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**Title II Baseline Study
Executive Summary
Food Security Improvement Program**

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EXECUTIVE SUMMARY

Since 1996, the U.S. Government has supported food security programs in Guatemala using Public Law 480, Title II (P.L.480), by assigning resources through the United States Agency for International Development (USAID). The current cycle of Title II programs will be implemented between 2007 and 2011 by three Private Voluntary Organizations (PVOs): Asociación SHARE de Guatemala (SHARE), Catholic Relief Services (CRS), and Save the Children USA. SHARE will implement a multi-sectoral program in Guatemala, including interventions in health, nutrition, agriculture, small animal production and formal markets. Activities will be implemented in three municipalities of the department of Chimaltenango and seven municipalities of the department of Huehuetenango, reaching approximately 18,150 families.

Between May and October 2007 a baseline study for Multi-Year Assistance Programs (MYAP) was carried out. It aimed to provide updated information related to practices in health, nutrition, agriculture, small animal production and formal markets in the intervention areas before beginning the implementation of activities. In addition, it measured different indicators that will allow each PVO to gauge the extent to which the activities will result in changes, as well as progress during activity implementation and the level of achievement of outcomes at the end of the program.

This survey was done jointly between SHARE, CRS and Save the Children USA, by setting up a consortium with representatives of each PVO. The consortium hired external professionals to design the survey and was responsible for selecting the indicators to be measured, designing the questionnaires to collect information at the household level and hiring external professionals to process the collected data. Each PVO was responsible for collecting information in their intervention areas, analyzing the processed data and elaborating their final report.

This report describes the results of the baseline survey, which is a descriptive, transversal survey. It was carried out through random sample interviews, covering 32 communities in the 10 municipalities where SHARE will have interventions. The total size of the sample was 800 families, 550 in Huehuetenango and 250 in Chimaltenango.

The sample was selected by cluster sampling using PPS methodology. The cluster design factorial was set at 32 x 25 (32 communities and 25 families in each community).

P.L. 480 Title II programs have a set of generic indicators from which the consortium selected eleven, based on the expected MYAP outcomes, recommendations from USAID, FFP, and FANTA, and available resources in each PVO. Measured indicators reflect the multi-sectoral nature of the MYAP.

Two questionnaires were designed and validated to accommodate differences between PVOs. The questionnaires collected information related to health and nutrition, agricultural and small animal production and formal market practices. Information in the communities was collected using structured interviews, conducted by trained interviewers and professional anthropometrists. Mothers of children less than five years of age in each selected family were the main respondents for the health and nutrition questionnaire, while male heads of family were the main respondents for questions related to agricultural and small animal production and formal market practices. In the absence of main respondents, caretakers of the child less than five years of age, siblings over 15 years of age or other relatives living in the house that had knowledge about the chosen family situation were considered alternative respondents.

Eight hundred families from 32 communities of 10 municipalities of the two departments of SHARE's MYAP, the Food Security Improvement Program (FSIP), were interviewed, and the weight and height of 1,211 children between 0 and 59.99 months old were taken in order to determine the prevalence of chronic and global malnutrition.

A database of collected information was created using Epi Info 6.04d. Data was entered twice, generating two independent databases which were systematically compared. Data processing was done with the statistical program SAS version 9.1.3, which allowed adjustments to the percentage of grade factor according to sample design and to generate output tables according to the analysis plan established by the consortium. Anthropometric data was analyzed with the software ANTHRO version 2005.

For the health and nutrition component, 97% of the respondents were mothers and 3% were caretakers of the children less than five years of age. For the production component, 61% of the respondents were mothers, 30% were fathers, and 9% were

other members of the family interviewed. Fifty percent of the respondents had an elementary education level, and 44% were illiterate. Four percent had a high school degree and the remaining 2% was divided between pre-school education and those who were only taught to read and write. Seventy-five percent speak Spanish, and the other two most frequently spoken languages were Mam and Kakchiquel.

Weight and height measures of 1,211 children between 0 and 59.99 months of age were collected. A total of 64% were stunted and 35% were underweight, though the prevalence changed between age groups of both indicators. The highest percentage of stunting (60%) occurred in children between 0 and 35.99 months of age with equal frequency among boys (50%) and girls (50%). Underweight prevalence had a similar pattern being higher in children between 0 and 35.99 months (66%) and with similar prevalence between boys (51%) and girls (49%).

In relation to the months of adequate household food provisioning (MAHFP), informants were interviewed based on food consumption in the household in the last 12 months. Most people stated they did not have enough food to meet their family's needs during more than one month of the year. Fifty-nine percent of the families had a mean of 12 months of adequate food provisioning during the year, ranking at a high level; 31% had a low level with a mean of 9 months, and 10% a medium level with a mean of 11 months of adequate food provisioning.

The months in which they experience the highest inadequate household food provisioning are June, July and August. The top three causes of inadequate provisioning are the lack of money, lack of work and the high cost of food, in that order. The food shortage in order of frequency is beans, corn and sugar. The main actions undertaken to eat during those months is migration to work in other places, selling animals and borrowing money.

As an estimate of families' access to food, household dietary diversity was calculated through the identification of the different number of food groups consumed by the family members in the last 24 hours. Food was classified in 12 groups: A) Cereals; B) Roots and tubers; C) Vegetables and fruits with vitamin A; D) Other vegetables and fruits; E) Meat, poultry and viscera; F) Eggs; G) Fish and seafood; H) Legumes and

nuts; I) Milk and milk products; J) Oils and fats; K) Sugar and honey; and L) Miscellaneous food.

Forty-one percent of the families had a high level of dietary diversity with a mean consumption of 8 different groups. Thirty-seven percent had a low level with a mean of 4 groups and 22% had a medium level with a mean of 6 groups. The four most commonly consumed groups are cereals (100%), sugar and honey (90%), legumes and nuts (74%), and vegetables and fruits with vitamin A (67%).

Seventy-one percent of children between 0 and 5.99 months of age received exclusive breast feeding in the last 24 hours. Information of all informants revealed that mothers start complementary feeding of their children at a mean age of seven months with a range between 0 and 22 months, and that 98% of the mothers breastfeed their smallest child.

The level of knowledge of mothers and caretakers of children between 0 and 59.99 months of age about the seven danger signs of child illnesses as defined by the MOH was measured. Thirty-six percent of the mothers or caretakers identified at least two danger signs, 36% identified one sign and 27% did not identify any¹. The three most frequently identified signs were: high fever, does not eat or drink liquids, and that the child seems sick or does not want to play.

The level of knowledge of mothers of children between 0 and 59.99 months of age about the five danger signs during pregnancy as defined by the MOH (along with one sign added following FANTA recommendations) was measured. Thirteen percent of mothers identified at least two danger signs, 21% identified one sign and 66% did not identify any. The three most frequently identified signs were: vaginal bleeding, strong pain in the stomach, and a strong headache.

The level of knowledge of mothers of children between 0 and 59.99 months of age about the five danger signs of the newborn child as defined by the MOH (along with two signals added following FANTA recommendations) was measured. Fifteen percent of mothers identified at least two danger signs, 29% identified one sign and 56% did not

¹ The sum for this indicator does not total 100 due to rounding.

identify any. The three most frequently identified signs were: fever, the child does not breastfeed, and breathing difficulty.

Based on the interventions and practices that will be promoted through the FSIP, SHARE defined a set of improved practices for agriculture and small animal production as well as for formal marketing.

Ninety-one percent of the informants were agriculture producers. Eighteen percent practice at least two improved methods of agricultural production. The three most frequently mentioned practices were: management of fruit trees, organic fertilization, and the use of silos for post-harvest storage.

Eighty percent of the informants were small animal producers, with the most common animals being poultry, pigs and sheep. Nine percent practice at least two improved methods of small animal production. The most frequently mentioned practices were: the use of improved farmyard facilities for poultry, and poultry vaccination.

Twenty-seven percent of the informants operate some kind of business, mainly in the areas of agriculture, family-run business, handicrafts, small animals, and forestry. Seventeen percent include at least two practices of formal marketing. The most frequently mentioned practices were: calculations of expenses and profits of their business, keeping a record of the calculations in a notebook, and receiving technical assistance in formal marketing from an institution.

The results presented in this report give a general orientation about the attitudes and practices that should be emphasized in order to fine tune FSIP interventions with the aim of offering the highest level of benefits possible to improve the food security of beneficiary families. At the same, these results will allow SHARE to orient, monitor and evaluate the program's interventions.