks.⁵ Given that some level of risk is generally necessary to stimulate innovation, business, and investment, this data suggests that there may be major obstacles to savings and investment for farmers in Timor-Leste. The overriding need for households to ensure basic household food security for survival, in the face of frequent food shocks, also needs to be considered as a major factor influencing appetite for risk.

This is not to say that Timorese farmers are not commercially-oriented. Many farming decisions are driven by a desire for short-term gain (e.g. planting vegetables as a cash crop),⁶ which may dominate longer-term planning (such as trialling a new crop or new technology). The tendency to consider financial decisions one-by-one and as they come, compared to looking at the overall financial situation, can have an impact on how resources are allocated.⁷ For example, farmers may view resources used for cultural commitments (e.g. animals used to feed those attending the ceremonies and for familial exchange during ceremonies), household food security, and to meet basic cash needs such as school fees as being entirely separate from each other and not necessarily connected to the household's overall financial situation. This means that once resources are allocated for one purpose, there may be limited opportunity for transfer into other categories such as investment in the farm. Short-term thinking can also be a barrier to farmers understanding the full cost of running their farm (and their overall profit), as costs are incurred throughout the cropping season whereas harvest income generally comes as a larger sum only at the time of harvest.⁸

2.1. Relevant findings from profit-seeking related surveys

To develop this strategy, TOMAK examined a number of relevant surveys and data related to profit-seeking in Timor-Leste. These resources explore a number of topics including access to financial services, agriculture input supply, aspirations, gender, youth in agriculture, and value chains.

³ C-Change. A Short Guide to Social and Behaviour Change Theories and Models. 2012.

⁴ World Bank. Mind, Society, and Behavior. Chapter 6 Household Finance. 2015.

⁵ Timor-Leste: Values Study: Final Report. USAID. June 2018.

⁶ TOMAK/IADE. Farmer Entrepreneurs: Attitudes to Farming as a Business in Timor-Leste. November 2017.

⁷ World Bank. Mind, Society, and Behavior. Chapter 6 Household Finance. 2015.

⁸ TOMAK/IADE. Farmer Entrepreneurs: Attitudes to Farming as a Business in Timor-Leste. November 2017.

Input supply

Farmers require inputs (e.g. seeds, equipment) to develop their farming operations. A TOMAK assessment of agriculture input supply was reviewed to ensure input supply concerns would not adversely impact the promotion of profit-seeking behaviours with farmers. There are already several development partners⁹ supporting activities with input supply dealers, and improvements in input supply are evident in TOMAK's target municipalities. The assessment¹⁰ found that there have already been multiple development efforts along the input supply value chain (from municipal based shops to wholesalers), and recommended that programs such as TOMAK focus on maintaining (and increasing) demand for inputs by farmers, instead of supporting supply-side activities which are already advancing. While supply chain constraints that used to affect retailers are steadily reducing, retailers and their consumers (farmers) still suffer from a lack of knowledge, resources, and support on the safe and effective use of inputs¹¹. As described in the assessment report:

"A farmer who uses a product safely and effectively to increase productivity is more likely to use it again, and these efficiencies will spread throughout the community. A farmer who, for example, applies the wrong chemical or concentration, or burns a crop with incorrect fertiliser application is likely to avoid using anything in the future. With both successes and failures, this information spreads through communities, and misunderstanding of these technologies can severely limit production over a large area and for a long time."

Access to savings and credit

An assessment of existing savings group members and farmers reveals there is a gap in farmers' ability to save seasonal income from agricultural sales. Without another safe alternative to save cash, many households opt to purchase livestock as a way of saving cash.

Much of the credit accessed through savings groups is used to meet recurring education expenses and cultural 'commitments', with some used for the purchase of wholesale goods (kiosk supplies). While this means that these types of loans are small, there is an opportunity to build off access to small credit and promote savings capacity to bridge cropping cycles.



Youth in agriculture

Timor-Leste's Strategic Development Plan (2011-2030)¹³ identifies agriculture as one of the key sectors for driving economic growth. Yet during various field assessments conducted in 2016-17, TOMAK struggled to find young people (under 30) involved or interested in agriculture, a fact confirmed by most organisations working in rural areas. Very few young people are engaged in farming – they are in Dili studying or working, or abroad. The Government recognises the issue, and has designed programs to support young farmers, but so far with limited success. Given that close to half of farmers are over 45 years old,¹⁴ failure to attract and retain young people into the sector is a serious long-term issue.¹⁵ These findings were also confirmed by the Food and Agriculture Organization's (FAO) Youth in Agriculture Survey that found youth see working in agriculture to be

⁹ Market Development Facility, Avansa, and Mercy Corps

¹⁰ TOMAK. Agricultural Input Supply Strengthening. May 2018.

¹¹ Ibid.

¹² Assessment of Financial Services for Agribusiness and Rural Farmers in Timor-Leste. FHI360. June 2014.

¹³ Democratic Republic of Timor-Leste. Timor-Leste Strategic Development Plan 2011-2030. 2011.

¹⁴ TOMAK/IADE. Farmer Entrepreneurs: Attitudes to Farming as a Business in Timor-Leste. November 2017. This number is likely to be underestimated given the sample excluded very rural locations.
¹⁵ Ibid.

hard work for little gain.¹⁶ In comparison to salaried jobs or overseas seasonal work, working in agriculture is seen by both parents and their children as a last resort.¹⁷

The FAO survey found that youth (15-24 years) have low awareness of the different actors in a value chain (tending to focus solely on production) and that the small number of youth in agriculture gravitate towards higher value crops with shorter term financial pay-offs such as strawberries and broccoli. However, the study also found that there are a small number of young entrepreneurs emerging in the agriculture sector in Timor, particularly in more profit-driven sub-sectors such as horticulture, aquaculture and value-added food products. Rural youth interviewed claimed that they could mobilise funds to start small agribusinesses but displayed low awareness of any financial management, business planning and quality control skills.

Women in agriculture

Women are integrally involved in the agriculture sector in rural communities in Timor at almost equal levels to men (57.5% of women and 60% men). Women farmers carry out a broader range of agricultural and market functions compared to men, and their involvement in food production and processing is also more diverse.

The majority of marketplace trade is in agricultural food products, with women being the primary sellers. A recent TOMAK assessment of four municipal marketplaces found that 100% of women participants use their income primarily to purchase for food for their family's meals and to pay for children's schooling. The assessment also described a number of key challenges faced by women vendors including poor infrastructure (esp. lack of clean water and toilets), irregular waste collection, and weak management of the marketplace. Women also reported threats to their security from sleeping in unprotected spaces (in order to stay close to their goods), disruptive and/or violent behaviour from young men in the market, and risks round public transport and walking after dark.²⁰

Men are generally able to accrue more assets than women in Timor-Leste, including land (except in some matrilineal areas). Land ownership is typically passed to the first-born male, which means that landless women and men may have to negotiate the use of land so that they can invest in crops and develop businesses.²¹ Property rights for women farmers is a key determinant in a woman's willingness to engage and increase their time and financial investment in agricultural production compared to non-agricultural based livelihoods.²²

Production skills

Overall, adoption of improved farming technologies in Timor-Leste is low. In terms of agricultural production, TOMAK's baseline for red rice and peanut production found that very few farmers (less than one third) had received technical support to improve their farming. Support usually came in the form of training once or twice per year, and more than half the time through a MAF agricultural extension worker (AEW).²³ Out of the minority of farmers who had received support, about half were men and half were women. The baseline found that women farmers are accessing agricultural inputs and technical support at similar levels to men for these crops,²⁴ and a majority of women interviewed reported that they have input into some (38%) or all (37%) farming and production decisions for their household.

¹⁶ FAO. 2018. A Study on Sustainable Livelihood Opportunities for Rural Youth in Timor-Leste.

¹⁷ TOMAK/IADE. Farmer Entrepreneurs: Attitudes to Farming as a Business in Timor-Leste. November 2017.

¹⁸ Timor-Leste National Census. 2015.

¹⁹ TOMAK. Gender Equality and Social Inclusion Analysis (GESIA). 2016.

²⁰ TOMAK. Gendered Assessment of Marketplaces in Timor-Leste. December 2018.

²¹ TOMAK. GESIA. 2016.

²² Ibid.

²³ TOMAK. Peanut and red rice baseline. May 2018.

²⁴ Ibid.

3. Formative research findings

As part of the SBC strategy development process, formative research was conducted by TOMAK through Timor-Leste's Institute for Business Support (IADE) in 2017 to gain a deeper understanding of the context for social and behaviour change, including how Timorese farmers and/or their spouses perceive life as a farmer: its challenges, opportunities and potential for the future. Specifically, it sought to understand the extent to which farmers are already engaged in market-oriented behaviours, and exhibit entrepreneurial attitudes and values. The research focused on farms that had at least some short to medium-term prospect of becoming more commercial and therefore excluded farmers that were classified as 100% subsistence and/or as very remote.

A total of 237 interviews and six focus group discussions (FGDs)²⁵ were carried out in the three TOMAK municipalities. Overall, the study found that farmers in Timor-Leste are reasonably commercially oriented and that the most important mindset challenge to development is not their low 'entrepreneurial drive' but lack of a long-term perspective, partly driven by perceptions around farming as a vocation with a future.²⁶

Table 1 presents a summary of constraints found in the formative research, and identifies opportunities which could be leveraged for social and behaviour change development.

Table 1: Key Constraints and Opportunities

Constraint	Description and Cause	Opportunities for SBC development	
Structural issues	 The size of farms reduces potential for development Roads and transport remain big issues and limit access to market and types of crops that can be grown Lack of, or poorly maintained, irrigation systems Need for better warehousing/permanent markets 	 Some farmers do see 'potential' in farming On-going investment by government to improve infrastructure 	
Practical, on-farm problems	 The large number of crops/livestock types produced reduces risk for farmers, but limits focus and ability to achieve scale to attract big buyers Lack of improved technology/machinery Lack of access to quality inputs (seeds, fertiliser etc.) Lack of fencing/wandering animals damaging or destroying cash crops 	 Examples exist of farmers adopting improved agricultural practice, generating profit from this, reinvesting it in their farm and becoming more commercial. On-going investment by government (usually through donor projects), NGOs and the private sector to address constraints and improve production practices. 	
Knowledge & training issues	 Knowledge/training gaps identified: Modern farming practices. Possible crops and livestock outside the current repertoire. Making better decisions about what to grow Business networking & finding buyers. Managing cashflow and running the farm as a business. 	 In general farmers recognise a need to improve their farming and marketing practices. Link consumption of nutritious crops and commercial advantages to better educational outcomes for children. 	

²⁵ Participants were selected to provide a cross-section of ages and types of farms.

²⁶ Ibid.

Constraint	Description and Cause	Opportunities for SBC development
	Bookkeeping, pricing and profitability analysis.Balancing household and farming needs.	
Attitudes to risk, finance and investment	 Farmers often have little experience/ understanding of the need to make longer- term trade-offs, or take risks to grow. Farms are operating mainly on a cashflow basis, with limited understanding of profitability and costs. Few are open to taking loans to develop the farm. Reinvestment of income in the farm is low. Farmers generally seem to view commercial farming not as a long-term business investment, but as a vehicle to generate cash for other purposes. Parents prioritise education expenses over farming inputs. 	 Many farmers are willing to innovate and take shorter-term risks. Farmers participate in labour sharing during harvest, pay for short term labour with rice, participate in savings groups for to pay for labour²⁷. Strong value placed on using income for children's' education. Opportunity to link farm development/investment with tangible benefits for farmers and their children.
Aging farmers and household demographics	 The farming population is an older cohort, and most do not want to hand on their way of life to their children. Farm work is seen as less respectable than a salaried position. Children's education (to help them get nonfarm jobs), is prioritised over farm reinvestment, resulting in a loss of labour when they are sent away to study. Households are large. Farm households typically have around 6 people living in them, with fewer people between aged 16-40. 	 Farmers feel positive about farming for themselves. Given closeness of communities, potential to use examples of best farming practice and innovation.
Differences in attitudes between men and women farmers	 Women farmers are generally as interested in cash sales of crops as men. More females were pessimistic about the future of farming and the ability of their farms to make money. Fewer women are willing to take a loan to improve the farm, many were cautious about reinvestment in the farm. 	Opportunity to leverage women's interest in cash crops and link with entrepreneurial behaviours.

In addition to the formative research carried out by IADE, TOMAK also conducted FGDs with high school students at the agriculture technical school in Maliana and with first and final year agriculture students at UNTL. There were no major differences in responses between young women and young men.

A total of four FGDs were carried out with 80 students, with the following headline results:

- The main advantage to being a farmer is the ability to be your own boss (*Manda ita nia an rasik. La depende ba ema seluk*) and having a flexible schedule.
- There is pride in producing nutritious food for household consumption.
- Farming cash crops is a relatively fast way to get income.

²⁷ Based on TOMAK and partner experience working with farmers in Bobonaro.

- The majority of students did not plan to return to their village and become a farmer, but rather wanted to work for an NGO or Government institution that provides technical assistance to farmers.
- Farming is hot, hard, and dirty work.
- Parents provide financial support for higher education, and high value is placed on being able to secure
 a stable monthly salary.

3.1. Communication channels

In late 2016 TOMAK carried out an Information Consumption Survey²⁸ (ICS) in the three target municipalities to learn more about how households access general and nutrition-related information. The assessment found significant differences between Bobonaro and Baucau/Viqueque:

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

In terms of language, the ICS found no shared language across TOMAK's three target municipalities other than Tetum. This will be a key consideration for print and mass media approaches. Mass media approaches can be complemented by community-level approaches that allow for nuancing when promoting key practices. In terms of preferred communication channels for adolescents, recent formative research conducted by TOMAK and the World Food Program showed that schools were overwhelmingly the most preferred channel for health and nutrition topics.²⁹

The last national media survey conducted in Timor-Leste by the Hirondelle Foundation in 2007 found that informal face-to-face communication (word of mouth) was the second most reliable source of information in the country after national radio.³⁰ While radio and TV coverage has increased over the past 10 years, interpersonal communication (IPC) remains the primary form of communication across the country and therefore needs to be an integral part of any SBC strategy.

3.2. Intended audiences

As part of the formative research around profit-seeking (described in earlier sections), farmers were asked to rank a series of attitudinal statements.³¹ Farmers were asked the extent to which they agree that farming is a business, has the potential to make a profit, requires a willingness to change, and has good potential for the future. They were also asked to indicate the extent to which they identify with certain entrepreneurial values such as the need to experiment with new ideas, work hard and take risks.

Using farmers' responses to these statements, segmentation analysis then identified three broad groups of farmers:³²

²⁸ TOMAK Technical Report 11 Nutrition-related information consumption survey results. February 2016.

²⁹ Formative research on Adolescents' nutrition and health in Baucau, Bobonaro, Dili and Ermera. World Food Program and TOMAK. Preliminary Findings Presentation. July 2018. Preferred communication channels on agriculture topics would have to be explored further in the future.

³⁰ Soares, E. & Mytton, G. *Timor-Leste National Media Survey. Final Report.* Foundation Hirondelle, Dili, TL. 2007.

³¹ Hierarchical cluster analysis was carried out based on the ranked statements.

³² TOMAK/IADE. Farmer Entrepreneurs: Attitudes to Farming as a Business in Timor-Leste. November 2017.

- 1. **Farmer Entrepreneurs** (39%): distinguished by attitudes and values that are by and large entrepreneurial; view farming as a business, and believe they can make money from farming
- 2. **Happy Traditionalists** (36%): generally positive about their lives and farming, but more conservative and traditional than Farmer Entrepreneurs
- 3. **Reluctant Pessimists** (25%): overall less happy and pessimistic about farming and the future, and very concerned about accessing inputs

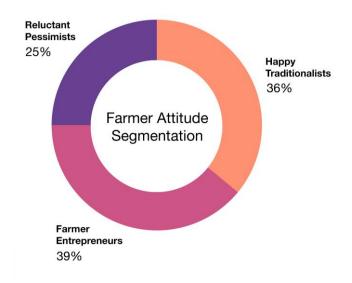


Figure 1: Farmer Attitude Segmentation

Neither age nor the number of children in the household had an impact on their likelihood to be a farmer entrepreneur or another category of farmer. The main difference found was between men and women farmers - the majority of farmer entrepreneurs were male (71%, compared with 59% of the survey sample).³³

However as the IADE survey³⁴ points out:

"It must be emphasised that segmentation represents a holistic assessment across a range of attitudes and does not mean that all women are "pessimistic". On many attributes women exhibit progressive and entrepreneurial attitudes. However, analysis suggests that the attitudes of women farmers make them less likely to fit into the more consistently optimistic 'farmer entrepreneur' category."

Taking this analysis into consideration and in line with TOMAK's objectives, intended audiences for this SBC strategy are categorised into three segments:

- Primary audience (people directly affected): Male farmer entrepreneurs and emerging entrepreneurs.
- Secondary audience (people directly influencing them): Female spouses of farmer entrepreneurs.
- Tertiary audience (people directly influenced by the primary audience): Happy traditionalists (both men and women).

To allow for greater focus on those groups with a higher chance of adopting profit-seeking behaviours, farmers with a more pessimistic mindset and exhibiting a reluctance to engage in new practices ('reluctant pessimists') are not targeted under this strategy. TOMAK interacts with farmers on a repeated basis per cropping season, which allows for program staff to identify farmer entrepreneurs, female spouses of farmer entrepreneurs, and happy traditionalists.

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³³ Important to note that men were 59% of the sample in the study.

³⁴ Ibid. page 47.

While there are several similarities across audience segments, there are also key differences. Farmer entrepreneurs are more likely to sell their products at municipal markets and (to a smaller extent) to buyers in Dili, compared to happy traditionalists who mainly sell at local village markets. While both farmer entrepreneurs and happy traditionalists believe their biggest challenge is a lack of the right machinery or technology to develop the farm, farmer entrepreneurs more consistently identify this as their biggest problem (42%, compared with 27% of happy traditionalists). That being said, 47% percent of farmer entrepreneurs report that they have introduced new technology or machinery in recent years, compared with 29% of happy traditionalists. Farmer entrepreneurs are also more likely to grow white rice and cash crops such as vegetables, compared to traditional crops (maize, cassava, etc.).

TOMAK field experience suggests that male farmer entrepreneurs may be more willing to take risks than their spouses, who are often managing the household expenses. While farmer entrepreneurs like being their own boss and are prepared to take on some risk for farming, they may be afraid to tell their wives if they have lost money through an investment. While some farmer entrepreneurs may be married to someone with a similar entrepreneurial mindset, it is likely that others are making farming decisions with a partner who is either a happy traditionalist or reluctant pessimist. As larger purchases and investment decisions generally require consultation and consent from both members of a farming couple,³⁵ the wives of farmer entrepreneurs are an important secondary audience in this strategy.

Table 2 on the following page describes the intended audience profiles, based on both the formative research with IADE and TOMAK field experience.

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³⁵ TOMAK. GESIA. 2016

Table 2: Audience Profiles

Audience segment	Demographic characteristics	Geographic & economic characteristics	Socio-cultural characteristics	Psychographic characteristics	Ideational characteristics
Farmer entrepreneurs (male)	• Aged 35+, married ³⁶	 Lives in TOMAK target suku in Baucau, Bobonaro, or VQQ Lives within 1-hour drive of municipality Sells produce and animals (chickens, pigs, goats) at the weekly local market and municipal market Mainly plants vegetables and rice (for sale) with spouse Farms on over a hectare of land 	 Primary to secondary schooling Literate Speaks Tetum and local dialect Catholic Cultural ceremonies and commitments are important, but not top priority May have access to some other regular cash source (pension/veteran/social payments)³⁷ 	 Member of a farming labour sharing group Smokes³⁸ Has access to a mobile phone Interested in learning new techniques but doesn't know how to look for them Poor/no bookkeeping skills Fears telling wife about losses on the farm Fears not finding market/buyers, pests, lost crops, etc. Prioritises spending on children's education 	 Wants children to go to school and be smart/successful Thinks children will only take over the family farm in the future if they do not do well in school Likes being his own boss Wants to keep farming Likes the flexible schedule of farming Open to new ideas Willing to take some risk in the future
Wives of male farmer entrepreneurs	Aged 35+, married	 Lives in TOMAK target suku in Baucau, Bobonaro, or VQQ Lives within 1-hour drive of municipality Sells crops and animals at the weekly local market and municipal market Mainly plants vegetables and rice (for sale) with spouse Farms on over a hectare of land 	 Primary to secondary schooling Semi-literate Speaks Tetum and local dialect Catholic Cultural ceremonies and commitments are important May have access to some other regular cash source (pension/veteran/social payments) 	 Finds it hard to balance HH and farming needs Prioritises spending on children's education Has access to a mobile phone Likes to be close to her family Likes to grow food for her family Likes the 'quick' cash from horticulture (continued return, access to market) Does not like taking risk related to farming activities Poor/no bookkeeping skills 	 Manages HH expenditures and worries about having sufficient money for expenses and farming needs Wants children to go to school and be smart/successful Thinks children will only take over the family farm in the future if they do not do well in school Wants to keep farming

Marriage is defined as living together with a partner as husband and wife.
 Approximately 40% of farmers in Bobonaro and Viqueque received some form of social transfer, compared to 17% in Baucau. (TOMAK/IADE 2017)
 69.5% of adult males smoke. WHO Report on Global Tobacco Epidemic 2017. Country Profile Timor-Leste. http://www.who.int/tobacco/surveillance/policy/country_profile/tls.pdf

Audience segment	Demographic characteristics	Geographic & economic characteristics	Socio-cultural characteristics	Psychographic characteristics	Ideational characteristics
				Limited time for activities outside of the HH	Reluctant to reinvest in the farm
Happy traditionalist farmers (male and female)	Aged 45+, married	 Lives in TOMAK target suku in Baucau, Bobonaro, or VQQ Lives within 1-hour drive of municipality Sells crops and animals at the weekly local market Mainly plants traditional crops (maize, cassava, etc.) and vegetables (for sale/own consumption) Farms on less than hectare of land 	 Primary to secondary schooling Semi-literate Speaks Tetum and local dialect Catholic Cultural ceremonies and commitments are important May have access to some other regular cash source (pension/veteran/social payments) Manages HH expenditures (women) Has limited time for activities outside of the HH (women) 	 Influenced by community leaders and peers Member of a farming labour sharing group Prioritises spending on children's education Gives importance to cultural commitments Has access to a mobile phone Likes to farm in a traditional way Likes to be close to family Likes to grow food for her or his family Poor/no have bookkeeping skills 	Wants children to go to school and be smart/successful Thinks children will only take over the family farm in the future if they do not do well in school Wants to keep farming Willing to take out a loan for labour/machinery/ seeds but not longer-term needs (e.g. fencing, grain storage) Feels like they are 'missing' some type of farming knowledge but cannot say what Overall content with way of life

4. Target behaviours

One of the key aims of TOMAK is to support farmers that are already engaging in market-oriented activities to progress farther into commercial farming activities. Thus it is important to understand existing market conditions and only engage in products that are currently being traded or where buyers can commit to supporting the production and sourcing of products. In an environment where so few buyers exist and where farmers are inexperienced market actors, the least risky approach is to start engaging in and improving existing value chains rather than building anew.³⁹

The **key behaviours** described in this strategy start with promoting a *targeted* set of feasible practices that will be monitored and revised based on audience movement along a continuum of change. Key behaviours take into consideration what audiences are already doing (e.g. taking small loans out for short-term agricultural inputs) and attempt to prioritise and focus on key practices that audiences are *not* doing and which will have a significant impact.

Table 3: Intended audiences and key behaviours

Audience segment	Key behaviours for intended audiences
Male farmer entrepreneurs	 Ask IADE for support to calculate farming costs and profit Encourage wife to participate in IADE agribusiness training Review farming income and expenditures (osan tama, osan sai) with wife on a monthly basis to help guide reinvestment of profit in the farm Make medium-term plans (at least one year) for expanding the farm business, based on better understanding of profits Save money for investment in agriculture production through saving groups or microfinance institutions Reinvest 25% of profit annually in the business (e.g. for labour, small equipment, improved seeds, drip irrigation) Encourage neighbours to attend Farmer Field Days (FFDs) to see results of improved agricultural practices on key value chain crops Encourage neighbours to attend FFDs and see how farming expenditures and profits are calculated
Wives of farmer entrepreneurs ⁴⁰	 Participate in IADE agribusiness training Review farming income and expenditures (osan tama osan sai) with husband on a monthly basis to help guide reinvestment of profit in the farm Support husband to make medium term plans (at least one year) for expanding the farm business, based on better understanding of profits Save money for investment in agriculture production through savings groups or microfinance institutions Allocate (or support husband to allocate) 25% of income for farming investment (e.g. for labour, small equipment, seeds, drip irrigation) Actively participate in duration of FFDs (harvest, yield and profit discussion)
Happy traditionalists	 Express interest in hosting a demplot for next cropping season Contact IADE for support to calculate farming costs and profit Calculate profit and plan for next crop season's expenditures

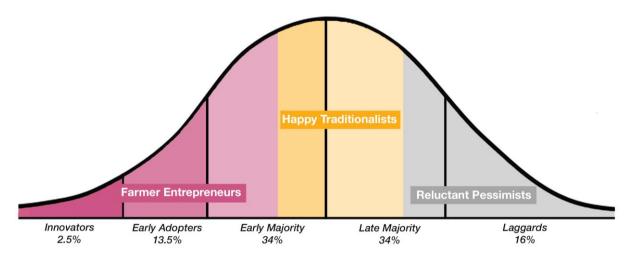
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³⁹ TOMAK Program Guiding Strategy. 2016.

⁴⁰ While TOMAK works with farming couples and promotes female entrepreneurs, this audience segmentation is based on the IADE Farming survey finding that 71% of farmer entrepreneurs are men (compared with 59% male respondents in the same study). Furthermore, TOMAK implementation experience shows that wives of farmer entrepreneurs can be barriers to the purchase of farming inputs due to risk aversion.

5. Strategic approach

TOMAK's strategic approach focuses on influencing different audiences through the use of multiple and reinforcing channels. For profit-seeking, this approach draws largely on Diffusion of Innovations theory (see Figure 2 below) where innovations are spread through social networks over time, and Social Learning Theory where people learn and make decisions about how to act by observing others and considering the consequences of those actions in their own lives. ⁴¹ Farmer entrepreneurs are clearly innovators within their communities. TOMAK aims to learn about how these farmers view the 'innovations' they are using (e.g. drip irrigation, better agricultural practices, greater farm investment) and identify messages that demonstrate the benefits of using the innovation and address barriers to adoption.



Adapted from: Everett Rogers, Diffusion of Innovations

Figure 2: Farmer profit-seeking behaviour and innovation

Social Learning theory is also applied to leverage the strong social networks amongst community members and farmers in Timor-Leste. Community members are constantly observing the actions of the people within their social network. During TOMAK supported FFDs, farmers who have been selected in part for their entrepreneurial attitudes ('farmer entrepreneurs') harvest crops they have grown using new varieties and/or agricultural practices, with support from an AEW. Neighbouring farmers who are often content with their current way of farming ('happy traditionalists') and generally less open to risk than farmer entrepreneurs are also invited to attend. This provides an opportunity for farmer entrepreneurs and AEWs to discuss their new techniques and personal testimonials around challenges and benefits. During the FFDs yield, income, production cost and profit is calculated.

The proposed strategic approach focuses on influencing different audiences through the use of multiple and reinforcing channels.

Technical agricultural support

In terms of key influencers for farmers, AEWs, located in most suku, are the only credible service provider for general extension support to farmers at this stage of Timor-Leste's development. All AEWs in TOMAK implementation suku have been trained in Good Agricultural Practice (GAP) for each of the target value chain crops. Demonstration plots (demplots) are established by AEWs to test and demonstrate new varieties and technologies. This approach to knowledge transfer and influence is summarised in Figure 3.

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⁴¹ Ibid.

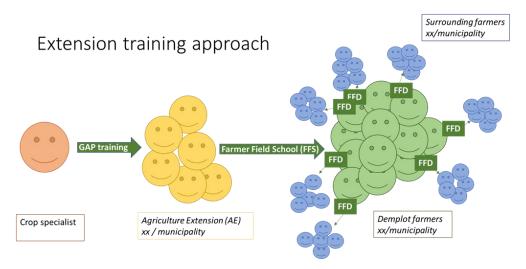


Figure 3: Knowledge transfer and influence through extension training

Agribusiness training

To address farmers' limited access to business support services, TOMAK has developed a training program⁴² designed to help farmers who have little or no commercial experience begin the transition to commercial agriculture. Module 1 of the training focuses on the basic steps required for farmers to make the shift to commercial farming, including basic concepts of how a market economy works (e.g. supply and demand, competition, etc). Module 2 focuses on developing basic skills (e.g. bookkeeping) for farmers to plan and manage their farming businesses better.

TOMAK aims to engage with farming couples (both husbands and wives), at times together but when that is not practical for them, through separate trainings. This is to encourage common understanding of basic market concepts and also to emphasise the importance of bookkeeping and reinvestment for farming families. IADE is progressively rolling out this training program to more entrepreneurial farmers being supported through TOMAK, including those that are already routinely engaging in commercial production practice, as well as those that are wanting to 'make the jump'.

Promoting farming as a respectable and profitable vocation

While youth (16- 30 years as defined by the Timor-Leste government) are not identified as a specific intended audience in this strategy, TOMAK is working to develop a clearer picture of the context/barriers for youth participation in the sector, and looking for ways to collaborate with MAF and other partners such as FAO and Avansa⁴³ in this area. This includes working together on the organisation of a national conference, hosted by MAF and designed to showcase successful young farmers and potentially share lessons in engaging rural youth from other countries in the region. The conference aims to produce a set of recommendations for retaining young people in the agricultural sector.

TOMAK also plans to explore the potential and options for attracting returnees from seasonal worker programs back into the agricultural sector, noting that many of these return with a significant level of savings, and in some cases relevant technical skills. The majority of farmer entrepreneurs working with TOMAK are over 35 years old. TOMAK will continue prioritise the selection of younger farmers for technical agricultural support (e.g. through demplots). As the program progresses and builds a stronger evidence base showing the potential for farmers to make money from farming, this SBC strategy may be revised to include youth as a specific intended audience.

⁴² The original agribusiness training package had 3 modules, but due to the focus on family dynamics in one module (Planning for the Family Farm), it was decided to remove this as part of IADE-facilitated training.

⁴³ USAID-funded project aimed at accelerating sustainable and inclusive economic growth in the horticulture sector in Timor-Leste (Aileu, Ainaro, Bobonaro, Dili and Ermera). April 2015 — March 2020

Potential key messages

Given that farming couples overwhelmingly value and state that they spend the largest portion of their resources on education (and household necessities) over cultural commitments, general saving, building a house and farm inputs,⁴⁴ there is an important opportunity for behaviour change messages to leverage the high value that parents' place on education.

Messages will also seek to leverage the parts of agricultural life that farmers already like, emphasise farming as a business and the potential for profit/prosperity, and encourage families to think more about long-term investment in their farm. Some examples of potential messages are below, noting that these have been tested with intended audiences, but further testing would be required once they are in incorporated into any behaviour change activities or materials.

Best parts of being a farmer⁴⁵

- Being a farmer means being my own boss (manda ita nia an rasik).
- Farming keeps me close to my family and community.
- Farming is a healthy profession and keeps me strong.
- Farming can be hard work but allows me to have time off and a flexible schedule.
- · Farming means I am self-sufficient and can feed my family.

Farming as a business

- My farm is a business. I take care of my farm as a business.
- The farm is my office.
- Investing in my farm helps invest in my children's future.
- I can make better money from farming than an office job.
- By working together as a family, we will reach our goals for a successful farm.
- Money won't come to me, I need to go out and look for money! 46 (Osan la mai buka ha'u. Ha'u tenke sai no buka osan!).
- We don't get rich in a day. Earn a little, but often (Manan ki'ik, maibé beibeik).
- I can make a profit (Ha'u bele hetan lukru).

Pride in farming

• Farming is a respectable profession for the future.

- I am proud to produce nutritious foods for my family and my country.
- Farming is my life and my life is farming.

The farm is an inheritance that crosses generations and makes me proud (*Ha'u orgullu tanba iha to'os hanesan ha'u nia rikusoin jerasaun*).

⁴⁴ TOMAK/IADE. Farmer Entrepreneurs: Attitudes to Farming as a Business in Timor-Leste. November 2017.

⁴⁵ Identified through focus group discussions with farmers. TOMAK/IADE. Farmer Entrepreneurs: Attitudes to Farming as a Business in Timor-Leste. November 2017.

⁴⁶ These key messages have been tested with farmers through the IADE agribusiness training.

Table 4 below summarises the strategic approach for the following year categorised by the proposed intervention type, activities, phase, and a proposed timeline.

Table 4: SBC Strategy interventions, activities and phases

Channel	Select activities	Tentative timeline
N/A	Conduct informal meetings at municipal level (MAF, IADE, partners) to socialise the strategy and solicit input	Sep-Oct 2018
	Community level discussions with select farmers to test key messages and further engagement around preferred channels	Sept-Nov 2018
	Assess the need for bookkeeping and farm reinvestment training content in TOMAK partner Savings Groups	July 2018
	Assess the potential and options for attracting returnees from seasonal worker programs back into the agricultural sector	July 2019
Interpersonal Communication	Conduct demplots on focus crops with farmer entrepreneurs, wives of farmer entrepreneurs and neighbouring farmers to participate	Ongoing
(IPC)	Farmer and AEW cross-visits and study visits on productivity and market linkages of focus crops	Oct 2018, April 2019
	Agribusiness training for TOMAK Food Security and Nutrition implementing partners	Completed
	Agribusiness training for all IADE municipal trainers	Jan 2019
	Agri-entrepreneur business training and counselling for Farmer Entrepreneurs and wives (individualized for couples)	Oct 2018- June 2019
	Remind AEWs about bookkeeping through monthly meetings with AEWs	Ongoing
	Commission a study to assess the formal and informal financial services currently available to commercial and semi-commercial farmers and small-scale traders	Sept 2019
Community mobilisation	Conduct Farmer Field Days with TOMAK selected value chain crops (profit analysis and promotion of IADE training)	Approx. 3 times per year
	Awards for best AEWs and farmers (productivity and innovation)	April 2019
	Onion exposition (on innovation techniques, new seed varieties)	April 2019
	Support a category of farmer entrepreneurs in IADE's annual business plan competition (municipal promotion)	Oct 2019
Advocacy	Continued advocacy with IADE to roll out the agribusiness training to farming couples	Ongoing
	Advocate for increased reinvestment in farm activities in savings groups, microfinance institutions	Nov 2018- June 2019
	Organise a national conference with MAF and partners to showcase successful young farmers and potentially share lessons in engaging rural youth	Nov 2019
	Revive Super Trainer Farmer character from IADE, develop 1 episode (disseminate on national TV, put on tablets for FFD)	Jan 2020

Channel	Select activities	Tentative timeline
Mass media/social media	Develop multimedia opportunities with farmer entrepreneurs and extension workers (as both the subject and creators of video/photo). Potential links to nutrition.	Jan 2019
	Promote and link entrepreneurial farmers on Facebook (video testimonials by model farmers to engage their peers, closed Facebook group for sharing amongst farmers)	Oct 2019
M&E	Conduct a tracer study to determine early results from IADE's agribusiness training for farmers.	Nov 2018
	Conduct discrete, qualitative monitoring to explore early influence on farmer behaviour and practice changes for the onion, mung bean, red rice and peanut sub-sectors.	Going

6. SBC research and development

While existing research and the formative research conducted during the course of developing this strategy provided valuable insights into motivations and barriers around profit seeking, there will be an ongoing need for further investigation into specific audience preferences and practices. Some of these immediate needs include further exploration into: how farmers currently view the innovations they are using (drip irrigation, better agricultural practices, reinvestment into the farm) and identification of additional messages that address barriers to innovation and demonstrate the benefits of using particular innovations. Over time, these will be tested, monitored and re-assessed.

7. Monitoring and evaluation

This SBC strategy will not have a separate MRM plan – measuring change in behaviours will be integrated within TOMAK's overall MRM Plan for Component 2 which will include qualitative data collected through FGDs and targeted surveys to track audience movement across a continuum of change. For example, following delivery of the Agribusiness Training of Trainers (ToT) and delivery of farmer agribusiness training, TOMAK and IADE will explore the early outcomes of training implementation. This will include analysing outcomes for IADE trainers from the ToT as well as agribusiness training participants. The study will analyse feedback on the quality and perceptions of the training itself as well as retention of key concepts and any early evidence of adoption of learnings by trainees. The key research objectives of the study include:

- Seeking feedback from respondents on the quality of the training materials and training delivery.
- Assessment of the level of retention of key concepts.

TOMAK will also conduct discrete, qualitative monitoring to explore early influence on key farmer behaviour and practice changes for the onion, mung bean, red rice and peanut sub-sectors.

8. Resources accessed

Bandura, A. 'Guide for Constructing Self-Efficacy Scales', in f. Pajares and t. Urdan (eds), Self-Efficacy Beliefs of Adolescents, Greenwich: Information Age Publishing 5: 307-37. 2006.

C-Change (Communication for Change). *C-Modules: A Learning Package for Social and behaviour Change Communication*. Washington, DC: FHI360/C-Change. 2011.

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

FAO. 2018. A Study on Sustainable Livelihood Opportunities for Rural Youth in Timor-Leste.

FHI360. Assessment of Financial Services for Agribusiness and Rural Farmers in Timor-Leste. June 2014.

Rogers, Everett M. Diffusion of innovations (3rd ed.). New York: Free Press of Glencoe. 1983.

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

Timor-Leste Asistensia Integradu Saude. Behaviour Change Communication Strategy for Child Health Timor-Leste. October 2008.

TOMAK. Agricultural Input Supply Strengthening. May 2018.

TOMAK/IADE. Farmer Entrepreneurs: Attitudes to Farming as a Business in Timor-Leste. November 2017.

TOMAK. Gender Equality and Social Inclusion Analysis (GESIA). 2016.

TOMAK. Gendered Assessment of Marketplaces in Timor-Leste. August 2018.

TOMAK. Social and Behaviour Change Strategy (Food Security and Nutrition). July 2017-June 2018.

TOMAK. Peanut and red rice baseline. May 2018.

TOMAK Technical Report 11 Nutrition-related information consumption survey results. February 2016.

TOMAK/IADE. Farmer Entrepreneurs: Attitudes to Farming as a Business in Timor-Leste. November 2017.

USAID. Timor-Leste: Values Study: Final Report. June 2018.

WashPlus. Behaviour Change Strategy Bangladesh. Washington, DC: FHI360. December 2013.

World Food Program and TOMAK.Formative research on Adolescents' nutrition and health in Baucau, Bobonaro, Dili and Ermera. Preliminary Findings Presentation. July 2018.

World Bank. Mind, Society, and Behavior. 2015.

Annex 1: Channel breakdown by audience

Audience segment	Channels and Activities
Male farmer entrepreneurs	 FFD IADE agribusiness training (Module 1 and 2) Individualised business counselling Study visits Demplots Community mobilisation (crop exposition, awards) Social media (Facebook group for farmers) Mass media (Super farmer campaign)
Wives of farmer entrepreneurs	 FFD IADE agribusiness training (Module 1 and 2) Individualised business counselling Demplots Community mobilisation (crop exposition, awards) Social media (Facebook group for farmers) Mass media (Super farmer campaign)
Happy traditionalists	 FFD (participate in discussions around how to improve production and improve profit IADE agribusiness training (Module 1)