

# Fill the Nutrient Gap Timor-Leste Final Report

December 2019





#### Contents

Contents	3
List of Figures	4
List of Tables	7
List of Appendices	7
Acknowledgements	9
Acronyms and abbreviations	11
Executive Summary	12
Introduction	16
Background	16
FNG in Timor-Leste: Process	17
Fill the Nutrient Gap: Situation Analysis for Multi-Sectoral Decision-Making on the Prevention of Malnutrition: Overview of FN Methods	
Collection of Primary Food Price and Availability Data	20
Cost of the Diet (CotD) analysis methods	22
A note on the Findings of the FNG Analysis	23
Key Finding 1: Nutrition has long been recognised as a fundamental human right in Timor-Leste and is incorporated throughout sector-specific and intersectoral policies. Evidence-based prioritisation of actions is now needed so that feasibre affordable nutrition interventions can be implemented across sectors.	
Key Finding 2: Diets are poor and lack diversity; especially for vulnerable groups such as mothers and children. Including a variety of foods from diverse food groups is essential to meet nutrient requirements.	
Key Finding 3: Almost all Timorese households could afford to meet their energy needs. For most households, a nutritious diet that meets energy, protein and micronutrient needs would be unaffordable	
Key Finding 4: Women are particularly impacted by poor nutrition. This both negatively affects their and their families' heat wellbeing and future potential.	
Key Finding 5: Improving the nutrition of infants and young children would require small investments in the short term the could deliver lasting returns over generations	
Key Finding 6: Programa Merenda Eskolar provides a valuable entry point to improve nutrition in children, but menus nee to be diverse and include micronutrient-dense foods.	
Key Finding 7: Meeting the nutrient requirements of adolescent girls would cost more than any other member of the fami They are at high risk of micronutrient deficiencies, but few interventions exist to address their needs and data to inform programming is limited.	-
Key Finding 8: Timor-Leste is a nation with strong participation in the agricultural sector and produces a great diversity of foods, yet productivity is low. Interventions targeting both the quantity and nutritional quality of foods produced could improve access to nutritious diets for all.	
Key Finding 9: Diets across the country are overwhelmingly dependent on staples such as white rice, which provide energy but are low in essential micronutrients. Exploring the potential for supporting rice fortification could mean greater access nutritious diets	to
Key Finding 10: Social protection has significant potential to improve access to nutritious diets for the most vulnerable, bu only if realistic transfer amounts and nutrition-sensitive packages are provided.	
Final observations: combined impact of household packages	74
Draft KONSSANTIL Recommendations	77
References	80
Appendices	85

#### List of Figures

Figure 1: Overview of the FNG process and Timeline in Timor-Leste	18
Figure 2: The Administrative Posts in which Market Data was collected	20
Figure 3: Images from the market price survey data collection	21
Figure 4: Municipalities selected for the CotD analysis for the Timor-Leste FNG	23
Figure 5: FNG Leadership and technical partners	
Figure 6: Overview of interventions modelled per group across the life cycle and by sector	
Figure 7: Percentage of IYC aged 6-23 months per municipality achieving minimum dietary diver	
as per the 2019 IPC report (3)	
Figure 8: Percentage of energy provided by food group in diets of 6-23mo: Diet A (left) a hypoth	
diet for this target group based on reported dietary patterns (estimate based on qualitative resu	
and Diet B (right) the lowest cost, nutritious diet modelled for this target group in the CotD Anal	
(example from Oecusse).	•
Figure 9: <b>Cumulative</b> percentage of micronutrient requirements met (capped at 100% RNI) by e	
additional food group for Breastfed IYC (6-23mo) (Oecusse) using the modelled lowest-cost	
Nutritious Diet (CotD Analysis), in order of food group added (based on modelling and not obser	rved
or current diets)	
Figure 10: <b>Cumulative</b> Percentage of micronutrient requirements <sup>7</sup> met (capped at 100%) by eac	
additional food group for Lactating Adult Women (Dili) using the lowest-cost Nutritious Diet (Co	
Analysis), in order of food group added	
Figure 11: <b>Cumulative</b> percentage of micronutrient requirements <sup>7</sup> met (capped at 100% RNI) by	
additional food group for Adolescent Girls (Ermera) using the lowest-cost Nutritious Diet (CotD	cuon
Analysis), in order of food group added	32
Figure 12: Cost of the lowest-cost diets that would meet requirements for 1) energy only and 2)	
energy, protein and 13 micronutrients (nutritious diet) for the model <b>5-person household<sup>8</sup></b> in th	
assessment municipalities	
Figure 13: Daily cost of the energy-only and nutritious diets per household member (average ac	
municipalities)	
Figure 14: Percentage of household energy target and iron target formed by individual househo	
member requirements and nutritious diet cost per household member	
Figure 15: Number of individual foods per food CotD group found to be available in each assess	
municipality for which food price data was collected	
Figure 16: Average cost per 100g of foods from each food group for which price data was collect	
per municipality	
Figure 17: Average price per 100g per food group and per 100kcal per food group (all 6	
municipalities)	38
Figure 18: Percentage of households that would be able to afford the energy-only or nutritious of	
estimated by comparing diet cost to adjusted household food expenditure from the TSLS-SLS	-
Figure 19: Comparison of the distribution of monthly food expenditure for a five-person househ	
Oecusse with the estimated costs of an energy-only diet and a nutritious diet and use of interse	
points to determine proportion of households that could afford either diet	-
Figure 20: Percentiles of monthly food expenditure for a five-person household from the 2014-2	
TL-SLS, adjusted to reflect inflation from 2014-2019(6,7)	
Figure 21: Distribution of estimated monthly food expenditure for five-person households from	
2014-2015 TL-SLS, adjusted to reflect inflation from 2014-2019(6,7)	
Figure 22: Comparison of the mean and median estimated monthly household food expenditure	
2019 using TL-SLS data and the cost of the energy-only and nutritious diets in each municipality	

Figure 23: Comparison of the daily cost (to households) of a modelled energy-only diet and a modelled nutritious diet for Lactating Women and Adult Men by municipality	44
municipality as per the 2016 DHS (30)	45
Figure 25: Prevalence of <b>Overweight and Obesity</b> for <b>adult men and women</b> (non-pregnant, non- lactating) by municipality as per the 2016 DHS (30)	
Figure 26: Preliminary results of modelling the impact in CotD of providing alternative nutrition interventions on the cost of a nutritious diet for <b>lactating adult women</b> across the 6 assessment municipalities	
Figure 27: Affordability of nutritious diets for adult men (diet cost compared to per-capita food expenditure) by municipality.	
Figure 28: Daily cost of the energy-only and Nutritious Diets modelled in CotD for 12-23mo Children	
Figure 29: Stunting prevalence as per the 2016 DHS, by municipality (30)	49
Figure 30: Daily cost (to household) of providing a nutritious diet for 12-23mo IYC, incorporating supplementation and transfers of nutritious foods	50
Figure 31: Percentage of daily protein and micronutrient targets for school-age children met by a	
school meal of 113 grams per day of unfortified or fortified rice	53
Figure 32: Daily cost (to household) of a nutritious diet for school children at baseline (nutritious	
diet) and with the provision of alternative school feeding menu options	
Figure 33: Percentage of daily protein and micronutrient targets (100% RNI) for school-age children	
met by different menu options	
Figure 34: Percentage of daily protein and micronutrient targets (100% RNI) for school-age children	
met by an Optimised School Feeding Menu and a Low Nutrient Menu	
Figure 35: Daily cost of a nutrition diet for the School Child with an Optimised School Feeding Menu (fortified and unfortified) and a Low Nutrient Menu at a budget of \$0.25 and \$0.50 per child, per da	
Figure 36: Proportion of total household diet cost (in an ideal scenario where nutrient requirements	S
are met) required to provide a nutritious diet for each model household member	56
Figure 37: Daily cost (to household) of the energy-only and nutritious diets modelled in CotD for	
Adolescent Boys and Adolescent Girls in each Municipality	57
Figure 38: Preliminary results of modelling the impact in CotD of providing alternative nutrition	
interventions on the cost of a nutritious diet for <b>adolescent girls</b> across the 6 assessment	
municipalities	57
Figure 39: Cost (to the household) of a nutritious diet for a 5-person household if, using different	
intervention scenarios, the household was able to access nutritious foods from home production in <b>Baucau Municipality</b>	
Figure 40: Proportion of households that would be able to afford a nutritious diet if, using different	
intervention scenarios, they were able to access nutritious foods from their own production in	
Baucau Municipality	61
Figure 41: Possible impact of home production and consumption of Orange Flesh Sweet Potatoes .	
Figure 42: Possible impact of household access to 2 eggs per week through own production,	
depending on household member/s receiving eggs, Ermera, Manufahi and Oecusse	63
Figure 43: Possible impact of household access to 2 eggs per week through own production,	
depending on household member/s receiving eggs, Baucau, Bobonaro and Dili	63
Figure 44: Daily cost of a nutritious diet for the model 5-person household and the impact on diet cost if up to 1 egg per day could be accessed by each household member from own production	
(reduced cost)	64

Figure 45: Proportion of households that would be able to afford a nutritious diet if up to 1 egg per
day could be accessed by each household member from own production (reduced cost)
Figure 46: Proportion of households that would be able to afford a nutritious diet if, using
interventions aimed at reducing post-harvest loss, income was improved by reductions in losses of
either 15% or 25%
Figure 47: Proportion of households that would be able to afford a nutritious diet if, using
Conservation Agriculture, income was able to be improved an average of 24% (62,63)
Figure 48: Cost to the household of a nutritious diet using current market prices and using a price of
fish (Ikan Tri) reduced by 50 percent and by 66 percent67
Figure 49: Preliminary results of modelling the impact of ensuring that <b>fortified rice</b> is available at
market cost on the cost of a nutritious diet for the model 5-person household across the 6
assessment municipalities
Figure 50: Monthly cost of a nutritious diet for household members for which the existing \$5
Monthly Bolsa da Mãe Cash Transfer would apply 69
Figure 51: Average monthly cost of a nutritious diet for different groups in the population
Figure 52: Proportion of households that would be able to afford a nutritious diet if different <b>cash</b>
transfer amounts were provided in the six assessment municipalities
Figure 53: Impact of possible cash transfers on ability of households to afford a nutritious diet
(percentage difference between baseline affordability or 'No Transfer) and affordability if Cash
Transfer amount implemented) 72
Figure 54: Monthly cost of a nutritious diet for the model 5-person household and the impact on diet
cost if different food vouchers were provided73
Figure 55: Proportion of households that would be able to afford a nutritious diet if <b>food vouchers</b>
were provided in the six assessment municipalities73
Figure 56: Impact of different packages of household interventions on the percentage of households
who would be able to afford a nutritious diet (packages using IFA for women and girls)
Figure 57: Impact of different packages of household interventions on the percentage of households
who would be able to afford a nutritious diet (packages using MMT for women and girls)
Figure 58: KONSSANTIL Presentation of the FNG Preliminary Findings, October 9th, 201978

#### List of Tables

Table 1: Nutrition-sensitive national policy documents	24
Table 2: KONSSANTIL sector priorities for nutrition outcomes and link with FNG-CotD Intervention	
Modelling (round 1), adapted from the table prepared by Heather Grieve for the FIRST Policy	
Effectiveness Review (1)	26
Table 3: Limiting Nutrients (average) by target group	34
Table 4: Required nutrient density per target group as per FAO/WHO/UNU estimations (36,37)	35
Table 5: Comparison of the energy-only diet (CotD), Food Poverty Basket (TL-SLS) and Nutritious D	Diet
(CotD) methods and costs	39
Table 6: School Feeding Menu scenarios modelled in the CotD	52
Table 7: Homestead Food Production intervention scenarios modelled in CotD for Baucau Municipa	ality
	59
Table 8: Modelled Nutritious Food Vouchers (Quarterly Transfer)	72
Table 9: Household intervention packages modelled to show potential combined intervention of	
multiple nutrition-sensitive and nutrition-specific interventions across sectors (sector colours show	'n in
key)	74
Table 10: DRAFT recommendations prioritised by KONSSANTIL members for follow-up as the FNG	
process continues	77

## List of Appendices

Appendix Table 1: Locations of the market price data collection and geographic zone reassignment
categories
Appendix Table 2: Availability and cost (average across all markets) of foods
Appendix Table 3: Weekly content and cost of the modelled nutritious diet in <b>BAUCAU</b> Municipality
by Household Member
Appendix Table 4: Weekly quantity of each nutrient provided by the edible portions of foods included
in the Weekly Nutritious Household Diet in BAUCAU Municipality
Appendix Table 5: The percentage (%) of each nutrient target provided by the edible portion of foods
selected by the software for the Weekly Nutritious Household Diet in BAUCAU Municipality
Appendix Table 6: Weekly content and cost of the modelled nutritious diet in BOBONARO
Municipality by Household Member96
Appendix Table 7: Weekly quantity of each nutrient provided by the edible portions of foods included
in the Weekly Nutritious Household Diet in BOBONARO Municipality97
Appendix Table 8: The percentage (%) of each nutrient target provided by the edible portion of foods
selected by the software for the Weekly Nutritious Household Diet in BOBONARO Municipality98
Appendix Table 9: Weekly content and cost of the modelled nutritious diet in <b>DILI</b> Municipality by
Household Member
Appendix Table 10: Weekly quantity of each nutrient provided by the edible portions of foods
included in the Weekly Nutritious Household Diet in <b>DILI</b> Municipality100
Appendix Table 11: The percentage (%) of each nutrient target provided by the edible portion of foods
selected by the software for the Weekly Nutritious Household Diet in <b>DILI</b> Municipality101
Appendix Table 12: Weekly content and cost of the modelled nutritious diet in <b>ERMERA</b> Municipality
by Household Member102
Appendix Table 13: Weekly quantity of each nutrient provided by the edible portions of foods
included in the Weekly Nutritious Household Diet in ERMERA Municipality103

Appendix Table 14: The percentage (%) of each nutrient target provided by the edible portion of foods
selected by the software for the Weekly Nutritious Household Diet in <b>ERMERA</b> Municipality104
Appendix Table 15: Weekly content and cost of the modelled nutritious diet in MANUFAHI
Municipality by Household Member
Appendix Table 16: Weekly quantity of each nutrient provided by the edible portions of foods
included in the Weekly Nutritious Household Diet in MANUFAHI Municipality
Appendix Table 17: The percentage (%) of each nutrient target provided by the edible portion of foods
selected by the software for the Weekly Nutritious Household Diet in <b>MANUFAHI</b> Municipality107
Appendix Table 18: Weekly content and cost of the modelled nutritious diet in <b>OECUSSE</b> Municipality
by Household Member
Appendix Table 19: Weekly quantity of each nutrient provided by the edible portions of foods
included in the Weekly Nutritious Household Diet in <b>OECUSSE</b> Municipality109
Appendix Table 20: The percentage (%) of each nutrient target provided by the edible portion of foods
selected by the software for the Weekly Nutritious Household Diet in <b>OECUSSE</b> Municipality110
Appendix Table 21: Limiting nutrients by household member and municipality in the CotD modelled
Nutritious diet
Appendix Table 22: Results of CotD re-analysis to estimate cost by geographic zone instead of
municipality using non-representative data
Appendix Table 23: Results of CotD re-analysis to estimate diet affordability by geographic zone
instead of municipality using non-representative data113
Appendix Table 24: Comparison of CotD estimated diet costs with the estimated 2019 household food
expenditure to estimate the percentage of households that would be able to afford the energy-only
and nutritious diets in <b>BAUCAU</b> 113
Appendix Table 25: Comparison of CotD estimated diet costs with the estimated 2019 household food
expenditure to estimate the percentage of households that would be able to afford the energy-only
and nutritious diets in <b>BOBONARO</b> 113
Appendix Table 26: Comparison of CotD estimated diet costs with the estimated 2019 household food
expenditure to estimate the percentage of households that would be able to afford the energy-only
and nutritious diets in ERMERA
Appendix Table 27: Comparison of CotD estimated diet costs with the estimated 2019 household food
expenditure to estimate the percentage of households that would be able to afford the energy-only
and nutritious diets in DILI
Appendix Table 28: Comparison of CotD estimated diet costs with the estimated 2019 household food
expenditure to estimate the percentage of households that would be able to afford the energy-only
and nutritious diets in MANUFAHI115
Appendix Table 29: Comparison of CotD estimated diet costs with the estimated 2019 household food

### 预览已结束, 完整报告链接和二维码如下:



https://www.yunbaogao.cn/report/index/report?reportId=5\_4056