

WORLD VISION INTERNATIONAL-HAITI

Emergency Food Security Program in La Gonâve, Haiti

USAID – EMERGENCY FOOD SECURITY PROGRAM (EFSP)

Final Report



Submitted by:

Amisial LEDIX, Economist-Statistician/Monitoring & Evaluation Specialist

In collaboration with:

Amos MONTREUIL JEAN, Agronomist/Food Security and Rural Resilience Specialist
Guibenson COLIN, Agroeconomist/Development and Society Specialist

March 2020

Table of Contents

Acknowledgements	3
List of Tables	4
List of Figures	4
List of Charts	4
List of Acronyms	6
Executive Summary	7
1. Background	10
2. Baseline Objectives	11
3. Methodology	11
3.1 Quantitative Survey of Project Beneficiaries	13
3.1.1 Total Sample.....	17
3.1.2 Total Sample.....	17
3.2 Survey of Resellers (Retailers) and Wholesalers	17
3.3 Field Data Collection	18
3.4 Pre-Testing of Collection Tools.....	18
4. Constraints and Limitations of the Study	19
5. Reviewing the Findings of the Baseline Study	20
5.1 General Characteristics of Beneficiary Households	20
5.2 Regarding Beneficiaries' Food Consumption	28
5.3 Condition of Beneficiary Households in relation to Hunger.....	30
5.4 Information Related to Shock Management and the Agricultural Situation	36
5.5 Access to Drinking Water for Beneficiary Households	37
5.6 Regarding Exclusive Breastfeeding	40
6. Local Market Assessment in the Intervention Areas	41
6.1 General Characteristics of Vendors	41
6.2 Overview of the Local Market in Program Intervention Areas	44
6.3 Current Status of Product Sales on the Local Market	50
7. Conclusion and Recommendations	55
8. Bibliographic References	57
9. Appendix I: Calculating Indicators	58
10. Appendix II : Convergence Table	62
11. Appendix III: Baseline Questionnaire	63
12. Appendix IV: Resellers and Wholesalers Questionnaire	76

Acknowledgements

The team of consultants in charge of the present study wishes to express their gratitude, in a special manner, to all those who contributed to the achievement of this work. Despite the many challenges and difficulties encountered, we were able to succeed because of your active and effective participation.

First, we wish to thank the Monitoring and Evaluation team, in the World Vision Haiti Central Office, for their open and fruitful collaboration. Interacting with our interlocutors was essential to the successful completion of the consultation. The support provided for the use of tablets and the reference documentation made available to us made our work easier.

Our gratitude, then, goes to the EFSP project manager with whom we also interacted during the scope of work meeting for this study. We also thank World Vision's Regional Manager in La Gonâve and the project's Monitoring and Evaluation key person for their respective support in logistics for the training of enumerators and for sharing the necessary information to facilitate the progress of field operations.

We would also like to thank the enumerators and supervisors who went to the field to collect data from beneficiaries in the project's various intervention communities.

The consulting team remains convinced that the study's findings and recommendations will effectively serve the EFSP project team in addressing the challenges and achieving expected results on behalf of the beneficiaries living in the organization's areas of intervention.

The Consulting Team

List of Tables

Table 1: Key indicators to be measured	11
Table 2: Key indicators to be measured	12
Table 3: Number of Beneficiaries per Commune and Communal Section	14
Table 4: Quantity of surveys to be carried out in the communal sections of the commune of Anse-à-Galets	16
Table 5: Quantity of surveys to be carried out in the communal sections of the commune of Pointe-à-Raquettes	16
Table 6: Household composition in terms of dependents, orphans and pregnant women	25
Table 7: Distribution of respondents by commune based on the head of household's type of habitat	25
Table 8: Distribution of respondents by commune according to the head of household's main activity	26
Table 9: Distribution of respondents by commune according to the head of household's second activity	26
Table 10: Dietary diversity score for the island of La Gonâve by commune	29
Table 11: Food consumption score of project beneficiaries for the island of La Gonâve by commune	30
Table 12: Hunger score of project beneficiaries for the island of La Gonâve by commune	31
Table 13: Reduced Coping Strategies Index (rCSI)	32
Table 14: Expected values for the indicators under consideration	33
Table 15: IPC Classification for Anse-à-Galets	34
Table 16: IPC Classification for Pointe-à-Raquettes	34
Table 17: IPC Classification for La Gonâve (both communes considered together)	35
Table 18: Percentage of households where adults and children have at least 2 meals a day (adults and children), according to their age	35
Table 19: Percentage of food use by type for project beneficiaries on the island of La Gonâve and the communes	36
Table 20: Percentage of households reporting having received information to cope with economic shocks for the island of La Gonâve and its communes	36
Table 21: Major shocks leading to hunger issues in percentage	37
Table 22: Distribution of beneficiaries by commune based on their main source of drinking water supply	38
Table 23: Average supply cost by product and commune	42
Table 24: Distribution of vendors by commune based on food products on sale	44
Table 25: Average number of customers a day before the hard times and during crises	50

List of Figures

Figure 1: Age Pyramid for Anse-à-Galets	21
Figure 2: Age Pyramid for Pointe-à-Raquettes	21

List of Charts

Graph 1: Distribution of respondents by commune based on gender (n=927)	22
Graph 2: Distribution of respondents by commune based on their relation to the head of household (n=926)	22
Graph 3: Distribution of heads of households by commune and by level of education (n=927)	23
Graph 4: Distribution of heads of household by commune and by marital status (n=919)	23
Graph 5: Distribution of respondents by commune according to whether or not there is at least one orphan in the household	24

Graph 6: Distribution of respondents by commune according to whether or not there is a pregnant woman in the household.....	24
Graph 7: Distribution of respondents by commune according to whether or not there is at least one disabled person in the household	24
Graph 8 : Distribution of respondents by commune according to monthly household income bracket	27
Graph 9: Distribution of respondents by commune according to household’s first annual expenditure item (n=914).....	28
Graph 10: Distribution of respondents by commune according to household’s second annual expenditure item (n=887)	28
Graph 11: Range of reduced Coping Strategy Index (rCSI)	32
Graph 12: Distribution of beneficiaries by commune based on the amount of water available for use per day.....	39
Graph 13: Distribution of beneficiaries by commune based on the walking time to and from water collection	40
Graph 14: Prevalence of mothers who exclusively breastfeed their infants six months of age or younger.....	40
Graph 15: Distribution of vendors by commune based on whether or not they are on the project list	41
Graph 16: Distribution of vendors by commune based on the frequency of store opening.....	41
Graph 17: Distribution of vendors by commune based on gender	42
Graph 18: Distribution of vendors by commune based on age group.....	42
Graph 19: Distribution of vendors by commune based on whether they are retailers or wholesalers	43
Graph 20: Distribution of vendors by commune based on whether or not they have storage space.....	43
Graph 21: Distribution of vendors by commune based on the size of their vending space.....	43
Graph 22: Distribution of vendors by commune based on the number of years since they have been using their space.....	44
Graph 23: Distribution of vendors by commune based on who supplies rice	45
Graph 24: Distribution of vendors by commune based on who supplies corn	45
Graph 25: Distribution of vendors by commune based on who supplies common beans	45
Graph 26: Distribution of vendors by commune based on who supplies flour	45
Graph 27: Distribution of Pointe-à-Raquettes vendors by month based on their ability or not to get the products usually sold	46
Graph 28: Distribution of vendors by commune based on the reason given for buying more food products from their supplier.....	47
Graph 29: Distribution of vendors by commune based on the goods’ delivery time.....	47
Graph 30: Distribution of beneficiaries by commune based on whether they feel safe or not on the road to the area’s supplier or market	48
Graph 31: Distribution of beneficiaries by commune based on whether they usually have challenges reaching the market	48
Graph 32: Distribution of beneficiaries by commune based on the type of challenge met on the road to the area’s market (n=48).....	50
Graph 33: Distribution of vendors based on whether or not they have secondary suppliers	51
Graph 34: Trend in the food basket’s minimum cost	52
Graph 35: Trend in the monthly variation of food prices	53

List of Acronyms

ASEC	<i>Assemblée de la Section Communale</i>
CASEC	<i>Conseil d'Administration de la Section Communale</i>
CNSA	<i>Coordination Nationale de la Sécurité Alimentaire</i>
EFSP	<i>Emergency Food Security Program</i>
FCS	<i>Food Consumption Score</i>
FEWSNET	<i>Famine Early Warning Systems Network</i>
FFP	<i>Food for Peace</i>
FVFA	<i>Food Vouchers for Asset</i>
GPS	<i>Global Positioning System</i>
IHSI	<i>Institut Haitien de Statistique et d'Informatique</i>
HH	<i>Household</i>
HDDES	<i>Household Dietary Diversity Score</i>
HHS	<i>Household Hunger Scale</i>
HNO	<i>Humanitarian Needs Overview</i>
IPC	<i>Integrated Phase Classification</i>
rCSI	<i>Reduced Coping Strategies Index</i>
S4T	<i>Savings for Transformation</i>
SPSS	<i>Statistical Package for the Social Sciences</i>
SRS	<i>One-stage Simple Random Sample</i>
USAID	<i>U.S. Agency for International Development</i>
WVI	<i>World Vision International</i>
WVI-H	<i>World Vision International-Haiti</i>

Executive Summary

La Gonâve is one of the country's regions with a high prevalence of food insecurity, with about 45% of households in the CPI 3 and 4 range (HNO, 2019). Such a situation could lead to a serious food crisis if no intervention is carried out to support the area's population. The country has been facing an economic and political crisis with devastating consequences for some time now and the standard of living of households is increasingly deteriorating, forcing them to resort to various survival strategies further driving them into poverty. The La Gonâve area remains one of the worst affected areas. In order to provide assistance to this population, WVI-H decided to implement an emergency food security program that will last 15 months and that focuses on providing food baskets, supporting pregnant and lactating women and income-generating activities. To identify target households and assess the program's final impacts, WVI-H decided to conduct this baseline study to rank households based on ICPs and establish initial values for baseline indicators.

This study is based on a cross section of 927 households randomly selected from a population of 4,662 households previously selected by WVI-H. The field survey was extended to all the communal sections within the island's two communes and also covered the peri-urban areas of Pointe-à-Raquettes and Anse-à-Galets. Data collection focused on the situation of households with regard to the items within the food security phase classification indicators and an analysis of the markets serving the households, taking into account the main food products consumed. The first facts resulting from the socio-economic data analysis show that:

- The respondents are mostly young, with a marked predominance of age groups below 25 years. [At the national level in Haiti, 23 is the median age of the population \(IHSI, 2015\).](#)
- Most respondents are women, 55% in Pointe-à-Raquettes and 65% in Anse-à-Galets.
- Illiteracy affects a large proportion of the heads of households, as 40% of respondents say they have never been to school in their lives.
- Heads of households have, on average, 5 dependents under their responsibility.
- More than half of the houses (68%) are simple houses, with tin roofs, which is an indicator of the households' level of vulnerability.

In terms of livelihoods, agriculture and trade are the main economic activities of heads of household [participating in the program](#) in both communes, with percentages being respectively 41% and 20%. These figures reflect the reality of predominantly rural areas where there is little diversification of economic activities. Many heads of household only have one source of income. On this point, about 42% of them say they do not have a second economic activity. It has also been noticed that the level of income derived from their activities by households remains relatively low. Indeed, in both communes, we noted the predominance of the 1,500 – 3,500 HTG income bracket. As regards the main expenditure items within households, food ranks first for absorbing more than 85% of their income. School fees and health care expenditures rank respectively second and third.

The review of household dietary diversity scores shows that, overall, 6% of households have low dietary diversity with a significant difference between the two communes (3% versus 9%) and nearly 75% have a high dietary diversity. For food consumption scores, about 16% of households have a poor score and 35% are in the intermediate level. Therefore, nearly half of the households have an acceptable consumption score. Compared to the results on the household index, only 16% of households are in a situation of little or no hunger, while 21% are in a severe hunger situation. Thus, more than a third are moderately hungry. As for the calculation of the Reduced Coping Strategies Index (rCSI), the results found in this study are almost similar to those found in the last National Emergency Food and Nutrition Security Survey (*Enquête Nationale d'Urgence sur la Sécurité Alimentaire et Nutritionnelle*)(ENUSAN, MARNDR/CNSA, 2019). Indeed, 43% of households in La Gonâve have a moderate (4-18) rCSI score according to data collected in this baseline, virtually the same rCSI score at the national level. The most frequent strategies are: eating less valued/expensive foods and limiting portion sizes at mealtimes. Therefore, considering the last 4 indicators mentioned above, namely Household Food Diversity Score, Food Consumption Score, Household Hunger Index and Coping Strategies Index (CSI), it was established, by convergence, that beneficiaries in the communes of Anse-à-Galets and Pointe-à-Raquettes are classified as IPC3. This partly means that beneficiary households are marginally able to meet minimum food needs, but only by depleting essential livelihoods or through crisis management strategies.

When it comes to the indicator related to the number of meals per day, in general, whether it is among children or adults, 72% of them, in Anse-à-Galets, have at least 2 meals per day against 62% for those in Pointe-à-Raquettes, i.e. 67% on the island of La Gonâve. As for the indicator related to the percentage of food use by type, in general, the agricultural production of households on the island of La Gonâve is used for household consumption (95%) and for sale (39%). As for the indicator related to information on managing economic shocks, only 16% of households in the commune of Anse-à-Galets and 20% of those in Pointe-à-Raquettes reported having received some information. Drought and plant disease were identified as the main shocks causing famine in the project intervention areas. Lastly, as for indicators, measuring the one related to the prevalence of mothers practicing exclusive breastfeeding, 86% of mothers with infants aged 6 months or less on the whole island of La Gonâve, exclusively used breast milk as food and drink.

Access to water for various domestic uses remains a major concern for a large proportion of households. For drinking water, although almost half of households (48%) are supplied from the DINEPA network and public pumps, a significant number of them (25%) are supplied from unsafe water points (unprotected wells, uncollected springs). This exposes them to potential contamination by pathogens, which would worsen their nutritional status. This situation is more critical in the commune of Pointe-à-Raquettes, where they still have to travel a much longer distance to fetch water.

In relation to the assessment of the local market in the intervention areas, concerning access to food products, the main supply points for the population of both communes of the island of La Gonâve are the markets of Anse-à-Galets and Pointe-à-Raquettes, which operate almost every day of the week. There are also other small markets serving as supply points in remote

areas. In these markets, the number of retailers far exceeds the number of wholesalers. These markets are supplied in food products from the port of Carriès, where boats travel between Anse-à-Galets/Carriès and the following supply centers: Port-au-Prince, Arcahaie, Saint-Marc and Gonaïves. The main products in the household food basket (oil, flour, corn, rice, wheat and common beans) are available on these markets. Overall, almost all the vendors surveyed offer rice (local and/or imported) as the main product, followed by corn (85% of vendors) and all of these products can be found with 57% of the vendors. It should be noted that commercial activities on the island are mainly carried out by women, who, according to the study's findings, represent 67% of the vendors. Access to markets is not always easy for all households. The decline in the socio-political situation in the country creates conditions of insecurity and instances of road blockades, sometimes preventing certain households from getting regular supplies of food products. It should also be noted that the economic crisis is leading to a decrease in sales by traders as a result of the decline in household purchasing power following the increase in product prices, mainly over the last two years.

I. Background

According to the latest Humanitarian Needs Overview (HNO) report in 2019, La Gonâve, one of Haiti's most food-insecure regions, is currently experiencing extreme food insecurity in its rural areas. Poor spring and fall harvests in the 2017-2018 season have left 45 percent of households (about 40,000 people in the CPI 3 and 4 range) at risk of a severe food crisis if emergency assistance is not provided to this population, which is barely able to meet its basic food needs.

Haiti's dire economic situation, characterized by currency depreciation and inflation, continues leading to higher prices for basic foodstuffs, especially grain. Access to food is even worse for most people in La Gonâve. To cope with this situation, people are selling off their livestock and non-productive assets. Other coping strategies include migration, selling labor, prostitution, fishing, and some households have already consumed their seed reserves.

In response to this humanitarian emergency, World Vision (WVI) is implementing an Emergency Food Security Program in La Gonâve to meet the immediate and basic food needs of 5,770 HH (approximately 28,842 people), currently in the IPC3 and IPC4 affected areas. This program will last approximately 15 months, from October 2019 to December 2020, and provide food vouchers to 100 percent of vulnerable households in IPC3 and 4 in rural areas, and to 58.5 percent of households in IPC3 and 4 in urban areas with funding from USAID.

WVI builds on its 20 years of cumulative experience implementing USAID emergency and food security projects in Haiti. Indeed, over the past ten years, WVI has implemented, on the island of La Gonâve, two consecutive EFSP projects that have focused on child nutrition and building resilience.

In this EFSP program in La Gonâve, the following fields of intervention to achieve the set goals and objectives are therefore:

- Food Vouchers for Assets (Food Vouchers for Asset/FVFA)
- Support to pregnant and breastfeeding women through training
- Training for young people in IGA (Income-Generating Activity)
- Savings for Transformation (S4T)

In order to evaluate all the changes to be induced as a result of this program's implementation, it is essential to outline the situation from the very beginning with precise data on the key indicators of the food security level. For that reason, this baseline study has been conducted among project beneficiaries, including an assessment of the local market in the intervention areas.

2. Baseline Objectives

The purpose of this baseline is to establish benchmarks for project performance indicators against which project success will be measured. Specifically, this baseline is used for the following purposes:

- Determine baseline values for key outcome indicators
- Collect data comparable to that of the final evaluation to determine the level of change in outcome indicators.
- Help establish/validate annual and end-of-project goals in the project M&E plan
- Increase World Vision Haiti's accountability with all its key stakeholders, including communities, partners, donors, supporters and the Government of Haiti.
- Identify households affected by the drought shock and classify vulnerable households in IPC classifications.

3. Methodology

The project's baseline was based on the collection of primary data (surveys and field observations) and secondary data (documentary research). Data collection methods were established according to the indicators directly concerned by the baseline's objectives, as indicated in the two tables below:

Table I: Key indicators to be measured

Key Indicators	Indicators Definition	Data Collection Method
Percentage of targeted households with an acceptable food consumption score (FCS)	The frequency-weighted dietary diversity score is a score calculated from the consumption frequency for the different food groups consumed (Appendix I) by a household over the 7 days preceding the survey.	Quantitative survey of project beneficiary households
Prevalence of households with little or no hunger (Household Hunger Scale – HHS)	Is essentially a behavioral measure that tends to capture more serious behaviors (Appendix I).	Quantitative survey of project beneficiary households
Proportion of households consuming at least 6 food groups during the previous month	Household Dietary Diversity Scale (HDDS): Dietary diversity is the number of different foods or food groups consumed during a given reference period.	Quantitative survey of project beneficiary households
Percentage of food use by type (household consumption, sale, exchange, feeding of livestock)	This indicator considers food generally available at the household level, regardless of its origin and quantity. It analyses the different modes of use, namely: Self-consumption, sale, trade and feeding of livestock. The priority use of food can provide information on the household's economic situation.	Quantitative survey of project beneficiary households

Table 2: Key indicators to be measured

Key Indicators	Indicators Definition	Data Collection Method
Percentage of households where adults and children eat at least 2 meals a day (adults and children), by age	<p>The average number of meals consumed per day in a household is an indicator of their level of food security or insecurity. The number of meals in food insecure households is lower than in food secure households.</p> <p>In fact, this indicator records the number of households where adults and children eat at least 2 meals a day.</p>	Quantitative survey of project beneficiary households
Prevalence of mothers exclusively breastfeeding infants six months of age or younger	<p>This indicator considers the proportion of mothers whose children aged six (6) months or less were exclusively breastfed.</p>	In the quantitative household survey, a subgroup of questions will be addressed to households with mothers with infants up to 6 months old.
Reduced Coping Strategies Index (rCSI)	<p>rCSI measures behavior: what people do when they don't have access to enough food by answering the question: What do you do when you don't have enough food and you don't have enough money to buy food?</p> <ul style="list-style-type: none"> - Measures adjustments made by households in consumption and livelihoods. These may be changes in consumption, expenditure reductions or income growth. - rCSIs tend to measure less severe coping behaviors. - rCSIs use the five most common strategies with standardized weightings: <ol style="list-style-type: none"> 1- Relying on less valued and less expensive food? 2- Borrow food or rely on the help of a friend or relative? 3- Limit portion sizes at mealtimes? 4- Restrict consumption by adults so that young children can eat? 5- Reduce the number of meals consumed per day? (Appendix I) 	Quantitative household survey
Percentage of households reporting greater ability to cope with economic shocks.	<p>This indicator considers households with information on shocks. The households most vulnerable to risks are those without information.</p> <p>Measuring this indicator therefore has to do with two (2) key elements:</p> <ol style="list-style-type: none"> a. Shock identification (floods, wind, drought, plant disease, erosion, hurricanes and others) and the level of contribution from each type of shock in food insecurity. b. Information received by households to manage shocks. 	Quantitative survey of project beneficiary households

Rapid Market Assessment

This baseline study also included a rapid analysis of local markets to assess their ability to meet additional demand without generating inflation risks or supply disruptions. USAID-IRC's Market Information Framework was used and adapted to conduct this assessment around two main components: the capacity of markets and their relationship with beneficiaries (key information) and the key factors to consider for the design of voucher assistance.

Since the program's distribution mechanism had already been identified (vouchers), the market assessment proposed in this study sheds light on how markets work and then on the link between households and markets.

3.1 Quantitative Survey of Project Beneficiaries

A quantitative sampling survey was conducted among project beneficiaries in the two intervention communes of the island of La Gonâve, namely Anse-à-Galets and Pointe-à-Raquettes. A probabilistic sampling method was considered to randomly select the various program beneficiaries to be surveyed. An initial internal work of the program had already written a list of beneficiaries by commune, by communal section, and by targeted localities with a contact telephone number, in most cases. This, therefore, constituted the sampling base from which a random sample of beneficiaries was extracted for interview. Then, we selected the **One-stage Simple Random Sample (SRS)** method. But all of that, each of the communes was assimilated to a stratum. The One-stage Simple Random Sample (SRS) method was conducted separately by stratum. It is true that access to the selected beneficiaries had caused a difficult logistical burden, but guides who were familiar with the localities concerned or who had participated with WVI Haiti in compiling the lists of beneficiaries were used to facilitate the work of the field interviewers.

As it was planned in the study's scope of work meetings with WVI-H counterparts to establish the values of indicators for each of the 2 communes, the number of beneficiaries to be surveyed was determined separately for each of them. The program targets 5,770 beneficiary households. The lists provided by the program provided contact information on nearly 4,662 beneficiaries. Hence the following table of the number of beneficiaries per commune and per communal section:

Table 3: Number of Beneficiaries per Commune and Communal Section

Communes	Communal Sections	Number of Beneficiaries
Anse-à-Galets	1ère Palma	719
	2ème Petite Source	658
	3ème Grande Source	462
	4ème Grand Lagon	745
	5ème Picmy	122
	6ème Section Petite Anse	115
Total		2,821
Pointe-à-Raquettes	1ère Section la Source	47
	2e Section Grand Vide	499
	3e Section Trou Louis	464
	4e Section Pointe-à-Raquettes	686
	5e Section Gros Mangle	122
	Town of Pointe-à-Raquettes	23
Total		1,841
Grand total		4,662

The overall sample is the sum of the 2 sub-samples n_1 and n_2 for the respective communes (or strata) of Anse-à-Galets and Pointe-à-Raquettes. The formula for calculating the sample size, with the chosen sampling method (**One-stage Simple Random Sample (SRS)**) per stratum is the following:

$$n_{initial} = D_{est} \left[\frac{Z_{1-\alpha} \sqrt{2P(1-P)} + Z_{1-\beta} \sqrt{P_{1,est}(1-P_{1,est}) + P_{2,est}(1-P_{2,est})}}{\delta} \right]^2$$

Where:

$n_{initial}$: is the initial sample size required by the baseline and final study surveys for each of the two time points.

$P_{1,est}$: represents a survey estimate of the true proportion $P1$ of the population at baseline [If such an estimate is not available from previous surveys, use 0.5]

$P_{2,est}$: represents a survey estimate of the true proportion $P2$ of the population at the end of the project for the final study

Since we are at the baseline, the value $P_{2,est}$ does no longer apply in the previous formula. This is why we use the following equivalent formula in our situation (UN, Designing Household Survey Samples: Practical Guidelines, 2005a):

$$n = D_{est} \frac{Z^2 (P_{1,est} * (1 - P_{1,est})) * r}{\epsilon^2}$$

Where D_{est} is the *design effect*, equal to 1 in a **One-stage Simple Random Sample (SRS) design**

Z: Confidence level z-score (1.96 or 1.645 corresponding respectively to a 95% and 90% confidence level)

r: Non-response rate (generally set at 1.1, corresponding to 10%, but may change depending on the context)

ϵ : Margin of error set, in this work, at 0.06

N_1 and N_2 are less than 100,000 beneficiaries, so the n_1 and n_2 sought are multiplied by the sampling correction factor ($N/(1+N)$).

Hence the n_1 and n_2 found from the formula become:

N_1 (Anse-à-Galets) = 2,821 beneficiaries, with a margin of error of 6%, n_1 (Anse-à-Galets) ~268 beneficiaries.

N_2 (Pointe-à-Raquettes) = 1,841, with a margin of error of 6%, n_2 (Pointe-à-Raquettes) ~256 beneficiaries.

Given that, according to the selected sampling method, i.e. the **One-stage Simple Random Sample (SRS)** per commune, at least 339 beneficiaries are needed to calculate the FCS and HHS indicators, the sample sizes for the communes of Anse-à-Galets and Pointe-à-Raquettes were therefore increased from **268 to 339** and **256 to 339** beneficiaries respectively.

We can see that the calculation formula gives a larger minimum size for Anse-à-Galets, which in fact has more participants in the program. It was in fact the adjustment to the minimum size required of 339 for the calculation of the indicators that removed the proportionality aspect of the respective sizes of the samples of the 2 communes compared to their population of program participants.

In relation to one of the indicators, the *prevalence of mothers exclusively breastfeeding infants six months of age or younger*, investigators were clearly instructed to interview at least 5 breastfeeding mothers. [The list of beneficiaries of the program which served as a sampling frame did not allow to identify all the breastfeeding mothers. Therefore, a separate sampling was not considered because we could not extract the subpopulation of the lactating women in the sampling frame.](#)

As in each commune there are communal sections in which listed beneficiaries live, the previously calculated sample size was broken down proportionally to the size (PPT) of each of these geographical units.

Table 4: Quantity of surveys to be carried out in the communal sections of the commune of Anse-à-Galets

Communes	Communal Sections	Number of Beneficiaries	Demographic Weight (pi=Ni/N)	Quantity Allocated by Zone	Minimum Planned Quantity*	Quantity of Surveys Conducted
Anse-à-Galets	1ère Palma	719	0.25	86	86	101
	2ème Petite Source	658	0.23	79	79	104
	3ème Grande Source	462	0.16	56	56	49
	4ème Grand Lagon	745	0.26	90	90	124
	5ème Picmy	122	0.043	15	30	42
	6ème Section Petite Anse	115	0.041	14	30	45
Total		2,821	1.00	339	371	465

* The number was adjusted for all communal sections with less than 30 households allocated.

An adjustment is made for all the communal sections whose allocated quantity is less than 30 households because of the Central Limit Theorem which justifies the use of normal distribution if the sample size is large enough. ... Empirically, it is said to be enough if the sample size is at least 30. That is why we always consider 30 the minimum number of observations we need to conduct some statistical test, for instance if we need to compare two means.

The quantity of beneficiary surveys to be carried out in the commune of Anse-à-Galets was therefore set at **n₁=371 beneficiaries**. But **465 beneficiaries** were actually surveyed in Anse-à-Galets. This therefore decreases the margin of error from 6% to 4% by deducting it in the previous formula for the random sampling plan.

Table 5: Quantity of surveys to be carried out in the communal sections of the commune of Pointe-à-Raquettes

Communes	Communal Sections	Number of Beneficiaries	Demographic Weight (pi=Ni/N)	Quantity Allocated by Zone	Minimal Planned Quantity*	Quantity of Surveys Conducted
	Town of Pointe-à-Raquettes	23	0.01	4	23	13
Pointe-à-Raquettes	1re Section la Source	47	0.03	9	30	30
	2e Section Grand Vide	499	0.27	92	92	132
	3e Section Trou Louis	464	0.25	85	85	92
	4e Section Pointe-à-Raquettes	686	0.37	126	126	157
	5e Section Gros Mangle	122	0.07	22	30	38
Total		1,841	1.00	339	381	462

* The number was adjusted for all communal sections with less than 30 households allocated.

The number of beneficiary surveys to be carried out in the commune of Pointe-à-Raquettes was therefore set at **$n_2=381$ beneficiaries**. However, **462 beneficiaries** were actually surveyed in Pointe-à-Raquettes. This therefore decreases the margin of error from 6% to 4% by deducting it in the previous formula for the random sampling plan.

In the data analysis, the indicators are calculated by commune as mentioned above. *The indicator values are not sample weighted*. To analyze these indicators on the whole of La Gonâve Island, the data from representative samples of the 2 communes are aggregated in order to obtain a global sample of program participants for the whole. The values of the indicators for the whole Island of La Gonâve are thus calculated on this global sample also representative of program participants.

3.1.2 Total Sample

The minimum size of the overall sample of beneficiaries to be surveyed in the 2 communes of La Gonâve was set to be: **$n = 747$ beneficiaries**

In order to ensure this minimum number was surveyed, each investigator was required to interview between 5 and 10 beneficiaries in addition to the planned number. Considering this latter aspect, the final number of households surveyed in the 2 communes is then **$n' = 927$** .

3.2 Survey of Resellers (Retailers) and Wholesalers

To conduct a rapid assessment of the local market in project intervention areas, a quantitative survey of vendors was conducted. A data collection tool was developed for this category of study units to help identify the **supply side** while a section related to this market assessment was inserted in the baseline questionnaire for project beneficiaries to consider the **demand side**.

A two-pronged approach was used to collect market assessment data by combining secondary data from observations and consultations with stakeholders and local authorities to identify and understand key aspects of market operations and size. Primary data (key information) was then collected from vendors/wholesalers in the project intervention communities.

- Consultations

Since no preliminary information was available, mainly with regard to the number of food vendors in the project areas, consultation sessions were organized with local authorities (mayors, CASEC and ASEC) to identify local markets in the 2 project communes. WVI was also asked to provide the list of traders in the food voucher distribution program to conduct the survey and analyze the inventory capacity and food prices the project intends to facilitate to food insecure beneficiaries.

- Survey of vendors (retailers) and wholesalers

This survey was carried out, not just thoroughly among the vendors pre-selected by the project, but also in the mid-size and large markets identified in the communes on the basis of a convenience sample of merchants. Price comparisons could be made between the relevant and non-project merchants. This survey of vendors and wholesalers also made it possible to collect primary information on the inherent capacity of markets to respond to demand growth over the duration of the program.

3.3 Field Data Collection

Primary data collection (beneficiary survey and vendor survey) was conducted electronically. The collection tools were designed using the digital survey platform called *Ona*. Each interviewer was therefore provided with a digital tablet on which the relevant survey form was installed. It was then possible to follow the entire collection process in real time from the *Ona* platform. The interviewers were also required to enter the GPS coordinates of the houses of the beneficiaries surveyed; this should reduce the risk of an interviewer filling in the form himself without actually visiting the specific survey respondent.

For the survey of beneficiaries, each investigator received the list of beneficiaries to be surveyed. This list was previously prepared using MS EXCEL spreadsheet and the *Random ()* function to randomly select the beneficiaries to be surveyed. With the list thus established, each interviewer was assisted by a guide with a great deal of knowledge of the different localities where the selected beneficiaries live.

3.4 Pre-Testing of Collection Tools

The collection tools (baseline questionnaire and vendor questionnaire) were tested for applicability. This work, which was carried out by the technical team that had worked on the development of these collection tools, helped adjust them to field realities adapt the training modules for interviewers and supervisors.

3.5 Selection and Training of Interviewers and Supervisors

Twenty (20) interviewers and two (2) supervisors were selected and mobilized in the 2 communes of La Gonâve to collect data for 5 to 6 days after receiving a one-day training on the survey forms and the study's objectives.

The data collected from the tablets and uploaded to the *Ona* digital platform were cleaned and processed. They were then exported to SPSS and MS Excel for further analysis.

- Classification of Vulnerable Households in IPC Phases

In order to classify vulnerable households into the corresponding IPC phase(s), the convergence table in version 3.0 of the IPC manual¹ was used, considering the following indicators whose threshold values were established in this study:

- Percentage of targeted households with an acceptable food consumption score (FCS)
- Prevalence of households with little or no hunger (Household Hunger Scale – HHS)
- Proportion of households who consumed at least 6 food groups in the previous month (HDDS)
- Reduced Coping Strategies Index (rCSI)

These indicators take into account the food consumption aspect in the ICP phases.

The nutritional status is not considered since *GAM (Global Acute Malnutrition)* will not be measured according to the study's terms of reference.

The indicators considered are calculated for each of the 2 communes and for the 2 program intervention areas, as a whole. The percentages for each class of indicators are placed in the corresponding phases, as indicated in the convergence table (**Appendix II**). The accumulation of these figures from right to left (starting from phase 5 to phase 1) for each of the indicators allows to decide which IPC to use by applying the 20% rule. The phase in which aggregated percentages reach 20% is chosen for each of the indicator rows considered. In this way, the current population percentage ranges for each of the phases can be established, and then finally the consensus percentage of the population falling into each of the phases can be established. Where 20% is reached, it is chosen as the IPC phase for the commune or area under analysis.

4. Constraints and Limitations of the Study

As indicated in the methodology, this study is being carried out on the whole island of La Gonâve. Thus, data collection was carried out on the basis of a random sample taken from a list of beneficiaries that had already been identified by WVI-H. In order to find the sample-selected beneficiaries in the field, the interviewers had to use the telephone numbers provided in the WVI-H database. This exercise sometimes proved difficult, despite the presence of the guides, because of communication issues related to the non-existent telephone signal in several localities on the island. Most of the initial beneficiaries selected could not be found, mainly in certain communal sections of Pointe-à-Raquettes, so the selection work had to be resumed for several localities and new lists had to be submitted to certain interviewers to facilitate their work. Another challenge faced in the field was due to the full names of beneficiaries. In some cases, the last or first names reported by beneficiaries or respondents differed somewhat from those found in the initial database. In such situations, interviewers had to ask additional questions to ensure the person they were interviewing was indeed the one they were

¹ Technical Manual version 3.0, Evidence and Standards for Better Food Security & Nutrition Decisions, April 2019, pages 35-36

supposed to interview. This resulted in some rather marginal differences between the initial database and the one built from the baseline survey.

As there already was a sampling frame that formed a clearly defined population from which the sample was drawn, this did not pose any methodological issues. However, given the size of the study area, which is made up of many small localities, it was not possible to take a sample that is equally spread over the entire area. However, all precautions were taken for the selected beneficiaries to cover as much of the study area as possible. This did not prevent some concentration of surveys in a few localities due to the corrections made to the first random selection where some beneficiaries could not be identified by the interviewer.

Another limitation of this study is the fact that the survey was conducted on a sample of beneficiaries, a large part of which were from the 3,000 participants were part of in an emergency food distribution intervention in December 2019 after the political unrest causing the "peyi lok" (lockdown). This intervention has surely a positive effect on the initial values of the baseline indicators related to the food security in the households.

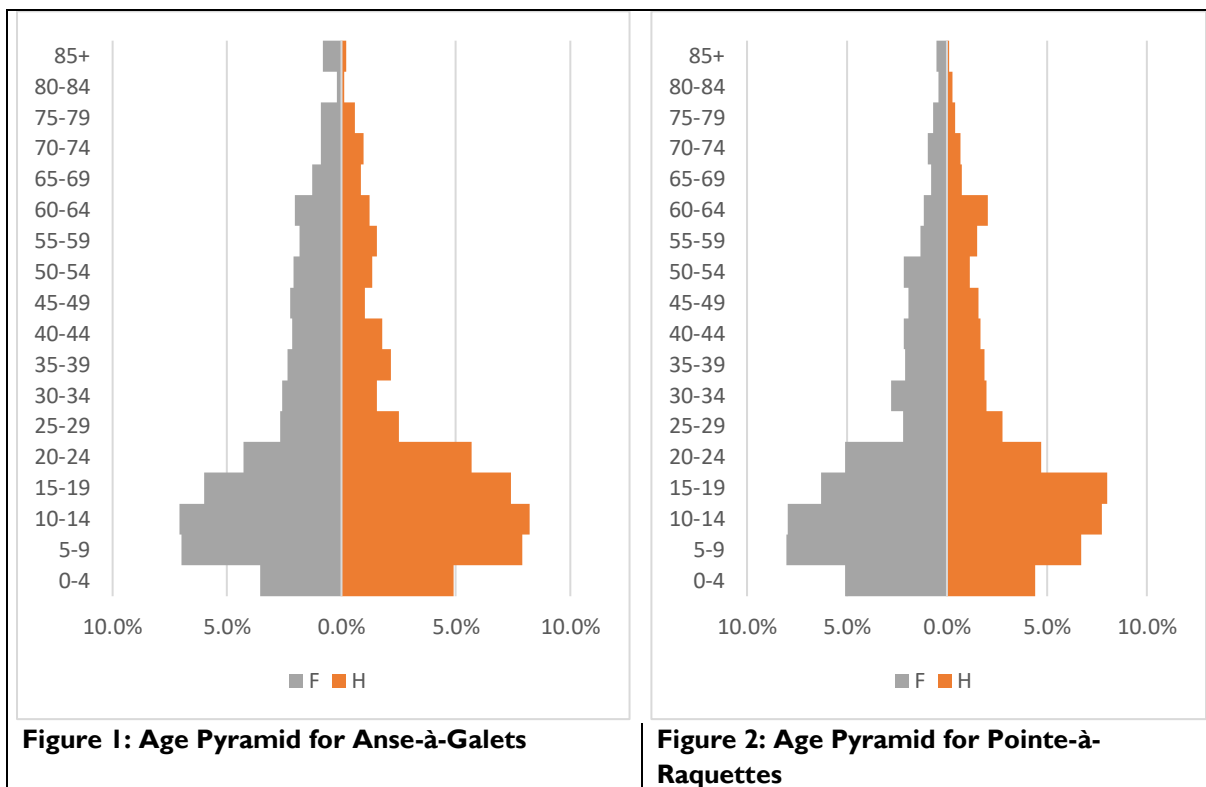
There is also a limitation of this study related to the low sample size of lactating women who were questioned for the indicator titled: "Prevalence of mothers exclusively breastfeeding infants six months of age or younger". A separate sample would have to be considered but we could not extract the subpopulation of the lactating women in the sampling frame. The list of beneficiaries did not have information the quantity of lactating women in the sampling frame. With this low sample size, we assume that the result for this indicator may not reflect the reality.

5. Reviewing the Findings of the Baseline Study

In this section, the findings of the baseline are reviewed by highlighting the general characteristics of beneficiary households, establishing the values of the different indicators under study per commune and interpreting the food consumption indicators for the IPC classification by convergence.

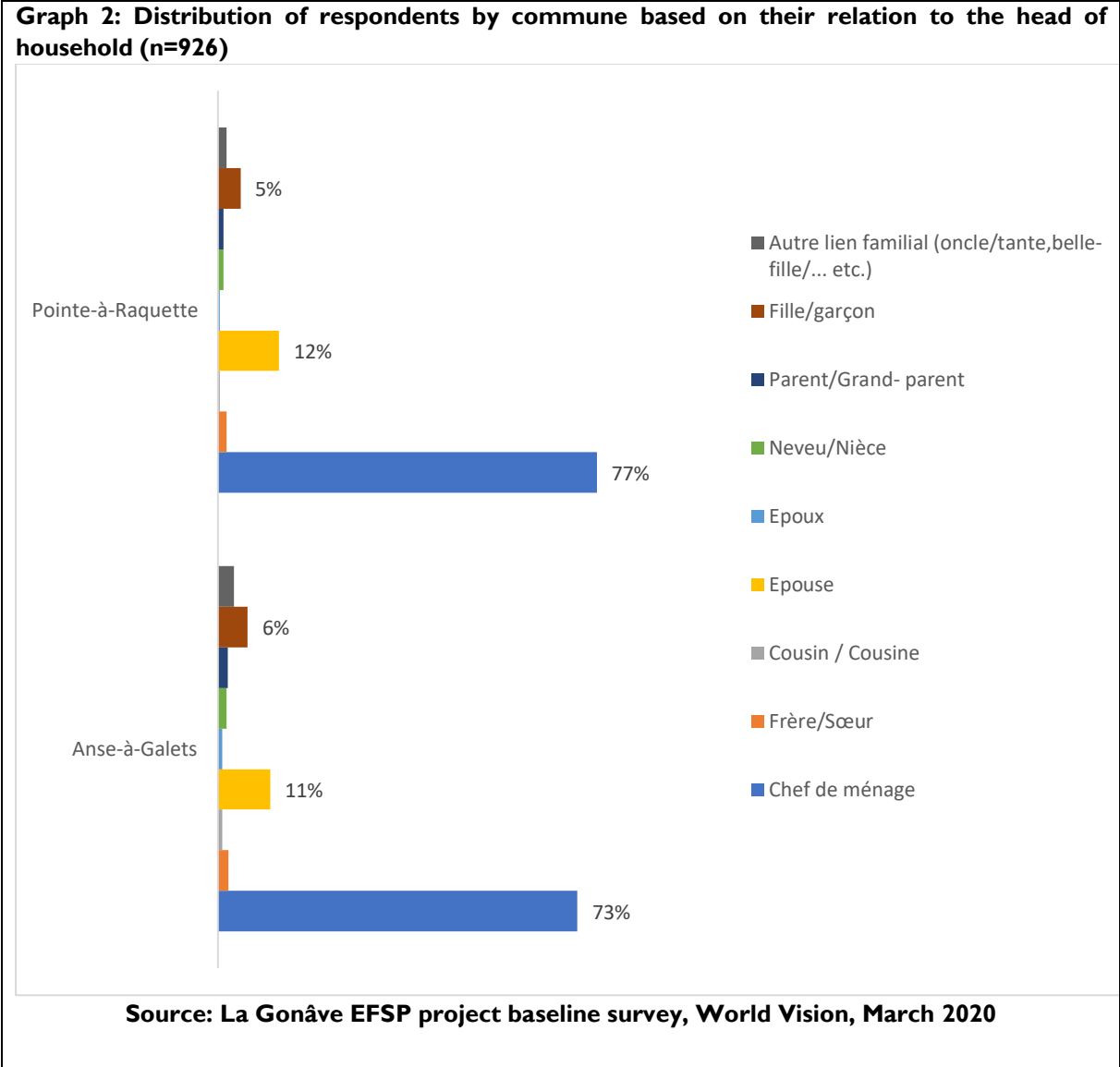
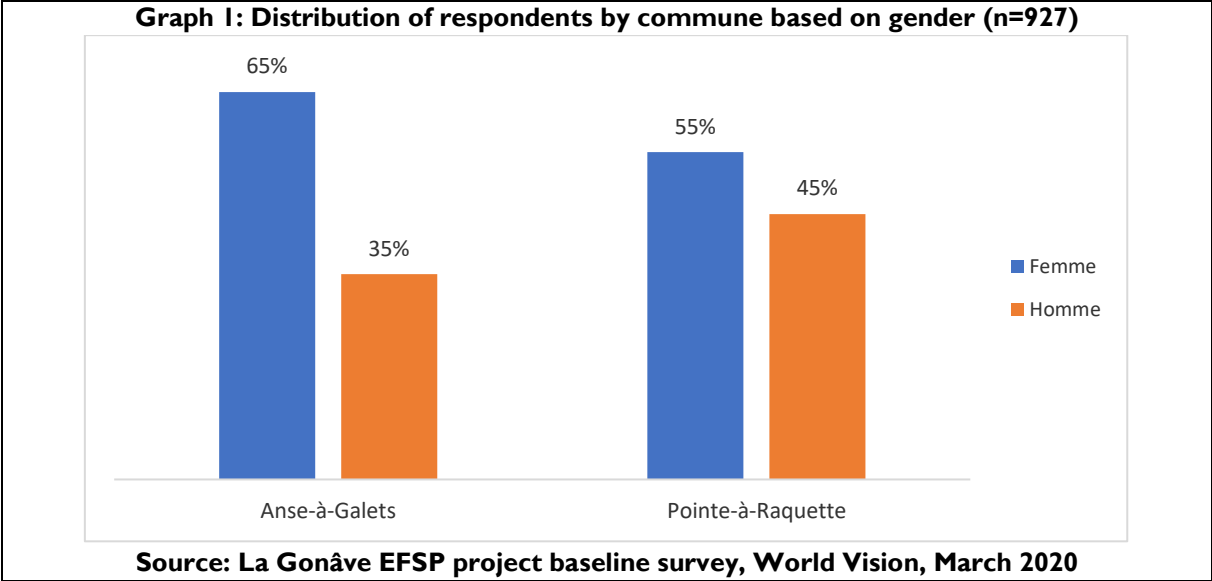
5.1 General Characteristics of Beneficiary Households

It was necessary to characterize the universe of the study in relation to the beneficiary households surveyed. In order to get an overview of the household structure in the project intervention communes, an age pyramid was designed for each of them (**Figures 1 to 2**). These graphs have the same configuration as the Haitian population's age pyramid in general, i.e., very broad at the base and very slender at the top. This means that the population is very young. The most represented age groups are those under 25 years of age. We note that in the 2 communes, this similarity exists, i.e. a peak in the 5-9 and 10-14 age groups for both sexes. In both communes, there also tends to be more women in the population. This reflects the reality of the Haitian population, which has more women than men.



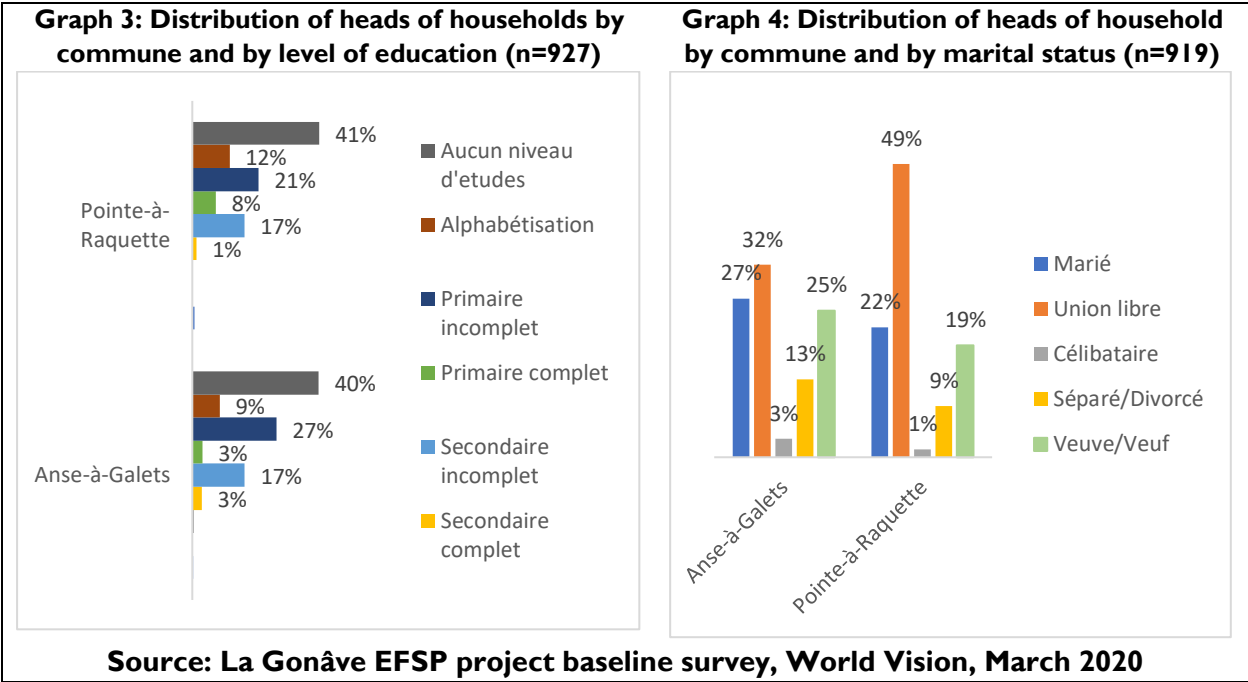
This survey was answered, for the most part, by women in selected beneficiary households in the two communes of the island (**Graph 1**). In addition, most of the latter were in fact the head of their household (**Graph 2**). In reality, men are often absent, especially in rural Haiti, where they are often the ones who migrate in search of economic activities² (IHSI/ECVH, 2001).

² One-third of female-headed households have relatives living abroad (Chapter 2, IHSI/Living Conditions in Haiti Survey (ECVH), 2001)



Most of the heads of beneficiary households in the two intervention communes have no level of education at all, i.e. 40% of them (**Graph 3**). Then, the same trend appears again for those with incomplete primary education, respectively 21% and 27% in Pointe-à-Raquettes and Anse-à-Galets. And less than 20% are found with an incomplete high-school level. It is therefore understandable that the situation of educational provision is as serious on the island of La Gonave as in the rest of the country where many adults aged 50 and over often lack the chance to attend school. According to figures from the island of La Gonave School District Office, in 2014, there were only 12 public schools in Anse-à-Galets and 7 in Pointe-à-Raquettes. People think that, all along, there has probably been some improvement with the presence of NGOs working in this field on the island. However, it is then understandable why there are so many adults with no education.

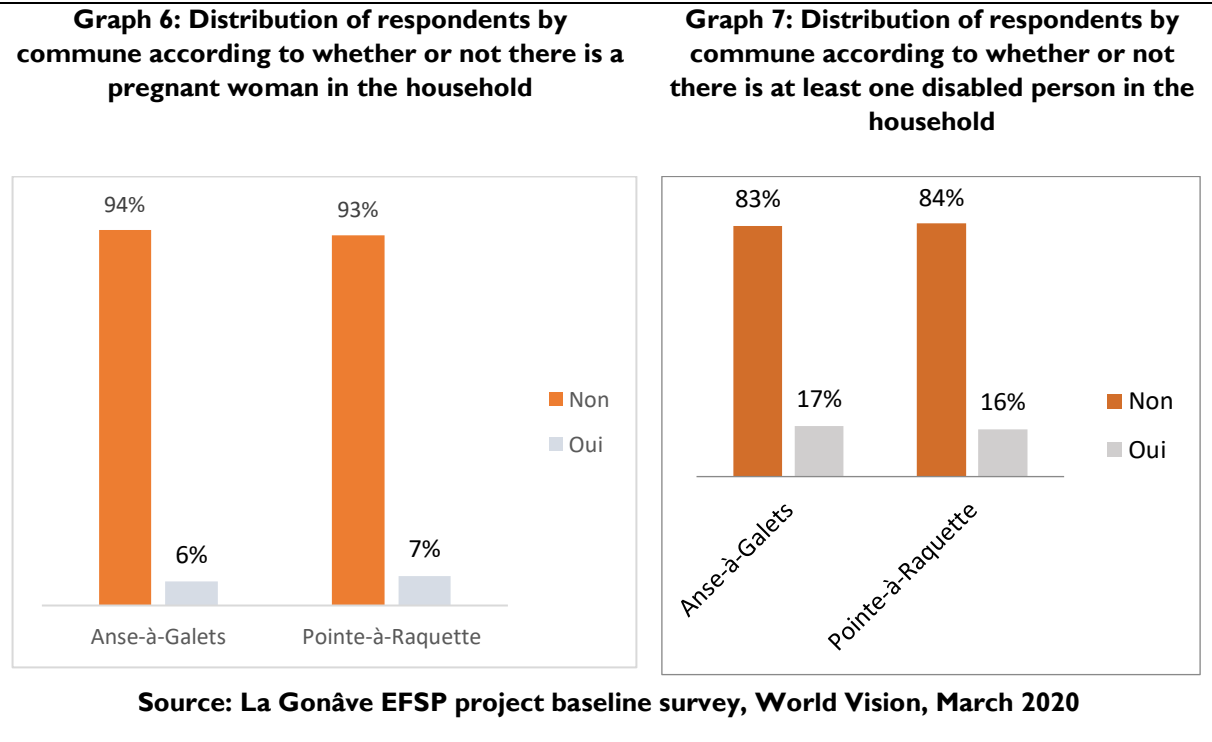
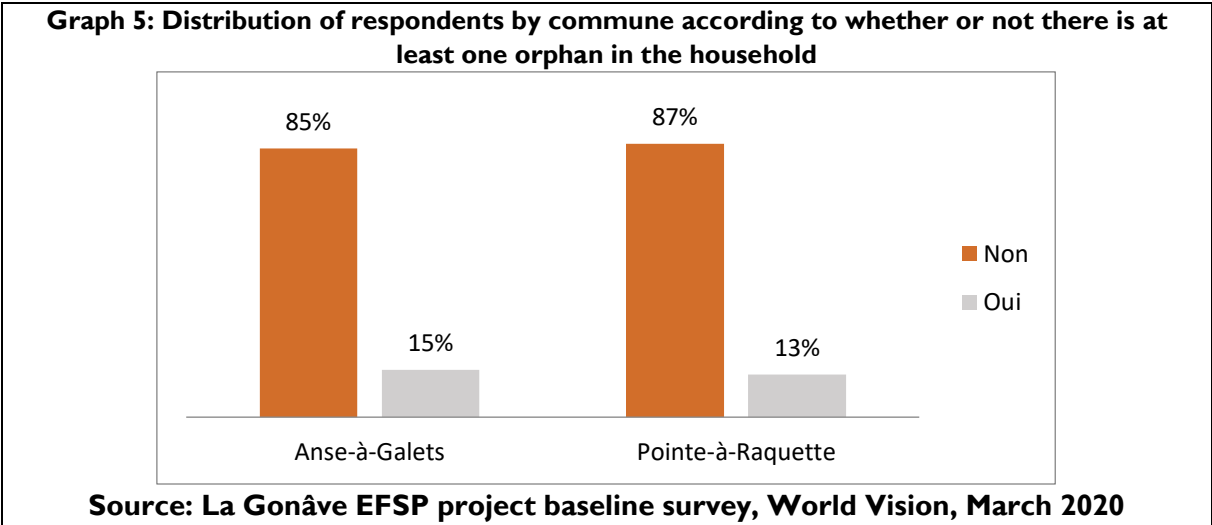
Moreover, in terms of marital status, common-law unions predominate, with 32% and 49% of heads of household³ with this status in Anse-à-Galets and Pointe-à-Raquettes, respectively (**Graph 4**). An astonishing statistic at this level is the proportion of widows/widowers among beneficiaries, varying from 19% in Pointe-à-Raquettes and 25% in Anse-à-Galets. Thus, there is a considerable number of single-parent families who will benefit from the project’s support.



Within beneficiary households, very few of them reported having a pregnant woman at the time of the survey (**Graph 6**). On average, one pregnant woman was counted among 62 households that reported having a pregnant woman in the two communes (**Table 6**).

³ In Haiti, according to the official institute of the statistics (IHSI) a household is defined as follow: “all people living under the same roof sharing daily resources for more than three months at the time of the survey. The head of the household is the person who has the final say in the decision-making process involving the household. All people in the household recognize his authority”.

Less than 20% of households also reported having at least one person with a disability in their home (**Chart 7**). Nor are there many households with orphans, nearly 15% or fewer (**Chart 5**).



The heads of beneficiary households have an average of 5 dependents, a figure corresponding to the average number of persons in a household at the national level. The 2.52 standard deviation shows that this average number is slightly driven by extreme values. This means that the average value is fairly close to reality, i.e. there are still a good number of heads of project beneficiary households who actually have 5 dependents.

Table 6: Household composition in terms of dependents, orphans and pregnant women

	Average number per household	Standard deviation	Total considered
Dependents of the head of household	5.25	2.52	927
Orphans	1.99	1.45	132
Pregnant women	1.01	0.12	62

Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

The type of habitat in which beneficiaries live gives an idea of their degree of vulnerability. Then, it is evident that households living in thatched houses, in cottages, in slums are in extreme poverty and those in tin-roofed houses are largely poor. The survey data show a predominance of dwellings with tin roofs, especially in Pointe-à-Raquettes (**Table 7**). There are a few houses with concrete roofs in Anse-à-Galets. If we were only to consider this analysis indicator, we might say that both communes are very vulnerable and that the situation in Pointe-à-Raquettes would be the worst of the two.

Table 7: Distribution of respondents by commune based on the head of household's type of habitat

Type of household dwelling	Communes		
	Anse-à-Galets	Pointe-à-Raquettes	Grand Total
Thatched house	0%	2%	1%
Other (with tarpaulin, ...)	0%	0%	0%
Slum/board house	3%	1%	2%
Cottage	2%	4%	3%
Mud house with tin roof	5%	0%	2%
Built shelter (Shelter)	7%	2%	4%
Stone house	11%	4%	8%
Low but simple house	15%	0%	8%
House with tin roof	54%	83%	68%
Block and concrete house	0%	3%	2%
House with concrete roof	3%	1%	2%
Two-story house	1%	0%	1%
Grand Total	100%	100%	100%

Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

In terms of main sector of economic activity for the head of household, agriculture and trade dominate all other sectors in the 2 communes (**Table 8**). Marginally, there are a few other activities such as charcoal-making (10%), fishing (3%) and farming (3%). But it is surprising that the weight of fishing does not exceed 4% in the 2 communes, given that this is an island.

Table 8: Distribution of respondents by commune according to the head of household's main activity

Head of household's main activity	Communes		
	Anse-à-Galets	Pointe-à-Raquettes	Grand Total
Agriculture	32%	48%	40%
Trade	26%	16%	21%
Unemployed	14%	11%	12%
Charcoal-making	9%	11%	10%
Fishing	5%	0%	3%
Farming	2%	3%	3%
Masonry	3%	1%	2%
Breeding	2%	3%	2%
Transportation	2%	0%	1%
Education	2%	1%	2%
Mechanics	0%	0%	0%
Housewife	1%	1%	1%
Manual worker (Baker, cabinetmaker, etc.)	1%	2%	1%
Sand mine operator	1%	0%	0%
Living on remittances	1%	0%	1%
Others (Seaman, construction, midwife, etc.)	0%	2%	1%
Grand Total	100%	100%	100%

Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

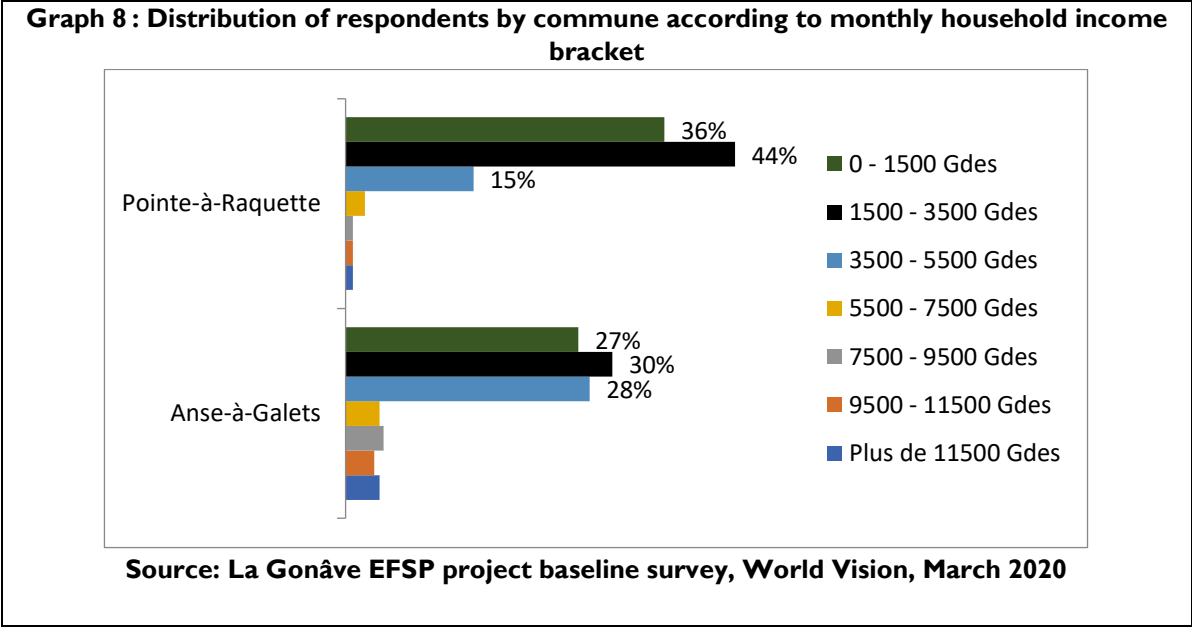
We were interested in identifying a second economic activity of the beneficiary households surveyed. Almost half of respondents in Anse-à-Galets did not mention a second activity (**Table 9**). In Pointe-à-Raquettes, animal husbandry appears to be a very important second economic activity, practiced by nearly 20% of the beneficiaries. Overall, agriculture, trade, animal husbandry and charcoal-making can be considered as the income-generating activities mentioned by most respondents.

Table 9: Distribution of respondents by commune according to the head of household's second activity

Second household activity	Communes		
	Anse-à-Galets	Pointe-à-Raquettes	Grand Total
No second activity	48%	36%	42%
Animal husbandry	12%	20%	16%
Agriculture	14%	16%	15%
Charcoal-making	11%	12%	11%
Trade	5%	7%	6%
Farming	3%	4%	4%
Others (Seaman, construction, midwife, etc.)	3%	2%	2%
Masonry	1%	1%	1%
Fishing	1%	0%	1%
Transportation	1%	0%	1%
Education	0%	1%	1%
Mechanics	0%	0%	0%
Living on remittances	0%	0%	0%
Sand mine operator	1%	0%	0%
Manual worker (Baker, cabinetmaker, etc.)	0%	1%	1%
Grand Total	100%	100%	100%

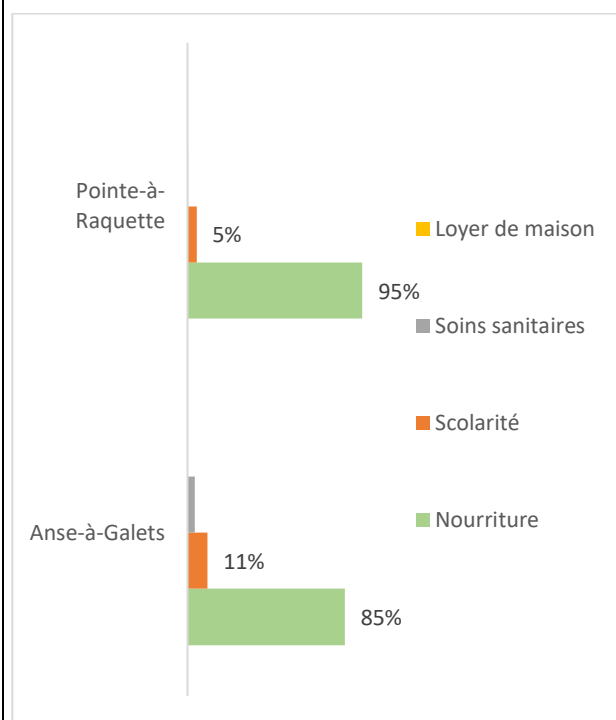
Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

To get an idea of the monthly household income, beneficiaries were asked to estimate the amount of income generated by the above-mentioned economic activities. Almost the same trend was noted in both communes, namely a predominance of the 1500-3500 HTG bracket (**Graph 8**). In these estimates again, households in Anse-à-Galets appear to be in a slightly better situation than those in Pointe-à-Raquettes. It is clear that 28% of households surveyed in Anse-à-Galets are in the 3,500-5,500 HTG monthly income bracket compared to 15% of those in Pointe-à-Raquettes.

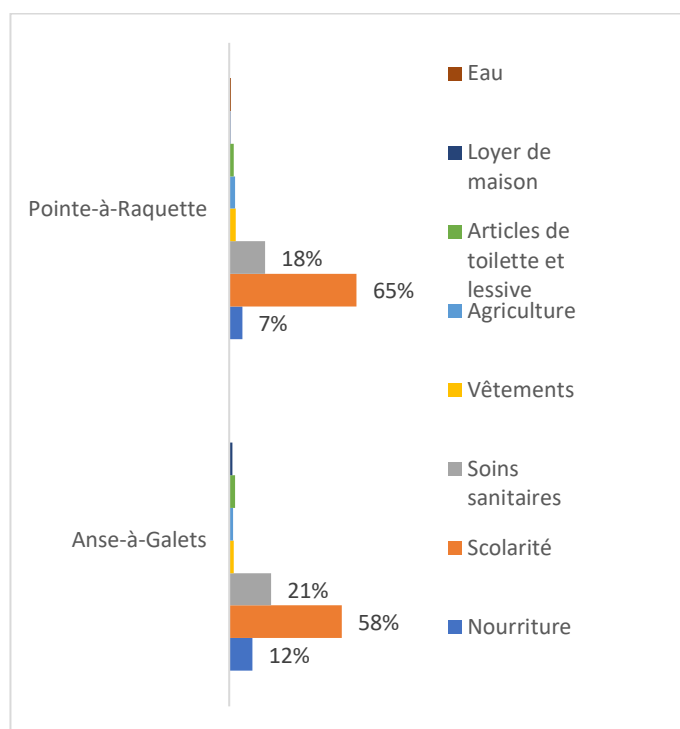


The main expenditure items for beneficiary households in both communes are food, schooling and health care (**Charts 9 and 10**). This finding is consistent with those at the national level. Haiti, one of the countries in the Americas with the most inequalities (World Bank-ONPES, 2014) has more than one person in two living in poverty, with less than USD 2.41 a day and one person in four living in extreme poverty, with less than USD 1.23 a day. The limited resources available to poor households are largely directed towards food consumption.

Graph 9: Distribution of respondents by commune according to household's first annual expenditure item (n=914)



Graph 10: Distribution of respondents by commune according to household's second annual expenditure item (n=887)



Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

5.2 Regarding Beneficiaries' Food Consumption

The household food consumption component is taken into account in the study based on the indicators of dietary diversity including a food group consumed or not consumed by the household in the last 4 weeks preceding the survey and the frequency of food consumption for these same food groups over the last 7 days.

- Household Dietary Diversity Score

On the island of La Gonâve, 6% of households involved in this study have a low dietary diversity, which means 57 households out of the 927 surveyed in the study, i.e., they ate less than 3 food groups during the last 30 days before the study period (**Table 10**). However, more than 3/4 of these households are in the high dietary diversity category, i.e., 685 households for 6 or more food groups during the last 4 weeks prior to this study. In Pointe-à-Raquettes, more households have a low dietary diversity compared to Anse-à-Galets, and more households in Anse-à-Galets have high dietary diversity, i.e. 83% compared to 65% in Pointe-à-Raquettes. For the 2 communes of the island of La Gonâve, the fat-based food group is the most consumed, followed by the cereal-based food group, followed by the leguminous food group. In fact, more than 80% of surveyed beneficiary households ate at least the last 3 food groups during the month preceding the survey. In calculating the indicator, cereals and legumes respectively have a weight of 2 and 3. By contextualizing the high percentages found for this indicator's high dietary diversity portion, we realized that a large proportion of

beneficiaries had already participated in a World Vision distribution, one or two months before the survey as mentioned in the section 4-Constraints and limitations of the study. Cereals and legumes (beans or peas) were included in this distribution.

Table 10: Dietary diversity score for the island of La Gonâve by commune

Indicator: Dietary diversity	Anse-à-Galets			Pointe-à-Raquettes			Island of La Gonâve		
	Num ⁴	Den	%	Num	Den	%	Num	Den	%
Low dietary diversity	14	465	3%	43	462	9%	57	927	6%
Average dietary diversity	67	465	14%	118	462	26%	185	927	20%
High dietary diversity	384	465	83%	301	462	65%	685	927	74%
Average HDDS	7.08			6.14			6.61		
Standard Deviation HDDS	1.67			1.83			1.81		
Confidence Interval (95%) of the Average HDDS	[6.93; 7.24]			[5.97; 6.31]			[6.50; 6.73]		

Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

- Household Food Consumption Score (FCS)

Over the 7 days preceding the survey on the island of La Gonâve, 16% of interviewed beneficiaries had poor food consumption and less than half of them had acceptable food consumption (**Table 11**). Thus, 52% are poor or at the acceptable limit of food consumption because they are between 0 and 35 for the set threshold. In fact, 60% of households in the commune of Pointe à-Raquettes have a poor or acceptable food consumption, compared to 44% of those living in Anse-à-Galets. We can then conclude that more households in the commune of Pointe-à-Raquettes are food insecure than those in the commune of Anse-à-Galets with regard to the values of the last two indicators. The higher acceptable range can also be explained by the same prior World Vision distribution referred to above.

⁴ Num=Numerator
Den=Denominator

Table 11: Food consumption score of project beneficiaries for the island of La Gonâve by commune

Indicator: Food Consumption Score	Anse-à-Galets			Pointe-à-Raquettes			Island of La Gonâve		
	Num	Den	%	Num	Den	%	Num	Den	%
Poor food consumption (Percentage of households with FCS of 0-21)	51	465	11%	101	462	22%	152	927	16%
Food consumption at the acceptable limit (borderline) (Percentage of households with FCS of 21.5-35)	153	465	33%	175	462	38%	328	927	35%
Acceptable food consumption (Percentage of households with FCS of >35)	261	465	56%	186	462	40%	447	927	48%
Average FCS	38.86			33.28			36.08		
Standard deviation FCS	15.09			14.07			14.85		
Confidence Interval (95%) of the Average FCS	[37.49; 40.24]			[32; 34.57]			[35.13; 37.04]		

5.3 Condition of Beneficiary Households in relation to Hunger

The famine conditions in the intervention communes at the start of the project was identified based on the Household Hunger Scale (HHI), the survival (adaptation) strategies-rCSI and the household using their production or not.

- Hunger Scale Score/Household Hunger Index (HHI/HHS)

Only 16% of beneficiary households interviewed on the island of La Gonâve have access to sufficient food or experience little or no hunger, 8% of which are in the commune of Pointe-à-Raquettes. Contrary to the food consumption score indicator, Anse-à-Galets has 25% of these households responding to this study who experience severe hunger. However, 3/4 of the households in the commune of Pointe-à-Raquettes are moderately hungry, as well as more than half of the households in the commune of Anse-à-Galets. As indicated in the table below, 92% of the households in the commune of Anse-à-Galets are facing severe and moderate hunger. However, the situation has not so much improved in the commune of Anse-à-Galets, since 77% of these households are in the same situation. Overall, 84% of respondent households on the island of La Gonâve are experiencing severe to moderate hunger.

Table 12: Hunger score of project beneficiaries for the island of La Gonâve by commune

Indicator: Hunger Scale or Household Hunger Index/Household Hunger Score (HHS)	Anse-à-Galets			Pointe-à-Raquettes			Island of La Gonâve		
	Num	Den	%	Num	Den	%	Num	Den	%
Little or no hunger in households (scores 0-1)	108	465	23%	36	462	8%	144	927	16%
Moderate household hunger (scores 2-3)	242	465	52%	346	462	75%	588	927	63%
Severe household hunger (scores 4-6)	115	465	25%	80	462	17%	195	927	21%
Average HHS	2.79			2.90			2.85		
Standard deviation HHS	1.66			1.05			1.39		
Confidence Interval (95%) of the Average HHS	[2.64; 2.94]			[2.81; 3.00]			[2.76; 2.94]		

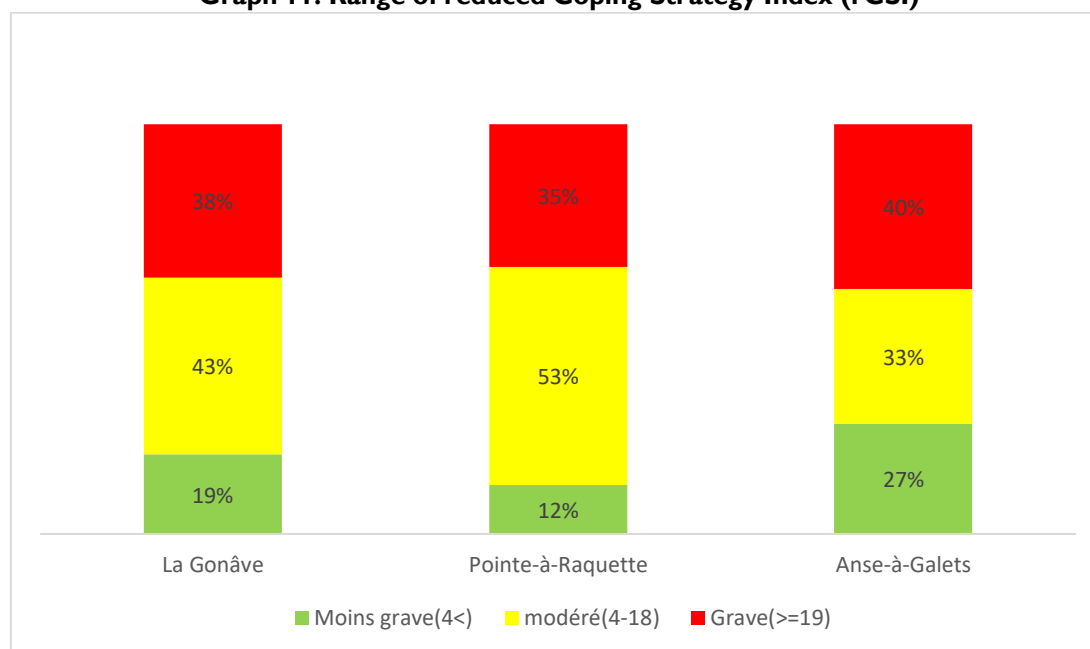
- Reduced Coping Strategies Index (rCSI)

In this baseline study, the average score of the reduced coping strategy index is around 17.24 and 17.57 respectively for beneficiaries in Anse-à-Galets and Pointe-à-Raquettes (**Table 13**). In fact, we know that the higher the index score, the more food insecure the household in question is, meaning that it uses negative strategies more frequently and/or that the strategies used are more severe compared to a household with a lower score. The maximum score for the index is theoretically 56. The average found for the index is in the very low rCSI modal class (4-18), i.e. 43% of households at the national level, from the last National Emergency Survey on Food and Nutrition Security (ENUSAN, MARNDR/CNSA, 2019). It is evident that the upper limit of the confidence interval for the estimate of the calculated average does not reach 19. The (4-18) range for this last study is also 43% in La Gonâve according to the data collected in this baseline (**Graph 11**). The most repeated strategies are: eating less valued/expensive foods and limiting portion sizes at meals.

Table 13: Reduced Coping Strategies Index (rCSI)

Reduced Coping Strategies Index (rCSI)	Anse-à-Galets	Pointe-à-Raquettes	La Gonâve
Average	17.24	17.57	17.41
Standard deviation	15.05	12.17	13.68
Confidence interval of the average	[15.87; 18.61]	[16.46; 18.68]	[16.53; 18.29]
Median	16	16	16

Graph 11: Range of reduced Coping Strategy Index (rCSI)



Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

- Classification of vulnerable households in IPC phases

In order to classify vulnerable households in the corresponding IPC phase(s), one must use the convergence table in version 3.0 of the IPC manual⁵, considering the following indicators whose threshold values are established in this study:

- Percentage of targeted households with an acceptable Food Consumption Score (FCS)
- Prevalence of households with little or no hunger (Household Hunger Scale – HHS)
- Proportion of households consuming at least 6 food groups in the previous month (HDDS)
- Reduced Coping Strategies Index (rCSI)

⁵ Technical Manual version 3.0, Evidence and Standards for Better Food Security & Nutrition Decisions, April 2019, pages 35-36

These indicators take into account the food consumption aspect in the IPC phases. The convergence table is presented below, taking into account the above-mentioned indicators:

Table 14: Expected values for the indicators under consideration

		Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	PHASE
Food Consumption	FCS ⁶	Acceptable FCS		Limit FCS	Low FCS		To be determined
	HDDES	High HDDES (5-12)		Average HDDES (3-4)	Low HDDES (0-2)		To be determined
	rCSI	Less severe (0-3)	Moderate (4-18)	Severe (>=19)			To be determined
	HHS	No Hunger (0)	Little Hunger (1)	Moderate Hunger (2-3)	Severe Hunger (4)	Severe Hunger (5-6)	To be determined
% Ranges of Current Final Population		To be determined	To be determined	To be determined	To be determined	To be determined	To be determined
% of Current Final Population		To be determined	To be determined	To be determined	To be determined	To be determined	To be determined

- IPC classification for Anse-à-Galets

To establish the IPC for Anse-à-Galets, using the convergence table with the suggested indicators, the values for each class of indicator are placed in the corresponding phases (**Table 15**). The accumulation of these figures from right to left (from phase 5 to phase 1) for each of the indicators helped establish which IPC was selected by applying the 20% rule. For the FCS, for example, when we add 11% + 33%, we realize we reach 20% in phase 3. For the HDDES, 3% + 14%=17%, we realize we reach 20% in phase 2.

Then, in the “Percentage Range of Current Population” row, the range in which the values found for each of the indicators in each of the phases are found is established. The minimum and maximum values are then determined.

Then, finally, the percentage of the population for each phase is established by consensus given the ranges found. The point in which we reach 20% is selected as the IPC phase for the commune or area under analysis. Thus, for Anse-à-Galets, in the last row of the table “% of current final population”, we have 20% in 15-50 range in phase 3, from which we establish by convergence, based on the 4 food consumption indicators listed here, that beneficiaries are in the IPC3 phase. This is therefore a crisis phase where households have gaps in food consumption.

⁶ **FCS:** Food Consumption Score
HDDES: Household Dietary Diversity Score
rCSI: Reduced Coping Strategy Index
HHS: Household Hunger Scale

Table 15: IPC Classification for Anse-à-Galets

		Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	PHASE
Food Consumption	FCS	56%		33%	11%		IPC3
	HDSS	83%		14%	3%		IPC2
	rCSI	27%	33%	40%			IPC3
	HHS	10%	13%	52%	10%	15%	IPC4
% Ranges of Current Final Population		10-40	10-40	15-50	5-15	0-15	IPC3
% of Current Final Population		30%	40%	20%	10%	0%	IPC3

- IPC Classification for Pointe-à-Raquettes

The same considerations explained above led to the conclusion that the Pointe-à-Raquettes beneficiaries are in the IPC3 phase as well (**Table 16**). One should note that Pointe-à-Raquettes, based on the indicators considered, is in a more severe condition than the commune of Anse-à-Galets, even though the convergence analysis places it in phase 3.

This result related to the classification of the IPC is also impacted by the emergency interventions realized in December 2019 in La Gonâve with the details in section 4 (Constraints and limitations of the study).

Then overall, the island of La Gonâve is obviously classified as an IPC3 by this convergence analysis (**Table 17**).

Table 16: IPC Classification for Pointe-à-Raquettes

		Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	PHASE
Food Consumption	FCS	40%		38%	22%		IPC4
	HDSS	65%		26%	9%		IPC3
	rCSI	12%	53%	35%			IPC3
	HHS	4%	4%	75%	11%	6%	IPC3
% Ranges of Current Final Population		0-30	5-50	10-75	5-10	5-10	IPC3
% of Current Final Population		30%	40%	20%	5%	5%	IPC3

Table 17: IPC Classification for La Gonâve (both communes considered together)

		Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	PHASE
Food Consumption	FCS	48%		35%	16%		IPC3
	HDSS	74%		20%	6%		IPC3
	rCSI	19%	43%	38%			IPC3
	HHS	7%	9%	63%	11%	10%	IPC4
% Ranges of Current Final Population		5-35	10-45	15-65	5-15	5-15	IPC3
% of Current Final Population		30%	40%	20%	5%	5%	IPC3

- Percentage of households where adults and children have at least 2 meals a day (adults and children), according to their age

90% of children between 6 and 23 months of age have at least 2 meals a day in the commune of Anse-à-Galets compared to 79% of them in the commune of Pointe-à-Raquettes and 85% on the island of La Gonâve. For children between 24 and 59 months of age, 88% have at least 2 meals a day in the commune of Anse-à-Galets against 73% of them in Pointe-à-Raquettes, i.e. 81% of the children on the island of La Gonâve. 60% of children between 5 and 18 years old, in Anse-à-Galets, have at least 2 meals a day, 50% in the commune of Pointe-à-Raquettes, i.e. 55% on the island of La Gonâve. Adults (19 to 59 years old) who have had at least 2 meals a day represent 50% for Anse-à-Galets, 43% for Pointe-à-Raquettes and 46% for the island of La Gonâve. In general, for both children and adults, 72% in Anse-à-Galets have at least 2 meals a day, compared to 62% in Pointe-à-Raquettes, which is 67% on the island of La Gonâve (**Table 18**).

Table 18: Percentage of households where adults and children have at least 2 meals a day (adults and children), according to their age

Number of meals a day by age group	Anse-à-Galets			Pointe-à-Raquettes			Island of La Gonâve		
	Num	Den	%	Num	Den	%	Num	Den	%
Percentage of children aged (6-23 months) who had at least 2 meals a day	418	465	90%	367	462	79%	785	927	85%
Percentage of children aged (24-59 months) who had at least 2 meals a day	411	465	88%	338	462	73%	749	927	81%
Percentage of children aged (5-18) who had at least 2 meals a day	278	465	60%	229	462	50%	507	927	55%
Percentage of adults aged (19-59) who had at least 2 meals a day	232	465	50%	198	462	43%	430	927	46%
Percentage of adults aged (60 years and over) who had at least 2 meals a day	342	465	74%	305	462	66%	647	927	70%
Percentage of children and adults who had at least 2 meals a day	336	465	72%	287	462	62%	624	927	67%

- Percentage of food use by type (household consumption, sale, exchange, feeding of livestock)

Most respondents to the survey in the commune of Anse-à-Galets, i.e. 92%, say their agricultural production is used for household consumption, 34% of them say they sell their production to increase household income, and 7% of these households use this production to feed their livestock. In Pointe-à-Raquettes, agricultural production is used for household consumption (98%) and sale (44%) and only 3 households report exchanging their production for other products. In general, household agricultural production on the island of La Gonâve is used for household consumption (95%) and sale (39%).

Table 19: Percentage of food use by type for project beneficiaries on the island of La Gonâve and the communes

Indicator: Production use	Anse-à-Galets			Pointe-à-Raquettes			Island of La Gonâve		
	Num	Den	%	Num	Den	%	Num	Den	%
Household consumption	427	465	92%	454	462	98%	881	927	95%
Sale	159	465	34%	201	462	44%	360	927	39%
Exchange	2	465	0%	3	462	1%	5	927	1%
Feeding of livestock	34	465	7%	2	462	0%	36	927	4%

5.4 Information Related to Shock Management and the Agricultural Situation

Only 16% of households in the commune of Anse-à-Galets received information on managing economic shocks, 20% of them in Pointe-à-Raquettes and 18% of all households on the island of La Gonâve. 92% of those said they used these messages to cope with shocks.

For the island of La Gonâve in general, drought remains their major issue, because of the famine, according to 90% of the island's households, followed by plant diseases (23%) and hurricane seasons (17%).

Table 20: Percentage of households reporting having received information to cope with economic shocks for the island of La Gonâve and its communes

Economic Shock	Anse-à-Galets			Pointe-à-Raquettes			Island of La Gonâve		
	Num	Den	%	Num	Den	%	Num	Den	%
Percentage of households reporting having received information to manage economic shocks	73	465	16%	91	462	20%	164	927	18%
Percentage of households having used information for shock management	69	73	95%	82	91	90%	151	164	92%

Beneficiaries are mainly receiving this kind of information from Civil protection/Local Authority, community and church leaders.

Table 21: Major shocks leading to hunger issues in percentage

Indicator: Major shocks leading to hunger issues in percentage	Anse-à-Galets			Pointe-à-Raquettes			Island of La Gonâve		
	Num	Den	%	Num	Den	%	Num	Den	%
Drought	404	465	87%	433	462	94%	837	927	90%
Erosion	22	465	5%	10	462	2%	32	927	3%
Plant diseases	122	465	26%	92	462	20%	214	927	23%
Hurricanes	55	465	12%	105	462	23%	160	927	17%
Landslides	0	465	0%	2	462	0%	2	927	0%
Other issues	168	465	36%	107	462	23%	275	927	30%

5.5 Access to Drinking Water for Beneficiary Households

Water remains a key element in food security because it is associated with the four pillars (Availability, Accessibility, Use, Stability). Its role is even more important when used because its quality can impact food quality and household health status. With no access to quality water for consumption, the nutritional status of household members can significantly decline. To emphasize this point, the different sources of household drinking water were considered. The study reveals that households use several sources for drinking water supply, and the situation differs from one commune to another (**Table 22**).

For the commune of Pointe-à-Raquettes, non-protected wells are the primary source of drinking water for households, with a percentage of 29%. Other sources such as the DINEPA network, private kiosks, uncollected springs, public pumps and rainwater contribute, to an acceptable extent (more than 10% each), to household water supply. Considering the percentage of households getting their water from non-protected wells and uncollected springs (39% of households), there is a risk over a large proportion of households with regard to the quality of drinking water and the decline of the nutritional status of household members. In the commune of Anse-à-Galets, the DINEPA network and public pumps are the two main sources of drinking water, with 37% and 32% of households getting water from these respectively. A significant number of households (11%) use the services of private vendors (private kiosks) for their drinking water supply. It should also be noted that, for this area, about 13% of households interviewed report using water from uncollected springs and non-protected wells for direct consumption. This still represents a significant proportion of households that are being exposed to potential contamination sources likely to affect their nutritional status.

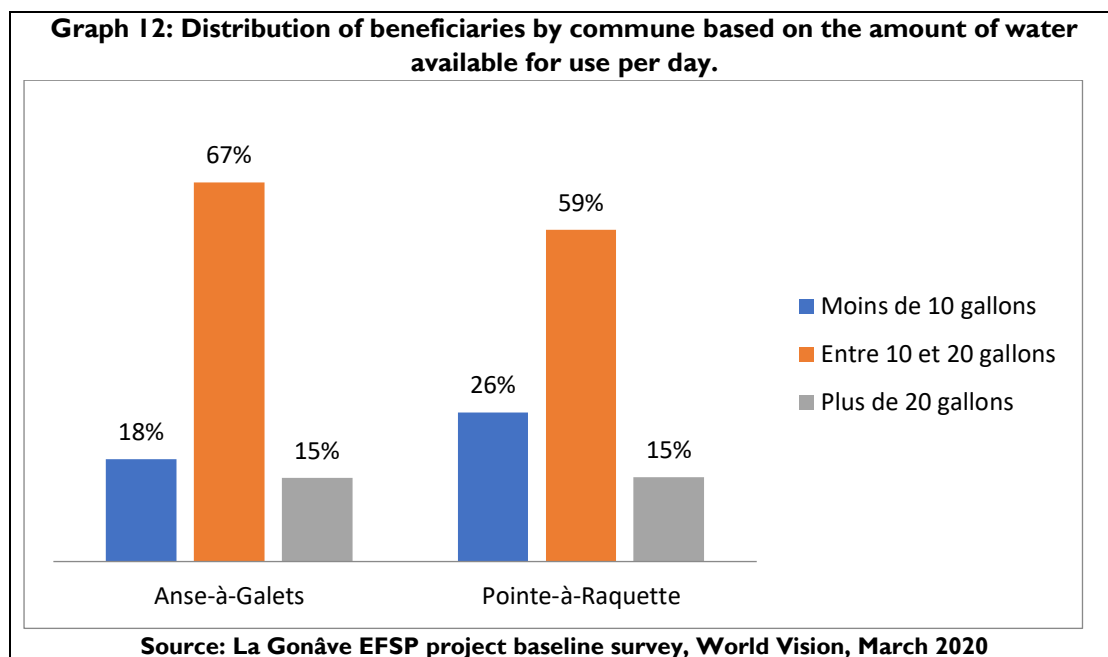
Although they actually use the same sources of drinking water supply in both communes, there is a difference in the proportion of household use. In Anse-à-Galets, 80% of households use three sources (DINEPA, public pumps, private vendors) and 88% of households in Pointe-à-Raquettes use six different sources (non-protected wells, DINEPA, public pumps, rainwater, private kiosks, uncollected springs).

Table 22: Distribution of beneficiaries by commune based on their main source of drinking water supply

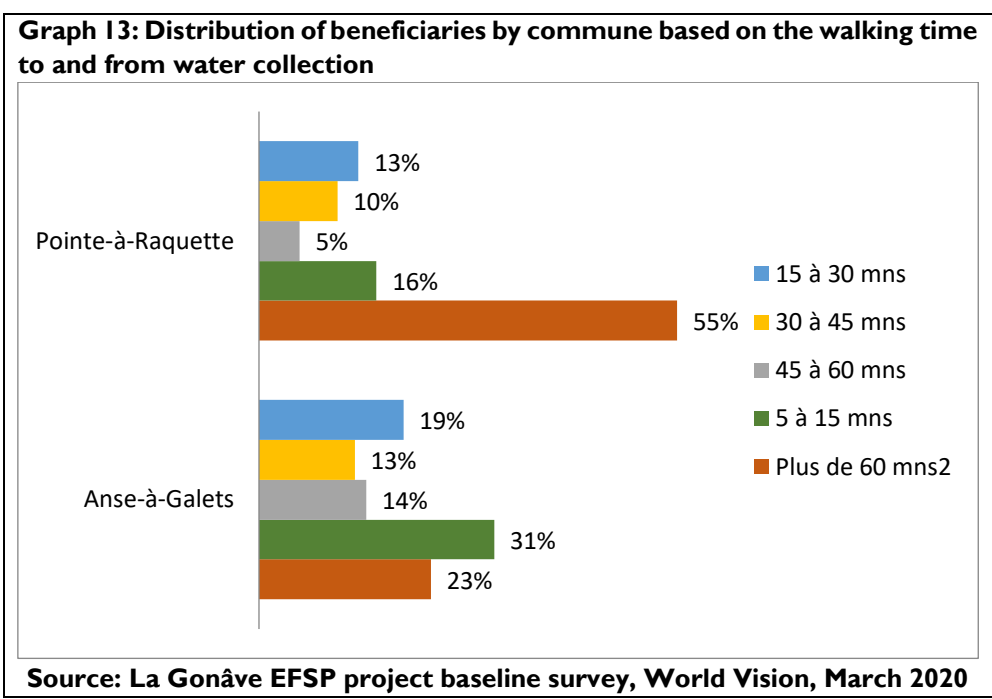
Main source of drinking water supply	Communes		
	Anse-à-Galets	Pointe-à-Raquettes	Grand Total
DINEPA public fountain/kiosk	37%	15%	26%
Public well/pump	32%	13%	22%
Non-protected wells	4%	29%	16%
Private kiosk	11%	11%	11%
Uncollected spring	9%	10%	9%
Rainwater	3%	10%	7%
Private connection	1%	5%	3%
Collected well	1%	5%	3%
Water-truck (untreated water)	0%	2%	1%
Water cistern	2%	1%	1%
Large cistern	0%	0%	0%
Grand Total	100%	100%	100%

Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

With regard to the amount of water used daily by households to cover all their domestic needs, most interviewees report they have between 10 and 20 gallons of water available. This percentage is higher in the commune of Anse-à-Galets (67% of households) than in the commune of Pointe-à-Raquettes (58% of households). On the other hand, the same number of households in the communes (15%) state they have more than 20 gallons of water per day for all domestic uses. The number of households with less than 10 gallons of water differs in both communes. In this case, the commune of Pointe-à-Raquettes has the highest percentage (26% of households) compared to 18% for the commune of Anse-à-Galets. Overall, households residing in the commune of Anse-à-Galets have much more water for domestic use than those in Pointe-à-Raquettes (**Graph 12**). This situation could be explained, on the one hand, by the fact that, in Anse-à-Galets, more than a third of households are supplied by the DINEPA network and about another third are supplied by public pumps and, on the other hand, by the significant use, in Pointe-à-Raquettes, of unstable supply sources that register significant seasonal variations in terms of water flow or quantity (non-protected wells, rainwater, uncollected springs).

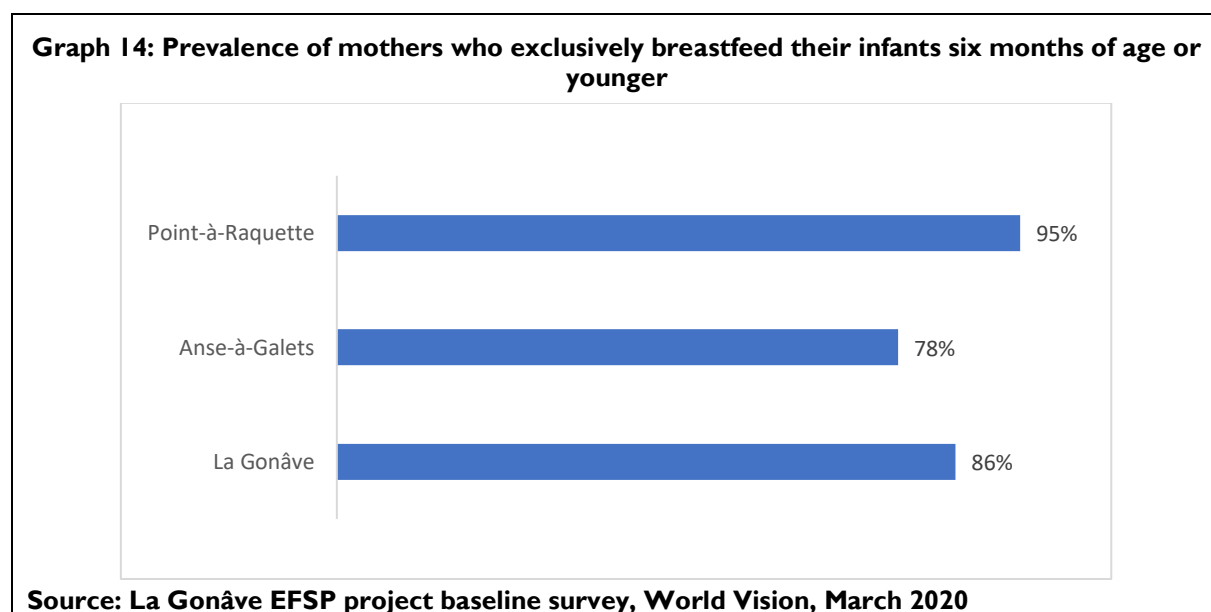


The study reveals that, in the commune of Pointe-à-Raquettes, households take much longer on average to collect water (**Graph 13**). In this part of the island of La Gonâve, 55% of households take more than an hour to collect water, compared to 23% in Anse-à-Galets. On the other hand, 31% of households in Anse-à-Galets take between 5 and 15 minutes to get water, compared to 16% in Pointe-à-Raquettes. It is therefore obvious that collection time is closely related to the various supply points used by households. In Anse-à-Galets, according to **Graph 13**, more than two thirds of households get their water from public fountains and pumps generally built not far from their homes, which contributes to the reduction in water collection time. In Pointe-à-Raquettes, the percentage of households using these sources is only 29%. The other households have to travel varying distances to collect water. This explains the difference in the time it takes for households to get water between both communes. Hence a limitation in water access in the places where supply time is the longest, which would have a negative impact on the food security situation of households.



5.6 Regarding Exclusive Breastfeeding

The prevalence of mothers practicing exclusive breastfeeding for infants six months of age or younger among project beneficiaries is 78% [75%;96%] in the commune of Anse-à-Galets and 95% [92%; 102%] in Pointe-à-Raquettes (**Graph 14**). The prevalence is therefore 86% [85%;97%] for the island of La Gonâve. The point is that, out of 80 breastfeeding mothers with infants aged 6 months or less, 69 of them exclusively used breast milk as food and liquid. However, this outcome is due to the involvement of several institutions supporting in raising people’s awareness. [A larger sample of breastfeeding mothers may be considered in the final study of this program with more detailed question level to ensure respondents' understanding of exclusive breastfeeding.](#)

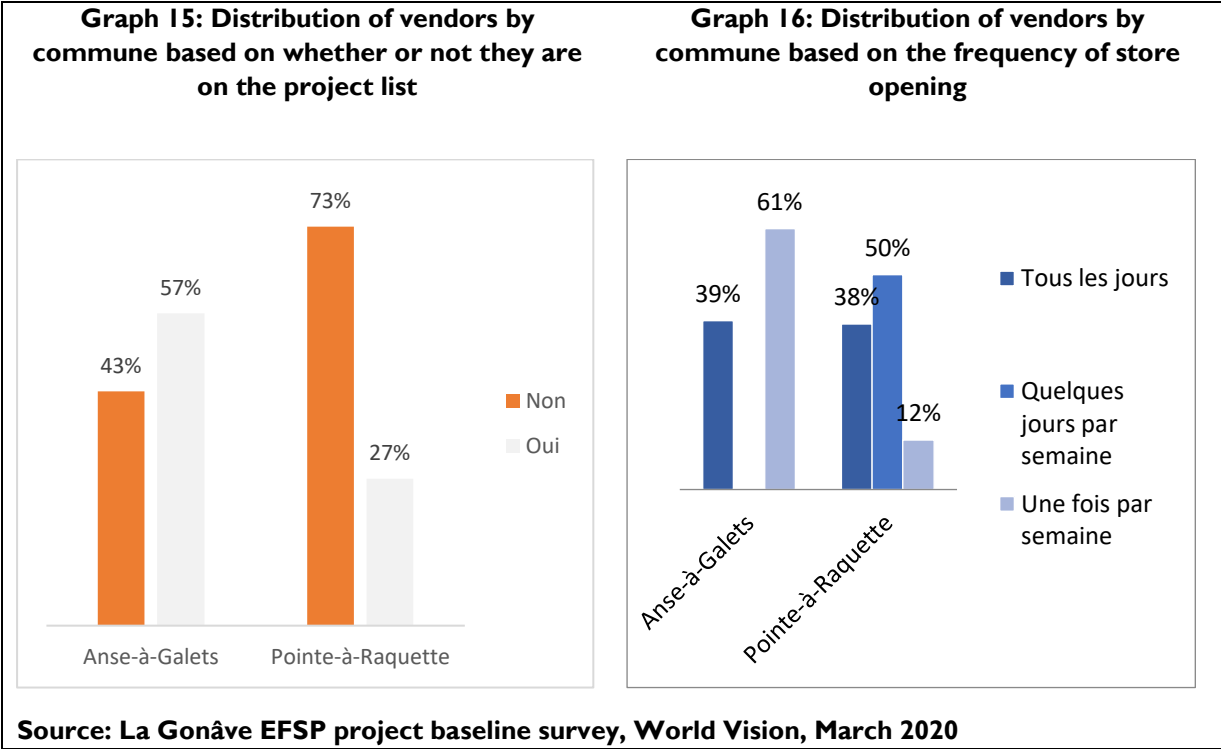


6. Local Market Assessment in the Intervention Areas

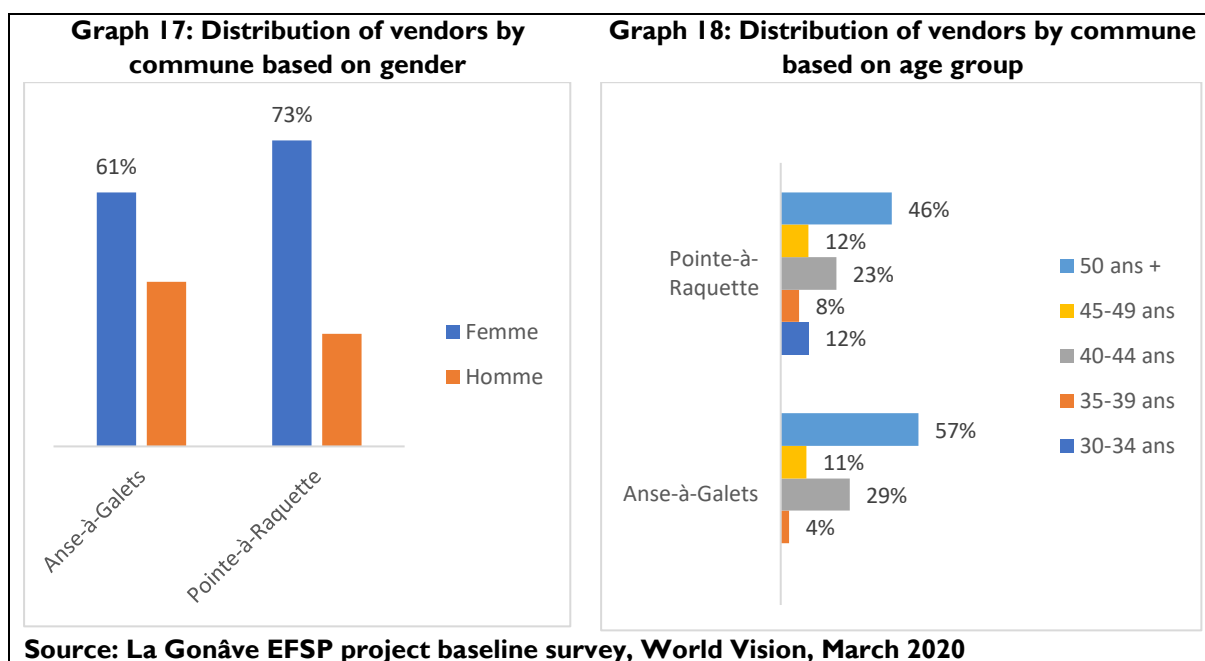
In this section, the analysis of findings from the local market assessment is presented, taking into account the general characteristics of vendors, market spaces and the current situation of food sales.

6.1 General Characteristics of Vendors

The Anse-à-Galets and Pointe-à-Raquettes markets are the main commercial centers serving the populations of the island of La Gonâve. Vendors (wholesalers and retailers) open their businesses almost every day of the week, nearly 40% (Graph 16), with busy peak days: Tuesdays, Wednesdays and Saturdays. Nearly 57% of vendors surveyed are part of the EFSP project list in Anse-à-Galets versus 27% in Pointe-à-Raquettes (Graph 15), which allows the study team to produce an overview of the retailers and wholesalers dynamics in the two communes and not just to provide data focused on the vendors attached to the project.



Nearly 67% of the vendors surveyed in the two communes are women (Graph 17) and over 50 years old (Graph 18), thus affirming the United Nations data for the Latin American and Caribbean region, estimating that more than 50% of the people mainly working in trade, sales, transportation, hotels, community services and agriculture are women (MINUSTAH, 2013).



Although precise figures on the number of food sellers and wholesalers operating in these major markets are not available, the estimates and observations of the assessment team can highlight that there is a high level of competition and a wide range of commercial players operating in the sale of food products as wholesalers or retailers. The volume of investment in food supply highlighted by the vendors is much greater (on average 4 times greater) in Anse-à-Galets than in Pointe-à-Raquettes for all products, with rice being the main purchased item with nearly 40% of transactions volume (**Table 23**).

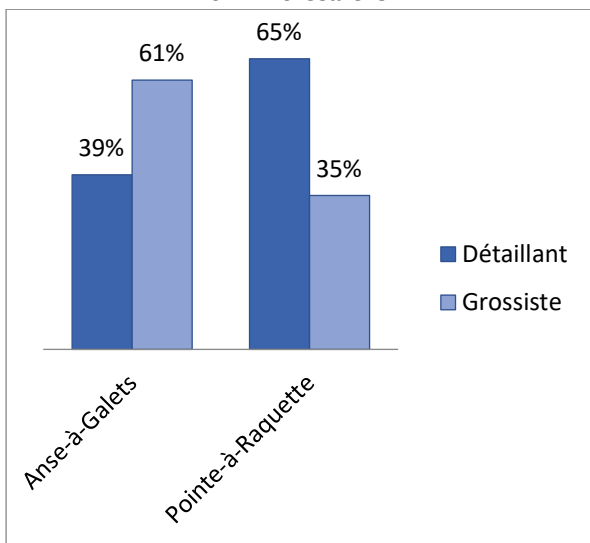
Table 23: Average supply cost by product and commune

Town	Rice	Corn	Flour	Wheat	Oil	Common beans
Anse-à-Galets	526.519 HTG	58.930 HTG	150.430 HTG	27.749 HTG	95.378 HTG	92.521 HTG
Pointe-à-Raquettes	63.411 HTG	15.540 HTG	68.987 HTG	16.059 HTG	28.331 HTG	41.021 HTG
Weighted average	303.541 HTG	38.038 HTG	111.217 HTG	22.120 HTG	63.096 HTG	67.725 HTG

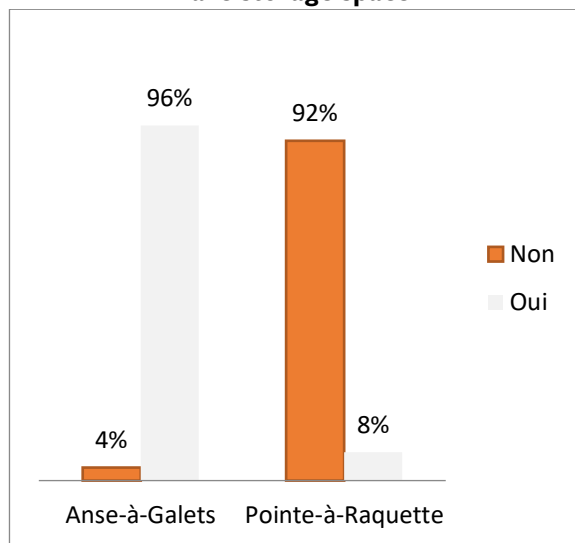
Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

These food products are supplied from the ports of Carriès, where boats travel between Anse-à-Galets and Carriès, and the products come directly from Arcahaie and/or Gonaïves mainly and are stocked by wholesalers in Anse-à-Galets (FAO, 2013). In fact, 61% (**Figure 19**) of the vendors surveyed in Anse-à-Galets are wholesalers and own warehouses, which is 96% (**Figure 20**), with limited space for retail sales. On the other hand, in Pointe-à-Raquettes, there mostly are retailers (65%) with almost no place to store their food products, while they have large spaces for resale, or 65% (**Figure 21**). Hence, in terms of commercial structures, the wholesalers of Anse-à-Galets mostly and gradually supply the island's retailers and merchants in general.

Graph 19: Distribution of vendors by commune based on whether they are retailers or wholesalers

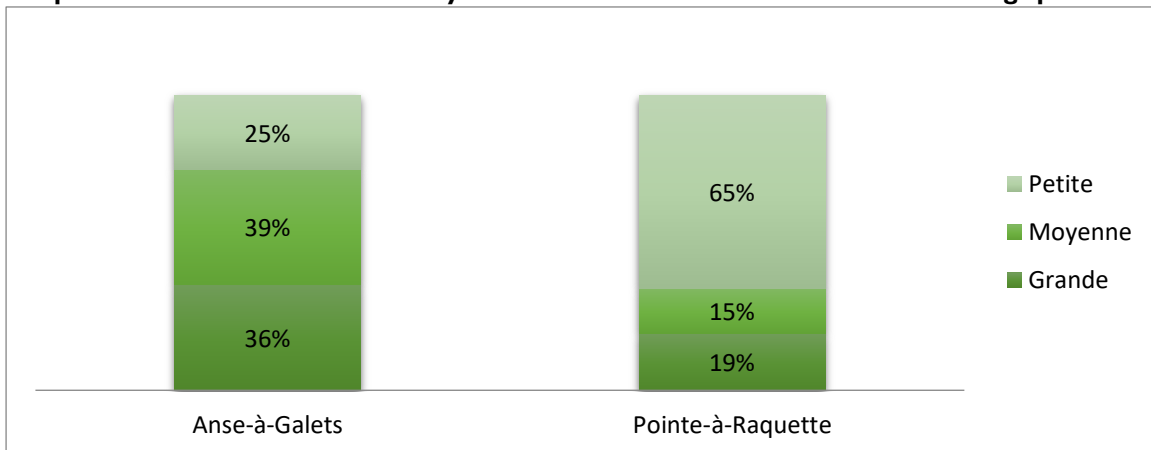


Graph 20: Distribution of vendors by commune based on whether or not they have storage space



Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

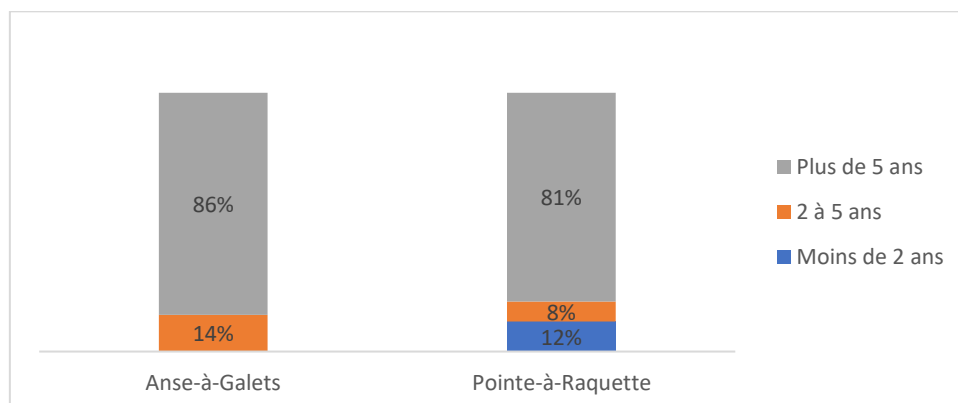
Graph 21: Distribution of vendors by commune based on the size of their vending space



Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

The vendors surveyed offer a wide range of food products to neighboring populations, the most important of which are part of the basic food basket established by the *Coordination Nationale de la Sécurité Alimentaire* (National Food Security Coordination) and are analyzed in this baseline study (oil, flour, corn, rice, wheat and common beans). In addition, nearly 80% (**Graph 22**) of them have been occupying their current vending space for more than 5 years, which ensures some stability and loyalty from the customers served and this can be subsequently considered as a guarantee for future partnerships. This new kind of rural micro-entrepreneurs (dominated by retail sales) permanently occupying a physical space and facilities over a few square meters, is the rural form of expansion of the tertiary sector in the Haitian economy, due mainly to the weakness of local agricultural production and the infrastructural challenges of accessing closest urban centers (in this case the outskirts of Arcahaie) (Paul et al, 2010).

Graph 22: Distribution of vendors by commune based on the number of years since they have been using their space



Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

Overall, almost all the vendors surveyed offer (local and/or imported) rice as the main product, followed by corn (85% of vendors), flour, wheat, cooking oil and common beans for 57% of respondents (**Table 24**). It should be noted that the most available food products on local markets are imported, which means produced outside of the island. In fact, agricultural production in La Gonâve revolves around food crops, sorghum, corn, fava beans and common beans. The drought that hit Haiti and lasted until the 2019 winter season caused losses of more than 12% to the country’s agricultural sector (up to 25% in the high-altitude areas) and thus generated peaks in the scarcity of local products (CNSA, EFSA 2019).

Table 24: Distribution of vendors by commune based on food products on sale

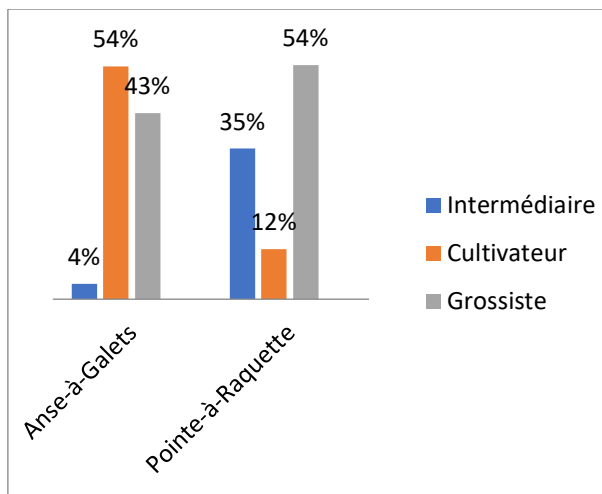
Town	Rice	Corn	Flour	Wheat	Oil	Common beans
Anse-à-Galets	100%	79%	75%	57%	82%	64%
Pointe-à-Raquettes	100%	92%	81%	46%	77%	50%
Global	100%	85%	78%	52%	80%	57%

Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

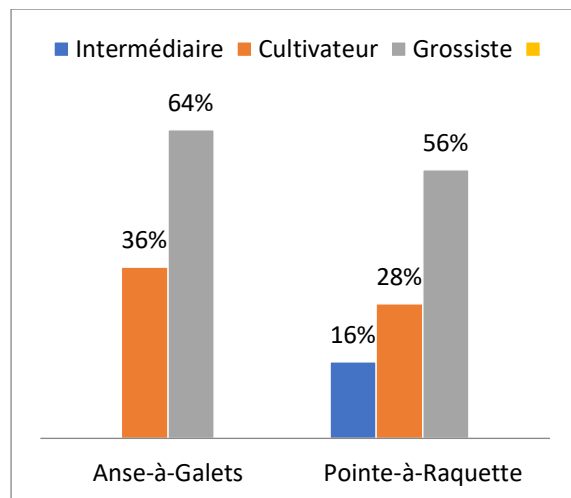
6.2 Overview of the Local Market in Program Intervention Areas

The local market in the intervention areas is here examined in terms of availability and capacity. Wholesalers in Anse-à-Galets are the main suppliers for retailers in general, and they themselves get rice, flour, wheat and cooking oil from “Madam Saras” (traveling traders) and other wholesalers in Arcahaie, in Carriès. More than 30% (**Graph 23**) of vendors reported having sourced corn from local growers and having had to resort to suppliers outside of the island to meet the excess demand because local production is insufficient to support the region’s corn demands given the average yields of 0.3 tons/ha, which is much lower than the national productivity of 1 to 2 tons/ha (Concern Worldwide, 2013).

Graph 23: Distribution of vendors by commune based on who supplies rice



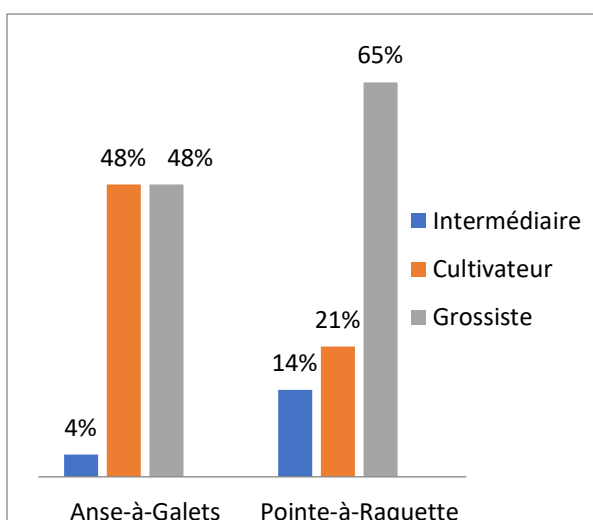
Graph 24: Distribution of vendors by commune based on who supplies corn



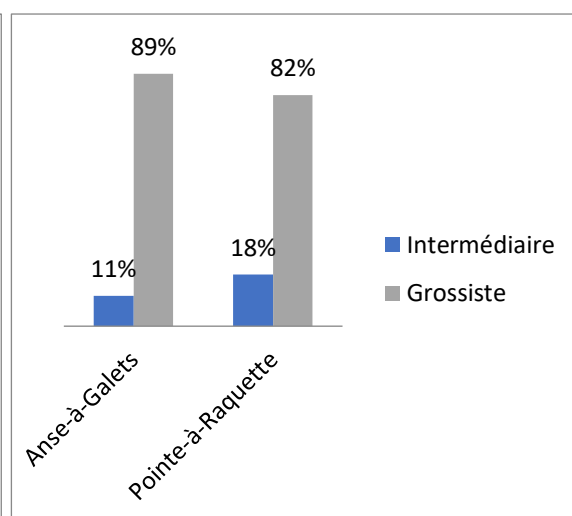
Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

Locally produced common beans are supplied equally from direct growers and wholesalers (nearly 48% (**Graph 25**) each in Anse-à-Galets), which is a significant indication that wholesalers are prepositioning themselves to purchase this product from growers for resale to retailers; and that a small portion of the market relies exclusively on the resale of common beans directly from growers to retailers. Further research is needed to understand the dynamics and relationships between these market players and whether this structure affects the prices of this product in the local market, especially during periods of shortages or hunger gaps.

Graph 25: Distribution of vendors by commune based on who supplies common beans



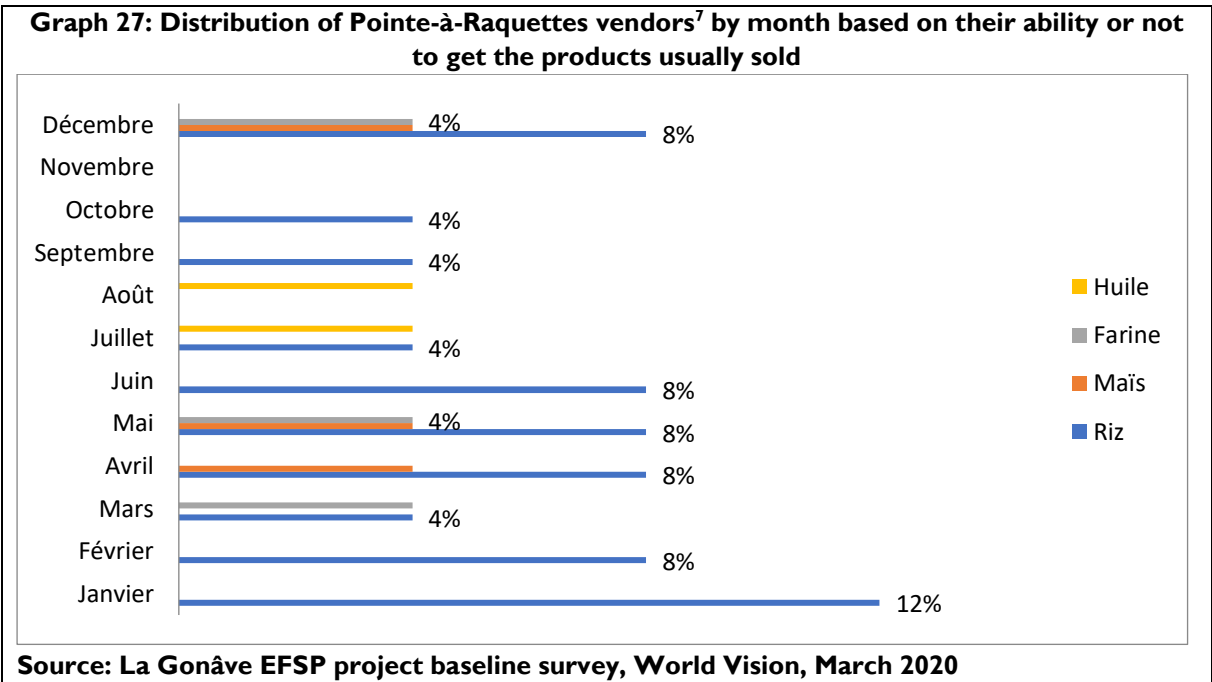
Graph 26: Distribution of vendors by commune based on who supplies flour



Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

For the Anse-à-Galets and Pointe-à-Raquettes markets, intermediaries play a secondary role as suppliers of food products because they rank last in the supply options (less than 20% on average) for wholesalers and retailers. This can be explained by the fact that the food products mentioned above are mostly produced outside the island and/or imported, and intermediaries in the Haitian commercial context most often sell local agricultural products from producers to wholesalers and retailers and, in addition to a purchasing relationship, they are mostly creditors of local producers (MARNDR, PNISA 2011).

In general, markets operate year-round, with wholesalers and retailers offering their products according to their availability, during the periods of the year and their supplying capacity. For local rice produced in Artibonite, for example, sellers (12%, **Graph 27**) sometimes have difficulty getting it, especially in April and May, which corresponds to the spring planting season, and December and January, which corresponds to the winter planting season (MARNDR, 2015). For imported rice, there are no availability challenges; it is mainly linked to the capacity of wholesalers to place orders and can be affected by socio-political unrest, given that most of the trade takes place from the port of Anse-à-Galets, although there are connections between Pointe-à-Raquettes and Petit-Goâve, Miragoâne).

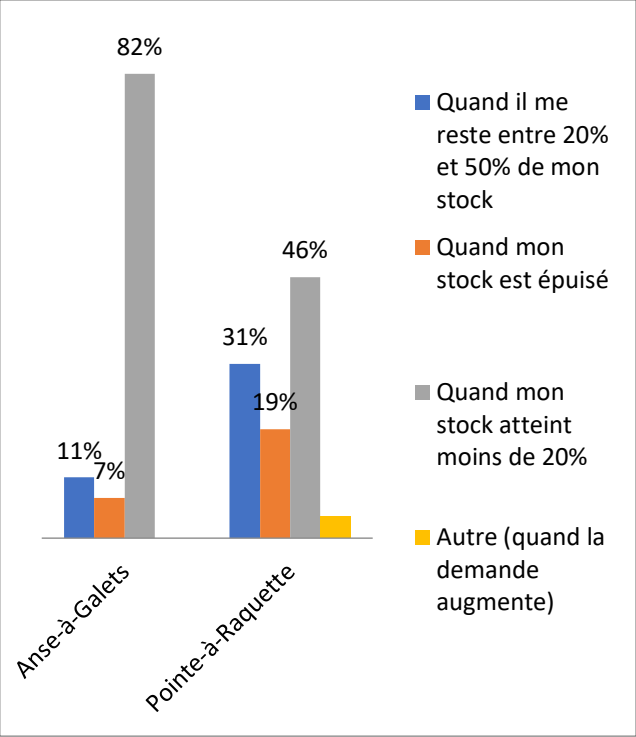


There is no waiting time between the moment sellers place an order with local wholesalers or external suppliers and the delivery of goods, almost 60% (**Graph 29**) mentioned immediate supply while 30% waited at least 3 days, and 10% up to a week before their goods are delivered to them. In Anse-à-Galets, being mostly wholesalers, vendors follow a defined supply trend: placing a new order with their suppliers when their current stock is at least 20% depleted (**Graph 28**). Whereas in Pointe-à-Raquettes, which is heavily based on retail sales, with zero storage capacity, the trend is rather to replenish mostly from Anse-à-Galets wholesalers as

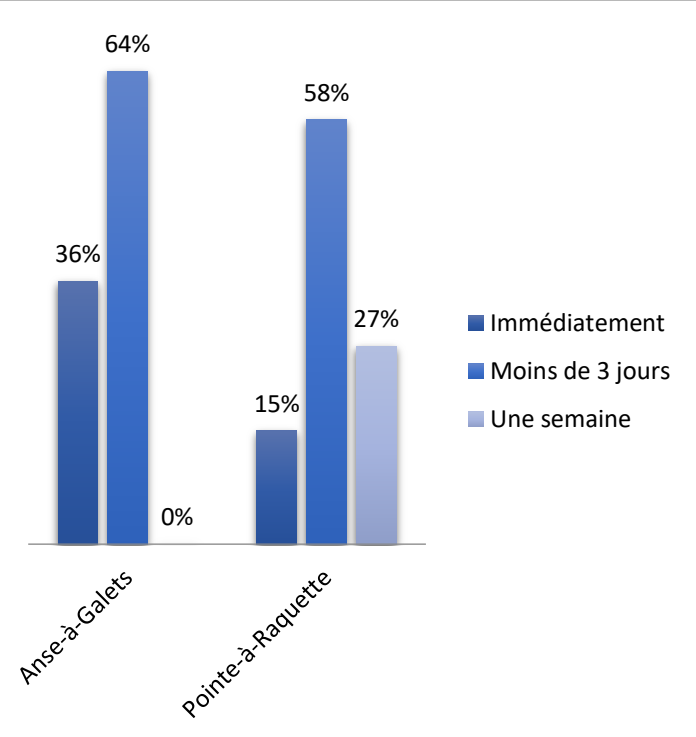
⁷ None of the vendors in Anse-à-Galets mentioned any supplying challenge at any time of the year.

products for resale are being sold. All the wholesalers consulted had 20 to 40% of products in stock and none reported unavailable items.

Graph 28: Distribution of vendors by commune based on the reason given for buying more food products from their supplier



Graph 29: Distribution of vendors by commune based on the goods' delivery time

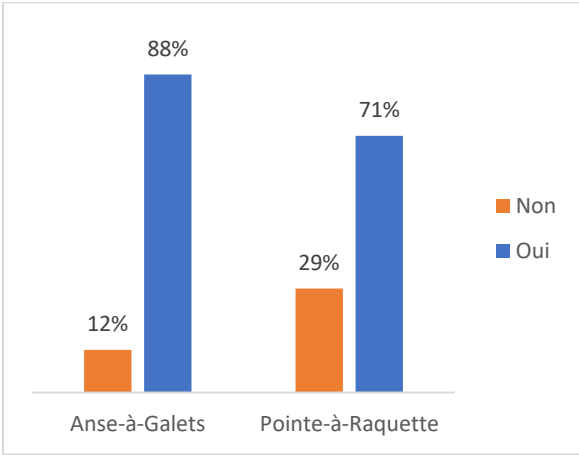


Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

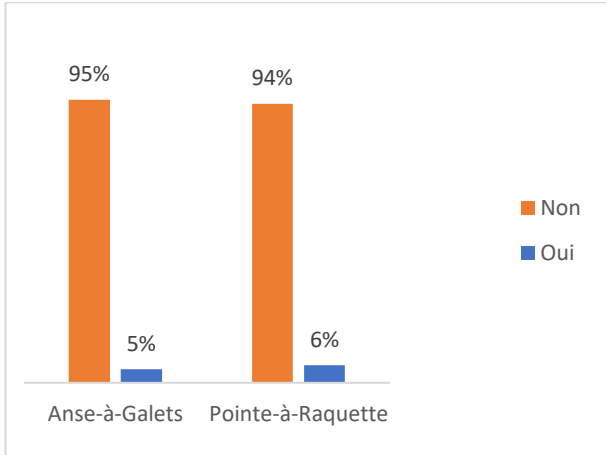
In the households

Ease of access to markets is an important factor in ensuring household food accessibility. Compared to the current situation in the country, especially on the island of La Gonâve, several factors can hinder households' access to the various types of markets where they usually source food. Regarding the security aspect on the roads leading to suppliers or to markets in their respective areas, most beneficiaries interviewed in both communes say they feel safe travelling these roads (**Graph 30**). However, the number of beneficiaries giving a positive answer to this question is higher for the commune of Anse-à-Galets (88%) than for Pointe-à-Raquettes (71%). It should therefore be noted that nearly 30% of respondents in Pointe-à-Raquettes giving a negative answer to this question, compared to only 12% in Anse-à-Galets. This indicates there are security issues in both areas and that, despite the support provided, the security situation or the feeling of insecurity could contribute to keeping a good portion of households food insecure. Visualizing the location of beneficiaries in relation to that of current project providers shows there is still some distance for many heads of household to travel, mainly in Pointe-à-Raquettes, to redeem a voucher (**Maps 1 and 2**).

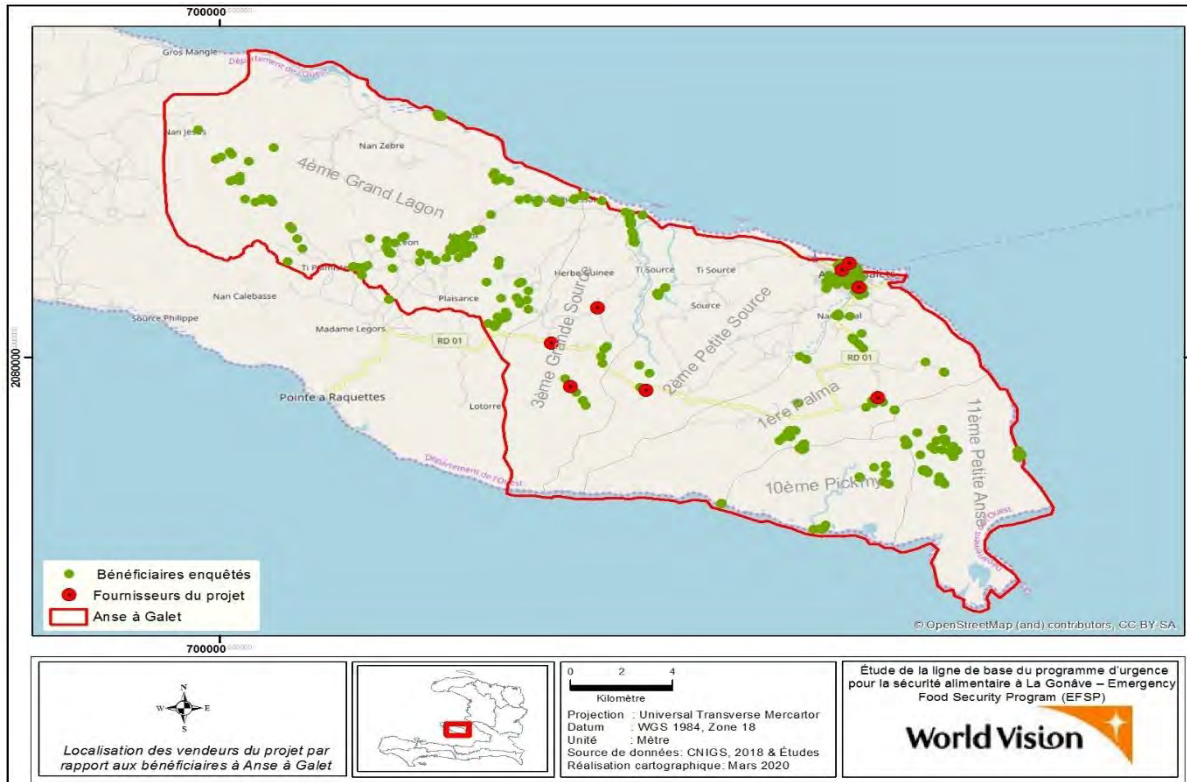
Graph 30: Distribution of beneficiaries by commune based on whether they feel safe or not on the road to the area's supplier or market



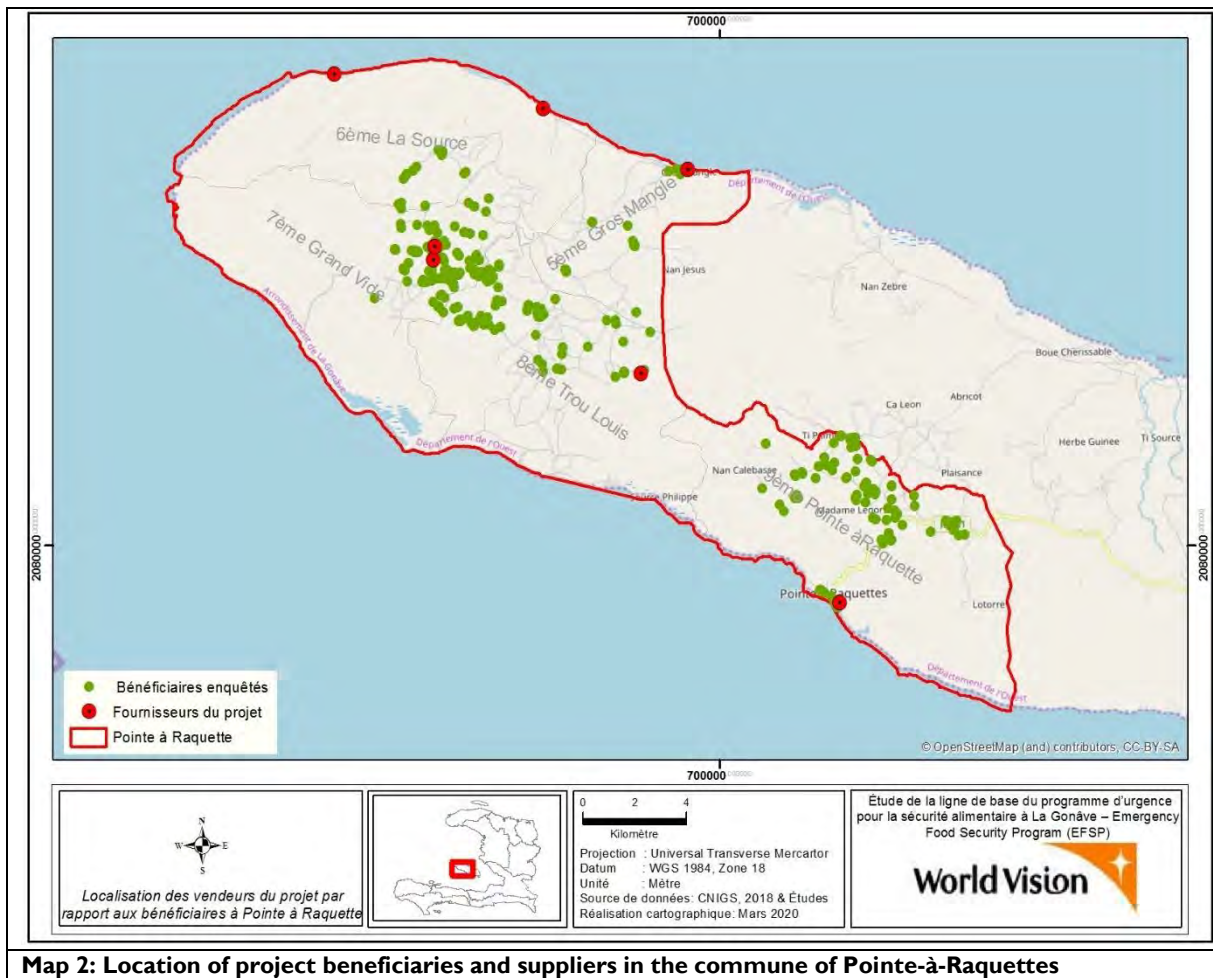
Graph 31: Distribution of beneficiaries by commune based on whether they usually have challenges reaching the market



Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

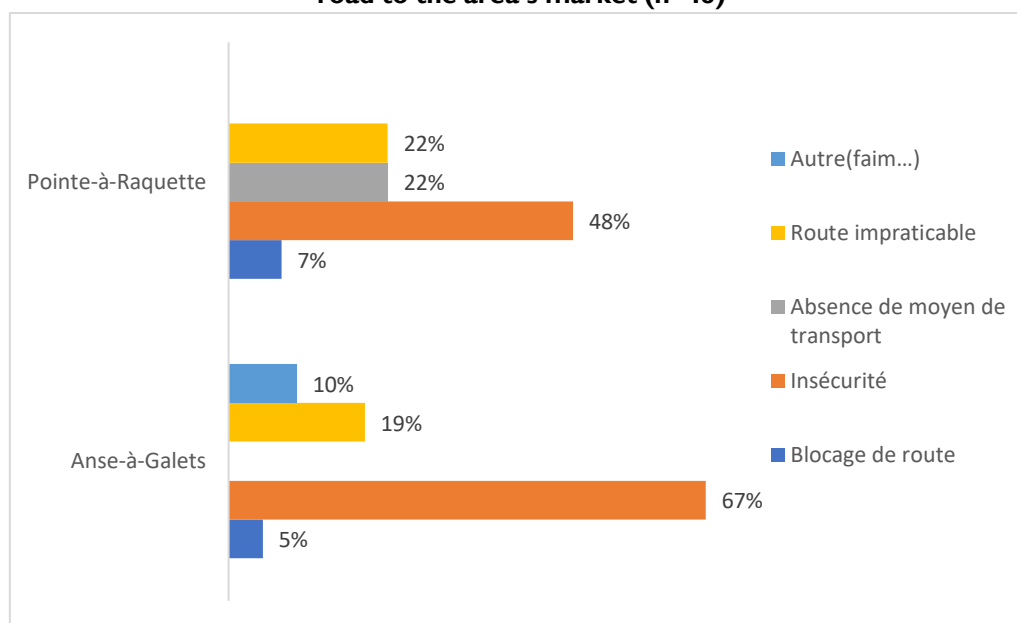


Map I: Location of project beneficiaries and suppliers in the commune of Anse-à-Galets



Most heads of household interviewed said they do not meet any challenge when having to go to markets to get food (**Graph 31**). The number of people who gave a positive answer is relatively the same for both communes (95% for Anse-à-Galets versus 94% for Pointe-à-Raquettes). Finally, about 5% of people selected in each of the two communes say they meet challenges on the roads to the market. These difficulties come from several factors, including the impassability of the roads, insecurity, barricades set up by local residents or protestors on the roads, lack of means of transport, etc. (Graph 31). In both communes, insecurity is the main cause of households' inability to access markets, with a stronger trend in the commune of Anse-à-Galets (**Graph 32**). Thus, a deterioration of security conditions in the area could be a shock affecting households' ability to meet their food needs. According to survey results, the lack of means of transportation and the poor condition of roads are the two other main factors preventing households from accessing markets.

Graph 32: Distribution of beneficiaries by commune based on the type of challenge met on the road to the area's market (n=48)



Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

6.3 Current Status of Product Sales on the Local Market

Vendors reported a general decline in demand during the food crisis period since 2019 (Table 25), pointing to the increase in product prices associated with a deterioration in the purchasing power of the local population as the main reason for such change in customer attendance in the market. In Anse-à-Galets, the number of customers dropped by half, and in Pointe-à-Raquettes, 1 out of 3 customers no longer go to the market. According to the latest food basket bulletin released by CNSA last February, the average nominal cost of the food basket (including the six products in the evaluation) is around 1,922 gourdes per person in January 2020 compared to 1,425 gourdes for the same month a year earlier, an increase of 34% in a year. Thus, customers whose income mainly comes from agricultural activity (40%, Table 8) no longer have the same ability to buy food because of the losses incurred and are forced to adopt short-term strategies to change their food consumption habits such as reducing the number of meals per day, eating less preferred and less expensive food and limiting portion sizes.

Table 25: Average number of customers a day before the hard times and during crises

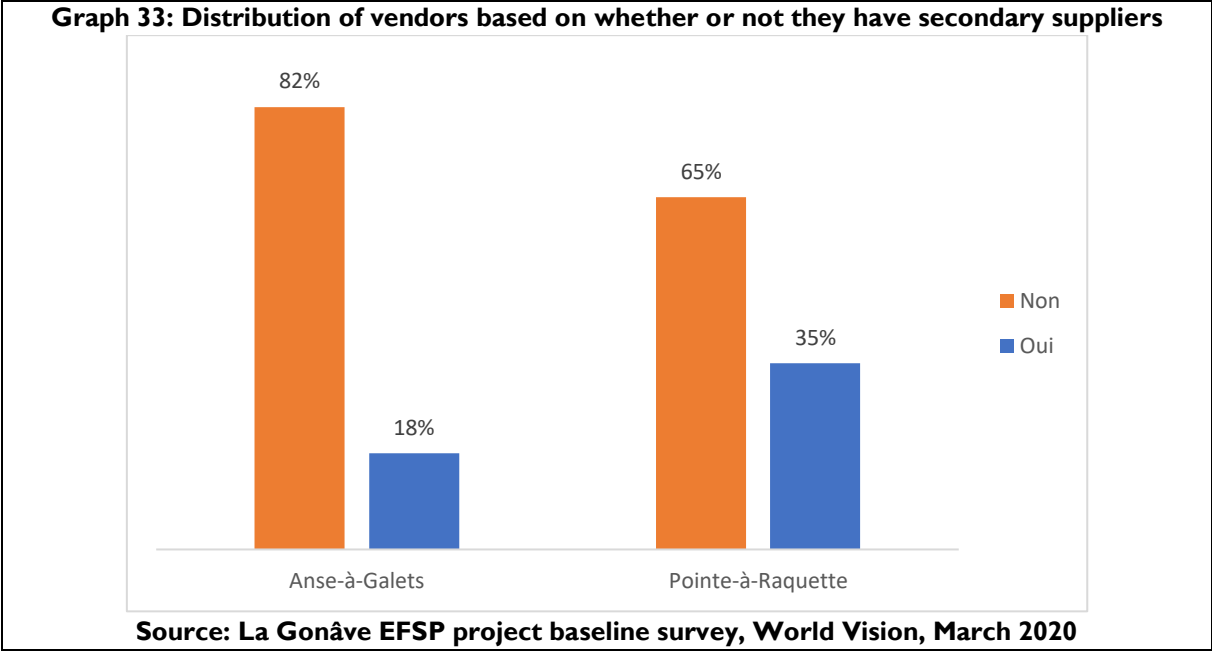
Town	Before the hard times	During a crisis
Anse-à-Galets	45	20
Pointe-à-Raquettes	32	23
Overall average	39	21

Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

- **Integration**

The markets appear to be well integrated, with vendors having a variety of suppliers and supply locations, especially Pointe-à-Raquettes retailers, who source locally in Anse-à-Galets. As for

wholesalers in Anse-à-Galets, if products are unavailable or inaccessible from a supplier or the main supply location, which is Carriès, in this case, between 18 and 35% (**Graph 33**) of vendors said they were able to adapt and buy from other but relatively difficult locations such as the TiTony market in the Port-au-Prince metropolitan area. It will take longer for these products to be available and dispensed over both markets and it will generate additional transportation and fluctuation costs.

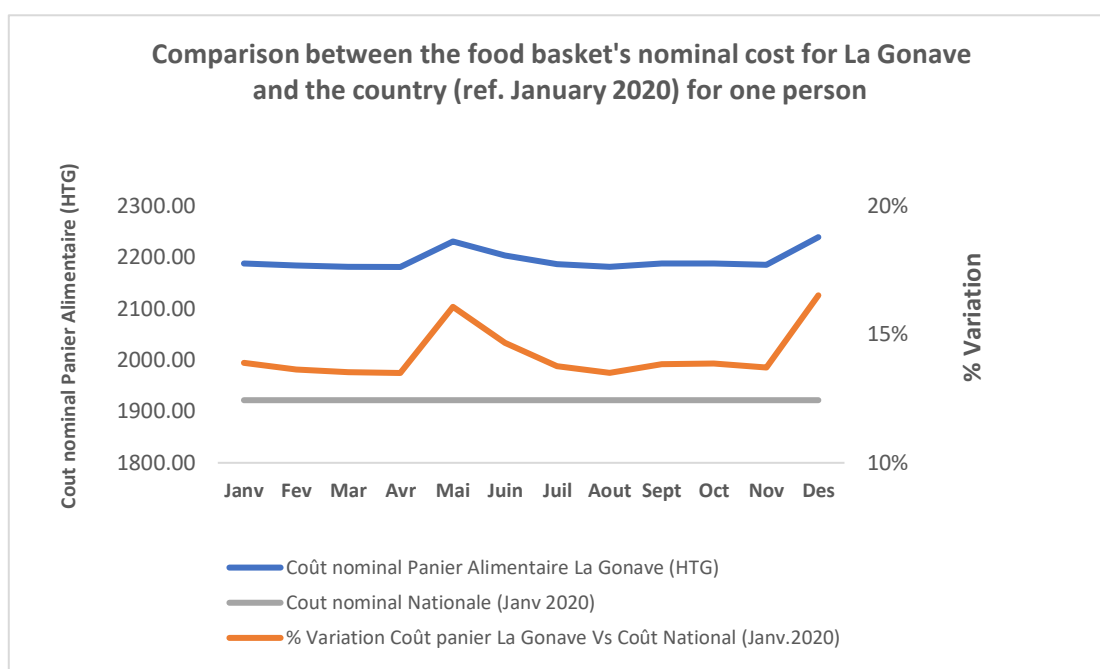


- **Prices**

The La Gonâve’s markets are commercial centers mostly supplied by other markets from neighboring regions such as Archaie/Carriès, “Madam Sara” of l’Artibonite and even urban centers in Port-au-Prince such as the TiTony market, which adds additional costs to the average price of products on the island. In general, in La Gonâve, the nominal cost of the food basket (including the six products analyzed), exceeds by 14.5% the national reference average (1,922 gourdes in January 2020, CNSA) recorded in the country’s main markets (Port-de-Paix, Fond des Nègres, Jérémie, Gonaïves, Jacmel, Croix-des-Bossales and Les Cayes), i.e. 2,200 gourdes. In other words, the population of La Gonâve spends more money to get the same amount of food products on the market compared to other commercial centers in the country. The major variation peaks (over 16%) mainly occur in the months of May, June, and December, corresponding respectively to the hunger gap and the end-of-year festivities (**Graph 34**).

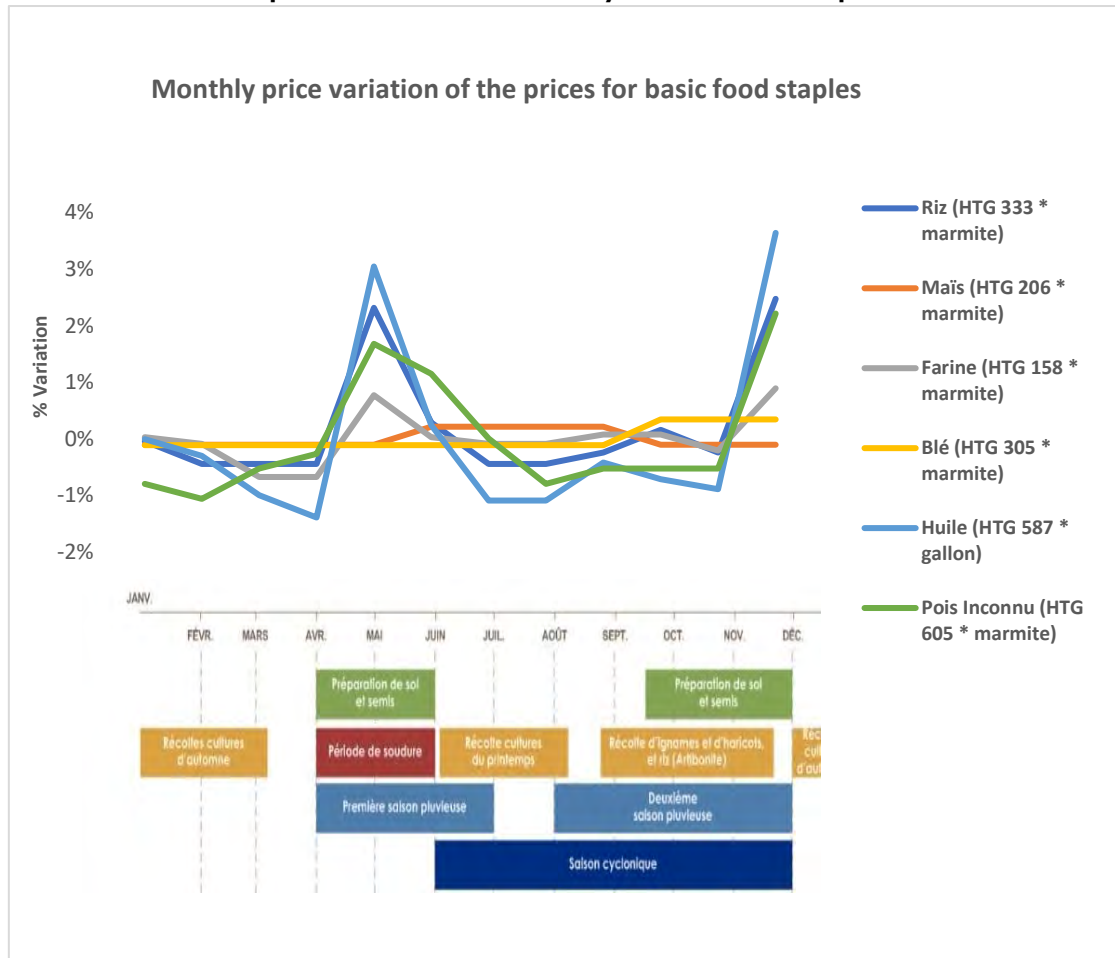
Graph 34: Trend in the food basket's minimum cost

Source: La Gonâve EFSP project baseline survey, World Vision, March 2020



In general, in La Gonâve, the monthly price variations for the basic food basket products such as cooking oil, flour, rice and beans follow the trend of the agricultural and cultural cycle, with a 4% increase during the hunger gap and shortages of April, May and June and the end-of-year festivities in December. For example, for local rice, grown in Artibonite in a monsoon climate (6 months of rain and 6 months of drought), the production cycle begins in April/May and ends in September/October, thus affecting the supply and demand balance. The monthly prices of corn and wheat are subject to little variation during the year and are not subject to the growing seasons, since the excess demand for corn is mainly met by external suppliers and wheat, which is not grown on the island, is supplied 100% from outside (**Graph 35**).

Graph 35: Trend in the monthly variation of food prices



Source: La Gonâve EFSP project baseline survey, World Vision, March 2020

- **Constraints**

Although vendors consistently reported not having difficulty increasing their inventory to meet a growing demand for a potential voucher program, they reported the following general constraints faced in their businesses in recent months:

- The decrease of the local population’s purchasing power
- The depreciation of the local currency had a general impact on purchase prices for vendors and on selling prices for customers.
- Socio-political unrest and “country lockdown” episodes.
- Insecurity limiting consumer access to different markets.

The data collected show that markets are operating normally, the food baskets products the project intends to facilitate to beneficiaries via vouchers are available, wholesalers have 20 to 40% reserve inventories to buffer any local demand increase of less than 50%. However, local demand has declined in recent months in both communes due to the low purchasing power of the island’s populations, who rely on agriculture as their main economic activity (40%) and who lost their livelihood during the drought period from 2018 all the way to 2019. This

situation, combined with major political unrest and the depreciation of the local currency, exacerbated food and nutritional security data and populations are now in IPC 3 with a strong possibility, if nothing is done in the coming months, to switch to emergency phase 4. Moreover, more than 12% of beneficiaries are unemployed (**Table 8**) and 42% only have one source of income, hence the need for the program, in parallel with food voucher distributions, to promote alternative income-generating activities to diversify family income sources and their purchasing power.

7. Conclusion and Recommendations

The main purpose of this baseline study was to establish benchmarks for the performance indicators of the emergency food security program in La Gonâve and to measure the performance and effects of its interventions on the communities. In other words, the study sought to outline the food security situation of households and analyze the operation of markets in the area. 927 surveys were conducted randomly among project beneficiaries and 54 vendors, including 23 vendors who already had a contract with WVI-H, were interviewed in the two intervention communes of Anse-à-Galets and Pointe-à-Raquettes.

Overall, the findings show that, through surveyed beneficiary households, intervention communes include many young people under 25 years of age. There are very few young people of both sexes, between 25 and 39, remaining in the communes. Therefore, this is a good fringe of the active population that has left the program's intervention areas. In addition, less than 20% of survey respondents have incomplete high school education, but the vast majority of heads of beneficiary households have a lower level of education. This means, therefore, a critical human capital issue inviting the project team to adapt the communication tools and training in visual support to ensure understanding of the awareness information.

The data collected revealed many cases of single-parent families. Therefore, distribution centers must take into account the availability (day and time) of these types of beneficiary families. The results confirm, from statistics on housing quality and food consumption indicators, that there is more poverty in Pointe-à-Raquettes than in Anse-à-Galets even though both are classified as IPC3 in the classification analysis conducted by convergence using the 4 food security-related indicators (Food Consumption Score, Food Diversity Score, Domestic Hunger Index and Coping Strategies Index).

There are no specific recommendations related to this baseline study other than those already specified above. Therefore, we need to strengthen certain actions already planned in the project aimed at supporting households to develop income-generating activities by considering various promising fields. At this level, diversifying income sources and introducing internal financing tools for communities linked to solidarity economy such as savings and credit associations can really help households face the economic shocks that keep affecting the entire planet today.

Compared to the findings of the local market's rapid assessment, there are a few recommendations:

- In La Gonâve, voucher-based food assistance is viable to meet the immediate needs of food insecure people. The range of priority items in the basic food basket are all available and vendors have the capacity to meet an additional demand of less than 50% if current conditions do not change in the coming months.
- Intentionally provide food assistance to cover the needs of food insecure people during food shortages and hunger gaps (March, April and May). During these periods, the

project team must anticipate delivery delays as stocks will be heavily dependent on external supplies in outlying areas and even in markets in Port-au-Prince.

- Closely work with vendors and wholesalers to ensure that they are well informed in advance of the voucher distribution schedule in order to give them time to prepare stocks and access products.
- Use the estimated cost proposals of the national food basket provided by CNSA as a basis for the value of vouchers by adapting product prices to the specifics of the situation in La Gonâve (+14.5% increase and monthly product variation margins of 4%); and consider additional costs if vendors need to source their goods from other markets in Port-au-Prince, Petit-Goâve or Miragoâne.
- Spread out food voucher distributions over several days to mitigate the risk of a sudden increase in market demand and to give vendors time to replenish supplies when needed. Above all, avoid having vendors mobilize large amounts of stock over a short period of time to alleviate insecurity issues.
- It will be important to properly raise beneficiaries' awareness on the purpose of in-kind transfers (vouchers), needs, duration and distribution process.
- The project team should draw up a risk matrix to anticipate potential impacts of political unrest and the coronavirus pandemic on food price volatility and monitor product prices on the markets and analyze possible distortions the project may create.

8. Bibliographic References

1. Bénédicte Paul, Alix Daméus et Michel Garrabe, « Le processus de tertiarisation de l'économie haïtienne », *Études caribéennes* [En ligne], 16 : <http://journals.openedition.org/etudescaribeennes/4757> ; DOI : <https://doi.org/10.4000/etudescaribeennes.4757>
2. CNSA 2019, Emergency Food Security Assessment
3. Concern Worldwide, 2013. *Diagnostic agricole de l'île de la Gonâve d'Haïti*
4. Enquête sur les Conditions de Vie en Haïti (ECVH), 2001, IHSI
5. Enquête Nationale d'Urgence sur la Sécurité alimentaire et Nutritionnelle (ENUSAN), MARNDR/CNSA et al, 2019.
6. FAO, 2013 : Le Pays en un coup d'œil
7. Humanitarian Needs Overview (HNO), 2019, récupéré à partir du lien : <https://www.humanitarianresponse.info/en/programme-cycle/space/document/2020-humanitarian-needs-overview-templates>
8. *Haiti, Perspectives de l'offre et du marché*, Few's Net, Septembre 2019 récupéré à partir du lien : https://reliefweb.int/sites/reliefweb.int/files/resources/Haiti_Perspectives_de_lOffre_et_du_Marche_Septembre_2019_Juin_2020.pdf
9. *Haïti : Investir dans l'humain pour combattre la pauvreté*, 2014, Banque mondiale-ONPES
10. MINUSTHA, 2013 : *Autonomisation des femmes en Haïti, Un défi à relever* https://reliefweb.int/sites/reliefweb.int/files/resources/ddm008_mars2013.pdf
11. MARNDR, 2015. Unité Statistique Agricole et Informatique. Situation de la Filière du Riz.
12. Ministère de L'Agriculture et des Ressources Naturelles et le Développement Rural : *Plan National D'Investissement du Secteur Agricole (PINASA) 2011*.
13. UN, *Designing Household Survey Samples: Practical Guidelines*, 2005.
14. Technical Manual version 3.0, *Evidence and Standards for Better Food Security & Nutrition Decisions*, April 2019, pages 35-36

9. Appendix I: Calculating Indicators

Household Dietary Diversity Score (HDDS)

The Dietary Diversity Score captures the economic capacity of households to access and consume a variety of foods.

The Household Dietary Diversity Score (HDDS) is a proxy measure of household access to food. It is intended to reflect, in a snapshot, the economic ability of a household to consume a variety of foods.

Nine (9) food groups are considered in this study:

Group No.	Food Group
1	Staple food: Corn, rice, sorghum, other grain, roots and tubers (potatoes, yucca, yam, sweet potatoes, large breadfruit, small breadfruit) and plantain
2	Legumes: White beans, black beans, red beans, pinto beans, green beans, nuts, peanuts (<i>and other similar foods</i>)
3	Vegetables/Leaves: Lyann panye, spinach, chives, cabbage, pumpkin, tomatoes, onions, broccoli, radishes (<i>and all kinds of similar vegetables</i>)
4	Fruits: Mango, papaya, guava, apricot, cantaloupe, pineapple, orange, melon, watermelon, quince, cherries, lemon, grapefruit, avocado, banana, apple, plum, tamarind, strawberry, pear (<i>and all kinds of fruits</i>)
5	Meat, poultry and offal: goats, pigs, sheep, cows, horses, chickens, turkeys, guinea fowls, pigeons, liver, kidneys, hearts, intestines, offals, brains, (<i>and all other types of meat</i>) Seafood: Fresh fish, salted fish, salted cod, crabs, shrimp, (<i>and all kinds of seafood</i>)
6	Milk and dairy: Cow's milk, powdered milk, canned milk and batch milk, yogurt (<i>and all other similar products</i>)
7	Sugar and honey: White sugar, red sugar, honey (<i>and all other similar products</i>)
8	Oils and fatty products: Vegetable oil, olive oil, butter, shortening, fat (<i>and all other similar products</i>)
9	Spices/drinks: Coffee, tea, spices (parsley, thyme, garlic, clove), salt, fish powder, creamer

The score of a food group is the result of a frequency (0 or 1) by the number of food groups consumed on the day (1) preceding the survey. It is outright equivalent to the number of food groups consumed by the household on the day before the survey.

N.B: For the purpose of this work, we have instead considered the month preceding the survey.

The classification is the following :

Class	Consumption
Low dietary diversity	Less than or equal to 3 food groups
Average dietary diversity	4 and 5 food groups
High dietary diversity	6 groups and more

Food Consumption Score (FCS)

The Food Consumption Score (FCS) is a composite indicator based on dietary diversity, frequency of food consumption and the relative nutrient intake of different food groups. This indicator is calculated using the frequency of consumption of the various food groups consumed by a household over the seven (7) days preceding the survey.

In EFSP, the nine (9) food groups are taken into account along with their weighting. These groups include different types of **foods**:

Group No.	Food Group
1	Staple food: Corn, rice, sorghum, other grain, roots and tubers (potatoes, yucca, yam, sweet potatoes, large breadfruit, small breadfruit) and plantain
2	Legumes: White beans, black beans, red beans, pinto beans, green beans, nuts, peanuts <i>(and other similar foods)</i>
3	Vegetables/Leaves: Lyann panye, spinach, chives, cabbage, pumpkin, tomatoes, onions, broccoli, radishes <i>(and all kinds of similar vegetables)</i>
4	Fruits: Mango, papaya, guava, apricot, cantaloupe, pineapple, orange, melon, watermelon, quince, cherries, lemon, grapefruit, avocado, banana, apple, plum, tamarind, strawberry, pear <i>(and all kinds of fruits)</i>
5	Meat, poultry and offal: goats, pigs, sheep, cows, horses, chickens, turkeys, guinea fowls, pigeons, liver, kidneys, hearts, intestines, offals, brains, <i>(and all other types of meat)</i> Seafood: Fresh fish, salted fish, salted cod, crabs, shrimp, <i>(and all kinds of seafood)</i>
6	Milk and dairy: Cow's milk, powdered milk, canned milk and batch milk, yogurt <i>(and all other similar products)</i>
7	Sugar and honey: White sugar, red sugar, honey <i>(and all other similar products)</i>
8	Oils and fatty products: Vegetable oil, olive oil, butter, shortening, fat <i>(and all other similar products)</i>
9	Spices/drinks: Coffee, tea, spices (parsley, thyme, garlic, clove), salt, fish powder, creamer

These thresholds were established based on information or experience from other surveys around the world. For the purposes of this survey, the following thresholds were considered:

Poor food consumption: score between 0 and 21

Borderline food consumption: score between 21.5 and 35

Acceptable food consumption: score above 35

Household Hunger Score (HHS)

The hunger scale was measured using three (3) questions, to provide information on an important dimension of food security, namely access to sufficient food in the household. The following three (3) situations can be interpreted as a feeling of hunger in the household, and therefore as a food access issue: i) being totally without food in the household, ii) a member of the household going to bed hungry, iii) spending a whole day without eating.

Households are asked about their experiences of hunger in the last four (4) weeks/30 days preceding the survey. Their answers allow us to classify them into three (3) categories: little or no hunger, moderate hunger and severe hunger. The first level of the scale is considered an acceptable or normal situation from the food access standpoint.

Three (3) frequency answers (Never=0, Seldom or Sometimes=1, Often=2)

A score is calculated for each household (summing the three (3) responses), with a minimum possible score of 0 and a maximum possible score of 6.

Three (3) categories of hunger are thus defined:

- a. “Little or no household hunger” (scores 0-1)
- b. “Moderate household hunger” (scores 2-3)
- c. “Severe household hunger” (scores 4-6)

Reduced Coping Strategy Index (rCSI)

The Coping Strategy Index measures what people do when they cannot access enough food. It measures the frequency and severity of coping behaviors. It is an important variable in measuring food insecurity in the household. It is determined by the frequency of use of different (reversible or irreversible) risk strategies over a reference period corresponding to the seven (7) days preceding the survey.

The coping strategy score is obtained by weighting the various responses provided as a means of coping by the household, which allows them to be categorized as stress, crisis and emergency strategies.

Coping strategies have been categorized according to their severity:

Category	Behavior	Weighting
Stress Strategy	Buying or borrowing food on credit	2
	Borrowing money	2
	Spending savings	2
	Use more casual work than usual	2
Crisis strategy	Selling productive assets	3
	Removing children from school	3
	Reducing health and education expenses	3
Emergency strategy	Sending household members to beg	4
	Selling the last breeding females	4
	Migration of the whole household	4

In the so-called reduced strategy, only five (5) standard elements (standard strategies) are taken into account with their weighting, which tells their severity.

No	Strategy	Weighting
1	Eat cheaper but less preferred food	1
2	Borrow food or money from friends or family	2
3	Reduce portion sizes in meals	1
4	Reduce adult consumption so that children eat more	3
5	Reduce number of meals a day	1

The maximum possible value of the score is 56 since a household uses all 5 strategies over all 7 days.

The situation was evaluated according to the index value:

Groups	Index Value
Less serious	Less than 4
Moderate	Between 4 and 18
Serious	≥ 19

10. Appendix II : Convergence Table

Phase name and description	Phase 1 None/Minimal	Phase 2 Stressed	Phase 3 Crisis	Phase 4 Emergency	Phase 5 Catastrophe/ Famine	
	Households are able to meet essential food and non-food needs without engaging in atypical and unsustainable strategies to access food and income.	Households have minimally adequate food consumption but are unable to afford some essential non-food expenditures without engaging in stress-coping strategies.	Households either: - Have food consumption gaps that are reflected by acute or moderate acute malnutrition; or - Are marginally able to meet minimum requirements for only low to basic essential livelihoods (even in drought/crisis conditions).	Households either: - Have large food consumption gaps which are reflected in very high acute malnutrition and excess mortality; or - Are able to mitigate large food consumption gaps but only by employing emergency livelihood strategies and asset liquidation.	Households have an extreme lack of food and/or other basic needs even after full employment of coping strategies. Starvation, death, destitution and extremely critical acute malnutrition levels are evident. (For Famine Classification, area needs to have extreme critical levels of acute malnutrition and mortality).	
Priority response objectives	Action required to build resilience and for disaster risk reduction	Action required for disaster risk reduction and to protect livelihoods	Urgent action required to: Protect livelihoods and reduce food consumption gaps			
				Save lives and livelihoods	Never/prevent widespread death and total collapse of livelihoods	
<p>First-level outcomes refer to characteristics of food consumption and livelihood change. Thresholds that correspond as closely as possible to the Phase description are included for each indicator. Although cut-offs are based on applied research and presented as global reference, correlation between indicators is often somewhat limited and findings need to be contextualized. The area is classified in the most severe Phase that affects at least 20% of the population</p>						
Food security firs / first-level outcomes	Food consumption (focus on energy intake)	Quantity: Adequate energy intake	Quantity: Minimally Adequate	Quantity: Moderately Inadequate – Moderate deficits	Quantity: Very Inadequate – Large deficits	Quantity: Extremely Inadequate – Very large deficits
		Dietary energy intake¹: Adequate (avg. 2,350 kcal pp/day) and stable	Dietary energy intake: Minimally adequate (avg. 2,100 kcal pp/day)	Dietary energy intake: Food gap (below avg. 2,100 kcal pp/day)	Dietary energy intake: Large food gap, much below 2,100 kcal pp/day	Dietary energy intake: Extreme food gap
		Household Dietary Diversity Score²: 5-12 food groups and stable	Household Dietary Diversity Score: 5-FG but deterioration >1 FG from typical	Household Dietary Diversity Score: 3-4 FG	Household Dietary Diversity Score: 0-2 FG (NDC to differentiate P4 and 5)	Household Dietary Diversity Score: 0-2 FG
		Food Consumption Score³: Acceptable and stable	Food Consumption Score: Acceptable but deterioration from typical	Food Consumption Score: Borderline	Food Consumption Score: Poor (NDC to differentiate P4 and 5)	Food Consumption Score: Poor (NDC to differentiate P4 and 5)
		Household Hunger Scale⁴: 0 (none)	Household Hunger Scale: 1 (slight)	Household Hunger Scale: 2-3 (moderate)	Household Hunger Scale: 4 (severe)	Household Hunger Scale: 5-6 (severe)
		Reduced Coping Strategies Index⁵: Reduced Coping Strategies Index ⁶ : 0-3	Reduced Coping Strategies Index: Reduced Coping Strategies Index: 4-18	Reduced Coping Strategies Index: Reduced Coping Strategies Index: ≥ 19 (non-defining characteristics (NDC) to differentiate P3, 4 and 5)	Reduced Coping Strategies Index: Reduced Coping Strategies Index: ≥ 19 (NDC to differentiate P3, 4 and 5)	Reduced Coping Strategies Index: Reduced Coping Strategies Index: ≥ 19 (NDC to differentiate P3, 4 and 5)
		Household Economy Analysis⁷: No livelihood protection deficit	Household Economy Analysis: Small or moderate livelihood protection deficit <80%	Household Economy Analysis: Livelihood protection deficit ≥80% or survival deficit <20%	Household Economy Analysis: Survival deficit >20% but <50%	Household Economy Analysis: Survival deficit >50%
	Livelihood change (assets & strategies)	Livelihood change: Sustainable livelihood strategies and assets	Livelihood change: Stressed strategies and/or assets; reduced ability to invest in livelihoods	Livelihood change: Accelerated depletion/erosion of strategies and/or assets	Livelihood change: Extreme depletion/liquidation of strategies and assets	Livelihood change: Near complete collapse of strategies and assets
		Livelihood coping strategies⁸: No stress, crisis or emergency coping observed	Livelihood coping strategies: Stress strategies are the most severe strategies used by the household in the past 30 days	Livelihood coping strategies: Crisis strategies are the most severe strategies used by the household in the past 30 days	Livelihood coping strategies: Emergency strategies are the most severe strategies used by the household in the past 30 days	Livelihood coping strategies: Near exhaustion of coping capacity

II. Appendix III: Baseline Questionnaire

Food Security Survey - EFSP / WVI-H Project

Hello, my name is, I am working to conduct a food safety survey. The reason why I am here today is because you have been chosen at random to participate in a discussion on this question in the area. We will be very happy if you have this little dialogue with us. We won't hold on for long, we can do this in 30 minutes. The small talk that we are going to do together in there will remain very confidential. You can participate if you want, and you can stand this small talk at any of the time if you decide not to answer with a particular question. Do you agree to talk to us? | __ | 1 = Yes, 2 = No

IF YES, ANSWER THE QUESTIONS - IF NO, PASS TO ANOTHER BENEFICIARY.

SECTION A.- DEMOGRAPHIC INFORMATION

No	Questions	Answer
A0	Department	
A1	Commune	
A2	Communal Section	
A3	Locality / community	
A4	GPS household's	
A5	The date of the investigation	
A6	The name of the Supervisor	
A7	The name of the Investigator	
A8	The questionnaire number	
A9	Phone's Number	

SECTION B.- SOCIAL ECONOMIC INFORMATION

No	Questions	Answer
B0	Respondent's name	
B1	Gender respondent	__ 1 = Male 2 = Female
B2	Age respondent	Age: ____ year(s)
B3	The respondent's relationship with the head of the household	__ 1 = Head of household 2 = Husband 3 = Wife 4 = Daughter / son 5 = Siblings 6 = Parents / grandparents 7 = Nephew / niece 8 = Cousin 9 = Son / granddaughter 10 = other relatives that linked us (uncle, aunt, etc.) 11 = adopted children 12 = People who work at home 13 = other

B4	Head of household name: (if B0 3 ≠ 1)	
B5	Gender of the Head of household: (if B0 3 ≠ 1)	___ 1 = Male 2 = Female
B6	Head of household: (if B0 3 ≠ 1)	Age: ____ year(s)
B7	Marital status of the head of the household:	___ 1 = Single 2 = Married 3 = Placed 4 = Separated / Divorced 5 = Widow 6 = Other
B8	Level education Head of household of:	___ 1 = illiterate 2 = elementary literacy incomplete 3 = primary 4 = complete 5 = high school incomplete 6 = high school complete 7 = university complete 8 = university incomplete 9 = 10 = school professional technical school = 11 professionals 12 = Other
B9	How many people who live in the household?	____ people
B10	Information about other people living at home	
	Name:	Gender:
	Age:	Activities:
	If she is still in school, at what level:	
B11	Are there pregnant women in the household?	___ no = 0 yes = 1, if yes, how many _____
B12	Are there people with disabilities in the home?	___ no = 0 yes = 1
B13	Are there children who are orphans? This means that there is no mother or father or 2	___ no = 0 yes = 1, if yes, how many _____
B14	Are there older people who do not use themselves anything?	___ no = 0 yes = 1
B1	How many people on responsibility meter house?	___
B16	In what type of house does the respondent live?	___ 1 = Ground floor (top and bottom of the house is the same) 2 = Plank 3 = Hut 4 = Sheet metal house 5 = Low but simple / concrete house 6 = House with floor 7 = Other:
B17	How many rooms does the house have?	____

B18	Main activities of the head of household to make money?	____ 1 = agriculture 2 = breeding 3 = trade 4 = fishing 5 = transport 6 = coal 7 = school 8 = day sale 9 = mechanic 10 = builder 11 = Other professions:
B19	Second activity of the head of household to make money?	____ 1 = agriculture 2 = breeding 3 = trade 4 = fishing 5 = transport 6 = coal 7 = school 8 = day sale 9 = mechanic 10 = builder 11 = Other professions:
B20	The third activity of the head of household to make money?	____ 1 = agriculture 2 = breeding 3 = trade 4 = fishing 5 = transport 6 = coal 7 = school 8 = sale day 9 = mechanic 10 = builder 11 = Other professions :
B21	How much do we estimate these activities allow us to enter the home each month?	_____ gourdes
B22	What is the first activity that makes us spend more money at home for a year?	____ 1 = food 2 = school 3 = health care 4 = clothes 5 = garden 6 = toiletries and laundry 7 = rent 8 = Other :
B23	What is the second activity that makes us spend more money at home for a year?	____ 1 = food 2 = school 3 = health care 4 = clothes 5 = garden 6 = toiletries and laundry 7 = rent 8 = Other :
B24	What is the third activity that makes us spend more money at home in a year?	____ 1 = food 2 = school 3 = health care 4 = clothes 5 = garden 6 = toiletries and laundry 7 = rent 8 = Other :

SECTION C: MISCELLANEOUS FOOD / FOOD DIVERSITY

No	Questions	Answer
C1	Who the things that we ate during the last 30 days that last?	
	1. Basic foods : corn, rice, millet, other cereals, roots and tubers (potatoes, cassava, yams, sweet potatoes, blades, rabbits) and bananas	____ no = 0 yes = 1
	2. Beans: beans white beans black beans red beans, butter, almonds, peanuts (<i>and all other types of food the same way</i>)	____ no = 0 yes = 1
	3. Vegetables: spinach, watercress, cabbage, pumpkin, tomato, onions, broccoli, croupier, radishes (<i>and all other types of vegetables similar</i>)	____ no = 0 yes = 1
	4. Fruits : Mango, papaya, guava, apricots, pineapples, oranges, cantaloupe, watermelon, sterility, cherries, lemons, grapefruit, avocado, banana, apple, plum, tamarind, strawberry, pear (<i>and all other kinds of fruit</i>)	____ no = 0 yes = 1
	5. Meat, poultry and inside animals : Goats, pigs, sheep, cows, horses, chickens, turkeys, pentads,	____ no = 0 yes = 1

	pigeons, livers, kidneys, hearts, intestines, goats, fallen cows, brains, (<i>and all other types of meat</i>) Seafood : Fish fresh, salted fish, mod, crabs, shrimps, (<i>and all other kinds of fruit sea</i>)	
	6. Letters and product base milk : Milk cow, powdered milk, milk in small batches, yogurt (<i>and other products similar</i>)	____ no = 0 yes = 1
	7. Sugar : White sugar, red sugar , honey (<i>and all other similar products</i>)	____ no = 0 yes = 1
	8. Oils based on fat products: Vegetable oil , Olive oil , butter, shortening, fat (<i>and all other similar products</i>)	____ no = 0 yes = 1
	9. Spices / drinks : coffee, tea, spices (parsley, tincture, garlic, cloves), salt, fish powder , small amount of milk to put in tea	____ no = 0 yes = 1

SECTION D : FOOD WEEK CONSUMED IN A WEEK / FOOD CONSUMPTION

No	Questions	Answer
D1	How many times in 7 days past we ate things such ? Frequency : 0 = We do not eat them 1 = 1 day 2 = 2 days 3 = 3 days 4 = 4 days 5 = 5 days 6 = 6 days 7 = 7 days	
	1. Basic foods : corn, rice, millet, cereals, roots and tubers (potatoes, cassava, yams, sweet potatoes, blades, rabbits) and bananas	____
	2. Beans : beans white beans black beans red beans, butter beans waiting, almonds, peanuts (and all other types of food the same way)	____
	3. Vegetables: spinach, watercress, cabbage, pumpkin, tomato, onions, broccoli, croupier, radishes (and all other types of vegetables similar)	____
	4. Fruits : Mango, papaya, guava, apricot, pineapple, orange, watermelon, watermelon, hemp, cherries, lemon, grapefruit, avocado, banana, apple, plum, tamarind, strawberry, leek (and all other fruits)	____
	5. Meat, poultry and inside animals : Goats, pigs, sheep, cows, horses, chickens, turkeys, guinea fowl, pigeon, livers, kidneys, hearts, intestines, goats, fallen cows, brains, (and all other types of meat)	____

SECTION G: HOW TO RESIST / REDUCED ADAPTATION STRATEGY

No	Questions	Answer
F1	During the past 7 days, if there was not enough food and enough money to buy food at home, for how many days did you have to make those decisions?	Frequency: 0 = No 1 = 1 day 2 = 2 days 3 = 3 days 4 = 4 days 5 = 5 days 6 = 6 days 7 = 7 days
	Eat some food that we do not like or is not expensive	____
	Borrow your food and get support from family and friends	____
	Reduce the quantity of food we usually give to each person (including children)	____
	Reduce what is being given to adults so that children can eat well	____
	Reduced number of meal that we take per day	____

SECTION H : NUMBER OF TIMES EAT PER DAY / NUMBER OF MEALS PER DAY

No	Questions	Answer
G1	How many times in a day people are eating at home?	Frequency : 0 = no 1 = 1 times 2 = 2 times 3 = 3 times 4 = 4 times 5 = more times
G11	Children	Children 6-23 months ____ Children 24-59 months ____ Children between 5 and 18 years ____
G12	Adult	Between 19 and 59 years ____ 60 years over ____

SECTION I: FOOD AND FOOD PRODUCTION / USE OF PRODUCTION

No	Questions	Answer
H1	<p>The main products that grow in the field that we use(culture)</p> <p>What to do with these foods (use)</p>	<p> _ </p> <p> _ </p> <p> _ </p> <p> _ </p> <p> _ </p> <p> _ </p> <p> _ </p> <p> _ </p> <p> _ </p> <p> _ </p> <p> _ </p>
<p>Culture codes : 1 = More ; 2 = Sorghum ; 3 = Rice ; 4 = Bean ; 5 = congo beans ; 6 = Bananas ; 7 = Potatoes ; 8 = yam ; 9 = Potato ; 10 = Cabbage ; 11 = Carrots ; 12 = Onion ; 13 = Shallot ; 14 = Chili ; 15 = Tomatoes ; 16 = Coffee ; 17 = Mangos ; 18 = Lawyer ; 19 = Sugar cane ; 20 = Other (Specify)</p>		
<p>Usage code : a = eat it ; b = sell it ; c = change it for other things ; d = provide animal feed it ; e = lot</p>		

SECTION J: AFTER HARVESTING TECHNICAL TRAINING AND FIELD SUPPORT

No	Questions	Answer
H 1	Is there a household that followed training techniques that he must use his camp had reaping	___ 0 = no 1 = yes
	What the training was about:	___
	1. Drying	___
	2. Properly conditioned crops 3. conservation	___
	Do we apply T ik Sayo	___ 0 = no 1 = yes
	Are they giving us good results	___ 0 = no 1 = yes
H2	Did you know getting support for our do landscaping?	___ 0 = no 1 = yes
	What kind of support we used to get ?	
	1) Seeds	___
	2) Fertilizer	___
	3) Tools	___

	4) Other :	
--	------------------	--

SECTION K : SHOCK MANAGEMENT INFORMATION / INFORMATION FOR SHOCK AND AGRICULTURAL SITUATION MANAGEMENT

No	Questions	Answer
J1	Main shock explaining that we have hunger issues in the area 1. Drought 2. Flood 3. Plant disease 4. Erosion 5. Hurricane 6. sliding strip 7. Other / Specify :	 ____ ____ ____ ____ ____ ____ ____
J2	Since the shock began, have we have been given information to manage the hunger problem ?	____ no = 0 yes = 1
J21	Who gave you this information? 1. Civil protection 2. Church 3. Radio.... 4. Leadership 5. KASEK / ASEK 6. City hall 7. On the phone 8. Other / specify	 ____ ____ ____ ____ ____ ____ ____ ____
J23	Did you use this information ?	____ no = 0 yes = 1
J24	Are they allowing us to live better 1. No. 2. More or less 3. Many 4. Very much	____
J25	Did they allow you protect well the family 1. No. 2. more or less 3. Many 4. Many times	____

SECTION L : WATER USED FOR DRINKING / DRINKING WATER

No	Questions	Answer
K1	Main where we take our water for household use? 1. Private connection 2. Public Network / SNEP / DINEPA 3. Public pumps 4. fountains that do not capture 5. Rainwater 6. The prize is not protected 7. Truck / Tanker (treated water) 8. Trucks / Tanks (untreated water) 9. People who sold privately 10. Protected prices 11. Other :	___ ___ ___ ___ ___ ___ ___ ___ ___ ___
K2	How much water is available for us to use per day? 1. <10 gallons 2. <10-20 gallons 3. > 20 gallons	
K3	Are we used to treat drinking water	___ no = 0 yes= 1
K4	And what we treat drinking water 1. Gadyen dlo 2. Lemon 3. Chlorine 4. Put in the sun 5. Boil water 6. Watercolor 7. Filters 8. Let stand and put racquet Other _____	___ ___ <input type="checkbox"/> ___ ___ ___

K5	In what do we keep water to drink? 1. In drums that have cover 2. In drums without cover 3. In buckets with lids 4. In buckets without lids 5. In gallons 6. In basins 7. Other	____ ____ ____ ____ ____ ____ ____
K6	Who goes to get water in the house? 1. Adult female 2. Adult men 3. Little girl 4. Boys	____ ____ ____ ____
K7	How long do we walk to fetch water and return? 1) 5 and 15 min minutes 2) 15 to 30 minutes 3) 30 and 45 minutes 4) 45 minutes and 1 hour 5) More than 1 hour	____ ____

SECTION M : FOOD OF CHILDREN UNDER 6 MONTHS / NUTRITION OF CHILDREN UNDER 6 MONTHS (exclusive breastfeeding)

No	Questions	Answer
I1	Are there children younger than 6 months in the household?	____ no = 0 yes = 1
I2	How old is the child?	____ how many months (0-59)
I3	What is the sex of the child?	____ 1 = Male 2 = Female
I4	Did you give the child the breast?	____ 0 = No 1 = Yes

I5	<p>If "No" Why?</p> <p>1. I did not have enough milk</p> <p>2. I was sick</p> <p>3. I left the kids at home with other person</p> <p>4. I did not want to</p> <p>5. Other</p>	____
I6	Are you still breastfeeding?	____ 0 = No 1 = Yes
I7	<p>In addition breast milk, did you give baby the other liquid or food?</p> <p>1. Only mother's milk</p> <p>2. Water</p> <p>3. Liquid (powdered milk, lotion,...)</p> <p>4. Food (nutriben, nutrigú, cereal,...)</p> <p>5. Other</p>	<p> ____ </p> <p> ____ </p> <p> ____ </p> <p> ____ </p>

SECTION N : MARKET INFORMATION IN THE AREA

No	Questions	Answer
1	When you need to buy groceries, what market do you go to?	A :
2	How long do you walk to get from home to the market ?	____ minute
3	Is when you need to buy retail or wholesale is always in the same market that you go ?	____ 0 = No 1 = Yes
4	If the name is, tell us which side you go to buy in bulk ?	A :
5	Where you normally go to you buy retail ?	A :
6	You can give us some names of people or business names you usually go shopping for	A :

7	Do you feel safe going to or from these markets or sellers' homes ?	____ 0 = No 1 = Yes
8	When you go to market, are there things that usually prevent you reach the market ?	____ 0 = No 1 = Yes
9	If so, what are the problems? 1. Roads are blocked 2. It is impossible for me to pass through the road and it breaks 3. I'm afraid, there is insecurity 4. Should I pay so I can pass 5. Other : _____	____ ____ ____ ____
10	Is that you always anointed produce food that you shop at the market ?	____ 0 = No 1 = Yes
11	Do you always find these products in the market ? Rice corn Wheat Flour The oil Weight unknown	____ 0 = No 1 = Yes ____ 0 = No 1 = Yes ____ 0 = No 1 = Yes ____ 0 = No 1 = Yes ____ 0 = No 1 = Yes ____ 0 = No 1 = Yes
12	Do you eat these products almost every day ? Rice corn Wheat Flour The oil Pois inconnu (local variety of bean)	____ 0 = No 1 = Yes ____ 0 = No 1 = Yes ____ 0 = No 1 = Yes ____ 0 = No 1 = Yes ____ 0 = No 1 = Yes ____ 0 = No 1 = Yes
13	For No as answers, can you tell us what other products you eat in their place ?	A :

12. Appendix IV: Resellers and Wholesalers Questionnaire

The name of the Investigator	
Dat	
Commune	
Communal section and dwellings	
Market name (if the market has a name)	

Section 1: Retailer or Wholesaler Information

1.1 Is it a retailer or a wholesaler?

- Retailer
- Wholesaler

1.2 What is the name of the store? (if there are names) _____

1.3 Do you have a phone number you can share with us?

- Yes, if YES give us the number please _____
- No.

Section 2: Trade Space Information

2.1 What is the store space like?

- Large (large space, various visible elements and products)
- Medium / not too big, not too small either
- Small (little space) / it's small

2.2 Do you have a place to store food products you are selling?

- Yes
- No.

(if Yes), how many food items you can estimate that you have in storage space

- ___ Less than 20%
- ___ between 20 to 40%
- ___ More than 40%

2.3 How much time you have since you are selling in this space?

- Less than 2 years
- 2 to 5 years
- Over 5 years

2.4 What food items are you selling? tell us which ones are more important?

- _____
- _____
- _____
- _____
- _____

2.5 What day did you open the store or shop to sell?

- Every day
- Every Week
- Few days of the week (specify) _____

Section 3: Stock / Inventory

3.1 Where and from whom do you buy the food items you sell? provide details on the list of these products.

Produce	Type of suppliers (farmers, middleman, wholesalers etc)	Where this supplier is located?	How many of these products do you usually buy? (kilos, bags etc) provide accuracy	How often do you buy these products from them? is there a special day of the week that this purchase is made?	transaction amount (including transportation costs)
Corn					
Wheat flour					
Wheat (grains)					
Cooking oil					
Pwa enkoni (local beans variety)					
Rice					

Are there other suppliers that you can contact for supplies if your normal suppliers cannot supply you??

- Yes, who _____
- No.

3.2 On what basis do you source food products?

- When all my stock runs out
- When my stock is less than 20%
- When I have between 20 to 50% products stored
- Other (specify) _____

3.3 When buying goods, how long can it take before these goods come to you?

- As soon as the order is placed
- Less than 3 days
- in 1 week
- More than 2 weeks

3.4 Do you sometimes not find these products from your suppliers? How often?

- Corn _____ Often _____ Sometimes _____ It Never Happens
- Wheat (grains) _____ Often _____ Sometimes _____ It never happens
- Cooking oil _____ Often _____ Sometimes _____ It never happens
- Rice _____ Often _____ Sometimes _____ It Never Happens
- Wheat Flour _____ Often _____ Sometimes _____ It Never Happens
- Pwa enkoni (local beans variety) _____ Often _____ Sometimes _____ It Never Happens

If this happens you don't get the products, tell us in which month these products were not available to you ?

- Corn _____ / _____ / _____ / _____ / _____ / _____ / _____ / _____
- Wheat (grains) / _____ / _____ / _____ / _____ / _____ / _____
- Cooking oil _____ / _____ / _____ / _____ / _____ / _____ / _____ / _____
- Rice _____ / _____ / _____ / _____ / _____ / _____ / _____ / _____
- Wheat Flour _____ / _____ / _____ / _____ / _____ / _____ / _____ / _____
- Pwa enkoni (local beans variety) _____ / _____ / _____ / _____ / _____ / _____ / _____ / _____

3.4 Why are these products not usually available for purchase?

- Corn
- There was no harvest

- Roads are not good, transportation becomes more expensive
- Products are too expensive, I can't buy them
- other _____

- Wheat (grains)
 - There was no harvest
 - Roads are not good, transportation becomes more expensive
 - Products are too expensive, I can't buy them
 - other _____

- Cooking Oil
 - There was no harvest
 - Roads are not good, transportation becomes more expensive
 - Products are too expensive, I can't buy them
 - other _____

- Wheat flour
 - There was no harvest
 - Roads are not good, transportation becomes more expensive
 - Products are too expensive, I can't buy them
 - other _____

- Pwa enkoni (local beans variety)
 - There was no harvest
 - Roads are not good, transportation becomes more expensive
 - Products are too expensive, I can't buy them
 - Lot _____

- Rice
 - There was no harvest
 - Roads are not good, transportation becomes more expensive
 - Products are too expensive, I can't buy them
 - other _____

3.5 What often makes it difficult for goods (foodstuffs) to enter or exit the market?

- all products come in and out normally
- insecurity
- roads are not good
- we can't find the products to buy
- products are too expensive, taxes and transportation take all the money
- other _____

Section 4 : Sale

4.1 Can you tell us at least the quantity and price you sell each day for these products ? :

Products	how much do you sell in each of these products per day ? kilo, to be precise	Cost of a unit ? gourd	Total
Corn			
Wheat flour			
Wheat grains			
Cooking oil			

Pwa enkoni (local beans variety)			
Rice			

4.2 Can you tell us at what price you sell these products for each month of the year? see reference 3.4 which gives the month that the products are hard to find, the trend should be in the months the products are hard to find, the prices should increase

Produce	Unit	Jan. / gourd	Feb.	Mar.	Av	May	June	July	August	Sept.	Oct.	Nov.	Dec.
Corn													
Wheat flour													
Wheat grains													
Cooking oil													
Pwa enkoni (local beans variety)													
Rice													

4.3 After selling normally each day, How much extra can you sell in each of these products? that is, the amount you have in stock if you ever need to sell still.

Products	the additional quantity you can still sell (kilos, bags, provide accuracy)
Corn	
Wheat flour	
Wheat grains	
Cooking oil	
Pwa enkoni (local beans variety)	
rice	

What would you have to do if you wanted to sell more products every day?:

- 20% extra per day _____
- 30% to 40% extra per day _____
- More than 40% extra every day _____

4.4 Where do your customers come from? specify communes and communal sections

4. 5 Can you tell me how many such customers come to buy from you when things were good before this crisis? _____

4. 6 Can you tell me how many such customers come to buy from you at this time during this crisis hits the community _____

4. 7 What causes changes in the number of people who come to buy from you?

___ Products become more expensive

___ The price of the product does not change but it is the people who don't have enough money to buy

___ I don't have the products so customers don't come

___ other

Section 5: Access to Credit

5.1 Do you have a bank account or a credit union savings account?

Yes

No.

5.2 Do you take credit for doing this business?

Yes

No.

5.3 (If yes) where do you get this credit?

___ Bank

___ credit union

___ Community Bank

___ individual

___ other _____

5.4 Do you sell on credit to your customers?

Yes

No.

Section 6: Markets in general

6.1 Since the crisis began last year, have you seen a change in the number of retailers and wholesalers in the market?

Yes (If yes, how could you define this change ? _

___ There is 2 times less vendors than before

___ there is 2 to 4 times less vendors

___ The number of vendors decreased more than 4 times

___ There is more than 2 times vendors since last year

___ Between 2 and 4 more vendors

___ More than 4 times vendors

No, there is always the same quantity of vendors selling in the market

6.2 What do you think causes these changes?

(If the person's response was to decrease the number of vendors)

___ Products become more expensive

- the cost of transportation becomes higher
- It is difficult to renew our stocks because the products are not available
- roads are not even good
- where we are used to buy are no longer given credit
- is a 2 to 3 places where the products are sold, if they do not have the product, then we can not find it
- other _____

(If the person's response was to increase the number of vendors)

- gets more opportunities to trade
- we get credit
- products are available, we just buy them
- other

6.3 Are you accustomed to participating in programs where customers come up with a cash voucher to buy from you?

- Yes
- No.

(If Yes) Well tell us how the experience was for you, what would you like to change and how ?
