RAPID FOOD SECURITY ASSESSMENT 2020: FULL REPORT

Timor-Leste

9 JUNE 2020

Foreword

The agricultural sector is very important to the economy of Timor-Leste and the livelihood of our people. The mandate of the Ministry of Agriculture and Fisheries (MAF) is to have a competitive and prosperous agricultural sector that will significantly and sustainably contribute to the Gross Domestic Product (GDP), eradication of poverty, food insecurity, and under-nutrition of the country. However, investments in agriculture at a national, community and household level have been significantly challenged during the 2019/2020 cropping season. This period saw the arrival of both longstanding and new shocks, including crop pests (such as Fall Armyworm), livestock disease (such as African Swine Fever), variable rainfall and the COVID-19 pandemic.

The full impact of the range of these shocks on households was unknown, resulting in the need for a rapid food security assessment. This assessment was designed to quickly provide a quantitative evidence base that reflects the impacts of recent shocks on the agriculture sector and food security of households across all municipalities in Timor-Leste.

The Rapid Food Security Assessment was conducted by MAF with the support of lead partners Mercy Corps and Oxfam through investments from the United States Government and the Australian Government. The findings highlight the impact of, and losses resulting from, environmental shocks and COVID-19, as well as the compounding negative effects that this is having on livelihoods and food security of rural farming communities in Timor-Leste.

I take this opportunity to express my gratitude for the collaboration between National Directorate for Food Security and Cooperation of the Ministry of Agriculture and Fisheries, and National Directorate of Statistics and Social Economy of the Ministry of Finance for their leadership and commitment to carry out this assessment in order to fill the existing evidence gap regarding the magnitude of the impact of recent shocks.

My sincere appreciation also to the United States Government and the Australian Government for their support of this survey, as well as to lead partners Mercy Corps and Oxfam. Additional thanks are extended to all partners who supported data collection, including ADRA, CRS, TOMAK and World Vision.

The evidence gathered within this assessment indicates that the food security situation is expected to worsen over the coming months in the absence of comprehensive and coordinated action. I hope that the findings will inspire national and subnational efforts for joint policies and actions, as well as collaborative efforts for future comprehensive data collection and monitoring systems, so that we may continue to build more resilient livelihoods and eradicate food insecurity.

Dili, 9 Juñu 2020

Eng. Pedro dos Reis
Ministry of Agriculture and Fisheries

Acknowledgements

This nationwide Rapid Food Security Assessment of Timor-Leste is led by the Department of Food Security, Ministry of Agriculture and Fisheries, with lead agency support from Mercy Corps and Oxfam. It is the result of a truly collaborative effort. Special thanks to the agencies who supported data collection across Timor-Leste: ADRA, CRS, Mercy Corps, Oxfam, TOMAK (Australian Aid) and World Vision. Additional thanks are extended to the following agencies for their technical contributions: Food and Agriculture Organization of the United Nations, World Food Program, Mercy Corps, Oxfam, TOMAK and World Vision.

Analysis and the development of this report have been conducted by Joseph Freach, independent consultant, and Katherine Dobson, Mercy Corps' Director for Monitoring, Evaluation, Research and Learning. The authors would like to thank the enumerators, local partners, project field staff, translators, and drivers who made completion of this report under an extremely tight timeframe possible. Thanks are also extended to the Ministry of Agriculture and Fisheries and partner organizations for their support and feedback throughout the process.

The Assessment was made possible by the generous support of the American people through the United States Agency for International Development (USAID) and United States Department of Agriculture (USDA), and the generous support of the Australian Government through the NGO Cooperation Program. The contents are the responsibility of the Ministry of Agriculture and Fisheries and do not necessarily reflect the views of USAID, USDA, the United States Government or the Australian Government.

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Executive Summary

This report has been prepared to present the findings of the Timor-Leste nationwide Rapid Food Security Assessment. Data was collected between 5 - 18 May, 2020. COVID-19 health and safety protocols were respected at all times, including physical distancing, use of face masks, and regular hand washing. The assessment gathered information on the effects of COVID-19 restrictions as well as recent agricultural shocks such as crop pests, livestock and poultry diseases, and variable rains on rural households throughout Timor-Leste. The results from the assessment are summarized herein with an emphasis on the timely provision of as much information as possible to government departments and the international development community to inform activity design in the coming weeks and months. This report supersedes a preliminary version released to the Ministry of Agriculture and Fisheries and data collection partners in the days immediately after data collection ended, and before full analysis had been completed.

A total of **1,217 respondents** (46% female, 54% male) participated in this assessment, which used a purposive (intentional) sampling approach. Respondents represent 17% female-headed and 83% male-headed households. Households from **every municipality of Timor-Leste** were interviewed. Households with at least one member with a disability made up 21% of the sample, and 20% of households had at least one pregnant or lactating member.

This nationwide Rapid Food Security Assessment of Timor-Leste is led by the Department of Food Security, Ministry of Agriculture and Fisheries.

Key Findings

- **Rural households are absorbing more people:** 14% of surveyed households have increased in size, by an average of 3.2 members, in the last two months. Beyond their own households, 32% of respondents observed people returning from cities in their communities due to COVID-19.
- **Households are experiencing food insecurity at what should be the most food secure time of the year:** Harvest of staples means April and May should be the months with the highest level of food security in a typical year, but over 40% of households are already engaging in coping strategies that reduce the amount of food they are eating at least once per week. Severe hunger was found to be low, but all respondents reported relying on at least one income source that they said they 'only rely on in times of stress'.
- **Household food security is impacted by COVID-19:** 81% of households reported the restrictions around COVID-19 had affected their food/income sources. For 75% of households, more than one food/income source had been affected. 50% of respondents had experienced a food shortage in shops and in markets, and 35% reported shortages of non-food items in shops due to COVID-19.
- **Food insecurity is not universal:** 34% of respondents noted they had not shifted to consumption of less preferred or less expensive foods. Between 43 - 47% reported that they were not borrowing food, consuming seed stock or purchasing food on credit. Households are generally not relying on sending household members to eat with neighbors or relatives as a coping strategy (93%).

- **Household savings and food stocks are limited:** 64% of households have two months or less of food stored, including 18% who have no food stored. 58% of households rate their food storage levels as less than this time in a typical year. Only 22% of respondents said that any member of their household had savings of any kind, and among those with savings only 7% reported having more than $250.

- **Livestock levels have dropped dramatically compared to 12 months ago:** Households were found to have less than one third as many pigs, and less than half as many chickens as a year ago. 82% of respondents reported being impacted by African Swine Fever[1], and all municipalities were affected.

- **Economic shocks are severe and diverse:** 92% of households indicated they had not been able to travel to market in recent months, 82% were affected by the closure of markets/shops and 74% had experienced reduced/unavailable food in markets. The impact of those economic shocks was severe; 49% - 64% of respondents said the impact was 'strong' or the 'worst that had ever happened'. To date, recovery has been limited.

- **Agriculture shocks are widespread:** 88% of households were impacted by livestock disease (including African Swine Fever), 77% of households were impacted by crops pests (including Fall Armyworm), 73% were impacted by unseasonal or erratic rain, and 67% of households were impacted by a very bad harvest.

- **Affected households are struggling to recover:** Between 42% and 69% of respondents rated the impact of the top-three agriculture shocks (livestock disease, crop pests, and unseasonal/erratic rainfall) as either 'strong' or the 'worst that had ever happened'. Between 35% and 51% of these households said that they had 'not at all' or 'partially' recovered from these shocks.

- **Most households are aware of COVID-19 prevention behaviors:** 99% of respondents had received information on COVID-19, and 97% felt that information had helped them to understand and prepare for it. Television (71%), community leaders (54%) and radio (52%) were the top three sources of information. Unprompted, 99% of respondents mentioned washing their hands regularly and/or washing their hands regularly with soap was a way that they could keep their household safe from COVID-19, 76% mentioned wearing a mask and 76% stated physical distancing.

These findings reflect that food insecurity and fragility already exists in Timor-Leste; with many households showing low levels of food storage, savings, limited recovery from shocks, and practicing coping strategies associated with reduced food and income.

It is strongly recommended that stakeholders engage in a consultative process to create a set of recommendations for action, tailored to key actors (including government, development agencies, civil society organizations and private sector stakeholders) in order to move forward with a unified and comprehensive approach to improving the current food security situation in Timor-Leste.

[1] Results based on respondent's perception of pigs having been affected. Testing for African Swine Fever is not widespread in Timor-Leste and there are other livestock diseases that affect pigs.

Introduction

This report outlines the results and findings from the 2020 Rapid Food Security Assessment, which gathered information on the effects of COVID-19 restrictions as well as on recent agricultural shocks such as crop pests (including Fall Armyworm), livestock and poultry diseases (including African Swine Fever), and variable rains on rural households throughout Timor-Leste. The data, which was collected between 5 - 18 May 2020, is summarized in the following sections, with an emphasis on rapidly providing as much information as possible to government departments and the international development community to inform their activities in the coming months. It should be noted that this version of the report supersedes a preliminary version released to the Ministry of Agriculture and Fisheries and data collection partners in the days following the end of data collection. While no errors have been found in that version, this report represents the full analysis of the data.

Methodology

Rapid Food Security Assessment data was collected through quantitative surveys with household representatives in each municipality throughout Timor-Leste. Surveys were conducted in-person, by trained, locally-based data collection partners. COVID-19 health and safety protocols were respected at all times, including physical distancing, use of face masks, and regular hand washing. Surveys were conducted in Tetun, with supporting use of local languages where it was appropriate. Data collection partners recorded participants' responses digitally, using the ONA/ODK application on tablets or smart phones.

A purposive (intentional) sampling approach was used in order to balance the need to rapidly collect accurate data in order to inform Government of Timor-Leste and agency responses, with the desire to have nationwide representation and robust, credible and reliable findings. Purposive sampling is a technique that is widely used in research and involves identifying and selecting households who are experiencing a phenomenon of interest, based on specified selection criteria.[2] In this assessment, the use of purposive sampling meets the information needs of key stakeholders and provides a solid snapshot of the food security situation in Timor-Leste. It is not however, a probabilistic or random sampling approach. As such, findings are not intended to be generalized and comparisons between municipalities should be interpreted with care.

Households from each of Timor-Leste's 13 municipalities are represented. Within each municipality, data collection partners were asked to survey approximately 90 households from at least 6 different sucos.[3] To reduce unnecessary travel during a global pandemic and comply with Timor-Leste's State of Emergency, each data collection partner selected sucos where they currently work and that were thought to have been impacted by COVID-19 restrictions and/or recent agricultural shocks. Within each suco, data collection partners were encouraged to select respondents randomly. In some instances, data collection partners surveyed representatives from households who are program participants (beneficiaries). This defined but pragmatic sampling approach means that surveyed households may come from sucos where some households (but

[2] Creswell, J.W. & Plano Clark, V.L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA : Sage Publications.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA : Sage Publications.

[3] Within each municipality, households from six or seven different sucos were surveyed, with the exception of Ermera where the 107 households surveyed came from only four sucos.

not necessarily the households surveyed) might have been more severely affected by recent shocks than other sucos in that municipality.

References to 'households' in this report means respondent households, and may not reflect the experiences of households throughout Timor-Leste. For the purposes of the survey, a household was defined as a group of people living and sharing meals together.

A total of 1,217 respondents were surveyed, which exceeds a nation-wide, minimum recommended sample size of 385 (assuming 95% confidence level, 5% margin of error and 50% response distribution).[4]

Respondent Demographics

A total of **1,217 respondents** (46% female, 54% male) participated in Rapid Food Security Assessment surveys, representing 17% female-headed and 83% male-headed households (as indicated by the respondent). Households from each of Timor-Leste's 13 municipalities are represented, with between 85 and 107 respondents per municipality. Within each municipality, households from 6 or 7 different sucos were surveyed, with the exception of Ermera where the 107 households surveyed came from only 4 sucos. Households with at least one member with a disability made up 21% of the sample[5], and 20% of households had at least one pregnant or lactating member. The varying education levels of heads of households are outlined in Table 1.

TABLE 1. EDUCATION LEVEL OF HEAD OF HOUSEHOLD

Education level	n=	% head of household
No school (or less than primary level) & cannot read and write	354	29%
No school (or less than primary level) & can read and write	71	6%
Primary level (Grade 1 - 6)	191	16%
Pre-secondary level (Grade 7 - 9)	286	24%
Secondary level (Grade 10 - 12)	244	20%
Technical or vocational	12	1%
University	59	5%

The average household size was 7.1 members and this has risen in the last two months, with **14% of respondents reporting that their household had added new members during that time.** Among those households that had grown, the **average increase in household members was 3.2 members**. The rise in household size is in line with figures from the 2015 Population and Housing census which found an average household size of 5.7 at that time, with a slowly declining trend compared to previous censuses.[6] Some people appear to be leaving urban areas and returning to rural areas due to fear of COVID-19 or in response to associated restrictions or education and employment changes. Data from Table 37 also supports this conclusion, as 32% of

[4] Raosoft Inc. (2020). Sample size calculator. Retrieved from http://www.raosoft.com/samplesize.html

[5] This rate is higher than in the Census, which may be due to the use of Washington Group questions that ask (less pejoratively) about *difficulties* that household members experience completing particular tasks, rather than whether or not household members have a *disability*. It may also be influenced by the purposive sampling method used.

Washington Group on Disability Statistics. (2018, July). Disability measurement and monitoring using the Washington Group disability questions. Retrieved from http://www.washingtongroup-disability.com/

[6] General Directorate of Statistics (GDS) (2018). *Population and housing census of Timor-Leste: 2015.*

respondents noticed people returning home due to COVID-19 in their communities. Ainaro had the largest household size (9.0 members), and Oecusse the smallest (5.3 members). Table 2 below shows the number of respondents and average household size for each municipality.

TABLE 2. NUMBER OF RESPONDENTS AND AVERAGE HOUSEHOLD SIZE BY MUNICIPALITY

Municipality	No. respondents	Average HH size
Aileu	90	8.2
Ainaro	92	9.0
Baucau	85	8.2
Bobonaro	92	7.1
Covalima	92	6.2
Dili	95	6.2
Ermera	103	8.0
Lautem	90	7.4
Liquiça	90	7.1
Manatuto	91	6.5
Manufahi	107	7.2
Oecusse	91	5.3
Viqueque	99	5.7

Livelihoods

Households are currently relying on are agriculture (92%), livestock (53%), and pensions (18%) as their main livelihoods or income sources. These were also the top three activities that respondents listed as livelihoods that they rely on in times of stress. **All surveyed households were found to be relying on at least one income source that they said they 'only rely on in times of stress'**. Data on household livelihood activities and households' reliance on them in times of stress can be found in Table 3.

TABLE 3. HOUSEHOLD LIVELIHOOD SOURCES AND RELIANCE IN TIMES OF STRESS

Activity[7]	Households engaged (%)	Households rely on activity in time of stress (%)
Agriculture – crops	92%	85%
Agriculture – livestock	53%	47%
Pensions (any type)	18%	13%
Small business (e.g. kiosks and mini-restaurants)	13%	13%
Professional services (usually salaried)	9%	7%
Fishing, aquaculture or cultivation	8%	6%
Daily labor (e.g. agricultural, road work)	8%	6%
Remittances from overseas	2%	1%
Remittances from within Timor-Leste	1%	2%
Large business (e.g. construction company)	1%	1%

[7] Pensions include veteran, terseira idade, bolsa de mae and banku de bebe. Professional services are usually salaried, and include government roles, teaching and accounting.

Respondents widely reported that their food/income sources had been affected by the restrictions around COVID-19, with 81% reporting some impact on their activities. For each livelihood, the percentage of female and male headed households reporting an effect of the restrictions was proportional to the total number of female and male headed households, so the gender of the head of household had little influence on whether livelihoods had been affected. The main sources affected were agriculture, livestock, and small businesses. In total, **75% of respondents said that more than one of their household's food/income sources has been affected**. On average, the livelihood of 1.95 people within each household had been affected, with an average of 2.5 different food/income sources impacted.

TABLE 4. LIVELIHOOD ACTIVITIES AFFECTED BY COVID-19 RESTRICTIONS

Activity	Households reporting livelihood activity affected by restrictions
Agriculture – crops	85%
Agriculture – livestock	61%
Small business (e.g. kiosks and mini-restaurants)	24%
Daily labor (e.g. agricultural, road work)	18%
Pensions (any type)	16%
Fishing, aquaculture or cultivation	14%
Professional services (usually salaried)	11%
Large business (e.g. construction company)	8%
Remittances from within Timor-Leste	8%
Remittances from overseas	6%

Agricultural Production

Most respondents were engaged in some type of agriculture, growing an average of four crops from the list in Table 5. Maize, fruit, tubers, leafy greens, and vegetables were the most commonly grown crops.

TABLE 5. CROP PRODUCTION BY % OF RESPONDENTS

Crop	No. respondents growing	% respondents growing
Maize	928	76%
Fruits	814	67%
Tubers	812	67%
Leafy greens	789	65%
Other vegetables	766	63%
Beans	578	47%
Peanuts	354	29%
Rice	329	27%

Of the respondents growing each crop, **the majority of respondents reported that crop conditions were poorer than last year for maize, rice and beans.**

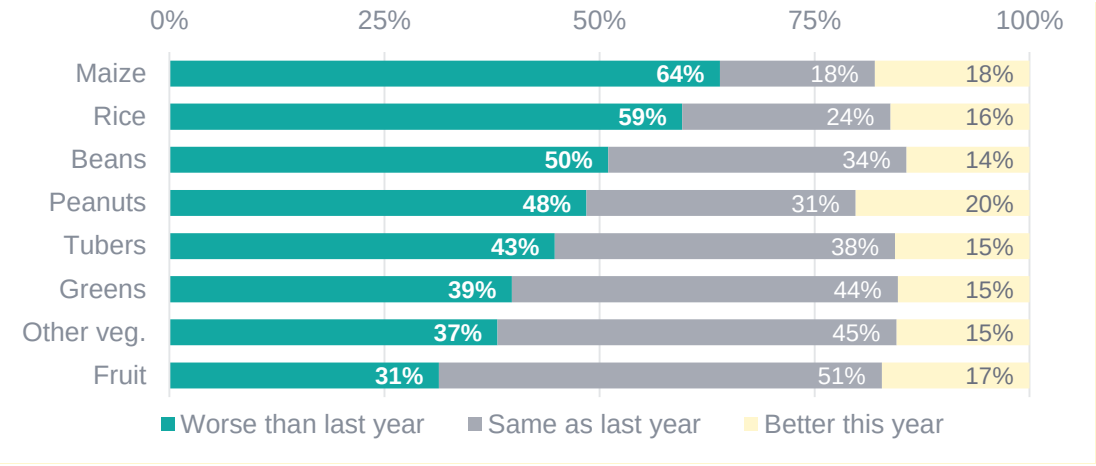

FIGURE 1. CURRENT CROP CONDITIONS COMPARED TO LAST YEAR

TABLE 6. CURRENT CROP CONDITIONS COMPARED TO LAST YEAR, AMONG RESPONDENTS GROWING EACH CROP

Condition	Maize	Rice	Tubers	Beans	Peanuts	Greens	Other veg.	Fruit
Better this year	18%	16%	15%	14%	20%	15%	15%	17%
Same as last year	18%	24%	38%	34%	31%	44%	45%	51%
Worse than last year	64%	59%	43%	50%	48%	39%	37%	31%

The majority of maize and rice growing respondents reported planting less maize and rice this year, and between 41% and 45% of respondents indicated that they had planted less tubers, beans and peanuts this year, among those who said they grow those crops. Maize also had the highest number of respondents planting more this year, though this was only 18%.

TABLE 7. PLANTING LEVELS COMPARED TO LAST YEAR

Condition	Maize	Rice	Tubers	Beans	Peanuts	Greens	Other veg.	Fruit
More	18%	16%	14%	12%	14%	11%	13%	14%
Same	28%	32%	43%	42%	38%	47%	47%	53%
Less	**53%**	**51%**	**41%**	**45%**	**45%**	39%	38%	30%

Table 8 outlines the main challenges to crop production faced by respondents. Crop pests (50%), lack of rainfall (46%) and unpredictable rainfall (25%) were the top challenges experienced. Respondents from Aileu, Cova Lima, Ermera and Oecusse reported facing the highest number of challenges, and Viqueque, Lautem and Dili the fewest. There was substantial variation between municipalities. The main challenge faced by respondents in each municipality, and the percentage of households facing that challenge within the municipality, can be found in Table 9.

TABLE 8. CHALLENGES TO CROP PRODUCTION BY % RESPONSES

Challenges	% experiencing
Crop pests	50%
Lack of rainfall	46%
Unpredictable rainfall	25%
Strong winds / wind storms	22%
Restricted movement because of COVID-19	21%

Challenges	% experiencing
Lack of markets to sell at / customers	17%
Lack of aggregators / buyers	14%
Unfenced/untethered livestock damaging crops	13%
Lack of inputs (seeds, fertilizers, tools)	12%
Lack of storage	11%
Too much rainfall	9%
Lack of family labor (including illness)	6%
Land erosion	5%
Wild fires	4%
Lack of hired labour	3%
Lack of land	2%

TABLE 9. MAIN CHALLENGES AND % OF HOUSEHOLDS FACED IN EACH MUNICIPALITY

Municipality	Main challenge faced	% households facing challenge in municipality
Aileu	Lack of hired labor	54%
Ainaro	Wild fires	31%
Baucau	Lack of aggregators / buyers	13%
Bobonaro	Lack of rainfall	15%
Covalima	Lack of markets to sell at / customers	24%
Dili	Lack of land	16%
Ermera	Land erosion	35%
Lautem	Unpredictable rainfall	14%
Liquica	Land erosion	11%
Manatuto	Too much rainfall	19%
Manufahi	Wild fires	21%
Oecusse	Lack of family labor (including illness)	31%
Viqueque	Lack of land	16%

Rates of respondents experiencing Fall Armyworm were in line with those who reported crop pests as a challenge to crop production.[8] Table 10 shows the total percentage of respondents reporting Fall Armyworm and a breakdown of where those respondents were among the municipalities. Fall Armyworm was most often reported in Manufahi.

TABLE 10. RESPONDENTS (%) EXPERIENCING FALL ARMYWORM, TOTAL (N=553) AND BY MUNICIPALITY

Municipality	Fall Armyworm
All respondents	45%
Aileu	8%
Ainaro	7%
Baucau	10%

[8] Results based on respondent's perception of having been affected. The assessment did not include observation.

Municipality	Fall Armyworm
Bobonaro	8%
Covalima	7%
Dili	9%
Ermera	5%
Lautem	7%
Liquica	3%
Manatuto	13%
Manufahi	14%
Oecusse	2%
Viqueque	7%

The amount of food stored in respondents' households was found to be low, with 64% of households having two or less months of food on hand, and 58% reporting that their food storage levels are less than this time in a typical year (Figure 2). Ermera (56%) and Dili (particularly in Atauro) (41%) had the highest incidence of households having no food stored, while Covalima (53%) and Ainaro (24%) had the highest incidence of households having more than 6 months of food stored.

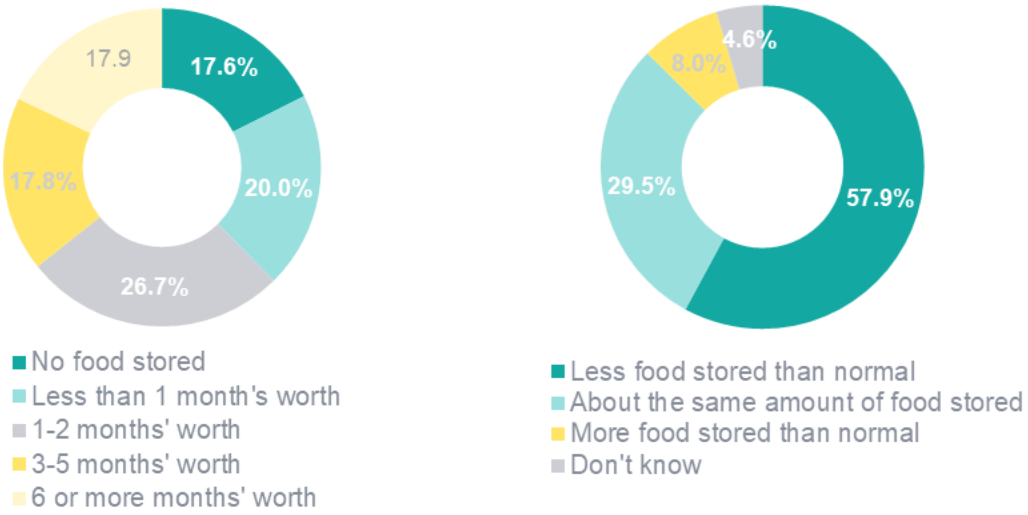

FIGURE 2. CURRENT MONTHS OF FOOD STORED, AND FOOD LEVEL COMPARISON TO 12 MONTHS AGO

TABLE 11. CURRENT MONTHS OF FOOD STORED, AND FOOD LEVEL COMPARISON TO 12 MONTHS AGO

Current months of food stored	% HHs
No food stored	17.6%
Less than 1 month's worth	20.0%
1-2 months' worth	26.7%
3-5 months' worth	17.8%
6 or more months' worth	17.9%

Food level compared to normal year	% HHs
More food stored than normal	8.0%
About the same amount of food stored	29.5%
Less food stored than normal	57.9%
Don't know	4.6%

Livestock

Livestock levels were reported to have dropped dramatically compared to 12 months ago; households currently have fewer animals than in the previous year. Households were found to have less than one third (31%) as many pigs, and less than half (49%) as many chickens as a year ago. These levels are coherent with the high reported incidences of African Swine Fever (82%) and poultry diseases (77%) experienced by respondents. Table 12 outlines the data on current livestock holdings and a comparison to last year.

TABLE 12. LIVESTOCK HOLDINGS/HOUSEHOLD AND COMPARISON TO 12 MONTHS AGO

Animal	Average # now	Average # 12 months ago	Livestock holdings compared to 12 months ago (%)
Sheep	0.1	4.9	2%
Duck	0.2	3.5	5%
Fish	8.5	85.1	10%
Buffalo	0.7	5.6	12%
Pig	1.2	3.9	31%
Goat	1.7	5.3	32%
Cattle	1.7	4.8	35%
Chicken	8.0	16.4	49%
Dog	2.2	2.9	74%

African Swine Fever was the most commonly experienced livestock shock, reportedly affecting 82% of respondents. A substantial proportion of surveyed households had been affected by poultry disease. **Incidences of these and other agricultural shocks were high among respondents, with only 8% reporting that they had not experienced any of the listed livestock diseases.** The incidence of livestock shocks was spread equally throughout the country, with less than a 3% difference in the number of respondents reporting at least one of the listed shocks among municipalities.

TABLE 13. LIVESTOCK SHOCKS

Shock	% experiencing
African Swine Fever	82%
Poultry diseases	77%
Other livestock diseases	48%
None (no shocks)	8%

Table 14 shows the percentage of respondents experiencing livestock shocks for each municipality from the total number having experienced each shock. Poultry diseases and African Swine Fever were most often encountered in Manufahi, and 'other livestock diseases' in Covalima and Ermera. The highest incidence of respondents who had not experienced a shock was in Ainaro.

TABLE 14. RESPONDENTS (%) EXPERIENCING LIVESTOCK SHOCKS BY MUNICIPALITY

Municipality	Poultry diseases	Other livestock diseases	African Swine Fever	None
Aileu	7%	9%	7%	11%
Ainaro	6%	6%	7%	15%
Baucau	7%	6%	7%	11%
Bobonaro	7%	5%	7%	7%
Covalima	9%	12%	9%	0%
Dili	5%	3%	5%	11%
Ermera	9%	12%	9%	9%
Lautem	9%	9%	9%	0%
Liquica	9%	9%	8%	5%
Manatuto	7%	9%	8%	4%
Manufahi	10%	5%	10%	4%
Oecusse	8%	10%	6%	9%
Viqueque	7%	6%	9%	13%

The majority of households (72%) do not intend to sell their livestock in the near future. While this reflects a lack of emergency sales, it might also reflect a reluctance to sell when prices are low, or be a result of the low levels of livestock households possess at present. Prices for livestock were seen to be falling by respondents, with between 42% and 65% responding that prices were lower for each animal. There was little difference among female and male headed households for each category of 'planning to sell animals', except that female headed households were slightly more likely to have plans to sell animals in '6 or more months' time. **Nearly all households that had livestock listed selling animals as a livelihood activity that they rely on in times of stress.**

TABLE 15. PERCEPTION OF CURRENT LIVESTOCK PRICE LEVELS COMPARED TO 12 MONTHS AGO

Price	Chicken	Fish	Pig	Goat	Sheep	Cattle	Buffalo	Duck	Dog
Higher	12%	13%	10%	4%	8%	6%	7%	11%	4%
Same	26%	33%	26%	31%	50%	36%	30%	26%	33%
Lower	62%	54%	64%	65%	42%	58%	63%	63%	63%

TABLE 16. RESPONDENT'S PLANS TO SELL LIVESTOCK

Planning to sell animals	% households
No plans	72%
This month	9%
1-2 months	8%
3-5 months	6%
6 or more months	5%

Savings and Loans

Access to savings and loans can be beneficial during times of stress. The survey looked specifically at access to informal financial services (Savings and Loans Groups) that are common in rural Timor-Leste. Among surveyed households, 55% had at least one member who was involved in a Savings and Loan Group. Of those involved in groups, 32% reported that the group's social fund had been used to purchase food for members in need in the last two months.

Only 22% of respondents said that any member of their household had monetary savings of any kind. Even among those with savings, levels were low, with only 7% of respondents reporting more than $250 in savings.[9] This leaves households highly susceptible to shocks, as the 2014 Timor-Leste Survey of Living Standards conducted by the General Directorate of Statistics places the poverty line at $46.37 per person per month, and Monash University has indexed this for inflation to $51.50 per person per month in 2020.[10] **With a household size of more than 7 members at present, even families at the high end of the scale have almost no margin should their livelihoods be subjected to further shocks**. Lautem had the highest incidence (15%) of respondents with greater than $250 in savings, while Aileu, Covalima, Liquiça, Manatuto, and Viqueque all had over 50% of respondents with $0 - $100 in savings. The levels of savings were approximately the same for female and male headed households, though the incidence of 'Don't know' responses was slightly higher for female headed households. In the case of Savings and Loan Groups, it is important to note that current savings may not be immediately accessible if the group has distributed that savings as loans to other members. As a result, while households may have the amount secured in savings; depending on their group behavior, they may not be able to access those funds at this time.

Table 17 shows the current savings levels among respondents' households.

TABLE 17. CURRENT SAVINGS LEVELS AMONG SURVEYED HOUSEHOLDS

Current savings amount	% households
$0 - $100	40%
$100 - $250	16%
Greater than $250	7%
Don't Know	14%
Prefer not to say	22%

Household savings will likely not be sufficient to sustain households and ensure food security, and many households have already taken loans to cover basic (rather than strategic) expenses. A total of 23% of respondents said that they or someone in their household currently had a loan; and among those who did, Table 18 shows where they had borrowed the

[9] It should be noted that as part of this voluntary survey, some respondents declined to respond to this question. Overall, 22% - said they preferred not to say how much they had saved and 14.5% said they did not know how much their household had in savings.

[10] World Bank Group. (2016). *Poverty in Timor-Leste 2014*. Washington, DC : World Bank.

Inder, B. (2020, May). The $100 cash transfer – A life saver? [Blog post]. Retrieved from https://sites.google.com/monash.edu/monashintimor-org/latest-blogs/2020/blog-3

money.[11] Savings and Loan Groups were the most common source of loans (68%), while only 5% of loans came from an informal source other than friends/relatives. The average loan amount was $390.36, and Table 19 outlines the reasons households took out loans**. Over 65% of households had taken a loan to buy food due to an emergency or crisis, while an additional 39% routinely used borrowed money to buy food. While 17% of household's current loans had been used to invest in a business or garden, only 3% bought farm inputs.**

TABLE 18. LOAN SOURCE AMONG RESPONDENT HOUSEHOLDS WITH LOANS (N=274)

Loan source	% households
Village savings and loans community / savings group	68%
Friends/relatives	16%
Cooperatives	7%
Private money lender	5%
Microfinance institution (including. Union)	3%
Bank	3%
Landlord	1%
Employer	0%
Input trader/shop keeper	0%

TABLE 19. REASON FOR TAKING A LOAN AMONG HOUSEHOLDS WITH LOANS (N=274)[12]

Reason for loan	% households
To buy food – during an emergency / time of crisis	66%
To buy food – during 'normal' times (routine / planned)	39%
To pay school fees and supplies	31%
To buy household items	18%
To invest in a business or garden	17%
To pay for medical expenses / medicine	13%
To repair a house	6%
To contribute to cultural ceremonies	6%
To pay agricultural laborers	4%
To buy farm inputs (e.g. seeds, tools)	3%
To pay for utilities (electricity, water, etc.)	2%
To build a house	1%
To buy a large asset (motorbike etc)	1%

Food Security

The Household Hunger Scale (HHS) measures food deprivation over the prior month by asking a series of questions about whether or not hunger occurred, and if it did, how often. The responses

[11] Respondents were asked whether any member of their household 'currently' had any outstanding loans. Thus, loan information presented in this section includes a mix of loans that had been taken out prior to and during the State of Emergency.

[12] Traffic light coding indicates which reasons for loaning are generally regarded as strategic (green), compared to loans for basic needs that might indicate broader vulnerability/risk (red).

are then coded according to a set scale, and a score produced for each household. A measure of 2-3 indicates moderate hunger, a measure of 4-5 indicates severe hunger.[13] The score was low for the sample with an average of less than 1 and a median score of 0. This is in line with the cropping season, as maize and most rice would have been harvested by this time in a typical year. **April and May should be the months with the highest level of food security.**[14] For 2020, preliminary information from the Ministry of Agriculture and Fisheries and anecdotal reports from around the country indicate that maize harvest was finished 2-4 months ago depending on location, and that production was at normal levels. A late rice harvest is in progress for many locations, but reports from the western municipalities indicate an extremely poor harvest with reductions in the area of rice planted and widespread crop failures. Ministry of Agriculture and Fisheries' projections estimate that only 30% - 70% of the normal rice paddy area has been planted this year, that the failure rate is high due to lack of rain, and that harvest has been delayed due to late planting. **In normal conditions, food security should be highest at this time of the year but 14% of respondents fell into the 'moderate hunger' category.** With 76% of respondents growing maize and if harvests were at normal levels, households may be depending on maize stocks for their food security at present. It seems however, that there will be little rice to follow. In total, **less than 1% of households fell into the 'severe hunger' category**. The only municipality with an average HHS above 0 was Ermera, with an average score of 1.4. HHS scores for female and male headed households were nearly identical.

TABLE 20. HOUSEHOLD HUNGER SCALE SCORE

Hunger	HHS score	n=	% households
Low	0	861	70.8%
	1	175	14.4%
Moderate	2	110	9.0%
	3	60	4.9%
Severe	4	6	0.5%
	5	4	0.3%
	6	1	0.1%

Several Coping Strategies Index questions were asked to determine the impact of shocks on consumption at a household level.[15] **The results indicate that a substantial proportion of respondents have not had to make significant consumption adjustments in the last 30 days**. 34% of respondents noted they had not shifted to consumption of less preferred or less expensive foods. Similarly, between 40-50% reported that they were not borrowing food, consuming seed stock or purchasing food on credit. Households are generally not relying on sending household members to eat with neighbors or relatives as a coping strategy (93%).

However, several indicators highlight that a significant proportion of households are experiencing food insecurity. In the last 30 days, one-fifth (22%) of households had adjusted their dietary intake 'often' or 'daily' to rely on less expensive foods. Just under one-third (31%) of households said they were borrowing food between 1-3 times a week and 30% of households

[13] Ballard, T., Coates, J., Swindale, A., & Deitchler, M. (2011). *Household Hunger Scale: Indicator definition and measurement guide*. Washington, DC : Food and Nutrition Technical Assistance II Project, FHI 360.

[14] Da Costa, M., Lopes, M., Ximenes, A., Ferreira, A., Spyckerelle, L., Williams, R., Nesbitt, H. & Erskine, W. (2013). Household food insecurity in Timor-Leste. *Food Security*, *5*(10). https://doi.org/10.1007/s12571-012-0228-6

[15] Maxwell, D. & Caldwell, R. (2008). The Coping Strategies Index: Field methods manual (2nd ed.).

reported consuming seed stock either ‘sometimes’ (1 time a week), ‘often’ (3 or more times per week) or ‘daily’. Between 41-43% of households reported engaging in coping strategies such as reducing the number of meals consumed in a day (41%), reducing consumption among adults (42%) and/or limiting portion size (43%), ‘sometimes’ (1 time a week), ‘often’ (3 or more times per week) or ‘daily’.

Some of these strategies, such as those involving shifting or adjusting items towards cheaper/less nutritious options or altering the utilization of food in the household, are relatively easy to reverse when conditions improve. For other strategies, such as consuming next season’s seed stock or reducing food intake, recovery may be much more difficult. **With families already utilizing coping strategies this soon after harvest time, and with projections of later staple harvests (rice) being poor, it is likely that the current, relatively benign coping strategies will not be enough to mitigate food insecurity in the coming months.**

TABLE 21. COPING STRATEGIES: **DIETARY CHANGE** BY % RESPONDENTS

Frequency	Rely on less preferred and less expensive foods
Never	34%
Seldom (not more than once a week)	29%
Sometimes (1 or 2 times/ week)	15%
Often (3 or more times/ week)	3%
Daily	19%

TABLE 22. COPING STRATEGIES: **RATIONALIZING STRATEGIES** BY % RESPONDENTS

Frequency	Limit portion size at mealtimes	Reduce consump-tion by adults in order for small children to eat	Reduce consump-tion by women in order for men to eat	Feed working members of the household at the expense of non-working members	Reduce number of meals eaten in a day	Skip entire days without eating
Never	16%	32%	60%	56%	30%	48%
Seldom (not more than once a week)	41%	25%	21%	22%	29%	35%
Sometimes (1 or 2 times/ week)	21%	16%	13%	12%	21%	16%
Often (3 or more times/ week)	7%	11%	3%	4%	8%	1%
Daily	16%	15%	2%	7%	12%	1%

TABLE 23. COPING STRATEGIES: **INCREASE SHORT-TERM HOUSEHOLD FOOD AVAILABILITY** BY % RESPONDENTS

Frequency	Borrow food from a friend or relative	Purchase food on credit (incl. from trader or using a loan)	Gather wild food, hunt, or harvest immature crops in unusual types or amounts	Consume seed stock held (i.e. that was to be saved) for next season
Never	43%	47%	67%	46%
Seldom (not more than once a week)	26%	24%	16%	24%
Sometimes (1 or 2 times/ week)	19%	16%	8%	19%
Often (3 or more times/ week)	12%	14%	1%	5%
Daily	0%	0%	8%	5%

TABLE 24. COPING STRATEGIES: **DECREASE NUMBER OF PEOPLE** BY % RESPONDENTS

Frequency	Send children to eat with neighbours or relatives	Send other household members to eat with neighbours or relatives
Never	93%	94%
Seldom (not more than once a week)	5%	4%
Sometimes (1 or 2 times/ week)	2%	0%
Often (3 or more times/ week)	0%	0%
Daily	1%	1%

Shocks and Recovery

Table 25 outlines the data on environmental/agricultural shocks. Respondents were asked whether they had been affected by each shock (listed in Table 25), and if they were, follow-up questions were asked to rate the impact of each shock and to what extent respondents' households had recovered. **Overall, 88% of households were impacted by livestock disease, 77% of households were impacted by crops pests (Fall Armyworm inclusive), 73% were impacted by unseasonal or erratic rain, and 67% of households were impacted by a very bad harvest.**

Of the top 3 shocks experienced in this category (livestock disease, crop pests, and unseasonal/erratic rainfall), between 42% and 69% of respondents rated their impact as either 'strong' or 'worst ever happened', and between 35% and 51% of these households said that they had 'not at all' or 'partially' recovered from these shocks. Livestock diseases had the highest impact of all environmental/agricultural shocks (i.e. households saying the impact was 'strong' or 'worst ever happened'), and river cutting had the lowest level of recovery (i.e. 'partially' or 'not at all' recovered).

TABLE 25. ENVIRONMENTAL/AGRICULTURAL SHOCKS, IMPACT, AND RECOVERY BY % HOUSEHOLDS

	Excessive rains / flooding	Unseasonal / erratic rains	Too little rain / drought	Livestock disease (incl. ASF)	Crop pests (incl. FAW)	Very bad harvest	Landslide / erosion	River cutting	Excessive wind	Wild fires
AFFECTED	**30%**	**73%**	**59%**	**88%**	**77%**	**67%**	**16%**	**9%**	**34%**	**14%**
IMPACT										
'Strong' or 'Worst ever happened'	19%	42%	44%	69%	56%	40%	10%	7%	20%	10%
RECOVERY										
'Partial' or 'Not at all'	66%	51%	50%	35%	45%	53%	77%	78%	68%	75%

Incidence of community shocks were low compared to other categories with 'Death / funeral of other family members / friends' affecting the most respondents. The majority of impacts were 'slight' in this category, and most respondent's households were at least partially recovered. Table 26 shows the data for community shocks.

TABLE 26. COMMUNITY SHOCKS, IMPACT, AND RECOVERY BY % HOUSEHOLDS

	Violence against household members	Theft or destruction of assets	Medical emergency within the household	Death of household member	Death / funeral of other family members / friends
AFFECTED	**7%**	**7%**	**12%**	**9%**	**27%**
IMPACT					
'Strong' or 'Worst ever happened'	4%	3%	4%	3%	3%
RECOVERY					
'Partial' or 'Not at all'	78%	78%	77%	81%	80%

Table 27 outlines the data on economic shocks. **Inability to travel to markets was the most prevalent shock (92%), followed by closure of markets/shops (82%) and reduced/unavailable food in markets (74%). Impacts tended to be high, with 44% of responses in the 'strong' or 'worst ever happened' categories across all economic shocks, and recovery low with 51% of households 'not at all' or 'partially' recovered from these shocks.**

TABLE 27. ECONOMIC SHOCKS, IMPACT, AND RECOVERY BY % HOUSEHOLDS

	Not able to travel to market	Markets / shops closed	Reduced / unavailable food in market	Unavailability of agricultural or livestock inputs	Increase in price of agricultural or livestock inputs	Drop in price of agricultural or livestock products	Increase in price of food or other goods
AFFECTED	**92%**	**82%**	**74%**	**49%**	**31%**	**35%**	**41%**
IMPACT							
'Strong' or 'Worst ever happened'	64%	57%	49%	40%	30%	33%	33%
RECOVERY							
'Partial' or 'Not at all'	34%	39%	46%	56%	64%	61%	58%

The survey also asked respondents about the effects of the shocks they had experienced. Overall, 59% of respondents reported that they had experienced changes in the workload on their farms, and 49% had experienced changes to the workload of cooking and looking after children. **For household duties and overall workload, the effect was more pronounced for women.** Both of these changes were reported to be ongoing for the majority of respondents.

TABLE 28. EXPERIENCE OF SHOCK EFFECTS BY GENDER

	Changes to housework & childcare	Changes to farm work	Changes in overall workload
Women	52%	59%	71%
Men	46%	60%	68%

Food Access and Markets

Inability to travel to market was highlighted as the most commonly experienced economic shock in the previous section, and had the second highest impact of all economic shocks. This section further explores access to food and markets during the State of Emergency. **There were was a near universal difficulty accessing the main markets, with 96% of households noting it was 'somewhat' or 'very' difficult to access the market.**

TABLE 29. ACCESS TO MAIN MARKET TO BUY/SELL GOODS IN 2020 BY % HOUSEHOLDS

Market access	% households
Very easy	0%
Easy	4%
Somewhat difficult	**36%**
Very difficult	**60%**

There were large differences in ease of market access among the municipalities. All respondents with 'very easy' market access were in Bobonaro, Covalima and Manatuto, while Oecusse, Manatuto, Baucau, Ainaro, Ermera and had the highest number of 'very difficult' responses.

TABLE 30. BREAKDOWN OF MARKET ACCESS RESPONSES BY MUNICIPALITY

Municipality	Very easy	Easy	Somewhat difficult	Very difficult	Worse than 12 MONTHS ago
Aileu	0%	2%	53%	44%	92%
Ainaro	0%	4%	18%	77%	87%
Baucau	0%	2%	20%	78%	86%
Bobonaro	3%	4%	28%	64%	96%
Covalima	1%	0%	39%	60%	99%
Dili	0%	7%	37%	56%	88%
Ermera	0%	0%	29%	71%	70%
Lautem	0%	3%	60%	37%	57%
Liquica	0%	1%	47%	52%	91%
Manatuto	1%	13%	3%	82%	82%
Manufahi	0%	6%	46%	49%	64%
Oecusse	0%	0%	7%	93%	91%
Viqueque	0%	3%	80%	17%	70%
Total:	**0%**	**4%**	**36%**	**60%**	**82%**

When asked to rate their market access compared to their access 12 months ago, **82% of respondents rated their access as worse off now.**

TABLE 31. MARKET ACCESS BY % HOUSEHOLDS

Market access	Compared to 12 months ago
Worse off	82%
About the same	16%
Better	1%

'Lack of transport', 'long distances', 'closed markets/shops', 'regulations prohibiting movement', and 'fewer buyers' were the main reasons selected as challenges to market access (Figure 3). **In the face of absent public transport and restrictions/closure of their primary marketplaces, it is clear that market access is severely restricted for much of the rural population. The assessment found that 70% of respondents felt that they could not sell products directly from their home or garden, but only 16% said that this has led to a change in where they are selling their products.** It is probable that, for at least some households, lack of access to their main market and inability to sell from farm gate has prevented them from selling any goods at all.

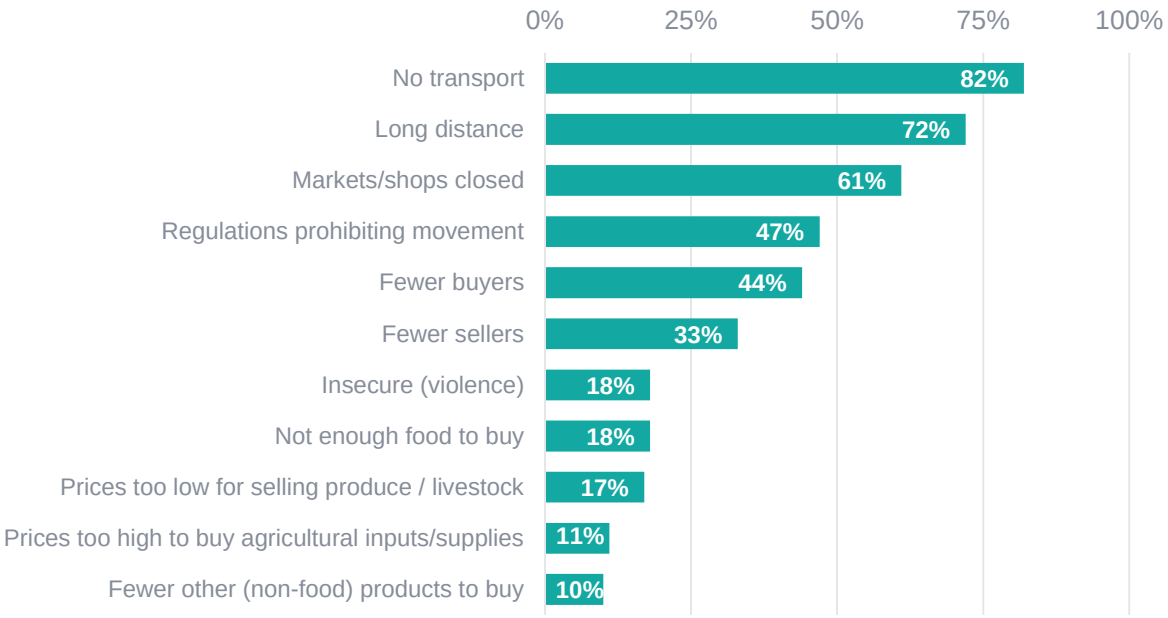

FIGURE 3. PRIMARY CHALLENGES TO MARKET ACCESS BY % HOUSEHOLDS

TABLE 32. PRIMARY CHALLENGES TO MARKET ACCESS BY % HOUSEHOLDS

Challenge	% households
No transport	82%
Long distance	72%
Markets/shops closed	61%
Regulations prohibiting movement	47%
Fewer buyers	44%
Fewer sellers	33%
Insecure (violence)	18%
Not enough food to buy	18%
Prices too low for selling produce / livestock	17%
Prices too high to buy agricultural inputs/supplies	11%
Fewer other (non-food) products to buy	10%
Other	3%

Table 33 below shows where respondents facing a selected list of challenges were located. Of the total respondents facing each challenge, the table shows the percentage of those located in each municipality. ‘Regulations prohibiting movement’ was highest in Aileu, ‘insecure’ and ‘not enough food to buy’ were most common in Oecusse, ‘markets/shops closed’ was most prevalent in Dili, and ‘no transport’ was relatively equal across the country.

TABLE 33. SELECTED PRIMARY MARKET CHALLENGES BY MUNICIPALITY

Municipality	Regulations prohibiting movement	Insecure (violence)	Markets/ shops closed	No transport	Not enough food to buy
Aileu	11%	18%	3%	8%	16%
Ainaro	8%	7%	7%	6%	6%
Baucau	8%	4%	8%	7%	3%
Bobonaro	10%	7%	2%	8%	3%
Covalima	7%	10%	1%	8%	12%
Dili	6%	1%	28%	5%	11%
Ermera	10%	4%	5%	10%	3%
Lautem	7%	1%	2%	8%	1%
Liquica	1%	4%	7%	6%	4%
Manatuto	6%	3%	2%	8%	2%
Manufahi	6%	7%	4%	9%	8%
Oecusse	12%	30%	11%	9%	26%
Viqueque	10%	5%	21%	9%	5%
Total:	100%	100%	100%	100%	100%

The survey further explored access to WASH supplies as a critical element in COVID-19 response, looking at access to water pipes/faucets, buckets and soap. Most respondents do not purchase water pipes/faucets. For buckets and soap, respondents relied on a variety of market actors to purchase supplies with the highest percentage purchasing from within their suco, a neighboring suco, or a nearby urban center. Most households noted that currently they have access to a vendor that means they can purchase soap (88%) and buckets (62%). Additional details are in Table 34.

TABLE 34. MARKET DATA ON WASH SUPPLIES

	Water pipes / faucets	Buckets	Soap
PURCHASE BEHAVIOR			
Do not purchase	64%	30%	20%
Door to door sales	3%	6%	7%
Within my suco	7%	16%	11%
In a neighboring suco	6%	11%	39%
In an urban center nearby	8%	18%	11%
In Dili	5%	5%	1%
Somewhere else	8%	14%	11%
CAN PURCHASE NORMALLY	29%	62%	88%

Purchases of agricultural products were generally low but of those respondents who did buy them, less than half (14% - 49%) could purchase those products during COVID-19 as they usually would in 'normal' times. When respondents did purchase agricultural products, they tended to do so in larger urban centers or in Dili. Table 35 outlines the data on agricultural products.

TABLE 35. MARKET DATA ON AGRICULTURAL PRODUCTS

	Seed	Fertilizer	Pesticides	Agricultural tools (shovels, liners)	Agricultural machinery	Grain storage solutions	Seed storage solutions	Water storage solutions
PURCHASE BEHAVIOR								
Do not purchase	63%	73%	69%	56%	76%	66%	66%	71%
Door to door sales	2%	2%	2%	2%	2%	3%	3%	3%
Within my suco	6%	4%	4%	8%	2%	4%	5%	4%
In a neighboring suco	6%	1%	1%	3%	1%	3%	3%	3%
In an urban center nearby	9%	9%	10%	13%	7%	9%	9%	8%
In Dili	7%	8%	8%	9%	7%	6%	6%	5%
Somewhere else	7%	3%	5%	9%	6%	9%	9%	5%
CAN PURCHASE NORMALLY	49%	26%	28%	38%	14%	33%	34%	30%

Similar data was collected on food crops, and a selection of the data is outlined in Table 36 below. Across all food products in the survey, the data shows that 39% of respondents normally bought food from 'within their suco', 'in a neighboring suco', or 'in and urban center nearby' with only a few going further afield. The most common frequency of those buying food was 'weekly' (25%). **An average of 44% of respondents, among those who said they purchased food from outside sources, reported that they could not purchase food from where they normally buy it.** Table 36 shows specific data for 9 selected food products from the survey.

TABLE 36. MARKET DATA ON SELECTED FOOD PRODUCTS

	Vegetables	Meat / poultry	Rice - imported	Rice - white local	Red bean	Eggs - local	Eggs - imported	Salt	Sugar
PURCHASE BEHAVIOR									
Do not purchase	49%	48%	17%	57%	50%	57%	29%	10%	10%
Door to door sales	11%	4%	9%	3%	5%	3%	5%	8%	8%
Within my suco	9%	11%	16%	8%	11%	9%	12%	18%	18%
In a neighboring suco	19%	15%	19%	11%	8%	16%	22%	36%	36%
In an urban center nearby	8%	11%	20%	10%	14%	9%	13%	13%	13%
In Dili	1%	4%	7%	6%	6%	2%	7%	2%	2%
Somewhere else	3%	8%	12%	5%	6%	5%	13%	13%	13%
CAN PURCHASE NORMALLY	69%	50%	79%	46%	45%	47%	55%	86%	85%

COVID-19 Specific Changes and Awareness

Respondents noted a number of changes due to COVID-19 restrictions, many of which had a high frequency of responses. Overall, **96% of households reported restricted movement, while 67% reported 'being afraid' and 65% 'no transport'. Over half of respondents noted they experienced a food shortage in shops (51%) and markets (50%) and over one-third (35%) reported shortages of non-food items in shops. COVID-19 also had a significant impact on migration with 32% of households reporting observing 'family members returning home (from cities)' in their communities.**

TABLE 37. MAIN CHANGES EXPERIENCED DUE TO COVID-19 RESTRICTIONS

Main changes	n=	% households
Restricted movement	1166	96%
People are afraid	818	67%
No public transport	787	65%
Food shortage in shops	618	51%
Food shortage in markets	609	50%
Other goods shortage in shops	427	35%
Other goods shortage in market	372	31%
Family members returning home (from cities)	387	32%

Respondents were asked a series of questions on community planning and disaster preparedness. Table 38 below summarizes this data. **Just under half (48%) of respondents said they were aware that their community has a plan in place to respond to health challenges associated with COVID-19, and some community members (43%) also said that their community has a plan to respond to associated economic challenges.** Over half (51%) of respondents said that they did not think their community had a disaster management committee, and **44% said that they were not aware of a COVID-19 task force or committee in their community.**

TABLE 38. COMMUNITY PLANNING AND DISASTER AWARENESS BY % HOUSEHOLDS

	Does your community have a disaster management committee?	Does your community have a COVID-19 Task Force or committee?	Does your community have a plan in place to respond to recent natural disasters / shocks?	Does your community have a plan in place to respond to health challenges associated with COVID-19?	Does your community have a plan in place to respond to economic/ livelihood challenges associated with COVID-19?	Does your community have a plan in place to respond to any social challenges associated with COVID-19?
Yes	20%	30%	26%	48%	43%	49%
No	51%	44%	48%	33%	35%	31%
Don't know	29%	26%	26%	19%	22%	20%

Note: Emphasis added for clarity.

Respondents were asked to list three things they could do to keep their household safe from COVID-19 and the responses are outlined in Figure 4. **There is strong evidence that behavior**

change messages are reaching people across Timor-Leste. Nearly all (99%) respondents mentioned that washing their hands regularly and/or washing their hands regularly with soap could help keep their household safe[16]. Unprompted, 76% mentioned they could wear a mask and 76% knew to maintain physical distancing.

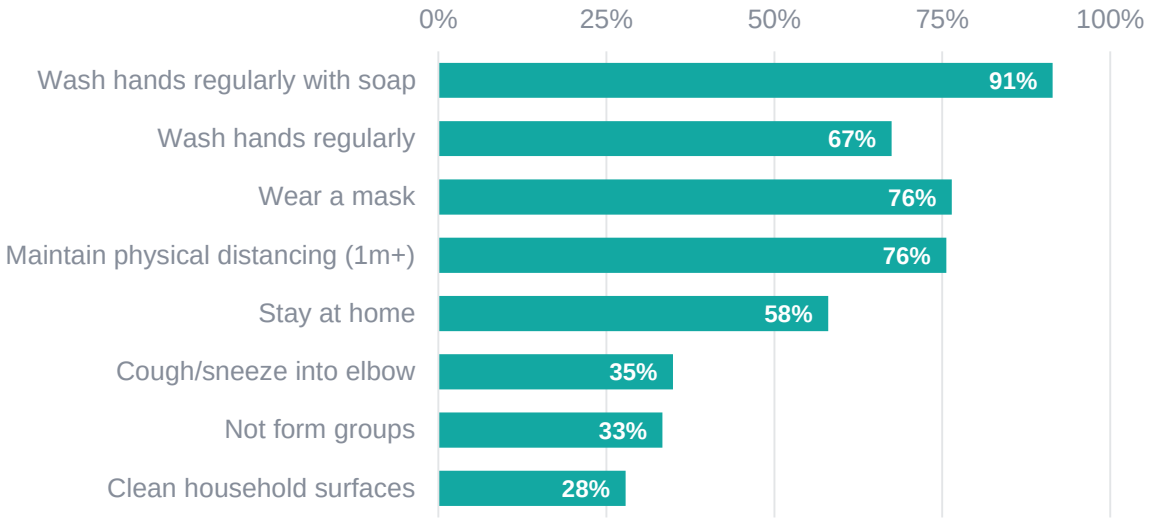

FIGURE 4. RESPONSES TO HOW YOU CAN KEEP YOUR HOUSEHOLD SAFE FROM COVID-19

TABLE 39. RESPONSES TO HOW YOU CAN KEEP YOUR HOUSEHOLD SAFE FROM COVID-19

Behaviour	n=	%
Wash hands regularly with soap	1113	91%
Wash hands regularly	821	67%
Wear a mask	930	76%
Maintain physical distancing (1m+)	920	76%
Stay at home	706	58%
Cough/sneeze into elbow	425	35%
Not form groups	406	33%
Clean household surfaces	339	28%

A total of 99% of respondents had received information on COVID-19. This information came from a variety of sources, most often via television (71%), community leaders (54%) and radio (52%). **When asked about the usefulness of this information, 97% of respondents felt that this information helped them to understand and prepare for COVID-19**. Finally, 36% of respondents said they had received information specifically on the restrictions around buying/selling food.

[16] Based on responses but not on observation of behaviors.

TABLE 40. SOURCES OF INFORMATION ABOUT COVID-19

Information source	n=	% households
Television	862	71%
Community leader - Xefe Suco or Xefe Aldeia	662	54%
Radio	627	52%
NGO / international program staff	490	40%
Loud speaker / megaphone	409	34%
Text message	320	26%
Neighbors or friends - Informal	272	22%
Village savings and lending group	215	18%
Facebook	176	14%
Other community Group - Formal	130	11%
Newspaper	65	5%
Other (specify)	63	5%
WhatsApp	57	5%
We have never received information related to COVID-19	7	1%

A similar question was asked about where respondents had received information about agricultural shocks. Such information can be helpful so that farmers can prepare for upcoming shocks and confirm what they are observing in their own fields. The frequency of responses for many of the information sources mirrored those that were mentioned for information on COVID-19.

TABLE 41. SOURCES OF INFORMATION ABOUT AGRICULTURAL STRESSORS

Information source	n=	% households
Television	759	62%
Radio	547	45%
Community leader - Xefe Suco or Xefe Aldeia	532	44%
NGO / international program staff	401	33%
Loud speaker / megaphone	273	22%
Text message	247	20%
Neighbors or friends - Informal	225	18%
Village savings and lending group	183	15%
Facebook	135	11%
Other community Group - Formal	130	11%
We have never received information related to agricultural stressors	126	10%
Agricultural extension workers	125	10%
Newspaper	59	5%
WhatsApp	50	4%
Other	19	2%

The effects of school closures (Table 42) **were high, with each affecting 50% or more households. Boredom was the main effect (83%)** (of the limited responses listed below)**, followed by children helping more on the farm and with housework.** Among respondents who answered affirmatively to ‘it creates more work for me’, 43% were female and 57% were male.

TABLE 42. EFFECTS OF SCHOOL CLOSURES

Effects of school closure	n=	% households
Children are bored	1012	83%
Children help more on the farm	689	57%
Children help more with cooking, cleaning and childcare	611	50%
It creates more work for me	288	24%

Conclusion and Recommendation

These findings reflect that food insecurity and fragility already exists in Timor-Leste. At a time of year when households are traditionally most food secure, many households are showing low levels of food storage and savings, demonstrating limited recovery from shocks, and practicing coping strategies associated with reduced food and income. Traditional wealth indicators such as livestock are at low levels, and rural households are absorbing members back from the cities.

While the State of Emergency and COVID-19 restrictions have been critical for ensuring the health and safety of the Timorese population, this has had an impact on households' livelihoods and food security. Agricultural and environmental shocks are widespread at this critical harvest time. In the coming months, as the dry season emerges and the 'hungry season' nears, families will face difficult decisions on how to manage their food security. With the next significant harvest nearly a year from now,[17] many households may have little resilience to face additional shocks.

Coordinated interventions now could improve food security for people across rural Timor-Leste, and prevent households from moving towards more drastic coping strategies, the effects of which are difficult to reverse.

It is strongly recommended that stakeholders engage in a consultative process to create a set of recommendations for action, tailored to key actors (including government, development agencies, civil society organizations and private sector stakeholders) in order to move forward with a unified and comprehensive approach to improving the current food security situation in Timor-Leste.

A copy of the Rapid Food Security Assessment survey tool is available on request. Please email Directorate of Food Security and Cooperation of the Ministry of Agriculture and Fisheries at gerrandogusmao@gmail.com.

[17] A second planting season in May by some communities along the south coast where bimodal rainfall is typical should be underway during the time of this assessment. Without intervention, the next significant opportunity for households across the country to improve their longer-term food security will come at the next harvest; nearly a year from now. Given the reliance on agricultural livelihoods among most rural households, coordinated action is recommended in the coming weeks and months.

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