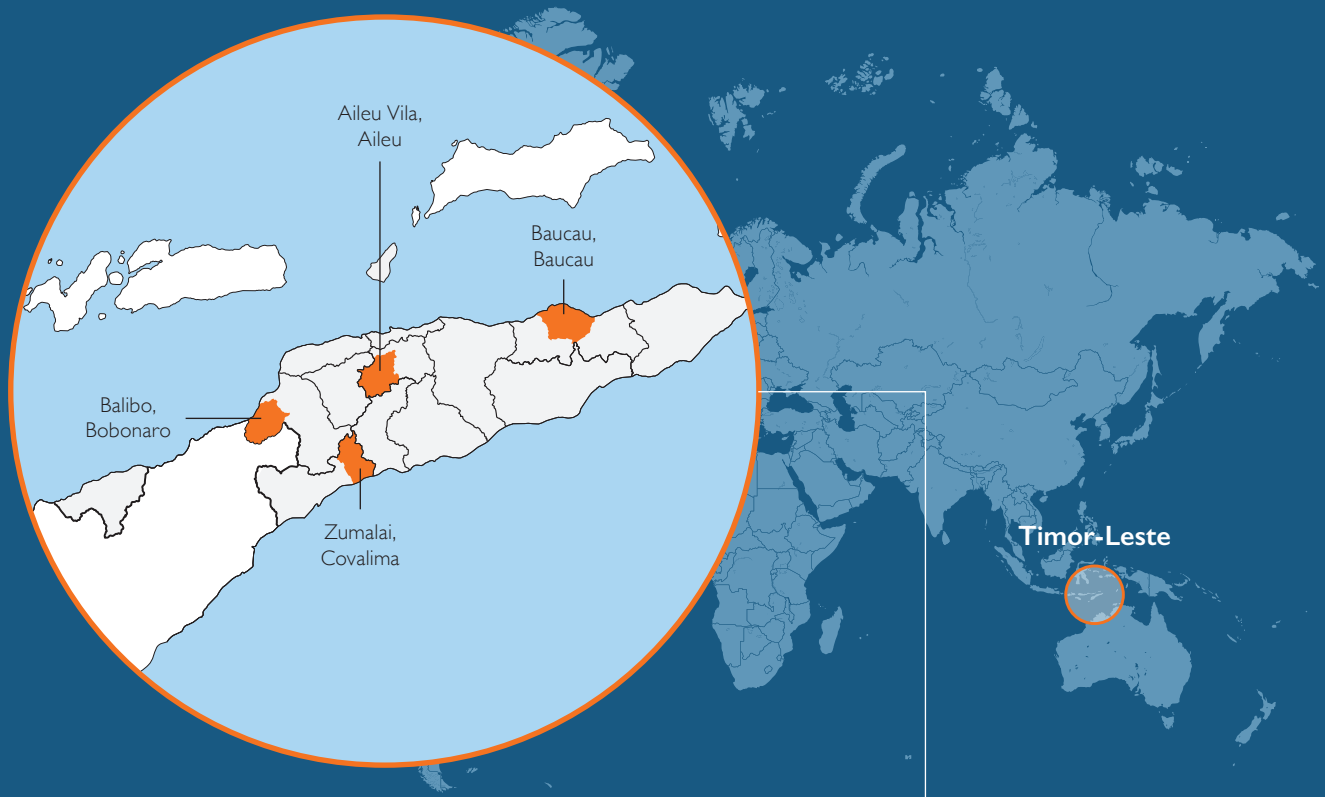


Timor-Leste Better Food, Better Health Project

Aileu, Baucau, Bobonaro and Covalima

Baseline Summary, October 2018

Project target beneficiaries and coverage



Abstract

World Vision’s Better Food, Better Health (BFBH) project is a nutrition-sensitive agriculture project aiming to improve nutrition for 31,806 direct beneficiaries in Timor-Leste. The project will promote production and utilisation of six “superfoods”: soybeans, mung beans, red kidney beans, orange sweet potato, moringa and eggs. This brief reports on the findings of the baseline study for the project conducted in 2017-18 and provides some recommendations.

The context

Timor-Leste has one of the highest rates of undernutrition globally. According to the most recent Demographic and Health Survey (DHS, 2016), the national prevalence of stunting¹, wasting² and underweight³ among children 0 to 59 months was 46 percent, 24 percent and 40 percent respectively, and anaemia⁴ prevalence amongst children 6-59 months is 40 percent. These rates all fall in the World Health Organization (WHO)’s most severe category for public health significance, highlighting the nutrition situation in Timor-Leste is in a critical state. Undernutrition, particularly during pregnancy and the first two years of

22	Villages (suku)
125	Sub-villages (aldeia)
4	Municipalities
31,806	Beneficiaries
16	Health posts
120	Community health workers (PSF)
287	Parents’ clubs
87	Farmer/FMNR groups
92	Savings and loans groups
21	Food processing groups

life, has been shown to have a devastating impact on child health and development, the effects of which persist into poor health, education and economy in adulthood. A growing young population coupled with severe rates of undernutrition places a heavy burden on Timor-Leste’s national health system and future economic development.

1. Height for age less than two standard deviations from median reference population.
 2. Weight for height less than two standard deviations from median reference population.
 3. Weight for age less than two standard deviations from median reference population.
 4. Hb<110g/L.

Overview

World Vision’s BFBH project aims to reduce undernutrition by improving utilisation and demand for nutritionally diverse foods, as well as enhancing year-round access to these foods – particularly protein-rich foods. The project will promote production and utilisation of six “superfoods”: soybeans, mung beans, red kidney beans, orange sweet potato, moringa and eggs.

The BFBH project involves a social and behaviour change communication strategy, built on learnings from previous World Vision child health and nutrition projects in Timor-Leste.

Activities include:

- Establishing community groups: parents’ clubs, farmer groups, food processing groups, savings and loans groups and Citizen Voice and Action groups.

- Promoting, training and supporting “superfood” production and utilisation, improved agricultural techniques and technologies including Farmer Managed Natural Regeneration (FMNR), perennial kitchen gardens, post-harvest processing, preservation and storage (e.g. production of tofu and tempeh).
- Training and supporting community health volunteers (PSFs) to facilitate parent club meetings, perform home visits and undertake child growth monitoring and health promotion during SISCa (Integrated Community Health Services) visits.
- Strengthening and expanding markets for products through private sector partnerships.

Direct beneficiaries include children aged 0-59 months and their caregivers, pregnant women, partners of these caregivers, agricultural households and PSFs.

“A young population and high rates of undernutrition are placing a heavy burden on Timor-Leste’s health system.”



“Timor-Leste has one of the highest rates of undernutrition globally.”



Outcome 1: Caregivers of under 5 children have improved nutrition and health seeking practices

Outcome 2: Households have improved access to “superfoods”

Outcome 3: Households have increased income from “superfood” production

Outcome 4: Improved sustainability of health and agriculture services

Baseline study purpose

The baseline study was conducted internally by World Vision and has sought to understand the pre-program conditions, knowledge, attitudes and behaviours of the target population with respect to child health and nutrition, and superfood consumption, production and sales. This will provide input into overall project design,

as well as provide a baseline for evaluation of the project's activities towards achieving project goals, outcomes and outputs. It also forms a basis from which to contribute to the knowledge base on nutrition-sensitive agriculture in Timor-Leste, and particularly, the role of protein- and iron-rich foods.

Method and design

The baseline study covered all 22 BFBH project villages (suku) as well as non-project comparison groups in all four municipalities, to allow for future evaluation of project impact. It also allows for identification of synergies with prior World Vision Timor-Leste programming experience, and in Baucau municipality, concurrent World Vision Timor-Leste-implemented TOMAK (To'os ba Moris Di'ak) Farming for Prosperity project, which is also supported by the Australian Government.

The study was designed as primarily a quantitative study, incorporating short-answer qualitative components in

data collection tools. Core methods employed included primary data collection from households, semi-qualitative key informant interviews with PSFs, and recording of GPS locations of key community infrastructure such as health posts and markets. Data collection at the household level included anthropometric and haemoglobin measurements – a rare contribution in a baseline study. The Multidimensional Poverty Index (MPI) was used to obtain a poverty rate for project and comparison groups.

Number of households interviewed in baseline survey			
		Project areas	Comparison areas
Aileu		447	143
Baucau			
	with TOMAK	191	123
	without TOMAK	267	106
	Total Baucau	458	229
Bobonaro		308	133
Covalima		263	99
Total		1476	604
Total sample		2080	



World Vision will work with farmers to increase production and income from superfoods, like orange sweet potato.

Key findings

Project goal: Children under 5 and their mothers are well nourished

Across the study sites, the prevalence of stunting in children (aged 0-59 months) ranged from 43 to 53 percent, wasting 11 to 23 percent, underweight 34 to 47 percent, and anaemia 39 to 68 percent. These percentages reflect what the WHO classes as a critical public health concern. Very high rates of anaemia were found among mothers of these children (24 to 45 percent) and pregnant women (41 to 64 percent).⁵ Although the prevalence of anaemia is high, in many cases the degree of anaemia is mild and therefore can potentially be improved with dietary adjustment such as that to be promoted through BFBH.

Traditional gender roles – that men are the final decision-makers and hold the power in the household, while women are responsible for the home and should not work outside – are strong among the target group, and data suggests this view is particularly strong among men. This highlights the benefits that education and involvement of men in parents' club activities may bring for gender equality.

Outcome 1: Caregivers of under 5 children have improved nutrition and health seeking practices

Indicators under Outcome 1 vary considerably by project area municipality. In almost all indicators, the Covalima sample presents by far the worst outcomes. This is indicative of a systemic concern in Covalima.

Nutrition

- 54 to 80 percent of children aged 0-5 months are exclusively breastfed.
- 28 to 75 percent of children aged 12-23 months received breastmilk in the last 24 hours.
- 3 to 13 percent of children aged 6-59 months satisfy the WHO's Minimum Dietary Diversity – that is, consumption of complementary foods from at least four food groups. The typical Timorese child is consuming well short of this at only two food groups.
- Consumption of any of the six "superfoods" in the last 24 hours is low for children and their mothers. This suggests a lack of access to such foods rather than



Deolinda, right, a PSF, visits her friend and neighbour Esperansa to support her in having a healthy pregnancy.

a lack of knowledge that these foods are good for children – if the household has access to superfoods, both mother and child consume them.

Hygiene

- Knowledge of hygiene practices is high, yet the practice of handwashing with soap (as indicated by the availability of soap and water) is low.

Health

- 74 to 97 percent of mothers report attending four antenatal care (ANC) visits, and 48 to 78 percent had their partner attend at least some of these.
- Birth in the home (35 to 71 percent of children aged 0-59 months) and lack of attendance by a skilled health professional (doctor, nurse or midwife: 33 to 75 percent) tend to go hand in hand. Reasons include no time (baby came too quickly), lack of transport and distance to health facilities.
- 11 to 59 percent of children aged 0-59 months attended SISCa in the last 3 months.
- 33 to 82 percent of children aged 4-59 months have received the third course of diphtheria, pertussis and tetanus (DPT3) or Pentavent vaccine.

43 percent of children in the Covalima sample have never attended SISCa.

5. Hb<120g/L for non-pregnant women and Hb<110g/L for pregnant women; women aged 15-49.

Outcome 2: Households have improved access to “superfoods”

Generally, very few “superfood” crops are grown and therefore eaten by households, with the exception of mung beans and moringa in Bobonaro. Households in Covalima consistently appear to fare worse with regards to “superfood” utilisation and availability. Moringa is grown in Bobonaro and Covalima but is virtually non-existent in Aileu and Baucau. While many households have chickens, eggs are not produced or obtained frequently and chickens are commonly lost. Less than 10 percent of households utilise secure chicken housing and less than five percent have had their chickens vaccinated.

Outcome 3: Households have increased income from ‘superfood’ production

Very few households in Aileu or Baucau earned income from ‘superfood’ crops in the last 12 months. “Superfoods” are more commonly sold in Bobonaro, except for moringa which, while being the most common “superfood” crop grown in the municipality, is rarely sold. Only 10 percent of households in Aileu sold chickens or eggs, but this was higher in Baucau (28 percent), Bobonaro (34 percent) and Covalima (42 percent).

Outcome 4: Improved sustainability of health and agriculture services

This project outcome will be facilitated through support for Citizen Voice and Action groups, community groups whereby members and the wider community can work together to affect changes to public service quality and accountability. At baseline, these groups did not exist. Indicators include respondent perception and satisfaction levels:

- 19 to 51 percent of respondents were confident to voice their opinions in public.
- 20 to 47 percent were confident they could make change to public service quality and accountability in their community.
- 29 to 51 percent were satisfied with public services in their community.

Respondents in Covalima report some of the lowest rates of confidence and satisfaction, and women tended to report much lower rates of confidence than men.

“While many households have chickens, eggs are not produced or obtained frequently and chickens are commonly lost.”



PSFs will be trained by World Vision to run parent clubs, educating on cooking “superfoods”.



Through parents' clubs, men will learn about nutritious food that can be grown, eaten and sold, which will benefit their families.

Recommendations

Acknowledging the large variation between the project sites (e.g. access to foods, agricultural practices etc), improving the nutrition profile of women and children will require a diverse and tailored set of sustainable interventions to be implemented. These will include strategies to improve the production and utilisation of home grown nutrient-rich foods, particularly those rich in protein and iron. By taking a multipronged, food-based approach to increase demand for a more diverse diet, the BFBH project is well-set to achieve improvements in the health and nutritional status of women and children in the project areas.

The results of the study have led to the development of a set of specific recommendations including:

- **Consider prioritising and tailoring “superfoods” by location.**
- **Promote “superfoods” in everyday cooking, not just special recipes.** For “superfoods” to be eaten daily, they need to be seen as everyday foods that can simply be added to meals using current cooking methods. Recipes that require increased effort or complexity, a second fireplace or long cooking times will not be as readily adopted as the simple message to eat them cooked in whatever way the current meal is being prepared (e.g. plain boiled, steamed or fried).
- **Acknowledge (and where appropriate, address) norms and taboos.**
- **Support PSFs to encourage pregnant women to develop realistic birth plans, that is, birth plans that acknowledge and address the practical limitations of poor transportation facilities and road access.**
- **Investigate the preferences and barriers to selling “superfoods”.** Even in areas where “superfoods” are more commonly grown, few households report selling them. Investigation into the specific preferences and barriers to selling these foods should be undertaken to determine the potential for consumption versus market.
- **Include training and promotion of secure chicken housing in group activities.** BFBH provides PSF the incentive of a “chicken package” – training, improved chicken housing, a rooster, 10 hens and chicken feed. With many households owning chickens and facing severe losses of both chickens and eggs, large improvements in the availability of eggs for sale and home consumption could be gained through promotion of secure chicken housing at the household level.



Caleb and his mother Joana received a chicken raising package in Aileu. Photo: Suzy Sainovski/World Vision

- **Supplement the quantitatively-heavy baseline with future qualitative studies throughout the project life.**
- **Collect individual-level disability (and gender) outcome indicators through monitoring processes.**
- **Work collaboratively with the Ministry of Health and other development partners in Covalima to address systemic issues.**
- **Work with the Health Education and Promotion Department of the Ministry of Health to develop Information, Education and Communication (IEC) materials aligned with baseline findings.**
- **Conduct further analysis using the baseline data.** The baseline data is a rich source of information, providing an opportunity for future in-depth analysis to gain a greater understanding of the household nutrition and agricultural practices in Timor-Leste.

Please find the complete baseline report at: worldvision.com.au/bfbh-report

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