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Addressing Immediate Food Insecurity in Alta Verapaz, Guatemala

Baseline Report

Award No: 720BHA21GR00161

(Period of Performance: June 7, 2021 – June 6, 2022)

Prepared for:

**Bureau for Humanitarian Assistance
The United States Agency for International Development (USAID)**

**Geographic Area: Guatemala, Central America
Submitted: December 23, 2021**

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ACRONYMS AND ABBREVIATIONS¹

APP	Application
ACH	Action Against Hunger Project
BHA	Bureau for Humanitarian Assistance
CARI	Consolidated Approach to Reporting Food Safety Indicators (ECRI)
CBA	Cost of Basic Food Basket
CODEDE	Departmental Development Commission
COMUSAN	Comisión Municipal de Seguridad Alimentaria y Nutricional
DA	Acute Malnutrition
DC	Chronic Malnutrition
DPI	Personal identification document
DRM	Disaster Risk Management
FTN	North Transversal Strip
INE	National Institute of Statistics
INSAN	Food and Nutrition Insecurity
INSIVUMEH	National Institute of Seismology, Volcanology, Meteorology, Hydrology
MAGA	Ministry of Agriculture, Livestock and Food
MSPAS	Ministry of Public Health and Social Assistance
PCA	Food Consumption Score
PMA	World Foods Program
SAN	Food and Nutrition Security
SA	Food Security
USAID	United States Agency for International Development
WFP	World Food Programme

¹ Please note that some of the acronyms are in Spanish and Plan has translated the full word to English.

PROJECT CONTEXT

Plan International implements the “Addressing Immediate Food Security in Alta Verapaz” project funded by USAID/Bureau for Humanitarian Assistance (BHA), to address the immediate impact of increased food insecurity among the most vulnerable families affected by Tropical Storms Eta and Iota in four rural, food insecure, and mostly indigenous, municipalities of the Alta Verapaz Department in northern Guatemala: Chisec, Raxruhá, Chamelco, and Tamahú. In response to these challenges, the project provides cash transfers for food, WASH and small-scale economic resilience and food availability activities with the implementation of backyard crops or home gardens and production of poultry.



*From July 5 – 30, 2021, Plan conducted a survey of 3,294 households across 37 communities in the municipalities of Chisec, Raxruha, San Juan Chamelco, and San Pablo Tamahú de Alta Verapaz. **The study found that 65% (2.132) of the households have severe to moderate INSA scores and are in need of urgent humanitarian assistance.***

To accomplish this objective, Plan developed and carried out a household beneficiary selection methodology to ensure that the most vulnerable individuals are being engaged by the project. From July 5 – 30, 2021, Plan conducted a survey of 3,294 households across 37 communities in the municipalities of Chisec, Raxruha, San Juan Chamelco, and San Pablo Tamahú in Alta Verapaz. The study found that 65% (2.132) of the households have severe to moderate INSA scores and are in need of urgent humanitarian assistance. This report analyzes and synthesizes the data collected in the field, using SPSS/ Excel to determine the level of household food insecurity.

BASELINE REPORT: FOOD SECURITY

To identify and characterize food insecurity among the most vulnerable households engaged by the “Addressing Immediate Food Insecurity in Alta Verapaz” project funded by USAID/BHA in four prioritized municipalities. Specifically, the baseline study seeks to:

1. Determine the level of household food insecurity in the priority communities within four municipalities of Alta Verapaz using the CARI method.
2. Carry out an assessment of the dietary diversity and the food consumption score (PCA, Spanish acronym) using the World Food Programme (WFP) methodology.
3. Identify and define project indicator targets.

METHODOLOGY

Fieldwork Planning Phase

In order to better understand household food insecurity in Chisec, Raxruhá, Chamelco, and Tamahú, Plan collected data on the availability, access, food consumption, survival strategies and other variables to

determine the level of vulnerability at both household and territory levels. The project utilized the CARI methodology to determine INSA, which measures the scale of food insecurity, evaluating the family food consumption, coping measures and food expenditure.

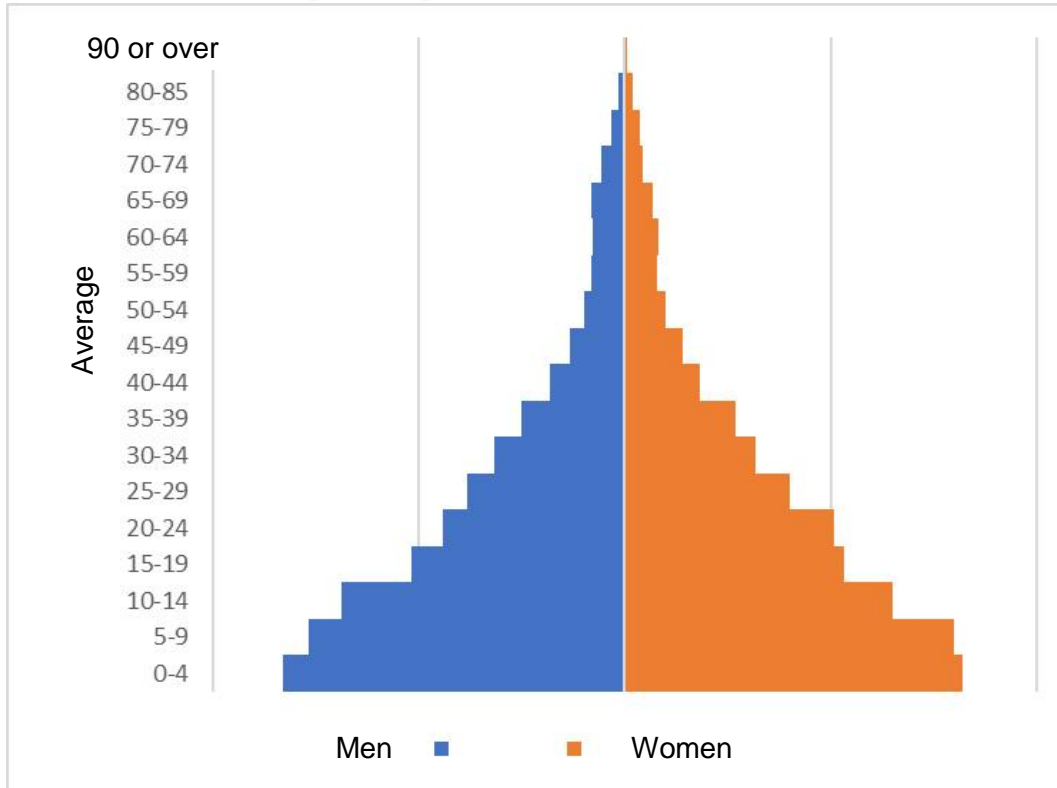
Further, the survey was used to collect data on food variety—hunger scale, survival strategies and other indicators (HDDS, acronym in Spanish)—that help inform a deeper understanding of the context. It should be noted that some of these indicators may be more or less severe than determined by the INSA. The project conducted 3,294 household surveys in four municipalities of Alta Verapaz in which 92% of respondents are women and 8.5% are men. The characterization of the households surveyed is described in Chapter 4 - Results of this report. Plan International project staff conducted data collection, utilizing tablets and KoBoCollect, an open source Android application.) The project team utilized SPSS and Excel to analyze the collected data.

RESULTS

Characteristics of the Households Surveyed

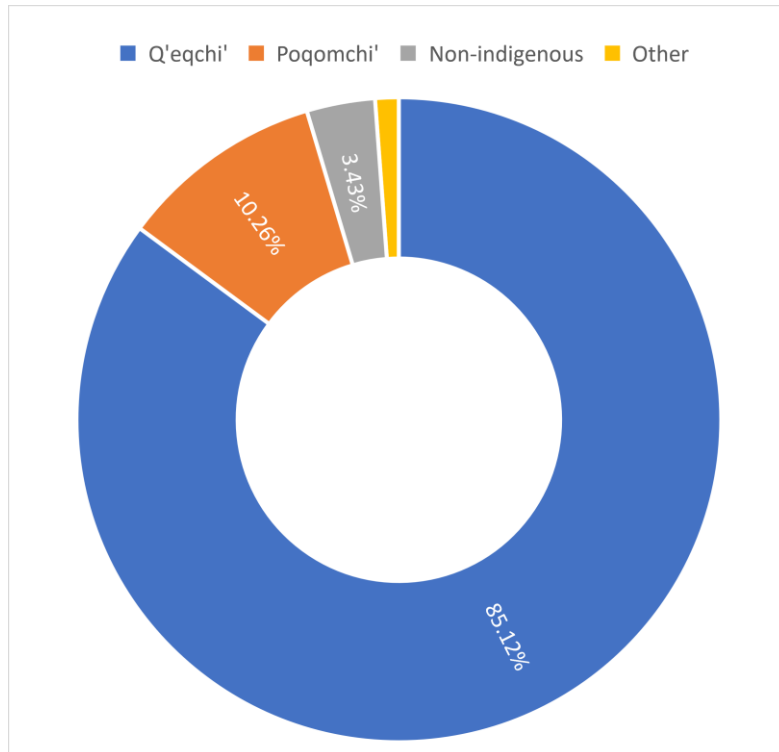
The average number of household members surveyed is 4.36 members with a distribution of 49.6% male and 50.4% female. As shown in Graph 1, the greatest area of the population pyramid is found in the stratum, which identifies a population under five years of age. On average there is one (0.73) child under the age of five per household.

Graph No. 1
Population pyramid of the households surveyed



It is important to highlight that 21.4% of the heads of households surveyed are women. 16% of single-parent households are headed by a woman. Graph 2 shows that 85.1% of the population surveyed are Q'eqchi' and 10.3% Poqomchi'.

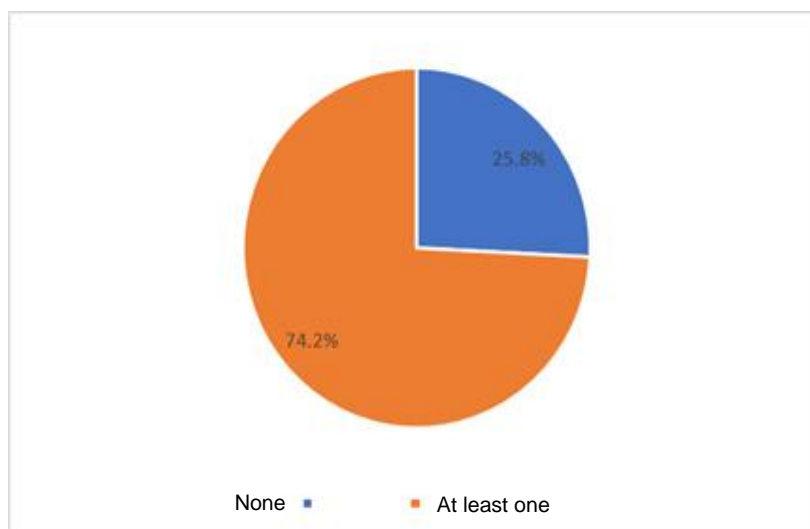
Graph No. 2
Ethnic identity in the surveyed territory



Household Classification

Graph 3 shows that of the 3,294 household surveys, 74.2% have more than one household member classified as vulnerable to food insecurity.

Graph No.3
Comparison of percentage of the households with some vulnerability and without vulnerability



According to the data collected in the field, the percentages of household vulnerabilities among respondents are as follows:

- 57% with children under 5 years old
- 28% with a woman breastfeeding
- 16% with a family member with disability
- 8% with a pregnant woman
- 4% with a migrant person

In order to develop the INSA classification, an analysis of the consumption, availability, access and use of food was carried out in compliance with internationally recognized indicators which are described below.

Food Consumption Score

To assess the food consumption frequency, the project utilized the food consumption score (PCA). The foods were divided into eight groups according to the nutritional content of the family diet and the food consumption frequency in the seven days before the assessment.

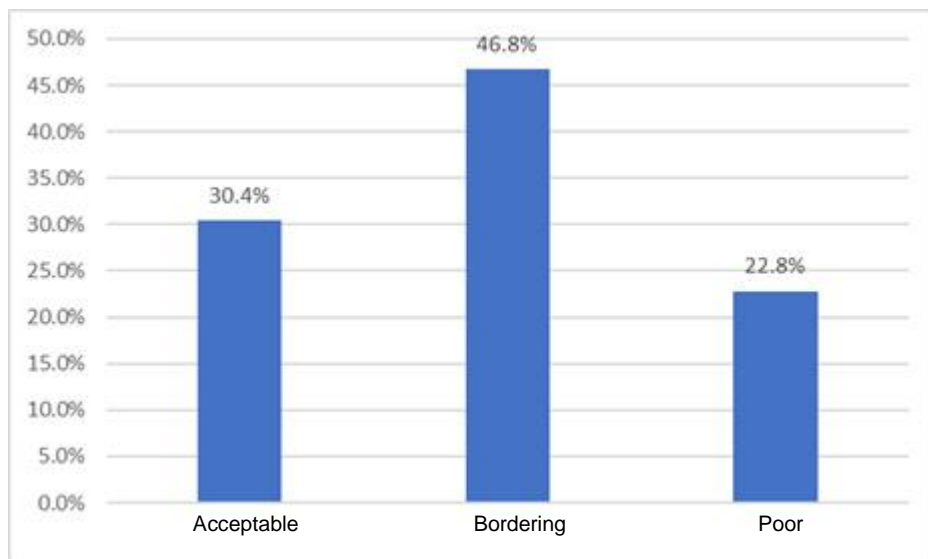
To perform three PCA classifications of each household evaluated, it was compared with the benchmarks established by the WFP methodology, as follows:

- ✓ Acceptable consumption : > 35 points
- ✓ Borderline consumption: 21.5 to 35 points
- ✓ Poor consumption: 0 to 21 points

The average scores show that 70% of the population have an insufficient diet in terms of variety and quality. This data indicates dietary insufficiency in surveyed areas of Alta Verapaz is nearly twice that

identified in the Dry Corridor by an earlier Action Against Hunger study in 2021². In other words, it suggests that the families living in the Alta Verapaz department currently face a more precarious food consumption situation in comparison to the families that live in the Dry Corridor, possibly as a result of exacerbation of the continuing confinement caused by Covid-19 and the major agricultural losses from the 2020 tropical. Graph 4 shows the comparison of the PCA average of the total of households surveyed.

Graph No. 4
PCA Average of the households surveyed



Regarding the dietary variety, 30.4% of the households surveyed had an “acceptable” consumption in the week leading up to the survey. On average, they reached the recommended minimum caloric intake of 2,100 cal/day.

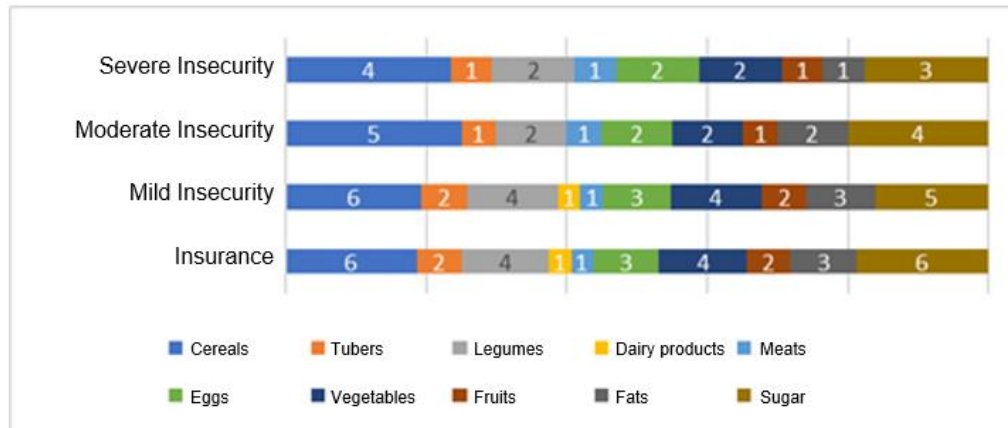
In addition, 46.8% of households surveyed are classified as borderline. This means that within seven days before the survey was conducted, they had an inadequate diet in terms of variety and frequency of food consumption. This implies a poor diet with possible negative effects on the nutritional status of the household members. The borderline diet is based on the consumption of a daily cereal (corn five days a week) and legumes, in the form of beans (2 days a week), supplemented at least one day a week with some fruit and/or vegetables. The presence of plant-based foods that provide essential proteins and minerals is largely missing from this diet.

Further, 22.8 % of the households surveyed were classified as poor PCA, which indicates the food consumption is poor in quantity, frequency and variety. This diet indicates “hunger” because these households have insufficient access to cereals (corn two days a week) and legumes (one day a week). The diet classified as “poor” implies that they have consumed some type of herbs at least three times a week. This indicates that these families employ some emergency measures to feed themselves due to their inadequate access to basic grains and cereals.

² ACH. May 2021. 29pp-<https://accioncontraelhambre.org.gt/wp-content/uploads/2021/07/03-Informe-Regional-SAN-marzo-abril-2021.pdf>

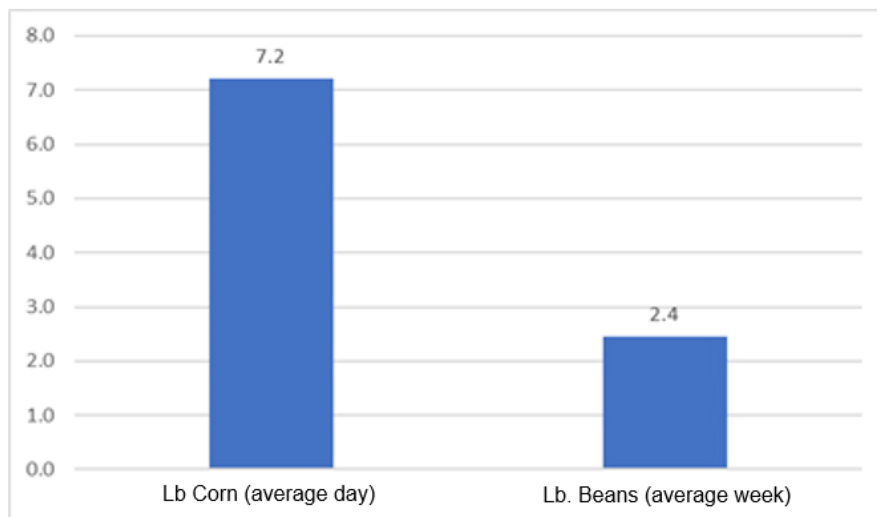
Graph 5 shows the variety and food consumption frequency associated with the levels of food insecurity.

Graph No. 5
Variety and food consumption frequency of the selected households classified with PCA and INSA levels



The consumption of corn reaches 1.61 pounds per person in the households surveyed and is higher than national average (1 pound per person). The above shows a high dependence on grains and high vulnerability to its losses.

Graph No. 6
Consumption of corn (per day) and beans (per week) in households surveyed

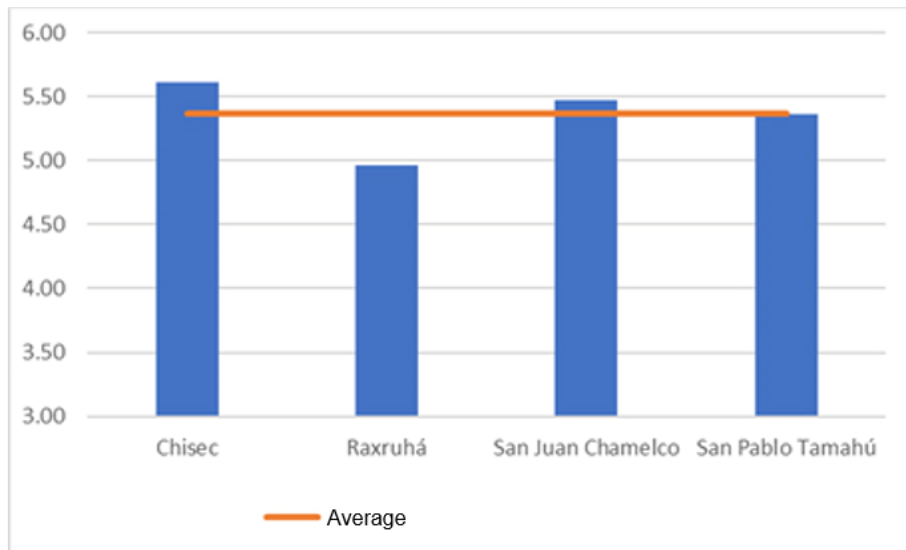


Dietary Variety (HDDS)

The project sent a reminder 24 hours before the survey was issued to collect data on dietary diversity (HDDS). The results presented in Graph 6 shows an acceptable behavior as it is above the average consumption of four food groups. The dietary variety is considered acceptable, with an average of 5.37 out of 12 food groups.

Graph No. 7

Variety and frequency of the food consumption of the last 24 hours before the survey was issued to the families surveyed



The results of the variable “food consumption” show a situation of food deficiency in the majority of selected households.

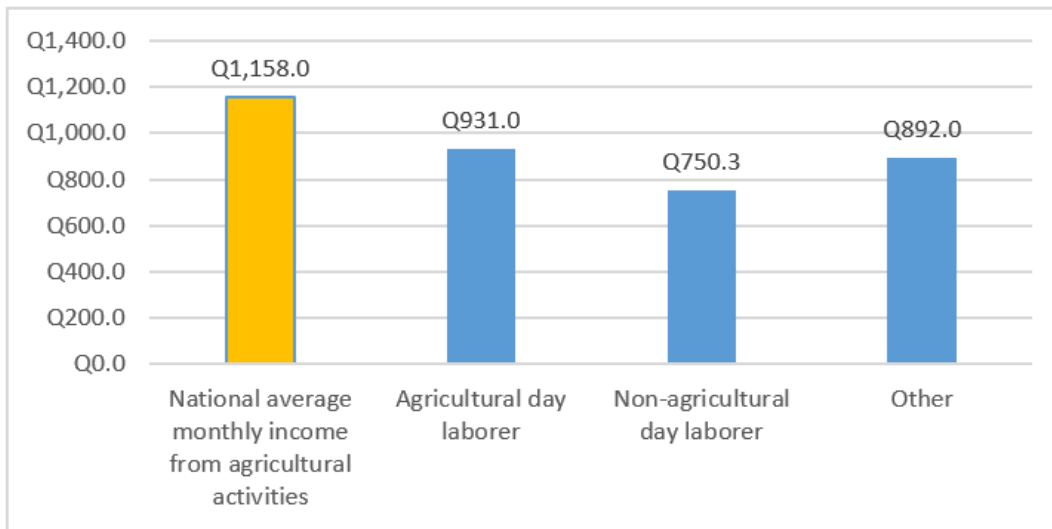
Access to Food

To determine households’ access to food, the project registered the quantity and source of income and food expenditures for the households surveyed.

The monthly income of the total population surveyed is low and displays a chronic and acute economic crisis, as shown in Graph 8.

Graph No. 8

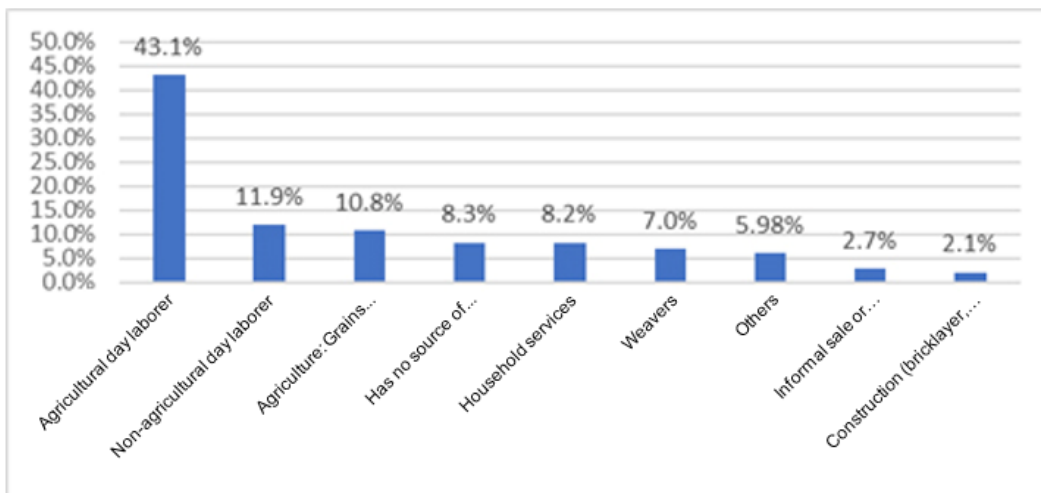
Comparison of the average income of the households by the main activities implemented in the area



As of July 2021, the CBA cost of GTQ 3.003.32 an amount that is above the average income of non-selected population of four surveyed municipalities. In order to reach the CBA income level, they should generate the average income of at least three months. The sources of income for the surveyed households are concentrated in agricultural activities, followed by non-agricultural activities; however, 8% of people have no source of income, as shown in Graph 9.

Graph No. 9

Sources of income of all surveyed households

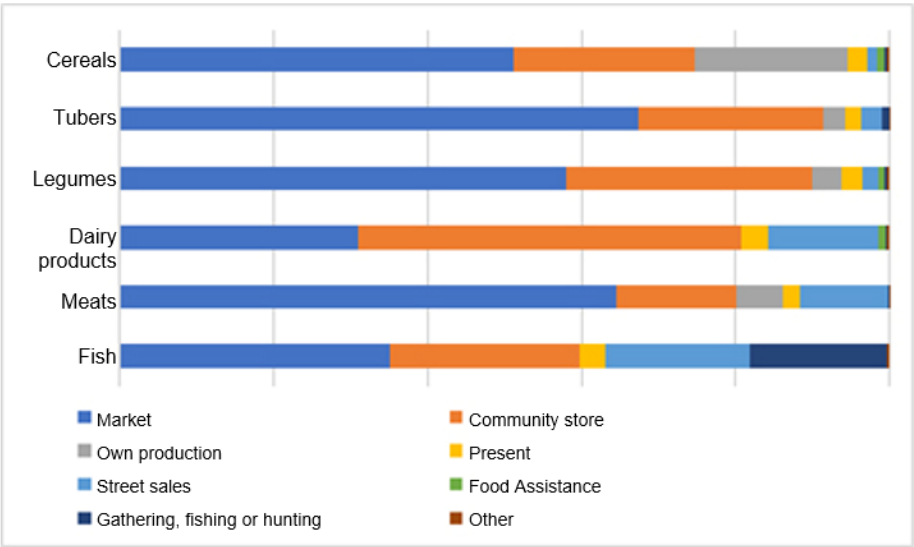


Regarding the food sources, within seven days prior to the survey being issued, 90% of the selected households indicated that they purchased the corn they consume, while 10% consumed the corn from their reserves. In addition, 96% of households buy beans and 4% consume beans that come from their crop reserve. It is important to note that July is considered a time of food shortages due to the "lean season" period. The situation is expected to improve in November from the corn harvest and the second cycle bean harvest barring any event such as a tropical storm, causing agricultural losses.

That data indicates that most of the households do not consume basic grain (diet base) from their crops or reserves, so they depend heavily on purchasing food products. As a result, they find themselves in a precarious economic situation which forces them to take extreme measures to access the resources and obtain food.

Graph 10 shows that with low income, food expenses are proportional to the consumption of corn, herbs, and beans.

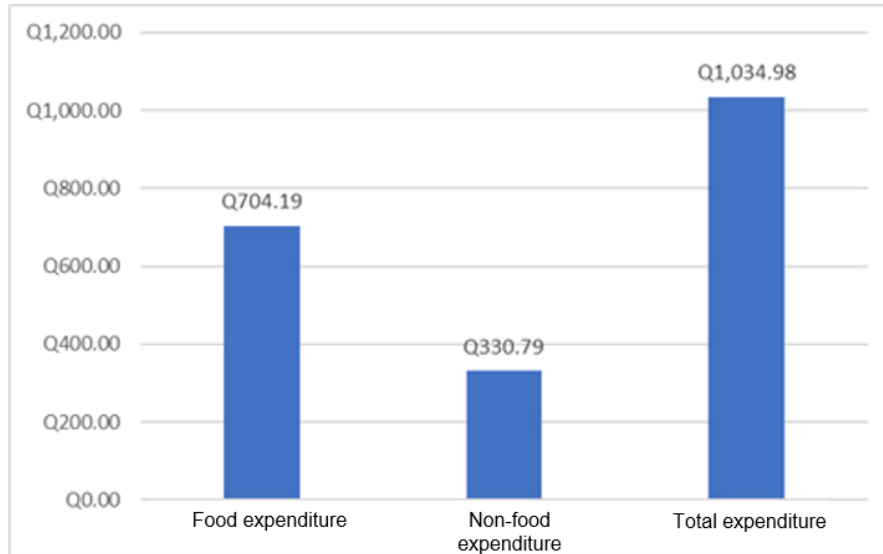
Graph No.10
Food sources in the households surveyed



Graph 11 shows that the highest proportion of the family's income is used for purchasing food products, which indicates a certain level of vulnerability with respect to the INSA of these families. Next, food and non-food expenses are compared:

Graph No. 11

Proportional food and non-food expenses according to average income, reported by families

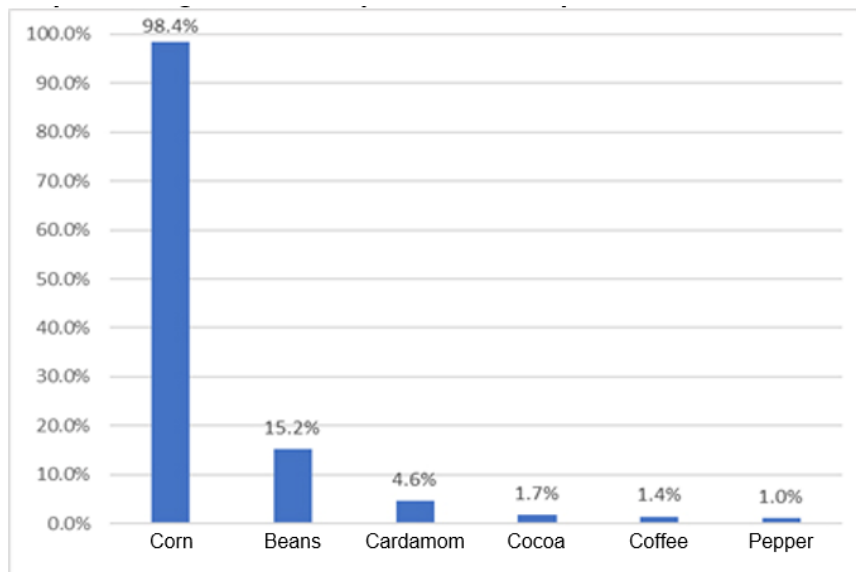


Food Availability

Graph 12 shows that slightly less than a half of the families surveyed do not farm (47.1%), and those that do farm (52.9%) mostly dedicate their work to cultivation of corn (98.4%) and beans (15.2%).

Graph No. 12

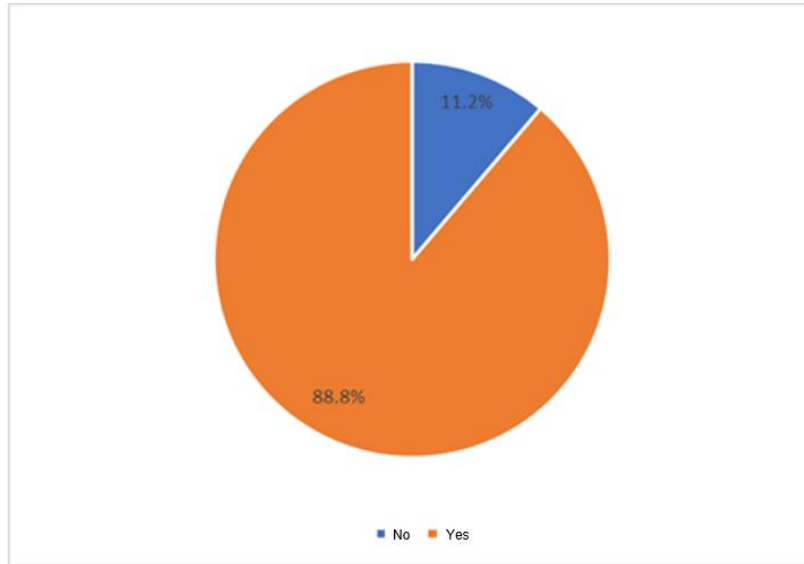
In percentages, main crops cultivated by families interviewed



There is a national trend that shows that families are farming less and less, partly due to the prices of basic grains in the markets of the border communities that supply the municipal markets due to their

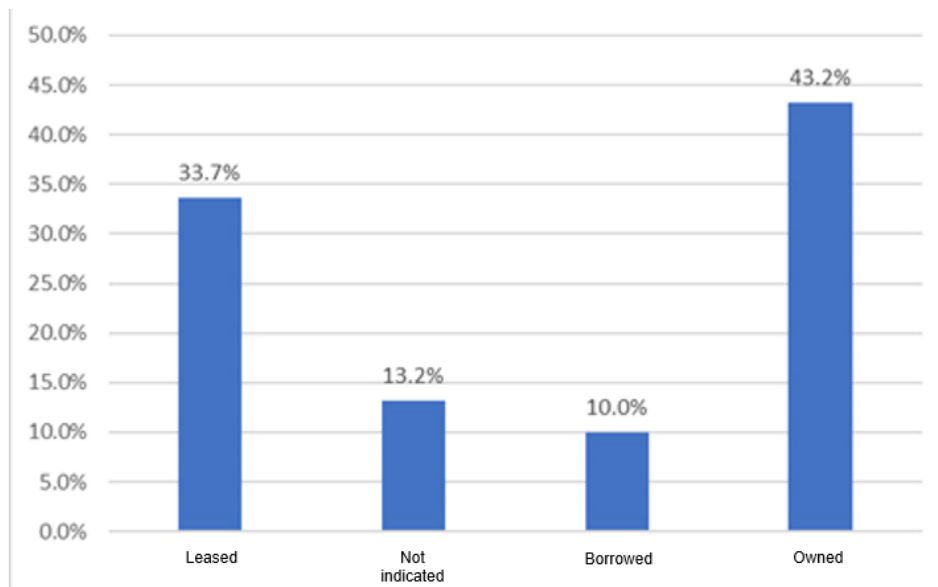
proximity, and on the other hand the monocultures in small plots such as palm oil. Of the households that dedicate themselves to farming, 89% own the land to carry out activities as shown in Graph 13.

Graph No. 13
Percentage of the households surveyed that dedicate themselves to farming with type of land ownership to carry out the activities



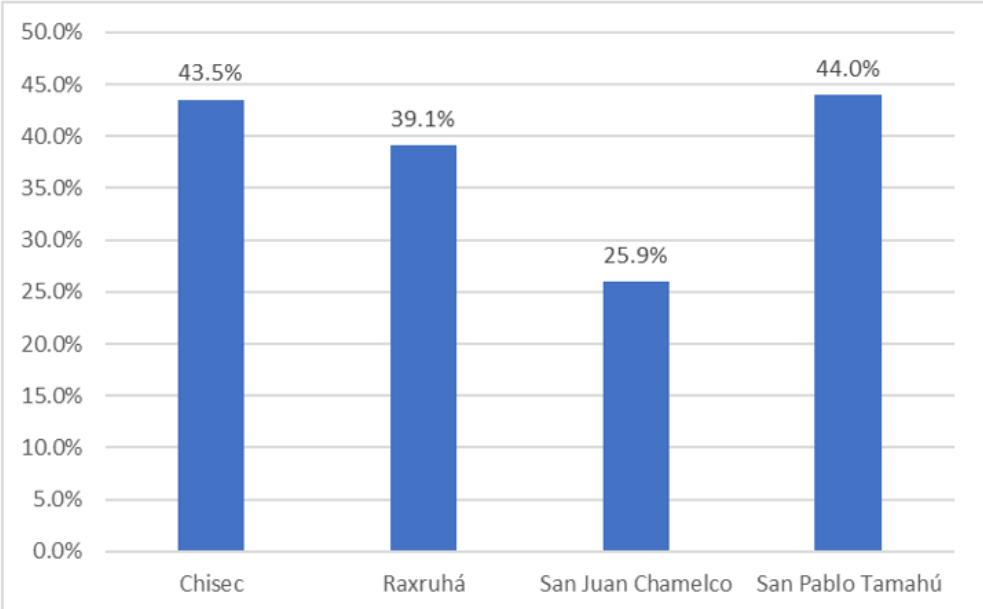
Graph 14 shows that the households that have land to farm, the ownership is diverse. The majority pay rent to farm given that part of their harvest goes to the owner of the land for which they work.

Graph No. 14
Type of ownership of the land where the surveyed families carry out their activities



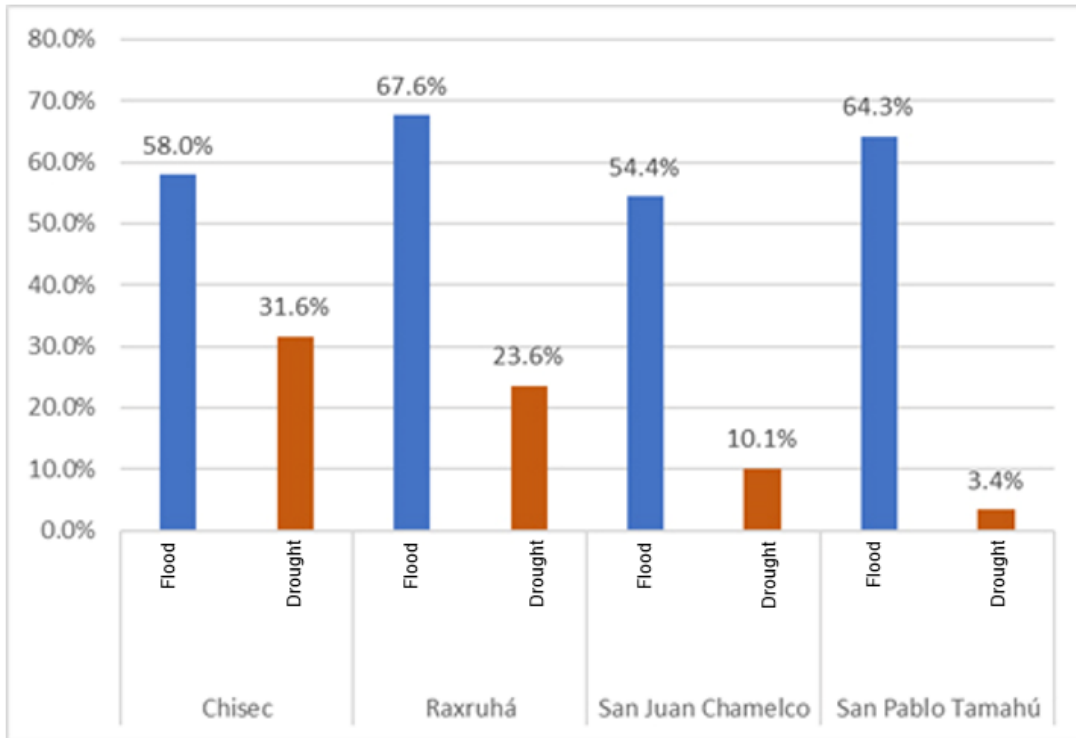
Graph 15 shows that almost four out of every ten (37.6%) households reported agricultural losses, mainly in the Chisec municipality.

Graph No. 15
Families that reported losses by municipality



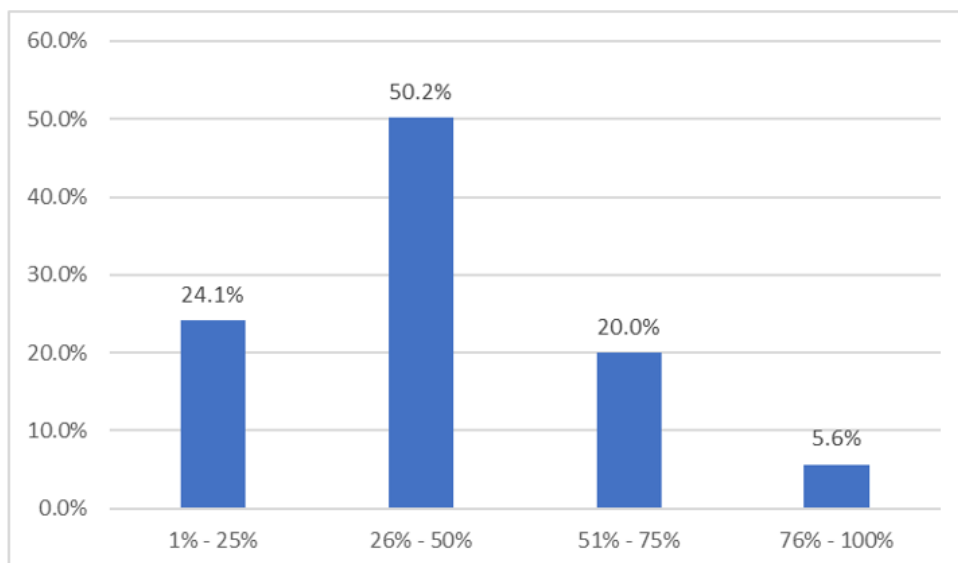
Graph 16 shows that the families that reported agricultural losses, 60% mention flooding due to Tropical Storms ETA/IOTA as a cause. This was more frequent in Raxruhá (68%), while in Chisec, drought caused the largest percentage of losses.

Graph No. 16
Percentage of families interviewed that reported losses by municipality



Moreover, Graph 17 shows that 76% of the families reported that the levels of agricultural losses exceeded 25% their own harvest showed in this graphic.

Graph No. 17
Percentage of losses reported by families surveyed



In summary, the data showed that flooding from the tropical storms had greater impact on crop losses than droughts.

Coping Strategies

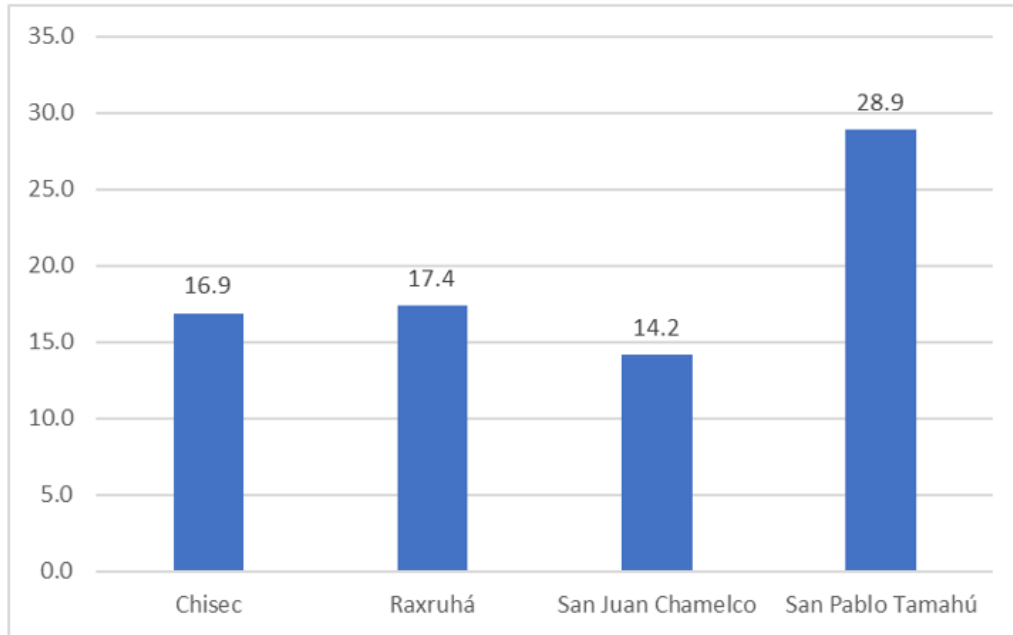
The Coping Strategy Index (CSI) is often used as proxy indicator for food insecurity; its elements can be used to analyze the structure of coping strategies. CSI is based on the possible answers that can be given to the question: “In the last seven days, the household had moments of stress related to INSA”³.

In the CSI there is no benchmark score as there is in the PCA, but adding the weight of each type of strategy implemented by households gives an absolute data and where the CSI is higher, its projection to severity is proportional.

In this case, when comparing the data between municipalities, it was determined that households surveyed in Tamahú undertook more coping strategies. This suggests that HHs in Tamahu face greater vulnerability than in the other surveyed areas.

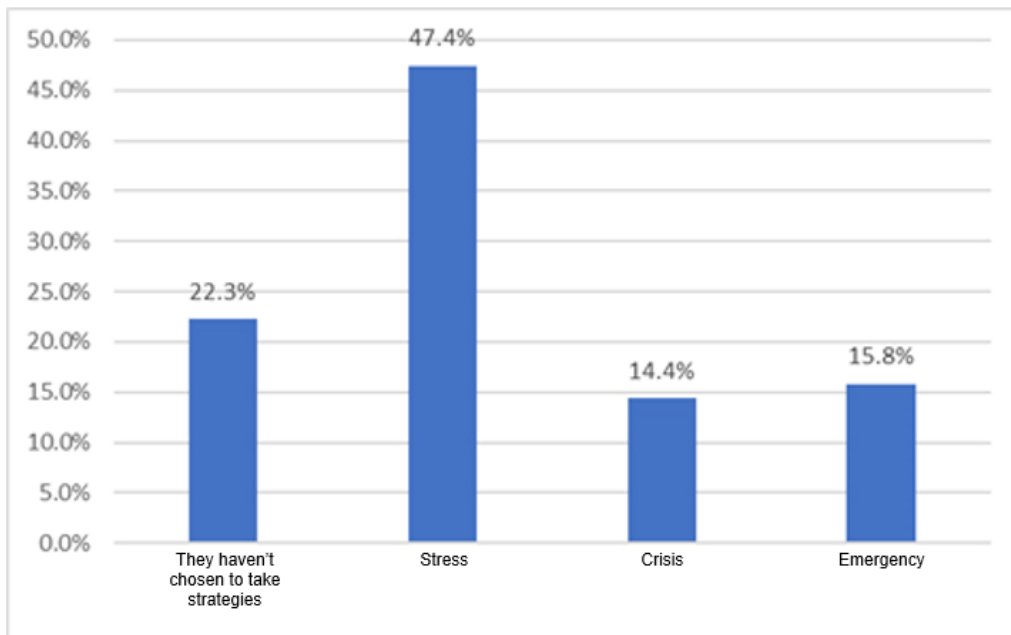
³ PMA 2009. Manual for evaluation of INSA in emergencies. Second Edition.

Graph No. 18
Comparison of the average of CSI in households surveyed between the municipalities evaluated



In addition, Graph 19 shows that more than half of the households surveyed are developing coping strategies to face food insecurities.

Graph No. 19
Identification in percentages of the coping strategies to access food, used by the surveyed families

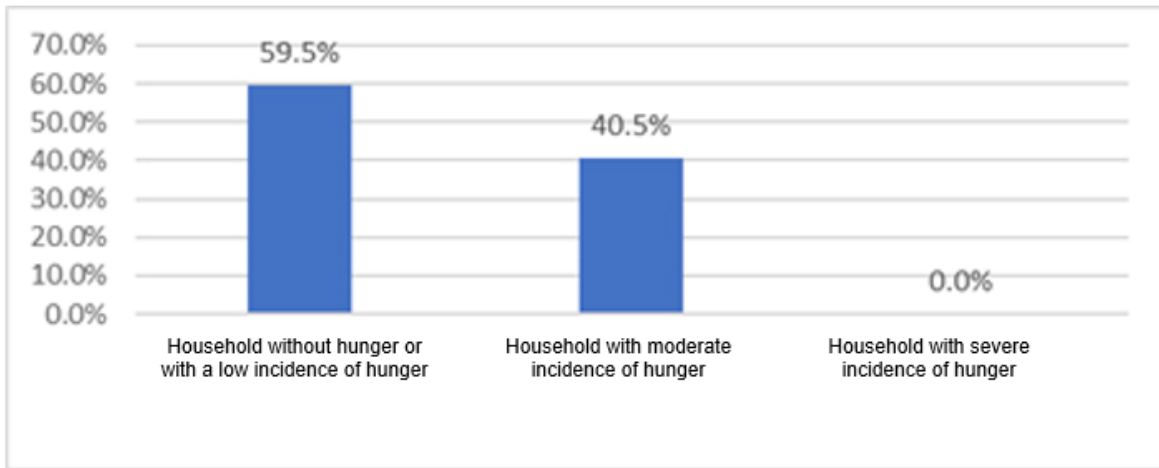


Further, the data can be interpreted as indicating that without timely emergency assistance, more vulnerable HHs would likely find it necessary to resort to coping strategies.

Hunger Scale

The Hunger Scale is an indicator of food deprivation in the household. To develop this baseline report, questions were asked about the occurrence of the Hunger Scale, inquiring whether or not a specific condition associated with experience of food insecurity occurred during the past four weeks (or past 30 days). Like the CSI, the results indicate that there is 40.5% incidence of moderate hunger among households surveyed, as shown in Graph 20.

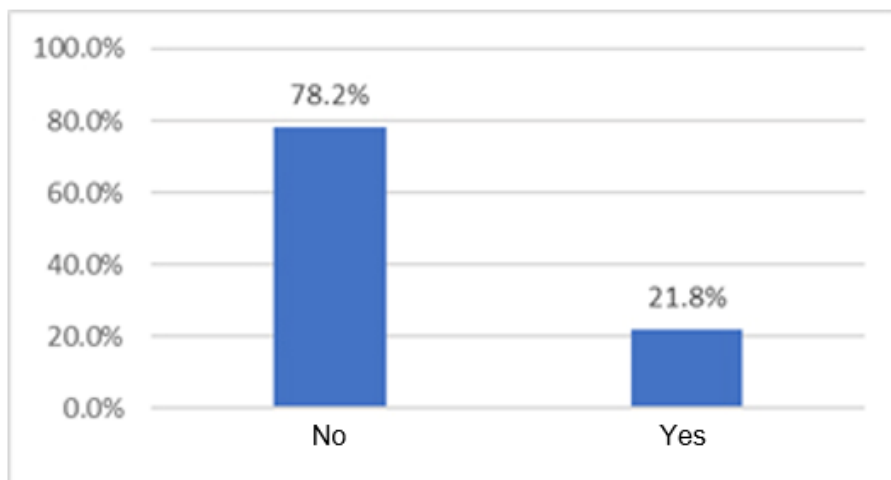
Graph No. 20
Hunger scale of the families surveyed



Perception of Malnutrition and Health

To understand the malnutrition situation, the survey included questions to measure the perception and the situation of prevalent diseases. Graph 21 shows that two out of ten households mentioned that their child had signs related to malnutrition.

Graph No. 21
Perception of the acute malnutrition in children under 5 years of age in surveyed households

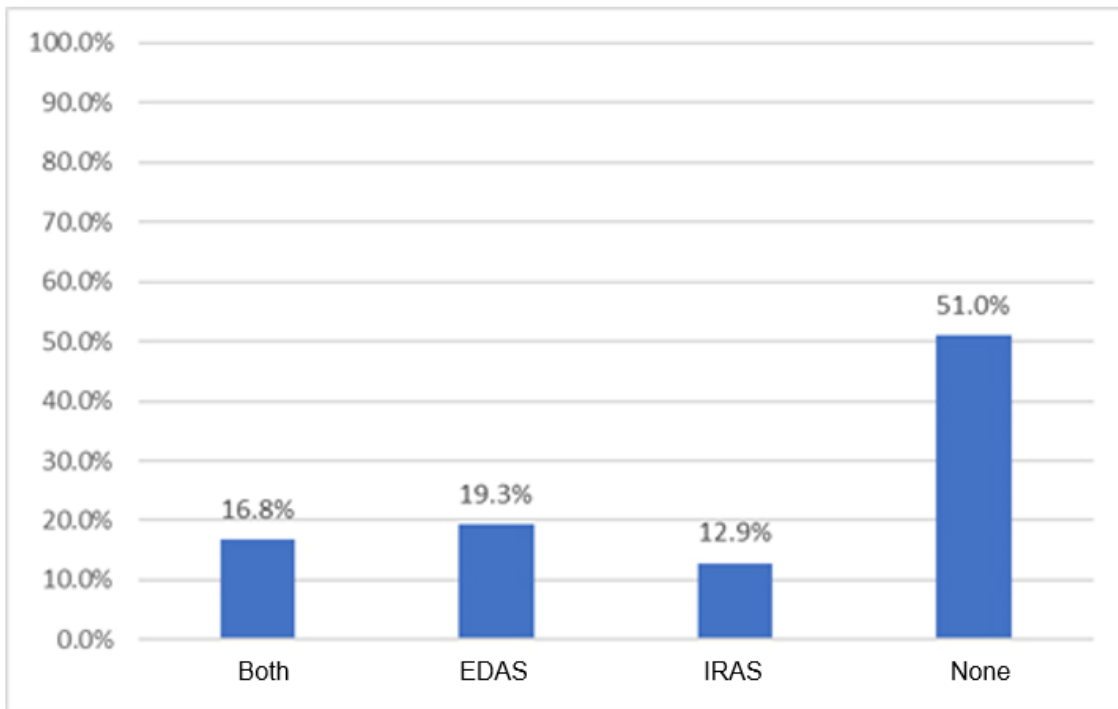


Perception of surveyors about acute and chronic malnutrition based from diagnostics public health of the locations.

Meanwhile, in the perception of prevalent diseases, acute diarrheal diseases and combination of diarrheal and respiratory diseases remain strong. The high incidence of these diseases, in addition to low food consumption, may result in acute and chronic malnutrition in the area.

Graph No. 22

Perception of the prevalent disease in children under 5 years of age one week before the survey was issued to households



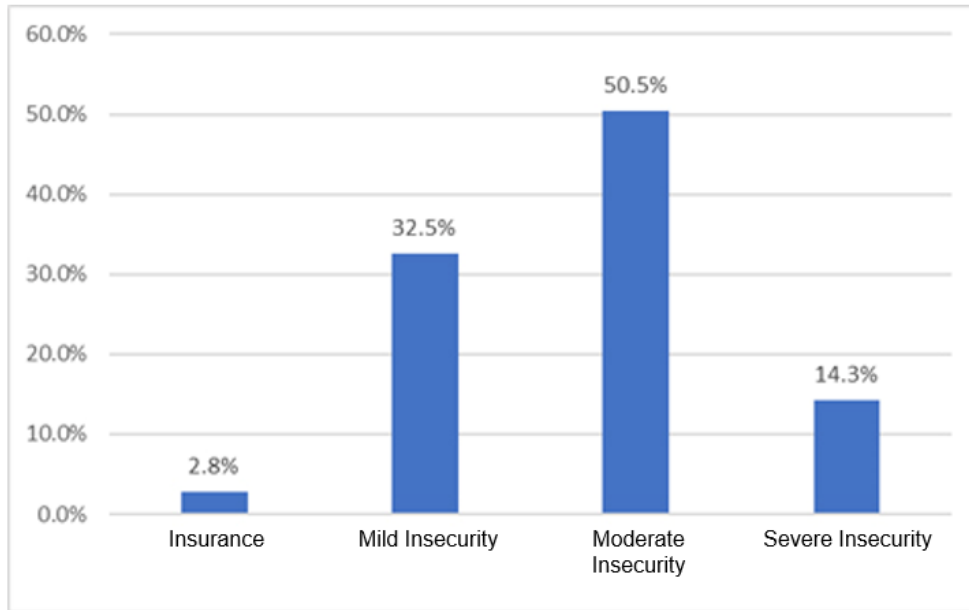
Food Insecurity

The project conducted a calculation to classify food insecurity at the household level, according to the CARI methodology. The related variables include: food consumption (PCA), income with proportion of food expenses and coping strategies, rated and ranked according to their severity. The survey data showed that 97% of the households reached in the project area suffer from food insecurity with the following classification according to its severity:

- 2.8% of the all households surveyed are classified as secure, which means that they are capable of meeting the basic nutritional and non-nutritional needs without resorting to coping strategies.
- 32.5% of all households are classified as mildly insecure, due to their adequate food consumption without resorting to irreversible coping strategies. They cannot afford some essential non-food items.

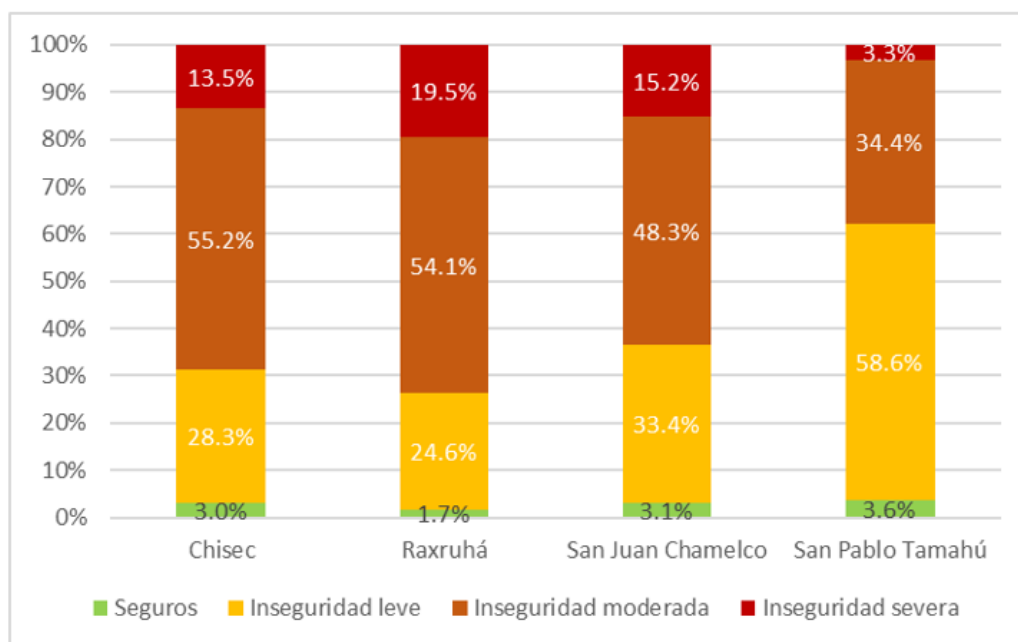
- 50.5% of the households are moderately insecure, which have significant gaps in food consumption, or are marginally capable to meet their minimal food needs only using irreversible coping strategies (liquidation of assets or deviation of expenses on non-food items).
- 14.3% of the households are severely insecure. It is characterized by having extreme deficiencies in food consumption, or an extreme loss of productive assets.

Graph No. 23
Food insecurity classification in percentages of the total families surveyed



Graph 24 demonstrates that Raxruhá is the municipality with the highest percentage of households with food insecurity. Also, it is where households with the greatest need for assistance is reported (73%), taking into account the levels of moderate and acute food insecurity.

Graph No. 24
Comparison of food insecurity classification in percentages of the families surveyed in four municipalities of Alta Verapaz



CONCLUSIONS – PART I

- The evaluation of 3,294 households in 39 communities of the municipalities of Chisec, Raxruhá, San Juan Chamelco, San Pablo Tamahú de Alta Verapaz found that 65% (2,132) of the households have severe to moderate INSA and are in need of urgent humanitarian assistance.
- The selected households have on average 4.38 family members, which is lower than the national average of 4.77. This number is considered too low to reach the target number of beneficiaries proposed in the project design, which was based on the national average.
- 77% members of the selected households are under the age of 30 years, which is higher than 69%ⁱⁱⁱ registered at the national level for the same segment of population. In addition, it was determined that 5% of the members of the surveyed households are under 5 years of age.
- The families of Alta Verapaz have a more precarious condition of food consumption, since 70% of the population interviewed has an insufficient diet in terms of variety and quality, which is nearly twice the figure determined by Action Against Hunger in the territory of the dry corridor in the year 2021 (37%) .
- The average income of the selected households is GTQ 892.00, which is GTQ 2,111 less than the GTQ 3,003 average for July 2021, preventing households from reaching the basic food basket. They are helped to supplement their monthly income through cash transfers so that they can afford to buy more nutritious and diverse foods.

- 53% of the surveyed households are engaged in farming and work on their own plots of land or rented land with dimensions under 0.73 of a street block, which classifies all these families as under-subsistence.
- The predominant crops are corn (98%) and beans (15.2%). Between the two crops, there is a significant difference in farming them, such as the low farming production and increase in bean prices, which may reduce the possibility that households access at least the traditional tortilla/beans diet, which is a mixture of medium nutritional value.
- 60% of the families reported that they have experienced agricultural losses due to the Tropical Storms ETA/IOTA. This is important to note since historically the food and nutrition crisis have occurred in the context of agricultural losses (2001, 2009, 2014).
- It was determined that interviewed households, due to a low income, agricultural losses in 2020, and almost non-existent food reserves, are conducting coping strategies to respond to food insecurity, mainly in Tamahu, a municipality with the highest index of food insecurity reported (28%). The implementation of vegetable gardens benefits small-scale production so that families can reduce the crisis of food and nutritional insecurity.
- The high perception of acute malnutrition and prevalent diseases in children, as well as moderate and severe situation of INSA, make the surveyed population (and project beneficiaries), require food assistance.

RECOMMENDATIONS

- Involve young women and men in project activities, especially those related to agricultural reactivation in the area.
- Monitor and evaluate the result of economic transfers in no less than 15 days after delivery to demonstrate their impact on food insecurity.
- Train families to best use small plots of land, and the families that are not engaged in agriculture, develop other types of income generating activities to obtain economical revenue.
- Due to the evidence associated with the Tropical Storms ETA/IOTA, the households of the municipalities most affected are in a critical situation from INSA, therefore, it's recommended to evaluate expanding the project to other municipalities such as Panzós, which to date is a municipality which reports most deaths from acute malnutrition in Guatemala.
- Given the low economic investments by the government of Guatemala in the area regarding data on malnutrition and the interruption of the basic health services due to Covid-19, it's recommended to include the nutritional monitoring component (initial evaluation and monitoring) to contribute to the prevention of the nutritional crisis in this territory.
- Present the report results to COMUSAN, CODESAN and National Forecast Committee of the municipalities where Plan International al Plan is engaged.
- Collaborate with other organizations that are present in the intervention areas, and with municipalities to organize (if not applicable, conduct them) reports and assessments of SAN and community assets, to obtain indicators that can serve as the starting point of a Comprehensive Municipal Development Policy to allocate specific funds to use it.

- Support the municipalities so that the development councils dedicate funds to the comprehensive rural development of the most underserved communities.
- Collaborate with other organizations for development of projects to address the continuous situation of food insecurity in the area.
- As a way to monitor the situation, develop a basic survey that collects data on food consumption score, coping strategies, income and quality of the services delivered.
- The importance of implementing food assistance, vegetable gardens, economic reactivation processes and poultry farms so that highly vulnerable and food insecure families can have access to vegetable food and animal protein and access to monetary resources that allow them to improve their daily diet with support to improve consumption.



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**ANNEX:
BASE LINE
REPORT**
SECTORS 2, 3 Y 4

ANNEX - INTRODUCTION

Plan International is implementing the USAID Bureau for Humanitarian Assistance (BHA)-funded project “Addressing Immediate Food Insecurity in Alta Verapaz” in the municipalities of San Juan Chamelco, Chisec, Raxruha and Tamahu. Prior to implementing the project activities in the areas of food assistance and cash transfers, agriculture, economic recovery and market systems, and WASH, Plan conducted a baseline assessment to identify project beneficiaries among food insecure households in the target areas. The beneficiary criteria serve to enhance the achievement of project outcomes and the potential to reach those in the greatest need.

The baseline study revealed that members of indigenous communities (Q’eqchi’ and Poqomchi), particularly women, faced difficulties undertaking economic activities due to challenges accessing credit within the Guatemalan financial systems. The study highlighted the importance of access to potable water as it relates to food insecurity, as well as the difficulty this posed for many surveyed HHs. In target communities, water that is consumed comes from the harvest, often without adequate processing, which can have a severe impact on the health of children and the entire population. Therefore, it is necessary that the Ministry of Health, as the governing body for water and environmental sanitation, and the respective municipalities, ensure access to water for the entire population.

This report contains an analysis of the information obtained from the baseline survey conducted with 1,350 heads of households in 51 communities across the four municipalities. The study allows for a deeper understanding of participating households’ consumption of nutritious food, economic management and water consumption. The following report builds off the food insecurity baseline survey

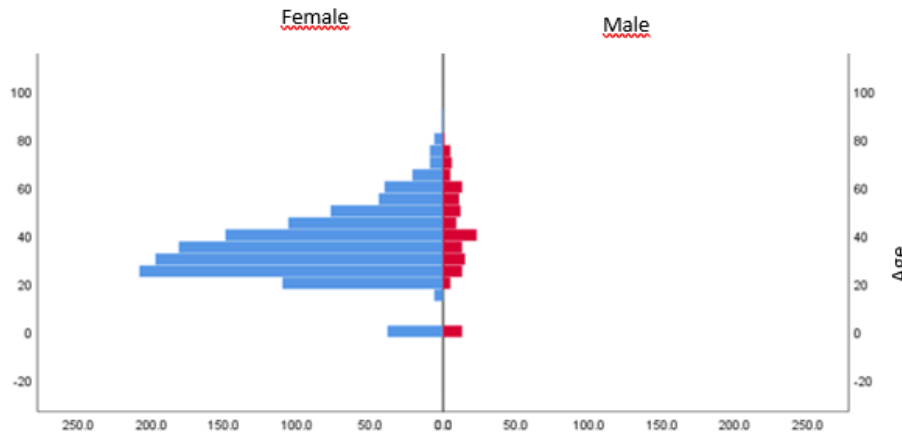
BASELINE REPORT: AGRICULTURE, LIVESTOCK, ECONOMIC RECOVERY AND MARKET SYSTEMS AND WASH SECTOR INDICATORS

Methodology

The project’s monitoring and evaluation and technical staff designed a primary data collection instrument that guided data collection, tabulation and analysis. The instrument captured relevant indicator data to inform the agriculture, livestock, economic recovery, and WASH project indicator baselines. The project technical staff, MAGA extension agents, and relevant municipal government staff conducted the data collection and engaged in project activities. Plan conducted a data collection training in target communities to enhance the survey data quality. The survey was then conducted among 1,350 heads of households.

Municipalities	Male	Female	Total	Communities
Chisec	87	329	416	14
Raxruha	21	268	289	12
Chamelco	17	425	442	18
Tamahu	20	183	203	8
Total	145	1,204	1,350	52

Table 1: Demographic data



Graph 1: Population pyramid by sex

Data Collection

First, in coordination with municipal authorities and MAGA extension workers, Plan prioritized communities with potential to participate in agriculture, livestock and economic recovery sector activities. The second step was to hold an introductory meeting with community authorities, in which project staff presented the project and scope of work. The meetings also provided an opportunity to identify individuals with relevant experience in key sectors.

Following the introductory meetings, data collection began by conducting home visits, often in groups and accompanied by community leaders. After completing the ballots, their general review was carried out to ensure that the interviewed persons complied with the inclusion criteria⁴ as determined by the Secretary of Food Security of the Government of Guatemala.

⁴ Households with children under 5 years old, Households with a woman breastfeeding, Households with a family member with disability, Households with a pregnant woman, Households with a migrant person



Photo 1: Meeting with community authorities

Data Analysis

After conducting the surveys in each of the communities, the data was analyzed using SPSS software. The results of this analysis are described below, beginning with a description of participating household demographics, followed by data for each of the project's indicators.

Household Characteristics

The following section describes the demographic information of heads of households surveyed.

Description	Chisec	Raxruha	Chamelco	Tamahu
Gender of the head of household				
Male	87	21	17	20
Female	329	268	425	183
Age of the head of household				
Average in years	33	37	37	36
Minimum in years	16	17	17	19
Maximum in years	91	86	77	79
Average number of members per household	5	5	5	5
Primary Decision-Maker				
Man	152	67	66	25
Woman	119	39	82	40
Both of them	145	183	294	138
Household type				
Single parent	21	23	41	19
Traditional	340	233	359	147
Multiple	55	33	42	37
Average number of animals per family	2	2	5	7

Table 2: Household Characteristics

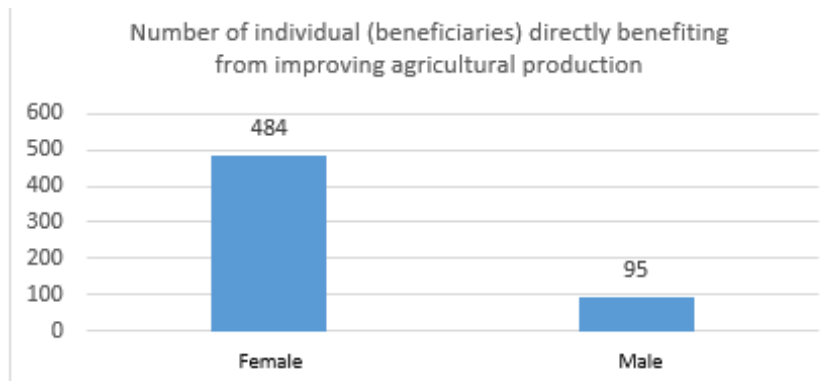
As shown in Table 2, the average age of the heads of households surveyed is 36 years of age, which indicates a potential for young farmers to be more open to incorporating improvements to their agricultural production practices. Likewise, 89% of respondents are women considering that most of them participate in different community activities because their husbands are often absent because of work.

Eight percent of households are single-parent households, with the woman as the head of household. 12% of the households surveyed have multiple heads of households. Households surveyed have an average of 7 members or up to 15 members. 80% are traditional households (male/female household).

INTERMEDIATE OUTCOME 2: INCREASED CONSUMPTION OF NUTRITIOUS FOOD BY ESTABLISHING HOUSEHOLD HOME GARDENS AND POULTRY UNITS

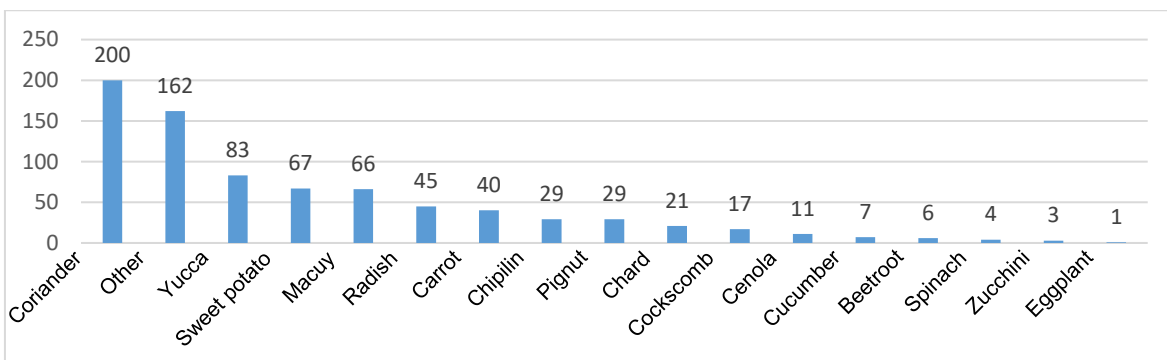
Number of individuals (beneficiaries) directly benefitting from improving agricultural production (A01)

The data showed that 99% of the beneficiaries surveyed reported having an area of land suitable for home gardens. However, 11% of households (69 families) rent their land from a third party, paying rent in the form of labor or a portion of their crops. Based on the beneficiary selection criteria, the project team identified 579 individuals to directly benefit from agricultural production activities, 484 (or 84%) of which are women and 95 (or 16%) of which are men.



Graph 2: Number of individual (beneficiaries) directly benefitting from improving agricultural production

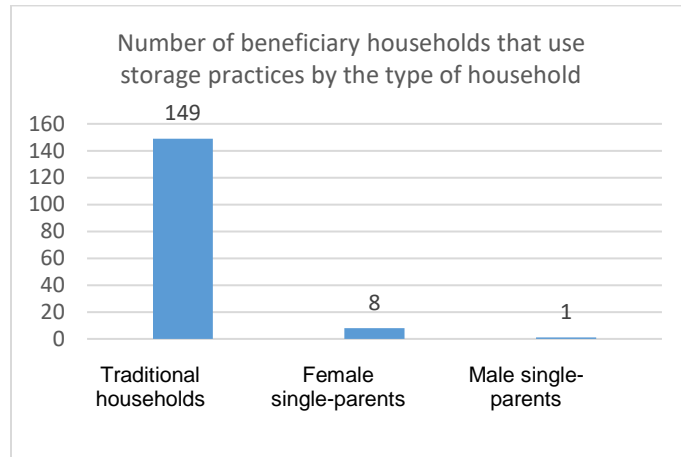
Individuals who indicated having previous experience in the cultivation of various crops are described below, in which most of the crops are produced locally.



Graph 1: Previous experience in the cultivation of various crops

Number of beneficiary households using improved post-harvest storage practices (A04)

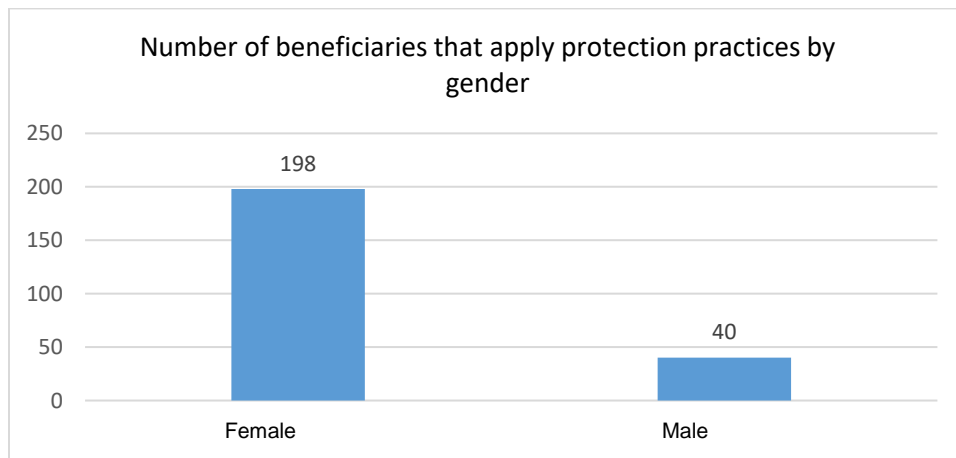
The baseline survey indicated that only 27% of households carry out some type of post-harvest storage practices. Storage practices currently employed by respondents include artisanal storage, the use of plastic containers (barrels), hermetic bags, dehydration processes, sacks and sheds.



Graph 2: Number of beneficiary households that use storage practices by the type of household

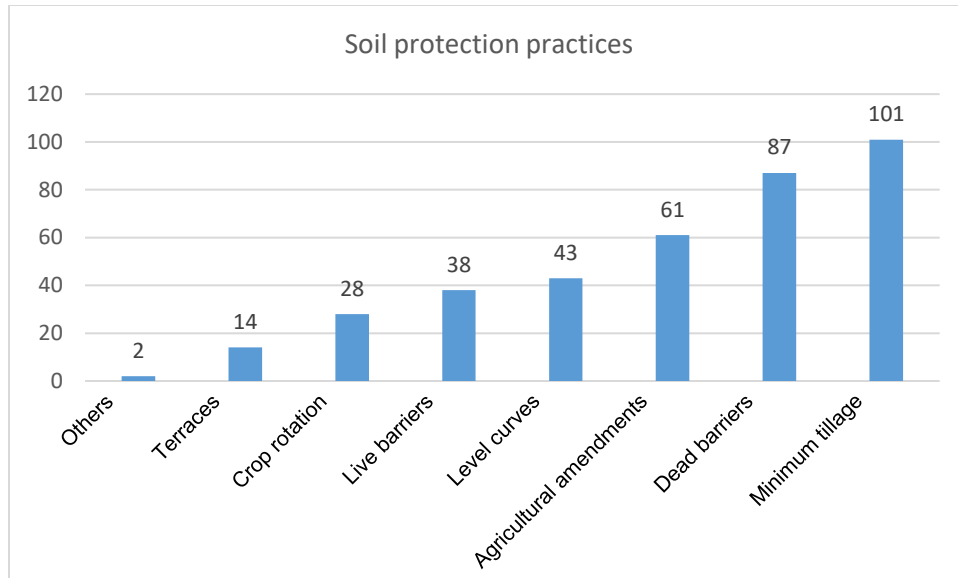
Number of individuals trained in appropriate crop protection practices (A11)

Of the 579 beneficiaries identified at baseline, 238 (or 41%) reported having knowledge of and applying practices for crop protection



Graph 3: Number of beneficiaries that apply protection practices by sex

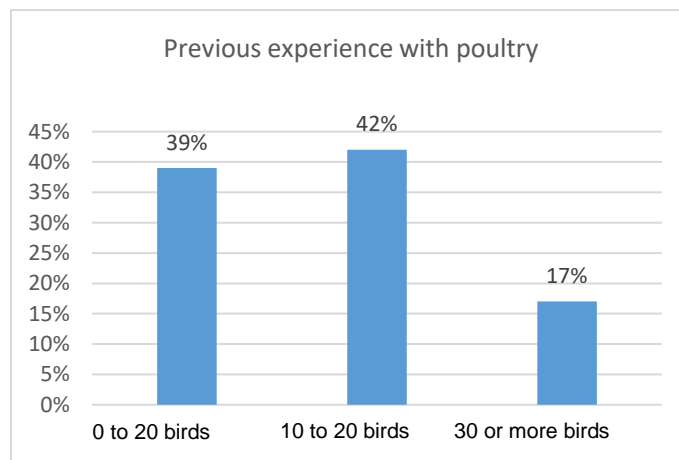
Most respondents shared that they employ one of three key soil protection processes: minimum tillage, dead barriers, or soil amendments.



Graphic 4: Soil protection practice

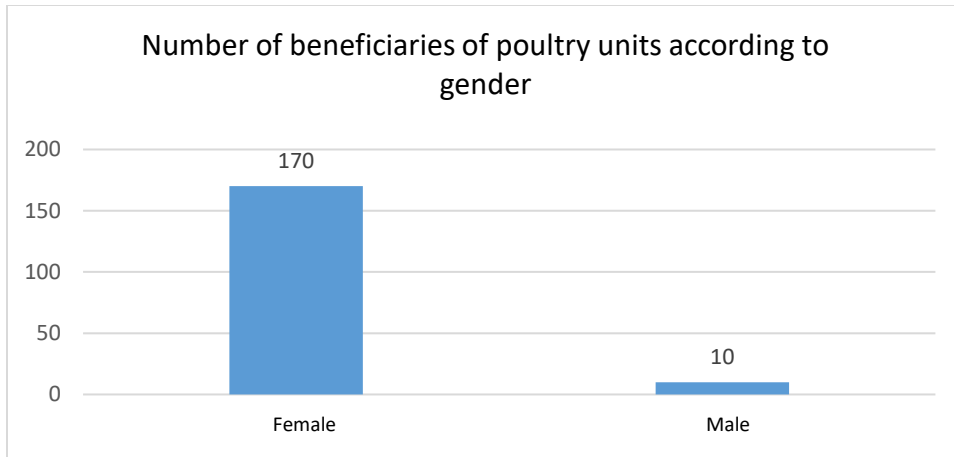
Number of individuals benefitting from livestock activities (A13)

Of the 180 participating head of household livestock, 98% mentioned in the surveys that they have previous experience managing poultry, including laying hens, broiler chickens and creole chickens.



Graph 5: Previous experience with poultry

60% of respondents reporting having no experience vaccinating their poultry, which presents an opportunity for the project to improve beneficiaries' knowledge of vaccination practices.



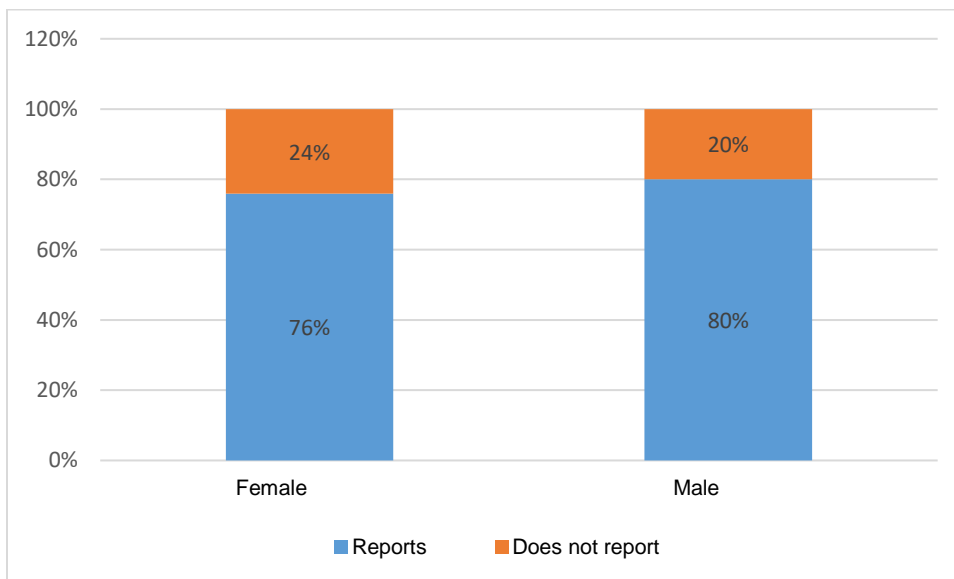
Graph 6: Number of beneficiaries of poultry units according to sex.

94% of beneficiaries of poultry livestock activities are women.

INTERMEDIATE OUTCOME 2: RECAPITALIZE RURAL MICRO-BUSINESSES

Percentage of beneficiaries reporting net income from their livelihoods (E02)

The data shows that out of 352 economic recovery and cash transfer beneficiaries, 268 (or 76%) reported monetary net income from activities they carry out with a weekly income of Q200 per business. With this weekly income, the family can only have access to basic grains for food.



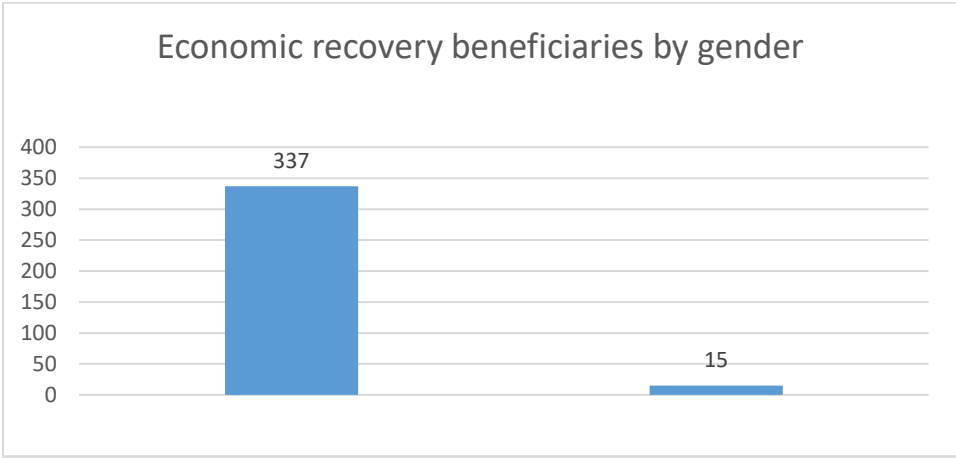
Graph 7: Transfer beneficiaries reported monetary net income

Number of individuals assisted through livelihood restoration activities (E01)

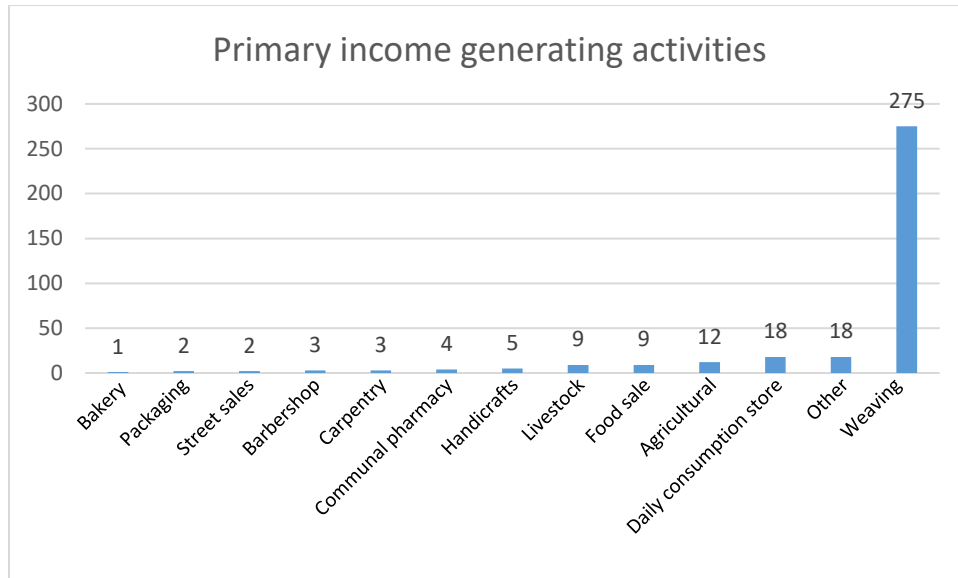


Photo 1: Women's weaving group

96% of economic recovery cash transfer recipients are women, while 4% are men.



Graph 8: Economic recovery beneficiaries by sex



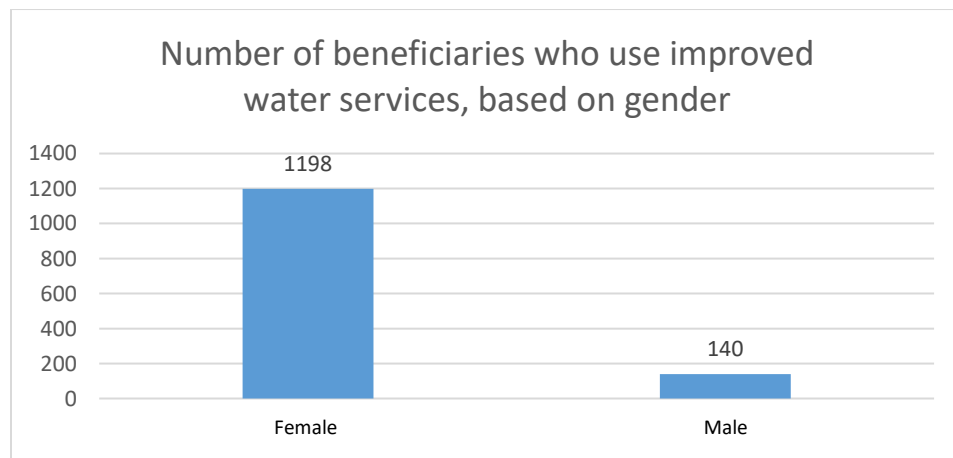
Graph 9: Primary income generating activities

The primary income generating activity among respondents is weaving, which is primarily conducted by women. However, respondents have limited knowledge of effectively marketing their products at the local markets and of selling products at an appropriate price according to the time investment required.

INTERMEDIATE OUTCOME 3: IMPROVE POINT-OF-USE WATER TREATMENT AMONG HOUSEHOLDS TO IMPROVE HYGIENE RELATED TO FOOD PREPARATION

Number of individuals directly utilizing improved water services provided with BHA funding (W29)

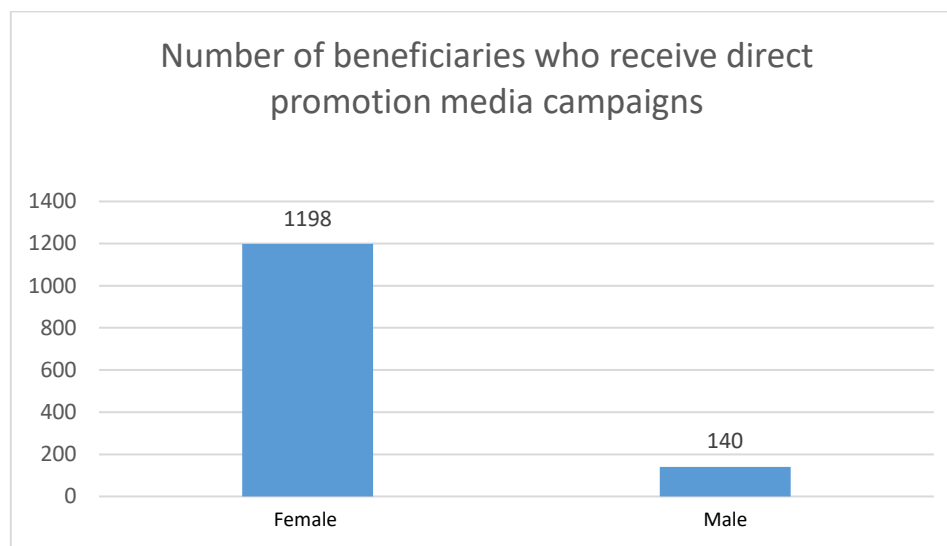
Graph 12 shows the number of heads of HH who will use improved water services (in the form of POU water treatment) provided with BHA funding. A total of 1,338 individuals interviewed will benefit.



Graph 10: Number of beneficiaries who use improved water services, based on sex

Number of individuals receiving direct hygiene promotion (excluding media campaigns and without double counting) (W07)

Graph 13 shows the number of heads of HH who will receive direct hygiene promotion through the project. A total of 1338 individuals interviewed will benefit.



Graph 11: Number of beneficiaries who receive direct promotion media campaigns

CONCLUSIONS – PART II

- For the home garden activities, 136 participants were identified in the municipalities of Raxruha and Chisec, and 92 were identified in Raxruha that meet the selection criteria and due to the difficulty of access to land for cultivation and lack of interest. The proposed goals for these two municipalities were not reached, so the remaining beneficiaries were transferred to the municipalities of Tamahu and San Juan Chamelco, leaving 245 and 106 respectively for these last two municipalities, reaching 579 participants in relation to home gardens.
- Communities in Chisec and Raxruha are most open to poultry activities, particularly given that some of the households surveyed already have creole birds on their farm. However, prophylactic practices are not common. This presents an opportunity for the project to increase the knowledge and skills of the beneficiaries on preventing transmission of infectious illness within livestock holdings through the technical trainings that will be conducted by the project technical team.
- In the municipalities of Chamelco and Tamahú, planting vegetables on a small scale (in household gardens) is common. Additionally, these communities have fertile soil, which may explain why communities in this region are more open to household garden activities. Tamahu was also one of the municipalities where it was identified that people carry out more coping activities, so the transfer of more gardens to this municipality will benefit the food security of the vulnerable population.
- With regards to economic recovery activities, the baseline study found that the majority of women already own micro-businesses, but require technical support to market and sell their

products on a larger scale. This presents an opportunity for these women to benefit from the capacity building activities on marketing and selling their products that the project's technical team will carry out.
