Appendix G.i
PROMASA II: Annual Evaluation.

During the fourth quarter of FY09, the PROMASA program conducted an annual results evaluation in order to analyze progress made in the field during the second year of program interventions.

Methodology

The evaluation was conducted using the LQAS[1] methodology with a stratified cluster sample comprised of 19 study units per stratum[2] for each sample of interest. The sample was established by randomly selecting 19 households participating in the PROMASA program for each of the 6 project coverage municipalities.

In order to evaluate progress made in regards to the SO1, SO2 and SO3 indicators, three different study samples were established as follows:

1. Maternal-child nutrition and health survey: a sample consisting of 19 households with children less than 36 months of age per stratum (municipality), in order to measure the maternal-child nutrition and health indicators[3]. A total of 114 households were evaluated.
2. Exclusive breastfeeding survey: the program then selected 19 households with children less than 6 months of age per stratum, in order to evaluate the exclusive breastfeeding indicator. A total of 111 households were evaluated. The sample size for this indicator was slightly lower due to the fact that there were only 16 children less than 6 months of age in the Chajul municipality.
3. Livelihood survey: in addition, the program established a sample of 19 households per stratum in order to evaluate the livelihood indicators[4]. A total of 114 households were evaluated.
4. Anthropometric evaluation[5]: in order to ensure the quality of the evaluation's anthropometric analysis, the program trained evaluation personnel on standards related to measuring children's weight, height and mid upper arm circumference (MUAC). Even though 100% of evaluation personnel were trained on MUAC and weight measurements, only 35% ended up trained on height measurement. This situation resulted in the need to measure the height per age (chronic malnutrition) and weight per height (acute malnutrition) indicators via a representative sample. Using the sample framework established for the MYAP baseline study, for which municipalities served as the primary stratum, 25 households in each of the 32 communities (located in the 6 program coverage municipalities) were randomly selected, in order to ensure appropriate representation and validity for the study, for a total of 800 households.

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[1] Lot Quality Assuring Sampling

[2] Valadez, Joseph. 2003. Assessing Community health Programs, A Trainer's Guide: Using LQAS for Baseline Surveys and Regular Monitoring. TALC: Teaching AIDS at Low Cost, St. Albans, United Kingdom.

[3] Weight per age, height per age prevalence, knowledge of neonatal, pregnancy and childhood danger signs.

[4] Adoption of best agricultural production and formal marketing practices, months of adequate supply and diet diversity index.

[5] Anthropometric indicators used in this report are defined as follows: a) Acute malnutrition: height for age b) Global malnutrition: weight for age, c) Acute malnutrition: weight for height and d) MUAC: mid upper arm circumference, used to measure acute malnutrition

For the global and acute malnutrition indicators evaluated using MUAC, a total of 8,274 children less than 36 months of age were evaluated, representing 95% of those enrolled in the PROMASA program in August of 2009.

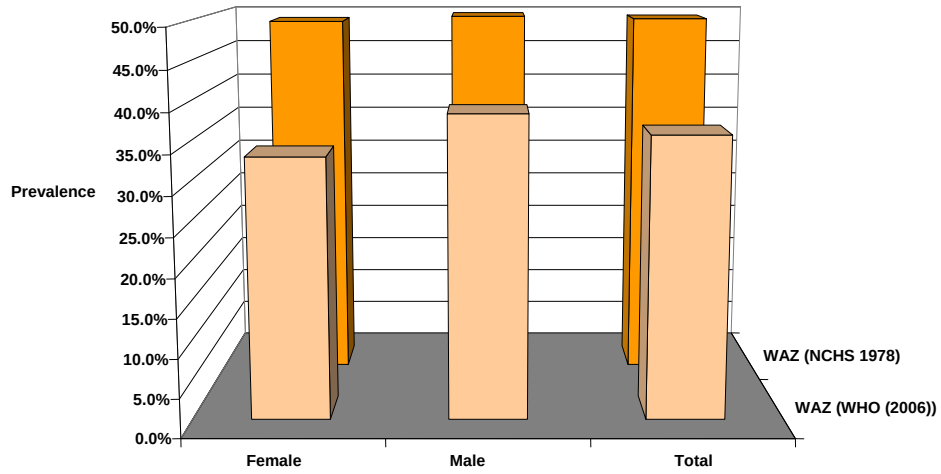
Results

The results of the PROMASA evaluation for fiscal year 2009 are presented below.

Anthropometric Indicators

Charts 1, 2 and 3 present the global, chronic and acute malnutrition prevalence rates by gender and NCHS (1978) / WHO (2006) growth standards. It is important to highlight that despite the fact that the differences found between the sexes is not significant, boys were more affected in all three anthropometric indices.

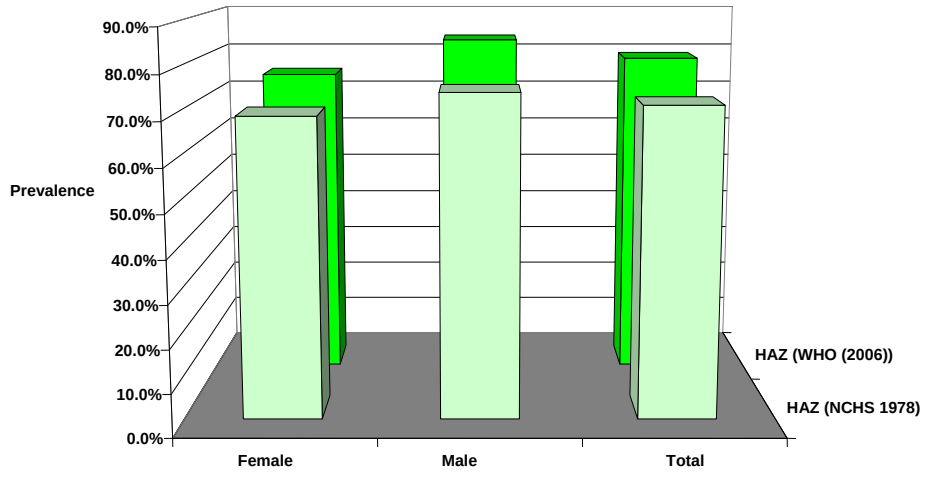
Chart 1
Global Malnutrition Prevalence per Sex and Classification
September, 2009. SC-MYAP, El Quiché, Guatemala



n = 8,274

	Female	Male	Total
WAZ (WHO)	33.6%	39.0%	36.4%
WAZ (NCHS)	48.9%	49.5%	49.2%

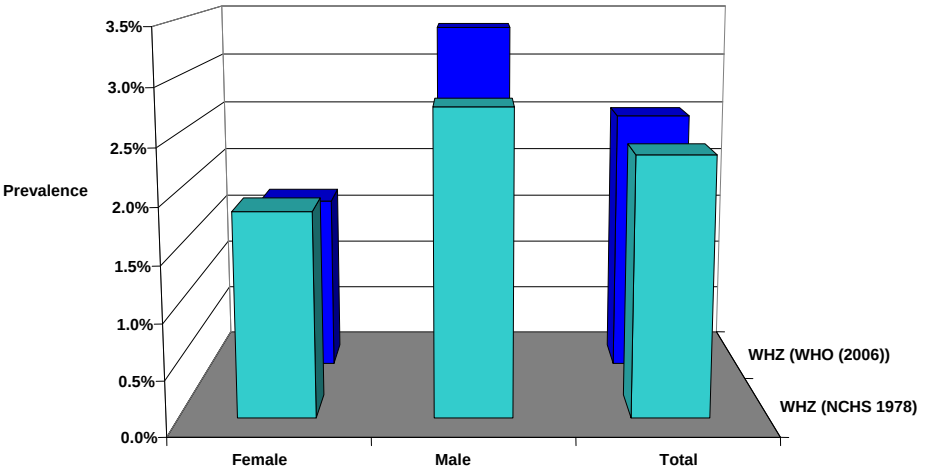
Chart 2
Chronic Malnutrition Prevalence per Sex and Classification
September, 2009. SC-MYAP, El Quiché, Guatemala



n = 821

	Female	Male	Total
HAZ (NCHS)	69.6%	74.8%	72.0%
HAZ (WHO)	74.6%	83.3%	78.7%

Chart 3
Acute Malnutrition Prevalence per Sex and Classification
September, 2009. SC-MYAP, El Quiché, Guatemala

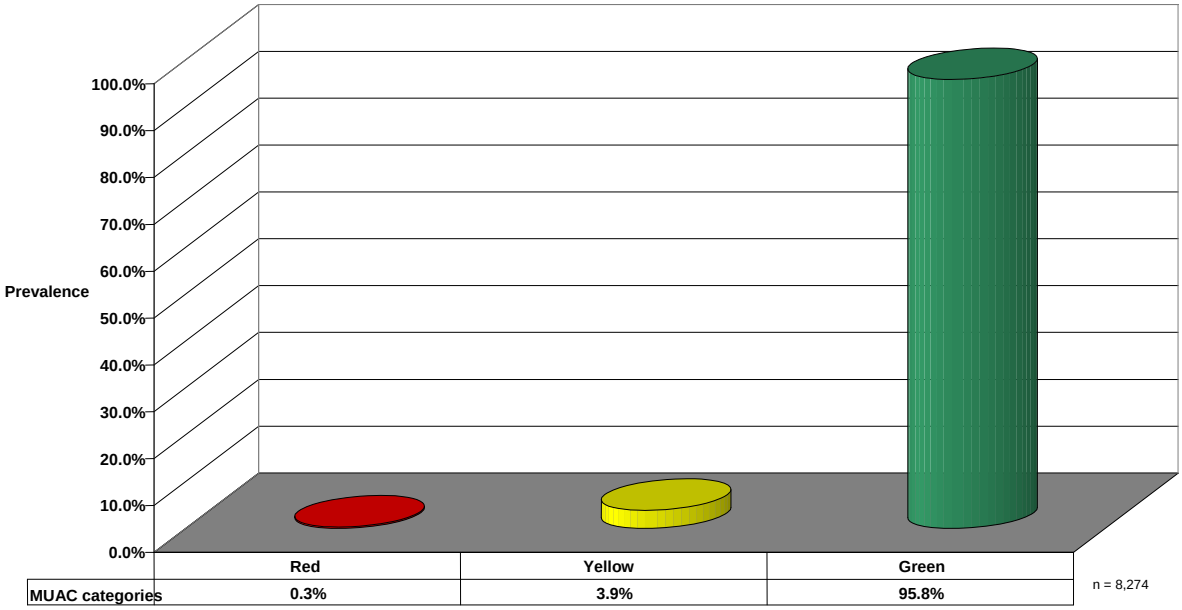


n = 821

	Female	Male	Total
WHZ (NCHS)	1.9%	2.8%	2.4%
WHZ (WHO)	1.7%	3.4%	2.5%

Chart 4 presents the results for acute malnutrition, using the mid-arm circumference methodology. The data show that 0.3% (red) of children evaluated require immediate attention, 3.9% (yellow) are at risk of developing severe acute malnutrition and should be monitored and 95.8% (green) have a normal weight per height.

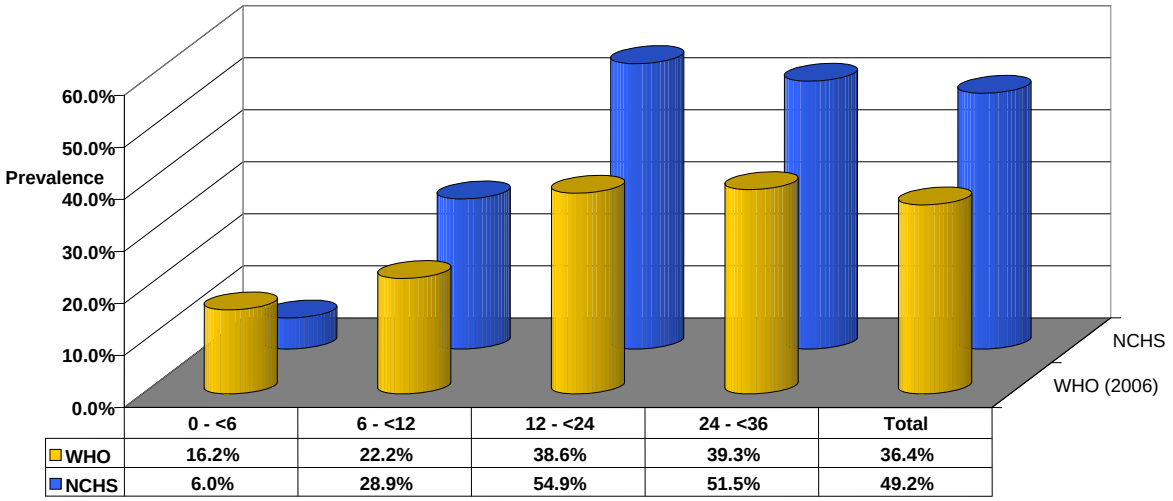
Chart 4
Acute Malnutrition Prevalence (%), using the mid-arm circumference (MUAC) methodology
September, 2009. SC-MYAP, El Quiché, Guatemala



MUAC categories	Red	Yellow	Green
	0.3%	3.9%	95.8%

Chart 5 shows the global malnutrition prevalence rate (%) per age group using the NCHS (1978) / WHO (2006) growth standards. Data collected for this indicator demonstrate a well-known tendency of weight per age beginning to decrease for the age group comprised of children between 12 and 24 months of age who, together with the age group comprised of children between 24 and 36 months of age, are the most affected (38.6% and 39.3% respectively).

Chart 5
Global Malnutrition Prevalence (WAZ) per Age Group and Measurement Standard
September, 2009. SC-MYAP, El Quiché, Guatemala



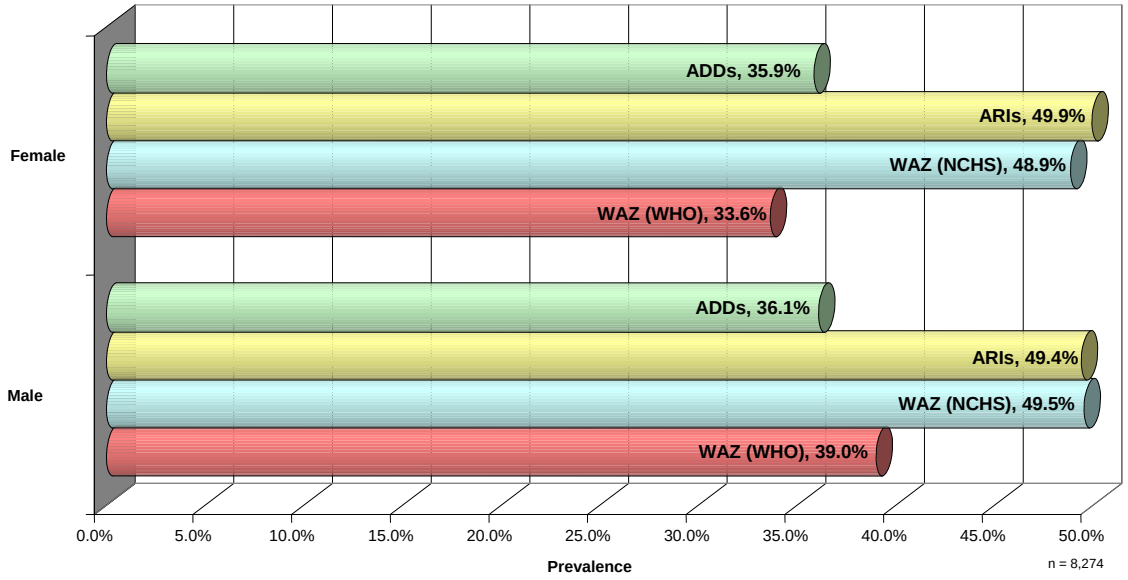
	0 - <6	6 - <12	12 - <24	24 - <36	Total
WHO	16.2%	22.2%	38.6%	39.3%	36.4%
NCHS	6.0%	28.9%	54.9%	51.5%	49.2%

Age Groups

ARIs and ADDs

Chart 6 compares global malnutrition (NCHS 1978 / WHO 2006) prevalence rates together with acute respiratory infection (ARI) prevalence and acute diarrheal disease (ADD) prevalence, per sex. Data collected show that the population covered by the PROMASA program is affected by all three of these prevalent illnesses (ARIs, ADDs and malnutrition), which cause great harm to children less than 5 years of age. These prevalence rates are much higher than the national averages reported in the 2002 ENSMI study and are similar to data reported in the PROMASA FY08 Annual Report.

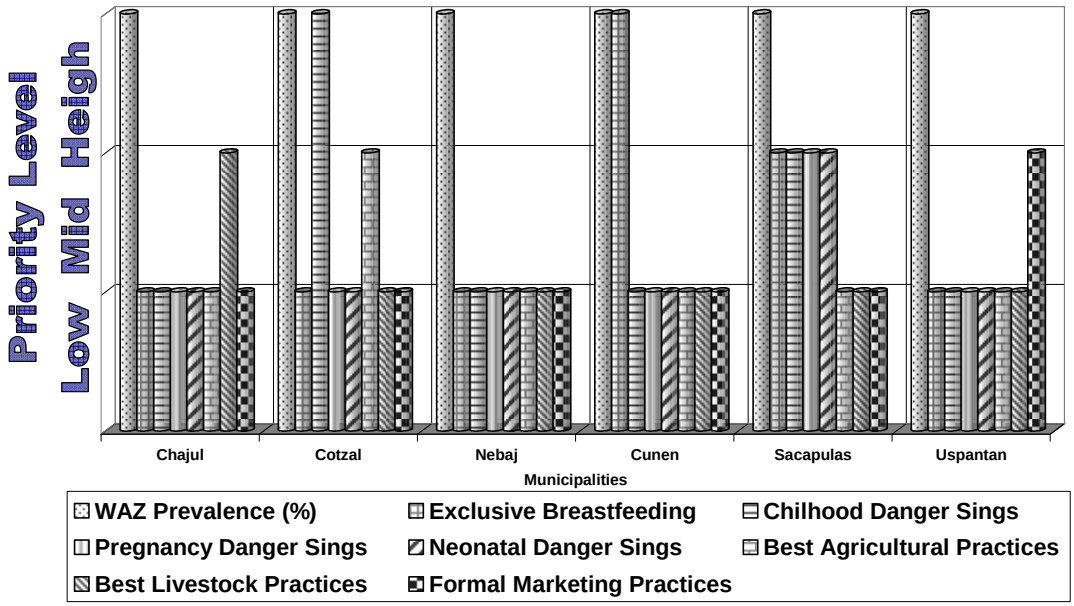
Chart 6
Global Malnutrition Prevalence (WAZ) per Measurement Standard
Acute Respiratory (ARIs) and Diarrheal (ADDs) Infections, per Sex
September, 2009. SC-MYAP, El Quiché, Guatemala



LQAS Analysis

Chart 7, based on a LQAS decision diagram, presents data on municipal priorities for the different PROMASA strategies. The primary results of this analysis are shown below.

Chart 7
Program interventions by municipality and priority level,
Sepember 2009, SC-MYAP, El Quiché, Guatemala



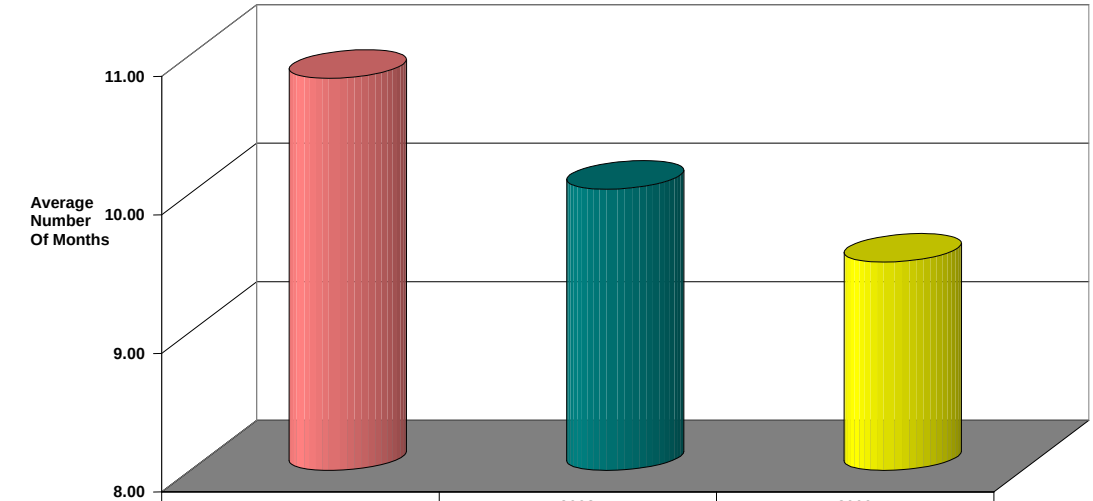
The majority of program interventions require special attention in the Sacapulas municipality. The low weight-per-age figures are a concern in all program coverage municipalities. Danger sign recognition and exclusive breastfeeding require special attention in 2 of the 6 program municipalities. This represents significant progress compared to last year where 4 of the 6 municipalities were categorized as high priorities for these interventions.

The adoption of best livestock and agricultural practices should be improved in the Chajul and Cotzal municipalities. In addition, formal marketing practices should be strengthened in Uspantán.

Livelihood Indicators

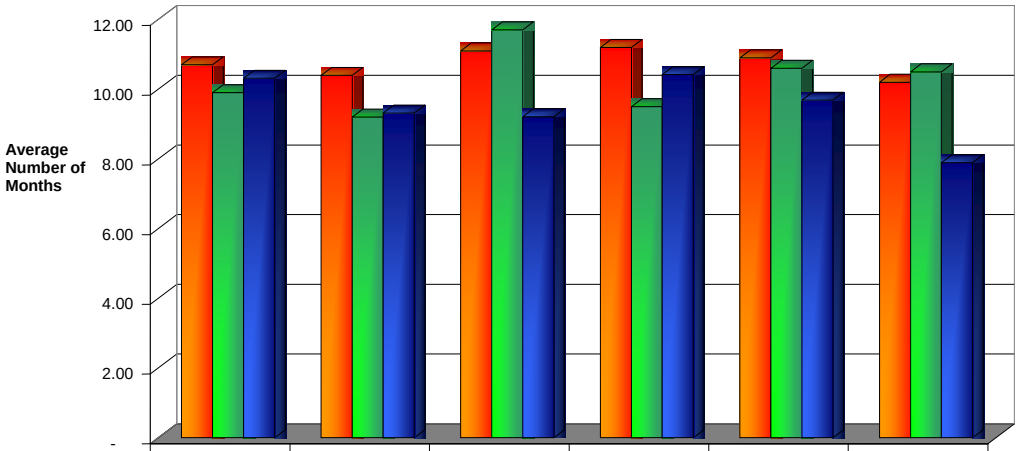
Charts 8, 9 and 10 presents information regarding the number of months of adequate household food provision since the start of the program, distribution per municipality and the percentage of households with inadequate food supplies per month.

Chart 8
Months of Adequate Household Food Provisions, (MAHFP)
SC-MYAP, El Quiché, Guatemala



	BL (n=799) IC (10.8;11.0)	2008 (n=214) IC (9.6;10.4)	2009 (n=114) IC (9.4;9.6)
Months (Avg.)	10.83	10.03	9.50

Chart 9
Months of Adequate Food Provisions, per Municipality
SC-MYAP, El Quiché, Guatemala

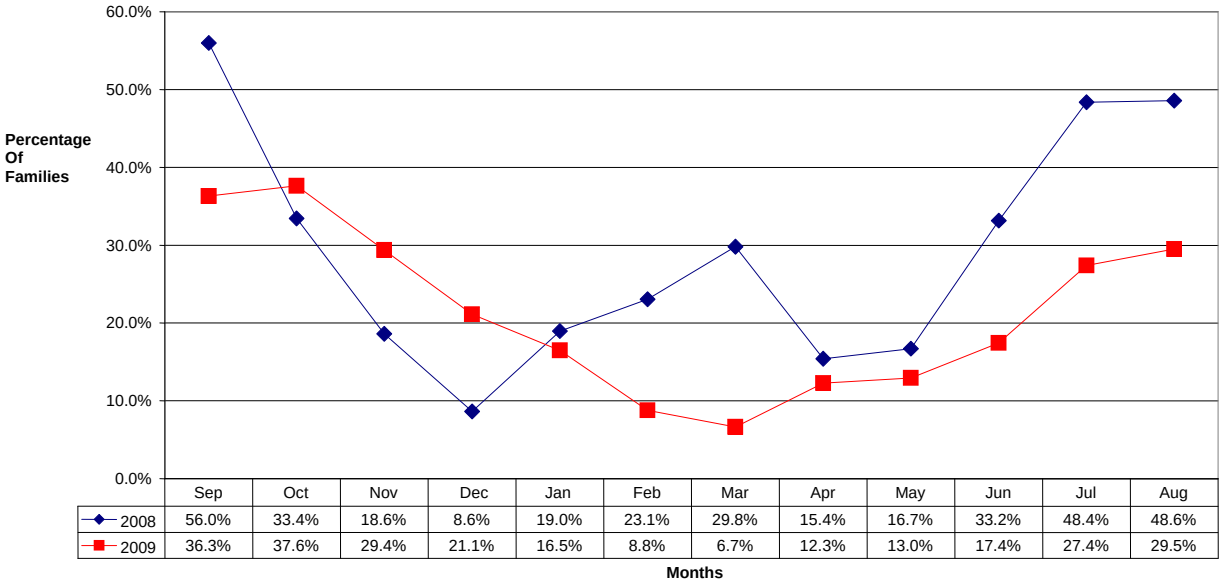


	Chajul	Cotzal	Nebaj	Cunén	Sacapulas	Uspantán
BL	10.70	10.40	11.10	11.20	10.90	10.20
2008	9.90	9.20	11.70	9.50	10.60	10.50
2009	10.32	9.32	9.21	10.42	9.68	7.89

Municipalities

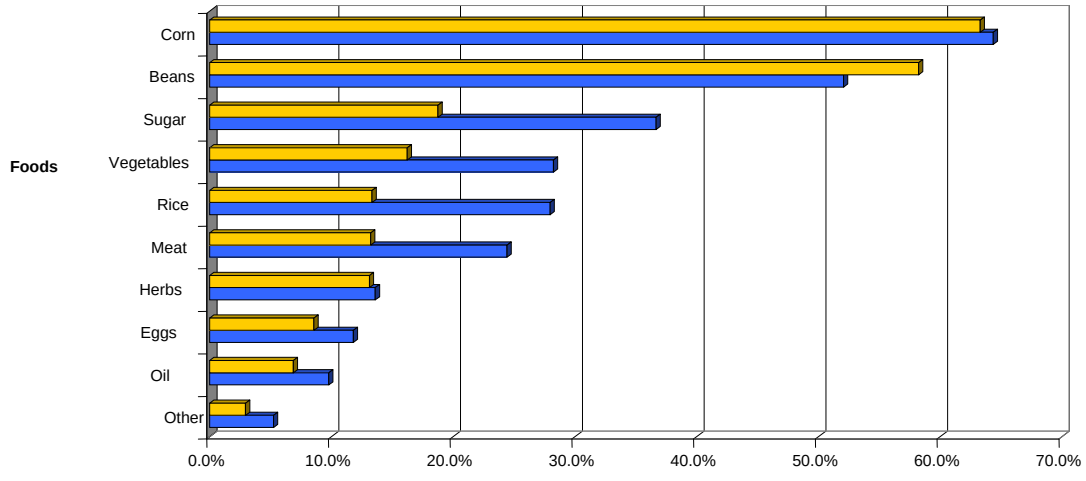
The data show that families participating in the PROMASA program continue to suffer food provision problems during months characterized by food shortages (July to November). This period was especially harsh in 2009 as a result the drought. As a result, the number of months of adequate food provisions decreased for all municipalities. Corn, beans and sugar were the foods most often reported to be in short supply (See Chart 11).

Chart 10
Percentage of households that reported inadequate food provisions, per month
SC-MYAP, El Quiché, Guatemala



	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
2008	56.0%	33.4%	18.6%	8.6%	19.0%	23.1%	29.8%	15.4%	16.7%	33.2%	48.4%	48.6%
2009	36.3%	37.6%	29.4%	21.1%	16.5%	8.8%	6.7%	12.3%	13.0%	17.4%	27.4%	29.5%

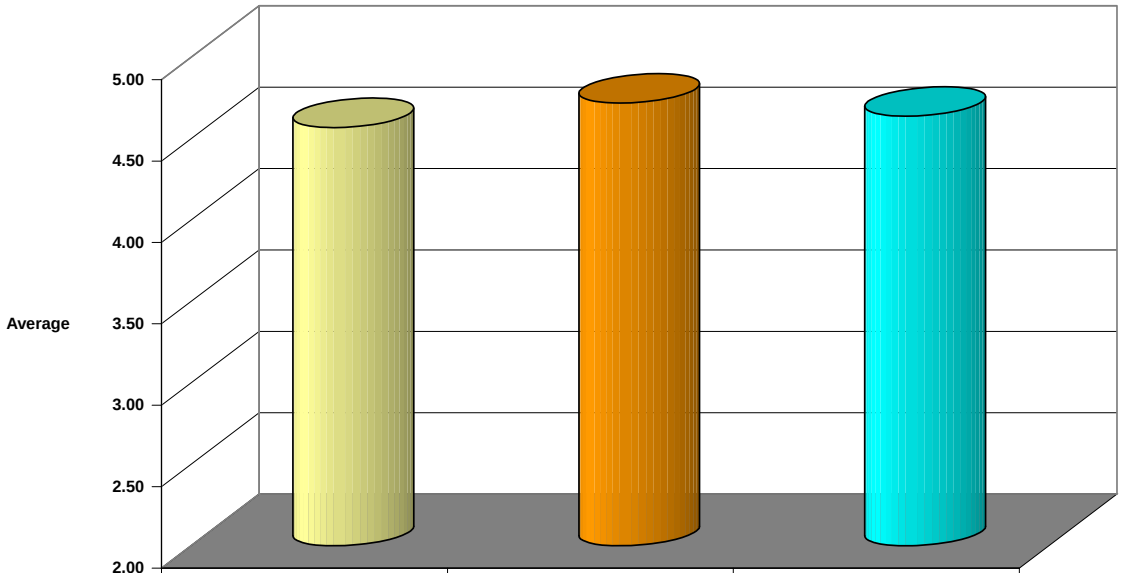
Chart 11
Percentage of households that reported food scarcity, per type of food
SC-MYAP, El Quiché, Guatemala



	Other	Oil	Eggs	Herbs	Meat	Rice	Vegetables	Sugar	Beans	Corn
2009	2.9%	6.9%	8.6%	13.1%	13.2%	13.3%	16.2%	18.7%	58.2%	63.3%
2008	5.2%	9.8%	11.8%	13.6%	24.4%	28.0%	28.2%	36.7%	52.1%	64.4%

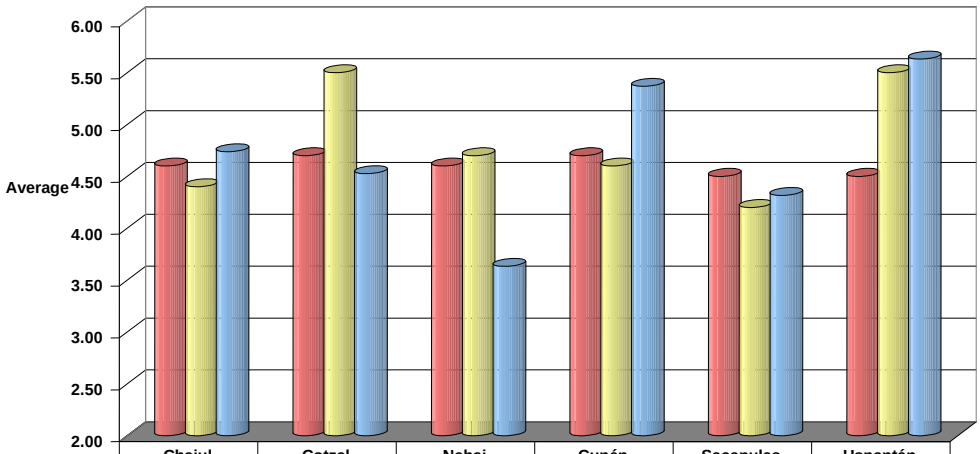
Charts 12 and 13 present information regarding the diet diversity score (HDDS) for households participating in the PROMASA program. This index has remained unchanged since the start of the program. The questions asked of participants to determine the diet diversity score can be further investigated in order to evaluate the consumption of specific foods or food groups. The program's family garden activity is a common intervention whose objective is to increase the consumption of vegetables rich in Vitamin A.

Chart 12
Household Diet Diversity Score (HDDS)
September 2009, SC-MYAP, El Quiché, Guatemala



	LB (n=799) IC (4.50;4.65)	2008 (n=214) IC (4.38;5.06)	2009 (n=114) IC (4.6;4.7)
Average	4.57	4.72	4.64

Chart 13
Household Diet Diversity Score (HDDS), per Municipality
SC-MYAP, El Quiché, Guatemala

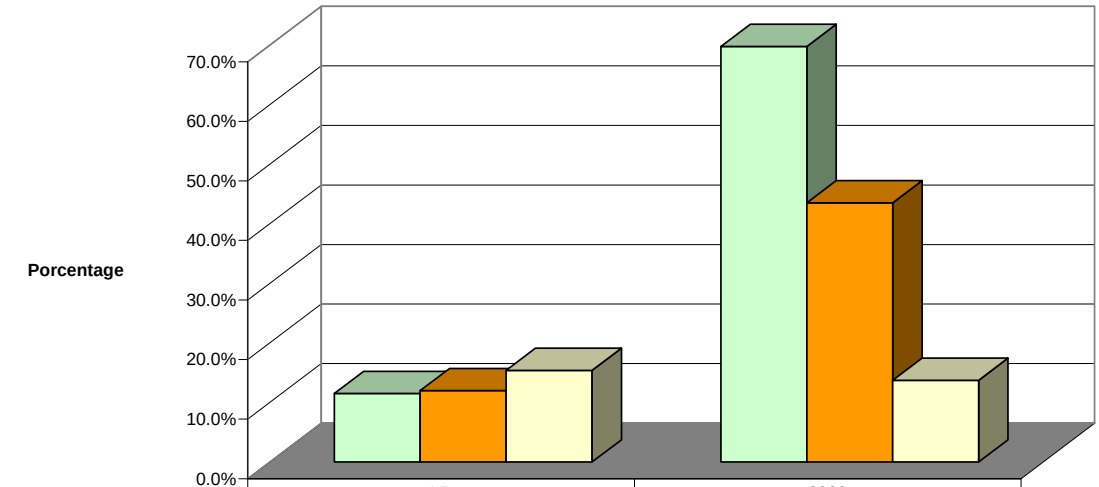


	Chajul	Cotzal	Nebaj	Cunén	Sacapulas	Uspantán
BL	4.60	4.70	4.60	4.70	4.50	4.50
2008	4.40	5.50	4.70	4.60	4.20	5.50
2009	4.74	4.53	3.63	5.37	4.32	5.63

Municipalities

Chart 14 presents data on the percentage of producers that have adopted best practices related to agriculture, livestock and marketing. It is important to mention that these indicators were not measured in FY08 as not enough time had passed to determine whether practices promoted by PROMASA had been adopted or not. The chart also presents results for these indicators at baseline.

Chart 14
Porcentage of producers that have adopted at least two best practices, per municipality
September, 2009 SC-MYAP, El Quiché, Guatemala



	LB	2009
Agriculture (60.7% : 78.9%)	11.5%	69.8%
Livestock (34.5% : 52.5%)	12.0%	43.5%
Marketing (7.0% : 20.5%)	15.4%	13.7%

Municipalities