



**USAID**  
FROM THE AMERICAN PEOPLE

# USAID-ACCESO

April 2011 to May 2015

**FINAL REPORT - Updated November 2015**



**November 2015**

This publication was prepared by Fintrac Inc. for review by the United States Agency for International Development.



fintrac

**Fintrac Inc.**

[www.fintrac.com](http://www.fintrac.com)

[info@fintrac.com](mailto:info@fintrac.com)

**US Virgin Islands**

3077 Kronprindsens Gade 72

St. Thomas, USVI 00802

Tel: (340) 776-7600

Fax: (340) 776-7601

**Washington, D.C.**

1400 16th Street, NW

Suite 400

Washington DC 20036

Tel: (202) 462-8475

Fax: (202) 462-8478

Email: [info@fintrac.com](mailto:info@fintrac.com)

**USAID-ACCESO**

Tegucigalpa

Oficina 1804, Piso 18,

Edificio Torre Alianza

Lomas del Guijarro Sur

Tegucigalpa MDC

La Lima

Instalaciones FHIA

Contiguo Instituto Patria

La Lima, Cortés

Tel:(504)2668-1190

E-mail: [acceso@fintrac.com](mailto:acceso@fintrac.com)

# **USAID-ACCESO**

**April 2011 to May 2015**

**FINAL REPORT - Updated November 2015**

**November 2015**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

# CONTENTS

<b>LIST OF ABBREVIATIONS .....</b>	<b>I</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>III</b>
<b>1. EXECUTIVE SUMMARY .....</b>	<b>I</b>
<b>2. PROJECT BACKGROUND .....</b>	<b>5</b>
<b>3. PROJECT IMPLEMENTATION .....</b>	<b>6</b>
3.1 PROJECT CLIENTS.....	6
3.2 TECHNICAL ASSISTANCE DELIVERY .....	6
3.3 INCOME GENERATION COMPONENT .....	7
3.4 PRODUCTION ACTIVITIES.....	8
3.5 PROCESSING AND VALUE ADDITION.....	12
3.6 BUSINESS SKILLS AND FINANCE.....	13
3.7 NUTRITION AND HEALTH COMPONENT.....	17
3.8. INTEGRATION OF THE TECHNICAL COMPONENTS .....	17
3.9 MONITORING AND EVALUATION.....	18
3.9.1 M&E Unit.....	18
3.9.2 CIRIS .....	18
3.9.3 Sampling.....	18
3.9.4 Data Collection Process.....	19
3.9.5 Final Report Data .....	20
<b>4. HIGH LEVEL TARGETS .....</b>	<b>20</b>
4.1 NUMBER OF HOUSEHOLDS MOVED OUT OF POVERTY.....	20
4.2 VALUE OF NEW NET INCOME.....	23
4.3 VALUE OF INCREMENTAL SALES.....	25
4.4 NUMBER OF JOBS ATTRIBUTED TO FTF IMPLEMENTATION.....	28
4.5 FACTORS AFFECTING ACHIEVEMENT OF HIGH-LEVEL RESULTS.....	30
<b>5. IR &amp; SUB-IR ACTIVITIES.....</b>	<b>32</b>
5.1 PROJECT CLIENTS.....	32
5.2 RURAL MSME ENTERPRISE GROWTH INCREASED (IR 2.1).....	34
5.2.1 Rural MSMEs Access to Inputs, Practices, and Technology for Market Participation Improved (SUB-IR 2.1.1).....	35
5.2.2 Rural MSMEs Access to New Market Opportunities Increased (SUB-IR 2.1.2).....	46
5.2.3 Barriers to Competitiveness of Rural MSMEs Reduced (SUB-IR 2.1.3) .....	50
5.3 HONDURAN BIODIVERSITY & NATURAL RESOURCES CONSERVED (IR 2.2).....	57
5.4 CAPACITY TO MITIGATE AND ADAPT TO CLIMATE CHANGE STRENGTHENED (IR 2.3).....	63
5.4.1 Disaster Vulnerability Reduced (SUB-IR 2.3.3).....	63
5.5 USE OF QUALITY MATERNAL AND CHILD HEALTH AND FAMILY PLANNING SERVICES INCREASED (IR 4.1) .....	72

<b>6. ADDITIONAL REPORTING.....</b>	<b>92</b>
6.1 USAID/HONDURAS .....	92
6.2 FTFMS .....	92
<b>7. SUPPORTING ACTIVITIES .....</b>	<b>92</b>
7.1 MONITORING AND EVALUATION ACTIVITIES.....	92
7.2 SMALL GRANTS, SUBCONTRACTS, AND ALLIANCES PROGRAM.....	94
7.3 ENVIRONMENTAL MONITORING .....	96
7.4 IFPRI .....	97
7.5 COMMUNICATIONS.....	98
7.6 FIELD VISITS.....	98
7.7 SELECTED ACTIVITIES WITH OTHER USAID AND USAID-RELATED PROJECTS.....	101
7.8 US GOVERNMENT ALLIANCES .....	102
7.9 ACTIVITIES WITH GOVERNMENT MINISTRIES.....	105
7.10 STUDENT TRAINING.....	108
7.11 LOCAL NGO AND ORGANIZATIONS.....	108
7.12 OTHERS.....	109
<b>8. GENDER INTEGRATION .....</b>	<b>110</b>
<b>9. ADMINISTRATIVE CONSIDERATIONS .....</b>	<b>114</b>
<b>10. LESSONS LEARNED .....</b>	<b>117</b>
10.1 WHAT WORKED WELL? .....	117
10.2 WHAT DID NOT WORK WELL?.....	118
10.3 WHAT COULD BE IMPROVED OR EXPANDED? .....	118
10.4 PROJECT CLIENTS .....	119
10.5 TECHNICAL ASSISTANCE DELIVERY .....	120
10.6 INTEGRATION OF TECHNICAL COMPONENTS.....	121
10.7 SUSTAINABILITY CONSIDERATIONS .....	121
10.8 SCALING UP.....	122
10.9 PROJECT TARGETS.....	122
<b>11. PRIORITY AREAS FOR FUTURE WORK .....</b>	<b>124</b>
<b>ANNEX I. PERFORMANCE MONITORING PLAN .....</b>	<b>125</b>

# LIST OF ABBREVIATIONS

ACRA	Italian NGO	ICADE	Instituto para la Cooperación y Autodesarrollo
ADEC	Agua y Desarrollo Comunitario	ICF	Instituto de Conservación Forestal
AIN-C	Atención Integral a la Niñez en la Comunidad	ICM	Integrated Crop Management
AMVAS	Asociación de Municipios del Valle de Sesecapa	IFAD	International Fund for Agricultural Development
ANAVIH	Asociación Nacional de Avicultores de Honduras	IFPRI	International Food Policy Research Institute
ASONOG	Asociación de Organismos No Gubernamentales de Honduras	IHCAFE	Instituto Hondureño del Café
BANADESA	Banco Nacional de Desarrollo Agrícola	INFOP	Instituto Nacional de Formación Profesional
BANHCAFE	Banco Hondureño del Café	IPM	Integrated Pest Management
BANHPROVI	Banco Hondureño para la Producción y la Vivienda	IR	Intermediary Results
BLF	Baseline Form	JICA	Japan International Cooperation Agency
CACIL	Cooperativa de Ahorro y Crédito Intibucana Limitada	LOP	Life of Project
CARITAS	CARITAS	M&E	Monitoring and Evaluation
CASM	Comisión de Acción Social Menonita	MAMCEPAZ	Mancomunidad de Municipios del Centro de La Paz
CATIE	Centro Agronómico Tropical de Investigación	MAMLESIP	Mancomunidad de Municipios Lencas de la Sierra de La Paz
CEN	Centro de Educación Nutricional	MAPANCE	Municipios del Parque Nacional Montaña de Celaque
CESAMO	Centro de Salud con Médico y Odontólogo	MCA-H/ACA	Millennium Challenge Account-Honduras/
CESAR	Centros de Salud Rural	MOSEF	Modernización del Sector Forestal de Honduras
CHV	Community Health Volunteer	MSME	Micro, Small & Medium Enterprise
CIP	Country Investment Plan (Agriculture)	NGO	Non-Governmental Organization
CIRIS	Client Impact & Results Information System	NRM	Natural Resource Management
CNBS	Comisión Nacional de Banca y Seguros	N&H	Nutrition and Health
CODEL	Comité de Emergencia Local	OCDIH	Organismo Cristiano de Desarrollo Integral de Honduras
CODEM	Comité de Emergencia Municipal	ODECO	Organización de Desarrollo Étnico Comunitario
COHEP	Consejo Hondureño de la Empresa Privada	ODEF	Organización de Desarrollo Empresarial Femenino
COMRURAL	Proyecto de Competitividad Rural para Honduras	OFI	Off-farm income
COMUPL	Cooperativa Mixta "Unidas Para Progresar"	OPDF	Organizaciones Privadas de Desarrollo Financieras
COPECO	Comisión Permanente de Contingencias	PACTA	Programa de Acceso a la Tierra
COPRAFEL	Cooperativa Regional Agroforestal Erandique Limitada	PESA	Programa Especial para la Seguridad Alimentaria
CR	Caja Rural	PILARH	Proyectos e Iniciativas Locales para el Autodesarrollo Regional de Honduras
CRS	Catholic Relief Service	PIRS	Performance Indicator Reference Sheet

CTU	Community Technical Units	PMP	Project Monitoring Plan
DEI	Dirección Ejecutiva de Ingresos	PPLR	Prevention Plan/Local Response
DICTA	Dirección de Ciencia y Tecnología Agropecuaria	PPP	Public Private Partnership
EDAN	Evaluación de Danos y Necesidades	PRAF	Programa de Asignación Familiar
EM	Efficient Microorganisms	PRONADERS	Programa Nacional de Desarrollo Rural Sostenible
ENDESA	Encuesta de Demografía y Salud	QQ	Quintal
ENEE	Empresa Nacional de Energía Eléctrica	RTN	Registro Tributario Nacional
EOH	End of Harvest	SAG	Secretaría de Agricultura y Ganadería
FAGRE	Fondo de la Garantía para el Sector Agropecuario	SANAA	Servicio Autónomo Nacional de Acueductos y Alcantarillado
FAO	Food and Agriculture Organisation	SECPLAN	Secretaría de Planificación, Coordinación y Presupuesto
FENAGH	Federación Nacional de Agricultores y Ganaderos de Honduras	SEDIS	Secretaría de Desarrollo e Inclusión Social
FIDE	Fundación para la Inversión y Desarrollo de Exportaciones	SENASA	Servicio Nacional de Sanidad Agropecuaria
FHIA	Fundación Hondureña de Investigación Agrícola	SERNA	Secretaría de Recursos Naturales y Ambiente
FHIS	Fondo Hondureño de Inversión Social	SIC	Secretaría de Industria y Comercio
FIRSA	Fideicomiso para la Reactivación del Sector Agrícola	SINAGER	Sistema Nacional de Gestión de Riesgos
FINNFOR	Bosques y Manejo Forestal en América Central	SNV	Servicio Holandés de Cooperación al Desarrollo
FOPRIHEH	Federación de Organizaciones No Gubernamentales para el Desarrollo de Honduras	TECHO	Fundación Un Techo para mi País
FTE	Full Time Equivalent	ULAT	Local Technical Assistance Unit for Health (USAID)
FTF	Feed the Future	UMA	Unidad Municipal de Ambiente
Funder	Fundación para el Desarrollo Empresarial de Honduras	UNA	Universidad Nacional de Agricultura
FY	Financial Year	UNAH	Universidad Nacional Autónoma de Honduras
GAFSP	Global Agriculture and Food Security Program	UNDP	United Nations Development Programme
GAP	Good Agricultural Practices	UNITEC	Universidad Tecnológica Centroamericana
GBV	Gender Based Violence	USAID OFDA/LAC	Office of U.S. Foreign Disaster Assistance. Regional Office for Latin America and the Caribbean
GMP	Good Manufacturing Practices	USDA	United States Department of Agriculture
GMS	Gender Mainstreaming Strategy	WASH	Water, Sanitation, Hygiene, and Nutrition
GOH	Government of Honduras	WEFTA	Water Engineers for the Americas
GPS	Global Positioning System	WFP	World Food Programme
HQC	Honduran Quality Coffee	ZOI	Zone of Influence

# ACKNOWLEDGEMENTS

Fintrac wishes to thank the technical, administration, and management team for their dedication, professionalism, enthusiasm and tireless efforts in providing income generating opportunities, technologies, practices, and knowledge to tens of thousands of household clients and their families. Thanks are due to the subcontractors and their staff for the support provided in ensuring a coordinated and integrated implementation of project services. Special thanks are also due to USAID/Honduras personnel for their continuous guidance, support, and advice during implementation. The confidence of the private sector companies in the project to develop commercial alliances with the poor and extreme poor families was essential for income generation and, ultimately, for poverty reduction. The coordination with government ministries, government institutions, local governments, *mancomunidades*, NGOs, projects, and donors all enabled expanded outreach to the benefit of project clients.

The success of projects such as USAID-ACCESO is based ultimately on the success of the project clients. Most of the acknowledgement and thanks have to go to the household clients, many of whom have made major positive changes from their traditional production and household practices to increase their incomes, nutritional status of their children, and the well-being of their families. They are the ones who took the risks with production and small business operations, and invested their time and limited funds with the expectation that their livelihoods and standards of living could change for the better.



**USAID-ACCESO team, December 2014**

# I. EXECUTIVE SUMMARY

USAID-ACCESO was a 49-month project, funded by the United States Agency for International Development (USAID) Office of Economic Growth in Honduras, to move rural Honduran households out of extreme poverty and under-nutrition by improving their incomes. USAID-ACCESO represented the core investment by USAID/Honduras in the US government's global hunger and food security initiative known as Feed the Future. The project worked through six key components to enable economic development at the household level:

1. Technical assistance and training to enhance the capacity of Honduras' poorest households in production, management, and marketing skills.
2. Market access focused on linking farmers to market opportunities.
3. Rural financial services through existing rural financial intermediaries, village banks, commercial banks, and other service and input providers.
4. Assistance in eliminating policy barriers that impede rural household access to market opportunities.
5. Malnutrition prevention activities to enhance the capacity of rural households to improve utilization and consumption of healthy food.
6. Sound environmental and natural resource management.

USAID-ACCESO was implemented by US agribusiness firm Fintrac Inc., in association with Fundación Hondureña de Investigación Agrícola (FHIA), Escuela Agrícola Panamericana (EAP-Zamorano), Fundación para el Desarrollo Empresarial Rural (FUNDER), CARE International, and the Global Village Project. Seven additional local organizations were also under subcontracts: Hermandad de Honduras, Save the Children, Cooperativa Regional Agroforestal Erandique Limitada (COPRAFEL), Organismo Cristiano de Desarrollo Integral de Honduras (OCDIH), Proyectos e Iniciativas Locales para el Autodesarrollo Regional de Honduras (PILARH), Comisión Acción Social Menonita (CASM), and Instituto Hondureño del Café (IHCAFE).

The project began start-up activities in April 2011 and was scheduled to finish in February 2015. Activities in three of the six departments finished in February 2015 while the other three continued until May 2015. This allowed USAID to transition to follow-on activities. The initial USAID-ACCESO final report was prepared in May 2015 without the 2014/2015 annual survey data, including that required to determine income and poverty level results. In October 2015, arrangements were made to enable the data collection from the sample household survey. This data is now incorporated into this report.

As of March 2015, the total number of client households receiving project assistance with baseline incomes below the poverty line was 30,364 (27,840 extreme poor and 2,524 poor). The poor and extreme poor families accounted for 165,604 beneficiaries, including 21,877 children under 5 years old. The project also worked with 3,667 non-poor households, covering an additional 15,587 beneficiaries with 1,452 children under 5 years old. For all cases, beneficiaries consisted of all the household members, which totaled 181,191: 94,371 male, 86,820 female, 23,328 under 5 years old, and 6,623 under 2 years old (the last two, at the time of client registration). Of the total 34,031 poor and non-poor registered clients, 6,985 were women (20.5 percent) and 27,046 were men.

The average client household size was 5.4 people. Targets related to individual households as opposed to averages require significantly more income-generating activities. It was generally the case that households with more members were usually the poorest households and had the fewest resources. Fifteen percent of USAID-ACCESO's poor and extreme poor clients (4,453) USAID-ACCESO fell under the age of 30; 16,014 were between 30 and 50 years old (53 percent); and, 9,897 were over 50 years old (32 percent).

The poverty line in Honduras has been established by the government as a minimum of \$2.42/day/person, while families with incomes below \$1.81/person/day were considered to live in extreme poverty. To take individuals above the poverty line required an annual income of \$883/year – a six-person family required a minimum of \$5,300 a year to move above the poverty line. With basic technologies, the most common crops – maize and beans – only generate around \$750 per hectare per year. While yields and incomes from basic grains increase with technology adoption, farmers would still require 5 hectares to generate the required income levels. In comparison, high-value horticulture production with basic technologies generates around \$4,000 per hectare. Growers would need 0.5 hectares of land, with year-round water supply to produce two high-value crops a year and at least \$5,000 of annual working capital to cover production costs. Most client farmers that started with USAID-ACCESO had less than 0.5 hectares of land; grew coffee, corn, and beans with zero technology; and did not have access to water, finance, or markets.

To generate household income, the project provided direct technical assistance and training to clients in production, marketing, postharvest, business skills, finance, certifications, and value-added processing. Value chains included basic grains, coffee, horticulture, animal production, fruit trees, on- and off-farm value added. The project also provided technical assistance at the household and community level on nutrition and health, disaster mitigation, natural resource management, and renewable energy.

**A total of 4,099 households moved above the poverty line, of which 3,416 came from extreme poverty.** When the standard FTF indicator is used, a total of **8,719 households starting with less than \$1.25/day/person moved above this income level.**

Across all 30,364 client households under the poverty line, incomes increased from **\$0.88 to \$1.44/person/day**. A total of **22,787 households had baseline incomes of less than \$1.25, which increased from \$0.63 to \$1.28/person/day**. More than 2,300 families increased their incomes by 485 percent, from less than \$1.25 to more than \$2.42/person/day.

The accumulated **value of new net income was \$78,495,249** against an updated target of \$30 million (262 percent of the target). Analysis of the FY 2015 \$37.934 million new net income by product category indicated that **horticulture and animal production increased by \$4.665 million and \$7.455 million, respectively**. Coffee began recovering from earlier problems with coffee rust disease and low market prices, to contribute \$2.396 million to overall income. Income from other sources increased by \$20.464 million. The extreme poor; poor; non-poor; and micro, small, and medium enterprise (MSME) categories all recorded positive results in FY 2014/2015, showing increases of \$30.323 million, \$506,157, \$4.036 million and \$3.068 million, respectively. Overall, **households below the poverty line increased their net income by \$30.829 million.**

The high-level life of project targets and the results achieved as of September 2015 are as follows:

Indicator	Achieved	LOP Target	Percent of Target
PIRS# 1: Number of households living in poverty moved above the poverty line	4,099	10,000	41%
PIRS# 2: Number of rural households living in extreme poverty moved above the poverty line	3,416	7,500	46%
PIRS# x: Number of rural households living below \$1.25/person/day moved above \$1.25/person/day	8,719	12,500	70%
PIRS# 3: Value of new net income of participant rural farmers and MSMEs	\$78.495 million	\$30.00 million	262%
PIRS# 4: Number of jobs attributed to FTF implementation	3,809	3,250	117%
PIRS# 5: Value of incremental sales (collected at farm/firm level) attributed to FTF implementation	\$41.289 million	\$68.00 million	61%

The accumulated **value of incremental sales increased to \$41.289**, against an updated target of \$68 million (61 percent of the target). Analysis of the FY 2014-2015 incremental sales by product category showed **sales in coffee, horticulture, and animal production increased by \$1.913, \$5.953, and \$8.837 million, respectively.**

Sales of coffee which were \$24.047 million less than baseline in 2014 due to rust disease and low market prices, recovered significantly in 2015 to a \$19.12 million increase over baseline as the improved production and marketing practices came into effect, and rust problems were reduced. In FY 2013-2014 and FY 2014-2015 the project emphasized improving animal production systems (mainly dairy), working with profitable MSME operations, improving corn yields and coffee production systems, and introducing horticultural products.

The implementation strategy took into account that with the USAID-ACCESO grower, neither coffee nor basic grains on their own could achieve the required incomes. Although horticulture alone would generate the required income, the majority of project growers had small production areas.

In total, **3,809 FTE job positions were created** against a LOP target of 3,500 (117 percent of the target). Most of these came from off-farm MSMEs rather than farming operations. Poor and extremely poor farmers, including those moved above the poverty line, have small operations and generally only hire labor for short periods for specific activities. The non-poor farmers hired less labor as yields and sales were low due to coffee rust and market constraints. Coffee harvesting does provide labor opportunities, but with the rust problem, yields were lower and crops were harvested over shorter periods of time.

Several factors account for not reaching the targets on families lifted above the poverty line. The main constraints to achieving high-level targets have been with the low baseline income levels (\$0.89/person/day) that required a 172 percent average increase in income to move above the \$2.42 poverty line; the slow rate of change and uptake of technologies by the households given the crop cycles and relatively short project duration; and the effects of rust disease and low international prices on coffee sales and income. That being said, even under these constraints, **USAID-ACCESO took the average income from \$0.89 to \$1.44/person/day**, and these families now require an additional 68 percent increase above current levels to reach the \$2.42 target.

Results from other activities included:

- Carried out 93,101 training events with 67,972 individuals receiving training, including 25,300 women (37 percent). Project technicians and specialists provided a total of 823,635 technical assistance visits.
- The prevalence of underweight children under 2 years old decreased by 50.7 percent, the prevalence of stunting by 57.3 percent, and modern contraceptive prevalence rate increased by 148.3 percent in health and nutrition priority communities. The prevalence of breastfeeding decreased 9.2 percent from baseline, anemia in children 6-23 months increased by 29.3 percent over baseline, while anemia in women decreased by 18.1 percent from baseline. Women's dietary diversity increased from 3.40 to 5.15 average number of food groups, which represents a 51 percent increase over baseline.
- Private sector investment in fixed assets was \$22.711 million, with 26,911 farmers, small agribusinesses, and off-farm MSMEs applying new technologies or management practices.
- The total area under production receiving project assistance was 73,842 hectares. Overall, coffee accounted for 26,375 hectares, basic grains for 40,681 hectares, horticulture for 5,939 hectares, and tree fruits with 847 hectares.
- 58 public-private sector alliances were developed and 473 companies provided business development and extension services to clients. Technical assistance served 1,546 producer

organizations, water associations, trade and business associations, and community-based organizations.

- Through project strategies for increasing market opportunities to rural MSMEs, 12,016 MSMEs accessed new market opportunities through a broker, 367 brokers provided market linkages to MSMEs, 5,388 MSMEs entered formal preferred supplier or contract agreements with brokers, and 23,097 MSMEs were verified to meet market standards for their products.
- As a result of project activities that eliminate barriers to rural MSME competitiveness and access to financing, 8,656 MSMEs accessed market-based financing, including \$16.877 million in agricultural and rural loans; and 13,955 MSMEs began implementing sound business management practices. Thirty-seven value chain/sector constraints were identified and resolved and six policy reforms, regulations, or administrative procedures were passed.
- Implementation strategies and activities in natural resource management resulted in 28,782 hectares under improved technologies or management practices; 26,971 companies (including farms) incorporating conservation-friendly changes in their business practices; 42 municipal governments starting to implement NRM policies; 61 vulnerable communities increasing capacity for adequate disaster prevention and mitigation; and establishing 3,886 rural renewable energy projects.
- Women made up 20.5 percent of the project clients (6,985 households) and 37.2 percent of the individuals receiving training (25,300). Women accounted for 17.2 percent of the individuals receiving loans (1,448); 16.3 percent of the individual plantings (26,774); 16 percent of the MSMEs accessing new market opportunities (1,976); 17 percent of MSMEs that entered formal preferred supplier or contract agreements (910); and 23 percent of the companies (including farms) that have made conservation-friendly changes in their business practices (6,084).

A total of 21 of 27 low-level indicators were surpassed, while only 2 of the 6 high-level (poverty related) targets were met. Normally, the achievement of lower level indicators indicates that high-level ones will also be achieved. The slow rate of the willingness and ability to change, adopt new practices, technology, and crop diversification by the majority of client households, and the problems with the coffee rust and coffee market prices limited achievement of high-level targets. Change at the technical level for farms or micro-businesses occurred as expected, but not at the level required to generate net incomes to move out of poverty. Incomes increased, but not fast enough to meet timelines for poverty targets. Longer timelines for technical change will be required due to multiple factors, most critically: the attitude and confidence of the poor and extreme poor farmers towards change; annual coffee cycles; extended corn cycles at high altitude; limited infrastructure; and risk-adverse households requiring change through small steps rather than leaps.

Through a wide range of activities carried out with the Honduran government and other donors, the project leveraged technical expertise, implementation methodology, and results to obtain government buy-in and support. Key to this effort was the preparation of the Country Investment Plan (CIP) for the agricultural sector, which established a strong link with the Ministry of Agriculture and subsequently opened the doors to other ministries. The CIP was the precursor to enable the government to access and obtain Global Agriculture and Food Security Program funds. Multiple field visits followed, initially from the Minister of Agriculture, and then from USAID/Washington; the US Embassy; international organizations; and high-level government ministers and officials, including several with the President. USAID-ACCESO served as an example of successful field implementation with integrated technical activities providing viable solutions in income generation and nutrition. USAID's results driven focus under Feed the Future was key to the formation of the alliance for the dry corridor, which is now made up of multiple donors with several hundred million dollars committed.

## 2. PROJECT BACKGROUND

Honduras' social and economic indicators rank it among the least developed countries in the Western Hemisphere, with 65.5 percent of its population living in poverty, the largest portions of which are found in rural areas. The agriculture sector in Honduras employs 35 percent of the workforce, accounts for an estimated 75 percent of exports, and remains the most important source of income for the poor and extremely poor. USAID-ACCESO targeted six departments that are among the poorest in the country. The project was designed and implemented taking into consideration that the majority of farm households cultivate traditional crops on small plots, often on hillsides, for which market access is hindered by poor roads and distance. The use of traditional cultural practices has produced poor yields, depleted soil of nutrients, and led to forest encroachment. Malnutrition is also a major problem, with nearly half of all children in extremely poor households exhibiting stunted growth.

USAID-ACCESO represents an important component of USAID/Honduras' multi-year strategy for Feed the Future. Objectives of Feed the Future include increasing agricultural productivity, preserving natural resources, improving agricultural marketing, increasing the purchasing power of vulnerable households, and maximizing food security. This strategy was in line with the economic growth (Agriculture/Micro, Small, and Medium Enterprise) and NRM related aspects of the "Promoting Economic Growth and Prosperity" goals of the US government's Honduras Country Assistance Strategy covering fiscal years 2009 to 2013.

USAID-ACCESO worked in six departments: Intibucá, La Paz, Ocotepeque, Lempira, Copán, and Santa Bárbara, with the following (initial) high-level targets:

- Bring 30,000 rural households living below the poverty line above the poverty threshold, of which a minimum of 18,000 will be from households living in extreme poverty.
- Generate \$73.95 million in net profits for client households assisted by the project.
- Create 10,425 permanent jobs in the assisted communities.

The project increased sales and incomes by introducing basic production practices for grains and coffee, developing market-driven programs for high-value cash crops, improving animal production systems, as well as by expanding off-farm microenterprise and employment opportunities. The tailored technical assistance and training provided enabled economic development and nutrition improvements at the household level.

A request to modify the high-level targets was made to USAID at the beginning of FY 2013/2014 to take into account the lower than expected baseline income, the 2013/2014 coffee crisis, the timing of implementation and other factors. These were approved by USAID in March 2015. Lower level targets were not changed. The modified high-level targets, which include an additional target, were:

- Bring 10,000 rural households living below the poverty line above the poverty threshold, of which a minimum of 7,500 will be from households living in extreme poverty.
- Raise 12,500 rural households living below \$1.25/person/day moved above \$1.25/person/day.
- Generate \$30.00 million in net profits for client households assisted by the project.
- Create 3,250 permanent jobs in the assisted communities.

The details on implementation methodology, strategies, and activities were provided in other documents prepared for USAID, including those on the work plans, gender, branding, and environment.

## 3. PROJECT IMPLEMENTATION

USAID-ACCESO aimed to lift 30,000 households in six departments in western Honduras above the poverty line, with a minimum of 18,000 being from extreme poverty, while also achieving improvements in the nutrition and health indicators of both women and children (these targets were modified to 10,000 above the poverty line and 7,500 being from extreme poverty). Income generation at the household level via on- and off-farm economic development activities and employment were the main focus to achieve the poverty reduction targets. This was achieved through direct technical assistance and training to household clients in production, marketing, postharvest, business skills, finance, certifications, and processing/value-added. Value chains included basic grains, coffee, horticulture, animal production, fruit trees, on- and off-farm value added. The following section provides a summary of strategies, systems, and selected activities under the principal technical components.

### 3.1 PROJECT CLIENTS

The principal project clients were households in poverty and extreme poverty. These families normally live on subsistence farming of corn and beans or small-scale coffee farms. In addition to low incomes, they were characterized by low yields, zero technology, poor or non-existent infrastructure, no access to technology, finance, or markets, a high dependence on government or NGO support, poor living conditions, and high prevalence rates of malnutrition and other child health problems. To lift the families out of poverty, they need to generate income that small-scale corn, bean, and coffee production cannot provide.

To enter into higher value crop production, households first needed to ensure their basic grain supply, while the project needed to obtain the families' confidence to make changes. The project showed farmers basic technologies that can double or triple corn and bean yields with no additional cost of production. The grains for self-consumption were then guaranteed while freeing up area for production of other crops with higher farm-gate value. The increased yields demonstrated the value of basic technologies and provided the confidence to enter in new crops. At the same time, the nutrition and health component worked with selected families to change and improve the household living conditions, food preparation, eating habits, hygiene, and child care. For those families with (or interested in) small-scale livestock such as cattle or chickens, support was also provided to increase milk and egg production for sale and self-consumption, again with no or minimal additional costs. Family plots were also established to supplement the dietary requirements. This integrated approach and technical support at the household level provided multiple solutions and options to a complicated problem, for which working in and solving only one area would not produce the required results.

### 3.2 TECHNICAL ASSISTANCE DELIVERY

The USAID-ACCESO team was made up of 206 full-time positions, broken down as follows:

Management:	3	Production:	122
Value added:	10	Marketing:	4
Business Skills & Finance:	10	Nutrition & Health:	22
Disaster mitigation/NRM:	4	M&E:	19
Administration/Accounts/IT:	7	Donations:	3
Renewable energy:	1	Policy:	1

The team was technical based. 147 team members were directly related to income-generating activities. All field activities were coordinated through 30 zone managers and six department managers. To reach

the target of 30,000 families, each agronomy position provided ongoing technical assistance to an average of 300 households. As a result, technical assistance and training activities in production and animal husbandry were given in a group format, where the technician rotated the farm visits between growers in the same group. These were not formal groups but grouping of growers around buyer and market production programs and various crops.

Training and technical assistance in the related areas for economic development followed a similar system, including marketing, postharvest, business skills, finance, and renewable energy. Nutrition technicians also worked under similar systems with training in group format and household visits playing a major role in fomenting change. Technical support to off-farm business was normally directed to the individual MSMEs with specific training being given both direct and in group format.

To speed up the implementation and expand outreach, USAID-ACCESO aligned with municipalities, private sector buyers, input and equipment suppliers, NGOs, donors, government, and others. Most had funds and donations to support the poor and extreme poor, but most did not provide integrated solutions or technical assistance and training. For example, some municipalities donated fruit trees and some NGOs donated irrigation equipment, but on their own, neither would help families move out of poverty. USAID-ACCESO was able to bring together the different players to provide the integrated solutions.

The team was structured with 11 subcontractors under Fintrac's management. However, unlike many other projects, Fintrac provided overall management and direction of all zones, activities, and technical areas. The structure ensured all project technicians reported to Fintrac managers, who defined targets, provided oversight, training, support, and direction. In this way, the project operated under one umbrella, moved in one direction, spoke the same language, and was fully integrated and focused on the households and the targets.

### **3.3 INCOME GENERATION COMPONENT**

The poverty line in Honduras has been established by the government as a minimum of \$2.42/day/person, while families with incomes below \$1.81/person/day were considered to live in extreme poverty. To take individuals above the poverty line required an annual income of \$883/year. Given that most client farmers had very small plots of coffee, maize, or corn, and did not have access to water, finance, or markets, USAID-ACCESO worked with progressive strategies to generate income from multiple sources, and over time, introduce basic technologies to increase yields of basic grains and coffee, enter into production programs for higher value crops, diversify crops and markets, and generate off-farm income where possible. Small-scale household production plots and chicken, egg and milk production provided additional nutrient sources that did not need to be purchased and in many cases excess product was sold. While it was initially projected that 75 to 85 percent of income could come from high-value crop production, the rate of the change and the introduction of new crops was slower than required and other income sources were expanded during implementation.

Off-farm activities with small-scale operations (MSMEs) were groups or individuals. In most cases, these small businesses alone did not generate sufficient income to lift families out of poverty, but they could contribute to overall family income. Pickled vegetables, plantain chips, tortillas, and crafts were good examples, but even with improvements in quality, reduced costs, and legalization, income generation was limited when split between numerous members or owners. Bakery and honey products were normally exceptions, where the margins were sufficient to generate higher levels of income. Efforts were made to try to match project support to MSMEs with support to the same family members for on-farm production activities to increase overall household income.

### 3.4 PRODUCTION ACTIVITIES

Subsistence level growers of basic grains and coffee were introduced to basic production practices that double or triple traditional yields. For corn and beans, four of five basic practices were introduced with no or minimal addition input costs, but which did require more work.

#### Corn and beans

- Basic land preparation and contouring where necessary
- Seed selection (with existing types)
- Specific planting distance with one seed per hole (high density)
- Liming of soils
- Fertilizer applications applied in solution with more frequent applications (where fertilizers were used, the total volume of fertilizer used was equal to or less than that used traditionally)
- Weed control

Initially, most growers did not move completely to these practices, but instead tested a small area in their production and then made comparisons. As mentioned previously, with increased yields the grower gained confidence in the technologies and, in subsequent plantings, could reduce the land area needed to obtain sufficient grains for self-consumption. The freed up area could then be used for higher value crops. This process took at least two seasons, essentially two years from the initial support provided at the first rain-fed planting.

#### Coffee (existing plantations)

- Liming of soils
- Diluted and more frequent fertilizer applications (where fertilizers were used)
- Plant pruning (after harvest)
- Control of soil-borne insects

With the implementation of three or four of these practices, productivity could be doubled on existing plantings. The practices were time sensitive and took 1 to 2 seasons to show the result or benefit. Practices were also implemented to dry more coffee on-farm to increase incomes through increased productivity and increased value (results obtained the same season as implementation). However, it was understood that most project coffee farmers would not generate sufficient income from coffee alone and in these cases the project promoted improved corn production systems, crop diversification, and other income sources. This became more important after the sector crisis with coffee rust and low international prices in the 2012/2013 harvest season.

The majority of project households worked with corn or coffee. Before the growers could move into higher value products, they needed to improve their existing operations (yields) to develop the confidence to introduce new crops or other income generating activities. When this point was reached crop options were offered to client households based on market needs, interest, agronomic conditions, logistics, cost, and water availability. Normally, the lower cost and less technically challenging crops were selected including carrot, cabbage, plantain, watermelon, and passion fruit. Growers with more experience worked with potatoes, broccoli, cauliflower, peppers, tomatoes, strawberries, and others.

#### High-Value Horticulture

Most client farmers that started with USAID-ACCESO had small plots of less than 0.5 hectares of land, grew coffee, corn, and/or beans with zero technology, and did not have access to water, finance, or markets. After making improvements in basic grain production practices, growers were introduced to higher value crop options. These required logistics and markets, and the implementation of basic and good agricultural practices, access to water, irrigation, and integrated crop management.

Given that technologies were introduced gradually, the crops selected were usually those that could still perform without full technology, were not expensive to produce, and could withstand rural roads in poor conditions. These usually included carrots, broccoli, cauliflower, squash, potato, plantain, and others. Market driven production programs were established with both formal and informal buyers; growers were introduced to these and normally started production with 1 or 2 *tareas* (1 *tarea* is equivalent to 1/23 of a hectare or 435 square meters). This required significant effort in planting coordination between growers to ensure sufficient volumes were available to fill pick-ups or trucks to minimize unit freight cost.

Grower grouping was essential in order to achieve volumes and consist supply to meet market requirements and competitive logistic costs. Coordination between production zones was needed to ensure continuity of supply to the markets, especially formal buyers. The project established these programs and gradually passed the management and coordination of some to buyers and group leaders.

### **Production and Management Technologies**

The agricultural production technicians and managers were responsible for delivering technical assistance to household clients. They had to be able to provide a wide range of options, technologies, and integrated solutions. This required a significant level of training of field technicians in multiple crops and technologies. They were continually trained and supported by project specialists and others (including IHCAFE on coffee). Production and management technologies which were implemented at the farm level included:

- Crop genetics
- Animal genetics
- Cultural practices
- Pest management
- Disease management
- Soil-related fertility and conservation
- Irrigation
- Water management (non-irrigation-based)
- Post-harvest handling and storage
- Processing
- Climate mitigation or adaptation
- Conservation technologies

At the individual farmer level, the technologies covered a broader range of technologies and systems relating to overall farm and business operations and management. These included:

- Land preparation
- Raised beds
- Improved Seeds
- Transplanting systems/density
- Fertilization systems/plan
- Use of irrigation
- Biological control systems
- Integrated Pest Management Systems
- Crop rotation/diversification
- Pruning methods
- Harvesting methods
- Medicine usage (animal production)
- Improved nutritional content (feeding)
- Updated/semi-automated processing systems
- Lay out of new plants and expansions
- Market led production programs
- Following market-set product standards
- Post harvesting systems
- Packaging/transport systems
- Industrial safety systems
- Recordkeeping (yields and sales)
- Recordkeeping (inputs and labor)
- Equipment/tools improvements
- Segmentation of land for different usage

Field technicians also had to promote the implementation of conservation-friendly changes in grower and business operations. These were also wide ranging and included the following:

- Contoured beds
- Field drainage systems
- Incorporation of organic materials in soils
- Use of physical terraces
- Pest and disease sampling systems
- Planting of permanent live barriers
- Water source protection
- Planting of riparian buffers (rivers and streams)
- Reforestation
- Forestry management plan
- Safe disposal of chemical containers
- Recycling of drip irrigation equipment
- Use of *eco-justa* stoves
- Development of wildlife conservation plans
- Effluent treatment systems for households and processing plants
- Treatment of coffee residues
- Production and use of hay silage for cattle feed
- Planting of fast woods for firewood
- Formal disposal of household waste

### **Fruit Trees**

In addition to high-value short cycle crops, USAID-ACCESO also promoted fruit tree planting. These included avocado (suitable for high altitude hillside (coffee diversification)) and cashew (for low altitude dry areas). In Lempira, groups of women and individual growers initiated nurseries for the production of cashew seedlings and grafting. While the results from this activity were not seen during USAID-ACCESO implementation, they will provide significant income over the long term for growers. The decision to promote these plantings throughout the project was based on results seen from MCA-H/EDA clients in Santa Barbara who planted avocado in 2006 and 2007, for which the results were not obtained under the project. Growers with Hass avocado at year 5 or 6 of harvest obtained gross sales of \$10,000 to \$15,000 per hectare. The first harvests of Hass avocado planted with USAID-ACCESO were made in February 2015 and were successfully sold into supermarkets in San Pedro Sula.

### **Animal Production**

At the beginning of USAID-ACCESO, technical assistance in animal production was focused mainly on families with five to 10 cows and the small commercial poultry and swine producers. A small-scale pilot project with stabling one or two cows and implementing basic practices with vaccination, feeding, and management increased daily milk production by 50 to 100 percent, which then generated daily income for the household. Training was given to growers on preparing small-scale feed silos to ensure feed availability during the dry months. As the production component introduced updated practices with grain and vegetable production, the option became available to produce fresh feed on a continuous basis. A rapid client survey indicated that the cattle population in project clients was around 16,000 head. The focus was then expanded to producing pasture with irrigation and basic production practices, stabling or semi-stabling and introducing the necessary management practices. In the final year of implementation, clients in all departments increased milk production for local sales, processing for local sales and for home consumption. Small scale activities were also carried out successfully with cattle meat production under contract and goat production for meat, milk and cheeses (mainly for home consumption, but also for sale). Chicken and egg production systems at the household level were also improved through the introduction of local cost coups, equipment and feeding systems – again for household consumption with some sales. This was one value chain and potential income source that was not given priority at the beginning of the project, but showed potential once the basic production practices were in place, and was expanded significantly during implementation.

### **Forestry Activities**

USAID-ACCESO's forestry component was small compared to other components but played an integral part of the services provided to selected project household and municipal clients. Most of the geographical area in the six department of the ZOI is forest based. These are natural forest of conifers

in mountainous areas and broadleaf forests in humid tropical areas. Much of the area is mountainous with slopes and infrastructure unsuitable for agriculture. Many forestry areas require protection and management for sustainability of water sources and nature reserves. The conservation and utilization of these natural resources are under state management, dependent technically on the *Instituto de Conservación Forestal* (ICF) for the national forests and municipal authorities for community forests.

USAID-ACCESO worked with household clients, MSMEs, and communities where many were at the limits of the agricultural boundaries, using and depending on water sources that originate in the national or community forests. These forests were affected by migratory agriculture and livestock (that encroach on the forest boundaries), forest fires, illegal logging as a source of energy (firewood), and theft for commercial gains. To avoid this:

- The farm production component provided technical assistance and training to clients in GAPs to establish conservation practices, increase incomes, increase productivity, and develop market-driven commercial agriculture that prevented negative environmental impact and expansion of the agricultural boundaries.
- The forestry and NRM components worked together to educate and train local authorities, community committees in the prevention and control of forest fires, to reduce environmental impact and resource destruction.
- The forestry and disaster mitigation components worked together on the reforestation of buffer zones and reserves for the protection of water sources and prevention of natural disasters.
- The forestry component worked with the nutrition and health and renewable energy components in the development of six tree nurseries for production of *Leucaena leucocephala*. This is a legume with a high growth rate (50m<sup>3</sup>/ha/year) and energy generation (from 4,200 to 4,600 kcal/kg). The nurseries produced planting materials to establish 1,500 plots of 128 m<sup>2</sup> in households with *eco-justa* stoves. These will sustainably provide the household with 1.44 m<sup>3</sup> of firewood each month, necessary for the operation of the *eco-justa* stove. At the same time it avoids the practice of cutting firewood from the forests and reduces the cost and time that the household spends on this activity.

In addition, forests without management plans may be affected by pests and diseases, which have proven to be more susceptible to climate change and if not detected in time, can reduce or eliminate the commercial value and benefits as a reserve. The development and implementation of USAID-ACCESO activities in forestry was centered on the forest as a renewable, sustainable natural resource.

### **Irrigation**

The availability of year-round water supply was key to the development of high-value crop production, technology implementation, risk reduction, market development, income generation, NRM, and others. It was central to market driven production programs, sales and income generation and therefore, a significant contributor to enable poverty reduction. The provision of water through irrigation in itself is not a solution. Growers can have access to water, but if they did not have the required production technologies, crops and markets, the irrigation would be of little benefit (the same can be said about finance and markets). The irrigation needs to be associated with updated production practices, market driven production programs and competitiveness (costs, margins, volumes, supply, consistency, etc.).

USAID-ACCESO co-investment in irrigation was gradual during implementation. Irrigation districts and filtered water conduction were the main focus in order to maximize the number of beneficiary growers and facilitate access to water for growers who had only produced under rain-fed systems. This activity could not begin in full force in the first years of implementation as it was necessary to determine grower, household, and community interest and commitment, form groups, implement basic practices for grains, and determine water volumes. There are many white elephant irrigation systems which have been installed over the years which did not take these factors into account.

The project introduced the irrigation projects over four phases, with the last two larger phases being carried out in 2014. With all phases, a total of 150 individual conduction systems were installed, with 523 kilometers of conduction pipe, involving 3,903 producers and a potential irrigation area of 1,317 hectares. In-plot systems were installed for 1,328 growers covering a total of 364 hectares. In total the installed capacity was 1,681 hectares with 5,231 growers. It should be noted that not all of the potential area is under production of high-value horticultural crops. Some growers have begun with basic grain plantings, with others have small plantings of high-value crops, but are not yet utilizing the full potential area. This is due to the need to start with 1 or 2 tareas of planted area to introduce the technologies, gain experience, and develop markets, logistics, and cash flow to be able to expand planting areas.

### **3.5 PROCESSING AND VALUE ADDITION**

The processing and value added component worked with rural MSMEs that had a commercial focus and generated at least \$10,000 of gross sales revenue per year. The specialists and technicians also provided technical assistance and training to household production clients able to and interested in supplementing their incomes through processing or adding value to the crops produced or bought and sold. Both areas had a strong focus on involving women in or running the business operations.

There were many rural MSMEs that were supported by NGOs and others, providing seed capital and grants, but that lacked a commercial approach and technical assistance. Many were formed by donors looking to support large numbers of people who formed the MSME (mostly women) rather than profitability. The initial project strategy to assist a wide range of rural business meant investments in time to identify that many were unprofitable and that to move from artisanal to semi-industrial levels was difficult to justify. Constraints to growth included the lack of raw materials, inefficiencies, too many members or owners, highly competitive markets, and limited logistics and distribution systems. Many of the MSME were groups of 5 to 20 people, where the sales and income did not even cover a basic salary for each person. Production and sales volumes were low and the members only worked a few hours a week, meaning that individual salaries or income were below the minimum. This approach meant that many MSMEs abandoned projects when they did not generate sufficient income or did not receive additional funds or grants. This occurred with MSME clients taken on by USAID-ACCESO once they became aware of their actual incomes and (lack of) profitability.

The project therefore identified MSME businesses that made commercial sense and supported businesses in the areas of dairy, broiler, diversified honey products, pig fattening, bakeries, snacks, juices, and preserves. These can be profitable, competitive, and had the growth potential to create jobs, source raw materials from local growers, and expand the range of products available in rural markets. Most USAID-ACCESO MSMEs are now stand-alone operations, with one or two owners, generating profits and providing small-but-consistent levels of employment. The remainder was principally businesses that allowed client households to diversify their income base to supplement household income.

The focus of the technical assistance was comprehensive and integrated, based on the development and application of good manufacturing processes (GMP), and introduced concepts in food safety, efficient and cost-effective sourcing of materials and inputs, and market requirements. Production costs, cash flows, cost centers, and profit margins were determined, together with the implementation of recordkeeping and basic accounts. The project initially started with standardized recordkeeping systems, but eventually developed systems specific to each business line.

Through coordination with other project components and alliances, support was provided to the MSMEs in company registration and legalization, sanitary licenses, product bar codes, product standardization and specifications, market linkages, and credit access.

USAID-ACCESO outreach in this area increased through alliances and coordination with others including:

- *INFOP*: with trainings in bakery, dairy, meat and preserves; the training provided by INFOP has not only been important for the training of MSMEs, but also for project specialists and technicians. This training was carried out in the communities and tailored to the requirements of MSMEs.
- *Zamorano and FHIA laboratories*: linked project clients with private laboratories, necessary for the analysis of food samples.
- *Municipalities*: support provided to MSMEs and MSMEs client households with seed capital, which was useful for venture start-up.
- *Suppliers of equipment, inputs, packing and labelling materials*: support and linkages enabled MSMEs to reduce costs, enhance presentations, and offer more competitive products.

### 3.6 BUSINESS SKILLS AND FINANCE

#### Technical Support to Growers in Business Skills & Finance

Project support provided direct to growers included technical assistance and training in business management practices and facilitating access to finance. These covered a range of areas including:

- Access to credit
- Annual accounts
- Annual audits
- Production costs (amount and timing)
- Break-even point analyses
- Budgeting (operative / investment)
- Business operations
- Cash flow operations and control
- Credit scoring and analysis
- Financial indicator analysis
- Financial links
- Inventory controls
- Legal procedures/documentation
- Payroll systems and controls
- Promotional activities (materials, trade shows)
- Recordkeeping for farm operations
- Sales records and control
- Tax management
- Loan documentation and loan applications
- Negotiation of purchase contracts for sale
- Use of mobile guarantees as collateral
- Credit analysis tools and credit portfolio management
- Operational and administrative rules
- Financial analysis

These complimented the production and MSME activities that were directed towards market driven planting, technified production systems with buyers pre-identified, grouping of growers for volumes, and logistics.

#### Technical Support to Rural Credit and Saving Banks (*Cajas Rurales*) in Business Skills & Finance

Despite having a poor reputation when USAID-ACCESO started, major advances were made in increasing the levels of credit that *cajas rurales* provided to project clients for productive activities. Support included:

- Legalization of existing and new *cajas rurales*; some had been in operation for up to eight years, but had never legalized their status (in association with the policy component)
- Development of statutes of operation and internal regulations
- Provision of the record book, certified by SIC, for the operation of the *cajas rurales*. These were i. general journal; ii) general ledger; iii) inventory and balances book; iv) cash inflows and outflows; v) minutes book of the general assembly; vi) minutes book of board of directors; vii) minutes book of the supervisory body; and viii) register of contributions. A total of 1,344 bound and sealed books were provided.
- Training in the use and operation of the record books
- Training in finance management

- Development of credit policies
- Calculation of interest and payments
- Organization and training for boards and committees from rural banks
- Training in developing business profiles for resource management
- Studies for establishment of alternative businesses
- Training in statutes

Information collected from 131 of the *cajas rurales* supported by the project showed that they increased their membership from 2,782 to 3,330, the savings portfolio from \$126,617 to \$316,587 and their loan portfolio from \$462,858 to \$883,633 during the time they have received assistance from the project. A total of 154 *cajas rurales* were legalized with USAID-ACCESO assistance via the agreement with SIC and UNITEC (an additional 75 remained in the process of legalization). The 230 *cajas rurales* involved were made up of 4,492 members. The legalization of the *cajas rurales* has not only increased the saving and loan levels, but also allowed them to source capital from government institutions, NGOs, cooperatives and others. Examples included FAO, OXFAM, World Vision, HEIFER international, and municipalities. In some cases legalization even allowed them to obtain public services.

### **Technical Support to Cooperatives and Input Suppliers in Business Skills & Finance**

Technical support was provided to small cooperatives to expand their loan portfolios to include project clients. This included:

- Development of financial products tailored for small-scale producers. Examples included: financing for rural banks, loans for agro stores installation, loans for warehouse receipts (*pignoración de granos*), microenterprise financing, and livestock financing.
- Triangulation between the cooperative, the grower and the buyer of the product. In this system the buyer made payments direct to the cooperative. Examples included:
  - AGROSEM – Aldea Global – Producers (Lempira)
  - Inversiones El Sembrador – D’LEITE – Producers (Santa Bárbara)
  - CADELGA – Cultivos del Norte – Producers (Santa Bárbara)
  - DEL CAMPO Soluciones Agrícolas – Cultivos del Norte – Producers (Santa Bárbara)
  - DEL CAMPO Soluciones Agrícolas – D’LEITE – Producers (Santa Bárbara)
  - DEL CAMPO Soluciones Agrícolas – Melvin Sanabria – Producers (Santa Bárbara)
  - Hermandad de Honduras – Supermercados La Colonia – Producers (Santa Bárbara)
  - Industrial de alimentos EYL S.A. de C.V. – Producers (Santa Bárbara)
  - FICOHSA Trust – ECARAI – Supermercados La Colonia – Producers (Intibucá)
  - ECARAI / ASOFAIL (Comrural) – Hortifruti and Walmart – Producers (Intibucá)
  - DEL CAMPO Soluciones Agrícolas – Supermercados La Colonia – Producers (Intibucá)
  - Agoferretería Del Campo – APRALIN – Producers (Intibucá)
  - Banadesa – ECARAI – Producers (Intibucá)
  - Del Campo Soluciones Agrícolas – Supermercados La Colonia – Producers (La Paz)
  - COMUPL – Supermercados La Colonia – Producers (La Paz)
  - Agroservicios del Rancho – D’LEITE – Producers (La Paz)
  - CACIL – Supermercados La Colonia / Hortifruti – Producers (La Paz)
  - Agroservicios Del Valle – Supermercados La Colonia / Hortifruti – Producers (La Paz)
- Sourcing of funds from second tier institutions. Examples included: MCA-H/ACA trust fund, BECAMO granted L. 6,000,000 in cash and supplies to a rural bank to lend to their producer members who repaid the loan capital with the sale of their coffee production.

### Other Activities – *Cajas Rurales*

In addition to the standard savings and loan products, the project introduced new products and activities to provide additional services to the members and to generate additional income.

- **Warehouse receipts for grain storage (*pignoración de granos*):** This was a completely service designed and introduced by USAID-ACCESO, whereby the *caja rural* received grains for storage, with specific quality and humidity specifications, and made a payment to the grower at the market price at that time. The *caja rural* stored the grain in small silos and applied the appropriate treatment. The grower retained ownership of the grains. At any point, the grower returned to remove the grains from storage and paid a storage fee to the *caja rural*. The grower could then sell the grains, normally at a higher price than at the harvest date. The project set up warehouse receipt systems with 49 *cajas rurales*. While the individual volumes were small, it actually had a large impact on food security at the household and community levels. This warehouse receipts system was expanded to include several municipalities that had larger grain storage facilities, and purchased the grains as part of a reserve for sale to the local population in the event of scarcity. These activities were carried out with technical support from the postharvest and production components.
- **Small-scale input and equipment stores (*agro-tiendas*):** This was a completely new activity introduced by USAID-ACCESO. Most of the USAID-ACCESO clients were located in or near rural communities that did not offer the normal services and products available in the secondary and primary cities. To purchase inputs and basic farming equipment, growers had to travel large distances to obtain them, and normally at higher prices than in the cities. In order to bring the inputs closer to the growers and to help maintain reasonable prices, the project worked with 45 *cajas rurales* to establish small-scale input stores to sell to their members and to others in the community. Selected private sector input and equipment suppliers (e.g. Del Campo Soluciones Agrícolas, Cadelga, Bayer) provided products to the *cajas rurales* at discounted rates (distributor prices) so that they could sell on. Training was provided by the project to the *cajas rurales* in inventory management, pricing structure, and purchase and sales record management. Members of the *cajas rurales* were also trained by CroLife as regents for the storage and sales of these products (as part of a PPP alliance). The business skills, production and postharvest components supported these activities.

Other income opportunities were developed, including land preparation services; processing, buying and selling of coffee; and, consumer stores, as in the case of the “Nuevo Despertar de Mariposas” rural bank, selling basic items with an inventory of near \$15,000.

### Other Activities – Business Plans

USAID-ACCESO provided continuous technical support and training to MSMEs and other businesses in the preparation of business plans to obtain funding from a wide range of sources. USAID-ACCESO worked with the World Bank COMRURAL project in different areas, including training of technicians and growers, but particularly through the business skills technicians providing support to project client preparing profiles, business plans, cash flow projections, and counterpart sources. USAID-ACCESO assisted clients to obtain COMRURAL donations totaling \$1.53 million, including:

- ECARAI, Intibucá: \$204,500
- ASOFAIL, Intibucá: \$48,400
- INDUNOSA, Copán: \$110,000
- CAEOL, Copán: \$90,000
- Empresa Asociativa Campesina “Los Cocos”, Lempira: \$57,000
- Cooperativa Cafetalera Belén Limitada (COCABEL), Lempira: \$139,000
- Cooperativa de Servicios Agropecuarios Gualcince Limitada “COSAGUAL”, Lempira: \$12,900
- ME “Red de Comercialización de Hortalizas Llano Grande”, Ocotepeque: \$78,000

- CR "Unión y Esperanza": \$77,700
- Cooperativa Agrícola y Ganadera Valle Escondido Limitada (COAGAVEL), Santa Bárbara: \$65,000
- Cooperativa Cafetalera San José Limitada, Santa Bárbara: \$500,000
- Asociación de Agricultores y Ganaderos de San Marcos, Santa Bárbara: \$168,000

USAID-ACCESO has assisted the institutions/organizations “certified” by COMRURAL to prepare the business plans. Other examples of business plan development included:

- Business and investments plans developed with *cajas rurales* for financing
- Business plans for crop financing
- Business plans for agro store implementation
- Business plans for *pignoración* implementation
- Business profiles for installation of drying infrastructures

### **Other Business Skills and Finance Activities**

- Developed credit lines for milking cows with CACIL (La Paz).
- Financed wood transformers under the MOSEF project, with CATIE and FINNFOR (Intibucá).
- Develop credit line for financing of female growers with PRAF (Intibucá, Copán and Ocotepeque).
- Costings for production, postharvest handling, and logistics of fresh produce and for processed products for specific MSMEs.
- Meetings with municipalities and BANADESA to provide grower financing, with the municipalities acting as the guarantors (three developed).
- Meetings and linkages between growers and input suppliers to develop credit lines.
- Organized finance fairs for SMMEs with local providers of credit.
- Supported grower groups, including irrigation groups and potable water boards, to develop statutes, internal rules, administrative recordkeeping, basic finance, etc. (in conjunction with the production and NRM components)
- Documentation preparation for company registration and legalization (in conjunction with the NRM, processing and policy components).
- Trained MSMEs in production, cost, sales and income records, and revision of documentation and calculations.
- Trained coffee producers to use recordkeeping log books for certification of production systems.
- Worked with buyers and growers on contract mechanisms and payment procedures (processors).
- Supported several hundred MSMEs to obtain RTNs from the DEI (a requirement for loans).
- Elaboration of *constancias* for growers receiving technical assistance to access finance.
- Saving products for children through schools or with the children from members of rural banks including *Superación Campesina*, *Nuevo Despertar*, *Nuevo Esfuerzo*, and *Nueva Vida* in Lempira.
- Provided training and tracking to the pilot program with WFP and two *cajas rurales* en La Paz for a school supply program for the *merienda escolar*.

### **Coordination**

In the business skills and finance component, much of the work was carried out directly by the USAID-ACCESO team. Outreach increased through alliances and coordination with others involved in these activities that collaborated with training, technical assistance and events, including:

- Private sector buyers and input/equipment suppliers
- Cooperatives, banks
- Municipalities
- PRONADERS, COMRURAL, FUNDER, ASONOG, Fundación Jicatuyo, HQC, Hermandad de Honduras, World Vision, AMVAS
- PACTA; WFP

### 3.7 NUTRITION AND HEALTH COMPONENT

An initial selection was made of priority communities for nutrition and health interventions based on the nutrition statistics from the Ministry of Health and the possibility of economic development activities. In the majority of cases, communities with the highest nutrition problems were selected under the basic premise that if these statistics can be improved the overall averages will also improve. The component worked in 225 communities, most of which were also involved in economic development activities. As with the economic development activities, USAID-ACCESO reported results from these communities rather than the ZOI at the department level.

When the project started, the Ministry of Health/World Bank was implementing the AIN-C program either through service providers or directly. Through a system of health volunteers, the AIN-C weighed children under 2 years old, provided basic advice and messages, and tabulated the statistics for the Ministry of Health. In most cases the detailed data was not being utilized to determine the cause of problems nor was assistance provided at the household level to prevent problems. Initial data analysis showed that at least half of the underweight children were due to preventable illnesses, with the remainder being due to lack of balanced diet, calories, nutrients, and vitamins (other possible causes were subsequently identified). The Ministry of Health/World Bank AIN-C program ceased to be implemented in January 2012. In response USAID-ACCESO worked with AIN-C volunteers in target communities and provided additional training to the volunteers, included them in the economic development activities, and introduced activities at the household level.

USAID-ACCESO quickly identified that solutions to the basic problems could not be achieved with messages and basic training, as changes were needed in cultural practices, diet, and habits. The nutrition component implementation systems were similar to those used in economic development. A wide range of training activities were carried out in group format, from the preparation of fortified foods and meals to ensuring balanced diets, basic hygiene practices, and using locally-available food items. Training activities were reinforced with household visits to determine problems and implement recommendations and procedures to prevent them. To be successful, repeated training and visits were needed until the improved practices formed part of household day-to-day activities.

The sources of preventable illnesses were determined and where possible, reduced. The project developed a “healthy household” activity to eliminate smoke from cooking fires, cover dirt floors and walls with a cement mix, ensure clean water inside the house, use waste disposal methods, and keep animals outside. Once solutions to these problems were implemented they were usually long term and did not require constant reinforcement.

Activities also included the planting of family plots, with crops that were needed to supplement the nutritional needs. These were crops that did not require the purchase of expensive hybrids seeds or pesticide applications to ensure production and from which planting materials could be taken from the plants themselves. They included both short- and long-term crops such as sweet potato, malanga (taro), banana, plantain, passion fruit, avocado, orange, mandarin, moringa, and locally available “weeds” high in iron (*amaranthus*, *chipilin*, *juniapa*). These plots ranged from 100 to 400 square meters and were not commercial plots. They involved land preparation, raised beds, planting distances, weeding and several basic practices used under commercial production systems, but this was to ensure production volumes not commercial viability. They were normally managed by the women of the household but, in some cases, men also became involved. Some of these plots were also planted in schools and centers where AIN-C meetings were held, for use by the volunteers, mothers and caregivers in the training activities.

### 3.8. INTEGRATION OF THE TECHNICAL COMPONENTS

The integration of technical components was key to developing diverse income-generating opportunities for the households. Production results on their own would have been reduced without the support

from marketing, postharvest, business skills, policy, and renewable energy; nutrition results would have been less without the support of NRM, renewable energy, and the production component. Technicians from all components contributed to overall targets. Examples of overlap included:

- Production & Nutrition: household plots (with some nutrition clients transitioning to production clients)
- Nutrition & Renewable Energy: installation of *eco-justa* stoves, bio-digesters, transparent roof cover
- Nutrition & NRM: community potable water and clean community programs
- Nutrition & Processing & Value Addition: recipe development for short-term processing and storage
- Production, Marketing & Postharvest: sales and income
- Nutrition & Animal Husbandry: milk and chicken egg/meat production
- Production & Disaster Mitigation: improving market access by preventing floods, landslides, road damage
- Production & Finance: access to credit for market based production
- Production & Processing & Business Skills: recordkeeping, cost controls for income-generating activities
- Renewable Energy, Production & Postharvest: solar dryers
- Policy, Production, Marketing & Business Skills: reduction and elimination of barriers to technology, services and trade

Project production technicians were also involved in giving basic nutrition messages during production trainings and nutrition technicians learned the basics for household production plots.

## 3.9 MONITORING AND EVALUATION

### 3.9.1 M&E Unit

As of September 2014, the USAID-ACCESO M&E team consisted of one M&E manager, three regional M&E specialists, 12 field-based M&E technicians, and 3 full-time data entry persons. Part-time data entry persons were also hired when necessary. Nutrition data collected during growth monitoring monthly meetings related to children less than 5 years, mothers and community health volunteers. In addition to the designated M&E team, each project field technician was required to report on their own activities, which accounted for around 5 percent of their time.

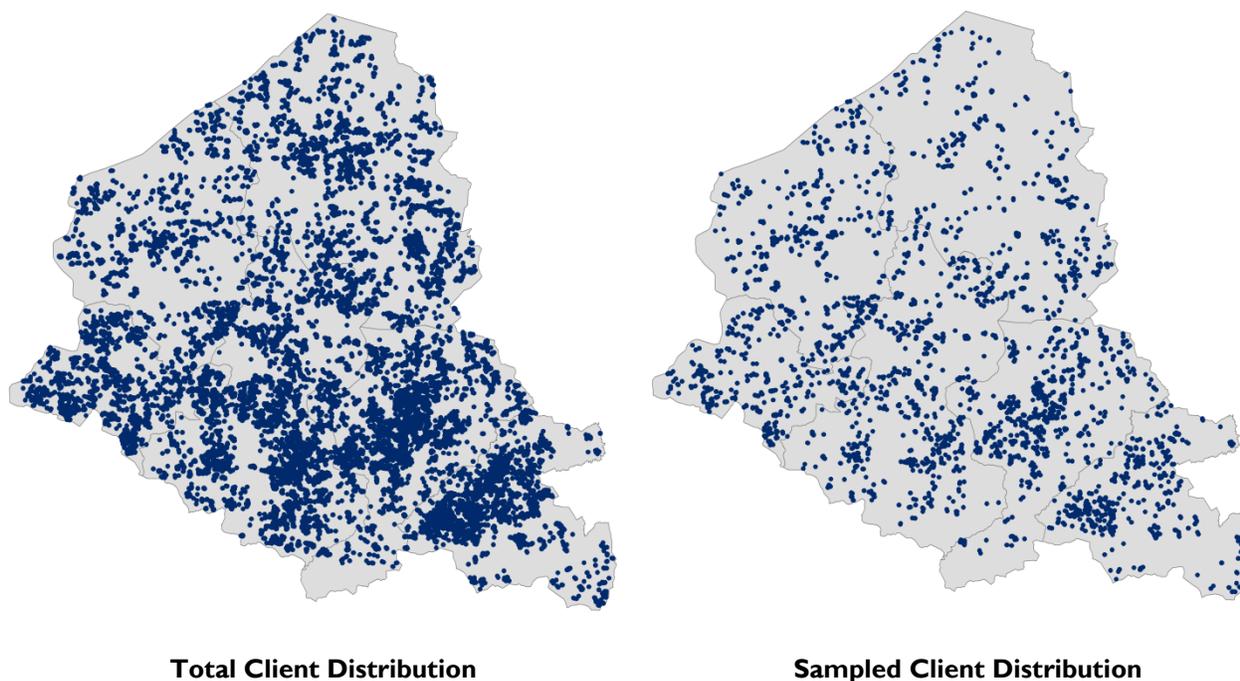
### 3.9.2 CIRIS

The Client Impact and Results Information System (CIRIS) is Fintrac's proprietary database software used to monitor all project activities and results. Activities such as technical assistance, plantings, training events, technologies in use, and meetings were entered directly into the system by field staff, while more complex surveys covering outcome and impact indicators were collected and entered by designated M&E staff. Nearly all figures in this report were derived from primary information entered into CIRIS. Fintrac's Health and Nutrition CIRIS was launched in 2014 and data was entered directly into the system by health technicians.

### 3.9.3 Sampling

Due to the high number of targeted households, USAID-ACCESO implemented a system of random sampling to collect baseline and subsequent results information from a representative sample of project-assisted households. As the entire population of targeted households was not known from the outset of the project, USAID-ACCESO designed the sample to grow over time, incorporating new households as they entered the project. The first sample was established in December 2011 for all households entering the project until that time; a second round was established in May 2012. Each household was equally

eligible for random sampling, ensuring a 95 percent confidence level and 5 percent margin of error while also accounting for potential attrition due to a variety of factors. In September 2012, 1,515 households were selected in the sample and in FY 2012/2013, an additional 2,550 households were randomly selected and included for baseline survey. In September 2014, the baseline and follow-up survey included 3,330 households, distributed randomly across all project zones. The maps depict the total client population as compared to the random sample. The random sample achieved representative distribution geographically, as well as within primary demographic subgroups.



#### *3.9.4 Data Collection Process*

USAID-ACCESO employed a variety of data collection tools to track and report on the required indicators. Upon entry into the program, a household profile form was completed to capture basic demographic information as well as a survey on income over the year prior to technical assistance. The income survey was used to categorize the household as extreme poor, poor, or non-poor. 23,715 client profile forms were collected, of which 20,908 were for active clients as of September 2014 (in FY 2012/2013 it was agreed with USAID that a census of all clients was not necessary given the quantity of data already available). Once the profile form had been collected, field technicians provided technical assistance and training to the household that was reported directly into CIRIS and/or through training forms.

For households selected for the sample, a baseline form captured crop-specific information (i.e. area, production, sales, costs, net income), technologies and management practices, maternal and child health and nutrition, and off-farm income. Once a household had been selected into the sample, the M&E team began ongoing monitoring of household activities. New planting information for crops was reported directly into CIRIS by field technicians as they occurred. Based on estimated harvest dates, the M&E team conducted field visits to complete crop productivity/end-of-harvest forms following the close of each crop cycle. These forms were used to derive crop yields, sales, cost of production, net income, technology adoption, investments in fixed assets, labor and loan details. Toward the end of each fiscal year, another data collection effort collected follow-up information on maternal and child health and

nutrition indicators and off-farm income. Crop income and off-farm income were then combined to determine the income per person per day for each sampled household to determine if they have moved out of poverty.

### 3.9.5 Final Report Data

Data presented in the original final report in May 2015 was that which was collected on a monthly or quarterly basis and was available up to April 2015. Indicators that used data from the annual client household survey were presented up to September 2014. In October 2015, arrangements were made by USAID to enable the required data collection from the sample household survey. This survey was carried out using a sample size of 1,049 households, sufficient to achieve a 95 percent confidence level and 5 percent margin of error. The survey captured additional information for FY 2014/2015 including sales, income, poverty, and employment data.

## 4. HIGH LEVEL TARGETS

USAID-ACCESO updated LOP high level targets were 10,000 families lifted above the poverty line, of which 7,500 were to come from extreme poverty; \$30 million in new net income across the project; \$68 million of incremental sales; and 3,250 new employment positions generated. Results against these targets and the progress for each FY through September 2015 are presented in Table 1.

**Table 1. High Level Targets and Results (September 2012, 2013 and 2014)**

	Achieved				Total Achieved	LOP Target	Percent of Target
	09/12	09/13	09/14	09/15			
PIRS# 1: Number of households living in poverty moved above the poverty line	1,183	2,236	3,783	4,099	4,099	10,000	41%
PIRS# 2: Number of rural households living in extreme poverty moved above the poverty line	834	1,630	2,975	3,416	3,416	7,500	46%
PIRS# x: Number of rural households living below \$1.25/person/day moved above \$1.25/person/day		4,329	6,626	8,719	8,719	12,500	70%
PIRS# 3: Value of new net income of participant rural farmers and MSMEs (\$ millions)	\$7.106	\$10.360	\$23.096	\$37.934	\$78.495	\$30.00	262%
PIRS# 4: Number of jobs attributed to FTF implementation (FTE)	2,332	243	354	881	3,809	3,250	117%
PIRS# 5: Value of incremental sales (collected at farm/firm level) attributed to FTF implementation (\$ millions)	\$12.406	(\$4.388)	\$0.773	\$28.110	\$41.289	\$68.00	61%

### 4.1 NUMBER OF HOUSEHOLDS MOVED OUT OF POVERTY

This indicator was calculated for households registered as active clients with the project. In September 2015, there were 30,364 households registered with baseline incomes below the poverty line (27,840 extreme poor, 2,546 poor). Of these, 4,099 achieved household incomes to move above the poverty line, of which 3,416 moved from extreme poverty. In September 2014, 3,783 households achieved incomes to move above the poverty line, of which 2,975 moved from extreme poverty. In September 2013, 2,236 households achieved incomes to move above the poverty line, of which 1,630 moved from extreme poverty. In September 2012, 1,183 households achieved incomes to move above the poverty line, of which 834 moved from extreme poverty. These indicators track where a household moved from

below to above the poverty line. It does not provide an indication of progress made towards increased incomes and poverty reduction across all project beneficiaries.

These indicators were calculated by taking the total net income of a family, dividing by the number of members of that family and then dividing by the number of days in the reporting period to derive a net income per person per day. The figures were then compared against the poverty lines.

Calculations for the number of households moved above the poverty line were made using the USAID-ACCESO PIRS definition, where net incomes have to be above \$2.42/day/person. When the standard FTF indicator was used, a total of 8,719 households starting with less than \$1.25/day/person were moved above this income level (compared to 6,626 in September 2014 and 4,392 in September 2013).

A more detailed breakdown on the increases in income for households moved above the poverty lines showed increases of between 94 and 485 percent (Table 2). Household clients who moved from less than \$1.25/person/day to above that figure, went from an average of \$0.69 to \$2.28/person/day – a 225 percent increase. Those who went from less than \$1.25 to above the poverty line achieved an average increase in income of 485 percent, while those who went from poor to above the poverty line increased incomes by 94 percent. It should be noted that the average baseline income across all clients was \$0.89/person/day. In total, 11,159 households were moved up the income categories.

**Table 2. US\$/person/day Income Data of Households Moved Above the Poverty Line, by Baseline Income Group (September 2013, 2014 and 2015)**

Baseline Income Group	Target Result	Actual Baseline	Result	Difference	% Increase	# HH
<b>September 2015</b>						
<\$1.25	>\$1.25	\$0.70	\$2.28	\$1.58	225%	8,719
<\$1.25	>\$1.81	\$0.72	\$3.11	\$2.37	331%	4,295
<\$1.25	>\$2.42	\$0.68	\$3.97	\$3.29	485%	2,310
\$1.25-\$1.81	>\$1.81	\$1.50	\$3.17	\$1.68	112%	1,757
\$1.25-\$1.81	>\$2.42	\$1.49	\$3.81	\$2.32	155%	1,106
\$1.81-\$2.42	>\$2.42	\$2.14	\$4.14	\$2.01	94%	683
<b>September 2014</b>						
<\$1.25	>\$1.25	\$0.69	\$2.41	\$1.72	249	6,626
<\$1.25	>\$1.81	\$0.69	\$3.24	\$2.55	369	3,476
<\$1.25	>\$2.42	\$0.70	\$4.09	\$3.39	486	1,984
\$1.25-\$1.81	>\$1.81	\$1.48	\$3.25	\$1.78	120	1,615
\$1.25-\$1.81	>\$2.42	\$1.48	\$4.01	\$2.53	171	982
\$1.81-\$2.42	>\$2.42	\$2.10	\$4.39	\$2.29	109	818
<b>September 2013</b>						
<\$1.25	>\$1.25	\$0.71	\$2.39	\$1.68	237	4,392
<\$1.25	>\$1.81	\$0.69	\$3.39	\$2.70	392	1,744
<\$1.25	>\$2.42	\$0.67	\$4.27	\$3.60	534	1,057
\$1.25-\$1.81	>\$1.81	\$1.50	\$2.46	\$0.96	112	987
\$1.25-\$1.81	>\$2.42	\$1.49	\$3.98	\$2.49	168	581
\$1.81-\$2.42	>\$2.42	\$2.14	\$4.77	\$2.63	123	597

Results of average income changes across all clients with baselines below the poverty line showed increases of 102, 77 and 64 percent for client households with baseline incomes of \$1.25, \$1.81 and \$2.42, respectively (Table 3).

**Table 3. Changes in Average Daily and Annual Incomes in Clients Under the Poverty Line (September 2015)**

Baseline Income Category \$/person/day	Average \$/person/day			Average \$/household/year			% Increase
	Baseline	Result 2015	Difference 2015	Baseline	Result 2015	Difference 2015	
Clients with baseline below \$1.25	0.63	1.28	0.65	1,199	2,421	1,222	102%
Clients with baseline below \$1.81	0.78	1.38	0.60	1,470	2,604	1,134	77%
Clients with baseline below \$2.42	0.88	1.44	.56	1,661	2,722	1,061	64%

*Average of 5.182 members/family in households with baseline under the poverty line*

As given in Table 4, 56 percent of USAID-ACCESO clients had baseline incomes below \$1.25/person/day, requiring increases of 282 percent to meet the \$2.42 threshold. 83 percent were below the \$1.81 extreme poverty level, requiring a 211 percent increase. In addition, 44 percent of the client households were made up of six or more members, which had increasingly higher targets.

**Table 4. Client Breakdown, Baseline Income Level and Required Increases**

Category	% of Actual Clients	Baseline Income	% Increase for \$2.42 Target
Clients with baseline below \$1.25	75%	0.63	282%
Clients with baseline below \$1.81	91%	0.78	211%
Clients with baseline below \$2.42	100%	0.89	172%

Results for September 2015 showed a total of 4,099 families were lifted above the poverty line (41 percent of the target of 10,000 families) with 3,416 coming from extreme poverty (46 percent of the target of 7,500 families). The poverty targets however were threshold level targets, which in themselves did not show the changes achieved and the progress toward reducing the poverty levels. Progress was made by many families with more than 2,310 families showing almost 500 percent increases. Across all clients under the poverty line, incomes increased from \$0.89 to \$1.44/person/day. Households with baseline incomes less than \$1.25 increased from \$0.63 to \$1.28/person/day. This 102 percent increase in income was not a small change to the livelihoods of these families.

The audit report of the Office of the Inspector General (published in January 2015) stated that “ACCESO... does not report household income increases for those who did not meet the thresholds,” while also noting that “... it did not report that 5,605 households increased their incomes because they didn’t increase enough to cross either threshold.” It also noted that “Any increase in household income is an importance measure of ACCESO’s achievements.” The 5,606 households were those that moved from less than \$1.00 to more than \$1.00/person/day (September 2013); this was specifically requested by the auditors and provided by Fintrac. As can be seen from the data already presented, Fintrac did collect and provide data on the increases in income across all clients, and in 2013 and 2014 included the \$1.25 threshold (which was eventually added as an indicator). Although it was not specifically stated, the auditors imply that an indicator should have been included that could track the progress for income generation of all project clients as opposed to just against thresholds.

FY 2014/2015 data for the number of families moving above the poverty continued to show increase, although not as high as expected. Progress can be seen however with the 30,364 household client incomes increasing from \$0.88 to \$1.44/person/day – a 64 percent increase across all clients. The partial recuperation of the coffee production from the rust disease and improved market prices in the initial part of the 2014/2015 season is partially responsible. Corn harvest from the late season 2014 planting,

the planting of high-value crops under irrigation, expanded animal production, and off-farm income all contributed to increasing the average income per person per day and the number of families moving out of poverty.

## **4.2 VALUE OF NEW NET INCOME**

The accumulated value of new net income increased by \$78.495 million against a target of \$30 million (262 percent of target); \$7.11 million, \$10.36 million, \$23.10 million and \$37.93 million in 2012, 2013, 2014 and 2015, respectively (Table 5).

In 2015, analysis of the new net income by product category indicated that horticulture and animal production increased by \$4.666 million and \$7.455 million, respectively. Coffee, recovering significantly from negative results in previous years due to the problems with coffee rust disease and low market prices, contributed \$2.396 million in incremental income. Income from other sources increased by \$20.464 million.

**Table 5. Value of New Net Income by Household Income Category (US\$)**

Product Category	09/2012			09/2013			09/2014			09/2015		
	Baseline	Results	Change	Baseline	Results	Change	Baseline	Results	Change	Baseline	Results	Change
Tree fruits				739,377	543,706	-195,671	71,749	105,323	33,574	164,600	317,837	153,237
Coffee	12,083,917	15,082,225	2,998,307	35,428,815	24,744,455	-10,684,360	39,566,141	21,036,941	-18,529,200	29,932,122	32,328,075	2,395,953
Basic grains	3,060,993	2,232,825	-828,168	6,507,826	5,200,875	-1,306,951	7,989,709	8,318,689	328,980	7,445,051	7,176,482	-268,568
Horticulture	3,263,398	5,409,973	2,146,575	3,057,879	6,884,264	3,826,385	3,861,341	10,220,668	6,359,327	3,784,208	8,449,760	4,665,552
Animal production			0	855,565	1,026,392	170,827	3,188,539	7,570,596	4,382,057	1,639,809	9,094,584	7,454,775
Processing			0	175,135	273,701	98,567	77,630	409,514	331,883	0	0	0
MSMEs	1,031,795	2,557,539	1,525,744	1,459,748	2,613,781	1,154,033	4,396,179	4,764,186	368,007	1,911,430	4,980,055	3,068,625
Others *	10,539,683	11,803,062	1,263,379	16,229,694	33,526,855	17,297,161	28,981,182	58,802,151	29,820,969	27,027,889	47,492,139	20,464,250
<b>Total</b>	<b>29,979,787</b>	<b>37,085,624</b>	<b>7,105,837</b>	<b>64,454,039</b>	<b>74,814,029</b>	<b>10,359,991</b>	<b>88,132,470</b>	<b>111,228,068</b>	<b>23,095,597</b>	<b>71,905,108</b>	<b>109,838,932</b>	<b>37,933,824</b>

\* Others - includes remittances, pensions, rents, businesses, salaries and daily labor.

The extreme poor, poor, non-poor, and MSME categories were all positive, showing increases of \$30.322 million, \$506,157, \$4.036 million, and \$3.069 million, respectively. Overall, households below the poverty line (poor and extreme poor) increased their net income by \$30.829 million.

**Table 6. Value of New Net Income by Household Income Category (US\$)**

Income Group	Number	Baseline	Results	Increment
<b>September 2015</b>				
Extreme Poverty	27,840	34,761,756	65,084,737	30,322,980
Poverty	2,524	6,610,073	7,116,230	506,157
Non Poor	3,667	28,621,849	32,657,910	4,036,061
MSME	375	1,911,430	4,980,055	3,068,625
<b>Total</b>	<b>34,406</b>	<b>71,905,108</b>	<b>109,838,932</b>	<b>37,933,824</b>
<b>September 2014</b>				
Extreme Poverty	25,602	34,467,407	61,551,229	27,083,822
Poverty	2,546	8,451,315	8,579,359	128,044
Non Poor	4,611	40,817,568	36,333,293	-4,484,276
MSME	380	4,396,179	4,764,186	368,007
<b>Total</b>	<b>33,140</b>	<b>88,132,470</b>	<b>111,228,067</b>	<b>23,095,597</b>
<b>September 2013</b>				
Extreme Poverty	25,073	30,715,265	41,533,987	10,818,722
Poverty	2,320	6,440,396	6,781,498	341,101
Non Poor	3,401	25,838,631	23,884,764	-1,953,866
MSME	465	1,459,748	2,613,781	1,154,033
<b>Total</b>	<b>31,259</b>	<b>64,454,039</b>	<b>74,814,029</b>	<b>10,359,991</b>

The increase in new net income figures reflect a strong recovery in the coffee sector, which was had previously depressed overall net incomes. Compared to baseline, coffee moved from a reduction of \$18.53 million in 2014 to an increase of \$2.4 million in 2015. This trend was shown since the first year of implementation as a result of high market prices and incomes at baseline, followed by significant reductions in net incomes due to lower prices in the 2012/2013 and 2013/2014 seasons, and compounded further by harvest volume reductions as a result of the leaf rust disease. Similar project support activities were provided across the product categories and the negative effect of coffee performance up until the final year was due to external factors outside of the control or influence of the project.

#### 4.3 VALUE OF INCREMENTAL SALES

The value of incremental sales was calculated as the difference in total farm and off-farm sales of products and services sold in reporting year, relative to a base year. New net income was calculated as the total value of sales of both on- and off-farm products or services provided minus cost of producing or providing them, relative to a base year.

The accumulated value of incremental sales over the life of the project increased by \$41.289 million, against a target of \$68 million (61 percent of the target). Sales increases over baseline were \$12.406 million in 2012, -\$4.388 million in 2013, \$0.772 million in 2014 and \$28.110 in 2015. The accumulated total excluded the negative sales total compared to baseline for 2013, as this was not a loss, but a reduction in sales compared to baseline.

Analysis of the 2015 incremental sales by product category showed sales in horticulture, coffee, and animal production increased by \$5.953 million, \$1.913 million, and \$8.837 million, respectively. MSMEs contributed \$11.925 million. Coffee sales recovered from previous losses to contribute \$1.913 million in incremental sales (Table 7).

**Table 7. Value of Incremental Sales by Product Category (US\$)**

Product Category	09/2013			09/2014			09/2015		
	Baseline	Results	Change	Baseline	Results	Change	Baseline	Results	Change
Tree fruits	965,550	729,209	(236,341)	91,840	121,778	29,938	216,785	372,609	155,824
Coffee	50,674,964	39,684,991	(10,989,973)	60,371,107	36,324,046	(24,047,061)	47,883,611	49,796,496	1,912,885
Basic grains	11,177,926	8,821,152	(2,356,774)	13,587,395	13,805,871	218,476	12,635,388	11,960,454	-674,935
Horticulture	6,977,109	12,662,904	5,685,796	7,960,547	17,490,746	9,530,199	7,972,461	13,925,872	5,953,411
Animal production	1,764,743	1,667,722	(97,021)	5,687,220	11,867,145	6,179,925	1,590,473	10,427,969	8,837,496
Processing	273,064	652,762	379,697	126,463	715,512	589,049			0
MSMEs	5,661,048	8,887,517	3,226,469	9,286,549	17,558,638	8,272,089	7,650,494	19,575,658	11,925,164
<b>Total</b>	<b>77,494,405</b>	<b>73,106,257</b>	<b>(4,388,148)</b>	<b>97,111,121</b>	<b>97,883,736</b>	<b>772,615</b>	<b>77,949,212</b>	<b>106,059,057</b>	<b>28,109,845</b>

Analysis of the incremental sales by income groups showed that the extreme poverty group increased their total sales by \$14.312 million and the MSMEs by \$11.925 million. Overall, households below the poverty line increased their total sales by \$13.839 million.

**Table 8. Value of Incremental Sales by Household Income Category (US\$)**

Income Group	Number	Baseline	Results	Increment
<b>September 2015</b>				
Extreme Poverty	27,840	32,202,911	46,514,631	14,311,720
Poverty	2,524	7,443,192	6,970,361	(472,832)
Non Poor	3,667	30,652,614	32,998,407	2,345,793
MSME	375	7,650,494	19,575,658	11,925,164
<b>Total</b>	<b>34,406</b>	<b>77,949,212</b>	<b>106,059,057</b>	<b>28,109,845</b>
<b>September 2014</b>				
Extreme Poverty	25,602	32,275,729	38,888,809	6,613,079
Poverty	2,546	8,886,402	6,654,669	(2,231,733)
Non Poor	4,611	46,662,441	34,781,621	(11,880,820)
MSME	380	9,286,549	17,558,638	8,272,089
<b>Total</b>	<b>33,140</b>	<b>97,111,121</b>	<b>97,883,736</b>	<b>772,615</b>
<b>September 2013</b>				
Extreme Poverty	25,073	31,871,212	31,429,280	(441,932)
Poverty	2,320	7,723,635	6,291,802	(1,431,833)
Non Poor	3,401	32,238,510	26,497,658	(5,740,852)
MSME	465	5,661,048	8,887,517	3,226,469
<b>Total</b>	<b>31,259</b>	<b>77,494,405</b>	<b>73,106,257</b>	<b>(4,388,148)</b>
<b>September 2012</b>				
Extreme Poverty	10,677	18,025,804	26,135,488	8,109,684
Poverty	1,039	4,022,925	4,360,619	337,694
Non Poor	1,462	17,546,539	19,243,586	1,697,047
MSME	322	7,239,098	9,500,839	2,261,741
<b>Total</b>	<b>13,500</b>	<b>46,834,366</b>	<b>59,240,532</b>	<b>12,406,166</b>

A further breakdown on the income sources for the households moved out of poverty in September 2013, 2014 and 2015 is provided in Table 9, which shows the percentage of clients in each income source category. In 2014 and 2015, 29.5 and 34.1 percent respectively, of the households moving out of poverty had multiple income sources from “coffee, basic grains and others” (others including animal production, small businesses, labor earnings, and remittances). The data also show that the increases were found among those with three or more sources, again, part of the reason for the strategy to diversify income sources and reduce risks to the households.

The implementation strategy took into account that neither coffee nor basic grains on their own would allow the grower to achieve the required incomes. Vegetables alone *would* generate the required income, but the majority of project growers had very small production areas, and had not reached the commercial production area necessary to do so. The importance of coffee and basic grains to the client production and income base was also demonstrated in this analysis. In 2014, 56 percent of those meeting targets had coffee in their income source mix, which increased to 68 percent in 2015. Basic grains were in 79 percent of the households in 2014 and 74 percent in 2015.

**Table 9. Net Income Source Category Contribution (%)**

<b>Income Source</b>	<b>09/2013 %</b>	<b>09/2014 %</b>	<b>09/2015 %</b>
Coffee only	1.2	0.5	4.0
Coffee & basic grains	7.0	0.5	9.5
Coffee, basic grains & horticulture	1.6	0.8	0.8
Coffee, basic grains & others	23.4	29.5	34.1
Coffee, basic grains, horticulture & others	4.7	13.8	6.4
Coffee & horticulture	0.8	0.3	0.8
Coffee, horticulture & others	2.7	1.6	0.0
Coffee & others	12.9	8.6	12.7
Basic grains & horticulture	2.3	1.9	0.8
Basic grains, horticulture & others	11.3	19.7	6.3
Basic grains & others	14.1	12.4	15.9
Horticulture only	3.1	0.3	0.8
Horticulture & others	6.3	4.9	2.4
Others	7.4	4.6	5.5
Animal production & Others	0.4	0.3	0.0
Processing & others	0.4	0.3	0.0
Tree fruits & others	0.4	0.0	0.0
<b>Total</b>	<b>100%</b>	<b>100.0%</b>	<b>100.0%</b>

#### **4.4 NUMBER OF JOBS ATTRIBUTED TO FTF IMPLEMENTATION**

In total, 3,809 FTE job positions were created against a LOP target of 3,500 (109 percent of the target) (Table 10). The number of jobs attributed to FTF implementation was calculated by comparing the number of full-time-equivalent employment positions to a base year.

**Table 10. Number of Jobs (FTE)**

Category	Sept. 2012			Sept. 2013			Sept. 2014			Sept. 2015		
	Baseline	Results	Increment	Baseline	Results	Increment	Baseline	Results	Increment	Baseline	Results	Increment
Households	2,438	3,355	917				8,954	9,261	306	7,879	8,471	592
MSME	2,223	3,638	1,415	583	825	243	619	666	47	567	856	289
<b>Total</b>	<b>4,661</b>	<b>6,993</b>	<b>2,332</b>	<b>583</b>	<b>825</b>	<b>243</b>	<b>9,573</b>	<b>9,927</b>	<b>354</b>	<b>8,446</b>	<b>9,327</b>	<b>881</b>
<b>Accumulated total</b>												<b>3,809</b>

*All registered day jobs divided by 260 to complete a FTE*

Poor and extremely poor farmers, including those moved above the poverty line, have very small operations, minimize costs, and rarely hire full time positions. They hire labor for short periods for specific activities, including land preparation, transplanting, and harvesting. The non-poor farmers hired less labor as yields and sales were low due to coffee rust and market. Coffee harvesting did provide labor opportunities, but with the rust problem, yields were lower and crops were harvested over shorter periods of time.

USAID-ACCESO has created self-employment for the grower, but this is not tracked with this indicator. Growers who were farming with subsistence systems are now producing with basic practices and many have moved to higher value crops that require more intense labor input. This labor is mainly provided by the farmer and the family and is paid for by increased sales and net income at the end of the crop cycle.

#### 4.5 FACTORS AFFECTING ACHIEVEMENT OF HIGH-LEVEL RESULTS

Four of the five high level targets are directly linked. Sales needed to increase so that net income increased further and households generated sufficient income to move above the poverty line. In terms of sales, negative coffee numbers in the second and third years negated most or all of the gains obtained from the other product categories.

**Coffee:** There were 19,171 USAID-ACCESO clients with 20,733 hectares of coffee, 56 percent of the total clientele. Baseline data for most clients was obtained from “normal” harvests and with relatively high market prices. The sector was also affected low world market prices and by rust disease for the 2012/2013 season which reduced harvest volumes at that time by 46 percent. While some recovery was made in the 2013/2014 season, this was not widespread as many farm had to be stumped for regeneration or replanted. Further recovery was achieved in the 2014/2015 season.

In the September 2013 annual report, the future outlook was given as follows:

*“The problems with coffee are likely to worsen for the 2013/2014 season.*

- *Yields: coffee borer will be a major problem and will cause a significant reduction in expected yields. The rust caused berries to drop to the ground or growers leaving berries on the plant which then dropped and have become hosts for the coffee borer.*
- *Market prices: prices are expected to drop even further, to around the \$100 level as a result of expected high export volumes from other suppliers, particularly Brazil.*
- *Employment incomes: reduced coffee harvest volumes will result in a reduction in employment earnings.*

*Even if project clients can double yields, but prices are at 50 percent of those of the 2011/2012 season and the beginning of the 2012/2013 season, the increase in sales and income will be zero. If they do not double yields, or if the price drops further, the sales and incomes will again be negative. There will also be the roll-on effect with poorer production practices and another significant drop in labor income from harvesting.”*

USAID-ACCESO responded to the coffee crisis, playing a leading role in developing and implementing a national response plan with the Honduran Coffee Institute (IHCAFE) and other stakeholders that included a massive-scale mitigation and control measures (increasing availability and distribution of inputs, spraying services, tree removal and stumping of infected plantations, new plantings of more resistant varieties, adoption of other crop management practices, etc.). In addition, the project was able to partially ameliorate impact on the clients through expanded farm-level interventions to increase producer value-added and farm-gate prices (on-farm solar dryers, quality differentiation) and increased targeted emphasis on crop and other income diversification.

Despite these problems with coffee, the positive side was that many growers had implemented improved production practices that take one or two years to have a positive effect on productivity.

Many of which came into effect for the 2014/2015 season. The improvement can be seen in the FY 2014/2015 results where coffee achieved an increase over baseline of \$1.913 million, compared to reductions over baseline of \$10.990 million and \$24.047 million for FY 2012/2013 and FY 2013/2014, respectively. The improvement was achieved despite the negative effects of drought in some zones in 2014, and fluctuating prices for the 2014/2015 season which began around the \$170 to \$180/46 kg mark and dropped to \$145/46 kg toward the end of the season.

**Speed of change:** The coffee problems were a major part of the reason why the high level poverty targets were not achieved. There were others. The speed at which household adopted technologies and new high value crops or business opportunities was slower than required given the time frame available. USAID-ACCESO clients were principally subsistence farmers with corn and bean production for self-consumption with small areas of coffee production. Some may have had vegetable production. All were characterized by no or very limited production technologies, low yields, variable quality, and inconsistent supplies. This was compounded by the lack of access to credit and poor transport infrastructure, particularly during the rainy season. Many had passed through NGO assistance programs with donations, but with little or no technical assistance. This required that USAID-ACCESO gain the confidence of the client households to make the changes in traditional practices and in some cases, changes in culture. Most growers that entered the project tested the updated technologies with corn and bean in small areas of land, then saw the two or threefold increases in productivity, and many expanded the technologies to the rest of the production area. Some were satisfied at this point and stopped there. In many cases however, area freed up as a result of increased basic grain yields was used to plant higher value crops. In reality, this process took longer than anticipated as the rate of expansion and diversification was slow as growers reverted to traditional systems as they did not have access to water or credit, were not willing to take the required risks, or simply not willing to put in the additional work. The results showed that many growers were diversifying, but the areas under production and the volumes produced were not sufficient enough to generate the income required to move the household above the poverty line.

To reduce risks, the project promoted mixed income sources that included corn, beans, coffee, higher value crops, and animal production, all with basic technologies to enable acceptable yields and reduced climate, pest, and market risks. Where possible, other business opportunities were promoted which, on their own, would not have generated the required income, but could do so in association with other production activities.

**Proportion of households in extreme poverty:** Initial targets for moving households above the poverty line were set based on an estimated 40 percent poor households and 60 percent extremely poor households as a proportion of the total client household base. Of the households below the poverty line receiving USAID-ACCESO support, 92 percent were classified as extreme poor while just 8 percent were considered poor. Extremely poor households were not only further from the poverty line, but they were also more limited in resources and the capacity to invest in inputs and therefore more risk adverse. Therefore, moving extremely poor households out of poverty is a process that will take more time than originally envisioned, but still achievable in the out years of the project.

The project focused on introducing basic practices and technologies to increase the productivity of household corn, bean and coffee production, then diversify into higher value income generating crops, and simultaneously increase the income streams from additional activities. Horticulture was the most profitable of the activities, requiring between 1 and 1.5 hectares of production per year to generate \$5,000 to \$6,000 of net income. However, the majority of project growers did not have sufficient land, resources, experience or suitable logistics for horticultural production alone to obtain the required total annual income to fully move above the poverty line. The diversified income strategy has proven effective and was demonstrated by the sales and income levels from the different value chains and the multiple income streams obtained by those households who have moved out of poverty.

The systems being implemented under this and animal production were technified and designed to reduce labor costs. Additional labor is normally generated once a grower reaches one hectare or more and needs to hire external labor. The majority of USAID-ACCESO growers did not reach this production size, especially given the emphasis on the diversified income sources.

## 5. IR & SUB-IR ACTIVITIES

This section highlights activities and results achieved by the project across the areas of intervention. It details the actions taken by the project in order to meet the intermediate (IR) and sub-intermediate results (sub-IR) and presents the project's progress in achieving milestones and output indicators. The IRs were as follows:

- Rural MSME growth increased (IR 2.1).
- Honduran biodiversity and natural resources conserved (IR 2.2).
- Capacity to mitigate and adapt to climate change strengthened (IR 2.3).
- Use of quality maternal and child health and family planning services increased (IR 4.1).

### 5.1 PROJECT CLIENTS

As of March 2015, a total of 34,759 household and MSME clients were registered and receiving technical assistance. Details on the number of clients recruited by financial year are provided in Table II.

**Table II. Project Client Breakdown**

CLIENT TYPE	April – Sept. 2011	Oct. 2011 – Sept. 2012	Oct. 2012 – Sept. 2013	Sept. 2014	Mar. 2015
HH Extreme Poverty	3,722	11,420	13,193	27,769	27,755
HH Poor	375	1,014	1,192	2,517	2,515
HH Non Poor	762	1,163	1,868	3,637	3,638
HH-MSMEs Extreme Poverty	21	98	5	88	85
HH-MSMEs Poor	2	8	5	9	9
HH-MSMEs Non Poor	15	22	5	30	29
MSMEs Microenterprise	57	176	212	405	402
MSMEs Small Enterprise	10	48	9	35	33
MSMEs Medium Enterprise	1	3	3	6	6
MSMEs Large Enterprise	1	-	1	2	2
MSMEs Others	103	149	61	285	285
<b>Total</b>	<b>5,069</b>	<b>14,101</b>	<b>16,555</b>	<b>34,783</b>	<b>34,759</b>

As of March 2015, the total number of client households receiving project assistance who started with baseline incomes below the poverty line was 30,364 (27,840 extreme poor, 2,524 poor). The poor and extreme poor families covered a total of 165,604 beneficiaries, including 21,877 children less than 5 years old. In addition the project worked with 3,667 non-poor, covering an additional 15,587 beneficiaries with 1,452 children less than 5 years old. In both cases, the beneficiaries were the total number of the household members. These totaled 181,191 beneficiaries, 94,371 male, 86,820 female, 23,328 less than 5 years old, and 6,623 less than 2 years old (the last two, at the time of client registration). Of the total 34,031 poor and non-poor registered clients, 6,985 were women (20.5 percent) and 27,046 were men.

During implementation the project worked with more household clients than mentioned above. A total of 6,413 additional households received some assistance, but were “downgraded” to “non-active” when they stopped participating in project activities (for lack of interest, death, migration, etc.). There were also additional persons who participated in some activities, but not on a regular basis, or became involved with the project after client registration was closed in June 2013.

It should be noted that not all clients received the same level of technical assistance and support, and not all participated to the same level. As mentioned previously, technical assistance and training was provided on a group basis, rotating the activities between farms. Group visits may have been weekly, as in the case of vegetable production, or every two or three weeks, as in the case of coffee production. Grower participation was usually higher with vegetable production and lower with coffee or basic grain production, averaging around 50 percent grower participation in the technical assistance and training events.

The number of poor and extreme poor clients with the number of members in the household and the annual income requirements to be above the poverty line are given in Table 12. 21,696 households had 6 or less members (71.5 percent) while 8,668 household had 7 or more members (28.5 percent). It should be noted that targets related to individual households as opposed to averages require significantly more income generating activities with those households with more members. It is generally the case however, that those with more members were usually the poorest households and have the fewest resources.

**Table 12. Poor and Extreme Poor Project Clients by Number of Family Members with Net Income Requirements**

Household Members	# Client HH	% of Total	Minimum Annual Net Income Requirement
1	589	1.9%	\$883
2	1,419	4.7%	\$1,767
3	3,789	12.5%	\$2,650
4	5,568	18.3%	\$3,533
5	5,589	18.4%	\$4,417
6	4,741	15.6%	\$5,300
7	3,278	10.8%	\$6,183
8	2,339	7.7%	\$7,066
9	1,382	4.6%	\$7,950
10	900	3.0%	\$8,830
>10	770	2.5%	
<b>Total</b>	<b>30,364</b>	<b>100.0%</b>	

*Extrapolated from 18,656 household client profile forms*

4,453 USAID-ACCESO poor and extreme poor clients were under the age of 30 (15 percent); 16,014 were between 30 and 50 years old (53 percent); and 9,897 were over 50 years old (32 percent). At 28 percent, the majority of the clients were in the 30 to 40 year old category (Table 13). Data analysis was not carried out in detail, but field implementation feedback indicated that the speed of change was slower with the older clients.

**Table 13. Poor and Extreme Poor Project Clients by Age**

Age	# Client HH	% of Total
< 20 years	104	0.3%
>20 < 30 years	4,349	14.3%
>30 < 40 years	8,624	28.4%

**Table 13. Poor and Extreme Poor Project Clients by Age**

Age	# Client HH	% of Total
>40 < 50 years	7,390	24.3%
>50 < 60 years	5,656	18.6%
>60 years	4,240	14.0%
<b>Total</b>	<b>30,364</b>	<b>100.0%</b>

*Extrapolated from 18,654 household client profile forms*

Almost 40 percent of USAID-ACCESO clients had at least a sixth grade education, but 48 percent had a third grade education or less. Only 8 percent had more than six years of schooling. This affected the ability and speed of household clients to implement certain changes and technologies.

**Table 14. Poor and Extreme Poor Project Clients by Years of Education**

Years of Schooling	# Client HH	% of Total
0	4,736	16%
1	1,914	6%
2	3,499	12%
3	4,525	15%
4	2,516	8%
5	1,216	4%
6	9,600	32%
>6	2,358	8%
<b>Total</b>	<b>30,364</b>	<b>100%</b>

*Extrapolated from 3,338 client surveys*

The project worked in 2,732 communities in 130 municipalities in the six departments (Table 15). Technical assistance to clients in some communities was stopped during implementation as a result of security issues or demands for donations.

**Table 15. Number of Municipalities and Communities with USAID-ACCESO Presence**

Department	# Municipalities	# Communities
Copán	23	438
Intibucá	16	423
La Paz	19	404
Lempira	28	614
Ocatepeque	16	292
Santa Barbara	28	561
<b>Total</b>	<b>130</b>	<b>2,732</b>

## 5.2 RURAL MSME ENTERPRISE GROWTH INCREASED (IR 2.1)

USAID-ACCESO's main activities and interventions were targeted toward achieving increased household incomes through MSME growth. This was based on the premise that increased incomes and productivities at the household level improves the communities' overall economic growth, while at the same time boosting client purchasing power to reduce food insecurity and related health problems. In this section, USAID-ACCESO reports on activities that directly contributed to three USAID sub-intermediate results (Sub IRs). These Sub IRs are:

- Rural MSMEs access to inputs, practices, and technology for market participation improved (Sub IR 2.1.1).
- Rural MSMEs access to new market opportunities increased (Sub IR 2.1.2).
- Barriers to competitiveness of rural MSMEs improved (Sub IR 2.1.3).

*5.2.1 Rural MSMEs Access to Inputs, Practices, and Technology for Market Participation Improved (SUB-IR 2.1.1)*

The greatest impact on the livelihoods of project-assisted households occurred when market-driven production programs were implemented (with basic production practices to enable access to markets and buyers) and improved coffee production and handling systems were utilized to increase productivity, reduce costs, and access better markets. Competitive, consistent, and coordinated production operations with defined markets were (and will continue to be) critical to ensuring increased incomes and resilience to climatic conditions, pest and diseases, and price fluctuations. While this applied principally to horticultural and coffee production, the project also supported other smaller-scale income generating activities on farm to complement the larger horticulture activities to generate additional household income (or food for household consumption). These included dairy, cattle, pigs, chickens, fish, and eggs.

Agricultural production activities formed the main technical component under this Sub-IR, supported by activities carried out under postharvest, marketing, and animal production. The value-added processing component worked with rural MSMEs both on and off farm, in most cases complementing the production activities, generating additional income for household clients, or providing employment opportunities.

<b>AGRICULTURAL PRODUCTION ACTIVITIES</b>			
<b>Dedicated technicians</b>	1 production manager, 2 deputy production managers, 6 department managers, 30 zone agronomists, 85 junior field agronomists (they also carried out activities related to postharvest, animal production and marketing)		
<b>Training events</b>	71,417		
<b>Training participants</b>	464,545 men	112,343 women	Total 576,888
<b>Training individuals</b>	35,909 men	12,964 women	Total 48,873
<b>Technical assistance</b>	618,320		
<b>Investment</b>	Clients \$10,519,566	Others \$1,822,067	Total \$12,341,633
<b>Training materials</b>	94 bulletins	33 presentations	Total 127
<b>POSTHARVEST &amp; CERTIFICATION ACTIVITIES</b>			
<b>Dedicated technicians</b>	3		
<b>Training events</b>	1,932		
<b>Training participants</b>	15,384 men	4,028 women	Total 19,412
<b>Training individuals</b>	5,209 men	1,303 women	Total 6,512
<b>Technical assistance</b>	16,725		
<b>Investment</b>	Clients \$282,678	Others \$446,803	Total \$729,480
<b>Training materials</b>	3 bulletins	17 presentations	Total 20
<b>ANIMAL PRODUCTION ACTIVITIES</b>			
<b>Dedicated technicians</b>	2		
<b>Training events</b>	2,520		
<b>Training participants</b>	14,570 men	6,702 women	Total 21,272
<b>Training individuals</b>	3,880 men	1,901 women	Total 5,781
<b>Technical assistance</b>	23,214		
<b>Investment</b>	Clients \$1,836,401	Others \$163,376	Total \$1,999,778
<b>Training materials</b>	5 bulletins	11 presentations	Total 16
<b>FORESTRY</b>			
<b>Dedicated technicians</b>	1		
<b>Training events</b>	183		
<b>Training participants</b>	1,662 men	366 women	Total 2,028
<b>Training individuals</b>	560 men	132 women	Total 692
<b>Technical assistance</b>	3,350		
<b>Investment</b>	Clients \$4,400	Others \$3,728	Total \$8,128
<b>Training materials</b>	2 bulletins	6 presentations	Total 8
<b>VALUE-ADDED PROCESSING ACTIVITIES</b>			
<b>Dedicated technicians</b>	10		
<b>Training events</b>	2,245		
<b>Training participants</b>	3,163 men	13,920 women	Total 17,083
<b>Training individuals</b>	939 men	2,504 women	Total 3,443
<b>Technical assistance</b>	34,161		
<b>Investment</b>	Clients \$1,934,622	Others \$801,521	Total \$2,736,143
<b>Training materials</b>		9 presentations	Total 9

## Implementation of updated production technologies (on and off farm)

**Table 16. Rural MSME Access to Inputs, Practices and Technology for Market Participation**

Indicator	Year 1. May to Sept. 2011	Year 2. Oct. 2011 to Sept. 2012	Year 3. Oct. 2012 to Sept. 2013	Year 4. Oct. 2013 to Sept. 2013	Year 5. Oct. 2014 to Mar. 2015	Total
WP #1: Number of individuals who have received government-supported short-term agricultural sector productivity or food security training (LOP Target 55,500):						
	7,723	15,671	21,110	16,371	7,097	67,972
WP #2: Number of extension visits to program beneficiaries (LOP Target 378,400):						
	13,571	134,840	267,955	313,875	93,394	823,635
WP #12: Number of technical materials produced (bulletins, manuals, presentations and tools) (LOP Target 225):						
	63	142	50	67	11	333
WP #10: Number of MSMEs (off-farm and processing) assisted by project (LOP Target 805):						
	285	417	132	-101	327	1,060
PIRS #6: Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation (\$ millions) (LOP Target \$21.60 million):						
	0.079	3.018	4.451	13.218	1.616	22.711
WP #11: Number of female individuals in training activities (LOP Target 8,300):						
	2,202	5,729	5,711	8,175	3,483	25,300
PIRS #7: Number of farmers and others who have applied new technologies or management practices as a result of government assistance (LOP Target 22,050):						
	-	4,592	14,270	8,049	-	26,911

**WP #1: Number of individuals who have received government-supported short-term agricultural sector productivity or food security training / WP # 11: Number of female individuals in 52 training activities**

During the project 67,972 individuals received agricultural sector productivity or food security training activities, against a target of 55,500 (122 percent of target). The 67,972 individuals consisted of 42,672 men and 25,300 women (37.2 percent). Tables 17 and 18 break down this total by department, sex, and technical component. Individuals may have received training in different technical areas and as a result the total number presented is higher than the 67,972.

As expected, production accounted for the highest percentage (50 percent), followed by nutrition and health (11 percent), and business skills (9 percent). Names and identification numbers for each participant were taken from training logs and entered one by one into CIRIS; identification numbers were then used to determine the number of individuals. Individuals may have participated in one or multiple training events.

**Table 17. Summary of Individuals Trained by Department**

Department	# Males	# Females	Total
Copán	5,934	2,895	8,829
Intibucá	8,020	5,378	13,398
La Paz	6,794	5,534	12,328
Lempira	7,832	4,890	12,722
Ocatepeque	5,242	2,700	7,942
Santa Bárbara	8,612	3,750	12,362
Other	238	153	391
<b>Total</b>	<b>42,672</b>	<b>25,300</b>	<b>67,972</b>

*Individuals registered only when National ID numbers were included.*

**Table 18. Summary of Individuals Trained by Activity Area**

Activity Area	# Males	# Females	Total
Animal Production	3,880	1,901	5,781
Business Development Services (BDS)	22	5	27
Business Skills	5,979	2,897	8,876
Certifications	1,621	411	2,032
Natural Disaster Management & Mitigation	1,150	552	1,702
Finance / Credit	481	225	706
Forestry	560	132	692
Information Technology	470	191	661
Market Information / Marketing	1,049	300	1,349
NRM	3,213	1,133	4,346
Health & Nutrition	1,482	8,997	10,479
Postharvest	3,588	892	4,480
Processing	939	2,504	3,443
Production	35,909	12,964	48,873
Project	916	463	1,379
Renewable Energy	2,200	713	2,913
Research/Other	63	56	119
<b>Total</b>	<b>63,522</b>	<b>34,336</b>	<b>97,858</b>

*Only individuals with National ID numbers were included (67,972). Individuals can receive trainings in more than one area.*

For reference purposes, a total of 93,101 training events were carried out with 823,870 participants, including 564,732 male and 259,138 female (32 percent). Production training accounts for the highest percentage of participants (70 percent), followed by nutrition and health (13 percent), and business skills (5 percent).

**Table 19. Training Events and Participants (by technical area)**

Technical Area	# Events	Male	Female	Total
Animal Production	2,523	14,593	6,702	21,295
Business Skills	4,156	25,191	12,990	38,181
Certifications	288	3,220	720	3,940
Finance / Credit	268	2,630	1,207	3,837
Forestry	183	1,662	366	2,028
Health & Nutrition	6,877	6,477	97,144	103,621
Information Technology	68	514	350	864
Logistics / Coordination	8	60	5	65
Market Information	402	3,588	1,015	4,603
Monitoring & Evaluation	11	234	37	271
Postharvest	1,645	12,175	3,309	15,484
Processing	2,245	3,163	13,920	17,083
Production	71,417	464,545	112,343	576,888
Project	254	2,627	1,218	3,845
Renewable Energy	1,495	8,553	2,014	10,567
Research	6	61	59	120
Specialty Coffee	105	964	127	1,091
NRM	830	9,965	3,478	13,443
Natural Disaster Management & Mitigation	320	4,510	2,134	6,644
<b>Total</b>	<b>93,101</b>	<b>564,732</b>	<b>259,138</b>	<b>823,870</b>

**WP #2: Number of extension visits to program beneficiaries:**

During the project 823,635 technical assistance visits were made against a target of 378,400 (218 percent of target). A breakdown by technical component is provided in Table 20. The majority of these were under the production component (75 percent) and nutrition and health (7 percent).

**Table 20. Technical Assistance Visits by Technical Component**

Area	# Visits	% TA Visits
Certifications	2,450	0.3%
Renew Energy	10,100	1.2%
Finance / Credit	2,796	0.3%
Forestry	3,350	0.4%
Business Skills	37,031	4.5%
Disaster Mitigation Management	5,308	0.6%
Natural Resources Management	11,455	1.4%
Marketing	5,430	0.7%
Nutrition and Health	55,128	6.7%
Postharvest	14,275	1.7%
Processing	34,161	4.1%
Production	618,320	75.1%
Animal Production	23,214	2.8%
Project implementation/Results	387	0.0%
Other	230	0.0%
<b>Total</b>	<b>823,635</b>	<b>100.0%</b>

**WP #12: Number of technical materials produced (bulletins, manuals, presentations, and tools):**

A wide range of technical materials were produced to use as part of the training activities directly with household clients and with technicians in NGOs, the private sector and the government. A total of 333 materials were prepared against a target of 225 (148 percent of target). The majority were in production, business skills and disaster mitigation. Many of these publications were widely distributed with SAG, NGOs and client households.

**Table 21. Number of Technical Materials Produced by Component**

Technical Area	Total
Animal Production	16
Business Skills/Finance	82
Disaster Mitigation	21
Forestry	8
Marketing	21
NRM	13
Nutrition & Health	12
Policy	1
Postharvest	20
Processing	9
Production	127
Renewable Energy	3
<b>Total</b>	<b>333</b>

### WP #10: Number of MSMEs (off-farm and processing) assisted by project

A total of 1,060 off-farm and processing MSME received technical assistance and training from the project against a target of 805 (132 percent of target). These included 759 micro- and small-scale companies, 284 rural banks, and 1 other. A selection of these MSMEs received assistance for specific activities or for a shorter duration, and in some cases, the project stopped providing technical assistance as a result of lack of interest, inability to follow recommendations, or closure. The number of reported MSMEs dropped in Year 4, as the number reported was the total of active project-registered MSMEs at that time, as opposed to the total number who had received assistance.

### PIRS #6: Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation

Investment in fixed assets by project clients and other private sector companies, NGOs, or municipalities totalled \$22.711 million against a target of \$21.60 million (105 percent of target). Investment by area is provided in Table 22, with the majority in production (54 percent), processing (12 percent), nutrition and health (10 percent), and animal production (9 percent). This data does not include the co-investments made by USAID-ACCESO. The project has been successful in leveraging project technical assistance and grant funds to foment investment by the clients and others in equipment, productive infrastructure, packing, drying, household improvements, logistics, and other areas. This has been in the form of both cost-sharing and direct. Investments in fixed assets were necessary to increase incomes and income generating potential. They included investments with both short and long term returns, as with equipment for land preparation and drying (short term) and irrigation districts and fruit tree planting (long term).

Project activities were leveraged to obtain investments by local government, NGOs and private sector companies for the benefit of the project clients. Examples included municipal investment in fruit trees, grain storage systems, irrigation districts, and nutrition training centers; NGO investment in irrigation equipment, household improvements, and nutrition training centers; and private sector investment in packing facilities, certifications, and processing equipment.

**Table 22. Investments in Fixed Assets (clients and others)**

Component/Area	# individual investments	Client Value \$	"Other" Value \$	Total Value \$	% of Total
Alliances	51	26,800	72,400	99,200	0.4%
Animal Production	1,658	1,836,401	163,376	1,999,778	8.8%
BDS	14	269,127	0	269,127	1.2%
Business Skills	16	6,200	3,841	10,041	0.0%
Certifications	16	16,110	146	16,256	0.1%
Forestry	36	4,400	3,728	8,128	0.0%
Health & Nutrition	6,785	1,658,555	548,096	2,206,651	9.7%
Information/Other	5	850	2,527	3,377	0.0%
Marketing	5	26,661	39,184	65,845	0.3%
Natural Disaster Mngt	107	26,407	139,055	165,462	0.7%
Natural Resource Mngt	910	302,136	339,626	641,763	2.8%
Postharvest	322	266,568	446,657	713,224	3.1%
Processing	798	1,934,622	801,521	2,736,143	12.0%
Production	19,098	10,519,566	1,822,067	12,341,633	54.3%
Project	203	113,997	57,970	171,967	0.8%
Public Services	128	63,014	515,983	578,997	2.5%
Renewable Energy	5,331	420,305	263,005	683,309	3.0%
<b>Grand Total</b>	<b>35,483</b>	<b>17,491,717</b>	<b>5,219,181</b>	<b>22,710,898</b>	<b>100.0%</b>

The audit report of the Office of the Inspector General stated that the project did not report on “Assets acquired by the beneficiaries” and gave examples of stoves, sinks, running water, and irrigation. As can be seen above, the project did report on client (beneficiary) investments in fixed assets, including those mentioned by the auditors and many others. The report stated “These improvements added value to their homes” and “Likewise...increases the value of the land.” Discussions were held with the auditors during field visits on determining poverty levels where assets are used to calculate a “net present value” of farms or properties after certain investments and improvements have been made (these also include longer term investments such as fruit trees and forestry products). The net present value of properties was not tracked, nor was it required to be tracked. This is however, different from the actual investments themselves, which was recorded, tracked and reported every quarter.

### **PIRS #7: Number of farmers and others who have applied new technologies or management practices as a result of government assistance**

A total of 29,899 farmers and others have applied new technologies or management practices, against a target of 22,050. Data was collected as part of the annual survey FY 2014/2015. Under this indicator the farmer had to implement one of the following technologies and practices.

- Land preparation
- Raised beds
- Improved Seeds
- Transplanting systems/density
- Fertilization systems/plan
- Use of irrigation
- Biological control systems
- Integrated Pest Management Systems
- Crop rotation/diversification
- Pruning methods
- Harvesting methods
- Medicine usage (animal production)
- Improved nutritional content (feeding)
- Updated/semi-automated processing systems
- Lay out of new plants and expansions
- Market led production programs
- Following market-set product standards
- Post harvesting systems
- Packaging/transport systems
- Industrial safety systems
- Record keeping (yields and sales)
- Record keeping (inputs and labor)
- Equipment/tools improvements
- Segmentation of land for different usage

The top five technologies were transplanting density, seed selection, land preparation, crop rotation, and improved seeds. Using the FTF technology type categories (guidance says that each technology should only be counted under one), disease management practices were being implemented by 11,224 growers (38 percent), cultural practices by 23,653 (79 percent), climate mitigation and adaptation technologies by 21,570 (72 percent), and soil-related fertility and conservation practices by 17,211 (58 percent).

**Table 23. Implementation of New Technologies or Management Practices**

<b>Technology Type</b>	<b># Growers</b>	<b>% Use</b>
Crop Genetics	4,002	13%
Cultural Practices	23,653	79%
Livestock Management	11,029	37%
Wild Fishing Technique/Gear	0	0%
Aquaculture Management	0	0%
Pest Management	9,272	31%
Disease Management	11,224	38%
Soil-related Fertility and Conservation	17,211	58%
Irrigation	2,798	9%
Water Management	0	0%
Climate Mitigation & Adaptation	21,570	72%
Marketing & Distribution	748	3%
Post-harvest Handling & Storage	4,783	16%

**Table 23. Implementation of New Technologies or Management Practices**

Technology Type	# Growers	% Use
Value-added Processing	130	0%
Other	6,800	23%
<b>Total</b>	<b>29,899</b>	<b>100%</b>

The project promoted new crop diversification alternatives, based on the potential of each specific region in terms of crop development, cost of production, and availability and proximity to logistics and markets. Since most of the farmers were new to these crops, they started with small plots with the project technicians guiding them in every step of the production process.

In terms of area under technical assistance, there were four main categories of plantings:

- Basic grains: annual plantings, rain-fed with basic production practices
- Coffee: existing plantings, with the use of basic practices (results one to two years after introduction); new plantings, with improved systems (most results post-project)
- Tree crops: basic practices, with results post-project
- Horticulture: short cycle (up to 1 year) vegetable and fruit crops, mainly irrigated, with at minimum the basic production practices and most with good agricultural practices. Includes basic grains as a rotation crop.

Based on area, the main crops receiving project assistance was basic grains (more than 40,000 hectares), coffee with 26,375 hectares (including 8,099 hectares of new plantings and stumped), high-value fruits and vegetables totalling 5,939 hectares (for income generation), and a range of tree crops 847 hectares (Table 24). Basic production technologies were implemented for each crop group, with more technified systems being used for horticultural production.

**Table 24. Hectares Assisted**

Value Chain	Year 1 (Apr. to Sept. 2011)	Year 2 (Oct. 2011 to Sept. 2012)	Year 3 (Oct. 2012 to Sept. 2013)	Year 4 (Oct. 2013 to Sept. 2014)	Year 5 (Oct. 2014 to Mar. 2015)	Total
Basic Grains	2,029	5,614	15,555	16,343	1,140	40,681
Coffee	18,477	1,707	2,572	3,233	386	26,375
Tree Fruits	563	56	114	103	11	847
Horticulture	481	1,009	1,526	2,290	633	5,939
<b>Total</b>	<b>21,550</b>	<b>8,386</b>	<b>19,767</b>	<b>21,969</b>	<b>2,170</b>	<b>73,842</b>

*Note: reported areas in Years 1 and 2 increased due to the entrance of new clients and their reporting of established coffee and fruit trees, which were brought under project assistance.*

In total the project registered 163,707 individual plantings for a total area of 73,842 hectares (9,918 hectares by women – 13 percent). Short-term crops with the highest area of plantings by USAID-ACCESO client households were corn, beans, coffee, potato, plantain, watermelon, cabbage, carrot, passion fruit, tomato, and onions (Table 25). Decisions for crop selection were based on variety of factors, including climate, markets, buyers, water needs, production costs, competitiveness, risks, and logistics.

**Table 25. Area Planted by Selected Crops (Hectares)**

<b>Product</b>	<b>Year 1 (Apr. to Sept. 2011)</b>	<b>Year 2 (Oct. 2011 to Sept. 2012)</b>	<b>Year 3 (Oct. 2012 to Sept. 2013)</b>	<b>Year 4 (Oct. 2013 to Sept. 2014)</b>	<b>Year 5 (Oct. 2014 to Mar. 2015)</b>	<b>Total</b>
Corn/Maize	919	2,809	9,248	9,794	614	23,384
Coffee under production	16,896	0	0	0	0	16,896
Coffee	1,549	1,590	1,985	2,648	328	8,099
Corn/Maize (High Altitude)	659	1,481	2,858	3,474	17	8,489
Beans (Dried)	413	1,126	2,186	2,732	367	6,825
Yellow Corn/Maize	0	0	1,052	210	0	1,263
Coffee Plantlets for Sale	57	128	585	584	26	1,380
Potato	82	213	415	542	141	1,394
Allspice in Production	355	0	0	1	0	355
Plantain	102	92	96	195	53	538
Watermelon	13	97	158	125	15	409
Cabbage	9	52	90	166	42	359
Beans (Silk)	0	82	60	69	11	222
Proso Millet	12	71	73	88	2	246
Corn (On the Cob)	0	44	90	58	46	238
Carrot	11	34	59	71	18	193
Rice	17	31	47	43	0	138
Passion Fruit	25	13	48	59	4	149
Tomato (Processing)	9	33	46	95	26	209
Cardamom	85	6	3	3	0	98
Onions	3	35	42	46	23	149
Sugar Cane	33	44	7	10	0	94
Tree Fruits - Avocado Hass	10	21	57	20	1	110
Cocoa	49	11	13	32	6	111
Lettuce	5	24	29	55	21	134
Others	261	357	513	990	240	2,361
<b>Total</b>	<b>21,574</b>	<b>8,394</b>	<b>19,761</b>	<b>22,110</b>	<b>2,003</b>	<b>73,842</b>

Given economic limitations of client households, one of the project's greatest challenges was to achieve competitive yields and acceptable quality with low or no additional costs. The application of basic production practices and the use of fertilization programs enabled the first jump in productivity with minimal increases in cost. The practices recommended by USAID-ACCESO focused on the prevention of problems before they occurred and the efficient and proper use of inputs rather than encouraging farmers to use additional inputs.

***Private sector alliances and integration of private sector equipment, input and service providers***

The status of activities in the Project Monitoring Plan (PMP) under this component throughout implementation, together with the accumulated total, is provided in Table 26.

**Table 26. Private Sector Alliances and Integration**

PIRS/ WP #	Year 1: Apr. to Sept. 2011	Year 2: Oct. 2011 to Sept. 2012	Year 3: Oct. 2012 to Sept. 2013	Year 4: Oct. 2013 to Sept. 2014	Year 5: Oct. 2014 to Mar. 2015	Total
PIRS #30: Number of organizations / companies providing business development / extension services to MSMEs (LOP Target 465):						
	-	78	110	273	12	473
PIRS #32: Number of public-private partnerships formed (LOP Target 65):						
	3	23	15	10	7	58

### **PIRS #30: Number of organizations / companies providing business development / extension services to MSMEs**

A total of 473 organizations and companies were providing business development or extension services to project MSMEs, against a PMP target of 465 (102 percent of target). These included input and equipment suppliers, cooperatives, rural village banks, foundations, grower/buyer organizations, microenterprises, exporters, and others. USAID-ACCESO provided a wide range of support to these organizations through direct technical assistance, participation in training events, links with project clients, links with upstream companies, legalization, finance, new business opportunities, and others. Examples included the new business opportunities for rural village banks in input and equipment sales, making links with the equipment and input suppliers, and developing credit lines; training of technicians in production and costs for selected finance providers; and, legal registration of microenterprises.

### **PIRS #32: Number of public-private partnerships formed / PIRS #33: Number of private sector alliances developed**

During implementation 58 public-private alliances were signed against a target of 65 (89 percent). Other USAID alliances were wide ranging and covered almost all components of project implementation, including exporters and packers of fresh produce, supermarkets, coffee exporters, input and equipment companies, municipalities investing in productive infrastructure, financial institutions and grower associations. Partners normally provided support to project clients in terms of commercial opportunities, training, infrastructure, discounted inputs and equipment, and preferential access to finance. The main components were in agricultural production and marketing, value addition, and nutrition.

In addition to the public-private sector partnerships, 18 letters of agreement were signed with the public sector, including SAG, Ministry of Health, COPECO, SEDIS and BANADESA. These alliances facilitated project implementation, helped obtain government buy-in, expanded the outreach and services provided to clients, and included government employees in project training activities.

The audit report of the Office of the Inspector General (published in January 2015) stated that the project did not report on “Leveraged funds from public-private partnerships”. The audit report stated that “[w]hile there is an indicator that tracks all public-private partnerships, the amount of private sector funds leveraged was not calculated.” This statement was only partially correct. Fintrac tracked investments in fixed assets that directly supported implementation from the public-private partnerships (e.g. field collection centers, coffee solar dryers). They were included in PIRS #6 and formed part of the investments made by “Others” (Table 22). They were not specifically broken down in reports as this was not required by USAID, but if needed they could have been (as with the GOH investments in fixed assets in project related activities). Due to commercial sensitivity, Fintrac did not track in-kind time (e.g. training provided by buyers, input suppliers’ employees) or other non-fixed asset investments/leverage made by partners (e.g. negotiated discounts on inputs and equipment sold to project beneficiaries). The

agreements with most partners were structured as memorandums of understanding (not as sub-awards) and they did not include direct project funding to partners.

### **Grower organization and the development of market-driven production programs**

The status of activities in the Project Monitoring Plan (PMP) under this component throughout implementation, together with the accumulated total, is provided in Table 27.

**Table 27. Grower Organization and Market-Driven Production Programs**

<b>PIRS/ WP #</b>	<b>Year 1: Apr. to Sept. 2011</b>	<b>Year 2: Oct. 2011 to Sept. 2012</b>	<b>Year 3: Oct. 2012 to Sept. 2013</b>	<b>Year 4: Oct. 2013 to Sept. 2014</b>	<b>Year 5: Oct. 2014 to Mar. 2015</b>	<b>Total</b>
<b>PIRS #31: Number of producers organizations, water users associations, trade and business associations, and community-based organizations (CBOs) receiving USG assistance (LOP Target 210)</b>						
	40	150	31	519	33	773
<b>WP #3: Number of small farmer associations formally established as businesses (LOP Target 55)</b>						
	-	-	118	46	63	227

### **PIRS #31: Number of producer organizations, water users associations, trade and business associations, and community-based organizations receiving USG assistance**

USAID-ACCESO developed a wide range of activities with organizations and associations to increase outreach and improve the quality and quantity of services at the household, group, and community levels. By working with community level organizations, the project generated client confidence. In many cases, problems and opportunities were identified through a participatory process by the communities themselves. During the project, 773 organizations received technical assistance and training against LOP target of 210 (368 percent of target). These included 676 private enterprises, 23 producer organizations, 45 water/irrigation associations, 27 community-based organizations, and two women's groups.

Private enterprises included financial institutions (cooperatives, village banks), input and equipment suppliers, processing companies, producer groups (dairy, coffee, vegetables), and other group organizations (bakery, snacks, poultry). Community based organizations included CODELs and CENs. Most of the water (potable) and irrigation boards were set up with project assistance.

### **WP #3: Number of small farmer associations formally established as businesses**

USAID-ACCESO business skills, policy, production, and marketing specialists worked together to identify the needs and requirements of groups of growers to formally register as businesses (but where the initial decision was made by the growers, not as a requirement by the project). These included rural village banks, growers associations, and companies. In addition to the work with the growers themselves, input from the project's policy component shortened processes, reduced costs, and improved the efficiencies of the registration process. Alliances were initially made with UNAH and SIC, but this was not formalized; a formal alliance was then made with UNITEC and SIC to assist in the legalization of the businesses.

During project implementation, 227 companies obtained official registrations against a target of 55 (413 percent). In addition, documents were sent for registration for an additional 58 businesses and another 58 remaining in the process of collecting and preparing documents. Groups receiving assistance under this activity totaled 343; they covered 7,948 members with an average of 23 members per business or group.

Groups with the business registrations included:

- Grower Association: 21
- Rural banks (cajas rurales): 231
- Companies with multiple services: 39
- Water boards: 49
- “Campesina” companies: 3

### 5.2.2 Rural MSMEs Access to New Market Opportunities Increased (SUB-IR 2.1.2)

USAID-ACCESO marketing specialists continually monitored new product and market opportunities, as well as recommending crops, varieties, and value-added products for calendarized production programs and commercial trials. Calendarized production programs were implemented in each of the six departments for the local and export markets, and were expanded as more growers joined these programs. In addition to fresh produce, the project emphasized developing new markets and improving logistics for MSME processed and off-farm products, including sweets, baked goods, pickles, sauces, plantain chips, raw sugar, honey, wines, and crafts.

Due to low production volumes (small plots, partial technologies) and difficulties competing in large markets in the main and secondary cities (poor roads, long distances, high transport costs, low volumes), USAID-ACCESO developed local farmers’ markets and distribution routes for sales to local outlets, *pulperias*, and intermediaries in the same zones where they are produced. This reduced transport costs and increased payment time. Another key activity carried out was the development of new and expansion of existing local produce fairs. The project worked closely with local authorities and community organizations to enable producers to sell their products in nearby communities. Small-scale market sales points were established in 16 communities. As the growers were selling themselves, this activity did not specifically contribute to the indicator target.

MARKETING			
<b>Dedicated technicians</b>	1 manager and 3 specialists		
<b>Training events</b>	402		
<b>Training participants</b>	3,588 men	1,015 women	Total 4,603
<b>Training individuals</b>	1,049 men	300 women	Total 1,349
<b>Technical assistance</b>	4,506		
<b>Investment</b>	Clients \$26,661	Others \$39,184	Total \$65,845
<b>Training materials</b>	18 bulletins	3 presentations	Total 21

### Development of buyer linkages and logistics

The status of activities in the Project Monitoring Plan (PMP) under this component throughout implementation, together with the accumulated total, is provided in Table 28.

**Table 28. Rural MSME Access to New Market Opportunities**

Indicator	Year 1: Apr. to Sept. 2011	Year 2: Oct. 2011 to Sept. 2012	Year 3: Oct. 2012 to Sept. 2013	Year 4: Oct. 2013 to Sept. 2014	Year 5: Oct. 2014 to Mar. 2015	Total
WP #4: Number of MSMEs accessing new market opportunities through a broker (LOP Target 10,932):						
	35	1,403	5,486	4,880	212	12,016
PIRS #12: Number of brokers providing market linkages to MSMEs (LOP Target 500):						
	10	19	41	288	9	367
WP #6: Number of market surveys conducted (LOP Target 24):						
	1	5	3	3	8	20

**WP #4: Number of MSMEs accessing new market opportunities through a broker**

A total of 12,016 MSMEs were registered as accessing new market opportunities through a broker, against a target of 10,932 (110 percent of target). Of these, 10,040 were male and 1,976 female (16.4 percent). These were those who had at least two recorded sales events to at least one broker. While this target was exceeded there were many more transactions. More than 4,000 buyers were registered as having purchased products from USAID-ACCESO clients and many buyers made one sale to a buyer with crops with single harvests (corn, beans, onion, potato, carrot, beetroot, etc.). Growers with crops with multiple harvests normally met the indicator criteria (plantain, papaya, passion fruit, tomato, peppers, etc.).

**Table 29. Number of Clients Accessing New Market Opportunities (>=2 deliveries each)**

Department	Total Clients	%
Copán	2,093	17.4%
Intibucá	1,698	14.1%
La Paz	1,627	13.5%
Lempira	2,802	23.3%
Ocotepeque	1,947	16.2%
Santa Bárbara	1,836	15.3%
Other	13	0.1%
<b>Total</b>	<b>12,016</b>	<b>100.0%</b>

**PIRS #12: Number of brokers providing market linkages to MSMEs**

A total of 367 brokers were classified according to the definition as providing market linkages to project clients. This was 73 percent of the target of 500. In total 4,000 buyers were registered as purchasing from project clients. The target was probably met, but the time required to collect and record all sales from all growers to all buyers from all harvests was excessive. A simple, less time consuming indicator definition would have been preferable.

Of the total of 367 classified brokers, 282 were intermediary buyers, 28 export operations, 21 retailers, 20 packhouses/collection centers, 9 processors, and 7 supermarkets. 17 buyers each purchased from more than 100 project clients; 55 buyers purchase from more than 50 clients; and, 126 buyers each purchased from more than 25 project growers.

**WP #6: Number of market surveys conducted**

A total of 20 market surveys were carried out against a target of 24 (83 percent). These included allspice, cardamom, processed onions, gherkins, eggplant, zucchini, stevia, chia, turmeric, and essential oils from pimento leaf, pimento berry, cardamom, avocado, passion fruit (fresh and juice), chayote,

processed guava, hot peppers and cashews. The allspice survey resulted in direct exports for the first time from Honduras to the US in 2012 (as opposed to intermediaries from Guatemala). This was expanded in the 2012/2013 season and has stabilized in the 2013/2014 season. The cardamom survey resulted in direct exports to Switzerland. In the previous year, both crops were to be supported with short-term technical assistance for essential oil extraction, but this was not carried out at that time due to administrative limitations (approvals). The processed products surveys indicated limited market options and low profitability not suitable for the USAID-ACCESO grower. The surveys for stevia, turmeric, and chia identified opportunities. In the last year, production and market trials were carried out with stevia and chia, with the latter being taking to commercial production levels in the last quarter of the final year. Informal market surveys were carried out for a range of crops in El Salvador and with exporters and importers for fresh herbs, snow peas, sugar snap peas, and French beans.

### ***Production and systems implementation to meet buyers' quality and standards***

#### **WP #5: Number of MSMEs that have entered formal preferred supplier or contract agreements with brokers**

The status of activities in the Project Monitoring Plan (PMP) under this component throughout implementation, together with the accumulated total, is provided in Table 30. The data was collected in the annual survey for FY 2014/2015.

**Table 30. Number of MSMEs That Entered Formal Preferred Supplier or Contract Agreements**

Indicator	Year 1: Apr. to Sept. 2011	Year 2: Oct. 2011 to Sept. 2012	Year 3: Oct. 2012 to Sept. 2013	Year 4: Oct. 2013 to Sept. 2014	Year 5: Oct. 2014 to <b>Sept.</b> 2015	Total
WP # 5: Number of MSMEs that have entered formal preferred supplier or contract agreements with brokers (LOP Target 2,996)						
	-	550	1,521	3,317	1,921	7,309

A total of 7,309 MSMEs entered formal preferred supplier or contract agreements against a target of 2,996 (244 percent of target). Sampling surveys were used as the quantity of transactions was too high to be able to track every one. Of these, 6,304 were male (83 percent) and 1,266 female (17 percent). These are those who have at least two recorded sales events to at least one broker. There were a total of 24,175 MSMEs who had one recorded sales event. These buyers included collection centers, cooperatives, supermarkets, processors, and exporters.

Given the limitations of farmers in the region, it was essential that these efforts were supported by activities to improve postharvest infrastructure, irrigation, logistics, access to inputs and seed, finance, and local investment, to ensure farmers meet quality standards and safety regulations.

Select examples of activities initiated to develop market-driven production programs included:

- Calendarized fruits and vegetables production programs were developed and implemented for all of the main supermarkets, including La Colonia, La Economica, Colonial, Los Andes, Pricemart, La Antorcha and Hortifruti (Wal-Mart). Project growers were supplying these supermarkets either directly or through approved suppliers.
- Negotiations were made with market retailers in La Esperanza and Marcala for purchase of second grades produced under a calendarized vegetable production program for the supermarkets.
- Seasonal production under contract of Chinese eggplant and other oriental vegetables for export to the US.
- Year round production programs under contract were developed for Tabasco pepper production with two processing companies for export to the USA.

- Seasonal production program with snow pea for export to Guatemala.
- Coffee programs for a range of buyer/exporters including Bon Café, Beneficio Santa Rosa, and OLAM.
- Seasonal passion fruit sales to a processor/exporter for export to the UK.
- Yellow corn production for the local industry.

Emphasis was given to the development of local markets within each department and in municipal markets such as Dandy and Central de Abastos de San Pedro Sula. Production to meet demands for supermarkets such as La Colonia, Wal-Mart, Madesma, Ebenezer, through distributors such as ASOFAIL-CICOM, ECARAI, ODECO, ECARAI, APROCEL, CAEOL, APRALIN, COPRAL, COPRAUL, Hermandad de Honduras and Aldea Global were developed or expanded.

Constraints to the marketing program included the small production lots, low volumes and complicated (and expensive) logistics. Project clients were located mainly in zones with poor (or no) roads where logistics costs to reach the main cities were high. For these clients, crops not only had to be selected based on agronomic and cost factors, but also on logistics and transport costs. Low value, low weight products were not normally profitably when transport costs were factored in.

### ***Implementation of business certification programs***

The status of activities in the Project Monitoring Plan (PMP) under this component throughout implementation, together with the accumulated total, is provided in Table 31. No new MSMEs were added in FY 2014/2015.

**Table 31. Implementation of Business Certification Programs**

<b>Indicator</b>	<b>Year 1: Apr. to Sept. 2011</b>	<b>Year 2: Oct. 2011 to Sept. 2012</b>	<b>Year 3: Oct. 2012 to Sept. 2013</b>	<b>Year 4: Oct. 2013 to Sept. 2014</b>	<b>Total</b>
PIRS #13: Number of MSMEs that have been verified to meet market standards for their products (LOP Target 2,000)					
	35	882	836	21,344	23,097

A total of 23,097 MSMEs were verified to have met market standards for their products, against a target of 2,000 (1,155 percent of target). MSMEs included growers. This target was exceeded due to the multiple strategies implemented to achieve it and the direct links to several other components.

Whether producers or microenterprises had implemented systems to meet buyers' demands was verified when sales took place to a specific market demanding a particular quality or standard. In order for micro and small businesses (including farmers) to build sustainable relationships with new markets, it was essential they comply with buyer expectations, not only for volumes, consistency, and frequency, but also in terms of quality and product standards. USAID-ACCESO's marketing, postharvest, certification, and production specialists provided direct technical assistance to farmers so they could achieve this goal. Additional training was provided by the actual buyers themselves, who visited the farms and participated in training and technical assistance activities or provided feedback to growers when produce was delivered.

USAID-ACCESO specialists supported vegetable growers to enter formal markets with quality standards and where necessary to obtain farm and product certifications. Project specialists also assisted coffee growers to meet the requirements for quality and a range of certifications (depending on buyer requirements), including Rainforest Alliance, UTZ, 4C, Certified Organic, and Fair Trade.

USAID-ACCESO worked with many buyers to develop quality standards for several crops. Examples included all vegetables for supermarket buyers, plantain for wholesalers, Chinese eggplant for the export market, green beans to Guatemala, stevia for a local processor, and coffee for many buyers and for specialty markets.

Given the informal nature of local markets, few buyers have specifications for fresh produce. For this reason, postharvest specialists, in coordination with marketing specialists, worked with informal buyers to develop basic standards and quality inspections to formalize some of the relationships. This was in addition to the continual focus on supporting USAID-ACCESO clients in meeting buyer quality standards so they could enter more reliable formal markets with potential for expansion. Support was provided to both buyers and growers in the development and use of product standards for fresh fruits and vegetables.

Additional activities were carried out with quality and standards for processed and other off-farm products, such as pickled vegetables, raw sugar, processed garlic, dehydrated herbs, dairy products, honey products, wood, and woven items. Small-scale processed food operations who had been selling informally because of a lack of registration or bar codes, received assistance to upgrade their products and operations to enter slightly larger markets (most were still not ready for the main distributors in the principal cities).

### *5.2.3 Barriers to Competitiveness of Rural MSMEs Reduced (SUB-IR 2.1.3)*

The business skills and finance technical team carried out most of the activities under this component in coordination with the production, processing, marketing, and policy components. This team also contributed to activities under other Sub-IRs, including 2.1.1 and 2.1.2. Activities carried out by the business skills and finance team were wide-ranging, commercially-focused, integrated with other project components, and worked at all levels of the finance chains.

<b>BUSINESS SKILLS AND FINANCE</b>			
<b>Dedicated technicians</b>	3 senior specialists and 7 junior technicians		
<b>Training events</b>	4,424		
<b>Training participants</b>	27,821 men	14,197 women	Total 42,018
<b>Training individuals</b>	6,460 men	3,122 women	Total 9,582
<b>Technical assistance</b>	39,827		
<b>Investment</b>	Clients \$6,200	Others \$3,841	Total \$10,041
<b>Training materials</b>	51 bulletins	31 presentations	Total 82

### **Loan Targets**

The development, linkage, and expansion of access to credit by the growers was first made possible by market-led, technified production programs. Profitable commercial farming operations were a necessity. Subsistence growers can rarely, if at all, pay back loans even if inclined to do so. In many cases, the production programs required pre-identified finance options, for which finance may have been required by individuals or by groups of growers, to purchase inputs or for inputs and labor. The project linked the finance source together with the users, aiming to be beneficial to both sides. Many non-traditional lending sources did not have the outreach to look for new clients, suitable financial products, sufficient funds to lend, or in the case of some rural village banks, were simply not legalized.

The project provided technical support and training in business skills and finance directly to the growers and to the lending sources. These activities contributed directly to PIRS #14 (access to finance), PIRS #15 (loan value), and PIRS # 11 (business management practices).

## Expanding Finance Sources for USAID-ACCESO Clients

The project developed a wide range of finance sources for client operations. A total of 396 sources of finance were used to make 13,496 loans to 8,656 clients totaling \$16,877,265. Sources of finance included:

- Rural savings and credit banks (*cajas rurales*)
- Cooperatives, sometimes in triangulation with buyers
- Suppliers of inputs and equipment, sometimes in triangulation with buyers
- Intermediaries providing cash advances or inputs provided and repaid against delivery of product
- Exporters and processors providing inputs in the form of seedlings, fertilizer, etc., repaid on delivery of product
- Sharecroppers who invest in the grower, by financing the production operation, while the growers puts the land and labor
- NGOs (eg. Fundación BANHCAFE, Fundación Jjicatuyo, World Vision, ODECO, FAO)
- Projects and governments programs (eg. COMRURAL, PACTA, HEIFER INTERNATIONAL, WFP, PRAF (Women financing program), DICTA, FAO/PESA)
- Farmer and agriculture associations

### *Increased access to finance*

The status of activities in the PMP under this component throughout implementation is provided in Table 32.

**Table 32. Barriers to Competitiveness of Rural MSMEs Reduced**

Indicator	Year 1: Apr. to Sept. 2011	Year 2: Oct. 2011 to Sept. 2012	Year 3: Oct. 2012 to Sept. 2013	Year 4: Oct. 2013 to Sept. 2014	Year 5: Oct. 2014 to Mar. 2015	Total
PIRS #14: Number of MSMEs accessing market-based financing as the result of government assistance (LOP target 4,314):						
	315	1,577	2,826	3,800	138	8,656
PIRS #15: Value of agricultural and rural loans made to MSMEs (\$ millions) (LOP target \$6.33 million):						
	0.200	1.554	6.072	8.060	0.991	16.877
PIRS #11: Number of MSMEs implementing sound business management practices (LOP target 8,482):						
	-	695	4,498	8,762	-	13,955

### **PIRS #14: Number of MSMEs accessing market-based financing as the result of government assistance**

During the project 8,656 MSMEs accessed financed against LOP target of 4,314 (201 percent of the target). Details on the loan numbers are provided in Table 33.

The extreme poor made up 76 percent of the MSMEs, 73 percent of the number of loans, and 34 percent of the loan value. The poor made up 8 percent of the MSMEs, 8 percent of the number of loans, and 8 percent of the loan value.

**Table 33. MSME access to market-based financing by baseline income**

Category	# MSMEs	% of Total	# Loans	% of Total	Loan Value \$	% of Total
Extreme Poor	6,544	76%	9,902	73%	5,665,669	34%
Poor	655	8%	1,065	8%	1,305,008	8%
Non-Poor	1,122	13%	1,963	15%	3,827,636	23%
MSMEs Micro	130	2%	277	2%	3,524,210	21%
MSMEs Other	205	2%	289	2%	2,554,742	15%
<b>Total</b>	<b>8,656</b>	<b>100%</b>	<b>13,496</b>	<b>100%</b>	<b>16,877,265</b>	<b>100%</b>

**PIRS #15: Value of agricultural and rural loans made to MSMEs**

Project clients accessed \$16.877 million in loans against a target of \$6.33 million (267 percent of target). Data is provided in Tables 34 to 37. More than 396 different finance sources were including rural village banks, input stores, cooperatives, buyers, NGO and municipalities. These were the formal loans. There were many informal loans, particularly between family members, intermediary buyers and sharecroppers. Traditional banks did not normally work with this segment.

- Female clients made up 17 percent of the MSMEs, 16 percent of the number of loans, and 11 percent of the loan value.
- The average loan amount was \$1,250, with the majority in the range of \$100 to \$500 (41 percent).
- The *cajas rurales* became a major source of loans for USAID-ACCESO clients: \$1.748 million of a total of \$16.877 million (11 percent), and 3,925 loans of a total of 13,496 loans (29 percent).
- Cooperatives made up the biggest loan value total with \$3.953 million of a total of \$16.877 million.
- Larger loans were obtained from banks including Banco Occidente (104 loans for \$1.364 million), FICOHSA (384 loans for \$621,064), BANADESA (220 loans for \$682,165), and BANHCAFE (31 loans for \$331,581).

**Table 34. Loan data by Sex**

Category	Female	% of Total	Male	% of Total	Total
Loan Value \$	1,836,841	11%	15,040,424	89%	16,877,265
# of Loans	2,210	16%	11,286	84%	13,496
# MSMEs	1,488	17%	7,168	83%	8,656

**Table 35. Loans data by Department**

Department	# Loans Female	Loan Value Female \$	# Loans Male	Loan Value Male \$	Total # Loans	Total Loan Value \$
Comayagua	0	0	20	15,401	20	15,401
Copan	355	332,795	2,216	2,996,785	2,571	3,329,580
Intibucá	390	316,273	1,873	2,254,828	2,263	2,571,101
La Paz	538	385,909	1,595	966,714	2,133	1,352,623
Lempira	478	329,259	2,444	2,058,750	2,922	2,388,009
Ocatepeque	251	328,304	1,530	3,121,215	1,781	3,449,520
Santa Bárbara	198	144,300	1,608	3,626,730	1,806	3,771,031
<b>Total</b>	<b>2,210</b>	<b>1,836,841</b>	<b>11,286</b>	<b>15,040,424</b>	<b>13,496</b>	<b>16,877,265</b>
<b>% of Total</b>	<b>16.4%</b>	<b>10.9%</b>	<b>83.6%</b>	<b>89.1%</b>		

**Table 36. Loan Size Data**

Loan Amount	# MSMEs	# MSMEs % of Total	# Loans	# Loans % of Total	Total Value	% of Total Value
< \$100	1,014	12%	2,220	16%	133,767	0.8%
>\$100 <\$500	3,520	41%	6,246	46%	1,797,585	10.7%
>\$500 < \$1,000	1,638	19%	2,472	18%	1,956,591	11.6%
>1,000 < \$5,000	1,995	23%	2,089	15%	4,535,637	26.9%
>\$5,000 < \$10,000	267	3%	245	2%	1,771,338	10.5%
>\$10,000 < \$100,000	207	2%	218	2%	5,476,889	32.5%
>\$100,000	15	0%	6	0%	1,205,458	7.1%
<b>Total</b>	<b>8,656</b>	<b>100%</b>	<b>13,496</b>	<b>100%</b>	<b>16,877,265</b>	<b>100.0%</b>

**Table 37. Loans by Lender**

Provider	Loan Value \$	# Loans	# Providers
Associations/Foundations	1,148,396	1,598	44
Banks	3,504,580	820	11
Community Banks ( <i>Cajas Rurales</i> )	1,748,377	3,925	108
Domestic Buyers	1,644,115	424	39
Cooperatives	3,953,799	2,165	55
International Agency	1,115	23	1
Municipal Corporations	69,363	344	5
Exporters	527,995	512	7
NGOs	199,343	501	15
Financial NGOs	956,799	1,019	14
Money Lenders	723,452	684	51
Input suppliers	2,010,060	1,136	39
Government Projects	254,835	241	4
Partners	132,039	103	2
Others	3,000	1	1
<b>Total</b>	<b>16,877,265</b>	<b>13,496</b>	<b>396</b>

**PIRS #11: Number of MSMEs implementing sound business management practices**

A total of 13,955 MSME implemented sound business management practices this year against a target of 8,482 (165 percent of the target). No new MSMEs were added in FY 2014/2015. To count as an MSME toward this indicator, the MSME had to implement a minimum of three of the following business management practices:

- Access to credit
- Annual accounts (internal or external)
- Annual audits (internal or external)
- Break-even point analyses
- Budgeting (operative / investment)
- Business operations
- Cash flow operations and control
- Credit scoring
- Financial indicator analysis
- Financial links
- Inventory controls
- Legal procedures/documentation
- Payroll systems and controls
- Promotional activities (materials, trade shows)
- Recordkeeping
- Sales records and control
- Tax management

This indicator was measured as part of the client household survey for the September 2014 annual report. The top five practices being implemented were access to credit; credit scoring; financial links; inventory controls; and recordkeeping.

**PIRS #GNDR 2: Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources.**

This indicator was added in for Year 3 (October 2012 to September 2013). Data is provided in Table 38. Of the 8,656 individuals obtained loans with project assistance, 1,488 were women – 17.2 percent against a target of 20.0 percent (86 percent of the target).

Women obtained just over \$1.83 million in loans (10.9 percent of the total value) and 2,210 individual loans (16.4 percent of the total).

**Table 38. Proportion of Female Participants with Access to Productive Resources**

Indicator	March 2015		
	Total	Female	%
GNDR 2: Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources (LOP Target: 20%)			
Individuals	8,656	1,488	17.2%
Additional Data			
\$ millions	16,877,265	1,836,841	10.9%
# Loans	13,496	2,210	16.4%

**Policy and value chain sector constraints identified and eliminated**

The status of activities in the PMP under this component throughout implementation is in Table 39.

**Table 39. Status: Policy and Value Chain Sector Constraints**

Indicator	Year 1: Apr. to Sept. 2011	Year 2: Oct. 2011 to Sept. 2012	Year 3: Oct. 2012 to Sept. 2013	Year 4: Oct. 2013 to Sept. 2014	Year 5: Oct. 2014 to Mar. 2015	Total
PIRS #16: Number of value chain / sector constraints identified and resolved (LOP Target 40):						
	-	1	16	15	5	37
PIRS #17: Number of policy reforms, regulations, administrative procedures passed for which implementation has begun with USG assistance (LOP Target 4):						
	1	2	2	1	-	6

**PIRS #16: Number of value chain / sector constraints identified and resolved**

During implementation, 37 value chain/sector constraint were resolved, against a target of 40 (93 percent of the target). A wide range of constraints were identified and were resolved. These have resulted in increased access to credit to lenders and to the final users; streamlined processes for registrations, legalization, etc.; and, standardized technical production practices and recommendations.

The following value chain/sector constraints were resolved as a direct result of or with USAID-ACCESO assistance:

- Legalization process for MSMEs.
- Simplification of export permit processes to regional markets of agriculture products.
- Reform of the operational guidelines of the MCA-H/ACA Trust Fund for Farmers' Credit Access.

- Normative evaluation and classification of the loan portfolio issued by the National Banking and Insurance Commission (via policy measures to expand credit service to farmers).
- Agricultural insurance operated by BANADESA (policy measures to expand credit service to farmers).
- Streamlined process for the establishment and operation of water administration boards.
- Streamlined process for registration of poultry farms engaged in production of meat and eggs.
- Official recognition of corn production manual under integrated crop management in order to harmonize and improve the quality of agricultural extension services.
- Official Recognition of Bean Production Manual in order to harmonize and improve the quality of agricultural extension services.
- Reform of the operational guidelines of the MCA-H Trust Farmers' Credit Access to finance projects in the cattle, chicken, coffee, and agricultural inputs value chains.
- Development of credit access mechanism for small producers assisted by USAID-ACCESS with trust funds managed by BANADESA.
- Reform of the operational guidelines of the MCA-H/ACA Trust Farmers' Credit Access for the qualification of new financial intermediaries.
- Executive Order to facilitate access to credit to MSMEs without collateral.
- Socialization of objectives, use and operation of the mobile guarantee register.
- Official Recognition of Potato, Onion, Cacao, and Carrot Production Manuals in order to harmonize and improve the quality of agricultural extension services.
- Simplification of RTN applications from the DEI for companies and individuals.
- National Plan for Integrated Assistance to Small-Scale Coffee Growers Affected by Coffee Rust (IHCAFE).
- Custom technical instruction for the waiver of payment of 15 percent on sales of inputs used in the process of production, processing and distribution of milk, beef and pork as set out in the law of the National Fund for The Competitiveness of the Agricultural Sector.
- Reforms to the Circular No. PE-002/2014 of BANHPROVI on the National Program of bovine, swine and poultry repopulation, to allow access to credit to small and medium-sized producers who were not members of associations or organizations belonging to the FENAGH.
- Streamlined Process for the registration and operation of chicken slaughterhouses.
- Official Recognition of Plantain Production Manual in order to harmonize and improve the quality of agricultural extension services.
- Official Recognition of Lettuce Production Manual in order to harmonize and improve the quality of agricultural extension services.
- Official Recognition of Palm Oil Production Manual in order to harmonize and improve the quality of agricultural extension services.
- Accreditation of natural and legal persons to provide agricultural inspection services.
- Establishment of additional reforms to the Normative Evaluation and Classification of the Agricultural Loan Portfolio issued by the National Banking and Insurance Commission (via Policy Measures to Expand Credit Service to Farmers).
- Clarification of the list of products that must pay the 1.0% of income tax established in article 19 of the law of strengthening of income, Social equity and rationalization of public expenditure, Decree No. 17-2010.
- Review and updating of the Pesticides and related substances regulations to simplify administrative procedures and requirements
- Development of Municipal Ordinances in La Esperanza, Ocotepeque, and Gracias to comply with the regulations for the sale of agrochemicals with varying degrees of toxicity (Legislative Decree).
- Approval of the Technical Management Committee (CTA) of the National Programme for the Reactivation of the Agricultural Sector (FIRSA) for the financing to Cajas de Ahorro y Credito.

### **PIRS #17: Number of policy reforms, regulations, administrative procedures passed for which implementation has begun with USG assistance**

Six policy reforms were achieved (policy reforms, regulations, and/or administrative procedures were passed for which implementation has begun with US government assistance), against a target of four (150 percent of the target). These were as a direct result of, or with USAID-ACCESO assistance:

- Country Investment Plan for the Agricultural Sector.
- Copyright law for protection for plant materials.
- Sector policy paper (FENAGH & COHEP) of actions to eliminate political and administrative barriers that limit sector growth.
- Regulation of Agricultural Mutual Guarantee Fund (Fagre) to facilitate access to credit to MSMEs.
- Policy Measures to Expand Credit Services to Farmers (approved by Council of Ministers).
- National Policy of *Cajas de Ahorro y Crédito* (approved by Council of Ministers).

### ***Applied research and development programs developed***

Applied research programs in technical areas to support USAID-ACCESO's production activities and crops were carried through partner funds with FHIA and Zamorano. This applied research resulted in information and scientifically validated practices to help Honduran farmers achieve higher yields, utilize more resistant and productive crops, and improve production and postharvest practices.

Status of activities in the PMP under this component:

- Research and development projects and activities identified: 14

Activities included:

#### **FHIA**

- Evaluation of different rootstocks in tomato and eggplant on development of bacterial wilting. Rootstocks were identified that provided acceptable tolerance to wilting in tomato, but did not provide the required tolerance in the case of eggplant.
- Optimization of drip irrigation to improve pest control in soil and general agrichemical applications. Trials indicated that using two drip irrigation tapes per bed provide 51 percent coverage of products in the soil, while using only one tape provided 31 percent.
- Application efficiency of commercial spray equipment. Trials carried out on sweet pepper plants. Conclusions of this activity indicate that spraying with motorized equipment is more effective than manual backpack sprayer, with backpack sprayers achieving less coverage of the leaf underside.
- Effects of planting Curaré plantain on raised beds. This activity concluded that there were no significant benefits to planting this plantain variety on raised beds.
- Evaluation of different types of limestone, time of application, and dosage in potato. The potato lot used for this activity was lost due to bacterial wilting.
- Productivity and quality of 23 different types of yellow and red onion. Results identified the best performing varieties in terms of yield and quality.
- Storage life evaluation of 11 onion varieties. Varieties with the best storage characteristics after four days were identified.
- Productivity and quality of 11 onion varieties grown in different seasons, together with their storage characteristics. The best performing varieties at each planting seasons were identified, which did not always show the best storage characteristics.
- Identification of virus in the main *solanacea* crops grown in USAID-ACCESO regions. The following results were obtained from this activity:
  - 83 percent of the samples collected showed the presence of virus.
  - The most common were those transmitted by white fly during the dry season.

- Weeds continue to be an important factor in the reproduction of virus transmitting vectors.
- Comparison between using plantlets and corms of different sizes in plantain production. Plantlet should the fastest rate of growth, followed by large and medium corms. Growth rate from small corms show slow growth.
- Effect of de-handing on plantain yields and fruit quality.
- Determination of production curves of two white corn hybrids under weekly plantings year round.

### EAP Zamorano

- Nematode displacement in soil. Application systems through drip lines showed that infected nematodes were able to move into the top 15 cm of the soil within 24 hours of application.
- Nematode distribution in irrigation systems. No differences were found in the nematode distribution between system injections with Ventry and a standard pump. When pressurized systems were compared to non-pressurized, higher populations were found with the pressurized systems.

## 5.3 HONDURAN BIODIVERSITY & NATURAL RESOURCES CONSERVED (IR 2.2)

On-farm NRM activities to maintain healthy soils and conserve water were integrated into the good agricultural practices at the centerpiece of the USAID-ACCESO extension program. Under this component, the project worked in collaboration with community groups to improve overall NRM practices at the community, micro-watershed, and municipal levels. USAID-ACCESO used a participatory municipal and community planning process to develop and implement municipal NRM plans that identify existing, proposed, and potential areas of public interest; biological and economic corridors, including areas with potential for and irrigation or hydropower development; as well as areas under current or future environmental threat due to deforestation, soil erosion and sedimentation, chemical and organic pollution, and natural hazards. The status of activities in the PMP under this component throughout implementation, together with the accumulated total, is provided in Table 40.

**Table 40. Status: Natural Resources Conserved**

Indicator	Year 1: Apr. to Sept. 2011	Year 2: Oct. 2011 to Sept. 2012	Year 3: Oct. 2012 to Sept. 2013	Year 4: Oct. 2013 to Sept. 2014	Year 5: Oct. 2014 to Sept. 2015	Total
PIRS #8: Number of additional hectares under improved technologies or management practices as a result of USG assistance (LOP Target 14,904):						
	-	8,321	7,963	11,214	1,553	28,782
PIRS #10: Number of companies (including farms) that have made conservation-friendly changes in their business practices (LOP Target 22,050):						
	-	356	350	6,194	4,615	11,515

*Implementation of NRM practices on farm*

### **PIRS #8: Number of additional hectares under improved technologies or management practices as a result of USG assistance.**

A total of 28,782 hectares were under improved practices against a target of 14,904 hectares (193 percent of target). The 28,782 hectares broken down by sex (decision-making) – 8,682 hectares by male clients (30 percent), 823 hectares by female clients (3 percent), and 19,277 hectares jointly by both male and female household members. This indicator was calculated with data including the annual household client survey carried out for FY 2014/2015. To be counted toward this indicator the company had to implement at least one of the following technology or management practices:

- Crop genetics
- Animal genetics
- Cultural practices
- Pest management
- Disease management
- Soil-related fertility and conservation
- Irrigation
- Water management (non-irrigation-based)
- Postharvest handling and storage
- Processing
- Climate mitigation or adaptation

Of the technologies and management practices, 81 percent of the area was under improved cultural practices, 57 percent with improved soil-related fertility and conservation, and 38 percent with improved disease management systems.

**PIRS #10: Number of companies (including farms) that have made conservation-friendly changes in their business practices.**

During project implementation 9,468 companies made the necessary changes, plus 2,047 households in municipalities implementing specific NRM practices, for a total of 11,515 (52 percent against 22,050). Of the 9,468 total companies, 1,920 were women (20.3 percent). This indicator was calculated with data from the annual household client survey carried out in September 2015. To be counted toward this indicator the company has to implement a minimum of five changes at the farm or household level from the following predefined list:

- |   |   |
|---|---|
| • Contoured beds                              | • Recycling of drip irrigation equipment                          |
| • Field drainage systems                      | • Use of <i>eco-justa</i> stoves                                  |
| • Incorporation of organic materials in soils | • Development of wildlife conservation plans                      |
| • Use of physical terraces                    | • Effluent treatment systems for households and processing plants |
| • Pest and disease sampling systems           | • Treatment of coffee residues                                    |
| • Planting of permanent live barriers         | • Production of hay silage for cattle feed                        |
| • Water source protection                     | • Planting of fast woods for firewood                             |
| • Planting of riparian buffers                | • Formal disposal of household waste                              |
| • Reforestation                               |   |
| • Forestry management plan                    |   |
| • Safe disposal of chemical containers        |   |

When the FTF definition was used, 26,971 companies had made conservation-friendly changes in their business practices ((at least one practices). The number of companies (including farms) and the respective changes from the list are as follows:

**Table 41. Number of Companies That Made Conservation-Friendly Changes in Their Business Practices**

# Changes	# Companies	%
1	7,450	27.6%
2	4,295	15.9%
3	3,384	12.5%
4	2,375	8.8%
5	2,277	8.4%
6	1,529	5.7%
7	1,789	6.6%
8	1,106	4.1%
9	813	3.0%
10+	1,952	7.2%
<b>Total # companies</b>	<b>26,971</b>	<b>100.0%</b>

The indicator definition also states that at the community level, if three of the following five NRM practices were achieved, the number of households in the community will be counted.

- Regulations for solid waste disposal
- Prevention and control of forest fires
- Legalization of water producing zones
- Recuperation of deforested area in watersheds
- Basic sanitation systems and water treatment for human consumption

A total of 2,047 households were registered in the 32 municipalities with at least three of the five practices. This was counted using the number of households with new or improved potable water services through project assistance in these municipalities.

#### ***Implementation of NRM practices at community and municipal levels***

During the life of project, USAID-ACCESO was to work with at least 20 municipalities to develop and implement NRM policies. The USAID-ACCESO NRM team developed activities with 67 municipalities. These municipalities were selected based on project presence, rates of poverty and child malnutrition, high vulnerability to environmental disaster, and interest in receiving project support. Many NRM practices were implemented by these municipalities and community involvement was high.

<b>NRM AND DISASTER PREVENTION</b>			
<b>Dedicated technicians</b>	2		
<b>Training events</b>	1,150		
<b>Training participants</b>	14,475 men	5,612 women	Total 20,087
<b>Training individuals</b>	4,363 men	1,685 women	Total 6,048
<b>Technical assistance</b>	16,763		
<b>Investment</b>	Clients \$328,543	Others \$478,681	Total \$807,225
<b>Training materials</b>	13 bulletins	21 presentations	Total 34

**Table 42. Status: NRM Practices at Community and Municipal Levels**

Indicator	Year 1: Apr. to Sept. 2011	Year 2: Oct. 2011 to Sept. 2012	Year 3: Oct. 2012 to Sept. 2013	Year 4: Oct. 2013 to Sept. 2014	Year 5: Oct. 2014 to Mar. 2015	Total
PIRS # 9: Number of Local Municipal Governments effectively implementing NRM policies (LOP Target 20):						
	7	24	5	6	-	42

Of the 67 municipalities receiving assistance 42 municipalities were implementing the required practices against a target of 20 (210 percent of target). Per the indicator's precise definition, a municipality was counted once implementation of four out of seven of the following NRM practices had begun:

- Development or strengthening of water boards
- Coffee waste
- Solid waste disposal
- Legalization of water producing zones
- Watershed protection / reforestation
- Basic sanitation and water treatment
- Forest fire prevention

#### **Development or strengthening of water boards**

USAID-ACCESO support resulted in the organization of new water boards, including legal registration (41 new potable water boards were registered with USAID-ACCESO assistance and eight were in process of registration at project close). There were 2,160 members in these water boards. For both new and existing, assistance was given in a wide range of areas, including:

- Organization: structuring roles and functions of the boards and support committees (operation and maintenance, watershed management, sanitation and education), while taking into account the general water law and national regulation of water boards.
- Administration: establishment of basic records for good governance and financial transparency, including ledgers (inputs and outputs), subscriber registration, worksheets, journal, and other service contracts.
- Review and development of regulations based on the general regulation of water management boards while taking into account the local conditions.
- Review and readjustment of rates: the project promoted the need to manage the boards as commercial operations and provided support to develop and review fees and cost structures. Rates varied from \$0.47/month to \$2.40/month per household, which while not ideal rates, can be considered as a major step and improvement for these organizations.
- Operation and maintenance: activities were based on the premise that the water projects were integrated systems that start in the watershed and end at the household, and training was provided to management and plumbers, first in the identification of the components, and then in their operation and maintenance.

#### **Coffee waste**

Project technical assistance was given to growers and to municipalities on the use of "mountain microorganisms" (*microrganismos eficaces de montaña*) or worms to use to decompose waste coffee pulp. The pulp is a major contaminant, especially for water supplies as 60 percent of the fruit is made up of pulp and skin. As a result of project training and promotion, many municipalities have developed their own stock of microorganisms they sell to growers. Some have also developed *ordenanzas municipales* for the control of waste pulp, through the UMAs, who now also provide training to the growers. This technology was adopted by municipalities, independent growers, companies, and coffee cooperatives

across the six departments where USAID-ACCESO worked. The use of the microorganisms for pulp disposal on farm also enabled growers to certify their environmental-friendly farming systems and obtain farm certifications, which in turn allowed entry in higher value markets and increased incomes.

### **Solid waste disposal**

Poor disposal of solid waste is a problem faced by all municipalities in the six departments in the ZOI. Project support included participation in municipal/community meetings, the development of *ordenanzas municipales* for the implementation and charges for solid waste disposal services and systems, identification and/or assessment of garbage fill sites, use of micro-landfills, expand recycling options. USAID-ACCESO, in direct coordination with the municipalities, and with other organizations including MAMLESIP and MAMCEPAZ (La Paz), and schools (e.g. Lenca agroforestry Yamaranguila Institute), provided assistance and training aimed at achieving improvements, including:

- Classification and marketing of certain wastes such as FIFO and aluminum.
- Treatment of organic waste with EM.
- Identification of sites for relocation of municipal dumps.
- Landfill management.
- Preparation of proposals for integrated waste management.
- Training on local waste management and establishment of sanitary landfills.

The work was oriented to technical support through municipal and local training and technical assistance, including coordination with the municipal environmental technicians, UMAs, community water boards, and the Ministry of Health.

### **Forest fire prevention**

USAID-ACCESO worked with municipalities to develop forest fire prevention and control plans, that included training of water boards and community leaders as forestry fireman, and involved the *mancomunidades*, UMAs, CODELs, watershed committees, ICF, COPECO and other projects (e.g. USAID-PROPARQUE, CRS and COPECO MITIGAR). Where necessary, support was provided to prepare *ordenanzas municipales*, executed through the UMAs; in many cases the *ordenanzas* involved the prohibition of farmers burning land or clearing trees to plant crops.

### **Legalization of water producing zones**

This activity was necessary to ensure the sustainability of the water-producing area or watershed with the direct participation of the communities and the municipalities. In many cases, ICF was also involved. USAID-ACCESO support included:

- Municipal agreement for protection of watersheds obtained through regular meetings or open fora.
- Delimitation and demarcation of the watershed with the participation of the community, UMA, *Catastro* and *regidores*. The delimitation was done via GPS and marked with visible paint.
- Development of the watershed protection plan.
- Preparation of records for each watershed, including maps and management plans, for approval by the municipality.

This process did not replace the declaration done through the ICF, but rather was considered a first step especially for water sources where there were conflicts of use and legalization.

### **Watershed protection / reforestation**

Meetings with local communities, water boards, watershed committees, and municipalities to agree to watershed protection, organize observation committees, and develop tree planting programs. Environmental watershed management plans were developed, detailing activities, demarcation, delimitation, conservation, protection, establishing of live and dead barriers at the water sources,

equipment/personnel needs, timing and persons responsible. These plans were coordinated with the municipalities, and may have involved water boards, UMAs, ICF, teachers and students, the community *patronato*, and other institutions including ICF, WFP, and MAPANCE. Watershed protection activities were also carried out where USAID-ACCESO had been involved in the installation of irrigation projects.

### **Basic sanitation and water treatment**

In addition to working with the communities on the quantity of water through the protection of the watersheds, USAID-ACCESO also worked to improve water access and quality for communities. This was done by constructing new or improving existing potable water systems. A total of 54 potable water systems were installed or rehabilitated with USAID-ACCESO assistance. Activities included:

- Construction or improvement for water capture
- Improvements in pipelines
- Rehabilitation of storage tanks
- Installation of chlorination systems
- Rehabilitation of loadbreak structures
- Expansion of domestic distribution networks
- Installing micro-measurement systems

Investments were made using project funds plus cost sharing from municipalities, communities, WEFTA, Agua y Desarrollo Comunitario (ADEC), PDA-Visión Mundial, ACRA, and others.

To complement the new or improved potable water systems, the NRM component in conjunction with the nutrition component, installed latrines and wash tanks for households receiving health and nutrition support. A total of 326 latrines and 346 household wash tanks were installed, enabling more efficient household water use and improved sanitary conditions. Training was provided in the use and maintenance of the latrines and tanks.

### **Coordination**

NRM activities involved planning meetings at the community level, as well as on-site training activities. While water board managers were key players, many of the activities required the buy-in and participation of entire communities. In the implementation of these activities, USAID-ACCESO coordinated and collaborated with a wide range of players, including:

- Municipalities, through the UMAs
- Ministry of Health, with environmental health technicians from the municipal health centers
- Regional SANAA offices
- Instituto de Conservación Forestal (ICF)
- Agua y Desarrollo Comunitario (ADEC) in La Paz, Intibucá and Lempira
- ACRA in La Paz
- WEFTA in Intibucá, La Paz and Lempira
- *Mancomunidades* through environment technicians
- PESA-FAO
- PMA in La Paz
- PDA-Visión Mundial through the WASH Project in Intibucá and Lempira
- COCEPRADII in Intibucá
- CRS in Intibucá and La Paz

Of the 42 municipalities implementing more than four practices, there were 2 with five practices; 22 with six practices; and 6 with seven practices. Another 11 municipalities required one additional practice to be counted for this indicator (Table 43). This indicated the value of the assistance being provided and the commitments from the municipalities involved.

**Table 43. Number of NRM Practices Implemented by Municipalities**

# NRM Practices Implemented	# Municipalities
7	6
6	22
5	2
4	12
3	11
2	11
1	2

Municipalities received support in seven areas. Assessment of the uptake and implementation of the areas indicates that priority was given by the municipalities to potable water supplies. Development and strengthening of water boards was achieved in 90 percent of the municipalities and basic sanitation and water treatment in 72 percent of them. Coffee waste treatment systems were taken up by 70 percent of the municipalities, indicating the importance and concern of the environmental damage caused by pulp.

**Table 43. Number of Municipalities Implementing Specific NRM practices**

NRM Practice	# Municipalities	% of total
Development or strengthening of water boards	61	91
Coffee waste	52	78
Solid waste disposal	39	58
Forest fire prevention	23	34
Legalization of water producing zones	27	40
Watershed protection / reforestation	39	58
Basic sanitation and water treatment	48	72

## 5.4 CAPACITY TO MITIGATE AND ADAPT TO CLIMATE CHANGE STRENGTHENED (IR 2.3)

This component implemented two main activities tracked in the PMP:

**Table 44. Status: Disaster Vulnerability Reduced**

Indicator	Year 1: Apr. to Sept. 2011	Year 2: Oct. 2011 to Sept. 2012	Year 3: Oct. 2012 to Sept. 2013	Year 4: Oct. 2013 to Sept. 2014	Year 5: Oct. 2014 to Mar. 2015	Total
PIRS #28: Number of communities in high vulnerability municipalities with adequate disaster prevention and mitigation capacity (LOP Target 40):						
	11	50	-	-	-	61
PIRS #29: Number of rural micro-generation clean/renewable energy projects established (LOP Target 805):						
	4	724	921	1,921	316	3,886

### 5.4.1 Disaster Vulnerability Reduced (SUB-IR 2.3.3)

*Development and implementation of disaster mitigation plans*

#### **PIRS #28: Number of communities in high vulnerability municipalities with adequate disaster prevention and mitigation capacity**

USAID-ACCESO aimed to work with at least 40 communities to develop and implement adequate disaster prevention and mitigation capacity. The USAID-ACCESO disaster prevention team developed activities with 81 communities selected based on project presence, rates of poverty and child

malnutrition, and high vulnerability to environmental disaster. These communities implemented a number of disaster prevention and mitigation practices and involved many members. Assisted communities have made significant progress and were in different stages of the process, from awareness to full implementation.

Of the 81 communities under this project, 61 implemented the required practices, against the LOP target of 40 (153 percent of target).

Per the indicator's precise definition, a community was counted once implementation of six out of eight of the following activities had begun:

- Plans for local prevention and response (PLPR)
- Personnel trained to prepare and update PLPRs
- Risk mapping
- EDAN Capacity
- Early warning systems implemented
- Identification and management of emergency centers
- First aid systems
- Simulation exercises

Work under this component included support to communities with high vulnerabilities in disaster prevention, mitigation, and preparedness. Reducing communities' disaster vulnerabilities will ultimately put USAID-ACCESO-assisted households in a position to increase their incomes or reduce losses during disasters.

Activities under this component aimed to reduce vulnerability to disasters at the community level. USAID-ACCESO utilized the small grants mechanism for selected projects.

The following table shows that of the 61 communities implementing more than six disaster prevention and mitigation practices, the highest number (30 and 29) carry out six to seven practices, respectively; only two implement eight practices. Another four communities required one or two additional practices to be counted for this indicator. This indicated the value of the assistance being provided and the commitments from the communities involved.

**Table 45. Number of Disaster Prevention and Mitigation Practices Implemented by Communities**

# Practices Implemented	# Communities
8	2
7	30
6	29
5	1
4	3
3	4
2	4
1	8

USAID-ACCESO supported the communities in eight technical areas. Assessment of the uptake and implementation of the areas indicates that priority was given by the communities to the prevention plans and local response, risk mapping, and improving the EDAN capacities.

**Table 46. Number of Communities Implementing Specific Disaster Prevention and Mitigation Practices**

<b>Disaster Prevention and Mitigation Practice</b>	<b># Communities</b>	<b>% of Total</b>
Prevention Plan/Local Response (PPLR)	74	91%
Personnel Trained to update &/or prepare PPLR	69	85%
Risk mapping	73	90%
EDAN capacity	71	88%
Early Warning System Implemented	59	73%
Identification & Management of Shelters	62	77%
First Aid	32	40%
Simulation & Mock Exercises	5	6%

**Prevention Plan/Local Response (PPLR)**

Municipal Committees and Local Emergency (CODEMs and CODEL) under the SINAGER law (National Risk Management System) maintain responsibility for prevention, preparedness, and response to adverse events. Water boards, trustees, parents, farmers groups, and others participated in the preparation of the PPLR in each location through five workshops held by the project. The plan covered four major aspects:

- Organizational structure and the roles and functions of those on the committee.
- Construction of the risk scenarios based on potential threats and vulnerabilities to the community.
- Measures for preparation and response together with actions for effective response.
- Measures for risk reduction.

The PPLR is the end product of the process and becomes an important tool in the community for prevention, mitigation, and risk management. In the six departments of the project, 66 PPLRs were developed and three were updated.

**Personnel trained to update or prepare PPLR**

Parallel to the plan development process, members of the CODEMs and CODEL learned preparation and how to update the plan (learning by doing), which included management of temporary shelters, EDAN, risk maps, and early warning systems. Members of the CODEL have the capability to regularly review and update the plan according to the incidence of adverse events. Throughout this process, an estimated 3,500 people participated in the series of community workshops, with an average of 10 participants per group.

**Risk mapping**

Risk mapping involved the development of a community map, and in some cases the municipality, where committee members worked together to identify potential threats using high, medium, and low risk categories. The maps complement prevention and response plans by identifying the most important community resources, such as churches, schools, shelters, escape routes, emergency operations centers, health centers, production areas, water storage tanks, bridges, and human resources. The risk levels to each resource were determined according to the identified threats and which of them could be used in situations of adverse events. In the six departments where USAID-ACCESO operated a total of 70 risk maps were developed.

**EDAN capacity**

Capacity building was carried out through the development of departmental courses in the Damage Assessment and Needs Analysis at the technical level of CODEMs, COPECO, and allied NGOs working on risk management and first response organizations (Fire Brigade and Honduran Red Cross). The work with the CODELs included teaching the basics of damage assessment and needs analysis in a simple, effective, and objective way through the use of COPECO materials between 8 and 72 hours after the adverse event, and ensuring the correct data entry and prioritization of needs. In addition, throughout

the six departments, USAID trained and certified persons as EDAN instructors; these activities were carried out in close coordination with USAID OFDA/LAC and COPECO.

### **Early warning systems**

The community alert mechanisms are implemented according to the threat, and are obtained via information bulletins and warnings issued COPECO, through the local and national media, and the actual conditions in each location. In some cases, the water levels in rivers are used to determine the maximum flow together with conventional rain gauges to measure precipitation in the area. When these exceed the specific levels the early warning systems and alarms are activated (e.g. siren, megaphone, church bell, phone calls, etc.).

### **Identification and management of shelters**

The activities were carried out in association with local and municipal emergency committees in each community, ensuring that they met the following basic requirements:

- Facilities are in good condition and close to the families who will use them
- Ensure that they are safe and easily accessible
- Availability of water and basic services
- Availability of areas and infrastructure for food preparation
- Latrines and showers

The committee members were trained in handling temporary shelters and taught to monitor and record affected incoming and outgoing families. Emphasis was made on using schools as the last option for shelters.

### **First aid**

Training in first aid was carried out in coordination with first response institutions and specialized agencies in the field, including the Honduran Red Cross and the Fire Department. They were provided with logistical support at practical training events carried out at the community level. Areas covered the proper treatment of bleeding, burns and fractures where the committees were taught to provide pre-hospital care to victims for any adverse event. Among the six departments, USAID-ACCESO trained a total of 30 CODELs.

### **Simulation and mock exercises**

Due to the high economic cost and wide mobilization of resources required, simulation exercises were conducted in the departments of Copan and Ocotepeque in coordination with ICADE and CARITAS. The preparation of a simulation was to identify a threat and prepare the scenario accordingly and as real as possible. The majority of the community population was involved in the exercise, and the CODEL was activated to mobilize and manage the necessary resources. If this was insufficient, the CODEL had to coordinate with others, including the CODEMs and COPECO. These types of exercises allowed the project and the community to measure their preparedness in coping with adverse events and to make required adjustments where necessary.

### **Coordination**

As the SINAGER law governs community risk management and COPECO is the leading government agency responsible for formalizing actions for disaster management, USAID-ACCESO signed an agreement of collaboration directly with COPECO. Through this agreement joint activities were developed, mainly related to the formation of the technicians in the six departments covering areas such as EDAN, forest fires, and basic life support. From the central level, coordination moved down to the regional levels, mainly those located in Santa Rosa de Copan and Comayagua.

Coordination also occurred with ICADE, National Fire Brigade College, SERNA, PRESANCA II, MAMLESIP, ASONOG, CARITAS, MITIGAR Project/COPECO, Inter-municipal Council "Higuito," Honduran Red Cross, Ministry of Education, and municipalities demonstrating interest in the subject.

## Installation of renewable energy technologies

### PIRS #29: Number of rural micro-generation clean/renewable energy projects established

USAID-ACCESO's renewable energy component focused on promoting low-cost renewable technologies for individual rural households and selected nutrition training centers. Priority project support was given to investments that provide clean renewable energy for individual households, nutrition training centers, and productive farm activities.

RENEWABLE ENERGY			
<b>Dedicated technicians</b>	1 (with support from production, postharvest, and nutrition components)		
<b>Training Events</b>	1,495		
<b>Training Participants</b>	8,553 men	2,014 women	Total 10,567
<b>Training Individual</b>	2,200 men	713 women	Total 2,913
<b>Technical Assistance</b>	10,100		
<b>Investment</b>	Clients \$420,305	Others \$263,005	Total \$683,309
<b>Training materials</b>	2 bulletins	1 presentations	Total 3

During project implementation, 3,886 projects were installed against a LOP target of 805 (483 percent of the target).

**Table 47. Installation of Renewable Energy Projects (in Households, Farms, and CENs)**

Renewable Energy - Type	Year 1: Apr. 2011 to Sept. 2011	Year 2; Oct. 2011 to Sept. 2012	Year 3: Oct. 2012 to Sept. 2013	Year 4: Oct. 2013 to Sept. 2014	Year 5: Oct. 2014 to Mar. 2015	Total
Solar dryers		112	224	720	259	1,315
Bio-digesters		40	62	50	4	156
Eco-justa cooking stoves	4	538	626	1,026	46	2,240
Solar panels		33	9	111	3	156
Ram pump		1	0	14	4	19
<b>Total</b>	<b>4</b>	<b>724</b>	<b>921</b>	<b>1,921</b>	<b>316</b>	<b>3,886</b>

*Note: An additional 1,450 ecofriendly cooking stoves and 30 solar panel systems, and 3 solar dryers were registered as installed by the University of Florida/USAID trilateral project in USAID-ACCESO client households or CENs.*

This activity was carried out in close coordination with both the production (to add value on-farm and increase incomes) and the nutrition component (to reduce the smoke pollution in houses and reduce the expenditure or time for collecting firewood). The installation of the renewable energy projects by department is given in Table 48.

**Table 48. Installation of Renewable Energy Projects by Department**

Department	Solar dryers	Bio-digesters	Eco-justa cooking stoves	Solar panels	Ram pumps
Copán	213	35	201	0	0
Intibucá	305	23	242	98	0
La Paz	216	33	283	35	1
Lempira	299	27	392	20	0
Ocotepeque	129	8	835	1	0
Santa Barbara	153	30	287	2	18
<b>Total</b>	<b>1,315</b>	<b>156</b>	<b>2,240</b>	<b>156</b>	<b>19</b>

## Solar dryers

Solar dryers were installed in key areas with coffee production with drying systems being implemented to add value and generate additional income; they were also being used to dry corn, beans, allspice, loofah, cashew, clothes, and adobe blocks. While this technology was being implemented by IHCAFE, the dissemination and use was not widespread and was not being used by small-scale growers in the project's ZOI. In addition, to benefit from the IHCAFE solar dryer program, the grower had to be registered with IHCAFE, and 40 percent of USAID-ACCESO coffee growers were not registered growers (around 700 project growers registered with IHCAFE).

Altogether project growers installed 1,315 solar dryers that each cost an average of \$400. Solar dryers directly benefit production activities, farm certification, access to market, and income generation. Buyers cannot cup wet coffee, and therefore growers cannot access the market for quality or specialty coffees.

The project's technology fund was used to promote the solar drying technology, initially for coffee. Traditionally, coffee drying when carried out is done in open air, on patios, asphalt roads, and other similar surfaces. This practice has a negative impact on the coffee's organoleptic qualities (aroma, flavor, texture and color) and overall quality. Although traditional drying utilizes solar energy, it does not optimize it nor does it protect the coffee beans. Solar dryers optimize solar energy by capturing heat within the structure, drying the beans more quickly and uniformly than other methods, and simultaneously protecting the beans from dirt, insects, water and other pollutants. Solar drying has been utilized inefficiently in the past, but the coffee drying structure utilized by the project (modified from an IHCAFE design) optimizes solar radiation and handling. The dryer consists of a 30 square meter domed structure built of wood, PVC pipe, and clear plastic with UV protection. The dome uses the heat of the sun to dry the coffee beans on trays, while also protecting them from dust, water, debris, and animals. Ventilation systems allow air movement to prevent overheating the coffee.

The objective was to introduce new postharvest technology to the small-scale coffee grower sector to add value on-farm by allowing the grower to sell dried coffee as opposed to wet beans. The dryer structure uses solar energy to reduce moisture in coffee beans from 40 to 12 percent in beans while ensuring the coffee's organoleptic properties (in the 2013/2014 season, buyer requirements reduced from 12 percent to 11 percent). By drying beans in less time (five to seven days) and better preserving quality, growers were able to access new and improved markets for their coffee, and in some cases rent them or purchase coffee for drying from neighbors.

Growers built the dryers under project supervision and provided cost share, which ensured knowledge remained in the community for replication and future expansion. Training in proper coffee drying techniques and market linkages were part of this activity in order for growers to exploit the dryers' full potential. Several other institutions have followed USAID-ACCESO's example with this technology, including Bon Café, Del Campo, OLAM, CASM, and several municipalities.

The technology adds value on-farm and therefore increases the sales income and profitability for the growers, as well opening up market access. Growers may sell cherry coffee, with no de-pulping, washing or drying) or wet coffee (which has been de-pulp and washed, but not dried). In both cases, the grower has a limited amount of time to sell their coffee to avoid fermentation and price reductions. Intermediaries who buy cherry coffee and wet coffee deduct the cost of transport and the drying operations from the grower. Transport is a major cost component with the sales of cherry coffee. For the 2013/2014 season, 1,112 solar dryers installed with project clients could produce 222,400 QQ during the season.

The additional sales income was \$2.67 million by moving from cherry sales to dry coffee and \$1.60 million by moving from wet to dry coffee. Factoring in transportation costs, this increased to an additional income potential of \$3.39 million by moving from cherry to dry coffee and \$1.84 million by

moving from wet to dry coffee. Tables 49 and 50 summarize the benefits on transport savings and sales income.

**Table 49. Potential Income Generation from Coffee Using Solar Dryers (2013/2014 Season Capacity and Data)**

Number of Solar Dryers	1,112
Capacity/Dryer (QQ) <sup>a</sup>	200 QQ
Total Dry Coffee Installed Capacity (QQ)	222,400 QQ
Cherry Coffee Sales Price (\$/QQ) <sup>b</sup>	\$100
Total Sales Cherry Coffee Sales Price (\$)	\$22,236,583
Wet Coffee Sales Price (\$/QQ) <sup>c</sup>	\$105
Total Sales Wet Coffee (\$)	\$23,304,320
Dry Coffee Sales Price (\$/QQ)	\$112
Total Sales Dry Coffee (\$)	\$24,906,576
Sales Income Difference Cherry Coffee vs Dry (\$)	\$2,669,993
Sales Income Difference Wet vs Dry (\$)	\$1,602,256

a. 10 harvesting weeks / 7 weeks per dry load / 20 QQ dry coffee per load (1.92 QQ wet coffee = 1 QQ dry coffee)

b. Cherry coffee bean sales price / QQ = Dry Coffee Price less L250/ QQ

c. Wet coffee sales price / QQ = Dry Coffee Price less L150/ QQ (de-pulped coffee)

**Table 50. Additional Income Potential Generated by Changing from Sales of Cherry or Wet Coffee to Dry Coffee (2013/2014 season capacity and data)**

	Move from cherry to dry coffee	Move from wet coffee to dry coffee
Number of Solar Dryers	1,112	1,112
Capacity/Dryer (QQ)	200	200
Additional Savings / Transportation	\$720,722	\$240,192
Income Premium for Dry Coffee \$	\$2,669,993	\$1,602,256
Total Additional Income \$	\$3,390,715	\$1,842,448
Dry Coffee Additional Price \$ /QQ	\$15.25	\$8.28
Dry Coffee Price	\$ 115.23	\$113.07

### Bio-digesters

Bio-digesters were installed with households who work under the production component with cattle (for milk or meat production). A total of 156 were installed, with an investment total of \$18,700. They cost an average of \$120 each. Cost savings for food preparation to the average family are an estimated \$360 per year compared to a traditional wood burning stove, and \$120 compared to an *eco-justa* stove. This technology was not available or widely used prior to USAID-ACCESO. Bio-digesters directly benefit health and nutrition activities, production activities, farm certification, and household incomes and expenditure.

A bio-digester is a hermetically-sealed container in which organic waste material is anaerobically digested to produce methane gas (biogas). The system consists of four components: a constructed trench, a nylon plastic tube (polythene film), the influent chamber (feed pit) through which waste enters the system, and the effluent chamber (outlet pit) through which biogas is expelled.

Biogas is an environmentally friendly, renewable energy, offering many benefits for productive and household activities. In Honduras, bio-digesters offer a solution to waste management (particularly in households with cattle and pigs) as well as a source of clean, renewable energy for rural families. In

addition, the use of bio-digesters also reduces the dependence on forest resources by reducing the amount of firewood needed for cooking – one of the most energy-consuming activities in rural households. In addition, they also reduce health risks by replacing traditional firewood stoves that can emit toxic smoke in the kitchen, thereby reducing the potential incidence of respiratory diseases. Other advantages include access to immediate heat (as opposed to waiting for firewood stoves to heat up), frees up time that would be used for firewood collection, can provide lighting, and produces organic material that can be used on the farm. They are low cost and have no or very little operating costs, which helps the household save money from firewood purchases.

Families built the bio-digesters under project supervision and provided cost share, which ensured that knowledge remained in the community for replication and future expansion. Training in the use and maintenance were an integral part of this activity. Several other institutions have followed USAID-ACCESO's example with this technology, including coffee processing and cooperatives, CASM, OCDIH and several municipalities.

### ***Eco-justa* cooking stoves**

The *eco-justa* cooking stoves were installed in households prioritized by the nutrition component, focusing principally on those households with children under two years old. In addition to the installation, the project provided training on use and maintenance of all the systems to ensure that they were operated correctly. A total of 2,240 were installed in households, with an investment cost of \$180,000. The stoves cost around \$80, with the household covering \$25. The fact that the end beneficiaries made a large contribution reflected the acceptance of these technologies and, therefore, their sustainability. In addition, the nutrition training centers established by the project also installed *eco-justas*.

This technology is not new to Honduras as NGOs and other institutions have developed and installed several models. The major difference with USAID-ACCESO, however, is that the stove serves as an integral part of the project's healthy household program and therefore can achieve the full potential impact on achieving a family's well-being.

Many rural Honduran families cook on traditional stoves with an open fire inside or near the home. Traditional wood burning stoves are inefficient and generate smoke, soot, and toxins that can cause respiratory diseases and ailments, particularly in young children and mothers. These eco-stoves consume 60 percent less wood than traditional stoves and they channel smoke and toxins outside the home through a chimney.

The stove comprises a traditional fireplace brick base and a brick foundry with a clay interior that acts as the combustion chamber. Gases are extracted through a galvanized chimney leading to the household's exterior through the kitchen roof and protected by a cap that prevents rainwater from entering. These stoves quickly and effectively respond to two basic problems in rural Honduras: health and natural resources. The eco-stoves have many benefits, including:

- Improved household health because they release less smoke, soot, carbon dioxide and toxins into the home than conventional wood stoves.
- Frees up time for the women in lighting up the stove, and in many cases in collecting firewood.
- The reduction in wood consumption also translates to direct savings in fuel costs (in time and money) for the family as well as reduced deforestation (Table 51).
- They contribute to reduced use of natural resources because less firewood fuel is required for their operation.

**Table 51. Average Operating Costs and Benefits for Traditional vs Eco-Justa stoves**

Department	Traditional Stove	Eco-Justa Stove
# pounds of firewood used per week	157.5	63
# pounds of firewood used per year	8,190	3,276
Equivalent # of trees per year	80	32
Equivalent # trees for 5,000 families	400,000	160,000
# trees not used ("saved")	240,000	
Cost for each pound of firewood	\$ 0.07	
Cost of firewood per year	\$ 573.30	\$ 229.32
Cost of firewood for 5,000 families	\$ 2,866,500	\$ 1,146,600
Cost savings per family using Eco-Justa stove	\$ 343.98	
Cost saving for 5,000 families	\$ 1,719,900	
<b>Calculations on Usage</b>		
12 pieces of firewood per day per family with an Eco-Justa stove (360 pieces per month)		
Each piece weighs an average of 0.73 pounds and measure 20 inches in length, equivalent to 9 pounds per day per family or 63 pounds per week for an Eco-Justa stove		
On average 70 pieces of firewood make up one "carga" (rural zones), equivalent to 51 pounds per carga.		
With averages of 0.73 pounds and 20 inches, each tree gives 2 cargas.		
In rural zones the average price of a carga of firewood is L. 70 (\$3.50), or L.1.372 per pound (\$0.07 per pound)		
1 Hectare planted at a distance of 3 meters by 3 meters, contains 1,111 trees. With savings equivalent to 240,000 trees, 216 hectares of forest is not utilized.		

Training in construction, use, and maintenance was carried out. Most communities now have persons trained in construction to build the stoves. Additionally, trainings were provided to the staff of NGOs and municipalities.

In the last quarter of FY 2013/2014, USAID-ACCESO started a new activity involving the planting of trees for firewood production. A pilot project was started with nurseries being established in households with *eco-justa* stoves using *Leucaena leucocephala*, a fast growing wood that is suitable for firewood. The first harvests will be in late 2015, and harvests being sustainable thereafter. This will further reduce costs, time involved in collection and pressure on the forestry resources.

### Solar panels

This technology is readily available commercially and being used and promoted by NGOs, municipalities and other organizations. A total of 156 were installed and cost an average of \$994 each. Given the high cost for the initial purchase and the part replacement costs, USAID-ACCESO decided not to expand with this line of renewable energy. Day time light was been provided using a very low cost transparent roof sheeting (\$8) as part of the healthy household program in the health and nutrition component (another USAID-ACCESO innovation).

### Ram pumps

A small number of ram pumps were installed for use in farms for productive activities and in communities for potable water supply. A total of 19 were installed with an average cost of \$600 each. They have no operating costs and save growers and communities the fuel costs necessary for pumping water. This technology was not available or widely used prior to USAID-ACCESO.

Hydraulic ram pumps take in water under at one height (pressure) and flow rate and outputs the water at a higher height and a lower flow rate. The pump uses a hammer effect to develop pressure that allows a percentage of the water that drives the pump to lift it to an elevation higher than where it originated. The height that the water can be lifted depends on the water volume and pressure at the source of the pump. The advantage, as mentioned, it that there is no operating costs and it can work 24 hours a day. They can be used to fill water tanks for potable water systems and for irrigation systems, where the water source is at a lower altitude than the water tank. The only cost is the investment in the pump and the pipes. There are no operating costs.

USAID-ACCESO has helped install 17 of these systems for farming operations and 2 for potable water systems. Assistance has also been given to develop two local rural manufacturers, both technically in the pump specifications and manufacture, and on business aspects in terms of unit cost, labor and materials.

### Collaboration

In the implementation of the renewable energy activities USAID-ACCESO collaborated with a wide range of organizations and institutions, including municipalities, Solaris, FHIS, IHCAFE, FHIA, TECHO, EAP Zamorano, and SNV.

A significant amount of time was dedicated to the USAID University of Florida Trilateral Project, including initial designs, field tour visits, and training. The project was initially housed in the USAID-ACCESO Tegucigalpa office to facilitate coordination. The initial aim was to coordinate activities to install renewable energy projects in USAID-ACCESO households and farms. The Trilateral project focused on installing *eco-justa* stoves in production related households and solar panels in the CENs. Although originally planned, no activities were carried out with the solar dryers for farm operations. According to USAID-ACCESO data, the Trilateral project has installed 1,450 Eco-Justa stoves and 30 solar panels with project clients. Three potential sites for micro-turbines in USAID-ACCESO communities were provided to UF for assessment, for which construction began in two communities in La Paz in the last quarter of FY 2013/2014.

## 5.5 USE OF QUALITY MATERNAL AND CHILD HEALTH AND FAMILY PLANNING SERVICES INCREASED (IR 4.1)

USAID-ACCESO fully integrated the nutrition and health activities with all other technical areas, including economic development (access to food), renewable energy (improved stoves), NRM (drinking water access and chlorination, waste disposal), and value-added products and animal production (diet diversity).

NUTRITION AND HEALTH			
<b>Dedicated technicians</b>	22		
<b>Training Events</b>	6,877		
<b>Training Participants</b>	6,477 men	97,144 women	Total 103,621
<b>Training Individuals</b>	1,458 men	8,997 women	Total 10,479
<b>Technical Assistance</b>	55,128		
<b>Investment</b>	Clients \$1,658,555	Others \$548,096	Total \$2,206,651
<b>Training materials</b>	9 bulletins	3 presentations	Total 12

As a result of strategies implemented since the second quarter of 2014 (community mobilization to identify and incorporate to AIN-C records all children under 2 years old in the community and expand to new communities), project's health and nutrition services finalized with work in 225 communities in 56 municipalities (after suspension of services to some communities with high insecurity for project staff).

Since AIN-C ceased operation in 2012, USAID-ACCESO worked directly with the community health volunteers to continue growth monitoring activities, while improving their skills to weigh children and record data as well as to provide training and services to the mothers. In accordance with Ministry of Health standards for the AIN-C program, the data was collected on children under 2 years of age (not on children under 5 years of age) by project nutrition and health staff during growth monitoring sessions in prioritized communities where the USAID-ACCESO nutrition component was implemented. It should be noted that the communities where USAID-ACCESO was working were predominantly those that had the highest levels of malnutrition. It was expected that improvements in these communities would have positive effect on the reduction of overall department figures.

**Table 52. Status of Nutrition and Health Indicators**

Indicator	Baseline (Aug. 2011) <sup>1</sup>	Sept. 2012			Sept. 2013			Sept. 2014			Feb. 2015 or Sept. 2015		
		Results	Difference	% Change	Results	Difference	% Change	Results	Difference	% Change	Results	Difference	% Change
PIRS #19: Prevalence of underweight children under 5 <sup>2</sup> (LOP Target: -20%):													
	22.00%	16.74%	-5.26%	-23.92%	14.6%	-7.44%	-33.8%	9.6%	-12.4%	-56.4%	10.8%	-11.2%	-50.8%
PIRS #20: Prevalence of stunted children under 5 (LOP Target: -20%)													
								28.6%	-8.9%	-23.8%	16.0% *	-21.5%	-57.3%
PIRS #21: Percent of children 6-23 months that received a Minimum Acceptable Diet (LOP Target: +30%)													
								58%	-2.58%	-4.25%	na	na	na
PIRS #22: Prevalence of exclusive breast feeding of children under 6 months <sup>3</sup> (LOP Target: +20%):													
	92.24%	96.39%	+4.15%	+4.50%	94.85%	+2.61%	+2.83%	83.07%	-9.17%	-9.95%	83.7%	-8.5%	-9.22%
PIRS #23: Prevalence of anemia among women of reproductive age (LOP Target: -5%) <sup>4</sup>													
		27.70%			27.60%	-0.1%	0.4%	22.6%	-5.1%	-18.2%	na	na	na
PIRS #24: Prevalence of anemia in children 5 - 59 months (LOP Target: -20%) <sup>4</sup>													
		35.40%			37.99%	+2.61%	+7.38%	45.74%	+10.36%	+29.3%	na	na	na
PIRS #25: Women's dietary diversity: mean number of food groups consumed by women of reproductive age (LOP Target: +30%) <sup>5</sup>													
		3.40			3.54	+0.15	+4.28%	4.09	+0.7	+20.5%	5.15	1.75	51.5%
PIRS #27: Modern contraceptive prevalence rate <sup>6</sup> (LOP target: +10%):													
	27.5%	30.6%	+3.1%	+11.2%	56.0%	+28.5%	+103.4	68.8%	+41.3%	+150.2%	68.3%	40.8%	148.3%
<sup>1</sup> , PIR#19 and PIR#22 baseline from AIN-C data for the communities with USAID-ACCESO nutrition intervention. <sup>2</sup> , PIR#19 data collected monthly with health monitors for the communities with USAID-ACCESO nutrition interventions; data collected by health monitors only for children under 2 years old. <sup>3</sup> , PIR#22 data collected monthly with health monitors for the communities with USAID-ACCESO nutrition interventions <sup>4</sup> , Anemia indicators with baseline date of August 2012 (data collected by USAID-ACCESO). Data reported corresponds to anemia in children 6-23 months of age. No data available for FY2014/2015 due to the unavailability of measurement materials. <sup>5</sup> , Baseline September 2012 HH survey with 3.4 groups. Final result is September 2015 data. <sup>6</sup> , PIR#27 baseline from USAID-ACCESO client sample survey for those households with a minimum of six months between survey interviews. na. not available * Result for PIRS # 20 is from December 2014 data													

**PIRS #18: Prevalence of households with moderate to severe hunger**

Data to have been collected by IFPRI.

**PIRS #19: Prevalence of underweight children under 5**

The final result from data collected in February 2015 showed a reduction of 50.8 percent in the prevalence of underweight children under 2, against a target of 20 percent reduction. Percentage at baseline was 22.0 percent compared to the result of 10.8 percent in February 2015.

Project results clearly indicate that significant advances were made in reducing acute malnutrition. The number of children (under 2 years old) under the third percentile was reduced from:

22.0 percent in August 2011 (936 of 4,253 children), to:

- 16.7 percent in September 2012 (796 of 4,754 children) – reduction from baseline of 23.9 percent
- 14.6 percent in September 2013 (626 of 4,296 children) – reduction from baseline of 33.8 percent
- 9.6 percent in September 2014 (415 of 4,329 children) – reduction from baseline of 56.4 percent
- 10.8 percent in February 2015 (372 of 3,432 children) – reduction from baseline of 50.8 percent

As a result of strategies implemented in the final year to expand services into new communities, 24 new communities and an additional 400 children under 2 years of age were added. As of February 2015, the project was serving a total of 5,021 children under 2 in 225 communities in 56 municipalities. This coverage does not include communities from which the project had to withdraw services due to high insecurity.

The prevalence of acute malnutrition in children under 2 in new communities was reduced significantly after less than one year of project interventions. These communities were selected based on the criteria that the community is served by a decentralized health service provider, the presence of USAID-ACCESO's agriculture production activities and the existence of trained community health volunteers implementing AIN-C. The baseline of *Prevalence of Underweight Children Under 2 Years* in these new communities two years after the close-out of activities of the decentralized AIN-C service providers under the World Bank project is consistent with what it was in the old communities when USAID-ACCESO initiated service delivery to them in 2011: 22.5 percent for January 2014. After one year of support, it was reduced to 11.1 percent in February 2015, which represents a 50.7 percent reduction from baseline in 13 months. This is a very clear indication that growth monitoring activities as delivered by AIN-C groups on its own cannot affect the nutritional status of children. The USAID-ACCESO strategies to reduce acute malnutrition worked. Complementary activities aimed to improve child feeding practices, food availability at the community level, household conditions and personal hygiene, hence increasing food intake and reducing gastrointestinal and respiratory disease in these poor communities, were crucial to reduce the prevalence rates of this indicator.

Data by department and year are given in Tables 53 to 56.

**Table 53. Prevalence of Underweight Children Under 2 Per Department (original communities)**

Department	# children < 2 years					# children under 3 <sup>o</sup> percentile					%				
	Aug. 2011	Sept. 2012	Sept. 2013	Sept. 2014	Feb. 2015	Aug. 2011	Sept. 2012	Sept. 2013	Sept. 2014	Feb. 2015	Aug. 2011	Sept. 2012	Sept. 2013	Sept. 2014	Feb. 2015
La Paz	634	603	669	674	598	123	102	73	46	40	19.4	16.9	10.9	6.8	6.7
Intibucá	629	793	750	839	737	185	191	124	100	78	29.4	24.1	16.5	11.9	10.6
Lempira	1,260	1,177	979	893	621	293	165	136	102	91	23.3	14.0	13.9	11.4	14.7
Copán	424	950	838	872	695	112	162	145	83	102	26.4	17.1	17.3	9.5	14.7
Ocatepeque	419	636	427	397	281	92	113	84	58	43	22.0	17.8	19.7	14.6	15.3
Santa Barbara	887	595	630	654	500	131	63	64	26	18	14.8	10.6	10.2	4.0	3.6
<b>Total</b>	<b>4,253</b>	<b>4,754</b>	<b>4,293</b>	<b>4,329</b>	<b>3,432</b>	<b>936</b>	<b>796</b>	<b>626</b>	<b>415</b>	<b>372</b>	<b>22.0</b>	<b>16.7</b>	<b>14.6</b>	<b>9.6</b>	<b>10.8</b>

<sup>1</sup>, Note: data from 200 original communities with USAID-ACCESO nutrition intervention.

**Table 54. Prevalence of Underweight Children Under 2 Per Department (new communities)**

Department	# children < 2 years			# children under 3 <sup>o</sup> percentile			%		
	Jan. 2014	Sept. 2014	Feb. 2015	Jan. 2014	Sept. 2014	Feb. 2015	Jan. 2014	Sept. 2014	Feb. 2015
La Paz	-	111	104	-	15	9	-	13.5	8.6
Intibucá	-	77	71	-	12	13	-	15.6	18.3
Lempira	49	67	71	9	9	6	18.3	13.4	8.5
Copán	-	125	76	-	14	8	-	11.2	10.5
Ocatepeque	13	21	21	5	4	5	38.4	19.0	23.9
Santa Barbara	-	33	28	-	1	0	1	3.0	0
<b>Total</b>	<b>62</b>	<b>434</b>	<b>371</b>	<b>14</b>	<b>55</b>	<b>41</b>	<b>22.5</b>	<b>12.7</b>	<b>11.1</b>

<sup>1</sup>, Note: data from 25 new communities with USAID-ACCESO nutrition intervention starting January 2014

**Table 55. Prevalence of Underweight Children Under 2 Years Old (Original Communities)**

Month/Year	# Children < 2 years old	# Children under the 3 <sup>o</sup> percentile	%
Aug-11	4,253	936	22.0
Mar-12	4,419	834	18.9
Apr-12	4,700	892	19.0
May-12	4,944	902	18.2
Jun-12	4,664	879	18.8
Jul-12	4,972	950	19.1
Aug-12	4,895	916	18.7
Sep-12	4,754	796	16.7
Oct-12	4,835	780	16.1
Nov-12	3,815	703	18.4
Dec-12	3,615	649	18.0
Jan-13	3,911	645	16.5
Feb-13	3,903	634	16.2
Mar-13	4,042	648	16.0
Apr-13	4,191	682	16.3
May-13	4,207	649	15.4
Jun-13	4,299	649	15.1
Jul-13	4,260	663	15.6
Aug-13	4,403	651	14.8
Sep-13	4,296	626	14.6
Oct-13	4,204	607	14.4
Nov-13	4,103	508	12.4
Dec-13	3,905	556	14.2
Jan-14	3,799	514	13.5
Feb-14	3,842	529	13.7
Mar-14	3,930	544	13.8
Apr-14	3,867	519	13.4
May-14	4,201	551	13.1
Jun-14	4,173	559	13.3
Jul-14	4,357	556	12.7
Aug-14	4,320	470	10.8
Sep-14	4,329	415	9.6
Oct-14	4,263	400	9.4
Nov-14	3,956	324	8.2
Dec-14	3,408	318	9.3
Jan-15	3,234	284	8.8
Feb-15	3,432	372	10.8

**Table 56. Prevalence of Underweight Children Under 2 Years Old (New Communities)**

Month/Year	# Children < 2 years old	# Children under the 3 <sup>o</sup> percentile	%
Jan-14	62	14	22.5
Feb-14	167	35	20.9
Mar-14	429	81	18.8
Apr-14	371	66	17.8
May-14	458	78	17.0
Jun-14	467	76	16.3
Jul-14	421	65	15.4
Aug-14	440	80	18.2
Sep-14	434	55	12.7
Oct-14	442	53	12.0
Nov-14	433	55	12.7
Dec-14	447	49	11.0
Jan-15	403	49	12.2
Feb-15	371	41	11.1

Project implementation strategies for the treatment and prevention of malnourished children under 2 years of age were similar in all departments. Though all six departments demonstrated a decrease in the rate of malnourished children under 2 years over the three-year period, it is important to highlight the results of project implementation strategies in Intibucá where the rate has reduced from 29.4 percent in 2011 (the highest prevalence rate of all six departments) to 10.6 percent in February 2015, which represents a 64 percent reduction. Santa Barbara presents the lowest prevalence rates among all six departments since 2011 where project activities have resulted in an outstanding 76 percent reduction from 14.8 percent in 2011 to 3.6 percent as of February 2015.

Overall, the results for this indicator were positive and indicated that project implementation strategies and methodology have worked well – prioritized communities and population focusing on mothers and children attending the AIN-C groups; counseling mothers on child nutrition, training and food preparation demonstrations; targeting family households with malnourished children for regular home visits to assist mothers with the practice of food preparation and feeding of the malnourished child and reinforce proper individual and household hygienic practices. Furthermore, along with technical assistance and training, USAID-ACCESO implemented household improvement initiatives in collaboration with families as preventive measures to address household conditions which contribute to child illness such as: installing eco-stoves, improving floors and walls, access to potable water inside the house, transparent roof sheets to improve illumination, and water filters.

#### **PIRS #20: Prevalence of stunted children under 5**

From the onset, this indicator was to be measured by IFRPI. As this was delayed and USAID-ACCESO needed the data for tracking and management purposes the decision was taken to collect the data.

The final result from data collected in December 2014 showed a reduction of 57.3 percent in the prevalence of stunted children under 5, against a target of 20 percent reduction. Percentage at baseline in October 2013 was 37.5 percent compared to the result of 16.0 percent in December 2014.

According to ENDESA 2011-2012, 23 percent of children between 6 months and 5 years of age experience stunting, with the highest percentage in Intibucá and Lempira. In January 2013, USAID-ACCESO began tracking height and weight per age for all children turning 2 and over during their last attendance to AIN-C growth monitoring sessions. An analysis of this data during the first two quarters of FY 2013/2014 gave results consistent with those of ENDESA. For December 2014, the result for all

six departments was 16.0 percent, which is a significant reduction from 37.5 percent in October 2013 (Tables 57a to 57e).

Chronic malnutrition or stunting indicates the cumulative effects of malnutrition and micronutrients deficiencies over time. It is associated with intrauterine growth retardation (low birth weight babies are prone to become stunted especially if the mother herself is stunted and has poor nutritional status), socioeconomic conditions, level of education of the mothers, and health conditions of the mother. Other contributors to stunting include chronic or recurrent infections, sometimes in combination with intestinal parasites. The prevalence of growth stunting, particularly among children under 2, can also reflect the prevalence of low birth weight in a population.

Though project interventions to address the problem of low weight for age ultimately had a positive effect, thus the consistent reduction of the prevalence rate of malnutrition, the rates of stunting still reflect the cumulative effect of the severity of this health condition in the child over the first two years of life in addition to conditions of the child at birth due to the health of the mother. Studies conducted in developing countries around the world assessing the prevalence of stunting, malnutrition, and wasting has produced results of higher prevalence rates for stunting than for malnutrition and wasting in the same period of time because of the overall effect of malnutrition in the stunting of the child.

As indicated in tables below, the behavior of this indicator is not consistent with that of acute malnutrition where there is a gradual and sustained decline over time. Chronic malnutrition fluctuated with increases and declines over each quarter. Understanding the concept of chronic malnutrition and its causes was crucial to better understand the results obtained for this indicator. Micronutrient deficiencies cause permanent loss of growth in children and most of them never regain from these effects, leading to long-term deficits in mental capacity. Given the behavior of this indicator over the past two ENDESA's, it is apparent that there is a need to review the implementation of national policies, as well as their appropriateness and impact.

**Table 57a. Stunting in Children 2 Years of Age per Department (October to Dec. 2013)**

Department	# of Children 23 months of age in AIN-C			# of Children with Stunting			Percentage		
	Oct	Nov	Dec	Oct	Nov	Dec	Oct	Nov	Dec
La Paz	15	19	15	6	6	6	40.0	31.6	40.0
Intibucá	0	11	7	0	4	6	0.0	36.4	85.7
Santa Bárbara	10	9	0	4	3	0	40.0	33.3	0.0
Lempira	21	20	14	6	6	12	28.6	30.0	85.7
Copán	32	31	10	13	7	3	40.6	22.6	30.0
Ocotepeque	18	11	15	7	4	3	38.9	36.4	20.0
<b>Total</b>	<b>96</b>	<b>101</b>	<b>61</b>	<b>36</b>	<b>30</b>	<b>30</b>	<b>37.5</b>	<b>29.7</b>	<b>49.2</b>

**Table 57b. Stunting in Children 2 Years of Age per Department (January to March 2014)**

Department	# of Children 23 months of age in AIN-C			# of Children with Stunting			Percentage		
	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar
La Paz	12	14	25	3	5	6	25.0	35.7	24.0
Intibucá	8	22	12	4	13	8	50.0	59.0	66.6
Santa Bárbara	6	6	4	3	2	0	50.0	33.3	0.0
Lempira	11	22	36	1	4	4	9.0	18.1	11.1
Copán	8	14	17	0	4	6	0.0	28.5	35.2
Ocotepeque	14	7	10	3	4	4	21.4	57.1	40.0
<b>Total</b>	<b>59</b>	<b>85</b>	<b>104</b>	<b>14</b>	<b>32</b>	<b>28</b>	<b>23.7</b>	<b>37.6</b>	<b>26.9</b>

**Table 57c. Stunting in Children 2 Years of Age per Department (April to June 2014)**

Department	# of Children 23 months of age in AIN-C			# of Children with Stunting			Percentage		
	Apr.	May	June	Apr.	May	June	Apr.	May	June
La Paz	14	30	9	4	5	2	28.6	16.7	22.2
Intibucá	12	16	17	6	7	7	50.0	43.8	41.2
Santa Bárbara	6	9	8	1	0	1	16.7	0	12.5
Lempira	27	49	23	9	11	5	33.3	22.4	21.7
Copán	18	20	25	6	8	8	33.3	40.0	32.0
Ocotepeque	6	29	13	3	16	4	50.0	55.2	30.8
<b>Total</b>	<b>83</b>	<b>153</b>	<b>95</b>	<b>29</b>	<b>47</b>	<b>27</b>	<b>34.9</b>	<b>30.7</b>	<b>28.4</b>

**Table 57d. Stunting in Children 2 Years of Age per Department (July to Sept. 2014)**

Department	# of Children 23 months of age in AIN-C			# of Children with Stunting			Percentage		
	Apr.	May	June	Apr.	May	June	Apr.	May	June
La Paz	2	21	15	0	4	2	0	19	13
Intibucá	9	16	12	3	11	7	33	69	58
Santa Bárbara	16	6	8	2	0	0	12	0	0
Lempira	36	22	29	14	3	5	39	14	17
Copán	25	32	37	7	13	9	28	41	24
Ocotepeque	17	11	25	9	2	13	53	18	52
<b>Total</b>	<b>105</b>	<b>108</b>	<b>126</b>	<b>35</b>	<b>33</b>	<b>36</b>	<b>33.3</b>	<b>30.5</b>	<b>28.5</b>

**Table 57e. Stunting in Children 2 Years of Age per Department (October to December 2014)**

Department	# of Children 23 months of age in AIN-C			# of Children with Stunting			Percentage		
	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.
La Paz	17	17	20	2	1	0	11.8	5.9	0.0
Intibucá	12	17	12	7	5	8	58.3	29.4	66.7
Santa Bárbara	9	16	5	1	0	2	11.1	0.0	40.0
Lempira	26	24	14	4	3	1	15.4	12.5	7.1
Copán	29	37	23	5	8	1	17.2	21.6	4.3
Ocotepeque	15	20	7	2	2	1	13.3	10.0	14.3
<b>Total</b>	<b>108</b>	<b>131</b>	<b>81</b>	<b>21</b>	<b>19</b>	<b>13</b>	<b>19.4</b>	<b>14.5</b>	<b>16.0</b>

**PIRS #21: Percent of children 6-23 months that received a minimum acceptable diet**

Nutrition and health staff conducted a survey among mothers of children 6-23 months of age to assess the status of the minimum acceptable diet. Data was collected for the first time in 2013 and was repeated 2014. It was originally expected that this data would be provided by IFPRI. Of the total 505 children surveyed, 293 were receiving the minimum acceptable diet and received feedings from at least four of the food groups (58 percent compared to 61 percent in 2013), of which 266 children were 9-23 months of age, and the remaining 27 were between 6 and 8 months of age. Of the 505, 317 were receiving breastfeeding of which 187 (59.0 percent compared to 64.0 percent in 2013) were receiving a minimum acceptable diet. Of the 188 children who were not being breastfed, 106 (56.3 percent compared to 49 percent in 2013) were receiving a minimum acceptable diet (Table 58). Data collection

was included in the M&E process for FY 2014/2015 but is not considered comparable with the previous data as it covered the M&E survey population rather than the N&H population. Consequently the September 2014 data is considered the final data.

The number of children receiving a minimum acceptable diet dropped from 61 percent in 2013 to 58 percent in 2014. Though the difference is not significant enough to raise concern, analysis of results concluded the slight drop can be a result of the higher proportion of non-breastfeeding children in the age group studied in 2014 (37 percent) compared to the proportion of non-breastfeeding children in the age group studied in 2013 (23 percent). In both 2013 and 2014 surveys, a high percentage of children who were not being breastfed were also not receiving the minimum acceptable diet. The assumption is that there is a relation between prevalence of these two practices and regular attendance to group meetings will eventually change knowledge and practice.

To ensure feeding practices contributed to the proper weight increase according to standards and impact the reduction of malnutrition, health technicians emphasize the importance of increasing the number of feedings for the child during the day. Although no significant change was observed in the number of children with a minimum acceptable diet, the results of the survey conducted demonstrated an outstanding impact in this practice among both age groups: 97 percent of children who were being breastfed received the minimum frequency of feedings and 99 percent of those who were not being breastfed were receiving the minimum frequency of feedings per day.

**Table 58. Children 6 to 23 Months That Received a Minimum Acceptable Diet**

	Sept. 2013	Sept. 2014
<b># children</b>	449	505
# receiving minimum acceptable diet	272	293
% receiving minimum acceptable diet	61%	58%
<b># children being breastfed</b>	347	317
# breastfed children with minimum acceptable diet	222	187
% breastfed children with minimum acceptable diet	64%	59%
<b># non-breastfed children</b>	102	188
# non-breastfed children with minimum acceptable diet	50	106
% non-breastfed children with minimum acceptable diet	49%	56%

*Minimum acceptable diet for breastfed children 6-23 months is defined as four or more food groups out of the seven food groups: Grains, roots and tubers, Legumes and nuts, Dairy products (milk, yogurt, and cheese), Flesh foods (meat, fish, poultry and liver/organ meats), Eggs, Vitamin-A rich fruits and vegetables, Other fruits and vegetables.*

*Minimum acceptable diet for non-breastfed children is defined as four or more food groups out of the following six food groups: Grains, roots and tubers, Legumes and nuts, Flesh foods, Eggs, Vitamin-A rich fruits and vegetables, and other fruits and vegetables.*

## **PIRS #22: Prevalence of exclusive breast feeding of children under 6 months**

According to ENDESA 2011-2012, the prevalence of exclusive breastfeeding among children under 6 months is 31 percent, and in the majority of the departments, the duration of exclusive breastfeeding has a median of less than 1 month. The percentage of children reported as receiving exclusive breastfeeding decreased from reported baseline of 92.3 percent in September 2011 to 83.1 percent in September 2014 and 83.7 percent in February 2015 (Table 59). Exclusive breastfeeding is a difficult practice to measure and requires technical expertise, knowledge of cultural practices among the population, and practical skill to collect accurate data. As indicated in project reports, a project health specialist identified in late 2013 that data collection methods used were not allowing accurate measurement and took corrective actions by training field staff and community health volunteers to properly collect data on this practice. The standardization of the concept as well as the questions asked to collect data during the monthly meetings was modified.

This change in the data collection method resulted in an immediate reduction of the prevalence rates compared to previous reporting periods and though there is no way to tell what the actual baseline

rates were in 2011, the project is confident there has been a positive impact on this indicator as a result of project interventions. With more than 80 percent reporting exclusive breastfeeding, the number was significantly higher than the 31 percent reported in the 2011-2012 ENDESA rates.

**Table 59. Prevalence of Exclusive Breastfeeding of Children Under 6 Months**

Department	# children < 6 months					# children with exclusive breastfeeding					%				
	Aug. 2011	Sept. 2012	Sept. 2013	Sept. 2014	Feb. 2014	Aug. 2011	Sept. 2012	Sept. 2013	Sept. 2014	Feb. 2014	Aug. 2011	Sept. 2012	Sept. 2013	Sept. 2014	Feb. 2014
La Paz	132	88	177	114	100	115	85	177	109	90	87.12	96.59	100.00	95.6	90.0
Intibucá	80	128	146	159	153	67	117	127	133	126	83.75	91.41	86.99	83.6	82.4
Lempira	285	148	160	164	111	269	141	154	153	107	94.39	95.27	96.25	93.3	96.4
Copán	93	147	159	169	138	90	143	146	134	105	96.77	97.28	91.82	79.3	76.1
Ocotepeque	80	103	100	80	65	77	103	97	73	59	96.25	100.00	97.00	91.2	90.8
Santa Barbara	NA	74	131	123	146	NA	74	131	70	110	ND	100.00	100.00	56.9	75.3
<b>Total</b>	<b>670</b>	<b>688</b>	<b>876</b>	<b>809</b>	<b>713</b>	<b>618</b>	<b>663</b>	<b>840</b>	<b>672</b>	<b>597</b>	<b>92.24</b>	<b>96.37</b>	<b>95.30</b>	<b>83.1</b>	<b>83.7</b>

PIRS #23 and PIRS #24 relate to the prevalence of anemia in women of reproductive ages and children under 5 years old. From the onset, these indicators were to be measure by IFRPI. As this was delayed and USAID-ACCESO needed the data for tracking and management purposes the decision was taken to buy the required equipment and carry out the tests (the equipment was subsequently lent to IFPRI). In August 2012, USAID-ACCESO technicians measured anemia levels in these two categories, including pregnant women, in communities where the USAID-ACCESO nutrition component was operating. The results of this testing were used as the baseline for USAID-ACCESO.

### **PIRS #23: Prevalence of anaemia among women of reproductive age**

The final result from data collected for the September 2014 annual report showed a reduction of 18.2 percent in the prevalence of anemia in women of reproductive age, against a target of 5 percent reduction.

The baseline sample was carried out in August 2012 of women of reproductive age – the mothers of children under 2 years that were sampled – of which 27.7 percent had a hemoglobin level of less than 12g/dl (the level considered normal in this group). This compared to the ENDESA figure of 16.5 percent for the same group. Santa Barbara was the department with the highest rate with 34 percent (also coinciding with the rate for children under two years in this department).

Testing was again carried out in 2013 of mothers of children under 2 years of age selected for testing. Of the 490 women tested, 27.6 percent (compared to 27.7 percent at baseline) had a hemoglobin level of less than 12g/dl. Intibucá was the department with the highest rate of anemic women in reproductive age with 38.9 percent followed by La Paz with 37.8 percent and Santa Barbara with 31.9 percent which was a decrease from the baseline of 36.2 percent. Ocotepeque was the department with the lowest rate at 15.9 percent, which also decreased from the baseline of 21.3 percent.

In August-September 2014, testing of women in reproductive age was carried out on mothers of children selected for the sample for hemoglobin testing. A total of 517 women were tested of which 117 (22.6 percent) resulted as anemic, an 18.2 percent decrease from baseline in 2012.

These results, when analyzed along with food consumption practices among project assisted households in 2014, suggested a correlation between the reduction of anemia in women and the increased number of families that were consuming from an average of four food groups, compared to 3.5 in 2013. Improvements in household conditions and food preparation methods have likely contributed to these results. In addition, women of reproductive age are less likely to have absorption problems with supplements provided during pregnancy through health centers, than children under 2 years of age.

**Table 60. Prevalence of Anemia In Women of Reproductive Age and Children Under 2**

Department	Women of Reproductive Age			Children < 2 years		
	# sampled	# with < 12g/dl	%	# sampled	# < 10.5g/dl	%
<b>Baseline August 2012</b>						
La Paz	34	10	29.4	23	9	39.1
Intibucá	47	16	34.0	21	8	38.1
Lempira	68	15	22.1	59	13	22.0
Copán	53	12	22.6	45	17	37.8
Ocotepeque	47	10	21.3	29	6	20.7
Santa Bárbara	69	25	36.2	35	22	62.9
<b>TOTAL</b>	<b>318</b>	<b>88</b>	<b>27.7</b>	<b>212</b>	<b>75</b>	<b>35.4</b>
<b>Results August 2013</b>						

**Table 60. Prevalence of Anemia In Women of Reproductive Age and Children Under 2**

Department	Women of Reproductive Age			Children < 2 years		
	# sampled	# with < 12g/dl	%	# sampled	# < 10.5g/dl	%
La Paz	37	14	37.8	25	12	48.0
Intibucá	90	35	38.9	53	26	49.1
Lempira	143	31	21.7	90	18	20.0
Copán	104	29	27.9	72	37	51.4
Ocotepeque	69	11	15.9	52	17	32.7
Santa Bárbara	47	15	31.9	37	15	40.5
<b>TOTAL</b>	<b>490</b>	<b>135</b>	<b>27.6</b>	<b>329</b>	<b>125</b>	<b>38.0</b>
<b>Results August 2014</b>						
La Paz	74	18	24.3	77	30	39.0
Intibucá	115	32	27.8	109	47	43.1
Lempira	103	20	19.4	101	49	48.5
Copán	104	33	31.7	102	69	67.6
Ocotepeque	45	2	4.4	45	16	35.6
Santa Bárbara	70	11	15.7	71	20	28.2
<b>TOTAL</b>	<b>511</b>	<b>116</b>	<b>22.7</b>	<b>505</b>	<b>231</b>	<b>45.7</b>

**PIRS #24: Prevalence of anemia in children 5 - 59 months**

The final result from data collected for the September 2014 annual report showed an increase of 29.3 percent in the prevalence of anemia in children 5-59 months, against a target of 20 percent reduction.

The baseline sample was carried out in August 2012 with 212 children less than 2 years of age, of which 75 had a hemoglobin level of less than 10.5 g/dl. Data showed that 35 percent of children sampled from the six departments were considered anemic. Santa Barbara presented the highest rate with 63 percent of children, followed by La Paz with 39 percent and Intibucá and Copán with 38 percent. The department of Ocotepeque had the lowest rate with 21 percent which was 2 percentage points lower than that of ENDESA (37.1 percent).

In August 2013, USAID-ACCESO tested 329 children less than 2 years of age in the six departments, of which 38 percent (125 children) resulted anemic (based on an hemoglobin level of less than 10.5 g/dl), compared to the baseline of 35 percent.

A project health specialist attributed this increase in cases of anemia to the fact that health service providers attending these AIN-C groups up to March 2012 provided all children less than 2 years of age with iron and zinc supplements on a monthly basis, and by doing so ensured they received appropriate nutrients to reduce anemia. Copán presented the highest rate with 51 percent, followed by Intibucá with 49 percent and La Paz with 48 percent. Lempira's rate dropped from baseline of 22 percent to 20 percent and is also the department with the lowest rate of anemia in children under 2 during this period. Importantly, the rate of anemia in children under 2 also decreased in Santa Barbara from the baseline of 62.9 percent to 40.5 percent during 2013.

During August-September 2014, health and nutrition staff, with the assistance of the M&E director, randomly selected a sample of 35 communities from all six departments to be surveyed for minimum acceptable diet and hemoglobin testing. A total of 521 children 6-23 months were randomly selected as subjects of the survey, and their respective mothers were the subjects of hemoglobin count in women

of reproductive age. For the purpose of analysis only 505 records were considered as the remaining 16 were either children younger than 6 months or older than 24 months of age.

Of the 505 children 6-23 months of age tested, 231 resulted with anemia (45.7 percent), an increase of 29.3 percent compared to baseline. The increase occurred across five of the six departments, with only Santa Barbara showing a decrease against baseline (Table 60). It is also important to point out that the mothers of the 505 children tested were also surveyed to identify those children that were actually receiving iron intakes. Of the 231 anemic children, 132 (57.1 percent) were receiving one of two different sources of iron supplements during the six months previous to the test. Of the 132 children who were receiving iron supplements six months previous to testing, 89 children (67 percent) were children 12 to 24 months of age.

Tables 61 and 62 present the distribution of anemia by type and sex. Of the 231 children with anemia, 177 (76.6 percent) experienced mild anemia, which meant that the large majority of the anemic children could be treated with oral therapy. While these results may appear high and raise genuine concerns, reports on experiences in other Latin America countries as well as the US demonstrates that despite the living conditions of project clients, this aspect of their health (anemia) is similar to other populations in countries with far better socioeconomic conditions. It also raises awareness to the need to strengthen the capacity of health facilities in the area to closer monitor this health condition among this particular age group. Project results for 2014 were very consistent with national rates presented by ENDESA 2011-2012: a 29.1 national rate for children 6-59 months of age, with the highest rates being among children 6-8 months with a 59.5 percent and a 52.4 percent in children 9-11 months.

Recognizing that as a medical condition, anemia is treated subject to the type and cause, leading ministries of health around the world put preventive measures in place, which involve supplementation of pregnant and lactating women, practices during child birth, and promotion of preventive measures during the first years of life of the child. The results also raised awareness to the need to strengthen the capacity of health facilities in the area to closer monitor this health condition among this particular age group and report results to regional and national levels to enable decision makers within the Ministry of Health to become aware of the need to review its programs and policies addressing child care.

**Table 61. Classification Of Anemia In Children 6-23 Months By Type (Sept. 2014)**

Hemoglobin	#	%	Anemia
<=5.9	1	0.2%	Anemia- severe: < 5.9 g/dl*
6-8.9	53	10.5%	Anemia- moderate: 6.0-8.9 g/dl*
9-10.4	177	35.0%	Anemia- mild: 9.0-10.4 g/dl*
	231	45.7%	WITH ANEMIA
	274	54.3%	WITHOUT ANEMIA
	<b>505</b>	<b>100.0%</b>	<b>TOTAL SAMPLE</b>

\* Ref: Honduras ENDESA DHS 2012 06-19-2013

**Table 62. Classification of Anemia in Children 6-23 Months by Sex**

Hemoglobin	Male	Female	Anemia
<=5.9	1	0	Anemia- severe: < 5.9 g/dl*
6-8.9	28	25	Anemia- moderate: 6.0-8.9 g/dl*
9-10.4	89	88	Anemia- mild: 9.0-10.4 g/dl*
<b>231</b>	<b>118</b>	<b>113</b>	<b>With Anemia</b>
	51.1%	48.9%	<b>% According To Sex</b>
<b>274</b>	<b>137</b>	<b>137</b>	<b>Without Anemia</b>
	50%	50%	<b>% According To Sex</b>

\* Ref: Honduras ENDESA DHS 2012 06-19-2013

Furthermore, USAID-ACCESO did not provide supplements to communities or children as the Ministry of Health should and most NGOs do. The project aimed to achieve sustainable changes, as can be seen in the case of acute malnutrition. If the project gave away or distributed supplements and there was no system in place to continue post-project, any improvement would be simply be lost in the next batch of children. This should have been addressed at the policy/Ministry of Health level, perhaps with the USAID ULAT project (or perhaps it was). The project focus was to increase the vitamin and mineral content in the diet, which was achieved through the “fortified” tortilla and other means. But in the case of anemia, it was not expected that the tortilla and increased consumption of leafy greens would eliminate the problem. In retrospect, in order to help meet the target, USAID-ACCESO should have distributed or obtained supplements.

Following a thorough analysis of the data up to September 2014 and all the facts, USAID-ACCESO nutrition and health leaders and specialists determined that it was necessary to assess the extent to which mothers and caregivers had modified their practices to reflect key messages promoted by project staff related to child feeding and personal and household hygiene. Field visits to selected communities in four of the six departments assessed mother and caregiver practices related to child care to identify determinant factors that could be contributing to anemia in children less than 2 in the ZOI. Results of this exercise concluded that mothers had knowledge and clarity of key messages promoted by project staff and that this knowledge was applied in their practice related to child feeding. However, issues related to hygiene remained a problem as living conditions include mud floors; further, a large percentage of households still lacked access to potable water despite activities implemented by the project to address these problems in many (but not all) communities. Following this exercise, discussions of findings with representatives from Ministry of Health, USAID, and the Department of Microbiology of the National University of Honduras (UNAH) led to a two-stage intervention plan:

- The immediate stage, which consisted of a field study in collaboration with the UNAH to identify the level of parasitism in children 6-23 months of age.
- The ongoing stages consisted first of the delivery of individualized treatment to each child tested based on results and prescribed by a pediatrician; and second, an ongoing collaborative effort with the Ministry of Health facilities in the communities for the distribution of micronutrients along with a continued delivery of counseling on preventive measures to mothers and caregivers.

The field study to assess the prevalence of parasites among children 6-24 months was conducted in January 2015 with a team of microbiologist from the UNAH leading in collaboration with staff from clinical laboratories in each of the health regional offices in each of the six departments. A total of 339 children 6-24 months from 21 communities of the six departments were tested, of which 54 percent tested positive for one or more types of parasites, while 50 percent were anemic. Of the children who

tested positive for parasites, 30 percent also had anemia. A pediatrician analyzed results for each child tested, and prescribed individual treatment considering age, weight, and the presence of anemia.

Treatments were administered directly to each child by health staff in each community in February 2015. In addition, simultaneously, project health specialists continued to work closely with public and private health service providers to identify and address other factors among children in targeted communities that contribute to the increase in the prevalence of anemia among children under 2. An extensive review of the literature revealed that the most common contributing factors are those which inhibit the absorption of iron such as parasitism, consumption of coffee, lack of consumption of other micronutrients, as well as those that contribute to blood loss leading to anemia such as specific practices during child birth, and consumption of cow's milk by children under 2. Key messages addressing these practices were developed and were promoted by project staff.

Results of the study on prevalence of parasites were presented and discussed with key actors in the Ministry of Health, donor community, and policy makers with the expectation that they will raise awareness of the need to address the issue at all levels, specifically the need for further rigorous studies to support the revision of norms and standards for primary health care services for children under 2 years of age and the revision of investments with the assistance of the international donor community.

This was the first time that this type of study had been carried out in Honduras, and demonstrated that reduction in anemia cannot be solved by diet and supplements alone. Future activities will also have to take into consideration these findings. More frequent anemia and parasite testing will also be required.

#### **PIRS #25. Women's dietary diversity: mean number of food groups consumed by women of reproductive age**

The baseline for number of food groups consumed at the household level was determined in September 2012 in client surveys carried out by the M&E team (98 percent of the client households sampled included women). The number of food groups average 3.4. The exercise was repeated in September 2013, where the average was 3.54 food groups (an increase of 4.3 percent); and in September 2014 with 4.09 groups. The final result from data collected for the FY 2014-2015 survey showed an increase of 51.5 percent increase in the mean number of food groups consumed by women of reproductive age against a target 30 percent. The number increased from 3.40 groups to 5.15 groups.

The mean minimum number of food groups consumed by women of reproductive age was calculated by averaging the number of food groups consumed (out of the nine food groups: grains, roots and tubers; legumes and nuts; dairy products (milk, yogurt, cheese); organ meat; eggs; flesh foods and other misc. small animal protein; vitamin A dark green leafy vegetables; other vitamin A rich vegetables and fruits; and other fruits and vegetables) consumed across all women of reproductive age in the sample.

This increase in the mean numbers of food groups consumed could have resulted from an increased availability of diverse foods at the community level because of the transformation of agriculture production, the impact of multiple methods that project health and nutrition staff employed to train mothers and caregivers on dietary diversity, or, more likely, the combination of the two.

#### **PIRS #27: Modern contraceptive prevalence rate**

The final result from data collected for February 2015 showed an increase of 148 percent in the contraceptive prevalence rate against a target 10 percent increase. The rate increased from a baseline of 27.5 percent to 68.3 percent in February 2015.

The modern contraception prevalence rate increased from 27.5 (baseline) to 30.6 percent (September 2012) and 56 percent (September 2013) across USAID-ACCESO sampled clients, with at least six months between the samplings. From the 4,316 women in the communities with project support, 2,417

responded positive to the use of modern contraceptives. This number represented a 28.5 percentage point increase indicating a 103.6 percent increase over baseline.

The modern contraception prevalence rate among mothers of children under 2 who attended growth monitoring sessions continued to increase in almost all quarters, from 56.0 percent in September 2013, to 62.5 percent in December 2013, to 64.3 percent in March 2014, and 65.8 percent in June 2014 (Table 63). The prevalence rate for all six departments as of February 2015 was 68.3 percent which represents a 40.8 percentage point increase and a 148.3 percent increase over baseline.

Baseline for this indicator collected among mothers of children under 2 recorded in AIN-C groups in **new communities** added in 2014 in the departments of La Paz, Intibucá, and Santa Barbara was 53 percent. For June and September 2014 the prevalence rate for new communities in all six departments was 67 percent, and finally 62 percent in February 2015.

This rate varies across the six departments, with highest prevalence rates in Santa Barbara, Lempira, and Ocotepeque with 79.7, 77.7 and 74.1 percent, respectively. In some departments the topic remains sensitive and women did not openly share this information, while Santa Barbara is considered a more urbanized department where the women have a slightly different mentality compared more rural departments. Health centers were frequently been short of contraceptive supplies during the life of the project.

**Table 63: Modern Contraceptive Prevalence Rate**

Department	# Children < 24 months				# Mothers Using Modern Contraceptive Methods				Percentage			
	Mar. 2014	Jun. 2014	Sept. 2014	Feb. 2015	Mar. 2014	Jun. 2014	Sept. 2014	Feb. 2015	Mar. 2014	Jun. 2014	Sept. 2014	Feb. 2015
La Paz	594	676	615	598	340	371	379	321	57.2	54.9	61.6	53.7
Intibucá	753	790	839	737	427	482	464	485	56.7	61.0	55.3	65.8
Lempira	779	841	893	621	489	585	694	602	62.8	69.6	77.7	96.9
Copán	815	872	872	695	510	585	586	430	62.6	67.1	67.2	61.9
Ocotepeque	387	381	397	281	230	270	294	163	59.4	70.9	74.1	58.0
Santa Bárbara	602	613	654	453	531	455	521	310	88.2	74.2	79.7	68.4
<b>Total</b>	<b>3,930</b>	<b>4,173</b>	<b>4,270</b>	<b>3,385</b>	<b>2,527</b>	<b>2,748</b>	<b>2,938</b>	<b>2,311</b>	<b>64.3</b>	<b>65.9</b>	<b>68.8</b>	<b>68.3</b>

#### **WP #8: Percentage of children less than two years old with two consecutive low monthly measurements**

Data from March 2012 through February 2015 of children under 2 in project communities with persistent inadequate growth (two consecutive low monthly measurements) is provided in Table 64.

Tracking persistent inadequate growth allows technicians and community volunteers to identify children at risk and focus counseling to their mothers on topics related to feeding practices that can prevent the child from falling below the third percentile. It is primarily an indication of the prevalence of child morbidity, which is why higher rates were observed in months corresponding to rainy seasons when prevalence of diarrhea and acute respiratory infections were higher.

**Table 64. Percentage of Children Less than 2 with Two Consecutive Low Monthly Measurements**

Year	Month	TOTAL # Children	Sum of # Girls with "PIG"	Sum of # Boys with "PIG"	Sum of TOTAL # Children with "PIG"	% total
2012	Mar	4,419	180	136	316	7.2%
	Apr	4,700	241	165	406	8.6%
	May	4,944	317	231	548	11.1%
	Jun	4,678	272	213	485	10.4%
	Jul	4,972	315	249	564	11.3%
	Aug	4,922	294	233	527	10.7%
	Sep	4,754	246	213	459	9.7%
	Oct	4,778	214	180	392	8.2%
	Nov	3,807	241	209	449	11.8%
	Dec	3,615	214	185	397	11.0%
2013	Jan	3,903	176	135	311	8.0%
	Feb	3,974	177	163	340	8.6%
	Mar	4,042	214	163	377	9.3%
	Apr	4,189	207	187	394	9.4%
	May	4,205	308	226	534	12.7%
	Jun	4,299	296	240	536	12.5%
	Jul	4,331	267	202	469	10.8%
	Aug	4,403	268	196	464	10.5%
	Sep	4,293	260	210	470	11.0%
	Oct	4,204	264	213	477	11.4%
	Nov	4,103	235	226	461	11.2%
	Dec	3,905	225	226	451	11.5%
2014	Jan	3,799	183	162	345	9.1%
	Feb	3,842	176	156	332	8.6%
	Mar	3,930	208	192	400	10.2%
	Apr	3,867	235	191	426	11.0%
	May	4,201	265	226	491	11.7%
	Jun	4,173	238	227	465	11.6%
	Jul	4,357	269	225	494	11.3%
	Aug	4,311	248	221	469	10.9%
	Sep	4,270	246	193	439	10.3%
	Oct	4,263	222	191	413	9.7%
	Nov	3,956	206	171	377	9.5%
	Dec	3,358	161	140	301	9.0%
2015	Jan	3,647			339	9.3%
	Feb	3,775			290	7.7%

**IND-3.1.9-1. Number of people trained in child health and nutrition through USG-supported programs (added 03/2014)**

During project implementation 6,782 training events were carried out with 103,578 participants (97,101 women and 6,477 men).

**Table 65. Participants in Nutrition and Health Training Events**

Time	# Events	# Male	# Female	# Total
May 2011 to Sept. 2011	35	317	399	716
Oct. 2011 to Sept. 2012	1,376	2,565	19,293	21,858
Oct. 2012 to Sept. 2013	1,881	1,526	26,717	28,243
Oct. 2013 to Sept. 2014	2,584	1,681	36,806	38,487
Oct. 2014 to Mar. 2015	906	388	13,886	14,274
<b>Total</b>	<b>6,782</b>	<b>6,477</b>	<b>97,101</b>	<b>103,578</b>

Note: The total number of individuals who have received training in health and nutrition was 10,479, including 8,997 women and 1,482 men.

### **IND-3.1.9-15. Number of children under 5 reached by USG-supported nutrition programs (added 03/2014)**

During project implementation 8,152 children under 2 years old have received assistance from the project. This number was calculated based on the total children participating in monthly weighing sessions, an average attendance rate of 80 percent (for the last year information the actual information has been used for the total number of children in the lists in order to determine the percentage of participation), and a monthly average of 80 children moving over 2 years old.

Sustained service delivery. USAID-ACCESO beneficiaries received training in health and nutrition-related activities, complementary to assistance in production systems and economic development where both components were present in the community. As of February 2015, the project was working with nutrition activities in 225 communities in 56 municipalities. Men and women learned child care, prevention of illnesses, nutrition practices, keeping a healthy household, and family planning. Training subjects included exclusive breastfeeding for children under 6 months, hand washing, good household and individual hygiene practices, safe water for human consumption, family planning, and consumption of vitamin- and nutrient-rich foods.

Project activities under the implementation strategies for the treatment and prevention of malnourished children under 2 were continuous, with emphasis on communities with highest malnutrition prevalence rates in each department. In these communities project staff mobilized all key community actors/leaders including religious leaders, public service workers such as school teachers, mayors, and police to raise their awareness of the determinant factors of this health problem.

To improve the capacity and skill of community health volunteers (CHVs), and boost motivation to continue the delivery of counseling and growth monitoring services after project close-out, USAID-ACCESO held a series of four-day training sessions for 484 CHVs in all six departments during 2014. The activity generated excellent results as the interest and dedication in conducting quality services was duly noted at the community level during supervisory visits and in quality of data reported. CHVs trained also motivated others to become involved in community service to the extent that project staff increased the number of CHVs in all six departments (more than 550). As described below, USAID-ACCESO developed and improved a number of activities over time.

**Household visits.** Technicians worked closely with community members, health committee members, and health volunteers to identify households with children under 2 years not attending growth monitoring sessions, including those recorded on group records as well as children who were not. In addition to regular home visits to refresh mothers' knowledge of food preparation and feeding practices, CHVs and technicians conducted household visits to educate mothers on the importance of growth monitoring sessions and identify and record children not regularly attending these sessions. As a result, the coverage of growth monitoring services showed continual improvements. Further, this strategy provided technicians the opportunity to increase knowledge transfer to CHVs and motivate CHVs to independently conduct home visits.

**Counseling on child nutrition, training and demonstrations for food preparation.** Food preparation demonstrations were another key activity done during household visits, at the Nutrition Training Centers (NTCs – or CENs), and at the CHVs' homes. CENs were a USAID-ACCESO initiative and did not previously exist. During implementation, 46 nutrition centers were installed and operational (40 with funds from USAID-ACCESO, four from CRS (USDA), and two from WFP). In communities where CENs were not established, demonstrations of food preparation and training to mothers were carried out at the homes of mothers and CHVs on a rotating basis.

**Collaboration with the Ministry of Health.** The project worked closely with leaders and technicians from Ministry of Health facilities in target areas for the coordination of field activities related

to delivery of the basic services package and selected distribution of micronutrients. In the last fiscal year 873 basic packages were delivered in targeted communities. The majority of these services were provided through the new decentralized health service providers which began operations in the last year.

In April 2012, USAID-ACCESO procured and distributed equipment to selected health centers to strengthen their capacity to manage acute malnutrition. A total of 20 Centers for Management of Acute Malnutrition (CMAM) were equipped and are operational. Community health centers staff and community health volunteers usually delivered the basic services package and primary health care services to targeted communities on a monthly basis, utilizing the equipment of the CMAMs. Basic services package and primary health care services included administration of dietary supplements, vaccines, prenatal care, and training of mothers and other caregivers in family planning, nutrition, and breastfeeding during group meetings and household visits respectively. The health centers that benefitted from this activity were:

- Intibucá: CESAR Zacate Blanco, CESAMO San Isidro, CESAR San Nicolás
- La Paz: CESAR Florida de San José, CESAR El Encinal, CESAR Sabanetas
- Ocotepeque: CESAMO San Jorge, CESAMO Belén Gualcho, CESAR Jocotan
- Lempira: CESAMO San Rafael, CESAMO San José, CESAR Rodeo Quelacasque, CESAR Platanares, CESAMO San Bartolo
- Santa Bárbara: CESAR Paso Viejo, CESAR San Francisco Carrizal
- Copán: CESAR Vega Redonda, CESAR de Capuca, CESAR Río Amarillo, CESAMO Nueva Armenia

**Activities to ensure food availability/diet diversity at the household level.** Family plots were successful in the homes of most CHVs and at NTCs housed in schools. However, this was not been the case in the majority of households with children under 2 that most needed these food sources. After a successful first cycle, many did not replant because mothers need more incentives, guidance, technical assistance, or training in good agricultural practices. During the final cycles, nutrition technicians in close collaboration with production technicians increased and improved the level of technical assistance.

Some clients were involved in poultry and goat production as another source of food and income. Through an agreement with ANAVIH (National Association of Poultry Producers in Honduras), USAID-ACCESO secured a supply of eggs on a daily basis to a total of 437 children under 2 years of age in 15 CENs in the departments of Lempira, Ocotepeque, Copán, Santa Barbara, and Intibucá. This activity was initiated in June 2014 and continued throughout 2014. It is expected to continue under the follow-on projects.

**Promotion of healthy household concept among client households.** Initially, this activity focused on health volunteers and families with children under 2 years old to improve basic household sanitation and health of family members through improvements to stoves, floors, walls, and water sources. Given the success of this activity and the benefits to disease prevention, living conditions, and wellbeing, the activities were extended to the wide client population.

- A total of 2,240 *eco-justa* stoves were installed mainly in households with children under 2 (plus 1,450 installed by the University of Florida).
- 1,019 households with water connections, 1,182 with improved walls and floors, 551 with transparent roof sheets, and 633 with water filters
- The NRM component included land fill construction for solid waste management and residual water treatment systems at household and community levels.
- A total of 346 water tanks and 326 latrines were constructed in 16 communities throughout the six departments under the technical oversight of NRM/DM specialists.

- Initial discussions were held with the government's *Vida Mejor* program to coordinate household improvements, but this was not implemented before project closure.

## 6. ADDITIONAL REPORTING

In addition to the PMP and work plan indicators that have been provided in this report, USAID-ACCESO reported on additional indicators and activities and provided data to USAID-Honduras and the FTFMS.

### 6.1 USAID/HONDURAS

#### Government of Honduras Investments

Data was provided quarterly on the government of Honduras cost sharing investments in fixed assets. This included investments made by the Ministry of Agriculture, municipalities, *mancomunidades*, FHIS, and selected projects. As of March 2015, this value totalled \$1,045,126.

#### USAID Reporting

Reporting to USAID on Mission indicators for annual reviews

### 6.2 FTFMS

USAID-ACCESO and USAID Honduras inputted data into the FTFMS on an annual basis. These included:

- Indicators reported under USAID-ACCESO
- Indicators reported under USAID-ACCESO, but with the Feed the Future definition
- Indicators not reported under USAID-ACCESO

FTFMS reporting was in September each year, at the same time as USAID-ACCESO annual reports.

## 7. SUPPORTING ACTIVITIES

### 7.1 MONITORING AND EVALUATION ACTIVITIES

Activities carried out by the monitoring and evaluation (M&E) unit enabled all project employees to report their activities in the field, to provide recurrent and real time feedback to department managers on major advancements in their regions, and to collect information on assisted client households. Specific activities carried out through implementation included:

- M&E specialists participated in all department level meetings, presenting CIRIS reports and providing critical feedback on project progress.
- Prepared inputs for monthly and quarterly reports and success stories/snapshots.
- Developed quarterly activity and status reports for subcontractors.
- Continuous performing maintenance of the CIRIS database.
- Data population of PMP monitor.
- Provision of feedback and training on CIRIS for all staff (continuous, including new hires).

- Provided management reports on advancement of all project components to department and zone managers for performance evaluation and decision making.
- Ongoing CIRIS data registration of trainees' participation lists collected on field.
- Client interviews (Baseline and follow-up surveys, off farm income (OFI):
  - FY 11/12: 457 clients
  - FY 12/13: 3,662 clients
  - FY 13/14: 3,330 clients
  - FY 14/15: -
- EOH Forms:
  - FY 11/12: 1,195 forms
  - FY 12/13: 11,341 forms
  - FY 13/14: 10,008 forms
  - FY 14/15: 4,012 forms from October 2014 to March 2015

Examples of specific activities during each FY included:

#### **FY 2010/2011**

- Presentation of final PMP and PIRS to USAID and to USAID-ACCESO departmental teams.
- All employees provided IT equipment and given access to the CIRIS M&E system.
- Training on M&E systems and data collection was delivered to all project employees; recurrent feedback has been provided as new employees become familiar with the system.
- M&E specialist participation in department level meetings with presentations of reports, providing critical feedback on the advancement of activities on all of the project components.
- Updating of client profile, end of harvest and baseline formats to collect additional information to allow more precise reporting of project results and targets.
- Completion of more than 5,200 client profiles out of the 6,050 clients currently being assisted by the project (86 per cent of the total).
- New guidelines and mechanisms were designed and implemented to report on nutrition and health activities in CIRIS, enabling levels of disaggregation.
- M&E specialists were trained on the Monitoring and Evaluation Database (Sistema de Monitoreo y Evaluación – SIME) utilized by the Ministry of Health.
- Four new updates to the CIRIS program were released during the reporting period to improve on data collection, data entry and reports tailored for USAID-ACCESO.
- In joint efforts with Fintrac home office M&E and information technology specialists, the project developed the tools for field based equipment (tablets) to be used for data collection and creating an interphase with the CIRIS system for automated data entry.
- Continuous maintenance and database revision has been carried out utilizing validation techniques.

#### **FY 2011/2012**

- Collection of more than 15,200 client household and MSME profiles, representing 78 percent of the total number of active clients registered in CIRIS.
- More than 1,300 Base Line Follow-up (BLF) surveys were collected from clients selected on the first and second round sampling.
- More than 2,200 EOH forms were completed within clients selected on the first and second round sampling from the six departments.
- Data entry technicians registered in CIRIS 100% of forms (BLF, EOH) collected.
- Developed new CIRIS reports to provide information on activities, outputs, and results.
- Participated in a Feed the Future workshop in Washington DC, strengthening knowledge on data collection and PIRs follow-up.

**FY 2012/2013**

- Participation in the Feed the Future Agricultural Indicators webinars.
- Emphasis made to collect FY2013 EOH forms and BL follow-up from all sampling clients.
- Data entry technicians continued registering in CIRIS: BL, BL follow-up, EOH forms and trainees lists collected on field.
- New CIRIS reports were prepared.
- Participated in meetings with technical production staff to evaluate performance against results, and to prepare strategies to improve data registering on CIRIS.
- M&E Director participated in interviewing AIN-C participants to collect diet diversity data for children less than 2 years old.
- Data entry and analysis for N&H survey (dietary diversity).

**FY 2013/2014**

- Ongoing maintenance and data assessment in CIRIS and Tablet database.
- Ongoing CIRIS data registration of trainees' participation lists collected on field.
- More than 3,300 clients were interviewed to collect FY2014 results (EOH, off farm income (OFI), BL-follow up data).
- More than 10,000 EOH forms were completed through on field visits during FY2014.
- Nutrition and Health support in preparing surveys and data entry on minimum diet diversity (MDD) for children less than 2 years old.
- Nutrition and Health support with data entry on anemia indicators for mothers and children.
- Nutrition and Health support in preparing surveys and data entry on minimum diet diversity (MDD) for children less than 2 years old.
- CIRIS N&H: ongoing data entry review for children's participation in AIN-C meetings
- Participating in M&E Workshop in Washington D.C. (Director and Specialist)
- FY2014 Project results shared with Laura Kulh regarding the research on "Innovation and Technology Transfer for Agricultural Adaptation: A Case Study of the ACCESO."

**7.2 SMALL GRANTS, SUBCONTRACTS, AND ALLIANCES PROGRAM**

USAID-ACCESO managed all activities related to small grants carried out under Partner Fund and Technology Fund activities, including short term subcontracts. This included the preparation of documentation for approval by Fintrac HO and USAID, quotations, purchase orders, delivery and logistics, and records. These activities were carried out in collaboration with all of the technical components and project administration.

One manager and two specialists comprised this component's staff. All administrative and financial activities related to the long-term subcontractors providing field technicians for implementation were also managed by this program (CASM, OCIDH, COPRAFEL, Hermandad de Honduras, PILARH, IHCAFE, and Save the Children).

The small grants and subcontracts were targeted at investments that promoted increased yields, sales, incomes, nutrition and health, and food security, that in most cases were used to promote the increased use of new or improved technology.

Activities focused on technology and partner funds in marketing, production, postharvest, nutrition and health, and disaster mitigation.

- Number of technology fund / grants to households: 19,903 grants
- Production: 11,448 households
- Nutrition & health grants: 5,427 households

- Disaster mitigation/NRM: 1,044 households
- Renewable energy: 1,458 households
- MSMEs: 291 MSMEs
- Marketing: 400 households
- Miscellaneous: 126 households

The principal activities carried out under these components are summarized below:

### **Production**

Twenty-four awards were carried out for smallholder farmers / households, which included two Partner Funds, and 22 Technology Funds. The Partner Funds provided cattle for twenty one families, and support for coffee production and harvest to more than two hundred families and MSMEs. Technology funds covered irrigation technology, solar dryers, new crop development, weather stations, biological controls for coffee, greenhouse technology, production manual reproduction, agricultural equipment, research trials, and a cattle outgrower program. A total of 11,448 individual grants were made.

Irrigation technology formed part the main part of the Technology Funds, being implemented by the project to allow for continuous production, improved yields and increased incomes for client households. USAID-ACCESO made an initial investment to provide irrigation technology and technical assistance to 375 beneficiaries under TF 2012-04 (Phase I), then increased to 1,500 additional beneficiaries with TF 2012-13 (Phase II), 1,449 additional beneficiaries with TF 2013-27 (Phase III); and finally with 1,900 beneficiaries under Phase IV. With all phases, a total of 150 individual conduction systems were installed, with 523 kilometers of conduction pipe, involving 3,903 producers and a potential irrigation area of 1,317 hectares. In-plot systems were installed for 1,328 growers covering a total of 364 hectares. In total 1,681 hectares can be irrigated with 5,231 growers.

The Technology Funds leveraged activities in herb production, snow and sugar pea production for more than 300 growers, equipment for allspice threshing and cleaning for two MSMEs, and irrigation infrastructure for at least 4,300 farmers. Additional investments included seeds for corn and bean programs for more than 4,600 farmers; support to develop new products and crops for at least 700 project clients; biological controls demonstrations for two hundred coffee growers; crop competitions to promote good agricultural practices among project farmers; three greenhouses for two groups for training and income generation; electronic scales for packing plants; printed training manuals for corn, bean, lettuce, carrots, plantain, and integrated crop management for more than 400 farmers and institutions; cows for dairy production for nine project families; and, solar driers for 100 small farmers linked to an export partner.

### **Marketing**

Three technology funds and two fixed price contracts were carried out, the first with market and product trials for four MSMEs exporting sweet peas, herbs, whole sugar cane and allspice, development of six local market fairs and participation in local trade events, and the second in promotional cooking events to promote the sales and consumption of fresh produce and project clients' processed items in two regional supermarket chains.

### **Nutrition & Health**

Eleven technology funds were implemented with nutrition and health activities. These covered the installation of more than 1,000 *eco-justa* stoves; installation and equipment of 40 NTCs; and 20 acute under-nutrition management centers; establishment of household production plots; over 600 water filters; home improvements in more than 1,700 project households; kitchen water connections in 1,000 project households; training activities and equipment for more than 400 volunteers; and projects for access to protein (chickens and goats) in more than 300 households. Overall, more than 5,000 individual

grants were made. The stoves, filters, water connections, household plot, floors and walls were all part of the healthy household program. The NTCs were a key activity in the nutrition and health component and helped achieve a major impact on the food preparation and feeding practices.

### **Disaster Mitigation/NRM**

Nine technology funds, one partner fund, and three fixed price contracts were carried out. The technology funds included the construction of two box culvert, installation of six weather stations, training materials and equipment for 56 CODELS, capacity building support for local disaster mitigation institutions, potable water system installation and improvements for 58 communities, road rehabilitation, general disaster mitigation projects such as sewer drains, and the installation of 318 household water tanks and 298 latrines. A partner fund was used to carry out disaster trainings with ICADE for more than 300 persons trained. Potable water and disaster mitigation studies for projects in 20 communities were carried out under fixed price contracts.

### **Renewable Energy**

Three technology funds were specifically carried out for renewable energy including solar energy systems (33), bio-digesters (91), and more than 1,000 solar dryers. These were expanded under technology funds initiated under other components (production and nutrition).

### **MSMEs**

Three technology funds, one partner fund, and two fixed price contracts were carried out. These covered the installation of a MSME training kitchen, corn collection centers support for twelve MSMEs, value added equipment for 40 MSMEs, legal formalization of 227 MSMEs by UNITEC, bakery, dairy processing and sewing trainings with INFOP, and legalization of 25 MSMEs by a law firm.

### **Research & Development**

Two Partner Funds and one fixed price contract were carried out for research and development. FHIA conducted one of the Partner Funds and provided valuable insights into plantain productivity yields when using raised beds, evaluation of different varieties of yellow and red onion along with their different shelf lives (comparative), bacterial wilting in solanaceous family crops susceptible to virus infections, drip irrigation effectiveness on raised beds with one versus two tapes, comparison of backpack sprayer effectiveness (motorized versus manual), virus identification for horticultural crops in all six USAID-ACCESO departments and corn planting curves to help determine the optimal planting dates for corn farmers in Honduras.

EAP Zamorano conducted the other R&D Partner Fund. This research provided valuable information on the dissemination and distribution of nematodes through a drip irrigation system. These nematodes are biological control agents used to combat pests in coffee plantations and others affected by white grub.

Fundación un TECHO para mi País implemented the fixed price contract. The research consisted of a qualitative multidimensional poverty study to provide further insight about the main causes of poverty in rural Honduras according to the local population.

## **7.3 ENVIRONMENTAL MONITORING**

The evaluation, monitoring, and follow-up for environmental monitoring of field activities referred to in the Environmental Management Plan began with the hiring in 2014 of two dedicated technicians. Priority was initially given to 148 irrigation systems installed or rehabilitated by USAID-ACCESO. EMPR were prepared based on visits to 105 systems; an additional 28 irrigation systems were provided partial recommendations as the system was not fully installed or operational. Only 15 systems were not visited

as a result of incomplete delivery of the materials or incomplete partner contribution at the time of the scheduled visit.

Upon termination of the programmed evaluation visits on the irrigation systems in March 2015, work was initiated on other projects using an updated format provided in the USAID workshop on Regulation 216 held in La Ceiba. EMPRs were carried out on 19 of 54 potable water systems, 8 of 13 natural disaster mitigation projects, and 6 of 6 sanitation projects.

As part of the field visits to carry out these assessments, technical assistance and training was also provided to project technicians, governmental and nongovernmental organizations, and growers. This covered the installation, maintenance and management of systems and/or infrastructure for irrigation, potable water, sanitation facilities or mitigation of natural disasters. Special emphasis was given to water management boards in the areas of organization, management, watershed management, water volume, flows, water quality, system operation and maintenance.

Most of the irrigation projects and potable water originate from surface water from springs, streams, and rivers. As such the water volume depends on the protection afforded to the watersheds, micro-watersheds, and the recharge areas. These areas were normally close to the agricultural frontier and usually in property which do not belong to the communities or groups of farmers receiving the systems. In many cases, the irrigation conduction systems (which total almost 95 kilometers) pass through properties of families who were not project beneficiaries or communal areas without a specific owner (*ejidales*). While management plans for water sources were made, these belong to larger watersheds, where the management exceeds the scope of the project. Meeting the legal requirements to obtain permits and authorizations required a significant amount of technicians' time and effort. Many of the processes and approvals depended on the willingness and interest of the local authority and ICF, which was often slow. However, importantly, the issue of water brought groups and communities together in their desire to obtain access to help improve the quality of life, improve their health, and reduce their vulnerability to climate change in agricultural production. Just with the investments in water systems the project was able to significantly benefit a large population in the communities where the projects were implemented.

As a result of these evaluations, five key areas were identified for continued focus and follow-up:

- Watershed protection plans that include a larger area than those performed at the micro-watershed level.
- Obtaining environmental permits and permissions (*servidumbre*), including declarations for protection of water sources.
- Improve the installation processes with less impact to the environment with vegetative slope protection and plant regeneration in the case of water pipelines and mitigation of natural disasters.
- The rational use of water, with payment for the use to facilitate sustainable systems.
- Integrated management of crops in the plots, including soil conservation works and drainage, regulation of registered products, and the proper handling of empty agrochemical containers.

The integration of all components along these lines made it possible that project beneficiaries, and communities, received technical assistance and training for the operation and maintenance.

## 7.4 IFPRI

IFPRI was contracted by USAID to carry out selected M&E activities and impact evaluations. As of September 2013, IFPRI has conducted the baseline survey (provided June 2013) and the midterm evaluation among USAID-ACCESO client households (not provided). USAID-ACCESO's involvement with IFPRI has been as follows:

- Participation in an IFPRI presentation on baseline data.

- Comments provided on baseline data report.
- USAID-ACCESO client data provided when requested in 2012 and 2013.
- No communication or interaction since FY13.

## 7.5 COMMUNICATIONS

External communications of project activities and results were prepared continuously through a range of media, including project and other websites; monthly updates; success stories; newspaper coverage (print and online); TV/radio interviews and programs; and participation in trade shows and other events.

Examples included:

- 47 monthly project bulletins prepared and disseminated
- 42 snapshots/success stories
- Preparation of infographic posters with project results
- Articles in the Feed the Future monthly newsletters
- [www.usaid-access.org](http://www.usaid-access.org) with an average on 4,400 users and 26,000 hits/month
- Two online photo essays <https://fintrac.exposure.co/improving-childhood-nutrition> and <https://fintrac.exposure.co/increasing-agricultural-productivity?more=true>
- Website publications including [unionmicrofinanza.org](http://unionmicrofinanza.org) and [presidencia.gob.hn](http://presidencia.gob.hn).
- Visit by One.org with a focus on the USAID-ACCESO project
- <http://www.one.org/us/2013/04/14/america-ferrera-alexis-bledel-claire-diaz-ortiz-travel-to-honduras-with-one/>
- Weekly slot on a morning news program on the main national TV channel which was repeated in the late evenings. Each three-minute segment covered various technical areas and results through interviews with clients, project technicians, and video footage. Video clips can be found on the project internet and intranet sites.
- Interviews on national TV including Canal 5 y Maya TV.
- Participation in technical programs on the government TV channel, including corn production, pest and disease control and marketing.
- Print and online articles in La Prensa, Hablamos Claro Financiera, La Tribuna, El Heraldito, and others.
- Project participation in numerous exhibitions and trade events including coffee, fresh produce, gifts, renewable energy, finance, business fairs and cooking demonstrations/product promotion.
- Preparation of short technical videos, promotional materials, and product catalogs.
- Publication of project technical manuals.

## 7.6 FIELD VISITS

Visitors from USAID and other local and international organizations organized numerous field visits to interact directly with household clients and staff; and consequently inform others of the project's implementation methodology, activities, components, challenges, and results.

### FY 2010/2011

- Coordination of meetings and field trips with USAID/Honduras Democracy & Governance and Nutrition and Health to Copan, Ocotepeque, and Santa Bárbara.
- Visit from a Feed the Future representative to project activities in La Paz, with market driven production programs, finance, microenterprise, and nutrition and health.
- Field visits from USDA Washington representatives to determine possible collaboration.
- Training workshops and field visits with USAID Regional and USAID/Honduras Environmental Officers on Environmental Mitigation Plans.

**FY 2011/2012**

- Field visit by One.org, the US ambassador, USAID-Honduras director, and other USAID representatives to USAID-ACCESO production and nutrition sites in Intibucá. Various videos were released online.
- Field visit by the Honduran first lady, US ambassador, the minister of agriculture, USAID representatives, WFP Honduras, and others to USAID-ACCESO project production and nutrition sites in Intibucá.
- Field visits by USDA representatives (US and Honduras) to project nutrition and health sites in Intibucá.
- Representatives from USAID/Honduras, USAID/Brazil, and the Brazilian government visited project clients in La Paz.
- Representatives from USAID/Honduras visited project activities in Ocotepeque, Santa Bárbara, and Intibucá.
- Visit of the US ambassador in Honduras and other representatives of the US Embassy and USAID to project clients in Copán.
- Visit of USAID/Honduras director and other USAID representatives to project clients in Santa Bárbara.
- Visit of USAID/Honduras sub-director and other USAID representatives to project clients in Lempira.
- Visit by IFPRI and USAID Honduras representatives to project clients in six departments under USAID-ACCESO.
- Visit by USAID Washington DC BFS and USAID/Honduras representatives to project clients in La Paz.
- Visit of the US ambassador in Honduras and other representatives of the US Embassy and USAID to project clients in La Campa, Lempira, and La Esperanza, Intibucá.
- Field visit by the USAID/Honduras interim director and other USAID representatives to project clients in La Paz.
- Visit by the assistant administrator of USAID for Latin America, USAID/Honduras mission director, Honduran minister of agriculture, and other US government representatives to project clients in Paihislal, Intibucá.
- Visit by the US UN ambassador, US ambassador to Honduras, USAID/Honduras mission director, Honduran minister of agriculture, and other US government representatives to project clients in Las Pavas, La Paz.

**FY 2012/2013**

- Various field visits by USAID/Honduras representatives to project clients in all six departments.
- Field visits to project clients by USAID Washington contractor carrying out a study analysis of USAID's partnerships with supermarket chains in Central America.
- Field visit by USAID/Honduras and USAID/Washington representatives to project clients in La Paz.
- Field visit by USAID/Honduras, USAID/Washington, and State Department representatives to project clients in Santa Bárbara.
- Field visits by members of AgNutrition GLEE contractor to prepare a case study on USAID-ACCESO.
- Field visit to project clients in Intibucá by the US ambassador, USAID Mission, donors from the International community, ministers from SAG, Ministry of Education, Ministry of Development and Social Services, and FHIS.

- Field visit by USAID/Honduras and the USAID/LAC/RSD Environmental Officer to project clients in Santa Bárbara to assess environmental compliance.

#### **FY 2013/2014**

- Various field visits from the minister of agriculture, including the USAID-ACCESO corn productivity competition in Copán and drip irrigation system inauguration in Intibucá.
- Various field visits with USAID/Honduras representatives, including the USAID-ACCESO corn productivity competition in La Paz, project activities in Lempira and Ocotepeque (including preparation for proposed visits from the ambassador and USAID director), and project activities in La Paz (including for proposed visits from the WFP Director).
- Visit by the incoming vice president and minister of economic development to project activities in production, marketing and nutrition in Intibucá.
- Signing of donor agreement for the new Dry Corridor Project at a USAID-ACCESO client farm in La Paz, including the president of Honduras, US ambassador, and representatives from Canada, World Bank, European Union, and BCIE.
- Two field visits by World Bank and other donor representatives to USAID-ACCESO clients in La Paz as part of the Dry Corridor activities.
- Field visits in Intibucá and Lempira with WFP and CRS to demonstrate USAID-ACCESO activities with project CENs and nutrition with the aim involving them both in project activities.
- Field visit to Santa Barbara by students from Calvin College, US.
- Routine field visits by USAID/Honduras representatives.
- Visit by the president of Honduras, the US ambassador, the ministers of health and education, and other high government officials. During the visit, a group of CHVs were recognized by the president and the minister of health for their outstanding performance in monitoring the nutritional status of children in their communities.
- Visit by the first lady and ministers of economic development, agriculture, education, and health to a community in Intibucá to learn about USAID-ACCESO's approach to reducing poverty and improving child health.
- Visit by representatives of the US Congress, the US Ambassador, and USAID/Honduras representatives to project clients in Santa Bárbara.
- Visit by PMA director and other representatives to La Paz to observe the operations of activities carried out with mothers and children in the NTCs.
- Visit by the US ambassador and USAID/Honduras representatives to inaugurate an irrigation system in Intibucá.
- Visit by the USAID director and the vice minister of agriculture to inaugurate an irrigation system in Jesus de Otoro, Intibucá.
- Field visits by RIG Auditors and USAID representatives over a two-week period to visit project clients and activities in all six departments.
- Routine field visits by USAID/Honduras representatives.
- Visit by the Feed the Future deputy coordinator for development, the US Ambassador, USAID director, the minister of economic development, minister of agriculture, and others to health and nutrition and production activities in La Paz.
- Visit by USAID DC representative to project activities in Santa Barbara and Lempira.

#### **FY 2014/2015**

- Field tour to USAID/Honduras consultant working on scaling up irrigation activities (six departments).
- Visit to USAID-ACCESO activity in Santa Rosita, Guajiquiro, La Paz, by the president of Honduras, the US ambassador, USAID/Honduras deputy director, Canadian ambassador, and others.

- Field tour for USAID-Honduras and INVEST Honduras to visit project nutrition and health activities (six departments).
- Field visits by USAID/Honduras and FHIS representatives to project sites in Lempira, La Paz, and Intibucá.
- Visit by USAID/Honduras representatives to field sites in Copan and Lempira.

## **7.7 SELECTED ACTIVITIES WITH OTHER USAID AND USAID-RELATED PROJECTS**

### **FY 2010/2011**

- Discussions held with USAID funded Horticulture Collaborative Research Support Program and Integrated Pest Management Collaborative Research Support System on possible collaborative activities.
- Presentation given to Peace Corps representatives on USAID-ACCESO implementation and areas of possible collaboration.

### **FY 2011/2012**

- USAID M&E workshop (Miami).
- Presentation at USAID BFS on USAID-ACCESO implementation (Washington).
- Filmed interview on Feed the Future activities under USAID-ACCESO with USAID BFS (Washington).

### **FY 2012/2013**

- Organization of training events on pest identification and controls with USDA, including USAID-ACCESO, NGO, and government technicians.
- Presentations made in USDA training event on insect control for US export shipments.
- Meetings held on possible joint activities; presentation made on USAID-ACCESO activities at HORT CRSP event).
- Meetings held on possible joint collaboration.
- Participation in USAID AgNutrition Glee meeting in Guatemala, including a presentation of USAID-ACCESO activities.
- Participation in USAID Gender Glee meeting in Washington DC, including a presentation of USAID-ACCESO activities.
- Participation as trainers in University of California training event on postharvest handling (Feed the Future Innovation Lab for Collaborative Research on Horticulture).
- Collaboration with USAID-NEXOS on training activities of community water board technicians.
- Training provided by project specialists in USDA organized training events in Comayagua and Lempira on thrip control.

### **FY 2013/2014**

- Support to USAID Climate-Smart Agriculture/Best Management Practices (CSA/BMPs) Workshop for the Latin America and Caribbean Region; pre-visits and selection and preparation of field sites in Gracias, Lempira (workshop to be carried out in November 2014).
- FHIS: field tour to Intibucá and Santa Barbara for representatives of FHIS and USAID in preparation for FHIS renewable energy project.
- World Bank: field visit organized to project clients in La Paz for representatives of the World Bank as part of the Dry Corridor activities.
- WFP: field visit organized for representatives of the WFP and FAO to project clients in La Paz and Intibucá.

- WFP: field visit organized for the WFP Director to project clients in La Paz.
- ACIDI-VOCA: presentation of USAID-ACCESO in a push-pull webinar organized by the USAID-funded Leveraging Economic Opportunities Project in Washington DC.
- Tetratek: support provided with meeting of project clients for the preparation of a study on resilience and climate change in Western Honduras.
- Lutheran World Relief: meetings on the GAPP project, Gender in Agriculture: from politics to practice, in Lempira.
- Horticultural Innovation Lab (HORT-CRSP): presentation at the annual meeting on USAID-ACCESO activities.
- Horticultural Innovation Lab (HORT-CRSP): support to North Carolina A&T State University on USAID-ACCESO client selection for trials with rainwater collection and storage.
- Horticultural Innovation Lab (HORT-CRSP): technical presentations made by USAID-ACCESO specialists in postharvest handling workshop held in association with EAP-Zamorano.
- ULAT: reviewed and tested training plan for the content on Child Nutrition with Emphasis on Children Under Two Years of Age, one of several topics included in the Manual for Implementation of the Strategy for Work with Individual Family and Community, developed by ULAT. Several meetings were held between ULAT and USAID-ACCESO staff in the initial stage. Nevertheless, the lack of communication from ULAT prevented further involvement of USAID-ACCESO staff in completing the process and the final document was submitted without USAID-ACCESO review of the contents.
- ODEF: following up on requests from USAID to coordinate with ODEF given their involvement with USAID guarantee funds, three field trips were organized to Santa Barbara, Lempira and Intibucá (where ODEF has offices). USAID-ACCESO presented 7 household clients, 5 MSMEs and 3 rural village banks as possible clients. Overall, the interest rates charged were considered too high for agricultural operations and the clients too distant from ODEF offices. ODEF has made 151 loans totaling \$180,942 to USAID-ACCESO clients (1.1 percent of the total value).
- RUTA: provision of production yield and cost data and participation in RUTA organized workshops.
- CRS: coordination and collaboration to implement four NTCs in four communities in the municipalities of Jesus de Otoro and Intibucá.

#### **FY 2014/2015**

- Participation in USAID Feed the Future webinar on civil society engagement. Presentation made of USAID-ACCESO related activities and results.

## **7.8 US GOVERNMENT ALLIANCES**

### **USAID-Honduras / Walmart Public Private Partnership**

USAID-Honduras and Walmart de Mexico y Centroamérica signed a Memorandum of Agreement in July 2011 which formalized joint activities to be carried out by USAID-ACCESO and Walmart. Since project inception, USAID-ACCESO has worked closely with Walmart (through Hortifruti) to establish production programs of a wide range of high-value crops.

Production programs were carried out principally through local collection companies in Intibucá (ASOFAIL), La Paz (ISEN), Ocotepeque (COPRAUL, COPRAL and Aldea Global), Copan (CAEOL), Santa Barbara (CAEOL, EBENEZER), and Lempira (CAEOL, ECARI and ASOFAIL). Crops under production programs included tomato (pear and table types), sweet pepper (bell and Natalie types),

lettuce, cabbage, carrot, beetroot and radish. Potato were also being sold but not under a formal production programs.

Walmart (Hortifruti) provides verbal purchasing agreements to project growers (they rarely offer written contracts), while their field buying representatives visit the growers every two to three weeks in the production cycle to verify plantings, estimate volumes and determine quality. In some cases, written guidelines were provided on quality requirements. The buyers also support USAID-ACCESO postharvest handling training activities with specific information on quality standards, pack systems, packing and transport.

The arrangement with Walmart was commercial between them and USAID-ACCESO growers. No special treatment was given (nor should be). The project role was to set up the calendarized production programs based on Walmart's needs, provide the TA and training to the growers to enable them to produce the quality, consistency and volume required. Walmart was one of the many formal buyers that USAID-ACCESO was working with to link small growers to the markets.

### **USAID-Honduras / WFP Agreement**

WFP works in the same departments as USAID-ACCESO with a range of activities. Following a field visit to USAID-ACCESO sites in La Paz (December 2011) by the US ambassador to the UN, the US ambassador in Honduras, USAID/Honduras, the Honduran minister of agriculture, and PMA representatives, an agreement was developed between USAID and the WFP to collaborate on the implementation of field activities. Following the signing of the agreement between USAID and WFP in May 2012, USAID-ACCESO and WFP have worked on and in the following areas:

- Coordination meeting to present USAID-ACCESO components and determine possible areas of collaboration (June 2012, La Paz).
- Coordination meeting on the USAID-ACCESO NRM component and WFP activities related to tree nurseries. USAID-ACCESO provided list of recommended fruit trees (August 2012, La Paz).
- Coordination meeting on nutrition and health activities to jointly prepare a manual on nutritional foods for families; USAID-ACCESO provided the recipes based on work carried out and PMA included the nutritional values. (August 2012, Lempira).
- USAID-ACCESO provided recommendations to the WFP corn production technological package, including methods to reduce production costs while increasing productivity. This was carried out with CAMACO, a cooperative that sells to PMA in Jesus de Otoro, Intibucá (September, 2012). USAID-ACCESO also assisted CAMACO with irrigation system installation and options for grain storage/warehouse receipts.
- ACCESO provided business skills assistance to UNESSEL, a cooperative in Gracias, Lempira working with the PMA. Advice was provided to improve business practices, review the credit portfolio of the members and recommendations to improve administrative controls. USAID-ACCESO prepared a draft manual for internal use on sales rules to enable the cooperative to purchase from non-members which was presented to board of the cooperative at end of October (carried out in September, 2012). This provided the option to nearby non-cooperative growers (including USAID-ACCESO growers) to sell to the cooperative, who then sold to the WFP.
- Other coordination meetings and activities were held with WFP technicians at the field level.
- Training of PMA field technicians in maize and bean production systems. The activity utilized USAID-ACCESO production manuals and also included postharvest training (December 2012).
- Meeting and coordination with the PMA and the Ministry of Health to ensure that the basic health package (supplements) were available in the USAID-ACCESO prioritized communities under the nutrition and health component.
- Numerous meetings and field visits with WFP to nutrition and health activities to co-invest in the development of CENs. WFP eventually covered the costs of equipping two CENs in La Paz.

- Numerous meetings and field visits to set up a pilot program for supplying schools with produce and eggs for the *merienda escolar*. Pilots were established with two *cajas rurales* in La Paz in late 2014.
- Participation in a WFP organized workshops to present experience with the pilot program in La Paz for supplying fruits, vegetables and eggs to schools.

### **PriceSmart**

In 2014 USAID/Honduras was contacted by PriceSmart USA who were responding to a USG request for the private sector to assist with reducing illegal immigration from Central America, particularly children. Meetings were held with PriceSmart's international, regional and local management to determine commercial options, and field visits were made to potential suppliers (plantain, papaya, and potato). USAID Honduras also participated in the meetings and field visits. Sales were initiated with plantain. While PriceSmart has four outlets in Honduras the volume requirements per delivery were small in comparison to others (production and logistics have to be consolidated with other deliveries to be competitive). Since December 2014, deliveries have been made from growers in Santa Barbara for 20 weeks, with an average of 1,750 lb/week and a sales value of \$500. Over the 20 weeks the total volume was 35,000 lb and total sales value of \$10,000. The deliveries will continue post-project. It should be noted that one hectare of technified plantain production produces an average of 80,000 lbs. As a result, the PriceSmart deliveries had to be part of a much larger sales program. Papaya has been delivered but the prices paid were less competitive than other markets and deliveries have not yet been consistent.

### **OLAM**

Following suggestions from USAID/Honduras project activities with OLAM were formalized and a pilot specialty coffee supply program was developed for the 2014/2015 coffee harvest. The alliance agreement included grower training by OLAM technicians on harvesting, processing and quality, finance for fertilizer and depulping equipment and the management of micro-lots. USAID-ACCESO selected the zones and growers in La Paz and Santa Barbara (where no formal buyers previously existed), provided technical assistance and training, co-invested in solar dryers and coordinated field and logistics activities. The majority of these growers previously sold their coffee to intermediaries in pulp or wet. The OLAM agreement resulted in growers receiving an additional (over market price) \$10 to \$20/QQ for coffee cupped as conventional, \$20 to \$35/QQ for strictly high grown (SHG), and \$50 to \$75/QQ for specialty coffee. 23 growers sold 144 QQ of SHG for \$15,100 and 74 growers sold 664 QQ of specialty coffee in micro-lots for \$78,000. Total sales to OLAM for the 2014/2015 season was \$93,100. 664 QQ of specialty coffee were sold against an initial target 300 QQ. The pilot was considered a success by all players and will be continued and expanded in the upcoming season.

### **USAID/Brazil/Honduras Trilateral Agreement**

In April 2012, representatives of USAID Brazil, Embassy of Brazil in Honduras, and the Brazilian visited USAID-ACCESO field activities and project implementation. This visit was followed by the signing in September 2012 of a trilateral agreement between USAID, ABC Brazil, and the government of Honduras for the implementation of joint activities on rural development, renewable energy, and poverty reduction. USAID-ACCESO participated in the initial meetings, provided comments to a draft plan and provided short-term technical assistance requirements which could help in USAID-ACCESO implementation.

Once implementation began, USAID-ACCESO provided office space to the new project with the aim of helping to align activities. In reality, limited coordination was obtained, with the exception of the installation of *eco-justa* stoves in USAID-ACCESO client houses and some solar panels in selected CENs. As of March 2015, according to USAID-ACCESO records, the trilateral project had installed 1,450 stoves, 30 solar energy systems and three solar dryers with USAID-ACCESO clients. Note: USAID-

ACCESO installed 2,240 eco-justa stoves and 1,315 solar dryers (with one dedicated renewable energy technician).

## **7.9 ACTIVITIES WITH GOVERNMENT MINISTRIES**

USAID-ACCESO collaborated with several government ministries and institutions, both informally and formally through signed memorandum. Several field visits with government representatives were carried out, including the President, First Lady, Vice Presidents and ministers. While the project did not work through the government, the relationships and agreements with them facilitated implementation, expanded outreach, promoted information, technology and methodology exchange, and increased visibility.

Examples included:

### **FY 2010/2011**

- SAG: coordination with the minister of agriculture on USAID-ACCESO activities and private sector support.
- Participation of project representatives in G-16 meeting.

### **FY 2011/2012**

- Wide range of activities including training of SAG technicians, organization of USAID-ACCESO consultative committee meetings, visits by the minister to field activities, policy activities, and rural village bank financing.
- Coordination with the ministry of health, centralized and regionally, with support to health centers, the AIN-C program (before closure in January 2012), and provision of basic health packages.
- Ministry of Work and Social Security: to utilize funds from PNUD for loans to rural youth enterprises in La Paz and Intibucá.
- Joint activities with the Ministry of Industry and Commerce under policy and small business development.
- Office of the Presidency: communication on activities and selected coordination with UTSAN (food security).

### **FY 2012/2013**

- Presentation of USAID-ACCESO activities, with emphasis on nutrition, in meeting organized by the minister of agriculture, to the minister of health, minister of human rights, and other government representatives.
- Participation of the minister of agriculture, and representatives from the Ministry of Industry of Commerce and local government in the formal provision of legal registration documentation to MSMEs.
- Presentation of overall USAID-ACCESO activities to representatives of IFAD and SAG.
- Involvement of representatives from UNDP, Firefighters of Honduras, COPECO, ICADE and SECPLAN in disaster and NRM training activities.
- Training of SAG and ENEE technicians in drip irrigation.
- Training event for Ministry of Agriculture technicians in drip irrigation, Comayagua.
- Participation in SAG organized sectorial meeting, with short presentations on policy and market driven production activities.
- Training event for Ministry of Agriculture technicians in drip irrigation, Choluteca.
- Registro Nacional de las Personas for access to national identity data base.

- Instituto de Conservación Forestal with permissions for use of communal forests (resin extraction, firewood/charcoal and fatwood) and commercial use of registered planted trees.
- Ministry of Health through coordination with health centers.
- SIC: registration of MSMEs.
- PRONADERS: registration of MSMEs.
- INFOP: joint training activities in agricultural production and processing.

#### **FY2013/2014**

- Wide range of activities including training of SAG technicians, organization of the USAID-ACCESO consultative committee meetings, ad-hoc committee for approval of technical production manuals, ministerial meetings regarding policy activities and rural village bank financing; and visits by the minister to USAID-ACCESO field activities.
- Donation of small-scale drip irrigation systems to USAID-ACCESO clients.
- USAID-ACCESO applied for large-scale overhead irrigation systems (5 hectares each) on behalf of project growers (Austrian donation); two were approved and installed.
- Meetings with the minister and vice ministers of agriculture on various policy-related activities, technical assistance delivery, cattle production, and finance. Included a meeting with the president of Honduras on technical assistance services/delivery and finance.
- Visit with vice minister of agriculture to sheep production facility to determine viability of establishing an outgrower program under USAID-ACCESO or future USAID projects.
- Meetings with the president and vice president of BANADESA to define new procedures for the implementation of the Agricultural Insurance operated by BANADESA and for the development of new credit access mechanisms for small producers assisted by USAID-ACCESS with trust funds managed by BANADESA.
- Wide range of activities related with SENASA including: streamlined processes for the registration and operation of chicken slaughter houses; registration of poultry farms engaged in the production of poultry meat and eggs; simplification of export permit processes to regional markets for agriculture products; review of regulations for pesticides and related substances; veterinary medicines regulations to simplify administrative procedures and requirements.
- The project continued to work closely with leaders and technicians from Ministry of Health facilities in target areas for the coordination of field activities related to delivery of a basic services package. During the reporting year, a total of 873 basic services packages were delivered in targeted communities. The majority of these services were provided in Copán while in Intibucá emphasis was on the delivery of Primary Health Care Services (PHCS) carried out through home visits.
- Coordination with Ministry of Health departmental officers, health centers at the community level, and ULAT.
- Field visits to USAID-ACCESO client households with *Secretaría de Desarrollo e Inclusión Social* and initial discussions on possible collaboration (with *Vida Mejor* project).
- Registration of MSMEs; legalization of rural village banks with the Ministry of Industry and Commerce.
- Joint training activities with INFOP in agricultural production and processing.
- Meetings with SECPLAN / IFAD *Proyecto Horizontes del Norte* to access finance and support for 10 grower organizations assisted by USAID-ACCESO.
- Coordinated training events with COPECO for CODELs.
- Meetings with the *Departamento de Egresos e Ingresos (DEI)* to simplify procedures for presentation of RTN applications form for companies and individuals.
- Meetings with the *Comisión Nacional de Banca y Seguros (CNBS)* for the analysis and discussion of reforms to the Normative Evaluation and Classification of the Agricultural Loan Portfolio.

- Secretaría de Gobernación: registration of Water Management Boards.

As can be seen from the wide range of activities carried out with the GOH, the project was able to leverage technical expertise, implementation methodology and results to obtain GOH buy-in and support. Key to this was the preparation of the Country Investment Plan for the Agricultural Sector (CIP), which established a direct link with the Ministry of Agriculture and which subsequently opened the doors to other Ministries. The CIP was the precursor to enable the GOH to access and obtain GAFSP funds. Multiple field visits were made, initially from the Minister of Agriculture, and then from high level government ministers and officials, including several with the President. USAID-ACCESO was used as an example of successfully field implementation with integrated technical activities providing viable solutions in income generation and nutrition. USAID's results driven focus under Feed the Future was key to the formation of the alliance for the Dry Corridor which is now made up of multiple donors with several hundred million dollars committed. With field visits, tours, and presentations, USAID-ACCESO was (probably) a key factor in achieving this coordination and commitment from the GOH and other donors.

### **Municipal Governments**

USAID-ACCESO has coordinated field activities with 80 municipalities in the six departments:

- Copán: 10
- Intibucá: 5
- La Paz: 18
- Lempira: 13
- Ocotepeque: 14
- Santa Bárbara: 20

A wide range of activities were carried out with the municipalities, including:

- Assistance to identify priority areas with high poverty levels and access to water and roads.
- Donations of fruit trees, hard wood seeds, chickens.
- Financing of seeds and inputs (including fertilizer) for beans, corn, and selected high-value crops.
- Co-financing of USAID-ACCESO and nutritional training centers.
- Transport costs for growers training activities.
- Coordination with farmers markets.
- Construction materials for *eco-justa* stoves.
- Co-financing with households on solar panel installation.
- Co-financing with households on home improvements (floor, roof).
- Establishment of municipal corn grain reserve system.
- Co-investment with USAID-ACCESO on irrigation systems and reservoir construction.
- Land purchase to ensure potable water source protection.
- Materials and input for box bridge construction.
- Rural road repair and maintenance.
- Fruit tree planting programs.
- Preparation of *ordenanzas* covering pesticide sales, garbage, watershed protection and others.
- Loan programs for project growers and MSMEs.

Excellent working relations were developed with many municipalities, more than initially expected at project start-up. This was due mainly to the ability of the project to provide multiple services to households also considered as a priority by the municipalities. The ability to provide solutions and investment options in productive operations and essential infrastructure enable the project to leverage

co-investment from the municipalities. The project's ability to assist communities with potable water, NRM, basic productive infrastructure, and nutrition opened many doors. The direct support from field technicians to the municipalities and the client households was key to facilitating joint activities.

Local governments invested just over \$750,000 in activities relating to USAID-ACCESO and household clients (of a total of \$1.045 million in GOH co-investment in fixed assets). This gives an indication of the municipal interest, engagement and commitment.

## 7.10 STUDENT TRAINING

### *Increasing the technical capabilities of agricultural schools and local NGOs*

As project implementation evolves, coordination with local actors continues to increase. NGOs, local governmental organizations, and agricultural, technical, and social promotion schools participate in many project training events and activities, and in some cases, specialized training courses were developed to meet their specific needs.

During project implementation more than 760 students held internships with the project in areas such as processing, business skills and finance, production, health and nutrition, IT, and administration. These students came from 57 different schools, technical colleges, and universities, and received a total of 4,952 weeks of on-the-job technical training. 34 students were at the university level (Zamorano, UNAH, Universidad Metropolitana, Universidad de San Pedro Sula, and UNA). Other schools were trained in executing community cleaning campaigns and others participated in the food preparation workshops.

## 7.11 LOCAL NGO AND ORGANIZATIONS

USAID-ACCESO worked with more than 100 organizations to coordinate activities and facilitate project implementation. Technical areas of collaboration included production, nutrition and health, renewable energy, NRM, and disaster mitigation. These range from grower organizations, cooperatives, local and international NGOs, donor projects, *mancomunidades*, and government institutions.

USAID-ACCESO worked with or collaborated with more than 60 counterpart organizations, including NGOs, donor institutions and projects have participated in project-sponsored activities. These included: Aldea Global, ANDESAIN, ASONOG, Caritas, CASM, CESAL, CEPUDO, CHF Honduras, Child Fund, CODESSE, COMRURAL, COMUCAP, COOMUPL, COPRAFEL, Catholic Relief Service, Escuela San Pablo, EDUCAR, Escuela Agrícola Pompilio Ortega, FAMA, FAO, IFAD, FIDE, FOPRIDEH, Fundación Adelante, FUNDAHRSE, Fundación Banhcafe, Fundahmicro, Fundación Vida, Funder, Red Cross, Heifer, IHCAFE, OCDIH, ODECO, Veco-MA, Oxfam, SOCODEVI, Swiss Contact, UNICEF, World Food Programme, and World Vision.

- Throughout implementation technicians from NGOs participated in wide-ranging project training events with households that included the following activities:
  - Production technicians in productive activities
  - Selected NGOs requested specific training events for their technicians, particularly with irrigation and high value horticulture production.
  - Technicians from financial organizations received hands-on training in production systems and costs.
  - Training of health volunteers and health and nutrition staff from NGOs and other organizations.
  - Training of technicians from *mancomunidades*, CODELS, and CODEM on NRM and disaster mitigation.

Eleven sub-contractors were also contracted directly to assist in the implementation of USAID-ACCESO; they included large national NGOs (CARE, Funder, Save the Children), small local NGOs (Aldea Global, CASM, COPRAFEL, PILAHR, OCDIH), a research organization (FHIA), a university (Zamorano), and an industry association (IHCAFE). Training was provided to all in following USAID regulations and requirements for invoicing, documentation, and administration. Some received additional support in human resource management, employee hiring, and employee evaluation. Some also received technical training in production, postharvest, marketing, and nutrition.

While IHCAFE was a subcontractor for project implementation, the project also worked with them in developing industry strategies to combat coffee rust. This involved multiple meetings with IHCAFE centrally and with industry players in Santa Barbara. Project support was given for clients to access loan funds from IHCAFE and for grower registration. Joint work was carried out on fruit tree promotion and solar dryer installation. IHCAFE provided initial training to project technicians on coffee production. IHCAFE does not have the technical capacity to provide assistance to all growers; the USAID-ACCESO client (small/micro) rarely, if ever, received any technical assistance or training from IHCAFE technicians.

## 7.12 OTHERS

USAID-ACCESO was involved in a range of activities as invited presenters, to share results and experiences and to provide technical support and training. Examples included:

- UNAH: Congreso Uniendo las Piezas para el Desarrollo – “Estrategias novedosas para la erradicación de la pobreza en comunidades rurales”.
- Tufts University: support was provided to a PhD student to carry out a study on USAID-ACCESO activities and results. Field logistics and meetings with project clients and technicians were organized together with the provision of data sets.
- USAID-ACCESO staff participation (production specialist, postharvest specialist and department managers) as presenters on drip irrigation and onion production conducted by FHIA in Comayagua.
- Provision of an EDAN training course to technicians of CRS and Caritas.
- Information provided to JICA on USAID-ACCESO activities with markets, crops, technical assistance and other areas – for designing new JICA support program to Honduras.
- USAID-ACCESO provided training and implementation support to SAG, including training of DICTA technicians in week long workshop on basic production practices (Comayagua) and SAG Irrigation department technicians on drip irrigation (Choluteca). Project technicians have also given technical and project presentations in workshops organized by USDA, Zamorano, FHIA, RED Katalysis, donor coordination meetings, and others.
- Participation in II Foro de Seguridad Alimentaria y Nutricional “Agricultura familiar y retos de la seguridad alimentaria y nutrición,” Zamorano.
- Numerous meetings to with representatives from a range of organizations interested in USAID-ACCESO activities including AGEXPORT Guatemala, IFC, HortCRSP, PeanutCRSP, IPM-CRSP, JICA, GIZ, CBI, and others.

## 8. GENDER INTEGRATION

USAID-ACCESO's gender integration strategy identified the types of technical assistance, technologies, and crops that best address constraints faced by women. Female clients were actively enrolled in credit unions and programs; became involved in women's groups; and many nutrition clients became production clients. Key activities focused on crop selection, including easy-to-grow herbs for smaller areas of land, garden-grown vegetables to generate food for the family, and fruit trees. The gender strategy included details on gender disaggregated indicators and data analysis, as well as including women in technical training given the cultural context of Honduras. Good opportunities existed to increase women's involvement in animal production and off-farm and value-added microenterprises. Targeted technologies in production included drip irrigation and low-cost greenhouses. Sowing, harvesting, and postharvest activities also provided women with labor opportunities. Selected gender related activities and numbers included:

- Women registered as 20.5 percent of client households (6,985) receiving direct project assistance. This number does not necessarily mean women-headed households; but, it does not count men receiving assistance as the principle client. Men and women (not necessarily a couple) accounted for 95 percent of client households, while 2 percent were women only and 3 percent men only.
- 25,300 of the 67,972 individuals (37.2 percent) who received project agricultural sector productivity or food security training were women.
- Fintrac gender specialists carried out focus groups with client households to determine roles, responsibilities, division of labor, and decision making for household expenses and investments.

Tables 66 to 73 provide data broken down by sex for a number of indicators.

**Table 66. Summary: Female Participation**

Indicator	March 2015	
	%	Number
Clients as % of total	20.5	6,985
Individuals trained as % of total	37.2	25,300
Participants in trainings as % of total	31.5	259,138
Access to finance as % of total loan value	10.9	1,836,841
Access to finance as % of total number of loans	16.4	2,210
Access to finance as % of total individuals with loans	17.2	1,488
Area planted as % of total area	13.4	9,918
Number of individual planting as % of total number	16.3	26,774
Number of MSMEs accessing new market opportunities through a broker	16	1,976
Number of MSMEs that have entered formal preferred supplier or contract agreements with brokers	17	910
Number of additional hectares under improved technologies or management practices		
Sex disaggregate based on decision making power		
Female	2.9	823
Joint	67.0	19,277
Number of companies (including farms) that have made conservation-friendly changes in their business practices	20.3	1,920

**Table 67. Household and Household MSME Client Sex Breakdown**

Department	# Female	% Female	# Male	% Male	Total
Copán	1,053	15%	4,320	16%	5,373
Intibucá	996	14%	4,588	17%	5,584
La Paz	1,778	25%	3,860	14%	5,638
Lempira	1,286	18%	5,344	20%	6,630
Ocatepeque	950	14%	3,381	13%	4,331
Santa Bárbara	922	13%	5,552	21%	6,474
<b>Total</b>	<b>6,985</b>	<b>100%</b>	<b>27,045</b>	<b>100%</b>	<b>34,030</b>

**Table 68. Summary of Individuals Trained by Activity Area by Sex**

Activity Area	# Male	% Male	# Females	% Female	Total
Animal Production	3,880	67.1%	1,901	32.9%	5,781
Business Development Services (BDS)	22	81.5%	5	18.5%	27
Business Skills	5,979	67.4%	2,897	32.6%	8,876
Certifications	1,621	79.8%	411	20.2%	2,032
Natural Disaster Management & Mitigation	1,150	67.6%	552	32.4%	1,702
Finance / Credit	481	68.1%	225	31.9%	706
Forestry	560	80.9%	132	19.1%	692
Information Technology	470	71.1%	191	28.9%	661
Market Information / Marketing	1,049	77.8%	300	22.2%	1,349
NRM	3,213	73.9%	1,133	26.1%	4,346
Health & Nutrition	1,482	14.1%	8,997	85.9%	10,479
Postharvest	3,588	80.1%	892	19.9%	4,480
Processing	939	27.3%	2,504	72.7%	3,443
Production	35,909	73.5%	12,964	26.5%	48,873
Project	916	66.4%	463	33.6%	1,379
Renewable Energy	2,200	75.5%	713	24.5%	2,913
Research/Other	63	52.9%	56	47.1%	119
<b>Total</b>	<b>63,522</b>	<b>64.9%</b>	<b>34,336</b>	<b>35.1%</b>	<b>97,858</b>

*Only individuals with National ID numbers were included (67,972). Individuals can receive trainings in more than one area.*

**Table 69. Summary of Training Participants by Activity Area by Sex**

Activity Area	# Male	% Male	# Females	% Female	Total
Animal Production	14,593	68.5%	6,702	31.5%	21,295
Business Skills	25,191	66.0%	12,990	34.0%	38,181
Certifications	3,220	81.7%	720	18.3%	3,940
Finance / Credit	2,630	68.5%	1,207	31.5%	3,837
Forestry	1,662	82.0%	366	18.0%	2,028
Health & Nutrition	6,477	6.3%	97,144	93.7%	103,621
Information Technology	514	59.5%	350	40.5%	864
Logistics / Coordination	60	92.3%	5	7.7%	65
Market Information	3,588	77.9%	1,015	22.1%	4,603
Monitoring & Evaluation	234	86.3%	37	13.7%	271
Postharvest	12,175	78.6%	3,309	21.4%	15,484
Processing	3,163	18.5%	13,920	81.5%	17,083
Production	464,545	80.5%	112,343	19.5%	576,888
Project	2,627	68.3%	1,218	31.7%	3,845
Renewable Energy	8,553	80.9%	2,014	19.1%	10,567
Research	61	50.8%	59	49.2%	120
Specialty Coffee	964	88.4%	127	11.6%	1,091
NRM	9,965	74.1%	3,478	25.9%	13,443
Natural Disaster Management & Mitigation	4,510	67.9%	2,134	32.1%	6,644
<b>Total</b>	<b>564,732</b>	<b>68.5%</b>	<b>259,138</b>	<b>31.5%</b>	<b>823,870</b>

**Table 70. Loan Value By Department and Sex US\$**

Department	Female	% Female	Male	% Male	Total
Comayagua	0	0.0%	15,401	100.0%	15,401
Copán	332,795	10.0%	2,996,785	90.0%	3,329,580
Intibucá	316,273	12.3%	2,254,828	87.7%	2,571,101
La Paz	385,909	28.5%	966,714	71.5%	1,352,623
Lempira	329,259	13.8%	2,058,750	86.2%	2,388,009
Ocatepeque	328,304	9.5%	3,121,215	90.5%	3,449,520
Santa Bárbara	144,300	3.8%	3,626,730	96.2%	3,771,031
<b>Total</b>	<b>1,836,841</b>	<b>10.9%</b>	<b>15,040,424</b>	<b>89.1%</b>	<b>16,877,265</b>
<b>% by sex</b>	<b>10.90%</b>		<b>89.10%</b>		

**Table 71. Loan data by Sex**

Category	Female	% of Total	Male	% of Total	Total
Loan Value \$	1,836,841	11%	15,040,424	89%	16,877,265
# of Loans	2,210	16%	11,286	84%	13,496
# MSMEs	1,488	17%	7,168	83%	8,656

**Table 72. Planting Summary by Sex and Crop Category - Hectares**

Crop Category	Female		Male		Total (Has)
	Hectares	% of Total	Hectares	% of Total	
Fruit trees	83	1%	764	1%	847
Coffee	3,464	35%	22,911	36%	26,375
Basic Grains	5,785	58%	34,896	55%	40,681
Horticulture	586	6%	5,353	8%	5,939
<b>Total</b>	<b>9,918</b>	<b>100%</b>	<b>63,925</b>	<b>100%</b>	<b>73,843</b>

**Table 73. Planting Summary by Sex and Department - Hectares & # Clients**

Row Labels	Female		Male		Total	
	# Clients	Hectares	# Clients	Hectares	# Clients	Hectares
Copán	1,025	1,702	4,265	12,298	5,290	14,000
Intibucá	967	1,072	4,370	7,596	5,337	8,669
La Paz	1,657	1,890	3,563	7,118	5,220	9,008
Lempira	1,534	2,096	5,308	12,183	6,842	14,278
Ocotepeque	942	1,442	3,360	9,214	4,302	10,656
Santa Bárbara	951	1,716	5,498	15,516	6,449	17,232
<b>Total</b>	<b>7,076</b>	<b>9,918</b>	<b>26,364</b>	<b>63,925</b>	<b>33,440</b>	<b>73,843</b>

The implementation of USAID-ACCESO gender integration strategy produced satisfactory results of women integration in project's productive activities as well as men's participation in activities related to maternal and child care. The project embraced opportunities to involve women in the household and community economy through productive activities such as animal production and off-farm and value-added microenterprises. Targeted technologies in production which contributed to women's participation in the agriculture sector included drip irrigation and the introduction of low-cost greenhouses. Sowing, harvesting, and postharvest activities were also activities that provided women with labor opportunities, and all of the above contributed to increasing the number of women clients receiving assistance and benefits from the project.

USAID defines gender-based violence as "violence that is directed at an individual based on his or her biological sex, gender identity, or perceived adherence to socially defined norms of masculinity and femininity. It includes physical, sexual, and psychological abuse; threats; coercion; arbitrary deprivation of liberty; and economic deprivation, whether occurring in public or private life." Though gender-based violence (was not part of USAID-ACCESO's gender strategy, there were occasions where project staff was informed or was directly involved in addressing this type of violence. The day-to-day relations between technicians and clients created a level of confidence that allowed clients to confide their problems in the technician. Production technicians were aware of several cases of verbal/psychological violence primary due to alcohol abuse by men. In these cases project staff played the role of "listener" and not of "counselor" as they were not trained to address these problems. Other examples were those where project health and nutrition technicians worked through community council meetings to inform and clarify the purpose of project interventions and approaches related to improving the health of mothers and children, in response to spouses' resistance and aggressive response to mothers' change in practices. This type of intervention by project staff resulted in positive responses and implementation of activities continued.

## 9. ADMINISTRATIVE CONSIDERATIONS

**Staffing:** Most of the senior level technical and management team were in place within two weeks of project start-up. Contracts were developed in the first quarter, with the initial five subcontractors operating six of the 12 local field implementation teams by the end of the second quarter. In the third quarter, contract mechanisms were developed with six local NGOs for five local implementation teams. By the end of 2011, 11 of the 12 Community Technical Units (CTUs) were operational. The final CTU was finalized in January 2012, 10 months after project start-up.

Project staff turnover was high with around 50 percent turnover. At the junior level, with relatively low salaries, low annual salary increases, a large client load, and pressure to meet targets, it was difficult to retain staff; after they were trained by the project, they were frequently taken up by other organizations who offered improved salaries and less work pressure to accomplish targets. Project management worked closely with department managers and subcontractors to identify reasons for staff turnover and to implement measures to address the issue.

**Subcontractors:** Eleven local organizations were subcontracted during implementation. They managed a range of specialists and technicians working on the project. Their administrative capabilities were wide ranging, and considerable training was initially provided to meet documentation and invoicing requirements and standards for USAID regulations. This was particularly the case with invoice timing and quality on the part of several subcontractors. Some subcontractors lacked the required cash flows, particularly when invoices were delayed during the initial phases due to errors or the lack of supporting documentation. Internal audits of the five main subcontractors and eight small subcontractors were carried out by Fintrac home office, together with local administrators. Invoices, documentation, and bank reconciliations were reviewed in all cases. Where necessary, observations and recommendations were provided to the subcontractors. Some subcontractors also received training in hiring practices and selection of candidates, personnel evaluation and administrative training of their own staff.

The audit report of the Office of Inspector General (January 2015) noted that Fintrac helped subcontractors develop their expertise in accounting and reporting but the activities were not reported, evaluated, or measured. While there was no specific PMP or work plan indicator, training of subcontractor project administration staff was reported in the narrative of quarterly and annual reports. Because of the integrated nature of the project, results of all implementing partners were presented as one. Using Fintrac's field-based M&E system, which allowed for a very high degree of disaggregation, Fintrac tracked a wide variety of performance metrics/indicators for each field technician and by geographic zone to measure overall subcontractor performance, and these were shared with subcontractors each quarter.

**Exonerations:** Delays with tax exoneration documentation resulted in delays of vehicle and equipment purchases for nutrition and irrigation grant activities, which in turn resulted in delays in implementation.

**Staff hiring approvals:** Every project hire required USAID approval. Over the life of the project, 79 individual requests for approval for 351 persons were made; approvals took from the same day up to 55 days – averaging 14 days. In several cases, selected personnel resigned before approval for hire was obtained. This requirement for USAID approval for all hires was eventually removed in the last quarter of 2014.

**Security:** Project staff were victim of armed assault (8 times) with motorbikes (3), computer (3), equipment (GPS, agronomist kits, cell phones), and personal effects/documents being stolen. Staff cars and houses have also been broken into on five occasions. Certain zones and routes became off-limits, which restricted implementation, especially in communities where the project had to stop providing

technical assistance and training visits, which included: El Espirito, Paraíso, El Zompopero (Copán), Los Barrientos, Planes de la Zona, La Zona, Los Hoyos, San Bartolo, San Carlos I, and San Carlos II (Lempira).

**Project Expenditure by Component:** Budget expenditures by staff and line item were proportioned by IR, Sub-IR and Activities. While this was not exact given the integrated nature of USAID-ACCESO, it does provide an indication of the proportional expenditure at each level (Table 74).

**Table 74. Percentage Project Expenditure by IR, Sub-IR and Activities**

<b>INTERMEDIATE RESULT</b>																	
IR 2.1: RURAL MICRO, SMALL, AND MEDIUM ENTERPRISE (MSME) GROWTH INCREASED											IR 2.2: HONDURAN BIODIVERSITY & NATURAL RESOURCES CONSERVED		IR 2.3: CAPACITY TO MITIGATE AND ADAPT TO CLIMATE CHANGE STRENGTHENED		IR 4.1: USE OF QUALITY MATERNAL AND CHILD HEALTH AND FAMILY PLANNING SERVICES INCREASED		
<b>SUB-INTERMEDIATE RESULT</b>																	
Sub-IR 2.1.1: RURAL MSMEs' ACCESS TO INPUTS, PRACTICES, AND TECHNOLOGY FOR MARKET PARTICIPATION IMPROVED				SUB-IR 2.1.2: RURAL MSMEs' ACCESS TO NEW MARKET OPPORTUNITIES INCREASED			SUB-IR 2.1.3: BARRIERS TO COMPETITIVENESS OF RURAL MSMEs REDUCED						SUB-IR 2.3.3: DISASTER VULNERABILITY REDUCED				
<b>ACTIVITIES</b>																	
	Implement- ation of updated produc- tion techno- logies (on- farm and off- farm)	Private sector alliances and integra- tion of private sector equip- ment, input and service provider	Grower organiza- tion and the develop- ment of market driven produc- tion program	Increasing the technical capability of agric. schools and local NGOs	Develop- ment of buyer linkages and logistics	Production and systems implemen- tation to meet buyers quality standards	Imple- mentation of business certific- ation programs	Increased access to finance	Policy and value/ chain sector constr- aints identi- fied and eliminate- ed	Applied research and develop- ment programs developed	Implemen- tation of NRM practices on farm	Implement- ation of NRM practices at community and municipality levels	Develop- ment and implemen- tation of disaster mitigation plans and systems	Install- ation of renewable energy technol- ogies	Implemen- tation of improved health and nutrition practices at the household level	Strengthen- ing of health center services	
Activity	43.46%	6.38%	6.14%	1.38%	7.43%	7.07%	2.94%	2.55%	2.10%	1.88%	3.66%	2.08%	1.62%	1.84%	6.74%	2.73%	
Sub IR	57.36%				17.45%			6.52%				5.74%		3.46%		9.47%	
IR	81.33%										5.74%		3.46%		9.47%		

## 10. LESSONS LEARNED

Many lessons were learned during the implementation of USAID-ACCESO, both positive and negative, that can be taken into consideration in future activities. The main aspects that made USAID-ACCESO different from previous economic development and nutrition projects in Honduras included the following:

- 30,000 families to be moved above the poverty line, with specific individual household income targets.
- A focus on families with subsistence level basic grain production and small-scale coffee production.
- Zone of influence covering some of the poorest communities with very limited infrastructure.
- Integration of a wide range of technical activities including agricultural production, marketing, postharvest, finance, policy, nutrition and health, renewable energy, NRM, and disaster mitigation.

The integrated approach allowed the project to provide solutions to client households in both economic development and nutrition, and leverage the work of several components to achieve changes at both the household and community levels. It did, however, also lead to several challenges in implementation, including the selection of clients and communities both within and between components, the delivery of technical assistance to groups of growers, and slower rates of technology uptake and change than required.

Fintrac surveyed 43 field specialists, managers, and technicians across the components to determine their opinions on what worked well, what did not work well, and what could be improved or expanded. There were many consistencies in responses related to the characteristics of the household clients, management and project guidelines, and the commercial and integrated focus.

### 10.1 WHAT WORKED WELL?

<b>Production</b>	<ul style="list-style-type: none"> <li>○ Vegetable production programs</li> <li>○ Irrigation districts</li> <li>○ Animal production, particularly small-scale cattle production linked to pasture production</li> <li>○ Coffee production, handling and marketing (despite the problems with <i>roya</i> and markets)</li> <li>○ Established technician visit rolls (or schedules)</li> <li>○ Technician training</li> <li>○ Alliances with municipalities, NGOs, and private sector input and equipment suppliers</li> </ul>
<b>Marketing</b>	<ul style="list-style-type: none"> <li>○ Alliances with buyers, collection centers, and processing plants</li> <li>○ Field tours with potential buyers</li> <li>○ Participation in national fairs and events</li> </ul>
<b>Postharvest</b>	<ul style="list-style-type: none"> <li>○ Training and technical assistance activities</li> <li>○ Grower visits to collection centers, packhouses and to buyer facilities</li> <li>○ Solar dryers for coffee, corn, and other products</li> <li>○ Knowledge of and compliance with product standards</li> <li>○ Field tours with potential buyers</li> </ul>
<b>Business Skills/Finance</b>	<ul style="list-style-type: none"> <li>○ Establishment of rural “agro-stores” for input sales</li> <li>○ Grain warehouse receipt systems with <i>cajas rurales</i> and others</li> <li>○ Contract production or sales contracts</li> <li>○ Legalization and/or strengthening of the <i>cajas rurales</i></li> </ul>

	<ul style="list-style-type: none"> <li>○ Alliances with cooperatives and finance providers</li> </ul>
<b>Processing/ Value-Added</b>	<ul style="list-style-type: none"> <li>○ Training and technical assistance</li> <li>○ Legalization of MSMEs</li> <li>○ Alliances with INFOP and others</li> <li>○ Assistance in plant registration with SENASA</li> <li>○ Product diversification</li> </ul>
<b>M&amp;E</b>	<ul style="list-style-type: none"> <li>○ CIRIS data structured and updated to meet project needs</li> <li>○ Direct and continuous support from Fintrac M&amp;E team</li> <li>○ Availability of logistics</li> </ul>

## 10.2 WHAT DID NOT WORK WELL?

<b>General</b>	<ul style="list-style-type: none"> <li>○ Coordination between components</li> </ul>
<b>Production</b>	<ul style="list-style-type: none"> <li>○ Planting programs for non-traditional export crops</li> <li>○ Coordination between components</li> <li>○ Contracting of junior technicians</li> <li>○ The number of clients per agronomy technician</li> <li>○ The selection of communities and clients</li> </ul>
<b>Marketing</b>	<ul style="list-style-type: none"> <li>○ Participation in local fairs and events</li> <li>○ Local (rural) buyers linked with large intermediary buyers</li> <li>○ Compliance with buyer volume, quality and consistency requirements</li> <li>○ Coordination between market demand and planting programs</li> </ul>
<b>Postharvest</b>	<ul style="list-style-type: none"> <li>○ Compliance with basic practices (production and postharvest)</li> <li>○ Compliance with delivery programs to formal buyers</li> <li>○ Export programs</li> </ul>
<b>Business Skills/Finance</b>	<ul style="list-style-type: none"> <li>○ Client commitment to repaying loans</li> <li>○ Lack of client documentation (RTN tax numbers, municipal tax receipts, etc.)</li> </ul>
<b>Processing/ Value-Added</b>	<ul style="list-style-type: none"> <li>○ Lack of client documentation (RTN tax numbers, municipal tax receipts, etc.)</li> <li>○ Project investment to support SMMEs</li> </ul>
<b>M&amp;E</b>	<ul style="list-style-type: none"> <li>○ Certain clients unsatisfied with project services and unwilling to provide survey data</li> <li>○ Delays from technical team in entry of field-related data</li> <li>○ High rotation of junior field staff</li> </ul>

## 10.3 WHAT COULD BE IMPROVED OR EXPANDED?

<b>General</b>	<ul style="list-style-type: none"> <li>○ Decentralize more responsibilities for coordination and implementation at the department level</li> <li>○ Coordination between technical components</li> </ul>
<b>Production</b>	<ul style="list-style-type: none"> <li>○ Hiring of junior technicians, providing them more training before working with project clients</li> <li>○ Invest in irrigation districts earlier in project implementation</li> <li>○ Improve the selection of registered project clients</li> </ul>
<b>Marketing</b>	<ul style="list-style-type: none"> <li>○ Strengthen regional market sales</li> <li>○ Strengthen relationships with regional buyer/distributors</li> <li>○ Expand relationships with buyers of specialty and quality coffees</li> <li>○ Increase sales to agroindustry/processors</li> </ul>

<b>Postharvest</b>	<ul style="list-style-type: none"> <li>○ Improve the supervision and implementation of basic practices</li> </ul>
<b>Business Skills/Finance</b>	<ul style="list-style-type: none"> <li>○ Strengthen and expand relationships with input suppliers</li> <li>○ Expand triangulated credit</li> <li>○ Increased involvement of municipalities</li> <li>○ Incorporate more members of the <i>cajas rurales</i> as project clients</li> </ul>
<b>Processing/ Value-Added</b>	<ul style="list-style-type: none"> <li>○ Carry out co-investment in equipment earlier in implementation</li> <li>○ Strengthen commercial alliances</li> <li>○ Increase support to industrialized products</li> <li>○ Increase support to coffee drying and value added</li> </ul>
<b>M&amp;E</b>	<ul style="list-style-type: none"> <li>○ Initial client selection</li> <li>○ Strengthen alliances with municipalities and other organizations</li> <li>○ Provide project support in more concentrated geographic areas to improve logistics for data and survey collection</li> <li>○ Ensure data entry from field technicians a minimum of twice per week</li> </ul>

A selection of the strengths, weaknesses and opportunities for improvements are expanded on in the following sections.

## 10.4 PROJECT CLIENTS

Given the project duration and the start-up of the field activities after the grain planting season in 2010, project agronomy technicians had to rapidly recruit household clients. Technicians focused on communities and individuals who showed interest in receiving technical assistance in order to speed up recruitment. Clients were registered based on their initial interest and participation, not on their potential ability to move out of poverty. Family size and location was not taken into consideration, even though increases in incomes of more than 500 percent would have been required to move them out of poverty. Problems were encountered with households (and in some cases, entire communities) dropping out after the first year if they did not receive donations or did not receive any benefits for their participation. Some were dropped by the project for lack of implementation of the basic practices necessary to generate increased incomes. In retrospect, the clients should have been selected based on their potential and interest to generate the required incomes to move out of poverty, in addition to road infrastructure, logistics, and the availability of water. This however, would have significantly reduced the client recruitment and excluded some households from receiving the assistance.

The value added/processing component also recruited initial clients at the same time as the households were being recruited, identifying clients with the interest in receiving technical assistance and the potential to increase sales and incomes to meet project targets. The selection of these clients was not directly linked or limited to the selection of the household clients for production activities and household income generations. The nutrition component, in order to meet targets, selected many communities with the poorest nutrition indicators, but these were not necessarily within the communities where the production component was selecting clients.

Considerable emphasis was given to demonstrating the value to the clients of the technical assistance and training – education – that was provided by the project. Most did not initially see the value and were more interested in donations than training. In general, client ability to absorb the knowledge and technologies was limited. 49 percent of the clients had a 3<sup>rd</sup> grade education or less. Most were probably malnourished as infants which would result in limited learning abilities later in life. Aspirations were limited and many were happy with just a good harvest and small increases in incomes. Some went back to traditional production methods as the basic practices were considered too time consuming, too complicated, or required too much effort. These are general statements and there were exceptions. There were many success stories, with families adopting technologies, new products, developing new

and diversified income sources, and increasing incomes by 500 percent or more. The challenge was to obtain these results across the majority of the 30,000 households.

It needs to be stated that there was not a long list of clients waiting to receive project assistance. Households started with small changes in a limited area and waited to see results before expanding. Many households observed others and waited to see results before trying out the practices themselves. The recruitment process was therefore slower and requirements to receive assistance were reduced in order to all recruit clients by mid-2013. This meant that a significant percentage was registered as clients but in reality did not have the potential to increase incomes to move above the poverty line. Individual households increased production, yields, and incomes, but not to the amount required to meet project targets. Large families required major income increases. While the average size was 5.4 members, 29 percent had seven members or more. A 10-member family needed almost \$9,000 of net income per year to be above the poverty line. A difficult target to achieve even in the best of circumstances.

Future projects with individual household income targets need to be more selective of clients. Each potential client needs to be evaluated in terms of income generation potential, abilities and aspirations. This means that the total number of beneficiaries has to be reduced or the number of technicians increased to reduce the ratio to provide more personalized assistance. This will remain a challenge in the future.

Communities with limited water and road access should not be included. USAID-ACCESO worked to remove these limitations while at the same time providing technical assistance. This took too much time, effort, and project resources, with little or no contribution to moving families above the poverty line (although many did increase their incomes and they now have access during the rainy season). While these are the families that perhaps need the assistance the most, it does not make sense for implementers to take them on if they do not have the potential to reach the set targets. They will remain the beneficiaries of donations and NGO programs.

## **10.5 TECHNICAL ASSISTANCE DELIVERY**

Due to the high number of project clients, technical assistance and training had to be delivered in a group format rather than on an individual basis. Many clients wanted and would have preferred individual support. Each field agronomy technician worked with 250 to 300 individual household clients, providing regular field visits. This ratio was too high to enable individual household visits and many did not participate regularly enough to make and achieve the required changes and adoption of practices. Some clients dropped out and did not continue with the project but still remained in the client database. The high level of junior technician rotation made this problem more acute as new technicians did not know the original client base. Future programs with individual household targets will need to reduce the client to technician ratio to at least 150 clients, and preferably 100 clients. Alliances with local government and the local private sector for hiring field technicians will help, but not solve, this challenge.

USAID-ACCESO provided ongoing training to field technicians in all components. The training of junior agronomists never stopped. Many growers were wary of following the recommendations of young technicians, especially when they recommended practices and technologies that did not seem logical (such as high-density corn planting), required major efforts (land preparation), or they had never seen before (drip irrigation). Many of the junior technicians lacked the experience to be able to solve specific problems or identify possible additional income sources. Some opportunities were not provided to households if the technicians believed the risks were too high or they had insufficient experience to respond to the needs. Many growers thought that they had more experience (particularly with grains and coffee) than junior technicians, even though they were repeating the same mistakes every year. This was critical as the technicians were providing assistance to convince households to invest their time, efforts and limited resources, which if not successful, would lead to financial loss to the household, and the client pulling out of the project. Grower to grower visits helped reduced this challenge. Senior

technicians helped the juniors through these processes directly with the household clients and through technician on-the-job training. In an ideal situation, senior and experienced technicians should be providing the direct technical assistance with the juniors learning alongside.

## **10.6 INTEGRATION OF TECHNICAL COMPONENTS**

USAID-ACCESO was probably the first project to encompass so many different technical components. Major efforts were made to coordinate and integrate the components and provide holistic solutions. This approach, however, did have challenges and could be improved. Client selection, timing, and component targets affected the integration. Theoretically, the household clients should have been selected first and all other components integrated on a gradual basis to ensure they focused on the same household clients. This did not happen as all components started at the same time. Follow-on activities will be able to further improve the integration of the technical components given that a client base will already exist and most communities will have already been identified. This will enable all activities to be focused on the main core of households being supported in economic development and income generation.

## **10.7 SUSTAINABILITY CONSIDERATIONS**

In previous activities carried out by Fintrac with USAID and MCC projects in Honduras, the sustainability was focused on commercial on-farm activity, where technified and profitable operations with trained farmers and employees were able to respond to market demands to increase production, productivity, competitiveness and profits. USAID-ACCESO was somewhat different given that the main target was to take a household above the poverty line. Even when this target was achieved, the household did not normally have the required capital or resilience to absorb a crop loss or a reduction in market prices. They can quickly drop below the poverty line again.

To prevent this, the household needs to be provided extended assistance to increase their earning to at least double the poverty line level. This is challenging for an implementer where the poverty line target in itself is difficult given the initial poverty level, education levels, and access to resources and markets. Threshold targets on an annual basis will force the implementer to focus on the poverty line level and not necessarily enable additional efforts to be made to provide additional assistance or opportunities to continue developing incomes. This is the balance between quantity of households reaching the poverty line threshold and quality (and level) of the technical assistance being provided. The tendency is to increase the quantity of beneficiaries, but this has to negatively affect the overall quality of the end result in income and sustainability terms.

Health and nutrition is somewhat different in that many of the preventative changes made at the household level will remain once the project finished. Most of the households and caregivers will continue utilizing the practices and the volunteers who have been trained will continue implementing the improved systems. There is no or only limited costs for the households associated with these activities. These preventative changes, however, are mainly restricted to those who have received project assistance and others will need to continue supporting them.

Major efforts were made to ensure the sustainability of the irrigation conduction systems, including group formation over time, legal documentation, committees, water source protection, cost sharing, fees for use, calendarized production programs, and municipal involvement. The same applies to potable water systems and other infrastructure investments made at the community level.

In both economic development and nutrition, USAID-ACCESO trained technicians and personnel from other institutions and organizations. Most of these however, follow traditional support designs and are not focused on income generation and results driven solutions. Some new projects and activities (not only the USAID follow-on ones) will be able to benefit from USAID-ACCESO experience and systems to be able to include more households into this process.

If sustainability of technical assistance and training services is a requirement, a different project design is necessary that does not give the implementers specific household income and other targets, and which would need to be focused on improving the capabilities of local and national players.

## 10.8 SCALING UP

Scaling up of selected technologies or activities is of particular interest in the future and USAID-ACCESO was a pioneer in many areas. The project worked with USAID in identifying certain technologies for potential scaling up. Drip irrigation was one of these and the project provided field support, data, and information to USAID consultants to carry out an assessment in Honduras. Other technologies that could result in major benefits from scaling up include solar dryers, climate station monitoring, coffee pulp management, CENs, healthy household program, mobile health laboratories, and rural grain warehouse receipts systems. These however are different from the more common USAID scaling up technologies which are normally stand-alone options such as seeds, fertilizer systems, or grain storage bags. Those identified under USAID-ACCESO require technical assistance for their implementation as they are part of an integrated process to move households above the poverty line or reduce undernutrition and malnutrition. In USAID-ACCESO's experience there are no one-off solutions.

## 10.9 PROJECT TARGETS

USAID-ACCESO had many targets and indicators. With a robust data collection and management system the project was data-rich. USAID received results and progress for indicators for project, FTF and Mission targets. In most cases they were different. In terms of time and efficiencies, for future activities it would be beneficial to streamline these targets with uniform definitions and consistency.

USAID-ACCESO included selected FTF indicators, but with more stringent definitions. In several cases this complicated the M&E data collection process and analysis. In the future, it would be preferable that the definitions be uniform.

High-level FTF targets cover a specific ZOI in the cases of reduction in poverty levels and reduction in stunting. USAID-ACCESO targets were related to a specific population within the ZOI with a specific income target for each household and nutrition and health targets for the attended population. It is understood that initial assumptions were made in project design that reaching a certain percentage of the population would have an impact on the data for the entire population in the ZOI. While the exact details are not known by Fintrac, it is unlikely that this would be possible, even for nutrition activities that showed excellent results for supported children and communities. The project could have developed approaches to further increase outreach in both economic development and nutrition to increase the number of beneficiaries, but quality would have suffered to reach the quantity, and certain threshold targets would have been more difficult. Again, streamlining of targets would be beneficial, but in terms of poverty reduction, absolute income values would be preferred as opposed to threshold income targets.

As mentioned, USAID-ACCESO's poverty reduction indicators and targets were threshold values – the household was either below or above a certain income level. There were no indicators that allowed the project to track or demonstrate progress toward increasing incomes across all project beneficiaries. The project did report these values, but they were not represented in targets. It would have been preferable to include them. Calculation and presentation of the actual income values across all clients would give a better indication of the progress towards moving up and out of the scales.

The primary beneficiary of USAID-ACCESO was at the household level – not individual men or women. The majority of the households were both men and women. The registered client was the person who was receiving the technical assistance when project support was initiated. This could have been the man

at the beginning, with the women receiving assistance in off-farm or other activities at a later date, but the women would not be a registered client as this would double count the family. Similarly, the woman might have been the registered client with an MSME activity, and the man later became a production client, but the woman remained the registered client for the household. For future projects, specific gender targets for the participation of women need to take this into consideration when working at the household level.

Initially some indicators were to be tracked by the USAID M&E contractor. Data was not presented on time and, in several cases, USAID-ACCESO had to collect the data. It would be preferable if there was more communication, coordination, and sharing of data between the implementing contractor and the M&E contractor.

Recommendations have been provided by FTF M&E and others that baseline data should be collected prior to beginning new projects. This would have helped USAID-ACCESO in establishing the initial high level targets in project design. Where not carried out, more flexibility to modify selected targets based on conditions would be advantageous to all. Flexibility is also required when certain macro or sector assumptions change after project start-up. In terms of USAID-ACCESO, three examples include the termination of the AIN-C program early in implementation, the regional coffee rust crisis and falling international coffee prices, and the lower than expected baseline income levels.

## II. PRIORITY AREAS FOR FUTURE WORK

To build upon activities, results and successes developed by USAID-ACCESO, several priority areas are recommended for focus, continuation and expansion, including:

- Focus on existing household clients with the potential to increase incomes to achieve targets. Select communities based on distance, logistics for both income generation and more efficient technical assistance delivery. This will require that clients are dropped from the USAID-ACCESO client list. The majority of new clients should be added to the remaining groups of growers and communities.
- All project components should work in communities supported with production activities, including nutrition and health.
- All irrigation conduction systems should be utilized to the maximum, new growers added, and new systems identified.
- Scaling up of selected technologies (drip irrigation, solar dryers, CENs, mobile laboratories, etc.)
- Support to coffee growers needs to be expanded to involve more growers in on-farm drying, access to specialty markets, and income diversification, including fruit tree production.
- Re-promote selected areas of the ZOI as supplier options for large scale exporters and processors.
- Cattle production should be expanded for both milk and meat production in production and nutrition and health communities; goat and fish production expanded in select nutrition and health communities.
- Select commercial alliances should be continued with coffee buyers and exporters; fruit and vegetable packing centers, distributors, retailers and processors; input suppliers; financial service providers; companies with social responsibility programs; and municipalities or *mancomunidades*. Based on results with partnerships, new ones can also be developed.
- Expand nutrition and health activities to an increased number of health volunteers and service providers, using USAID-ACCESO methodology and results as a platform.
- Leverage the USAID-ACCESO healthy household program to obtain buy-in from the Honduran government, local governments, and donors to increase the number of homes with basic improvements.
- Expand the research activities aligned with the project to determine causal effects of results and impact, including irrigation conduction systems, diversified income streams, family expenditure priorities, aflatoxin levels in grains, and parasite levels.
- Develop systems for calculation of net present value in households and farms. In USAID-ACCESO, client household investments in fixed assets, including productive infrastructure (home improvements, on-farm irrigation, fruit tree planting, etc.) has increased property values. These should be determined and valued.

USAID-ACCESO has developed and demonstrated successful methodology, practices, technologies, systems, results, and impact that can and should be used as a platform for follow-on projects to further increase the incomes and nutritional status of continuing and new household clients.

## ANNEX I. PERFORMANCE MONITORING PLAN

*The PMP and work plan targets for each indicator is provided below, together with the final status as of March or May 2015 for data collected quarterly and September 2015 for indicators that were collected as part of the annual surveys. These were separated by IRs and sub-IRs to be consistent with the quarterly and work plan formats. Note: data for selected indicators were collected on an ongoing basis while others were collected via annual surveys.*

ACTIVITY	YEAR 1 (FY 2011) ACHIEVED	YEAR 2 (FY 2012) ACHIEVED	YEAR 3 (FY 2013) ACHIEVED	YEAR 4 (FY 2014) ACHIEVED	YEAR 5 (FY 2015) ACHIEVED	Total Achieved	LOP Target	Target Difference	% Achievement	DELIVERABLE / UNITS	
	Apr. 2011 to Sept. 2011	Oct. 2011 to Sept. 2012	Oct. 2012 to Sept. 2013	Oct. 2013 to Sept. 2014	Oct. 2014 to Sept. 2015						
<b>1</b>	<b>Program Administrative Activities</b>										
	<b>Start-Up Activities</b>										
1.1	Key Personnel Fielded	done									
1.2	Grants Manual Submitted	1									
1.3	Project Intranet/Internet Sites Designed & Launched	2									
1.4	Vehicle/Equipment Procurement	cars/motorbikes									
1.5	Local Project Team Fielded	done									
1.6	Local staff trained in Fintrac implementation methodology	done									
1.7	Remaining team hired and fielded										
	<b>Communications &amp; Reporting</b>										
1.8	Branding & Marking Plan Prepared & Submitted	1									
1.9	PERSUAP	1									
1.10	EMP		1								
<a href="#">1.11</a>	Monthly Reports	6	12	12	12	5	47	46	1	102%	Reports
<a href="#">1.12</a>	Quarterly Reports	2	4	4	4	1	15	15	0	100%	Reports
<a href="#">1.13</a>	Annual Workplan	1	1	1	1	1	5	4	1	125%	Workplans
1.14	Final Report						1	1	0	100%	Reports
<a href="#">1.15</a>	Steering committee meetings		2		1		3	3	0	100%	Meeting Minutes
<b>2</b>	<b>Project Monitoring &amp; Evaluation Activities</b>										
2.1	Fintrac M&E System (CIRIS) customized and installed	done									
2.2	Staff trained in M&E methodology and CIRIS	done									
2.3	M&E Plan / PMP Developed and Submitted	1					1	1	0	100%	Plan
2.4	Baseline Data on Program Clients Collected	done									Data
2.6	Follow-up indicator data collected and verified	done									Data
2.7	Performance Indicator Review		1	1	1		3	3	0	100%	
<a href="#">2.8</a>	Success Stories Produced and Disseminated	2	18	17	5		42	53	-11	79%	Publications
<b>3</b>	<b>Small Grants Program</b>										
<a href="#">3.1</a>	Technology Fund (households)		5,160	7,681	5,237	1,825	19,903	10,146	9,757	196%	
<a href="#">3.2</a>	Nutrition / Health		4	7	0	1	12	10	2	120%	
<a href="#">3.3</a>	Disaster Mitigation / NRM		4	5	2	1	12	9	3	133%	
<a href="#">3.4</a>	Renewable Energy	4	724	921	1,921	320	3,886	805	3,081	483%	
<a href="#">3.5</a>	Number of grants awarded by community small grants mechanism		5,896	8,614	3,568	1,849	19,927	10,970	8,957	182%	

ACTIVITY		YEAR 1 (FY 2011) ACHIEVED	YEAR 2 (FY 2012) ACHIEVED	YEAR 3 (FY 2013) ACHIEVED	YEAR 4 (FY 2014) ACHIEVED	YEAR 5 (FY 2015) ACHIEVED	Total Achieved	LOP Target	Target Difference	% Achievement	DELIVERABLE / UNITS
		Apr. 2011 to Sept. 2011	Oct. 2011 to Sept. 2012	Oct. 2012 to Sept. 2013	Oct. 2013 to Sept. 2014	Oct. 2014 to Sept. 2015					
<b>High Level Targets</b>											
<b>GOAL: Increased Rural Household Incomes</b>											
PIRS # 1	Number of households living in poverty moved above the poverty line **		1,183	1,053	3,783	4,099	4,099	10,000	-5,901	41%	Households
PIRS # 2	Number of rural households living in extreme poverty moved above the poverty line <sup>1</sup> **		834	796	2,975	3,416	3,416	7,500	-4,084	46%	Households
PIRS # (New Indicator 2015/03)	Number of rural households living below \$1.25/person/day moved above \$1.25/person/day			4,392	6,626	8,719	8,719	12,500	-3,781	70%	Households
PIRS # 3	Value of new net income of participant rural farmers and MSMEs **		7.106	10.360	23.096	37.934	78.495	30.00	48	262%	US\$ Million
PIRS # 4	Number of jobs attributed to FTF implementation **		2,332	243	354	881	3,809	3,250	559	117%	FTEs
<b>Increased Agricultural Productivity</b>											
PIRS # 5	Value of incremental sales (collected at farm/firm level) attributed to FTF implementation **		12.406	-4.388	0.773	28.110	41.289	68.00	-26.71	61%	US\$ Million

ACTIVITY	YEAR 1 (FY 2011) ACHIEVED	YEAR 2 (FY 2012) ACHIEVED	YEAR 3 (FY 2013) ACHIEVED	YEAR 4 (FY 2014) ACHIEVED	YEAR 5 (FY 2015) ACHIEVED	Total Achieved	LOP Target	Target Difference	% Achievement	DELIVERABLE / UNITS		
	Apr. 2011 to Sept. 2011	Oct. 2011 to Sept. 2012	Oct. 2012 to Sept. 2013	Oct. 2013 to Sept. 2014	Oct. 2014 to Sept. 2015							
<b>IR 2.1: RURAL MICRO, SMALL, AND MEDIUM ENTERPRISE (MSME) GROWTH INCREASED</b>												
Sub-IR 2.1.1: RURAL MSMEs' ACCESS TO INPUTS, PRACTICES, AND TECHNOLOGY FOR MARKET PARTICIPATION IMPROVED												
<b>Implementation of updated production technologies (on-farm and off-farm)</b>												
<a href="#">WP # 1</a>	Number of individuals who have received USG supported short-term agricultural sector productivity or food security training	7,723	15,671	21,110	16,371	7,097	67,972	55,500	12,472	122%	Individuals	
<a href="#">WP # 2</a>	Number of extension visits to program beneficiaries	13,571	134,840	267,955	313,875	93,394	823,635	378,400	445,235	218%	Extension Visits	
<a href="#">WP # 12</a>	Number of technical materials produced (bulletins, manuals, presentations and tools)	63	142	50	67	11	333	225	108	148%	Technical materials	
<a href="#">WP # 10</a>	Number of MSMEs (off-farm and processing) assisted by project	285	417	132	(101)	327	1,060	805	255	132%	MSMEs	
<a href="#">PIRS # 6</a>	Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation	0.079	3.018	4.451	13.547	1.616	22.711	21.60	1.111	105%	New private sector investment (Millions)	
<a href="#">WP # 11</a>	Number of female individuals in training activities	2,202	5,729	5,711	8,175	3,483	25,300	8,300	17,000	305%	Female Individuals	
<a href="#">PIRS # 7</a>	Number of farmers and others who have applied new technologies or management practices as a result of USG assistance		4,592	14,270	6,638	4,399	29,899	22,050	7,849	136%	MSMEs	
<b>Private sector alliances and integration of private sector equipment, input and service providers</b>												
<a href="#">PIRS # 30</a>	Number of organizations / companies providing business development / extension services to MSMEs	0	78	110	273	12	473	465	8	102%	organizations / companies providing services to MSMEs	
<a href="#">PIRS # 32</a>	Number of public-private partnerships formed	3	23	15	10	7	58	65	-7	89%	PPP formed	
<a href="#">PIRS # 33</a>	Number of private sector alliances developed	merged to PIRS # 32										PSA's Formed
<b>Grower organization and the development of market driven production programs</b>												
<a href="#">PIRS # 31</a>	Number of producers organizations, water users associations, trade and business associations, and community-based organizations (CBOs) receiving USG assistance	40	150	31	519	806	1,546	210	1,336	736%	Organizations / associations / CBO's receiving assistance	
<a href="#">WP # 3</a>	Number of small farmer associations formally established as businesses		0	118	46	63	227	55		413%	Associations formally established as businesses	

ACTIVITY	YEAR 1 (FY 2011) ACHIEVED	YEAR 2 (FY 2012) ACHIEVED	YEAR 3 (FY 2013) ACHIEVED	YEAR 4 (FY 2014) ACHIEVED	YEAR 5 (FY 2015) ACHIEVED	Total Achieved	LOP Target	Target Difference	% Achievement	DELIVERABLE / UNITS	
	Apr. 2011 to Sept. 2011	Oct. 2011 to Sept. 2012	Oct. 2012 to Sept. 2013	Oct. 2013 to Sept. 2014	Oct. 2014 to Sept. 2015						
<b>SUB-IR 2.1.2: RURAL MSMEs' ACCESS TO NEW MARKET OPPORTUNITIES INCREASED</b>											
<b>Development of buyer linkages and logistics</b>											
<a href="#">WP # 4</a>	Number of MSMEs accessing new market opportunities through a broker	35	1,403	5,486	4,880	212	12,016	10,932	1,084	110%	MSMEs
<a href="#">PIRS # 12</a>	Number of brokers providing market linkages to MSMEs	10	19	41	288	9	367	500	-133	73%	Brokers providing market linkages to MSMEs
<a href="#">WP # 6</a>	Number of market surveys conducted	1	5	3	3	8	20	24	-4	83%	Market Surveys
<b>Production and systems implementation to meet buyers quality standards</b>											
<a href="#">WP # 5</a>	Number of MSMEs that have entered formal preferred supplier or contract agreements with brokers		550	1,521	3,317	1,921	7,309	2,996	4,313	244%	MSMEs
<b>Implementation of business certification programs</b>											
<a href="#">PIRS # 13</a>	Number of MSMEs that have been verified to meet market standards for their products	35	882	836	21,344	-	23,097	2,000	21,097	1155%	MSMEs
<b>SUB-IR 2.1.3: BARRIERS TO COMPETITIVENESS OF RURAL MSMEs REDUCED</b>											
<b>Increased access to finance</b>											
<a href="#">PIRS # 14</a>	Number of MSMEs accessing market-based financing as the result of USG assistance	315	1,577	2,826	3,800	138	8,656	4,314	4,342	201%	MSMEs accessing finance
<a href="#">PIRS # 15</a>	Value of Agricultural and Rural Loans made to MSMEs	0.200	1.554	6.072	8.060	0.991	16.877	6.330	10.547	267%	Value of loans (millions)
<a href="#">PIRS # 11</a>	Number of MSMEs implementing sound business management practices		695	4,498	8,762	-	13,955	8,482	5,473	165%	MSMEs
<a href="#">PIRS # 16</a>	Number of value chain / sector constraints identified and resolved		1	16	15	5	37	40	-3	93%	Constraints
<a href="#">PIRS # 17</a>	Number of policy reforms, regulations, administrative procedures passed for which implementation has begun with USG assistance	1	2	2	1		6	4	2	150%	Policies, regulations or administrative procedures passed
<a href="#">PIRS # GNDR-2</a>	Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources (ADDED FY 2012-2013)			17.4%	17.0%	17.2%	17.2%	20%	-2.8%	86%	Percentage
<b>Applied research and development programs developed</b>											
	R&D projects and Activities Identified	1	8	2	3		14				

ACTIVITY	YEAR 1 (FY 2011) ACHIEVED	YEAR 2 (FY 2012) ACHIEVED	YEAR 3 (FY 2013) ACHIEVED	YEAR 4 (FY 2014) ACHIEVED	YEAR 5 (FY 2015) ACHIEVED	Total Achieved	LOP Target	Target Difference	% Achievement	DELIVERABLE / UNITS	
	Apr. 2011 to Sept. 2011	Oct. 2011 to Sept. 2012	Oct. 2012 to Sept. 2013	Oct. 2013 to Sept. 2014	Oct. 2014 to Sept. 2015						
<b>IR 2.2: Honduran Biodiversity and Natural Resources Conserved and IR 2.3: CAPACITY TO ADAPT AND MITIGATE CLIMATE CHANGE STRENGTHENED</b>											
<b>Implementation of NRM practices on farm</b>											
<a href="#">PIRS # 8</a>	Number of additional hectares under improved technologies or management practices as a result of USG assistance		8,321	7,694	11,214	1,553	28,782	14,904	13,878	193%	Hectares
<a href="#">PIRS # 10</a>	Number of companies (including farms) that have made conservation-friendly changes in their business practices		356	350	6,194	4,615	11,515	22,050	-10,535	52%	Companies (including farms)
<b>Implementation of NRM practices at community and municipality levels</b>											
<a href="#">PIRS # 9</a>	Number of Local Municipal Governments effectively implementing natural resource management policies		7	24	5	6	42	20	22	210%	Local Municipal Governments
<b>SUB-IR 2.3.3: DISASTER VULNERABILITY REDUCED</b>											
<b>Development and implementation of disaster mitigation plans and systems</b>											
<a href="#">PIRS # 28</a>	Number of communities in high vulnerability municipalities with adequate disaster prevention and mitigation capacity		11	50	0	0	61	40	21	153%	Communities with adequate disaster prevention and mitigation capacity
<b>Installation of renewable energy technologies</b>											
<a href="#">PIRS # 29</a>	Number of rural micro-generation clean/renewable energy projects established	4	724	921	1,921	316	3,886	805	3,081	483%	Projects established

ACTIVITY		YEAR 1 (FY 2011) ACHIEVED	YEAR 2 (FY 2012) ACHIEVED	YEAR 3 (FY 2013) ACHIEVED	YEAR 4 (FY 2014) ACHIEVED	YEAR 5 (FY 2015) ACHIEVED	Total Achieved	LOP Target	Target Difference	% Achievement	DELIVERABLE / UNITS
		Apr. 2011 to Sept. 2011	Oct. 2011 to Sept. 2012	Oct. 2012 to Sept. 2013	Oct. 2013 to Sept. 2014	Oct. 2014 to Sept. 2015					
<b>IR 4.1: USE OF QUALITY MATERNAL AND CHILD HEALTH AND FAMILY PLANNING SERVICES INCREASED</b>											
<a href="#">PIRS # 18</a>	Prevalence of households with moderate to severe hunger								-20%		% reduction from baseline (IFPRI)
<a href="#">PIRS # 19</a>	Prevalence of underweight children under 5		-23.9%	-33.8%	-56.4%	-50.7%	-50.7%	-20%	30.7%	254%	% reduction from baseline
<a href="#">PIRS # 20</a>	Prevalence of stunted children under 5				-23.8%	-57.3%	-57.3%	-20%	37.3%	287%	% reduction from baseline
<a href="#">PIRS # 21</a>	Percent of children 6-23 months that received a Minimum Acceptable Diet				-4.8%	-	-4.8%	30%	-35%	-16%	% increase over baseline
<a href="#">PIRS # 22</a>	Prevalence of exclusive breast feeding of children under 6 months		4.5%	2.8%	-9.9%	-9.2%	-9.2%	20%	-29%	-46%	% increase over baseline
<a href="#">PIRS # 23</a>	Prevalence of anaemia among women of reproductive age			-0.4%	-18.2%	NA	-18.2%	-5%	13.2%	364%	% reduction from baseline
<a href="#">PIRS # 24</a>	Prevalence of anaemia in children 5 - 59 months			7.4%	29.3%	NA	29.3%	-20%	-49%	-146%	% reduction from baseline
<a href="#">PIRS # 25</a>	Women's dietary diversity: mean number of food groups consumed by women of reproductive age			4.3%	20.5%	51.5%	51.5%	30%	21.5%	172%	% Change in HDDS
<a href="#">PIRS # 26</a>	Number of health facilities with established capacity to manage acute under-nutrition (REMOVED for FY 2012-2013)						20	20	0	100%	Health Facilities
<a href="#">PIRS # 27</a>	Modern contraceptive prevalence rate		11.2%	103.6%	150.2%	148.3%	148.3%	10%	138%	1483%	% Increase over baseline
<a href="#">W/P # 8</a>	Percentage of children less than two years old with two consecutive low monthly measurements		9.7%	10.9%	10.3%	7.7%	7.7%	10%	2.3%	130%	%
<a href="#">IND-3.1.9-1</a>	Number of people trained in child health and nutrition through USG-supported programs (New 03/2014)			50,817	38,487	14,274	103,578	90,000	13,578	115%	Individuals - new indicator starting 03/2014
<a href="#">IND-3.1.9-15</a>	Number of children under five reached by USG-supported nutrition programs (new 03/2014)				7,781	8,152	8,152	8,000	152	102%	Individuals - new indicator starting 03/2014



# USAID-ACCESO

April 2011 to May 2015

FINAL REPORT - Updated November 2015