



# USAID | MASFRIJOL

DEL PUEBLO DE LOS ESTADOS UNIDOS DE AMÉRICA

Associate Award under the Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

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YEAR 4 REPORT: OCTOBER 2016 –MARCH 2017



With the collaboration of



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## List of Acronyms

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<b>Acronym</b>	<b>Name</b>
AGEXPORT	Guatemala Association of Exporters
ANACAFE	National Coffee Association
CECODE	Center for Communication on Development
COCODE	Community Committees for Development
COCOSAN	Community Committee for Food and Nutrition Security
COMUSAN	Municipal Committee for Food and Nutrition Security
FANTA III	Food and Nutrition Technical Assistance (III)
ICTA	Instituto de Ciencia y Tecnología Agrícolas
MAGA	Ministry of Agriculture and Livestock
MSPAS	Ministry of Health
NGO	Non-governmental Organization
PCI	Project Concern International
PCRV	Peace Corps Response Volunteers
PCVR	Rural Value Chain Project
SESAN	Guatemala Food and Nutrition Security Secretariat
USAID	US Agency for International Development
WHIP	USAID's Western Highlands Initiative Program

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## **1. Introduction**

This six-month report on the MASFRIJOL project covers October 2016 through March 2017. Continuing with the approved workplan, MASFRIJOL has met both of its targets: increasing bean yields and making seed available through Community Seed Depots, in addition to its ongoing promotion of increased bean consumption through nutrition education.

With the project entering its fourth year, the past six months have been used to strengthen different sustainability factors in the main project activities. During this period, following the project's Performance Monitoring Plan (PMP), the project team has emphasized four goals: a) seed dissemination to new beneficiaries, b) Community Seed Depots (CSDs), c) sampling of the nutritional evaluation survey to be conducted with beneficiary families; and d) continuation of education and technical assistance sessions that directly support these areas of the project.

In numbers, the progress achieved during this period is summarized as follows.

- 2,162 beneficiary families were reached with a 5pound bag of seed of improved bean varieties, bringing the project's total reach to approximately 35,000 families since the project's beginning in April 2014.
- 81 CSDs were established throughout the five WHIP departments. Of these, 33 opened in 2016 and continued activities in 2017, while 48 were founded in 2017. Eighty-one CSDs represent 8 percent more than the original goal of 75 set for the project. 5,205 lbs. of improved seed was produced by 44 CSDs during 2016 on an area of 2.2 ha. This seed was sold by CSDs to growers in their communities to produce grain.
- 4,014 beneficiaries were trained on at least one topic related to improved agronomic practices, making the total number of farmers trained over the course of the project 12.3 percent greater than the PMP-established goal of 12,000.
- 4,844 beneficiaries participated in at least one training session on nutrition education. This brings the accumulated number of beneficiaries trained to 46.2 percent above the target of 12,000 beneficiaries.
- 2,157 beneficiaries attended recipe demonstration sessions, bringing the total number of such beneficiaries to 139 percent over the original target of 2,000.

This report is divided into three major sections.

1. Details on increased bean productivity
2. Results related to nutrition education
3. Success stories from the five target departments illustrating the project's impact

## **4. Results from Supporting Increased Bean Productivity**

### **Reaching families with improved bean varieties**

MASFRIJOL can be summarized in two objectives: helping farming families to produce more beans and promoting more bean consumption to significantly improve the quality of diets. The distribution of seed of improved bean varieties has been strongly accepted by beneficiaries. Reaching families in remote areas with such technology has not been easy, but it has been possible, thanks to coordinated efforts with USAID implementing partners and public sector organizations, such as MAGA, MSPAS, SOSEP, Municipalities, ASOCUCH, and others.

During the current reporting period, the MASFRIJOL team and its collaborating partners have distributed 2,352 five-pound bags of seed of improved bean varieties. Of these, 2,162 were of the four bush varieties (ICTA Hunapú, ICTA Super Chiva, ICTA Altense, and ICTA Ligero) and 190 (2.0 lb. each) were climbing varieties (ICTA Uatlán and ICTA LOV). The climbing varieties were released by ICTA in February 2017, to be grown under the milpa system.

Table 1 details seed dissemination by department. Eighty-five percent of this period's new beneficiaries were located in the departments of Huehuetenango (1,087 bags/46.2 percent) and San Marcos (915 bags/38.9 percent), two of the most geographically dispersed areas of the project.

During this period, MASFRIJOL did not disseminate much of the available seed in Quiche, since direct support to the USAID-funded PCVR (Peace Corps Response Volunteers) project was provided to produce bean seed to reach farmers (about 10,000) in the area working with Save the Children.

As of this reporting period, 35,170 bags of seed have been made available to an equal number of families--41 percent above the target of 25,000 bags at the onset of the project.

Table No 1. Seed delivered by Department (Date, Institution, Destiny and Variety) during period October 2016-March 2017. MASFRIJOL.

SEED DELIVERED OCTOBER 2016 TO MARCH 2017 - HUEHUETENANGO DEPARTMENT-									
DATE (Delivery)	INSTITUTION	DESTINY	SEED DELIVERED OCTOBER 2016-MARCH 2017 (inclusive)						
			ICTA S. Chiva	ICTA Altense	ICTA Hunapu	ICTA Ligero	ICTA Utatlan	ICTA LOV	TOTAL
15-11-16	MAGA	Barillas	0	0	0	200	0	0	200
06-01-17	Municipalidad de Jacaltenango	Jacaltenango	0	0	0	40	0	0	40
10-01-17	Oficina de la Mujer Municipalidad Cuilco	Cuilco	0	0	0	112	0	0	112
23-01-17	Oficina de la Mujer Municipalidad Cuilco	Cuilco	118	0	0	213	0	0	331
30-01-17	Almacenes Comunitarios	Huehuetenango (varios municipios)	7	0	26	12	0	0	45
16-03-17	ASOCUCH	Chiantia	50	0	50	100	0	0	200
23-03-17	PCI	Huehuetenango (varios municipios)	0	0	0	95	32	32	159
<b>TOTAL</b>			<b>175</b>	<b>0</b>	<b>76</b>	<b>772</b>	<b>32</b>	<b>32</b>	<b>1087</b>
SEED DELIVERED OCTOBER 2016 TO MARCH 2017 - SAN MARCOS DEPARTMENT-									
15-12-16	Municipalidad de Sibinal	Sibinal	90	0	0	0	0	0	90
15-12-16	MSPAS	Sibinal	150	0	0	0	0	0	150
15-12-16	Beneficiarios/MASFRIJOL	San Miguel Ixtahuacan	26	0	0	0	0	0	26
15-12-16	COCODE Aldea El Triunfo	San Miguel Ixtahuacan	50	0	0	0	0	0	50
24-01-17	Almacenes Comunitarios	San Miguel Ixtahuacan	2	3	4	1	0	0	10
09-02-17	Almacenes Comunitarios	San Miguel Ixtahuacan	2	0	0	1	0	0	3
15-02-17	Almacenes Comunitarios	San Pablo, Nuevo Progreso	1	0	0	10	0	0	11
01-03-17	MAGA	San Pablo	0	0	0	300	0	0	300
14-03-17	MAGA	Tajumulco	100	0	0	150	0	0	250
20-03-17	Almacenes Comunitarios	Tajumulco	1	2	0	0	0	0	3
31-03-17	Beneficiarios/Almacenes	San Marcos (Varios Municipios)	0	0	0	0	11	11	22
<b>TOTAL</b>			<b>422</b>	<b>5</b>	<b>4</b>	<b>462</b>	<b>11</b>	<b>11</b>	<b>915</b>
SEED DELIVERED OCTOBER 2016 TO MARCH 2017 - EL QUICHE DEPARTMENT -									
07-10-16	Save the Children	San Miguel Uspantán	55	0	0	25	0	0	80
07-10-16	MSPAS	Sacapulas	30	0	0	0	0	0	30
24-11-16	MSPAS	San Miguel Uspantán	0	10	0	0	0	0	10
28-11-16	Almacenes Comunitarios	Sacapulas, San Miguel Uspantán, Cunén	0	3	2	0	0	0	5
04-01-17	Almacenes Comunitarios	San Miguel Uspantán, Cunén	0	1	3	0	0	0	4
19-01-17	Almacenes Comunitarios	San Miguel Uspantán, Cunén, Nebaj	3	0	1	1	0	0	5
21-03-17	MSPAS/Almacenes comunitarios/benefic.	Chichicastenango, Uspantán, Cunén, Zacualpa,	0	0	0	0	22	22	44
<b>TOTAL</b>			<b>88</b>	<b>14</b>	<b>6</b>	<b>26</b>	<b>22</b>	<b>22</b>	<b>178</b>
SEED DELIVERED OCTOBER 2016 TO MARCH 2017 - TOTONICAPAN DEPARTMENT -									
28-11-16	Almacenes Comunitarios	Santa Lucía La Reforma	0	2	2	0	0	0	4
16-01-17	Almacenes Comunitarios	Momostenango	1	0	2	0	0	0	3
13-02-17	Almacenes Comunitarios	Momostenango/Santa Lucía La Reforma	2	4	4	0	0	0	10
15-02-17	Almacenes Comunitarios	Santa Lucía La Reforma	4	0	6	0	0	0	10
31-03-17	Beneficiarios/Almacenes Comunitarios	Momostenango/Santa Lucía La Reforma	0	0	0	0	20	20	40
<b>TOTAL</b>			<b>7</b>	<b>6</b>	<b>14</b>	<b>0</b>	<b>20</b>	<b>20</b>	<b>67</b>
SEED DELIVERED OCTOBER 2016 TO MARCH 2017 - QUETZALTENANGO DEPARTMENT -									
07-10-16	MAGA	San Juan Ostuncalco	18	0	0	0	0	0	18
28-11-16	MAGA-Municipalidad San Martín Sacatepequez	San Martín Sacatepequez	60	0	0	0	0	0	60
20-02-17	Almacenes Comunitarios	San Juan Ostuncalco	3	4	0	0	0	0	7
31-03-17	Beneficiarios/Almacenes comunitarios	San Juan Ostuncalco/San Martín Sacatepequez	0	0	0	0	10	10	20
<b>TOTAL</b>			<b>81</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>105</b>

The 35,170 five-pound seed packets distributed to date have benefitted families in more than 350 communities, covering approximately 1,537 ha of beans. Table 2 summarizes the seed distributed by department and variety during this reporting period.

Table No 2. Seed delivered Summary by Department during period October 2016 to March 2017. MASFRIJOL

SEED DELIVERED SUMMARY BY DEPARTMENT DURING THE PERIOD OCTOBER 2016 TO MARCH 2017							
DEPARTMENT	SEED DELIVERED APRIL-SEPTEMBER 2016 (inclusive)						
	ICTA S. Chiva	ICTA Altense	ICTA Hunapu	ICTA Ligero	ICTA Utatlan	ICTA LOV	Total
Huehuetenango Department	175	0	76	772	32	32	1,087
San Marcos Department	422	5	4	462	11	11	915
Quiche Department	88	14	6	26	22	22	178
Totonicapan Department	7	6	14	0	20	20	67
Quetzaltenango Department	81	4	0	0	10	10	105
<b>TOTAL</b>	<b>773</b>	<b>29</b>	<b>100</b>	<b>1,260</b>	<b>95</b>	<b>95</b>	<b>2,352</b>

## Community Seed Depot (CSD)

As designed, the establishment of Community Seed Depots has confirmed that seed production at the community level is feasible and can contribute to project sustainability. With high quality seed produced by CSDs locally, many more families in the WHIP area are accessing this technology—and paying for it. Project expectation is that the CSDs will continue to supply high quality bean seed for a premium price above that of grain. The role CSDs play in disseminating the current varieties will also prove important for future variety dissemination as ICTA releases technology that responds to disease pressure or changes in agroclimatic conditions.

MASFRIJOL's goal is to help CSDs do more for farmers looking for improved seed and other technologies to improve their bean productivity and promote bean consumption.

Table 2 presents the characteristics and production output of the CSDs in terms of conditioned seed and grain resulting from the seed cleaning process. We list results from 47 CSDs supported and harvested at the end of 2016, from which 44 produced seed. The total seed produced (5,205.4 lbs.) in the 44 CSDs is sufficient to plant an area of 45 ha for consumption by more than 500 farmers at a rate of 10lbs/farmer. An estimated production of 2,300 lb/ha equals 47 MT of grain for consumption.



**Figure 1.** Almacén Comunitario del Sr. Pedro Cedillo; lote de producción de semilla de la variedad de frijol negro ICTA Súper Chiva; Comunidad Xhepiun Nebai, Quiche, 2017.

Table 3 shows the average data obtained in the CSDs conducted in each department during 2016. The average area of land used by CSDs was 481m<sup>2</sup>, giving an average bean production of 174.4 lbs/cuerda. The department of Totonicapán contributed the most to this average with 206.0 lbs/cuerda, of which 127 lb. was clean seed. Note, however, that the production corresponding to Quetzaltenango was not included in this average, since this production corresponds to only one CSD from which only grain for consumption was obtained.

**Table 3. Average Data of Seed Depots - MASFRIJOL by Department.**

Department	Area (m2) ++	Total yield (pounds by 437m <sup>2</sup> = 1 Cda.++)	Seed yield (pounds by 437m <sup>2</sup> = 1 Cda.++)	Grain yield (pounds by 437m <sup>2</sup> = 1 Cda.++)	Seed Price (US \$)+ got per pound
San Marcos	352.2	185.1	109.9	71.9	1.08
Huehuetenango	492.4	173.0	125.9	59.1	0.74
Quiche	569.1	147.3	65.4	81.9	0.66
Quetzaltenango	545.0	160.4	-	160.4	-
Totonicapán	448.9	206.0	127.0	79	0.99
PROMEDIOS	481.5	174.4	107.1	90.5	0.87
Table Notes: + Currency exchange Q8.0 = US\$1.0.; ++ 437 m <sup>2</sup> = 1 Cuerda = 0.044 ha = 0.062 mz.					

The average selling price of seed was US \$0.87 per pound; in the Department of San Marcos, however, the highest average selling price was US \$1.08 per pound.

MASFRIJOL's goal was to implement 75 Community Seed Depots during the project's four years (2014-2018). Forty-seven CSDs were established in 2016, 33 (70.2 percent) of which were replanted the next season and continued seed production in 2017.

The 14 CSDs (29.8 percent) that decided not to continue seed-related work in 2017 did so for various technical or personal reasons. Seed, versus grain, production is very different; producing seed requires particular agronomic actions in addition to other requirements in order to obtain the endorsement indicating that the seed produced has met the minimum requirements to be considered quality seed. Additionally some seed producers don't adapt or comply with the minimum cares required for obtaining quality seed; consequently, they are disqualified for continuing with the CSD.



**Figure 3. Almacén Comunitario de Doña Modesta Barrera, producción de semilla de frijol negro variedad ICTA Super Chiva Comunidad Sicalbe, Momostenango, Totonicapán, 2017.**

For the 2017 irrigation season, 48 new CSDs have been initiated—for a total of 81 that will harvest in 2017. Including the 81 CSDs currently planted in the field and the 14 CSDs that stopped working in 2016 for different reasons, MASFRIJOL has established 95 CSDs, 27 percent more than the 75 CSD planned for the period of the project. Table 6 shows the information in a consolidated format of the 81 CSD that are being conducted during 2017.



**Table 6. Information of Seed Depots Established during years 2016 and 2017 - MASFRIJOL Project.**

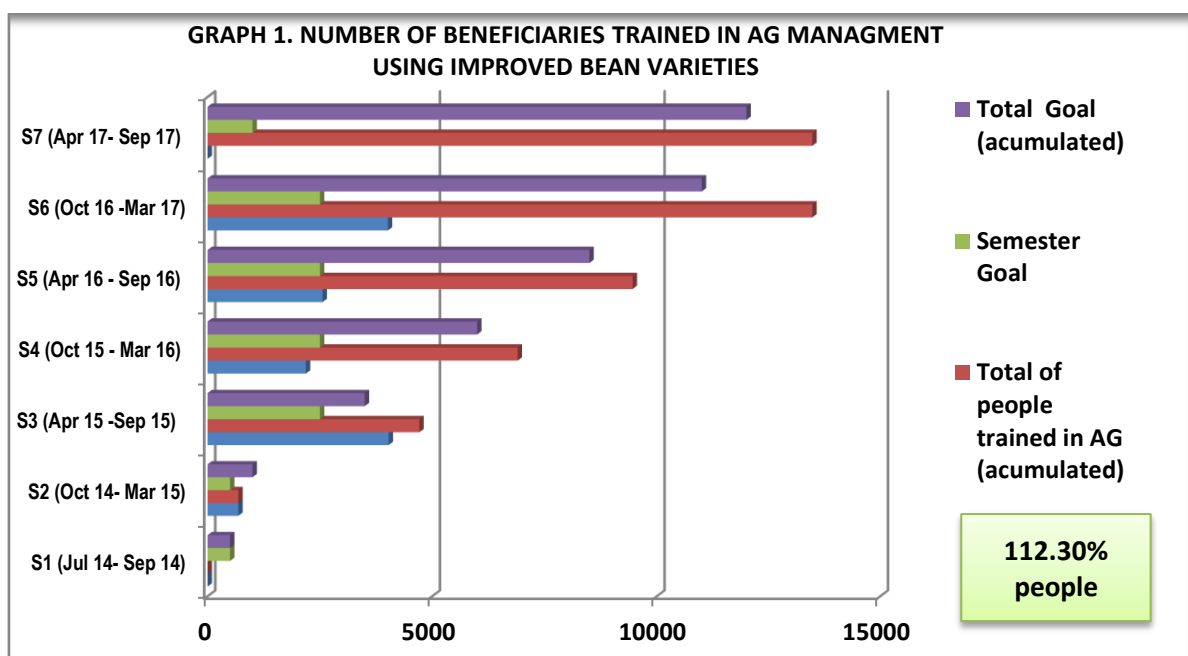
No.	Municipality	Community	Producer	Seed Depot Cycle	Variety ICTA	Area m <sup>2</sup>	Area in Cuerdas
<b>Department of QUICHE</b>							
1	Sacapulas	Caserío Chutinimit	Gaspar García Uluán	2016 - 2017	Altense	437	1.0
					Hunapú	437	1.0
2	Sta. Ma. Cunén	Caserío Los Planes	Juan López Chivalán	2016 - 2017	Hunapú	437	1.0
					Altense	437	1.0
3	Sta. Ma. Cunén	Río Blanco	Víctor Inés Samayoa Velásquez	2016 - 2017	Altense	874	2.0
4	S. M. Uspantán	Chotom	Felino Morales López	2016 - 2017	Hunapú	874	2.0
5	Zacualpa	Chixocol	Víctor Yat Jiménez	2016 - 2017	Hunapú	437	1.0
6	Zacualpa	Tunajá I	Manuel Hernández García	2016 - 2017	Hunapú	874	2.0
7	Zacualpa	Chichá	Carlos de La Cruz de La Cruz	New-2017	Hunapú	437	1.0
					Altense	437	1.0
8	S. M. Uspantán	Chocox	Salomé Tavico Noriega	New-2017	Hunapú	437	1.0
					Altense	437	1.0
9	Sta. Ma. Cunén	San Juan Xeúl	José Camajá Lux	New-2017	I Hunapú	437	1.0
					I Altense	437	1.0
10	Sta. Ma. Cunén	San Luís	Lucas Hernández Dubón	New-2017	I Hunapú	437	1.0
					I Altense	437	1.0
11	Sacapulas	Rancho de Teja	Santiago Mejía Tojín	New-2017	I Hunapú	437	1.0
12	S. M. Uspantán	Palquí	Osman Roni Lopez Perez	New-2017	Hunapu	437	1.0
					Ligero	437	1.0
13	Sta. Ma. Cunén	Las Grutas	Pedro Lopez Martin	New-2017	S. Chiva	874	2.0
14	Sta. Ma. Nebaj	Xhepium	Pedro Celestino Cedillo Perez	New-2017	S. Chiva	437	1.0
15	Sacapulas	La Vega, Pacan	Juan Lux Lopez	New-2017	Hunapu	437	1.0
					Ligero	437	1.0
16	S. M. Uspantán	Xolalbarda	Froilan Noriega Ramirez	Cycle 2016 but NO continue, suspend activities			
17	Zacualpa	S. Antonio V Centro	Francisco Tun Riquiac	Cycle 2016 but NO continue, suspend activities			
18	Zacualpa	La Vega	Santiago Lux Garcia**	Cycle 2016 but NO continue, suspend activities			
<b>TOTALS QUICHE 2017</b>						<b>11,799</b>	<b>27.0</b>
<b>Department of HUEHUETENANGO</b>							
1	Conc. Huista	Trapichitos	Eulalio Velasquez Cano	2016 - 2017	Hunapu	874	2.0
2	Conc. Huista	Yulá	Benito Ramos Matías	2016 - 2017	Hunapu	874	2.0
3	Jacaltenango	Jacaltenango	Francisco Sanchez Miguel	2016 - 2017	Ligero	2185	5.0
4	S. Ant. Huista	Nojoyá	Pedro Lopez Martinez	2016 - 2017	Hunapu	1311	3.0
5	Jacaltenango	Huntá	Alberto Carmel. Hernandez Q.	2016 - 2017	Ligero	874	2.0
6	Jacaltenango	Pelbipam	Angel Otoniel Castillo	2016 - 2017	Ligero	1311	3.0
7	S. Ant. Huista	Las Galeras	Gildardo Fredy Herrera J.	2016 - 2017	hunapu	2185	5.0
8	Chiantla	El Pino	Juan Alba Cifuentes	2016 - 2017	Hunapu	874	2.0
9	Conc. Huista	Yichoch	Jesus Ramirez	2016 - 2017	Hunapu	437	1.0
					S. Chiva	437	1.0
10	Todos Sto. Cuchum.	San Martin Cuchumatan	Artemio Ortiz Martinez	2016 - 2017	Hunapu	437	1.0
					S. Chiva	437	1.0
11	San Sebast. Hueh.	Tuizin	Augusto Cardona	New-2017	Hunapu	437	1.0
12	Conc. Huista	Petatan	Tomas Lopez	New-2017	Ligero	437	1.0
13	S. Ant. Huista	Canton Norte	Ursulo Feliciano Garcia Ambrosio	New-2017	Hunapu	874	2.0
					S. Chiva	437	1.0
14	La Democracia	Los Chucles	Erasmó Martínez	New-2017	Ligero	437	1.0
15	Cuilco	Sisi Chiquito	Jorge Luis Vicente	New-2017	Hunapu	437	1.0
16	Cuilco	Caserío Sandoval	Wilsido Isabel Martinez Morales	New-2017	Hunapu	437	1.0
					S. Chiva	437	1.0
17	San Sebast. Hueh.	Sipal	Mario Fabian Lopez	New-2017	Hunapu	437	1.0
18	La Libertad	Naranjo	Delmar Perez	New-2017	Hunapu	437	1.0
19	La Libertad	Rodeo	Angel Perez Samayoa	New-2017	S. Chiva	437	1.0
					Hunapu	437	1.0
20	La Libertad	Sto. Domingo	Porfirio Martinez	New-2017	Hunapu	656	1.5
21	Jacaltenango	Chapaltelaj	Ernersto Martin Pablo	Cycle 2016 but NO continue, suspend activities			
22	San Antonio Huista	Yalancú	Carlos Enrique Rodriguez	Cycle 2016 but NO continue, suspend activities			
23	Concepción Huista	Petatan	Bartolo Hernández Díaz	Cycle 2016 but NO continue, suspend activities			
24	Chiantla	El Carpintero	José Lopez Figueroa	Cycle 2016 but NO continue, suspend activities			
<b>TOTALS HUEHUETENANGO 2017</b>						<b>18,573</b>	<b>42.5</b>

Department of SAN MARCOS							
1	S. Miguel Ixtahu.	Siete Platos	Jose Bamaca Sales	2016 - 2017	Hunapú	437	1.0
2	S. Miguel Ixtahu.	Chisnan	Ricardo Benito Gonzalez	2016 - 2017	Altense	437	1.0
3	S. Miguel Ixtahu.	Maquivil	Hector Modesto Bravo Lopez	2016 - 2017	Altense	437	1.0
4	S. Miguel Ixtahu.	T. Blca. La Vega	Carlo Carmelino Domingo G.	2016 - 2017	Ligero	437	1.0
5	S. Miguel Ixtahu.	Las Escobas	Edgardo Anastacio Diaz Domingo	2016 - 2017	Hunapu	874	2.0
					Altense	437	1.0
6	S. Miguel Ixtahu.	El Exial	Miguel Estanislao Cinto Bamaca	2016 - 2017	Altense	437	1.0
					Hunapu	437	1.0
					S. Chiva	437	1.0
7	Tajumulco	El Malacate	Baudilio Santos Lopez Perez	2016 - 2017	S. Chiva	437	1.0
8	Tajumulco	Monte Perla	Hilda Chilel Lopez	2016 - 2017	S. Chiva	437	1.0
9	Tajumulco	Monte Perla	Hermeregildo Margarito Lopez M.	2016 - 2017	S. Chiva	437	1.0
10	Sibinal	El Malacate	Emerenciano Diaz	New-2017	S. Chiva	874	2.0
11	San Pablo	El Trapiche	Pablo Perez	New-2017	Ligero	874	2.0
12	San Pablo	La Joyita	Sergio Arnulfo Perez Ovalle	New-2017	Ligero	874	2.0
13	S. Miguel Ixtahu.	Shanshegual	Mariano Hernandez	New-2017	Hunapu	437	1.0
14	Nuevo Progreso	Centro N.P.	Saul Jermias Lopez Gomez	New-2017	Ligero	437	1.0
15	San Pablo	Loma Bonita	Pedro Hernandez Perez	New-2017	Ligero	437	1.0
16	Nuevo Progreso	Pariam	Reyna Nohemi Guzman Robles	New-2017	Ligero	437	1.0
17	Nuevo Progreso	La Floresta	Isidro Mariano Carreto Cardona	New-2017	Ligero	874	2.0
18	Tajumulco	Toquian Grande	Cornelio Perez Chavez	New-2017	S. Chiva	874	2.0
19	S. Miguel Ixtahu.	Alen	Leoncio Gumerciendo Gonzalez A.	Cycle 2016 but NO continue, suspend activities			
20	Comitancillo	Taltimiche	Lucia Leticia Crisostomo Matias	Cycle 2016 but NO continue, suspend activities			
21	S. Miguel Ixtahu.	El Salitre	Francisco Aquilino Perez Mendez	Cycle 2016 but NO continue, suspend activities			
<b>TOTALS SAN MARCOS 2017</b>						<b>11,799</b>	<b>27.0</b>
Department of TOTONICAPAN							
1	Momostenango	Panca	Santos Timoteo Garcia Vargas	2016 - 2017	Hunapú	437	1.0
2	Momostenango	Sicalbe	Modesta Barrera Ajcá	2016 - 2017	Hunapú	874	2.0
					S. Chiva	437	1.0
3	Momostenango	San Jose sigulla	Obispo Barrera	2016 - 2017	S. Chiva	874	2.0
4	Sta. L. La Reforma	San Luis Sibila	Miguel Tojin	2016 - 2017	Hunapú	437	1.0
5	Sta. L. La Reforma	Paviolin	Antonio Tzoy	2016 - 2017	Altense	874	2.0
6	Sta. L. La Reforma	Centro	Laura Milagrosa Pu	2016 - 2017	Altense	874	2.0
7	Sta. L. La Reforma	Centro	Leonzo Lux	2016 - 2017	Hunapu	874	2.0
					S. Chiva	437	1.0
8	S. Bart. Aguas Calien.	Centro	Gregorio Perez	2016 - 2017	Hunapu	437	1.0
9	Sta. L. La Reforma	Pamaria Centro	Jacobo Isaías Pu Tojin	New-2017	Hunapu	874	2.0
10	Sta. L. La Reforma	Tzanxan	Santiago Pu Tojin	New-2017	Hunapu	874	2.0
11	Sta. L. La Reforma	Xejuyup	Juana Pu Ixcotoyac	New-2017	Altense	874	2.0
12	Sta. L. La Reforma	Patulup	Juan Lux Ixcotoyac	New-2017	Hunapu	656	1.5
13	Sta. L. La Reforma	Gualtux	Francisco Tzoy Pu	New-2017	S. Chiva	656	1.5
14	Sta. L. La Reforma	Paxan	Diego Ixcotoyac Lux	New-2017	S. Chiva	656	1.5
15	Sta. L. La Reforma	Las Rosas	Miguel Pu Ixcotoyac	New-2017	S. Chiva	656	1.5
16	Sta. L. La Reforma	Pacabrican	Julio Tzoy	New-2017	S. Chiva	656	1.5
17	Momostenango	San Jose Sigulla	Tomas Baten	New-2017	Hunapu	656	1.5
18	Momostenango	Rachoquel	Pedro Zarate	New-2017	Hunapu	656	1.5
19	Momostenango	Barrio Santa Isabel	Candelaria Ajanel Itzep	New-2017	Altense	656	1.5
20	Momostenango	Chuacorrall	Amanda Veronica Vicente Garcia	New-2017	S. Chiva	656	1.5
21	Momostenango	Jutacaj	Juan Bautista Chanchavac	New-2017	Hunapu	437	1.0
22	Sta. Maria Chiquim.	Xalcata	Manuel Calel Castro	Cycle 2016 but NO continue, suspend activities-No WHIP			
23	Sta. Maria Chiquim.	Chichic	Marcos Lux Tiu	Cycle 2016 but NO continue, suspend activities-No WHIP			
24	Sta. Maria Chiquim.	Xebe	Sara Castro Chic	Cycle 2016 but NO continue, suspend activities-No WHIP			
<b>TOTALS TOTONICAPAN 2017</b>						<b>15,518</b>	<b>35.5</b>
Department of QUETZALTENANGO							
1	S. Juan Ostuncalco	Agua Bl. Nueva Conc.	Noe Rene Lopez Rodas	New-2017	Altense	656	1.5
2	S. Juan Ostuncalco	Las Victorias	Magdalena Escobar Alonzo	New-2017	Altense	219	0.5
3	S. Juan Ostuncalco	Varsovia	Alba Mendez Marroquin de Perez	New-2017	Altense	219	0.5
4	S. Juan Ostuncalco	Monrrovia	Bentura Lopez Lopez	New-2017	Altense	219	0.5
5	S. Juan Ostuncalco	Caserio Los Gomez	Enrique Escobar Juarez	New-2017	Altense	219	0.5
6	S. Juan Ostuncalco	Caserio los lopez	Beningno Castillo de Leon	New-2017	Altense	437	1.0
7	S. Juan Ostuncalco	Las Victorias	Epifanio Melchor Marroquin	New-2017	Altense	656	1.5
8	S. Juan Ostuncalco	Caserio Los Lopez	Juana/Elena Velasquez	Cycle 2016 but NO continue, suspend activities			
<b>TOTALS QUETZALTENANGO 2017</b>						<b>2,625</b>	<b>6.0</b>
<b>GRAND TOTAL 5 DEPARTMENTS 2017</b>						<b>60,314</b>	<b>138.0</b>

## Training on enhancing crop productivity

MASFRIJOL provides agricultural education sessions aiming at increase crop success. This training also contributes to increasing the levels of adoption and future use of improved bean varieties that the project is promoting to address the climatic conditions of the WHIP Municipalities. During this reporting period, 4,014 people attended at least one educational session on topics related to the good agronomic management of bean cultivation.

Graph 1 shows the progress achieved with activity of sessions of agronomic education directed to beneficiaries.



13,476 people were trained in these themes, representing 112.3 percent of the planned goal of 12,000 people. Videos approved for training have allowed the MASFRIJOL team to cover more ground. The full collection available includes the following:

- Use of GrainPro Bags
- Weed control
- Soil preparation
- Conducting a bean germination test
- Postharvest cleaning and drying
- Bean insect pests and diseases
- Bean harvesting and drying

The thematic lessons (lesson guides and videos) have been distributed to technicians of other USAID-funded projects as well as those organizations working with MASFRIJOL in the field (MAGA, MSPAS, SOSEP, Municipalities, etc.).

## 5. Nutrition Education

MASFRIJOL continues to work on its nutrition education strategy, which addresses the different themes of the project curriculum. The nutrition focus is on the consequences of chronic malnutrition, the importance of protein quality and its relation to growth (including delays when it's insufficient), the importance of bean consumption throughout the 1,000 days window, the correct complementary feeding for children from six months old and onward, and important foods during pregnancy and lactation stages.

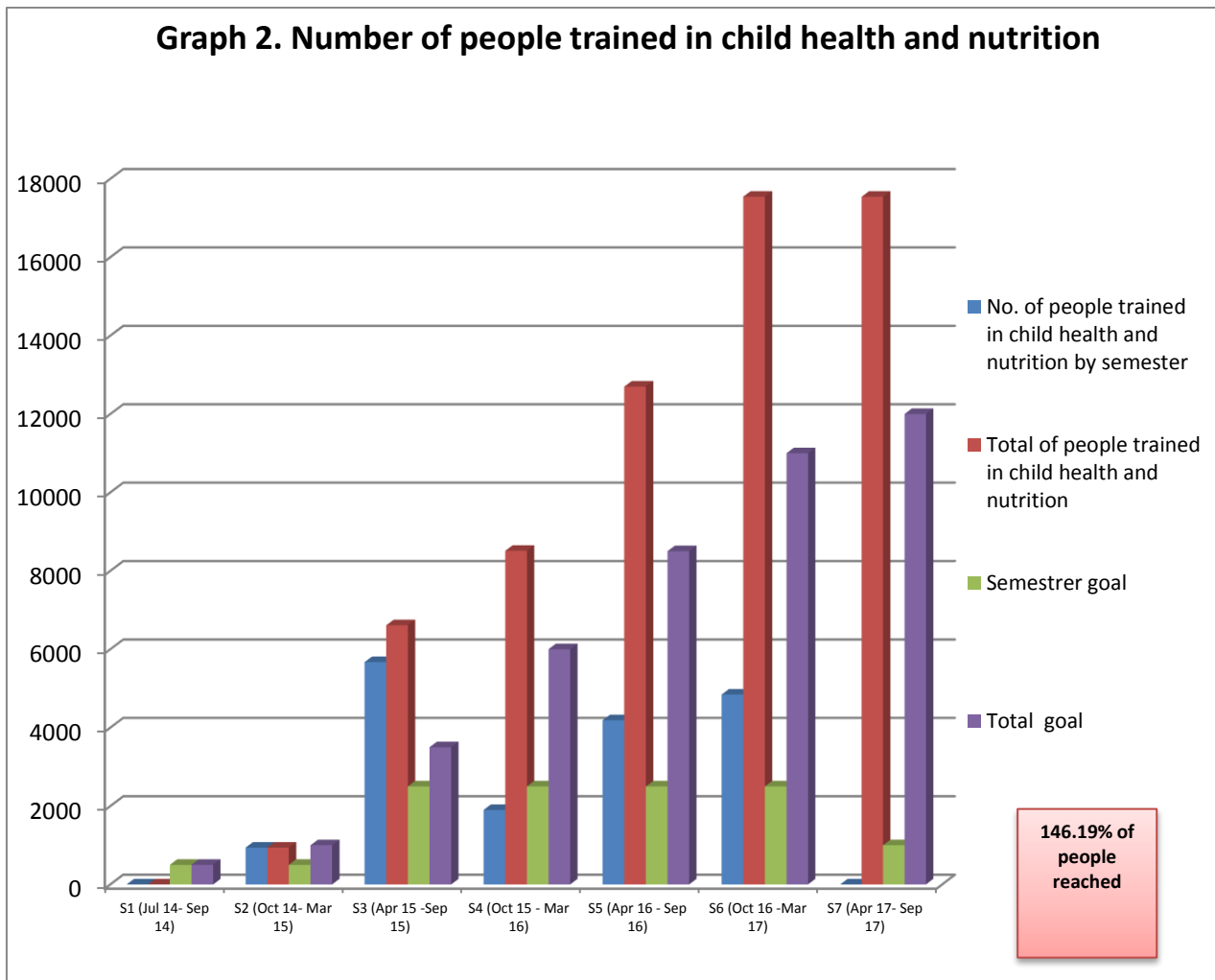
The nutrition-education strategy is not only based on audiovisual materials (videos) but also on practices that help the beneficiaries to acquire new knowledge and skills to apply in their daily lives.



Illustration 1 Nutritional Lesson # 4 "Feeding of children of 1-2 years of age". Guantajau,



Illustration 2 The Beantruck showing a MASFRIJOL video. El Trapiche, San Pablo, San Marcos.

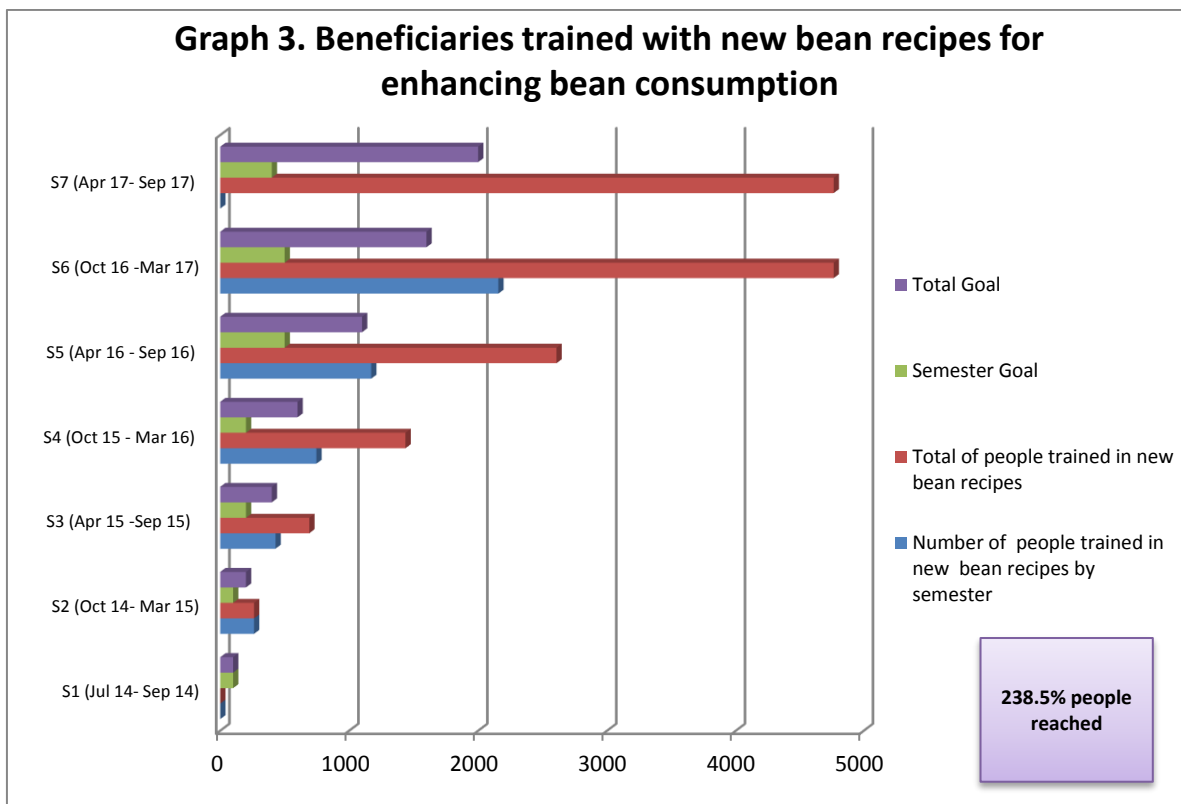


MASFRIJOL continues with the demonstration of black bean-based recipes in different communities. Food and nutrition education has been one of project’s favorite activities in target communities because it allows for creative teaching and open discussions with beneficiaries on how to eat more beans in different ways.



**Illustration 3 Women preparing bean recipes. Tzuná, Concepción Huista, Huehuetenango.**

Recipe demonstrations are held with small groups at beneficiaries’ homes and in health centers that can provide space and time. Partners, such as MAGA technicians, have adopted the recipes, using them in their established curricula with women. Graph 3 shows the number of beneficiaries reached through this activity in the last six months—2,157, of which 91.19 percent were women and 8.81 men. MASFRIJOL has surpassed its original target of 12,000 beneficiaries by more than twofold.



### Key messages delivered in different community set ups

In order to keep the target population aware of the importance of black bean cultivation and consumption in the WHIP municipalities, the



Illustration 4 Promotion activity in the Feria Patronal, San Antonio Huista,

MASFRIJOL project has established a dissemination strategy for information on agronomic and nutrition consisting of a team with a nutritionist and an agronomist using a *Frijomóvil* (Spanish for *Beanmobile*)—with all its audiovisual tools—in public places in the project’s prioritized municipalities. This approach captures the attention of farming families and allows time for addressing questions that arise on bean production and consumption related to MASFRIJOL. This outreach strategy has raised interest in beans (agricultural and nutritional) not only among older men and women but also of young people and adolescents. In addition, due to great interest on improved bean varieties, the activity is carried out at community seed depots.

These teams travel to such public places as town fairs, local market days, health center meetings, and the like. Table 7 lists such MASFRIJOL activities from October 2016 to March 2017.

**Table 7. Promotion of key messages about bean production and consumption at USAID/WHIP Municipalities October 2016-March 2017**

Department	Municipality	Place	Activity	Partner	Estimated # of people reached		
					# Women	# Men	# Total
Quetzaltenango	San Juan Ostuncalco	Centro de Salud	Promotion MASFRIJOL	MSPAS	75	5	80
		Centro de Salud	Promoción Jornada contra la Tuberculosis	MSPAS	50	75	125
	Concepción Chiquirichapa	Frontispicio Municipalidad	Promoción Día de Plaza	MSPAS	120	80	200
		Centro de Salud	Promotion MASFRIJOL	MSPAS	40	5	45
Totonicapán	Momostenango	Frontispicio municipalidad	Promoción Día de Plaza	Muni	60	150	210
		Escuela Fe y Alegría	Promoción Feria de la Salud	SESAN	450	200	650
Huehuetenango	Concepción Huista	Entrada al campo de futbol	Promoción en la Feria Patronal	Muni	150	250	400
		Centro de Salud	Promotion MASFRIJOL	MSPAS	70	20	90
	San Antonio Huista	Parque central	Promoción en la Feria Patronal	Muni	100	50	150
					150	75	225
					175	150	325
	San Sebastian Huehuetenango	Parque central	Feria de nutrición y el frijol	Varios	74	0	74
		Frontispicio Parque Central	Promoción Día de Plaza	Muni	150	100	250
	La Democracia	Centro de Salud	Promotion MASFRIJOL	MSPAS	60	10	70
	Jacaltenango	Parque Central	Promoción Día Internacional de la Mujer	Oficina Municipal de la Mujer	120	70	190
La Libertad	Centro de Salud	Promotion MASFRIJOL	MSPAS	60	10	70	
Quiché	Cunen	Frontispicio Iglesia	Promoción Día de Plaza	Muni	85	125	210
		Frontispicio Parque Central	Promoción Feria Patronal	Muni	440	460	900
		Mercado	Promotion MASFRIJOL	MSPAS	75	125	200
	Sacapulas	BANRURAL	Promotion MASFRIJOL	MSPAS	300	100	400
	Zacualpa	Mercado	Promoción	Muni	60	150	210
San Marcos	San Miguel Ixtahuacan	Frontispicio Parque Central	Promoción Día de Plaza	Muni	150	250	400
		Mercado	Promotion MASFRIJOL	Muni	250	350	600
	San Rafael Pie de la Cuesta	Mercado	Promotion MASFRIJOL	MSPAS	140	75	215
	San Lorenzo	Centro de Salud	Promotion MASFRIJOL	MSPAS	100	20	120
<b>TOTAL</b>					<b>3504</b>	<b>2905</b>	<b>6409</b>

## Nutrition evaluation

In meeting the PMP benchmarks and indicators, MASFRIJOL continues with the nutritional evaluation activities whose ultimate purpose is to evaluate changes in bean consumption, dietary diversity, and anthropometry of children under 5-years-of-age. The nutritional assessment is based on a sample of +/-700 families randomly selected and distributed in the WHIP communities.

The first stage of the strategy covers taking a nutritional pre-assessment to use as a baseline for later nutritional comparison. This pre-assessment includes indicators of dietary diversity among women of childbearing age and/or pregnant women, dietary diversity among children under 2-years-old, and the nutritional status of children under 5-years-old. In addition, household bean consumption is evaluated. The results of the nutritional pre-assessment of dietary diversity and nutritional status among children-under-5-years old were presented in the previous semi-annual report.

The second stage of the intervention was carried out through the MASFRIJOL nutrition/agriculture education curriculum every 20 to 30 days. The third—and final—stage of the strategy involves the nutrition post-evaluation, where the measurements of indicators are conducted.

Table 8 shows the progress MASFRIJOL made through March 2017. The chart shows nutritional indicators for 822 families from 99 communities. To date, data from 355 families from 62 communities have been collected (post-nutritional assessment); zeros in the table indicate those communities that still remain to be visited before this activity is finished.

<b>Table 8. Preliminary Results of the MASFRIJOL Nutrition Evaluation</b>					
<b>Department</b>	<b>Municipality</b>	<b>Pre-Nutritional Evaluation</b>		<b>Post-Nutritional Evaluation</b>	
		<b># Communities</b>	<b># Families</b>	<b># Communities</b>	<b># Families</b>
Quiché	Uspantan	3	19	3	17
	Zacualpa	3	20	0	0
	Sacapulas	8	61	8	55
	Nebaj	1	6	1	6
	Cunen	8	55	8	49
	Cotzal	1	3	1	3
	Chajul	1	5	1	5
<b>Total Quiché</b>		<b>25</b>	<b>169</b>	<b>22</b>	<b>135</b>
Totonicapán	Momostenango	4	39	4	18
	Santa Lucia la Reforma	4	38	4	28
<b>Total de Totonicapán</b>		<b>8</b>	<b>77</b>	<b>8</b>	<b>46</b>



Quetzaltenango	San Juan Ostuncalco	4	23	3	13
	Concepción Chiquirichapa	5	20	2	6
<b>Total Quetzaltenango</b>		<b>9</b>	<b>43</b>	<b>5</b>	<b>19</b>
Huehuetenango	Concepción Huista	10	66	10	52
	La libertad	1	9	1	5
	San Antonio Huista	2	16	2	11
	Todos Santos Cuchumatan	4	38	0	0
	Chiantla	1	9	0	0
	Barillas	2	25	0	0
	San Sebastian Huehuetenango	5	44	5	29
<b>Total Huehuetenango</b>		<b>25</b>	<b>207</b>	<b>18</b>	<b>97</b>
San Marcos	Concepción Tutuapa	5	37	0	0
	San Miguel Ixtahuacan	12	99	6	40
	San Pablo	4	66	0	0
	Nuevo Progreso	7	81	0	0
	San Rafael Pie de la Cuesta	4	43	3	18
<b>Total San Marcos</b>		<b>32</b>	<b>326</b>	<b>9</b>	<b>58</b>

**Boleta No. \_\_\_\_\_**

LUNES	MARTES	MIÉRCOLES	JUEVES	VIERNES	SÁBADO	DOMINGO

**Instrucciones:**  
El objetivo de este material es medir la cantidad de frijol negro que consume su familia cada día, durante una semana.

**Siguar los siguientes pasos:**

1. Ubique el recipiente MASFRÍJOL para medir la cantidad de frijol negro que va a cocinar.
2. Marque pintando en el dibujo de la taza la cantidad de frijol negro que va a cocinar.

**Instrucciones adicionales:**

1. Si consumieron otro tipo de frijol, marque con una "X" en la casilla que tipo de frijol consumió y en la parte inferior escriba la cantidad en libras.

Frijol rojo

Frijol blanco

Otro

\_\_\_\_ libras      \_\_\_\_ libras      \_\_\_\_ libras

2. ¿Cuántas libras de frijol compraron y consumieron durante la semana? \_\_\_\_\_
3. ¿Cuántas botas de frijol compraron y consumieron? \_\_\_\_\_

Illustration 5 Bean Intake Form

MASFRIJOL worked with FANTA III and the Center for Communication for Development (CECODE) to develop a visual tool on which families could record their weekly bean intake in both amount and frequency. These tools are large, laminated posters (40 x 140 cm) with images of three empty two-cup measures (~ 18 fl oz) pictured every day for a seven-days period (i.e., a week).

Each household is given a real plastic 2-cup measure and a marking pen to measure the amount of dry black beans they cook each day of the week. The MASFRIJOL staff member who distributes the form records the number of men, women—pregnant or lactating, and children in each household.

The weekly dry bean consumption per household (HH) is determined by adapting the FAO techniques for Adult Male Equivalents (AME) (Weisell et al., 2012). That is, intake is prorated based on the energy needs of adults versus children by age, gender, and reproductive status. Because the form records the numbers of people by gender within age ranges, those factors will be averaged for children younger than 1 year, 1 year olds, 2 to younger than 5 years, 5 to younger than 12 years, and older than 12 years, as shown in table 9, below. The amount of beans cooked per week in each HH is then converted to the energy (kcalories) in those beans, wherein 1 cup (225gm) dried black beans equals 494gm (3 cups) of cooked beans. The average amount of beans per hectare is reported in Table 4 as the energy from beans cooked, where 100 g of cooked black beans are noted to have 88kcal (Menchu & Mendez, 2012) divided by the AME / HH.

Ag, Yr	Adult Equivalents	
	Males	Females
<1	0.22	0.22
1	0.31	0.28
2<5	0.41	0.38
5<12	0.61	0.56
12+	1.00	0.80
12+ preg/lact	NA	1.00

MASFRIJOL recovered 772 of the laminated bean consumption posters and markers from the 822 families registered in the database for nutritional pre-evaluation. Of these, 729 were

included in the analysis; 43 families' charts were discounted due to incorrectly filled out daily charts.

The information in table 10 shows that consumption of beans across departments is similar. Quiché presents the highest family consumption, while Quetzaltenango records the least consumption of beans weekly. This difference may be due to geography, since many areas in the western highlands are in very high altitudes, which can affect production of this basic grain.

**Table 10. Bean baseline consumption report**

Department	Average family size		Average of dry beans/week	Average of cooked beans/week		Average Adult Male Equivalents *(AME)	Kcal/AME
	Adults ≥ 12Yr	Children <12 Yr	Grams--Pounds	Grams--Pounds	Kcal		
<b>Quiché</b>	4.3	3.0	2065--4.5	4530--9.9	3986	5.3	752
<b>Totonicapán</b>	4.2	3.2	1854--4.0	4067--8.9	3588	5.2	690
<b>Quetzaltenango</b>	3.8	2.9	1339--2.9	2938--6.3	2585	4.6	561
<b>Huehuetenango</b>	3.5	2.6	1265--2.7	3565--7.8	3137	4.3	726
<b>San Marcos</b>	3.8	2.9	1712--3.7	3756--8.3	3305	4.7	703
<b>TOTAL</b>	3.9	2.9	1647--3.5	3771--8.2	3320	4.8	686

**\*Adapted from FAO techniques for Adult Male Equivalents (AME) (Weisell et al., 2012).**

In regard to family bean consumption, it is noteworthy size that 10.6 percent of the families reported consuming red beans at an average of 1.4 pounds a week during the week of the nutritional pre-evaluation. Similarly, 13.4 percent of families reported white bean consumption by an average of 1.5 pounds per week. Likewise, 9.2 percent of the families affirmed the consumption of another type of bean among which stand the yellow bean, isich, chamborote and piloy. In the end, only 13 families reported having purchased canned black beans and 7 families claimed to have purchased black beans packed in the bag.

## **6. Success Stories: focus on Community Seed Depots**

This section on success stories is dedicated to Community Seed Depots (CSDs) that have shown strong command of seed production knowledge, have profited robustly from this activity selling seed at a premium price and that wish to continue supplying seed of improved varieties to their communities. Most of the documented experiences and development projects connected with promoting and disseminating improved bean seed varieties include sustainability challenges. At MASFRIJOL, it is believed that CSDs are a mechanism designed to ensure that seed of improved varieties would be continuously produced in the target communities by the best local bean farmers. The CSDs featured here are only a sample of the success stories MASFRIJOL coordinators and technicians have seen in the field.

## Quiché

Families in the community of Tunajá I in the municipality of Zacualpa, received bean seed of the ICTA Hunapú variety through the Ministry of Public Health and Social Assistance (MSPAS).

MSPAS nominated Don Manuel Hernández García, as the person responsible for managing the CSD. García started seed production in January of 2016. After the positive results of his first cycle, he was motivated to plant again in 2017. In the first cycle of production, García obtained 136 lbs of seed per cuerda, while in the second cycle his harvest jumped to 150 lbs total production.

Don Manuel is very interested in the CSD model and unselfishly shares his experiences with other producers. He expresses great interest in knowing other farmers' experiences with CSDs from other locations because he is interested in networking with other CSDs in Santa María Cunén.



Figure 1. Seed Depot of Mr. Manuel Hernández García, who is conditioning artisanal seed of ICTA Hunapú; Comunity Tunaja 1, Zacualpa, Quiche, 2016.



Figure 2. Seed Depot bean plot of two ICTA varieties conducted by Mr. Lucas Hernandez. San Luis Community, Sta. Maria Cunen, Quiche.

Another good experience among the community seed banks was the first approach to the San Luis Community of the Municipality of Santa María Cuné, Quiché, which was carried out by personnel of the Ministry of Public Health and Social Assistance (MSPAS). There, Don Lucas Hernández Dubón expressed great interest for the activities carried by The MASFRIJOL project, such as educational sessions on bean production issues and the importance of nutrition and bean consumption.

Don Lucas regularly attended meetings with his daughter-in-law, Doña Marta Lidia Chávez, and his granddaughters. Due to his positive attitude, the technical team in the department of Quiché nominated Don Lucas as an owner of a CSD. Because of his training with MASFRIJOL, Don Lucas indicated that he preferred growing ICTA Altense and ICTA Hunapú seed.

Don Lucas is one of the most active CSD owners. He adopts suggested recommendations in agronomic management, uses permitted pesticides, and enjoys sharing experiences with other producers. In addition, he is interested in testing the newly released climbing bean varieties ICTA Labor Ovalle and ICTA Utatlán. Don Lucas is a go-to person when we need to motivate new farmers to participate in the CSD model.

## Huehuetenango

Don Francisco Sanchez's CSD is located in the community of Huntá, municipality of Jacaltenango, in the Department of Huehuetenango. Sanchez is dedicated to the production of local varieties of coffee, corn, and black beans. However, in the last few years all these bean varieties have been affected by the bean golden mosaic virus, considerably reducing his production.

Sanchez was excited for the opportunity to establish a CSD using the ICTA Ligerito variety since it is resistant to the bean golden mosaic virus. In this area, through the work done by ICTA-Huehuetenango technicians, the ICTA Ligerito variety had already built a strong reputation; however, a large number of farmers had not had access to it.

With the arrival of the MASFRIJOL Project, seed dissemination activities allowed many farmers to try it, but unfortunately, they did not save seed for new plantings. Many of these producers



**Figure 3. Mr. Francisco Sanchez Seed Depot, production of ICTA Ligerito bean variety, at Hunta Community, Jacaltenango, Huehuetenango.**

liked its phenotypic and genotypic potential, which was expressed in resistance to the mosaic virus, so they started a search to obtain ICTA Ligerito seed.

In 2016, the ICTA Ligerito plantation was established on Don Francisco's land of 0.85 cuerdas (roughly 371m<sup>2</sup>) with an impressive yield of 1.5 quintals (150 lbs.), which is equal to an estimated 1.85 quintals per cuerda (185 lbs./cuerda). After seed conditioning, 120 net pounds of seed were obtained, which was purchased by a community seed retailer at Q6.00 per pound. Don Francisco Sánchez is satisfied with the work and very motivated, since as he states, "the CSD-produced seed was not sufficient to satisfy his market."

Sanchez's CSD is in its second cycle and Sanchez has increased his production by 400 percent—up to five cuerdas (2,185 m<sup>2</sup>), compared to 2016. His harvest is estimated to yield 2.0 quintals per cuerda, for a total of 1000 lbs.

A field day was recently held in Sanchez's CSD to promote ICTA Ligerito and its advantages. One hundred forty farmers from neighboring communities attended; seed orders for approximately 120 pounds of seed were placed.

## San Marcos



**Figure 5.** Mr. Pablo Perez and his wife are involved in both, education sessions and seed depot activities, which are supported by MASFRIJOL. El Trapiche Community, San Pablo Municipality, San Marcos.

Don Pablo Dionicio Pérez Guzmán lives in El Trapiche, Municipality of San Pablo. He is a farmer and the husband of one of the beneficiaries who participated in the nutrition monitoring activity conducted by MASFRIJOL. He is one of those enthusiasts who always accompanies his wife to the activities and participates very well with other men and women.

Don Pablo had the opportunity to plant a small plot with ICTA Ligero seed his wife received through MASFRIJOL. He planted 218 m<sup>2</sup> (half a cuerda) and obtained a yield of 97 lbs— the equivalent 194 lbs/cuerda. When Don Pablo was asked about the management of his plot to get this yield, he commented that he did everything he learned in the videos during the agricultural education sessions that were shared during agronomic education meetings.

Due to his experience, MASFRIJOL offered Don Pablo the opportunity to plant a CSD. After explaining the methodology and model objectives to Don Pablo, he very willingly agreed to participate.

Don Pablo is one of the 18 seed producers in CSDs who are located in the department of San Marcos. He hopes that his experience with planting a CSD will allow him to acquire it for the betterment of his family and community so as to improve the availability and consumption of beans.



**Figure 6.** Bean seed produced in Seed Depots supported by MASFRIJOL is displayed at the fair organized by the Sibinal Municipality on 2016.

Don Emerenciano Clemente Díaz Pérez lives in Toj Pac Village, Sibinal Township, San Marcos Department, and has been a beneficiary of MASFRIJOL since 2014. He is a leader in his community who supports many families in different ways. In agricultural activities, he was one of the few people to obtain a good bean production, achieving 210 pounds per cuerda with the planning of variety ICTA Super Chiva.

At the fair that was organized by the Municipality of Sibinal in 2016, Don Emerenciano talked about the bean production on his land at the MASFRIJOL display stand, where he was noticed by many of the farmers who attended the fair.

MASFRIJOL involved Don Emerenciano in the CSD activity to produce seed of the variety ICTA Super Chiva. Don Emerenciano is thankful for this opportunity because he hopes to be able to support his family. Currently his children who are farmers also produce beans of the same variety for their families. He also hopes to continue to support the families of his community.