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The World Bank

Report No: ICR00002907

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IDA-40990 IDA-52890 TF-55968)

ON A

CREDIT
IN THE AMOUNT OF US$67 MILLION
EQUIVALENT

AND A

GLOBAL ENVIRONMENTAL FACILITY GRANT
IN THE AMOUNT OF US$2.35 MILLION

TO THE

REPUBLIC OF HONDURAS

FOR A

RURAL INFRASTRUCTURE PROJECT

December 26, 2016

Energy and Extractives Global Practice
Central America Country Management Unit
Latin American and the Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective December 16, 2016)

Currency Unit = Honduras Lempira
23.46 HNL = US$1
US$1.34 = SDR1

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

CABEI	Central American Bank for Economic Integration
CAS	Country Assistance Strategy
CPS	Country Partnerships Strategies
EIRR	Economic Internal Rate of Return
ENEE	National Power Company *(Empresa Nacional de Energia Electrica)*
ERAP	Environmental Remediation Action Plan
FHIS	Honduran Social investment Fund: *(Fondo Hondureño de Inversion Social)*
FOSODE	Social Electrification Fund
GHG	Greenhouse Gas
GEF	Global Environment Fund
GEO	Global Environment Objectives
IDA	International Development Agency
IDB	Inter-American Development Bank
IFR	Interim Financial Report
IRM	Immediate Response Mechanism
ISRs	Implementation Status and Results Reports
MFIs	Microfinance Institutions
MHP	Micro Hydro-Power
M&E	Monitoring and Evaluation
PAD	Project Appraisal Document
PIR	Rural Infrastructure Project (*Proyecto de Infraestructura Rural)*
PCU	Project Coordination Unit
PDO	Project Development Objectives
PRSP	Poverty Reduction Strategy Paper
O&M	Operation and Maintenance
RET	Renewable Energy Technology
RIAP	Rural Infrastructure Action Plans
SERNA	Ministry of Natural Resources and the Environment *(Secretaria de Recursos Naturales y Ambiente)*
SHS	Solar Home Systems
UTI	Inter-Municipal Technical Unit

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Project Team Leader: Koffi Ekouevi
ICR Team Leader: Koffi Ekouevi

COUNTRY
REPUBLIC OF HONDURAS

CONTENTS

DATA SHEET

A. Basic Information			
Country:	Honduras	Project Name:	HN Rural Infrastructure Project
Project ID:	P086775,P090113	L/C/TF Number(s):	IDA-40990,IDA-52890,TF-55968
ICR Date:	11/09/2016	ICR Type:	Core ICR
Lending Instrument:	SIL,SIL	Borrower:	REPUBLIC OF HONDURAS
Original Total Commitment:	XDR 32.00M, USD 2.35M	Disbursed Amount:	XDR 40.44M, USD 2.35M
Environmental Category: B,B		**Focal Area**: C	
Implementing Agencies: *Fondo Hondureño de Inversion Social* (FHIS)/IDECOAS			
Cofinanciers and Other External Partners:			

B. Key Dates				
HN Rural Infrastructure Project - P086775				
Process	**Date**	**Process**	**Original Date**	**Revised / Actual Date(s)**
Concept Review:	11/03/2003	Effectiveness:	08/04/2006	08/04/2006
Appraisal:	04/11/2005	Restructuring(s):		04/08/2010 06/29/2010 06/01/2012 05/012013 12/18/2015
Approval:	07/07/2005	Mid-term Review:	02/23/2015	05/25/2015
		Closing:	06/30/2010	06/30/2016

Rural Electrification Project - P090113				
Process	**Date**	**Process**	**Original Date**	**Revised / Actual Date(s)**
Concept Review:	12/10/2003	Effectiveness:		08/04/2006
Appraisal:	11/03/2005	Restructuring(s):		04/08/2010
Approval:	12/15/2005	Mid-term Review:	06/30/2008	09/22/2008
		Closing:	06/30/2008	06/30/2013

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes	Moderately Satisfactory
GEO Outcomes	Moderately Satisfactory
Risk to Development Outcome	Substantial
Risk to GEO Outcome	Substantial
Bank Performance	Moderately Satisfactory
Borrower Performance	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	**Ratings**	**Borrower**	**Ratings**
Quality at Entry	Moderately Satisfactory	Government:	Moderately Unsatisfactory
Quality of Supervision:	Moderately Satisfactory	Implementing Agency/Agencies:	Satisfactory
Overall Bank Performance	Moderately Satisfactory	Overall Borrower Performance	Moderately Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators			
HN Rural Infrastructure Project - P086775			
Implementation Performance	**Indicators**	**QAG Assessments (if any)**	**Rating:**
Potential Problem Project at any time (Yes/No):	Yes	Quality at Entry (QEA)	None
Problem Project at any time (Yes/No):	Yes	Quality of Supervision (QSA)	None
DO rating before Closing/Inactive status	Moderately Satisfactory		

Rural Electrification Project - P090113			
Implementation Performance	**Indicators**	**QAG Assessments (if any)**	**Rating:**
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA)	None
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA)	None
GEO rating before Closing/Inactive Status	Satisfactory		

D. Sector and Theme Codes		
HN Rural Infrastructure Project - P086775		
	Original	**Actual**
Sector Code (as % of total Bank financing)		
Energy Transmission and Distribution	20	20
Other Renewable Energy	8	8
Other Water Supply, Sanitation and Waste Management	27	27
Rural and Inter-Urban Roads	33	33
Sub National Government (Central Agencies)	12	12

Theme Code (as % of total Bank financing)		
Decentralization	17	17
Infrastructure services for private sector development	17	17
Public expenditure, financial management and procurement	17	17
Rural services and infrastructure	33	33
Social Safety Nets/Social Assistance & Social Care Services	16	16

Rural Electrification Project - P090113		
	Original	**Actual**
Sector Code (as % of total Bank financing)		
Other Renewable Energy	75	75
Renewable Energy Hydro	25	25

Theme Code (as % of total Bank financing)		
Climate change	25	25
Infrastructure services for private sector development	25	25
Rural services and infrastructure	50	50

E. Bank Staff		
HN Rural Infrastructure Project - P086775		
Positions	**At ICR**	**At Approval**
Vice President:	Laura Tuck	Pamela Cox
Country Director:	J. Humberto Lopez	Jane Armitage
Practice Manager/Manager:	Antonio Alexandre Rodrigues Barbalho	Makhtar Diop
Project Team Leader:	Koffi Ekouevi	Dana Rysankova
ICR Team Leader:	Koffi Ekouevi	

ICR Primary Author:	Nestor Ntungwanayo	

Rural Electrification Project - P090113		
Positions	**At ICR**	**At Approval**
Vice President:	Laura Tuck	Pamela Cox
Country Director:	J. Humberto Lopez	Jane Armitage
Practice Manager/Manager:	Antonio Alexandre Rodrigues Barbalho	Makhtar Diop
Project Team Leader:	Koffi Ekouevi	Dana Rysankova
ICR Team Leader:	Koffi Ekouevi	
ICR Primary Author:	Nestor Ntungwanayo	

F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document)

1.2 Original Project Development Objectives (PDO) and Key Indicators (as approved)
The project development objectives are (i) to improve access, quality and sustainability of infrastructure services (roads, water & sanitation, and electricity) for the rural poor in Honduras; and (ii) to develop capacities and enabling environment for locally-driven service provision and planning.

Revised Project Development Objectives (as approved by original approving authority)

The project development objectives are (i) to improve access, quality and sustainability of infrastructure services (roads, water & sanitation, and electricity) for the rural poor in Honduras; and (ii) to develop capacities and enabling environment for locally-driven service provision and planning, and (iii) to improve the Recipient‘s capacity to respond promptly and effectively to an Eligible Emergency.

1.3 Original Global Environment Objectives (GEO) and Key Indicators (as approved)
The GEF project development objectives are: (i) improving access, quality and sustainability of electricity services through the development of off-grid electrification model projects, and (ii) developing capacities and enabling environment for off-grid electrification in a decentralized setting.

The project's global environmental objective is to achieve greenhouse gas (GHG) reductions through the reduction of policy, informational, financing and institutional capacity barriers that currently hinder renewable energy technology (RET) dissemination and market development in Honduras.

(a) PDO Indicator(s)

Table 1: Results Frameworks[1] established in May 2005 and in July 2011

RURAL INFRASTRUCTURE PROJECT RESULTS FRAMEWORK FROM THE PAD AND FROM THE JUNE 2011 RESTRUCTURING					
PDO Results Indicators	**Measurement Unit**	**Base Line**	**Original Target Values (from approval documents)**	**Formally Revised Target Values during the 07/09/2011 Restructuring[2]**	**Actual Value Achieved at the project closure (June 30, 2016)**
PDO Core Results Indicators					
(1) **Direct project beneficiaries**					
Value quantitative or Qualitative)	Number	0	318,595	423,987	550,791
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target related to direct project beneficiaries was exceeded and reached 130 percent of the revised target.				
(2) Share of rural population with access to an all-season road (percentage)					
Value quantitative or Qualitative)	%		Not determined	To be determined at the project closure	36
Date achieved			June 2005	July 2011	June 30, 2016
Comments	There was no target for this indicator, but the PCU estimated that on average 36 percent of the population in localities supported by the project have access to an all-season road				
(3) Number of people in rural areas provided with access to an all-season road under the project					
Value quantitative or Qualitative)	Number	0	200,000	164,653	184,779
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of people in rural areas provided with access to an all-season road under the project was exceeded and reached 112 percent of the revised target.				
(4) Number of people in rural areas provided with access to improved water sources under the project					
Value quantitative or Qualitative)	Number	0	40,800	51,498	91,458
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The number of people in rural areas provided with access to improved water sources was largely exceeded, results reaching 178 percent of the revised target.				

[1] This results framework provides the June 2016 value of the outcome indicators set at the approval of the PIR project in 2005 and during the level 2 project restructuring that took place in July 2011. Performance of the results frameworks adopted after the approval of the Additional Financing in May 2013 and during the December 2015 restructuring are presented in Table 3.

[2] The new PDO target indicators were to be achieved by 6 Mancomunidades, while at approval the targets were set for two mancomunidades (CHORTI and CRA).

(5) Number of people provided with access to power electricity under the project by household connections					
Value quantitative or Qualitative)	Number	0	27,000	75,264	92,142
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of people provided with access to power electricity under the project by household connections was exceeded and reached 122 percent of the revised target.				
(6) Number of people provided with access to renewable electricity under the project by household connections					
Value quantitative or Qualitative)	Number	0	31,595	32,842	63,492
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The number of people provided with access to renewable electricity under the project by household connections almost doubled as it reached 193 percent of the revised target.				
(7) Roads rehabilitated, Rural (Kilometers)					
Value quantitative or Qualitative)	km	0	400	600	639.977
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The length of rural roads rehabilitated was exceeded and reached 107 percent of the revised target.				
(8) New piped household water connections that are resulting from the project intervention (Number)					
Value quantitative or Qualitative)	Number	0	2,100	1,542	3,492
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The number of new piped household water connections that are resulting from the project intervention was more than doubled and reached 226 percent of the revised target.				
(9) Piped household water connections affected by rehabilitation works undertaken under the project (number)					
Value quantitative or Qualitative)	Number	0	4,700	7,041	11,751
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of piped household water connections affected by rehabilitation works was exceeded and reached 167 percent of the revised target.				
(10) Transmission and distribution lines constructed under the project (Kilometers)					
Value quantitative or Qualitative)	km	0	Not determined	712	844.483
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of transmission and distribution lines constructed under the project was exceeded and reached 119 percent of the revised target.				
(11) Number of community electricity connections under project through renewable energy (Number)					
Value quantitative or Qualitative)	Number	0	00	100	248
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of number of community electricity connections under project through renewable energy was exceed over 140 percent.				

(12) Generation capacity of renewable energy constructed under the project (MW)					
Value quantitative or Qualitative)	MW	0	1.10	0.54	0.60
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of generation capacity of renewable energy constructed under the project was exceeded and reached 111 percent of the revised target.				
PDO intermediate indicators					
(1) Female beneficiaries					
Value quantitative or Qualitative)	%		-	50	50
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of female beneficiaries under the project results was achieved at 100 percent.				
(2) Number of beneficiaries of the Municipal Kilometers Program					
Value quantitative or Qualitative)	Number		Not determined	54,069	85,871
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of beneficiaries of the Municipal Kilometers Program was largely exceeded as it reached 159 percent of the revised target.				
(3) Share of rural population with access to improved water services (percentage)					
Value quantitative or Qualitative)	%	62	67	This will be measured at the end of the project	75
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target of share of rural population with access to improved water services in supported localities exceeded the initial target, as there was no revised target.				
(4) Share of rural population with access to sanitation services (percentage)					
Value quantitative or Qualitative)	%		Not determined	This will be measured at the end of the project	60
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of share of rural population with access to sanitation services (percentage) in supported localities reached 60 percent, and was assessed as satisfactory, although there was no target.				
(5) Number of people in rural areas provided with access to sanitation under the project					
Value quantitative or Qualitative)	Number	0	40,800	47,082	33,049
Date achieved			June 2005	July 2011	June 30, 2016

Comments	The target of number of people in rural areas provided with access to sanitation under the project was missed, as it reached only 75 percent of the revised target.				
(6) Share of rural population with electricity service (grid and off grid)					
Value quantitative or Qualitative)	%	33	38	This will be measured at the end of the project	45
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of share of rural population with electricity service (grid and off grid) in supported localities was exceeded, as it reached 118 percent of the original target.				
(7) UTIs operating with trained technical staff and adequate budget					
Value quantitative or Qualitative			2	Dropped	
Comments	The indicator was not monitored, because it was dropped.				
(8) Value of contracts successfully procured by UTIs					
Value quantitative or Qualitative	US$ MM	0	10	25	31.06
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of value of contracts successfully procured by UTIs was exceeded, reaching 124 percent of the target.				
(9) Percentage of water systems rehabilitated or built by the project that remained as category A in the information system of rural water systems					
Value quantitative or Qualitative	%		No indicator	90	92
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of percentage of water systems rehabilitated or built by the project that remained as category A in the information system of rural water systems was achieved, reaching 102 percent of the target.				
(10) Sales amount of accredited solar companies (US$ million)					
Value quantitative or Qualitative	US$ MM	0	Not determined	4.80	7.63
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of sales amount of accredited solar companies was exceeded and reached 159 percent of target value.				
(11) Number of Kilometers under routine maintenance by micro-enterprises					

Value quantitative or Qualitative	Number	0	430	430	593.04
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of number of Kilometers under routine maintenance by micro-enterprises was exceeded, reaching 133 percent of the target value.				
(12) Six (6) participating *mancomunidades* selected based on objective economic and social criteria					
Value quantitative or Qualitative	Number	0	2	6	7
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of six (6) participating *mancomunidades* selected based on objective economic and social criteria was exceeded, reaching 117 percent of the target.				
(13) Rural Infrastructure Annual Plans established for each *mancomunidad* in a participatory manner, involving *mancomunidades*, municipalities and rural communities, with a bottom-up prioritization of investment, and adequate consideration of social and environmental safeguards					
Value quantitative or Qualitative	Number	0	6	6	7
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of Rural Infrastructure Annual Plans established for each *mancomunidad* was exceeded and reached 117 percent of the target.				
(14) Percentage of the number of financed subprojects out of the total number of prioritized subprojects of the Rural Infrastructure Annual Plans					
Value quantitative or Qualitative	%	0	Not determined	60	92
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of Percentage of the number of financed subprojects out of the total number of prioritized subprojects of the Rural Infrastructure Annual Plans was exceeded, reaching 153 percent of the target				
15. Improved strategy for rural water and sanitation provision consistent with decentralization policies, including definition of a financing mechanism and monitoring systems					
(Value quantitative or Qualitative)			No indicator	Dropped	
16. Adoption of a rural electrification policy, integrating all technologies (grid and off- grid), and defining an efficient financing mechanism and subsidy allocation rules					
(Value quantitative or Qualitative)			No indicator	Dropped	
(17) Roads rehabilitated, Municipal kilometers program					
Value quantitative or Qualitative	km	0	1	14	27.229

Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of Roads rehabilitated under the Municipal kilometers program was exceeded, and reached 194 percent of the revised target.				
(18) New household sewerage connections that are resulting from the project intervention					
Value quantitative or Qualitative	Number	0	Not determined	2,080	5,508
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of new household sewerage connections that are resulting from the project intervention was more than doubled, reaching 265 percent of the new target value**.**				
(19) New latrines built under the project (number)					
Value quantitative or Qualitative	Number	0	Not determined	5,767	4,893
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of new latrines built under the project was partially achieved, reaching only 85 percent of the target value.				
(20) New household connections that are resulting from project intervention through grid extension (number)					
Value quantitative or Qualitative	Number	0	4,500	12,544	15,357
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of new household connections that are resulting from project intervention through grid extension was exceeded, reaching 122 percent of the revised target value				
(21) Household solar systems installed under the project					
Value quantitative or Qualitative	Number	0	5,000	5,000	9,331
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The number of household solar systems installed under the project was almost the double of the target, reaching 187 percent of the target value**.**				
(22) Solar systems installed under the project in community centers – schools					
Value quantitative or Qualitative	Number	0	100	100	249
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of the solar systems installed under the project in community centers and schools was largely exceeded, reaching 249 percent of the target.				
(23) Micro-enterprises for routine road maintenance created under the project in operation					
Value quantitative or Qualitative	Number	0	20	6	8

Date achieved			June 2005	July 2011	June 30, 2016
Comments	The number of micro-entrepreneurs creating jobs under the project through the micro-enterprises program for routine maintenance was exceeded, reaching 133 percent of the revised target value.				
(24) Jobs created under the project through the micro-enterprises program for routine maintenance (number of micro-entrepreneurs)					
Value quantitative or Qualitative	Number	0	Not determined	60	112
Date achieved			June 2005	July 2011	June 30, 2016
Comments	**The target for jobs created under the micro-enterprises program for routine maintenance was exceeded, results reaching 187 percent of the target**				
(25) Labor-intensive methods applied in rural rehabilitation works					
Value quantitative or Qualitative			No indicator	Dropped	-
(26) Number of MSEs operating water or electricity rural systems, with adequate capacity					
Value quantitative or Qualitative			No indicator	Dropped	-
(27) N umber of UTIs with permanent water and sanitation staff for subproject follow up					
Value quantitative or Qualitative			No indicator	Dropped	-
(28) Micro-hydro grids built by the project and in operation					
Value quantitative or Qualitative	Number	0	8	2	1
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of micro-hydro grids built by the project and in operation was partially achieved as results were 50 percent of the revised target.				
(29) Solar companies accredited under the project and providing the installation services of solar systems					
Value quantitative or Qualitative	Number	0	Not determined	6	7
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of solar companies accredited under the project and providing the installation services of solar systems was exceeded, reaching 117 percent of the target value.				
(30) Micro-financing companies accredited under the project and providing the micro-financing services for the purchase of solar systems					

Value quantitative or Qualitative	Number	0	Not determined	7	7
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of micro-financing companies accredited under the project and providing the micro-financing services for the purchase of solar systems was achieved at 100 percent.				
(31) Volume of Bank support: Lines of credit-Microfinance					
Value quantitative or Qualitative	US$ MM	0	1.5	1.5	2.145
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The volume of Bank support to Lines of credit for Microfinance was exceeded, achievements reaching 143 percent of the target value.				
(32) Volume of Bank support: Institutional Development-Microfinance					
Value quantitative or Qualitative	US$ MM	0	0.3	0.3	0.18
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of volume of Bank support for institutional Development-Microfinance was partially achieved, results reaching 60 percent of the target.				
(33) Number of UTIs operating with trained technical staff in financial management, procurement, environmental and social safeguards, and technical for the infrastructure sectors					
Value quantitative or Qualitative	Number	0	2	6	6
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of UTIs operating with trained technical staff was achieved at 100 percent.				
(34) Water boards trained in O&M on technical aspects, tariff collection, and financial management					
Value quantitative or Qualitative	Number	0	Not determined	50	225
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of water boards trained in O&M on technical aspects, tariff collection, and financial management was exceeded, reaching 4.5 times of the revised target.				
(35) Households and schools where solar systems were installed under the project trained in O&M					
Value quantitative or Qualitative	Number	0	Not determined	5,100	9,580
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of households and schools where solar systems were installed under the project trained in O&M was largely exceeded, results reaching 188 percent of the target.				

(36) Micro-enterprises for road maintenance trained on technical standards and entrepreneurial practices					
Value quantitative or Qualitative	Number	0	Not determined	6	8
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of micro-enterprises for road maintenance trained on technical standards and entrepreneurial practices was exceeded, reaching 133 percent of the target.				
(37) M&E Plan and Strategy prepared and implemented					
Value quantitative or Qualitative		N/A	Complied with	Complied with	Complied with
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of M&E Plan and Strategy prepared and implemented was achieved**.**				
(38) Project undertaking and reporting monitoring indicators on quarterly reports					
Value quantitative or Qualitative		N/A	Complied with	Complied with	Complied with
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of project undertaking and reporting monitoring indicators on quarterly reports was achieved				
(39) Result Framework reviewed for overall project indicators and targets, including the for new *mancomunidades*					
Value quantitative or Qualitative		N/A	N/A	Complied with	Complied with
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of Result Framework reviewed for overall project indicators and targets, including the for new *mancomunidades was achieved*				
(40) Base line study for the new four m*ancomunidades* carried out					
Value quantitative or Qualitative		N/A	N/A	Complied with	Complied with
Date achieved			June 2005	July 2011	June 30, 2016
Comments		The target of base line study for the new four m*ancomunidades* carried out was achieved**.**			

Table 2: Results Frameworks[3] established in May 2005 and in July 2011

RESULTS FRAMEWORK: GLOBAL ENVIRONMENT FACILITY TRUST FUND - GEF					
PDO Results Indicators at the June 2011 Restructuring	**Measurement Unit**	**Base Line**	**Original Targets**	**Revised Targets**	**Results Achieved**
			2005	**Restructuring June 2011**	**2016**
(1) Dispersed households, business and public facilities with sustainable electricity access provided with solar home systems (SHS)					
Value quantitative or Qualitative	Number	0	4,000	5,000	9,580
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target of dispersed households, business and public facilities with sustainable electricity access provided with solar home systems (SHS) was largely exceeded, results reaching 192 percent of the revised target.				
(2) Village micro grids using hydro and other renewable energy technologies (financed under PIR) provide quality and sustainable electricity access to about 1,000 households, business, and public facilities					
Value quantitative or Qualitative	Number	0	5	2	216
Date achieved			June 2005	July 2011	June 30, 2016
Comments	The target for village micro grids using hydro and other renewable energy technologies providing quality and sustainable electricity was largely exceeded, because of additional funding from the municipalities.				
(3) Off-grid technologies fully integrated in the national and local rural electrification planning					
Value quantitative or Qualitative			RETs fully integrated in both national and local planning process	RETs fully integrated in both national and local planning process	Incentives for RETs incorporated in the Law for Renewable Energy Promotion
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target was fully achieved as incentives for RETs were incorporated in the Law for Renewable Energy Promotion				
(4) Global Environmental objective of GHG reduction of tC02 over 20 years					
Value quantitative or Qualitative	Tons		160,000 tC02 over 20 years	121,000 tC02 over 20 years	141,636.93 tCO2 in 20 years

[3] This results framework provides the June 2016 value of the outcome indicators set at the approval of the GEF grant project in 2005 and during the level 1 project restructuring that took place in July 2011.

Date achieved			June 2005	July 2011	June 30 2016
Comments	The target for the Global Environmental objective of GHG reduction tC02 over 20 years was exceeded, as results reached 117 percent of the revised target.				
(5) Number of RIAPs with adequate integration of RETs					
Value quantitative or Qualitative	Number		6	6	6
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target of RIAPs with adequate integration of RETs was achieved at 100 percent.				
(6) Adoption of a rural electrification policy, integrating all technologies (grid and off-grid), and defining an efficient financing mechanism and subsidy allocation rules.					
Value quantitative or Qualitative			Policy adopted	Policy adopted	The financing mechanism with the subsidy allocation has been implemented through PROSOL
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target was partially achieved as the financing mechanism with the subsidy allocation has been implemented through PROSOL.				
(7) Off-grid electrification included in FHIS program					
Value quantitative or Qualitative			Complied with	Complied with	Complied with
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target was fully achieved.				
(8) Number of households with electricity services in off-grid areas, provided with RETs					
Value quantitative or Qualitative	Number		Not determined	5,682	9,331
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target of households with electricity services in off-grid areas, provided with RETs was largely exceeded, as results reached 166 percent of the target value.				
(9) Number of community based MHP operating under sustainable conditions (financial, social and technical capacity), with the help of the technical assistance provided by the project					
Value quantitative or Qualitative	Number		5	2	1

Date achieved			June 2005	July 2011	June 30 2016
Comments	The number of community-based MHP operating under sustainable conditions was partially achieved, as results reached 50 percent of the revised target.				
(10) Implementation of other RET off-grid electrification pilot project (stand-alone wind-power system or wind diesel/hybrid installation)					
Value quantitative or Qualitative	Number		5	6	7
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target of implementation of other RET off-grid electrification pilot project was exceeded, as results reached 117 percent of the revised target.				
(11) Solar companies accredited under the project and providing the installation services of solar systems					
Value quantitative or Qualitative	Number		1	1	7
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target of solar companies accredited under the project and providing the installation services of solar systems was achieved at 100 percent.				
(12) Increase share of off-grid investments, using renewable energy in the total investment in rural electrification					
Value quantitative or Qualitative	%		30% of the PIR rural electrification investment	30%	35%
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target of increase share of off-grid investments, using renewable energy in the total investment in rural electrification was achieved, reaching 117 percent of the target value.				
(13) Tons of C02 avoided over 20 years					
Value quantitative or Qualitative	tons		160,000 tC02 over 20 years	121,000 tC02 over 20 years	141,636.93 tC02 over 20 years
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target of tons of C02 that will be avoided over 20 years was exceeded, as results reached 117 percent of the revised target.				
(14) Number of UTIs operating with trained technical staff, understanding off-grid electrification issues					
Value quantitative or Qualitative	Number		Complied with	Complied with	Complied with
Date achieved			June 2005	July 2011	June 30 2016

Comments	The target of UTIs operating with trained technical staff, understanding off-grid electrification issues was fully achieved**.**				
(15) FHIS staffed with specialists trained in off-grid electrification					
Value quantitative or Qualitative	Number		6	6	6
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target of the FHIS to be staffed with specialists trained in off-grid electrification was achieved at 100 percent.				
(16) Number of off-grid electrification service providers operating satisfactorily (within the project)					
Value quantitative or Qualitative	Number		8	2	7
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target of the off-grid electrification service providers operating satisfactorily was largely exceeded, as the target was multiplied by 3.5 times.				
(17) M&E for off-grid electrification integrated in the FHIS M&E System					
Value quantitative or Qualitative			Complied with	Complied with	Complied with
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target of M&E for off-grid electrification integrated in the FHIS M&E System was fully achieved				
(18) FHIS trained in M&E Activities					
Value quantitative or Qualitative			Complied with	Complied with	Complied with
Date achieved			June 2005	July 2011	June 30 2016
Comments	The target of FHIS trained in M&E activities was fully achieved				

Table 3: Results Framework from the July 2013 and December 2015 restructurings				
PDO Indicators	**Baseline Value**	**Formally revised targets during the May 2013 Restructuring**	**Formally Revised Target Values during the 12/15/ 2015 Restructuring**	**Actual Value Achieved at Project closure. June 30, 2016**
Indicator 1 : Direct project beneficiaries (Number, Customer)				
Value quantitative or Qualitative	0	593,036	513,997	550,791
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target of project beneficiaries was exceeded with results reaching 107 percent of the revised target value.				
Indicator 2 : Female beneficiaries (Percentage, Custom Supplement)				
Value quantitative or Qualitative	0	50%	50%	50%
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target of female beneficiaries was achieved at 100 percent of the target value				
Indicator 3: Generation capacity of renewable energy constructed under the project [(Megawatt hour (MWh), Custom]				
Value quantitative or Qualitative	0.00	0.54	0.54	0.60
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target related to the generation capacity of renewable energy constructed under the project was exceeded, reaching 111 percent of the target value.				
Indicator 4:Micro-enterprises for road maintenance trained on technical standards and entrepreneurial practices (Number, Customer)				
Value quantitative or Qualitative)	0	9	8	8
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target related to the number of Micro-enterprises for road maintenance trained on technical standards and entrepreneurial practices was achieved at 100 percent.				

Indicator 5: Roads rehabilitated, Municipal kilometers program (Kilometers, Custom)				
Value quantitative or Qualitative)	0	25	30.11	27.229
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target related to the length of the roads rehabilitated, under the municipal kilometers program was partially achieved, reaching 90 percent of the target value.				
Indicator 6. New household sewerage connections that are resulting from the project interventions (Number, Custom)				
Value quantitative or Qualitative	N/A	5,558	5,478	5,508
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target relate to the number of new household sewerage connections that are resulting from the project interventions was exceeded, with results reaching 100.6 percent of the revised target value.				
Indicator 7: People with access to electricity by household connections (Number, Core)				
Value quantitative or Qualitative	0	33 (%)	51,192	155,634
Date achieved	August 4, 2006	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target number of people with access to electricity by household connections was exceeded, with results achieving more than three times the revised target.				
Indicator 8: People provided with access to electricity by household –Grid (Number, Core Breakdown)				
Value quantitative or Qualitative	0	107,671	89,003	92,142
Date achieved	August 4, 2006	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The number of people provided with access to electricity by household –Grid was exceeded, with performance reaching 104 percent of the last target value.				
Indicator 9: People provided with electricity by household connection- Off-grid/Mini-grid-Only Renewable sources (Number, Core breakdown)				

Value quantitative or Qualitative	0	42,166	8,172	63,492
Date achieved	August 4, 2006	May 2013	Dec 15, 2015	Jun 30, 2016
Comments (incl. % achievement): The target of people provided with electricity by household connection- Off-grid/ Minigrid-Only Renewable sources was largely exceeded, because it includes SHS and hydropower energy.				
Indicator 10: Share of rural population with access to an all-season road (Percentage, Core)				
Value quantitative or Qualitative	30	This will be measured at the end of the project	45	36
Date achieved	August 4, 2006	May 2013	Dec 15, 2015	Jun 30, 2016
Comments (incl. % achievement): The share of rural population with access to an all-season road was exceeded, reaching 70 percent again a target of 45 percent.				
Indicator 11: Number of rural people with access to an all-season road (Core , supplement)				
Value (quantitative or Qualitative)	0	194,653	259,522	184,779
Date achieved	2005	May 2013	Dec 15, 2015	Jun 30, 2016
Comments (incl. % achievement): The target of the number of rural people with access to an all-season road, was partially achieved, as performance reached 71 percent compared to the last target value.				
Indicator 12: Number of people in rural areas provided with access to improved water resources under the project (Number, Core)				
Value quantitative or Qualitative	0	89,942	79,485	91,458
Date achieved	August 4, 2006	May 2013	Dec 15, 2015	Jun 30, 2016
Comments (incl. % achievement): The target of the number of people in rural areas provided with access to improved water resources under the project was exceeded, as results reached 115% compared to the last target value.				
Indicator 13: Percentage of population in target areas with access to water and sanitation, provided with quality and sustainability (Text, Custom)				
Value (quantitative or qualitative)	62	This will be measured at the end of the project	This will be measured at the end of the project	75

Date achieved	2005	May 2013	Dec 15, 2015	June 30, 2016
Comments (incl. % achievement): Based on PCU estimates, the target was exceeded as the population in target areas with access to water and sanitation reached 75 percent.				
Indicator 14: Number of people in rural areas provided with access to sanitation under the project (Number, Custom)				
Value (quantitative or qualitative)	0	32,350	28,549	33,049
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target of the number of people in rural areas provided with access to sanitation under the project was exceeded, with results reaching 115 percent of the last target value.				
Indicator 15: Population in target areas with access to electricity service, provided with adequate quality and sustainability (Text, Custom)				
Value (quantitative or qualitative)	0	33 (%)	51,192	155,634
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target of population in target areas with access to electricity service was largely exceeded, as results reached more than three times the revised target value				
Indicator 16: Value of contracts successfully procured by UTIs (cumulative- (Text, Custom)				
Value (quantitative or qualitative)	0	31.10	31.10	31.06
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target of value of contracts successfully procured by UTIs was achieved at 99 percent.				
Indicator 17: Kilometers under routine maintenance (Kilometers, Custom)				
Value (quantitative or qualitative)	-	750	-	593.04
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target related to the number of kilometers under routine maintenance was partially achieved, as results reached only 94 percent of the last target value.				
Indicator 18. Sales amount of accredited solar companies (Amount-US$, Custom)				

Value (quantitative or qualitative)	-		6.20	7.63
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target for the level of sales amount of accredited solar companies was exceeded, as performance reached 123 percent of the last target value.				
Indicator 19. Tons CO2 (greenhouse gas) emissions avoided (Tons/year, Custom)				
Value (quantitative or qualitative)	0	-	88,058	141,636.93 t C02 over 20 years
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target of greenhouse gas emission avoided was largely exceeded.				
Intermediate Outcome Indicators	**Baseline Value**	**Formally revised targets during the May 2013 Restructuring**	**Formally Revised Target Values during the 12/15/ 2015 Restructuring**	**Actual Value Achieved at Project closure. June 30, 2016**
Indicator 1: Distribution lines constructed or rehabilitated under the project (Kilometers, Core)				
Value (quantitative or qualitative)	0	908	690	844.483
Date achieved	August 4, 2006	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target for distribution lines constructed or rehabilitated under the project was exceeded, as results reached 122 percent of the last updated target value.				
Indicator 2: Distribution lines constructed under the project (Kilometers, Core Breakdown)				
Value (quantitative or qualitative)	0	908	690	844.483
Date achieved	August 4, 2006	May 2013	Dec 15, 2015	June 24, 2016

Comments (incl. % achievement): The target for distribution lines constructed or rehabilitated under the project was exceeded, as results reached 122 percent of the last updated target value.				
Indicator 3. Number of integrated mancommunal infrastructure plans completed (Text, Custom)				
Value (quantitative or qualitative)	0	6	7	7
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target for the number of integrated mancommunal infrastructure plans completed was achieved at 100 percent of the target value.				
Indicator 4: Percentage of planned sub-projects actually implemented (Percentage, Custom)				
Value (quantitative or qualitative)	0	72	72	92
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target of percentage of planned sub-projects actually implemented was exceeded, reaching 128 percent compared to the last updated target value				
Indicator 5: Roads rehabilitated, Rural (Kilometers, Core)				
Value (quantitative or qualitative)	0	690	690	639.977
Date achieved	August 1, 2006	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target for rural roads rehabilitated was partially, as results were 93 percent compared to the revised target value				
Indicator 6: New piped household water connections that are resulting from the project intervention (Number, Core)				
Value (quantitative or qualitative)	0	2,897	4,652	3,492
Date achieved	August 1, 2006	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement: The target of new piped household water connections that are resulting from the project intervention was partially achieved, results reaching 75 percent of the revised target.				

Indicator 7: Piped household water connections affected by rehabilitation works undertaken by the project (Number, Core)				
Value (quantitative or qualitative)	0	11,284	10,235	11,751
Date achieved	August 1, 2006	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target of piped household water connections affected by rehabilitation works undertaken by the project was exceeded, as results reached 115 percent of the last updated target value.				
Indicator 8: Latrines Constructed (Number, Custom)				
Value (quantitative or qualitative)	0	5,378	5,378	4,893
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target of latrines constructed was partially achieved, as results reached 91 percent of the revised target value.				
Indicator 9: Solar companies accredited (Number, Custom)				
Value (quantitative or qualitative)	0	5	5	7
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target for the solar companies accredited was exceeded, as it reached 140 percent, compared to the last target value.				
Indicator 10: Micro-financing companies accredited				
Value (quantitative or qualitative)	0	7	7	7
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): 100% achieved, compared to the revised target value.				
Indicator 11: Volume of Bank support: Lines of credit-Microfinance (Amount –US$ million), Core)				
Value (quantitative or qualitative)	0	1.48	1.53	2.145

Date achieved	August 4, 2006	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target of the volume of Bank support: Lines of credit in Microfinance was exceeded, with realizations reaching 140 percent of the revised target value.				
Indicator 12. Volume of Bank support: Institutional Development-Microfinance (Amount –US$), Core)				
Value (quantitative or qualitative)	0	180,000	180,000	180,000
Date achieved	August 4, 2006	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): 100% achieved, compared to the target value.				
Indicator 13. UTIs operating with trained staff (Number, Custom)				
Value (quantitative or qualitative)	0	6	6	6
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): 100% achieved, compared to the last target value.				
Indicator 14: Water Boards trained in operations and maintenance (Number, Custom)				
Value (quantitative or qualitative)	0	100	107	225
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016
Comments (incl. % achievement): The target for water boards trained in operations and maintenance was largely exceeded, reaching 188 percent of the last updated target value				
Indicator 15: Monitoring and Evaluation Systems established (Text, Custom)				
Value (quantitative or qualitative)	0	-	-	Complied with
Date achieved	2005	May 2013	Dec 15, 2015	June 24, 2016

Comments (incl. % achievement): 100% achieved, compared to the last target value estimated at 2016

G. Ratings of Project Performance in ISRs

-						
No.	Date ISR Archived	DO	GEO	IP	Actual Disbursements (USD millions)	
					Project 1	Project 2
1	06/23/2006	MS	MS	MS	0.00	0.00
2	12/10/2006	MS	MS	MS	3.20	0.00
3	05/14/2007	MS	MS	MS	3.20	0.00
4	11/28/2007	MU	MU	MU	3.20	0.15
5	06/20/2008	MU	MU	MU	8.95	0.15
6	11/26/2008	MU	MU	MU	8.95	0.31
7	05/13/2009	S	S	MS	9.35	0.47
8	07/29/2009	S	S	MS	12.89	0.47
9	12/03/2009	S	S	MS	12.89	0.47
10	06/15/2010	S	S	MS	17.25	0.72
11	12/10/2010	S	S	MS	21.07	0.75
12	06/29/2011	S	S	MS	28.48	1.00
13	12/16/2011	S	S	S	34.51	1.23
14	06/20/2012	S	S	S	41.38	1.59
15	02/10/2013	S	S	S	47.27	1.86
16	10/11/2013	S	S	S	48.69	2.35
17	04/28/2014	MS	S	MS	51.60	2.35
18	12/12/2014	MS	S	MS	51.60	2.35
19	07/06/2015	MU	S	MU	53.80	2.35
20	12/27/2015	MS	MS	MS	60.41	2.35
21	06/28/2016	MS	MS	MS	61.58	2.35

H. Restructuring (if any):

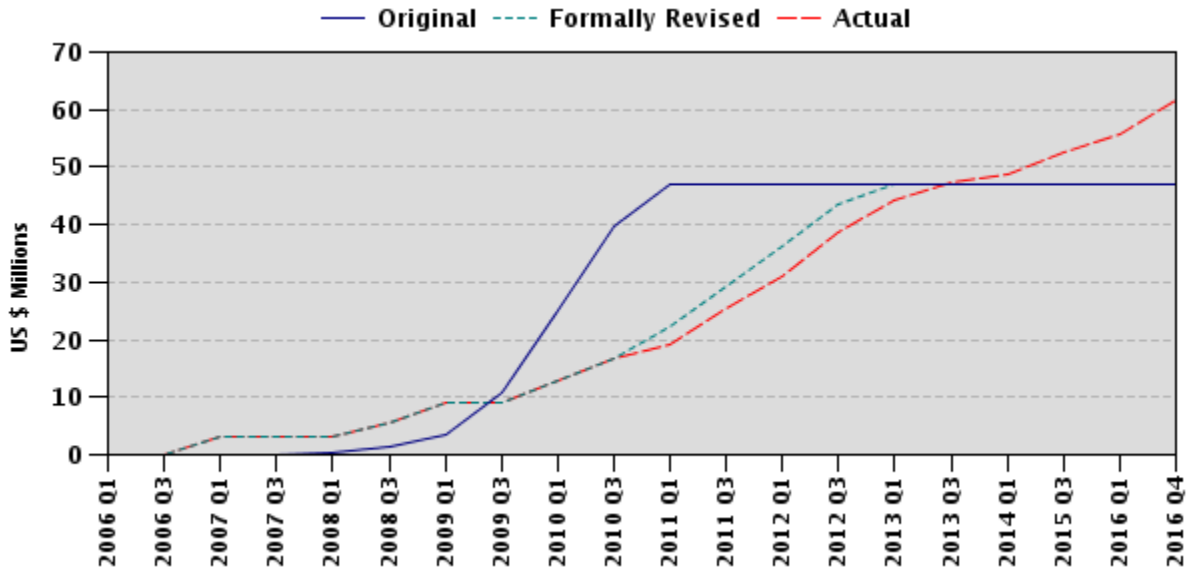
Reference Document	Restructuring Dates	Board Approved PDO change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in US$ million[1]	Reason for Restructuring & Key changes made
			PDO	IP		
Restructuring Paper	05/20/2010	N	S	MS	17.25	To extend the original closing date from 06/30/2010 to 06/30/2012
Restructuring Paper	06/30/2011	N	S	MS	28.48	(a) To revise : (i) project management and oversight; (ii) reducing Counterpart financing requirements from 15% to 5%; (iii) disbursement provision and procurement method; (iv) implementation arrangements; (v) indicators/targets; (vi) reallocation of credit proceeds; (vii) fiduciary arrangements; and (viii) modification of project description. (b) To extend the closing date of the credit

[1] Amounts disbursed are estimated and approximate.

						and the grant from 06/30/2012 to 06/30/2013.
Restructuring Paper	04/29/2013	N	S	MS	41.38	To reallocate resources among components
Restructuring Paper	May 17, 2013	Y	S	MS	47.27	To change the PDO, scale up investments, reallocate proceeds among categories of the credit, and revise results indicators.
Restructuring Paper	12/15/2015	N	MS	MS	60.41	To reallocate resources among categories, and revise results indicators.

I. Disbursement Profile

P086775



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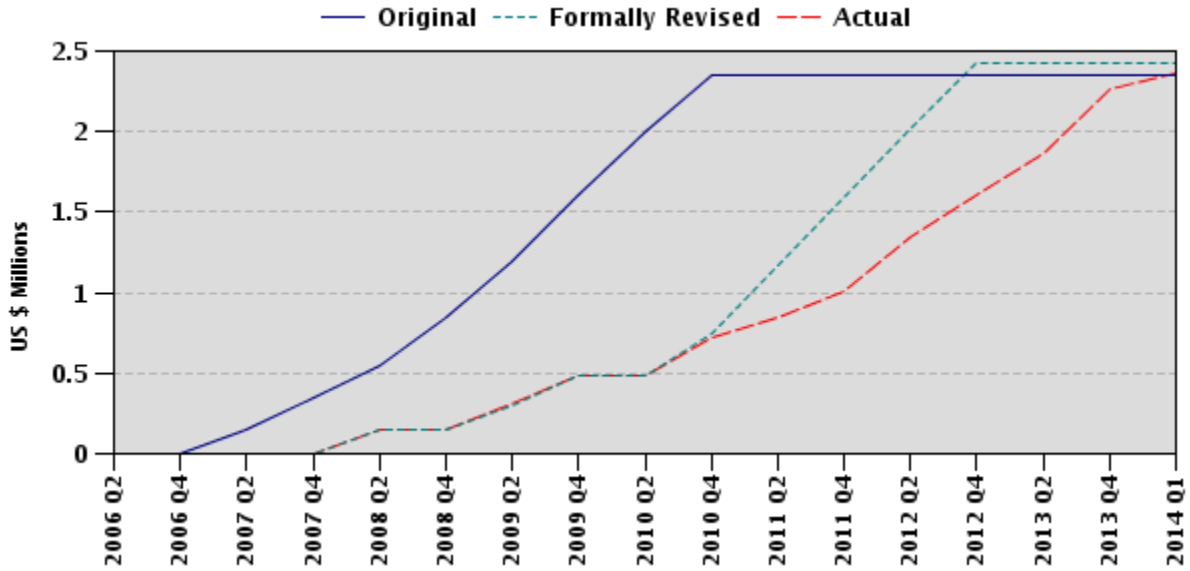


1. Project Context, Development and Global Environment Objectives and Design

1.1 Context at Appraisal

A. Country and sector issues

1. **A country confronted with poverty and inequality**: The project was initiated as one of the responses to the country's challenges of pervasive poverty, and urban and rural divide. In 2003, the gross national income per capita amounted to US$1,013, and an estimated 70.5 percent of the population lived below the poverty line, while 52 percent were in extreme poverty. There was a rise in the share of the poor population living in rural areas and medium-sized cities. The incidence of poverty in rural areas was almost 77 percent, versus 56 percent in urban areas. Inequality grew by 3 percent mainly due to increased extreme poverty in rural areas during the last decade.

2. **Low access to infrastructure services in the rural area was an impediment to growth and shared prosperity**: Despite some improvement during the previous decade, the low supply and quality of electricity, transport, water and sanitation services were serious constrains to the country's economic expansion, and social welfare. The rural and urban divide identified above was also predominant in the supply of infrastructure services**.** Key issues that had to be addressed were related to infrastructure access, their quality and sustainability, as well as the aspects of local capacity, coordination and synergies among sectors.

3. **Decentralization as a conduit of delivering rural infrastructure services**: Honduras identified in the 1990s that decentralization was one avenue to address poverty and inequality partially stemming from weak rural infrastructure. The option towards decentralization was launched through the adoption of a municipal law conferring local service delivery responsibilities and fiscal autonomy to the country's 298 local governments, and providing for a fiscal transfer of 5 percent of the annual budget to the municipalities.

4. **The 2001 PRSP underscored the role of the local government in tackling poverty, and identified infrastructure services as one of the areas to be delegated to municipalities.** In this perspective, reforms in the water and sanitation sector have been transferred to systems under the municipal authority, and the electricity sector, although managed by a state-owned utility (ENEE), the Government's strategy called for a greater role of the municipalities in planning and implementing rural electrification.

B. Rationale for Bank assistance:

5. **The Bank intended to support Honduras in addressing poverty and inequality through a coordinated and decentralized delivery of rural infrastructure based on regional experience.** The initiation of this project drew from Bank's lessons and innovative approaches to expanding access to quality and integrated infrastructure services to the poor recently implemented in Bolivia and Chile. In particular, the recent experience of the role of municipalities in implementing a rural project in Guatemala was the most inspiring. Finally, the Bank aimed to build on synergies with a parallel Bank-financed urban integrated development project (*Barrio Ciudad*).

1.2 Original Project Development Objectives (PDO) and Key Indicators (as approved)

6. The project development objectives are (i) to improve access, quality and sustainability of infrastructure services (roads, water & sanitation, and electricity) for the rural poor in Honduras; and (ii) to develop capacities and enabling environment for locally-driven service provision and planning.

7. Key PDO indicators at approval were identified under the two broad areas:

(i) Sustainable access:

- Population with improved road access, passable throughout the whole year reaching 200,000;
- % of population in each targeted mancomunidad with improved access to water and sanitation (with acceptable quality and cost recovery mechanisms in place) reaching 67 percent;
- % of population in each targeted mancomunidad with electricity service, provided with adequate quality and sustainability in target areas reaching 38 percent

(ii) Local capacity:

- UTIs operating with trained successfully technical staff and adequate budget to reach the number of 2;
- Value of contracts procured by UTIs reaching US$10.0 million
- % of users understanding and complying with their obligations in water and electricity systems reaching 40 percent
- Number of small scale service providers operating satisfactorily

8. The GEF project development objectives were similar to the Rural Infrastructure Project (PIR) objectives as stated above. In particular, the project's global environmental objective was to achieve greenhouse gas (GHG) reductions through the reduction of policy, informational, financing and institutional capacity barriers that currently hinder renewable energy technology (RET) dissemination and market development in Honduras.

1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification

9. With the advent of the Additional Funding to the PIR project in May 2013, both the PDO and the performance indicators were revised. The revised project development objectives are (i) to improve access, quality and sustainability of infrastructure services (roads, water & sanitation, and electricity) for the rural poor in Honduras; and (ii) to develop capacities and enabling environment for locally-driven service provision and planning, and (iii) to improve the Recipient‘s capacity to respond promptly and effectively to an Eligible Emergency.

10. There were two other revisions of the results framework, which did not coincide with a change of PDO in July 2011, and in December 2015. The July 2011 revision aimed to align the PDO indicators with the expansion of the project from two original *mancomunidades* to four additional *mancomunidades*. The December 2015 revision was triggered by the cancellation of a portion of the Additional Financing, and aimed to scale down the level of expected outcome targets. The above revisions are reflected in the results frameworks in Tables 1, 2, and 3.

1.4 Main Beneficiaries

11. The main beneficiaries of the project were the public and private institutions supporting decentralization and scaling up of affordable infrastructure in the rural area, in terms of infrastructure

upgrading, and capacity building. More specifically, the final beneficiaries were the middle income and poor households located in the rural areas of project implementation. At appraisal, specific targets were as follows: (i) about 200.000 individuals in the rural were to benefit from improved road access, passable throughout the year, (ii) 67 percent and 38 percent of the target areas will have access to quality water and sanitation services, and quality and sustainable electricity services respectively.

11. During the May 2013 project restructuring, the levels of beneficiaries were scaled up significantly because of additional funding. The project aimed to reach out to 593,036 beneficiaries, of which 296,518 will be female. The results framework provided a breakdown of beneficiaries by category of rural people accessing to an all-season road, improved water resources, sanitation, and electricity services (grid and off grid). The targets of beneficiaries were again revised downward in December 2015, when 34 percent of the additional financing was canceled.

12. Furthermore, the GEF component aimed to provide solar home systems, and hydro and other renewable energy technologies to at least about 4,000 dispersed households and 1,000 businesses and public facilities.

1.6 Original Components (as approved)

13. The initial project had four components funded by an IDA credit, and a GEF grant as delineated below:

14. **Component A - Support participatory local planning for integrated infrastructure service delivery:** This component intended to finance the costs of consultants, workshops, and studies to (i) prepare rural infrastructure diagnostics; (ii) expand and complement the existing local development plans with infrastructure projects; (iii) establish mechanisms and procedures for approaching the infrastructure issues in an integrated manner among the sectors and localities; and (iv) provide follow up support and monitoring of the overall planning process. The GEF financing was to provide partial funding of the above component in covering all stages of the local participatory planning process.

15. **Component B- Infrastructure Service Delivery:** This component was to finance technical designs, feasibility studies, civil works, goods, equipment, and services related to the local provision of rural infrastructure, including: a) upgrading of rural road networks under the municipal responsibility and establishment of sustainable maintenance arrangements; b) rehabilitation, expansion or construction of new water and sanitation systems and facilities in rural communities; c) electrification of rural communities through: (i) extension of the national power grid; (ii) off-grid systems, using local renewable energy resources; and (iii) establishment of a National Solar PV Market Program; and d) strengthening of local infrastructure service providers.

16. The GEF grant was to provide additional resources for investment and technical assistance to support (i) off-grid RET projects to expand electrification, (ii) investments in village micro-grids using hydro and other renewable energy technologies, (iii) off-grid MHP technical assistance, (iv) finance technical assistance activities related to the micro-hydro projects, and (v) the Solar Photo-voltaic Market Development Program.

17. **Component C - Local Capacity Building and Policy Development TA:** This component was to fund consulting services, training, goods and other TA to enhance the capacity of implementing agencies and key stakeholders on the local level and the central level (FHIS). The GEF financing was to fund capacity building and an enabling framework for managing and implementing off-grid RET sub-projects, and support a host of technical assistance and capacity building activities, to ensure that

decentralized electrification options utilizing renewable energy, are integrated into rural electrification planning.

18. **Component D -Project management, monitoring and evaluation:** This component was to fund the coordinating unit (FHIS), including the FHIS's project-related staff, the project management, monitoring and evaluation activities. The GEF grant was to contribute to the project management, monitoring and evaluation activities to be carried out by FOSODE.

1.7 Revised Components

19. During the May 2013 project restructuring, there were no changes for the components A, D and E. However, there were modifications affecting the components B and C, and a new notional component F was added to the project's components. Under Component B, the project eliminates new funding for off-grid micro-hydro sub-projects due to implementation challenges, provides new funding to renewable energy pilot sub-projects using wind/solar hybrid installations, and to carry out the Environmental Remediation Action Plan (ERAP). In addition, subsidies for Solar Home Systems (SHS) will be funded solely by IDA since GEF funding was totally used. Under Component C, the project provides no further funding for institutional development grants to Microfinance Institutions (MFIs). Finally, under Component F, the project adds the new Immediate Response Mechanism (IRM) Component.

1.8 Other significant changes

20. Three additional changes were incorporated when additional financing was granted as follows: (i) two eligible indigenous communities in Mancepaz were designated to be direct beneficiaries of the Project, (ii) the AF was to retain the community contribution level for roads and electricity, but will reduce the requisite contribution to 15 percent for water and sanitation and to 30 percent for *kilometros municipals;* the contribution was latter reduced to 5 percent, and finally (iii) the Operations Manual was revised by *Fondo Hondureño de Inversion Social* (FHIS) to incorporate revised guidelines for community ownership, and equitable burden sharing contributions, ensure adequate social safeguards are in place, including safety and community ownership.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

21. **The project's multisector approach was inspired by the Bank's regional experience, and aimed to achieve infrastructure planning and delivery for the rural sector:** There is evidence from Bank's studies showing that development outcome rises significantly when multiple infrastructure services are provided simultaneously.

22. **The decentralization approach aimed at striking a balance between reaching the poor and ensuring infrastructure sustainability:** One of the goals of the project was to establish effective linkages between the local and central government levels in charge of planning to ensure that the local development experiences can feed into the sectoral policies and successful models can be scaled up at the national level. The key obstacle to the transfer of responsibilities for infrastructure provision to local levels has always been the low quality of local technical capacity necessary to ensure the maintenance and the sustainability of the decentralized infrastructure. That is why local capacity building was one of the key building blocks of the project.

23. To lay the foundation for infrastructure sustainability, the project design privileged the quality, continuity and reliability of the infrastructure services that were to be put in place. Principles that were incorporated in the project design included (i) financial viability; (ii) adequate service delivery models, (iii) technical design and service quality; (iv) social acceptance of the models; (v) increased local capacity; and (vi) enabling policy, regulatory and institutional frameworks.

24. **Critical risks were well acknowledged, and mitigation measures were triggered in most instances, but unforeseen risks occurred:** Key project risks were identified, and included (i) the complexity of the project, (ii) the uncertain capacity of the PCU to manage the project, (iii) the lack of counterpart funds from participating municipalities, (iv) the absence of incentives for sector agencies to align with project objectives and approaches, and (v) the lack of sustainability in relation to the capacity to pay tariffs, the capacity to maintain infrastructure and so on. For each category of risks, mitigation measures were triggered as necessary, and that is why key outputs and outcomes were achieved, despite some delay. However, cancellation of funds was late and unforeseen, and could not be mitigated.

Table 4: Risks assessment

Risks that materialized	**Mitigation measures and actions**
Project complexity with weak institution capacity	There was a simplification of implementation arrangements, and provision of expertise to strengthen the PCU, the Project Coordinating Unit, and the mancommunidades.
The PCU had difficulties to coordinate the projects under its oversight	The PCU received technical assistance from the Bank and other donors which funded training and specialized expertise, and the Manual for Project Operations was regularly updated to adjust to ground context.
Inter Municipal Technical Units had difficulties to implement the project.	The Technical units received technical assistance from the Bank and other donors which funded training and specialized expertise
Participating municipalities had difficulties to contribute the counterpart funds	The level of contribution was reduced from 30 percent to 15 percent, and finally to 5 percent.
Lack of sustainability of road, water and sanitation and electricity infrastructure	The project and other donors funded training at the level of mancommunidades, and the private micro-enterprises that will ensure O& M after the project closure.
Non-identified risks	
Cancellation of a portion of project resources	There were no mitigation measures, and performance was affected by the resource cancellation

Source: Project documents and field mission

25**. The Bank combined an IDA credit with a GEF grant to support rural energy :** On the Bank side, two different projects were bundled together: (i) an IDA Rural Infrastructure Project and a GEF project, both of them to fund different portions of the renewable energy-based investments, the IDA Project financing the grid extension of the electrification component, while the GEF financing was sought for covering costs associated with the solar photo-voltaic program, technical assistance and capacity building activities.

26. **The project brought together a large partnership of donors that supported the rural infrastructure initiative**: Other donors that were expected to contributed to the strengthening of rural infrastructure included (i) the European Commission to co-finance two micro hydro power plants, the Central American Bank for Economic Integration (CABEI) to provide a parallel financing of about US$15 million, of which about US$5 million will be available for electricity sub-projects. Following the

same implementation procedures as IDA credit, German development agencies (KfW and GtZ) and Inter-American Development Bank (IDB) were also working on rural electrification, renewable energy, and decentralized service provision, and cooperated with the Bank's project. However, only CABEI has effectively supported rural infrastructure. As of December 2016, the project has committed 63.10% of the resources and disbursed 46.7% (US$7.06 mm). Project achievements include the following: 177 household with water and sanitation connections and 1,425 household with sanitation connections, 25.3 km of rural roads rehabilitated, 1,625 households with electrification connections and finally 177.32 km of electric distribution grid.

2.2 Implementation

27. **Project effectiveness took more than one year to be achieved, because of the complexity of the project design:** Readiness for implementation was not achieved yet when the project was approved**.** It took more than 12 months to have the project declared effective, due to difficulties inside the Bank, and pending issues on the side of the borrower.

28. **Implementing agencies took too long to build capacity and take up their responsibilities**: At project appraisal, identified key implementing agencies included (i) the FHIS, a social fund, entrusted with overall responsibility for project implementation and coordination at the national level; (ii) the mancomunidades, which are voluntary associations of municipalities; (iii) the Communities, which were set to participate in all project stages; (iv) the infrastructure service providers; (v) and the sectoral agencies. For the project to be implemented smoothly, all these entities had to execute correctly their assigned task in a harmonized way. It took some time for the Bank and the Borrower to build capacity in those entities, and to have everybody on board and accomplishing its assignment.

29. **There were shortcomings related to the set-up of implementation arrangements of Borrower entities and to the change in Government:** At project appraisal, implementation modalities were not finalized as regards the different roles to be played by the FHIS, the Project Coordinating Unit and the Mancommunidades. Adjustments had to be made to simplify processes with the borrower entities in order to accelerate implementation. Project implementation had to adjust also with the change of the Government in 2008, and the resulting need to fine-tune the project implementation arrangements and renegotiate some of the key participation agreements with the sector agencies, to ensure their full commitment to the project, which required participation of various central and decentralized institutions.

30. **The Bank acted decisively in the face of implementation obstacles, and scaled up the project when ground conditions became favorable**. To accelerate project effectiveness, the Bank implemented short term measures to facilitate project management; strengthened and streamlined procurement and financial management procedures in FHIS as well as the burdensome environmental approval process; accelerated the startup of infrastructure improvements in the four new mancomunidades, and revised the Operational Plan and the Procurement Plan to fully integrate the GEF funded activities.

31. To adapt with prevailing conditions on the ground, and remain on target toward outcome achievement, the Bank restructured the project five times: (i) in June 2010 to extend the original closing date until June 2012; (ii) in July 2011 to revise the results indicators/targets; reallocate credit proceeds; and extend the closing date of the credit until June 30, 2013; (iii) in April 2013, to reallocate the resources among components; (iv) in May 2013 to change the PDO, scale up investments by a US$20 million additional financing, reallocate proceeds among categories of the credit, and revise the results indicators, and extend the closing date until June 30, 2016; and finally (v) in December 2015, to cancel US$6.8

million of the resources, to reallocate the remainder of resources among categories, to revise results indicators and targets.

2.3 Monitoring and Evaluation (M&E)

32. **Design:** The initial results framework was comprehensive, with indicators to gauge (i) progress towards the achievement of project's physical outputs, intermediary and final outcomes and impact; and (ii) compliance with the procurement, financial management and social and environmental safeguards procedures. The majority of PDO and intermediate outcomes indicators had baselines, with annual benchmarks showing progress toward the targeted final values of the indicators, which were overall realistic. However, specificity of indicators to gauge quality and sustainability of rural infrastructure could have been carefully chosen. Moreover, the large number of indicators set after project restructuring, with some of them without end targets made the project difficult to monitor.

33. **Implementation:** During the period of June 2006-November 2008, project M&E performance was weak, its rating varying between Moderately Unsatisfactory and Unsatisfactory, because of lack of technical capacity at the level of the FHIS, and the mancommunidades, and the difficulties related to project effectiveness. A first Medium Term Review (MTR) in September-October 2008 aimed to assess project progress and identify roadblocks on the path of project implementation. The MTR identified measures to strengthen and update M&E arrangements, to address safeguards and fiduciary issues, and provided orientation on future project investments. Following Bank's support, M&E performance of the Borrower improved progressively, and its rating evolved from Moderately Satisfactory during the period 2008-2010 to Satisfactory for the remainder of the project life.

34. **A second MTR took place in May 2015 and intended to analyze the perspective of reduced project resources owing to budget constrains from the Government, and its impact on the achievement of project outputs and outcomes indicators.** The Bank continued to exert due diligence in reporting on what was happening on the ground in terms of progress toward project outputs and outcomes. The Bank team filed 21 Implementation Status and Results Reports (ISRs), which were overall well prepared, and they provided a candid account of project implementation on the ground. The ISRs were complemented by Aide-memoires that summarized the dialogue status between the Bank and the Borrower on how they cooperated to address obstacles to good progress toward project outcome and objectives.

35. **Utilization**: In line with the diligence displayed by the Bank team and the PCU in following up closely what was happening on the ground, the collected data and information were used to calibrate the project restructuring and scaling up. The feed-back from the teams on the ground as regards to progress made toward outputs and outcomes was key to the processing of project restructurings, in particular those that were consecutive to the approval of the additional financing, and the cancellation of funds after the country's portfolio review.

2.4 Safeguard and Fiduciary Compliance

(i) Social and environmental safeguards compliance

36. Overall, the sub-projects funded by the PIR project and the GEF grant consisted in activities and works generating positive environmental impacts, and improving the quality of life and physical environment in the poor rural communities. As the project was classified as "Category B", a Conceptual Framework for Social and Environmental Management was developed, in order to ensure that the social and environmental sustainability of the projects complies with the Environmental Safeguard Policy (OP.

4.011). Three other safeguards policies were triggered as follows: (i) Physical Cultural Resources (OP/BP 4.11), (ii) Indigenous Peoples (OP/BP 4.10) and (iii) Involuntary Resettlement (OP/BP 4.12). At the May 2013 restructuring, two additional safeguards policies were triggered: (i) Natural Habitats (OP/BP 4.04) and (ii) Forests (OP/BP 4.36). The vast majority of sub-projects that were to be funded under the projects were in Category 1, with moderate risks, and Category 2, which were to be handled by the municipal environmental units.

37. The projects' compliance with social safeguards policies was generally satisfactory. Safeguards review missions reported that most beneficiaries believed that the projects has had a positive impact on their health in particular, through water, and sanitation, and roads. Compliance with the Environmental Safeguards policies (OP 4.01) evolved over time, reflecting the progress made by the PCU and other stakeholders in resolving implementation bottlenecks. The Environmental safeguards policies performance was rated Satisfactory during the period 2011-2012, when the projects had reached implementation momentum, and in 2016 before the project closure. During the remainder of the project life, safeguards were rated as Moderately Satisfactory, because the PCU was having difficulties to obtain environment licenses from the Ministry of Natural Resources and the Environment (SERNA) for about 100 sub-projects, and had to conduct remediation activities for the construction of 30 sub-projects in protected areas.

38. After the approval of the additional financing, the FHIS worked toward enhancing safeguards compliance by (i) undertaking an environmental audit and review of a sample of sub-projects, (ii) preparing an Environmental Remediation Action Plan during the updating of the Project Operational Manual, (iii) hiring additional environmental and social specialist, and finally (iv) implementing capacity building activities for the PIR staff, UTIs and local communities. The Bank team worked closely with the PCU providing training to the PCU engineers, mancomunidades, supervising project and reviewing environmental management plans in overcoming the weaknesses identified prior of the AF.

39. The above remedial actions executed over the period 2013-2015 helped to iron out all pending weaknesses, and led to satisfactory compliance with all social and environmental safeguards policies by December 2015, ahead of the project closure in June 2016.

(ii) Fiduciary oversight

40. Pursuant to the terms of the Project Manual of Operations, the fiduciary system (budget management, reporting and auditing) of the respective municipal administrations served as the framework for the financial management and the procurement of the project's resources under the oversight of the FHIS and the Ministry of Governance and Justice.

41. **Financial management**: Key features of financial management implementation are the following: (i) the financial management team at the PCU was strengthened progressively until qualified professionals got in charge of finances of the project, (ii) programming and budgeting was done at the municipality level, but the PCU monitored closely the use of funds at the municipal level, and informed the Bank in the case of budget reallocation needs, (iii) internal controls at the PCU worked well, and identified financial weaknesses with regard to the flow of funds, accounting and financial reporting, external audits were timely spotted and corrected.

42. In terms of fiduciary compliance with reporting requirements, audit reports were transmitted to the Bank with moderate delays during the first period of execution, but this situation was normalized starting with the audit report for the year 2011 onwards. Similarly, audit opinions during the first period were qualified owing to several internal control issues, but the situation improved starting for the audit report for year 2011 onwards. Regarding the submission of the IFRs, these were sent with moderate

delays throughout the life of the project, following systemic delays from FHIS-DAF in closing accounting periods, resulting in these delays being transferred to the PCU.

43. From project approval in June 2005 until June 2008, project performance in the area of financial management was rated Moderately Unsatisfactory, reflecting the difficulties to which the project was confronted during the first years of its implementation. Key bottlenecks included: (i) the weaknesses in technical capacity of the staff handling financial issues within the FHIS, the PCU, and the mancommunidades, and (ii) the complexity of the relationships among the above implementing agencies.

44. Actions undertaken to address the above situation included (i) the streamlining of the implementation arrangements among implementing entities, (ii) intense supervision and building local capacity, and (iii) the completion of an MTR in September 2008, which was an opportunity to undertake a fundamental review of the project, by reducing the project complexity, and by providing direct support to the mancommunidades and the municipalities involved in the project, and (iii) ensuring the regularity of unqualified and timely annual external audits. These efforts produced results as FM was rated Moderately Satisfactory during the period November 2008- December 2012, and thereafter the rating was Satisfactory until the project closure.

45. **Procurement**: Performance of project procurement was confronted by the same bottlenecks identified under the financial management, and which had to do with the complexity of the project, the lack of clarity in the implementation arrangements among the PCU, weaknesses at the central and the decentralized entities involved in the project implementation. The actions undertaken under the financial management were also orientated to supporting the procurement. Project procument was rated as Satisfactory until the end of 2007, but fell down to MU in the year 2008, before rebounding to MS during 2009-2013, and then Satisfactory afterwards until the project closure.

2.5 Post-completion Operation/Next Phase

46. Sustainability of projects results will be predicated to the technical and financial capacity of the beneficiary communities in the all the 6 mancomunidades, but the counterpart funding has been lacking. Consultancies contracted for the participatory planning process provided capacity building to municipalities and communities, and most attention was focused on the formation of rural road micro-enterprises, but with the intention of creating one or two in every *mancomunidad*. In the water sector, 6 technical assistance consultants were hired to support the operation and maintenance activities of the community-based water boards for the water and sewerage projects financed under the project.

47. There are currently eight micro-enterprises working and four more under the process of being formed. While the work of the micro-enterprises for road maintenance that were created under the project has started to show the benefit, but at the municipal level, they do not have the financial resources to make them sustainable. The key challenge is the allocation of financial resources by municipalities and mancomunidades among the priorities.

48. For a number of 75 sub-projects, a local committee was formed, which not only supported basic supervision of the sub-projects, but also had a stronger involvement of the community in project preparation and construction. This was achieved through the link between the municipality, the *mancomunidad* and the PCU, whose participation is expected to ensure sustainability of the works in the future.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

Relevance of Objectives:

49. **Original project:** The original project objectives were (i) to improve access, quality and sustainability of infrastructure services (roads, water & sanitation, and electricity) for the rural poor in Honduras; and (ii) to develop capacities and enabling environment for locally-driven service provision and planning (PAD, p. 4)**.** The design of this project was triggered by the Government's intent to address poverty in general and the inequality between the rural and urban population in particular through rural integrated infrastructure. When the project was being appraised, 52 percent of the population was living in extreme poverty, and while there were signs of declining poverty nationally, extreme poverty was actually increasing in rural areas. That is why the Poverty Reduction Strategy Paper (PRSP) adopted in October 2001 by the Government of Honduras had a pillar devoted to the reduction of rural poverty, and two cross-cutting themes dealing with country's decentralization and environmental sustainability issues. The 2004 PRSP progress report found that both the issue of poverty and inequality were still dominant in the country, and that the Gini index showed that inequality had remained relatively stable since the PRSP launching, reaching 56.8% in 2003. The project intended to eliminate the urban-rural divide by promoting an integrated development of road, water and sanitation, and electricity infrastructure, including renewable energy. The relevance of objectives of the original project is rated **high**.

50. **Revised project**: The project went through a first level restructuring in May 2013, which consisted in (i) expanding the project objectives to include "the improvement of the Recipient's capacity to respond promptly and effectively to an eligible emergency", (ii) approving an additional financing aimed at scaling up the results achieved so far, (iii) the revamp of the results framework. The key lessons learned from the original Project were incorporated in the restructuring of the project toward improving the sustainability of investments, local capacity building efforts and attention to environmental management issues. Second, for investments in new areas, an integrated investment approach will be preferred in order to maximize development impacts. Scaling up the project scope was in harmony with the 2012-15 Country Partnerships Strategies (CPS), which had pillars aimed at expanding opportunities through reducing vulnerabilities, and enhancing good governance. The 2016-2020 CPS, which continued to emphasize the need to expand coverage of social programs, improve reliability of key infrastructure, and reducing vulnerabilities by boosting resilience to disasters and climate change. The relevance of objectives of the revised project is rated as **high**.

Relevance of Design

51. **Original project**: The higher level objectives, and the project objectives were well stated in the PAD, and were consistent, as they all emphasized environmental sustainability, and the decentralized delivery of rural infrastructure. Key principles underpinning the project design were: (i) the use of decentralization as the main conduit, (ii) the maximization of the cross-sectoral synergies and development impact, (iii) the focus on sustainable service delivery as opposed to building infrastructure alone, (iv) scaling up access for the rural poor, and enhance quality and sustainability, and finally (v) building strong local technical capacity

52. There was a logical chain between the components, the outputs, the outcomes and the objectives of the project. For instance, in order to improve access, quality and sustainability of infrastructure services, eighty percent of the resources were allocated to rehabilitating roads, funding electricity, water and sanitation infrastructures. Toward the generation of the renewable energy, the GEF grant was approved as complement to the PIR project to fund off-grid generation of electricity. To ensure sustainability of the project's results, both the PIR and the GEF grant funded activities to strengthen

local technical and institutional capacity. The relevance of design of the original project is rated **Substantial**

53. **Revised project:** The restructuring operation added a third objective, scaled up and reallocated project resources, and revamped the results framework. However, the newly added objective- to improve the Recipient's capacity to respond promptly and effectively to an eligible emergency was part of Bank policy. The results framework was expanded to capture (i) the larger scope of the planned infrastructure made possible by additional resources, and (ii) the outcome expected from eventual implementation of activities to support the third objective. While the logical chain was maintained after project restructuring, the setting of an objective without earmarked resources, and specific activities to generate the required outputs and outcome made the results framework look less realistic. However, the relevance of design of the revised project remained overall **substantial**, given that the addition of the third objective reflected a bank-wide project design policy aimed at mitigating emergencies in the borrower countries.

Relevance of implementation:

54. The project effectiveness was delayed by more than a year because of weaknesses of the PCU in fiduciary oversight, unclear relations among implementing agencies and shortcomings in implementation and M&E arrangements. Close supervision allowed the Bank to provide the needed support that helped to turn around the project in the third year after the project approval, and to address progressively fiduciary, M&E and safeguards flaws. The project went through four level 2 restructurings and a level 1 restructuring (see Data sheet, Section H). The first category of restructurings were occasions to reallocate resources, extend the closing date of the project, and/or revise project performance indicators. The level 1 restructuring took place in May 2013 when additional financing was approved, with a change in the PDO, and a significant shift in the targets of project outputs and outcome.

55. The reduction of project resources by US$6.8 million (34 percent of the additional financing) in December 2015 was unexpected and key outcome indicators had to be scaled down. Notable features of the relevance of project implementation include the following: (i) despite start up difficulties, the Bank has been proactive and resilient by addressing aggressively roadblocks and supporting the consolidation of local capacity, and (ii) the PCU has strengthened its technical capacity over time, to the extent of reaching high level standards of project implementation performance.

3.2 Achievement of Project Development Objectives and Global Environment Objectives

56. A split assessment of the project efficacy during the periods before and after July 2013 restructuring will be conducted for the following reasons: (i) there was a change in the PDO with the addition of a third objective, (ii) there was a substantial additional financing in the amount of US$20.0 million, and finally (iii) there were revisions of the targets of project performance indicators. The original project implemented during the period June 2005-June 2013 is assessed against the results framework prepared at the June 2011 restructuring.

Original project: (June 2005-June 2013 -78 % of resources disbursed)

Objective 1: (i) To improve the access, quality and sustainability of infrastructure services (roads, water, sanitation and electricity) for the rural poor in Honduras, and (ii) to achieve greenhouse gas (GHG) reductions through the reduction of policy, informational, financing and institutional capacity barriers that currently hinder renewable energy technology (RET) dissemination and market development in Honduras.
Rating: Substantial

57. **Access to infrastructure services (roads, water, sanitation and electricity) for the rural poor improved significantly after 11 years of project implementation.** The direct project beneficiaries (road, electricity and water and sanitation) reached the number of 550,791, or about 7 % of the 2016 country's population, of which 50 percent are female. The project reached out to the poor, because most of the beneficiary communities and people are landlocked, out of which 17 percent of them are from the indigenous communities, and half of the total beneficiaries are female.

58. **Achievements related to road and water access were beyond projected levels:** The population target with improved road access, passable throughout the whole year was exceeded by 12 percent, reaching the level of 184,779. The length (593 km) of the roads rehabilitated with adequate routine maintenance mechanisms established was also exceeded, with results reaching 138% of the revised target. The population (124,507) in each targeted mancomunidad with access to water and sanitation (with acceptable quality) was exceeded, with results achieving 126 percent of the revised target value. The revised target of the number of new water connections was exceeded, reaching 3,492, or 226 percent of the revised target. The target of piped household water connections affected by rehabilitation works was exceeded and reached 11, 751 people or 167 percent of the revised target. On the weaker side, the target of number of people in rural areas provided with access to sanitation under the project was missed, as it reached 33,049 people or only 75 percent of the revised target.

59. **Both the results for energy access and for improved global environment were outstanding.** Total population in target areas with access to electricity has reached the number of 155,634. There have been 92,142 new household connections from the national energy grid in 286 communities, including households, public and productive establishments through grid extension or 122 percent of the revised target. The number of people provided with access to renewable electricity under the project by household connections almost doubled with 63,492 people or 193 percent of the revised target. There are 844.48 kilometers of power transmission and distribution lines that were installed.

60. Similarly, the expected goal for the Global Environment Objective of GHG reduction over 20 years was exceeded, as results reached 141,636.93 tCO2 in 20 years or 117 percent of the revised target. Other key achievements towards the GEF objective include the following: (i) a Micro Hydropower grid was built under sustainable conditions (financial, social and technical capacity), with the help of the technical assistance provided by the project. The MHP generation capacity of renewable energy is 0.60 MW, (ii) there are 216 village micro grids using hydro and other renewable energy technologies providing quality and sustainable electricity, (iii) the number of solar systems installed under the project in community centers and schools is 248, and finally, (iv) The number of households with solar systems installed is 8,979.

Objective 2: To develop capacities and an enabling environment within Honduras for locally-driven infrastructure service provision and planning:

Rating: Substantial

61. **Key technical capacities were built at the community level to ensure the O&M for water sanitation, electricity and roads**. They include: (i) procurement management, (ii) O&M of water systems for human consumption and waste management, (iii) maintenance and management of wastewater treatment plants, (iv) environmental and social safeguards, (v) road conservation technical activities, (vi) the formulation of policies for municipal water and sanitation management, (vii) chlorine banks establishment and management, (viii) establishment and training of water boards, and (ix) prioritization of needs and definition of project at the community level. Also, eight community-based

road maintenance micro-enterprises, 22 road conservation community committees and 226 water boards were established. All beneficiaries of electrification projects were also trained in energy efficiency measures to promote consumption optimization

62. **The project performance in building capacity to deliver infrastructure exceeded planned goals in the areas of strengthening local enterprises, and service providers**. The following achievements supported by the project exceeded the targets (see Results Frameworks) set at project approval or restructuring: (i) the creation of rural road maintenance micro-enterprises trained on technical standards and entrepreneurial practices, (ii) the participating communities (and individual households) trained in sustainable O&M arrangements, (iii) the value of contracts successfully procured by UTIs (iv) the percentage of users understanding and complying with their obligations in water and electricity systems (v) the number of Rural Infrastructure Action Plans (RIAPs) with adequate integration of RETs, (vi) the number of village micro-grids operating under sustainable conditions (financial, social and technical capacity, (vii) the SHS providers accredited and participating in the national solar photo-voltaic development program, and (viii) the number of solar companies accredited under the project and providing the installation services of solar systems.

Revised project (July 2013-June 2016- 22 percent of disbursed resources):

63. Assessment of the revised project relies on the results framework in Table 3 which provides a report of the June 2016 project performance against the indicators set in July 2013, but which were scaled down in December 2015, following the cancellation of 34 percent of the Additional Financing. Assessment of the revised project is conducted against the outcome indicators updated during the December 2015 restructuring.

Objective 1: (i) To improve the access, quality and sustainability of infrastructure services (roads, water, sanitation and electricity) for the rural poor in Honduras, and (ii) to achieve greenhouse gas (GHG) reductions through the reduction of policy, informational, financing and institutional capacity barriers that currently hinder renewable energy technology (RET) dissemination and market development in Honduras.
Rating: Substantial

64. **Performance in road access and infrastructure generated by the project were short of the targets, due to the cancellation of AF resources, and M&E weaknesses.** Despite a reduction in the levels of targets, the new benchmarks could not be achieved as illustrated by the following achievements: (i) the target of rural population with access to an all-season road (40 percent) was missed, with a performance of 89 percent of the last target value, (ii) the targeted number of rural people with access to an all-season road, was missed, as achievement (184,779) reached only 71 percent compared to the last target value, (iii) the length of rural roads rehabilitated (639.98) was missed, as results were 93 percent compared to the last target value, and finally (iv) the length of roads under routine maintenance was missed, as results (593 km) was only 94 percent of the revised target. On the positive side, the length target of the roads rehabilitated, under the municipal kilometers program (27.23 km) was exceeded, reaching 121 percent revised target.

65. **Performance in water access surpassed the expected levels in terms of access, and water and sewerage connections.** Results were as follows: (i) the target number of people in rural areas provided with access to improved water resources under the project was exceeded by 15 % to reach 91,458, (ii) the target number of people in rural areas provided with access to sanitation under the project was exceeded by 15 percent to reach 33,049, (iii) the target of piped household water connections affected by rehabilitation works undertaken by the project was exceeded by 15 percent to reach 11,751,

(iv) the target of new piped household water connections resulting from the project intervention was exceeded by 33 percent to reach 4,652, and finally (v) the number of new household sewerage connections resulting from the project interventions was slightly exceeded to reach 5,508. Lower results were recorded regarding the latrines constructed (4,893) which fell 9 percent below the revised project target.

66. **Results were overall very strong in terms of electricity access and connections.** The majority of targets were exceeded as reported below: (i) the number of people (84,212) provided with access to electricity by household –Grid was exceeded, with performance reaching 106 percent of the last target value, (ii) the number of people (61,814) with access to electricity by household connections was exceeded, with results achieving percent 120 percent of the last target value, (iii) the percentage of population (33 percent) in target areas with access to electricity service, provided with adequate quality and sustainability was 100 percent achieved, compared to the last target value, (iv) the number of people (7,752) provided with electricity by household connection- Off-grid/Mini-grid-Only Renewable sources was slightly missed, as achievements reached 95 percent of the last target value.

67. **Performance in delivering electricity infrastructure, including with RETs, supported by the project surpassed the levels set at the 2015 restructuring**. Achievements included the following: (i) the target for distribution lines constructed under the project was exceeded, as results reached 122 percent of the last target value, (ii) the target for distribution lines constructed or rehabilitated under the project was exceeded, as results reached 122 percent of the last target value, (iii) the generation capacity of renewable energy constructed under the project was exceeded (0.60 megawatts), reaching 111 percent of the latest target value, (iv) the target for the solar companies accredited (7) was exceeded, as it reached 140 percent, compared to the last target value. Outcome related to electricity generated through RET's, the target of greenhouse gas emission avoided was largely exceeded, reaching almost the double of the volume targeted, and the target for the level of sales amount of accredited solar companies was exceeded, as performance reached 123 percent of the last target value.

Objective 2: To develop capacities and an enabling environment within Honduras for locally-driven infrastructure service provision and planning: Substantial

68. Towards building capacity and laying the foundation for infrastructure service provision and planning, a series of goals were exceeded, including the following: (i) the percentage of planned sub-projects actually implemented was exceeded by 28 percent reaching 92 percent, (ii) the target for the level of sales (US$7.63) amount of accredited solar companies was exceeded compared to the last target value, (iii) the target for water boards trained in operations and maintenance was largely exceeded, reaching 188 percent of the last updated target value.

69. Other achievements to reinforce technical capacity and sustainability include the following: (i) the volume of Bank support: Institutional Development-Microfinance (US$180,000) was 100 percent achieved, (ii) the number of micro-financing companies (7) accredited was 100 percent achieved, (iii) the number of Micro-enterprises (8) for road maintenance trained on technical standards and entrepreneurial practices was achieved at 100 percent (iii) the value of contracts (US$30.89 million) successfully procured by UTIs was 99 percent achieved compared to the last target value, (iv) the number of UTIs (operating with trained staff) was 100 percent achieved, (v) the Monitoring and Evaluation Systems were established, (vi) the target for the number of integrated mancommunal infrastructure plans (6) completed was achieved at 86 percent of the last target value. However, the target of the volume of Bank support: Lines of credit in Microfinance (1.53) was missed, with realizations reaching 94 percent compared to the last target value

Objective 3: To improve Honduras' capacity to respond promptly and effectively to an eligible emergency: Not rated.

70. This objective was cautionary and preventive in nature, and was to be pursued only if an emergency occurs. As there was no emergency during the project life, the activities toward this objective were neither triggered nor implemented.

3.3 Efficiency:

71. ***Administrative and operational efficiency*:** During the period of June 2005- June 2013, the project implementation went through two key phases: (i) an initial phase fraught with effectiveness bottlenecks, and start up difficulties, and (ii) a second phase of implementation surge during which the project implementation was turned-around and disbursement accelerated. During the first phase, difficulties ranged from inability to get the project effectiveness to weak technical capacity to oversee fiduciary management, procurement and environment issues. Because the Bank team overcame the launching difficulties, and ensured disbursement, restructuring and delivery of all planned activities, to the extent of scaling up the project through an additional financing, it can be concluded that overall the project became over time **substantially** efficient.

72. After the June 2013 first level restructuring, the second implementation period inherited a strengthened technical capacity, implementation experience, and additional financial resources. However, there were difficulties in M&E design and implementation. The Bank team could not determine realistic and focused outcome indicators, instead it came up with a list of multiple PDO and intermediate outcome indicators difficult to effectively monitor the project performance. Moreover, the Bank team could not succeed to avoid the cancellation of project resources, leading to the scaling down of the project activities. Due to these shortcomings and the 11 years of project implementation, this portion of efficiency is rated as **Modest.**

73. ***Economic efficiency*:** An ex-post economic analysis of the project was carried out to verify its economic viability as presented in the PAD. The economic analysis looked at the costs and benefits accruing to the main beneficiaries of the project, including rural households, benefiting from new connections to electricity, water and sanitation (or rehabilitation of existing water and sanitation systems), and the population living in the area of influence of the roads that were improved to provide all-weather access. The high economic returns of the project's investments in road rehabilitation, water and sanitation, and electricity allowed the generation of an NPV of about US$54.9 million and an EIRR of 28 percent over the 25-year period during which the acquired infrastructure will last.

74. ***Benefits***. The quantifiable benefits obtained from the different investments include the following: (i) road rehabilitation: Savings in road user costs, i.e. vehicle operating costs (VOC), as well as time savings for beneficiaries; (ii) water and sanitation: time savings (from recollection of water) and reduction of health expenditures; and (iii) electricity: with substitutable expenditures for fuel and batteries.

75. ***Costs***. The main economic cost of the different sub-projects include the investment costs and the costs for operation and maintenance. Additional costs specific to the sub-projects (e.g. battery replacement for SHS, tariff payments for grid-investments, rehabilitation of roads, etc.) were included under the specific analyses of the sub-components. A detailed account of the calculations of costs and benefits of the diverse categories of infrastructures are provided in Annex 3.

76. ***Results.*** The table below summarizes the results of the ex-post economic analysis of the Project. Due to the framework approach applied during Project appraisal, an overall NPV and EIRR at the time

was not calculated in the PAD. Based on the overall high economic returns of the Project's investments in road rehabilitation, water & sanitation and electricity (an NPV of about US$54,9 million and EIRR of 28 percent), the economic efficiency for the overall Project is rated as **High.** It should be noted that there are additional direct and indirect benefits from rural electrification, water and sanitation, and roads which are difficult to estimate, such as improvements in education, health, communication and productivity.

Table 5: Results

	ICR Results		**Appraisal Results**	
	NPV	**EIRR**	**NPV**	**EIRR**
Roads	US$2,041,596.54	13%	N/A	N/A
Water& sanitation	US$27,938,068.50	34%	N/A	N/A
Electricity	US$14,342,316	28%	N/A	33%
SHS	US$10,701,811	63%	N/A	30%
Mini-grid	(US$93,425)	6%	N/A	20%
Total	**US$54,930,367.51**	**28%**	**N/A**	**N/A**

77. In summary, economic efficiency of the project is rated as high, mainly because of substantial results accruing from water and electricity infrastructure, and to a lesser extent from roads and sanitation. However, administrative and operational efficiency suffered from a host of setbacks as described above. On balance, overall efficiency of the project is rated as **Substantial**.

3.4 Justification of the overall outcome rating

Original project:

78. The relevance of objectives for the original project was high, but the relevance of design was substantial. Efficacy was substantial for the first and second objectives, and efficiency is rated Substantial. The overall outcome rating for the original project is Satisfactory

Revised project

79. The relevance of objectives for the revised project was high, but the relevance of design was modest. Efficacy was modest for the first objective, but was substantial for the second objective, and efficiency is rated Substantial. The overall outcome rating for the original project is Moderately Satisfactory.

80. Applying the OPCS formula for restructured projects, (5*0.70) + (3*.0.30) = 4.40, the overall outcome rating for the PIR&GEF projects is Moderately Satisfactory.

Table 6: Weighted project performance

	Against original PDOs	**Against Revised PDOs**	**Overall**	**Comments**

Rating	Satisfactory	Moderately Unsatisfactory	Moderately Satisfactory	
Rating value	5	3	4	
Weight (% disbursed before /after PDO change	70%	30%	100%	
Weighed value	3.50	0.90	4.40	
Final rating	-	-	Moderately Satisfactory	Good performance before PDO change determined the level of overall outcome

81. **Summing up, the initiation of the integrated rural infrastructure project should be considered as a success, because it set up a highly performing PCU, and produced results that impacted about 7% of the country's population, among them the poorest of the country.** There have been challenges in setting up the implementation and M&E arrangements, but the Bank team overcame them and scaled up the project activities. The Bank's ability to provided close project supervision, to channel the resources to the rural area, and to build up a local implementing team has succeeded to pursue project implementation for about 11 years, and to deliver results to the most in need of Honduras as shown by Table 7.

Table 7: Number of people with access to rural infrastructure

1.	Number of people who gained year-round access to a road	184,779
2.	New people living in a community with urban paved roads	85,871
3.	New people who accessed to wáter connection	91,458
4.	Additional people who accessed to sanitation connection	33,049
5.	Additional people with connections to off grid connections	63,492
6.	Additional people with connections to grid connections	92,142
	Total people who accessed to rural infrastructure	**550,791**

Source: Data collected by the PCU

3.5: Overarching Themes, Other outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

82. Water and sanitation infrastructure has had immediate impact on the beneficiaries, including: (i) a reduction of contamination of soils and groundwater; and the spread of vectors of diseases, and has allowed to elevate the human dignity, especially for poor communities, (ii) an improvement of the households' hygienic conditions and cleanliness of kitchens which has allowed a positive change in the handling of food, and (iii) water inside the house or the property has reduced the expenses of medicines, and has improved health conditions.

83. Electric power to communities (i) opened up opportunities for people to carry out productive activities that generate income directly contributing to increase household income, (ii) improved the

quality of life arising from non-exposure to smoke, and (iii) teachers and students of electrified schools have diversified their teaching / learning techniques with audio and video techniques.

84. **Gender aspects**: The project has had a positive impact on women and children who (i) no longer have to travel long distances to fetch water and instead can use their time for other activities;, and (ii) girls have more time to attend school without having to assist their mothers in carrying water.

(b) Institutional Change and Strengthening

85. The project provided support to the central agencies associated with the project implementation, namely the project coordinating unit. Staff in those units received training and worked with Bank's experts, and this has improved their knowledge and ability to plan and deliver rural infrastructure. However, most of the trained staff were contractual, and were not part of the civil service.

86. **Mancomunidades:** Training and expertise provided to these institutions may be considered as the most useful, if it can be sustained. Not only capacity was strengthened in these institutions, but there was also institutional strengthening. The municipalities were the most to benefit from this project, as was illustrated by the presence and the engagement shown by the mayors and their eagerness to see a similar project to be approved to build on what was achieved by the project.

(c) Other Unintended Outcome

87. Not available

3.6 Summary of findings of beneficiary Survey and/or other stakeholder workshop

4. **Assessment of Risk to development outcome**

Rating: Substantial

88. Risk to development outcome for the road, electricity, and water and sanitation infrastructure has to do with (i) the financial sustainability of the entities in charge of their maintenance, and (ii) the technical capacity required to oversee and repair the infrastructure degradation.

89. Stakeholders in providing technical capacity are the communities, the *mancomunidades*, and the private firms that have contributed in the planning and delivery of the three infrastructure sectors. Project achievements in building planning and delivery capacities with the three stakeholders were limited in scope and in depth. Unless there is a follow-on project to further strengthen capacity, the three entities will be unable to use existing capacity to maintain and expand the planning and delivery of rural infrastructure.
Financial sustainability of the private firms will be central to the maintenance and sustainability of delivered infrastructure. However, the financial health is dependent upon the financial capacity of the municipalities and the beneficiaries to pay for their services.

90. During project implementation, communities could not pay their share part, which had to be scaled down from 30 percent to 10 percent, and in the end to 5 percent. Unless the communities, and the mancommunidades are not well organized in a way that allows the payment of services, the private firms will not be paid, will not prosper, and will be unable to maintain the delivered infrastructure. Owing to the above unsettled issues, risk to development outcome is rated as Substantial.

5.1 Bank Performance

(a) Quality at entry

Rating: Moderately Satisfactory

91. **The Bank used the appropriate lending instruments, and built on adequate lessons and principles to select activities that can generate the needed outputs and outcomes supporting project objectives**: Drawing on the lessons learned from the region and Bank experience in other parts of the world, the Bank put together the respective advantages of an IDA credit and a GEF grant to fund activities aimed at improving the delivery of rural infrastructure services. Key lessons and principles integrated in the project design included: (i) a multisector approach to infrastructure planning and delivery, (ii) innovation in the access modalities to deliver services in remote rural areas, based on a thought-through decentralization, (iii) attention to sustainability of rural infrastructure through notably the inclusion of local private sector in service provision, and finally (iv) local capacity building, and recognition of the importance of coordination and inter-sector synergies. The Bank succeeded in establishing adequate partnership arrangements that provided parallel financing, expertise and knowledge from regional integration and financial institutions (CABEI, IDB), and bilateral donors (Germany, Japan, USA and Finland) active in the rural sector, but only CABEI was able to deliver rural infrastructure.

92. **The Bank underperformed in assessing the technical capacity of implementing and monitoring agencies and in designing the arrangements presiding to their collaboration:** The implementing structure adopted at appraisal was complex, and included central and decentralized entities as follows: (i) a PCU, (ii) the *mancomunidades*, (iii) the communities, and (iv) the sectoral agencies. All those entities were supposed to work smoothly together, and to deliver on (i) the planning and prioritization process of activities, and (ii) the infrastructure investment and service provision. While the conceptual framework was sound, it was theoretical, and had never been tested. In particular, the Bank overestimated the ability of the PCU and the decentralized entities to perform the fiduciary and technical responsibilities of financial, procurement, and environment management. The modalities of collaboration among central and peripheral entities, while conceptually logical, were not always supported by appropriate management instruments and protocols. Moreover, technical capacity of staff supposed to implement the project activities at central and peripheral entities was below the required level. These weaknesses led to delays in project effectiveness (more than a year of delay), and provoked the difficulties encountered in having the project activities taking off, and the multiple modifications of the Project Operations Manual.

(b) Quality of supervision

Rating: Moderately Satisfactory

93. **The obstacles to project effectiveness and early implementation were enormous, but the Bank committed decisively to removing them:** After the project approval, key obstacles that hindered the project launching were: (i) the failure to achieve project's effectiveness, (ii) the technical weaknesses in in the PCU (FHIS), the Project Coordinating unit (PCU), and the *mancomunidades* (iii) the lack of expertise in the financial management, and (iv) the weaknesses in the M&E system**.** Because of all the above impediments, the startup of project activities and disbursement of IDA resources were very slow. The Bank strategy to remove them consisted in first recognizing that the biggest constraint was the need to enhance the capacity at mancommunidades level. The Bank provided strong support to the FHIS and

the *mancomunidades* to improve their fiduciary management, by strengthening and streamlining financial management and procurement, and the environmental approval process, and to start infrastructure improvements in four new *mancomunidades*. The Mid-Term Review in June 2008 completed the diagnostic of early start up difficulties and provided the needed recommendations as regard to the needed new arrangements among implementing entities, in order to make sure that implementation would continue smoothly.

94. **The Bank accelerated the pace of implementation when start up hurdles were removed:** After sustained support to fiduciary management and simplification of implementing arrangements, disbursement became smooth, and resources start to flow to the decentralized entities, making it possible for the infrastructure to be built and delivered. By May 2009, the turn-around of the project implementation was completed, and the Bank extended the project implementation period until June 2012 to catch up with the delay accumulated in the beginning. By mid to end-2009, the investment planned in the two first *mancomunidades* was completed, and the work in the second batch of four other mancommunidades had been launched, and there was evidence on the ground that the project's rural development model was working, the remaining challenge being to sustain the development impact through capacity building and maintenance provision.

95. **The Bank scaled up project activities because of increased efficacy and high demand from the beneficiaries, then scaled down the project activities because of investment budget ceiling by the Government, on advice of the donor community:** Following the above-described surge in project implementation, the GEF grant amount, and the IDA credit were expected to be fully disbursed by December 2012, and April 2013 respectively. The Bank realized at this juncture that some components, not only achieved their targets, but continued to deliver beyond targets, because of high demand on the ground. These circumstances triggered a Government request for an Additional Financing (US$20.0 million) under the scale up category of the project, which was approved by the Board in June, and signed in July 2013, with a new closing date set on June 30, 2016. Eighty percent of the additional funding was devoted to funding the infrastructure delivery in six former and two new mancommunidades, while the 20 percent balance of the AF was allocated inequitably among the other components.

96. The 2015 National Budget set by the Congress established a ceiling of US$2 million, a budget level below what the AF was able to disburse annually, and this jeopardized the disbursement of the AF resources and the possibility to scale up the project, as there was no room to extent the project's life of AF beyond June 2016. When the Bank failed to get the concurrence of the Borrower to get the ceiling removed, there was no other avenue for the Bank than reducing the AF to the level authorized by the ceiling, leading to cancelling an amount of US$6.8 million in December 2015. Infrastructure activities were then limited by the available resources, and more effort was made to consolidate sustainability through capacity building for local committees and developing infrastructure maintenance at the local level.

(c) **Justification of Rating for Overall Bank Performance Rating:**

97. Based on what is described above in the areas of quality at entry, and quality of supervision, the overall Bank performance is rated as Moderately Satisfactory.

5.2 Borrower Performance.

(a) Government Performance
Rating: Moderately Unsatisfactory

98. **The Government displayed commitment throughout the project life, but did not facilitate the total disbursement of the additional financing, thus reducing the level of expected results.** The project was under the strategic guidance of the Ministry of Presidency, which oversaw an Advisory Committee composed of members from the Ministry Interior and Justice, and other sectoral entities. Overall, the Government performed well in coordinating the partnership with other donors that took place to support the initiative of an integrated rural infrastructure, and in partnering with the Bank to remedy the weaknesses experienced in the beginning of the project. The Government played its role in making sure that, the PCU, the sector entities, and other decentralized entities (mancommunidades and communities) assume their responsibilities in the difficult task of implementing an integrated and complex project. In particular, the Government showed commitment and leadership when it requested the AF to ensure the project scaling up.

99. However, after having sought for the Additional Financing, the Government was unable to create the conditions of disbursing the totality of the additional resources, limiting the results expected from an expanded rural infrastructure that could have further enhanced service delivery to the rural population. Finally, the government institution (SERNA) overseeing environment licensing was slow in facilitating the project implementation throughout the project life.

(b) Implementing Agency or Agencies Performance

Rating: Satisfactory

100. The Project Coordinating Unit was the key implementing agency, complemented in this by the mancommunidades, the municipalities, and the infrastructure service providers. The first two agencies were at the core of the project implementation, and performed well overall. However, they lacked the needed technical expertise in the beginning to perform key functions of fiduciary oversight and environment compliance. The Bank support has contributed to reducing the impact of those weaknesses, but shortcomings in the above areas continued, especially as regards to safeguards compliance. The service providers in the electricity, water and sanitation, and the roads had the required expertise, and no shortcomings were spotted from their part during the project implementation. During the ICR mission, the PCU was able to showcase its know-how in terms of effectiveness on the ground, in building rapport with key stakeholders, and in putting M&E at the center of generating for the most isolated and in need in Honduras.

(c) Justification of Rating for Overall Borrower Performance
Rating: Moderately Satisfactory

6. Lessons learned

101. **Integrated rural infrastructure works and generates results, because all stakeholders gain from it:** Delivering integrated rural infrastructure is a win-win undertaking for the Borrower, the Bank and the beneficiaries. When the Bank finances this kind of activities, it has unconditional support of all stakeholders, because when the activities are completed and that service delivery occurs, every

stakeholder can claim ownership of the success, from the Bank to the beneficiary communities, including all political spheres in between. That shared success has been the key ingredient that has pushed every stakeholder to provide its utmost contribution to overcome all bottlenecks on the path of project implementation.

102. **It is important to be careful in the choice of implementation agencies and to adopt simple implementation arrangements:** When a project is implemented in a decentralized context, with the involvement of many stakeholders, it matters to have all parties on board, but key responsibilities must be entrusted to a limited number of entities. In the case of this project, the PCU and the mancomunidades were central to project implementation, the former with a coordinating mission, while the latter had a technical execution mandate. When these two entities execute correctly their tasks, other stakeholders can bring in their contribution as required.

103. **Capacity building is an ambivalent variable, and must be dealt with strategically:** Building capacity was a project component, and project implementation needed a great deal of local technical capacity. Most of the implementation delays came from limited capacity at the PCU and mancommunidades level. These two entities did not have the needed expertise to exert oversight over fiduciary management, procurement, M&E and environment issues, and this hindered the flow of resources from the Bank to the place of project implementation.

104. **Integrated rural infrastructure as a Bank's approach to address poverty and inequality in borrower countries has a lot of strengths, but with also some weaknesses:** The key strength is that it commits financial resources that build infrastructure and technical capacity in rural areas where poverty and inequality are predominant. Another strength is that there are economy of scale and synergy gains when technical capacities are setup to oversee the design and implementation of projects in different sectors. It is a sobering experience to watch teams of engineers under the same roof competing in the delivery of the best infrastructure at the least cost in the three sectors of interventions. On the flipside, it takes time and resilience to build an effective team that can deliver integrated rural infrastructure.

105. **Decentralization in order to serve poor communities is a gigantic task that can be achieved only through tough choices, dedicated technical teams and strong ownership of local communities.** The key obstacle to decentralization is that it has financial, technical and political implications, and it is difficult to have them all aligned at once. On the political side, reconciling centrifugal forces and decentralization advocates requires a good knowledge of the forces at play, mobilizing the needed financial resources requires making hard choices as illustrated by the cancellation of part of the additional financing, and the demand for qualified technical capacity is higher in the urban centers than in the rural areas. This project has demonstrated that with dedicated technical teams, ownership of local communities, integrated infrastructure can be built in rural areas. This was observed during the ICR mission in the Santa Maria Municipality, La Paz Department, whereby a community of indigenous people isolated in one of the most inaccessible mountains was provided with water, sanitation, and solar home electricity infrastructure that has transformed their life.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

(a) Borrower/implementing agencies

Comments received from the Borrower/Implementing Agencies were accounted for in the main text.

(b) Cofinanciers

Not applicable.

(c) Other partners and stakeholders

(e.g. NGOs/private sector/civil society)

Not applicable.

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in USD Million equivalent)

HN Rural Infrastructure Project - P086775			
Components	**Appraisal Estimate (USD millions)**	**Actual/Latest Estimate (USD millions)**	**Percentage of Appraisal**
Component 1 - Support to the participatory local, planning for integrated infrastructure service delivery	1.3	1.3	2.09%
Component 2 - Infrastructure Service Delivery	53.6	52.7	86.09%
Component 3 - Local capacity building and policy development TA	2.0	2.0	3.32%
Component 4 -Microfinance Services for SHS Sub-programs	1.5	1.6	2.16%
Component 4 - Project Management, Monitoring	4.2	3.9	6.34%
Total	**62.6**	**61.6**	**97.9 %**
Total Baseline Cost			
Physical Contingencies	0.00	0.00	0.00
Price Contingencies	0.00	0.00	0.00
Total Project Costs			
PPF	0.00	0.00	0.00
Front-end fee IBRD	0.00	0.00	0.00
Total Financing Required	**62.6**	**61.6**	**97.9 %**

Rural Electrification Project - P090113			
Components	**Appraisal Estimate (USD millions)**	**Actual/Latest Estimate (USD millions)**	**Percentage of Appraisal**
Component A - Support to the participatory local planning for integrated infrastructure service delivery	0.10	0.10	100.00
Component B – Off-grid Electrification Service Delivery	1.35	1.35	100.00
Component C - Local capacity building and policy development TA	0.60	0.60	100.00

Component D - Project Management, Monitoring and Evaluation	0.30	0.30	100.00
Total Baseline Cost		**2.35**	**100.00**
Physical Contingencies	0.00	0.00	0.00
Price Contingencies	0.00	0.00	0.00
Total Project Costs			
PPF	0.00	0.00	0.00
Front-end fee IBRD	0.00	0.00	0.00
Total Financing Required	**2.35**	**2.35**	**100.00**

(b) Financing

P086775 - HN Rural Infrastructure Project				
Source of Funds	**Type of Financing**	**Appraisal Estimate (USD millions)**	**Actual/Latest Estimate (USD millions)**	**Percentage of Appraisal**
Borrower		7.80	0.00	.00
International Development Association (IDA)		62.6	61.6	97.9 %
P090113 - Rural Electrification Project				
Source of Funds	**Type of Financing**	**Appraisal Estimate (USD millions)**	**Actual/Latest Estimate (USD millions)**	**Percentage of Appraisal**
Borrower		2.60	0.00	.00
EC: European Commission		0.24	0.00	.00
GLOBAL ENVIRONMENT - Associated IDA Fund		15.90	0.00	.00
Global Environment Facility (GEF)		2.35	2.35	100.00

Annex 2. Outputs by Component

Component 1: Support to the participatory local planning; for integrated infrastructure service delivery

(i) There are 7 integrated mancommunal infrastructure plans completed.
(ii) There are 7 UTIs operating with trained technical staff in financial management, procurement, environmental and social safeguards, and technical for the infrastructure sectors.
(iii) Rural Infrastructure Annual Plans were established for each *mancomunidad* in a participatory manner, involving *mancomunidades,* municipalities and rural communities, with a bottom-up prioritization of investment, and adequate consideration of social and environmental safeguards.
(iv) There are 6 Rural Infrastructure Action Plans (RIAPs) with adequate integration of RETs.
(v) Adoption of a rural electrification policy, integrating all technologies (grid and off-grid), and defining an efficient financing mechanism and subsidy allocation rules. The financing mechanism with the subsidy allocation has been implemented through PROSOL.

Component 2&3: Infrastructure Service Delivery

The direct project beneficiaries (road, electricity and water and sanitation) reached the number of 550,791, or 7 % of the country's total population, of which 50 percent are female.

A. <u>ROADS</u>

Infrastructure and Beneficiaries

(i) Key achievements in rural infrastructure included the following: (i) the length of rural roads rehabilitated is 639.98 km, (ii) the length of paved roads is 6.88 km, (iii) the number of kilometers under routine maintenance is 593.04 km, and (iv) the length of the roads rehabilitated, under the municipal kilometers program reached 27.23 km.

(ii) There are now 8 micro-enterprises for road maintenance trained on technical standards and entrepreneurial practices, and creating jobs under the project through the micro-enterprises program for routine maintenance.

(iii) A number of 112 jobs were created under the micro-enterprises program for routine maintenance.

(iv) The value of contracts successfully procured by UTIs was I the amount of US$31.06 million

(iv) As a consequence of the above, (a) the number of rural people with access to an all-season road is 184,779, (b) the number of beneficiaries of the Municipal Kilometers Program increased up to 85,871, and (c) the PCU estimated that on average 70 percent of the population in localities supported by the project have access to an all-season road.

(v) The Additional Financing supported a new strategy of forming Road Maintenance Committees, made up of local people, who are provided with basic tools and training to develop routine minor maintenance activities. These road maintenance committees are available, but the problem is that funding is lacking to finance their interventions.

B. ENERGY:

- The PCU estimate for the share of rural population with electricity service (grid and off grid) in supported localities is 75 percent of the population in supported municipalities.

1. Grid Infrastructure Network and beneficiaries

(i) There are 92,142 new household connections from the national energy grid in 286 communities, including households, public and productive establishments through grid extension.
(ii) There are 844.48 kilometers of power transmission and distribution lines that were installed.
(iii) Total population in target areas with access to national electricity grid has reached the number of 155,634.

2. Hydropower and Solar Home Systems and beneficiaries

i. One MHP grid was built under sustainable conditions (financial, social and technical capacity), with the help of the technical assistance provided by the project. The MHP generation capacity of renewable energy is 0.60 MW.
ii. There are 216 village micro grids using hydro and other renewable energy technologies providing quality and sustainable electricity.
iii. The number of solar systems installed under the project in community centers and schools is 248.
iv. The number of households with solar systems installed is 8,979.
v. There are 7 RET off-grid electrification pilot project (stand-alone wind-power system or wind diesel/hybrid installation).
vi. There are 6 UTIs (6) operating with trained technical staff, understanding offgrid electrification issues
vii. There are 7 solar companies accredited under the project and providing the installation services of solar systems satisfactorily
viii. The FHIS is staffed with 6 specialists trained in off-grid electrification
ix. The M&E for off-grid electrification is integrated in the FHIS M&E System
x. The sales amount of accredited solar companies reached US$ 7.63 million
xi. The number of people provided with access to renewable electricity under the project by household connections reached 63,492.
xii. The number of households with electricity services in off-grid areas, provided with RETs is 9,331 units.
xiii. The number of households, business and public facilities with sustainable electricity access provided with solar home systems (SHS) is 9,580.
xiv. Incentives for RETs incorporated in the Law for Renewable Energy Promotion
xv. The GHG reduction of tC02 over 20 years achieved by the project is 141,636.93 tCO2 in 20 years

3. SHS-Driven Microfinance:

(i) There are 7 micro-financing companies accredited under the project, which provide the micro-financing services for the purchase of solar systems.
(ii) The 7 accredited MFIs signed 7 Loan Agreements between FHIS and the MFIs for L.32.25 million, and loans were approved and disbursed for Lps.24.8 Million, which represents 77% of the management capacity of the MFIs of the agreed funds.

(iii) The MFIs granted to micro credits to 1,886 households to acquire solar systems for an amount of 22,064,464.70 Lempiras for an average loan per financed system of 11,699.00 Lempiras.
(iv) 512 SFV were financed with the Revolving Credit Line of Additional Financing of L.6.8 Million as of June 30, 2016, of which L. 2.2 million of capital and L. 0.8 million of interest have been recovered
(v) The volume of Bank support to Lines of credit for Microfinance was in the amount of US$2.145 million
(vi) The volume of Bank support for institutional Development for Microfinance was in the amount of US$0.18 million

C. WATER/SANITATION

- **Infrastructure and beneficiaries**

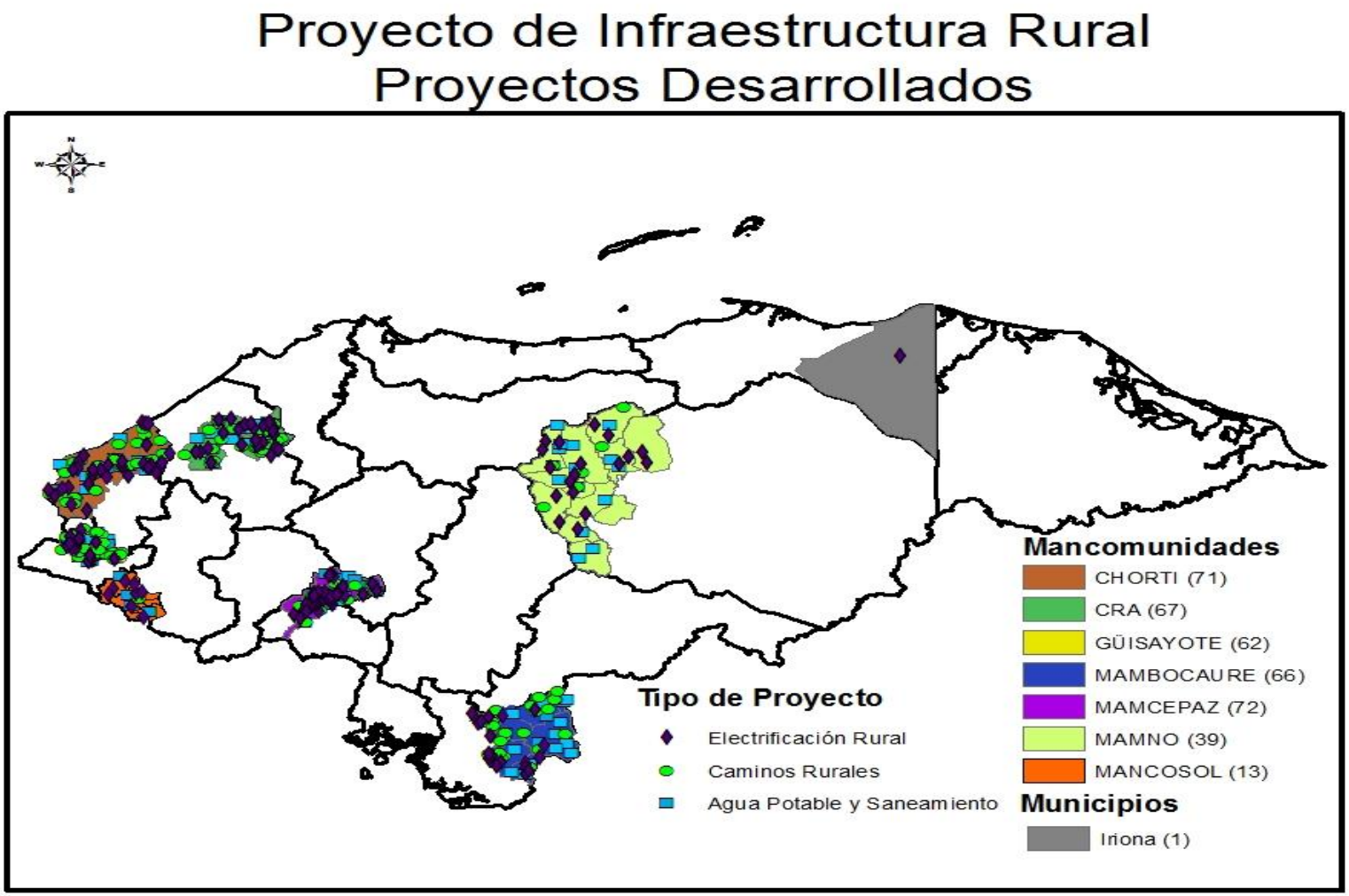
(i) The new piped household water connections that are resulting from the project intervention reached the number of 3,492.
(ii) Piped household water connections affected by rehabilitation work reached the number of 11,751
(iii) The new household sewerage connections that are resulting from the project intervention reached the number of 5,508.
(iv) The new latrines built under the project were in the number of 4,893.
(v) 6 Sewage treatment plants / lagoons
(vi) 4 Wastewater Treatment Plants
(vii) There are water boards trained in O&M on technical aspects, tariff collection, and financial management.
(viii) The percentage of water systems rehabilitated or built by the project that remained as category A in the information system of rural water systems reached 92 percent.
(ix) When the project closed, the number of people in rural areas provided with access to improved water sources was 91,458.
(x) The share of rural population with access to improved water services in supported localities is about 75 percent of the mancommunidades population
(xi) The share of rural population with access to sanitation services (percentage) in supported localities reached 75 percent
(xii) The number of people in rural areas provided with access to sanitation under the project reached 33,049

Component 4 - Local Capacity Building and Policy Development TA (US$3.5 million)

Key capacity building activities at the community level include:
(i) Procurement management,
(ii) O&M of water systems for human consumption, waste management,
(iii) Maintenance and management of wastewater treatment plants,
(iv) Environmental and social safeguards,
(v) Road conservation technical activities,
(vi) Formulation of policies for municipal water and sanitation management,
(vii) Chlorine banks establishment and management,
(viii) Establishment and training (administration aspects and management of the water system) of Water Boards,
(ix) Prioritization of needs and definition of project at the community level, among others. Also, eight community-based road maintenance micro-enterprises, 22 road conservation

community committees and 226 water boards were established. All beneficiaries of electrification projects were also trained in energy efficiency measures to promote consumption optimization.

Map With the 7 Mancommunidades and the 390 Rural Infrastructure Projects



Annex 3: Economic Analysis

An ex-post economic analysis of the Project was carried out to evaluate the efficiency of the Project and verify its economic viability as presented in the PAD. The economic analysis looked at the costs and benefits accruing to the main beneficiaries of the project, including rural households, benefiting from new connections to electricity, water and sanitation (or rehabilitation of existing water and sanitation systems), and the population living in the area of influence of the roads to be improved to provide all-weather access.

Road rehabilitation

Economic benefits. The project financed two categories of road interventions: (i) road works aimed at improving a track or a rural road to provide basic all-weather road access; and (ii) road works that provided a higher level of service than basic all-weather road access. The quantifiable benefits obtained from the rehabilitation works are directly related to savings in road user costs, i.e. vehicle operating costs (VOC), as well as time savings for beneficiaries. The total number of people living in close proximity to the 667 km of roads built and rehabilitated are 184,778. It was estimated that each household has one car resulting in a number of direct beneficiaries from the road rehabilitation of 36,956 people (assuming 5 people per household).

Based on beneficiary consultations in mancomunidad of Guisayote, where beneficiaries reported to spend now 8.3 minutes/km in commuting instead of 40 minutes/km prior to the project, it was assumed that at least 15 commutes a year are made by each household with one priority commute of at least 3 km. It shall be noted that this assumption could not be verified for all sub-projects and just represents an indicative number. In many sub-projects, people were not commuting significantly due to the very poor conditions of the roads. The reported time savings of 31.7 minutes/km were monetarized based on the average salary of L5681.75/month in the project areas.

For the VOC benefits, consultation were held with beneficiaries of the mancomunidad of Chorti. VOC for an average commute to the commercial center or next health center was L150 before the project and L30 after the project. Again it was assumed that on average 15 similar commutes were made each year by the households.

In other communities, even higher benefits were reported, e.g. 75 percent VOC reduction, 65 percent reduction of transport cost and up to 75 percent of time savings. Since a baseline of original VOC, transport costs and time spent on commuting could not be established, more conservative assumptions from the two mancomunidades were used for the analysis.

Costs. The main economic cost of the road rehabilitation sub-component include: (i) the investment costs in road rehabilitation, i.e. US$13,897,856; and (ii) the costs for operation and maintenance: US$1,353,026 per year and additional US$6,524,230 for rehabilitation works every five years.

Results. The cost-benefit analysis for road rehabilitation investments yields in a positive Net Present Value (NPV) at a discount rate of 10 percent. The EIRR of the Project is estimated to be 13 percent. Due to the difficulty of available data during project appraisal, appraisal stage NPV and EIRR are not available.

Table 7: Results of water and sanitation projects

	ICR Results		Appraisal Results	
	NPV	EIRR	NPV	EIRR

Roads	US$2,041,596.54	13%	N/A	N/A

Water and sanitation

Economic benefits. The objective of this component of the project was to provide basic water and sanitation services to the designated communities in the target mancomunidades. The direct user benefits of the water interventions derive from time savings monetarized by the average wage in the project areas of L150 a day. It was assumed that households outside the project area spent at least one hour each day for recollection of water and one additional hour twice a week for commuting to the nearby water pond or well for clothes washing. This results in total benefits of L712.5 per months per household. The sanitation sub-projects resulted in a 15 percent reduction of health expenditures (i.e. medication and visits to nearby health clinics) related to gastrointestinal diseases for children younger than 5 years. This translates into a monthly saving of L112.50 per household.

Costs. The main economic costs include: (i) the capital costs comprised by the credit amount and counterpart funding of a total of US$15,571,333 (10,727,595 for water sub-projects and 4,843,738 for sanitation sub-projects); and (ii) O&M costs of US$879,062 (US$495,604 for water sub-projects and US$383,459 for sanitation sub-projects).

Results. The sub-component is economically viable with an EIRR of 34 percent. While water investments reach an economic rate of return of at least 48 percent, sanitation projects have an EIRR of -3 percent. It shall be noted that additional monetary benefits resulting from sanitation projects (including loss of days in schools/at work or environmental benefits) could not have been included in the analysis due to the lack of available data, which would have led to a higher economic return. The summary of results are listed in table below.

Table 8: Results of water and sanitation projects

	ICR Results		**Appraisal Results**	
	NPV	**EIRR**	**NPV**	**EIRR**
Total	US$27,938,068.50	34%	N/A	N/A
Water	US$31,023,082.90	48%	N/A	N/A
Sanitation	(US$3,085,014.40)	-3%	N/A	N/A

Electricity

Economic benefits. The Project provided access to electricity to rural population in seven mancomunidades through grid extension, isolated mini-grids and solar home systems. The minimum consumer benefits are comprised of current substitutable expenditures for fuel and batteries ranging between L260-L660. Additional benefits such as health benefits and global environmental externalities for renewable technologies apply but were not included due to lack of available data.

Costs. Economic costs consist of (i) investment costs (US$11,331,224 for grid sub-projects; US$3,317,834 for SHS-subprojects and US$412,924 for the hydro-subproject); (ii) replacement costs for batteries (in the case of the solar home systems), tariff payments of beneficiaries (for grid sub-projects) and operating and maintenance costs of the new systems in the project sites.

Results. The economic analysis yields positive results for all technologies that have been analyzed. It should be noted that there are additional direct and indirect benefits from rural electrification, which are difficult to estimate, such as improvements in education, health, communication and productivity. They have not been counted towards the conservative EIRR used for quantitative cost benefit analysis.

Table 9: Results of electricity projects

	ICR Results		Appraisal Results	
	NPV	**EIRR**	**NPV**	**EIRR**
Electricity	US$14,342,316	28%	N/A	33%
SHS	US$10,701,811	63%	N/A	30%
Mini-grid	(US$93,425)	6%	N/A	20%

Summary

The table below summarizes the results of the ex-post economic analysis of the Project. Due to the framework approach applied during Project appraisal, an overall NPV and EIRR at the time was not calculated in the PAD. Based on the overall high economic returns of the Project's investments in road rehabilitation, water & sanitation and electricity, the efficiency for the overall Project is rated as **High**.

Table 10: Total results

	ICR Results		Appraisal Results	
	NPV	**EIRR**	**NPV**	**EIRR**
Total	US$54,930,367.51	28%	N/A	N/A

Table 11: Streams of annual costs and benefits from the categories of rural infrastructure funded by the Project (in US$ million).

	Invest	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Grid	(11.33)	3.58	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08
SHS	(3.32)	2.26	2.26	1.81	2.42	1.65	(0.02)	2.42	1.65	2.42	1.81	(0.18)	2.42	1.81	2.26	1.81	(0.02)	2.26	1.81	2.42	1.65	(1.86)
Hydro	(0.41)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Water	(10.73)	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19
Sanitation	(4.84)	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Roads	(13.90)	2.33	2.33	2.33	2.33	2.33	(4.19)	2.33	2.33	2.33	2.33	(4.19)	2.33	2.33	2.33	2.33	(4.19)	2.33	2.33	2.33	2.33	(4.19)
Total	**(44.53)**	**13.56**	**13.06**	**12.61**	**13.22**	**12.45**	**4.25**	**13.22**	**12.45**	**13.22**	**12.61**	**4.10**	**13.22**	**12.61**	**13.06**	**12.61**	**4.25**	**13.06**	**12.61**	**13.22**	**12.45**	**2.42**

NPV	**54.9**
EIRR	**28%**

Annex 4: Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Dana Ryzankova	Senior Economist, TTL	LCSFE	
Alberto Didoni	Operations Officer	CLAAS	
Almudena Mateos Merino	Energy Specialist	SEGES	
Ana Silvia Aguilera	Infrastructure Specialist	GPOBA	
Aura Marcela Ariza Rodriguez	Junior Professional Associate	MNCA4	
Beate Gisela Mueller	Procurement Specialist	LCSPT	
Cecilia Claudia Corvalan	Senior Transport Economist	LCSTR	
Christian Borja-Vega	Economist	TWIWP	
Dana Rysankova	Senior Operations Officer	OPSRE	
Diomedes Berroa	Senior Operations Officer	LCSPT	
Eduardo A. Perez	Lead Water and Sanitation Spec	TWIWP	
Ernesto N. Terrado	Consultant	MNSSD	
Etel Patricia Bereslawski Aberboj	Senior Procurement Specialist	LCSPT	
Fabienne Mroczka	Financial Management Specialist	LCSFM	
Fernanda Ruiz Nunez	Senior Economist	TWISI	
Georg Caspary	Operations Officer	CPAPD	
Joao Nuno Vian Lanceiro da Veiga Ma	Manager	AFTPE	
Jose Simon Rezk	Financial Management Specialist	LCSFM	
Kimberly Vilar	Social Development Specialist	LCSSO	
Luisa F. Pacheco de Vincenzo	Senior Program Assistant	LCSEG	
Manuel Schiffler	Senior Economist	LCSUW-HIS	
Marco Antonio Zambrano Chavez	Consultant	AFTTR	
Marquez Martinez	Consultant	LCSAR	
Michael J. Goldberg	Operations Adviser	AFTDE	
Rajeev Kumar Swami	Sr Financial Management Specia	ECSO3	
Rigoberto Yepez-Garcia	Senior Energy Economist	LCSEG	
Rosa G. Valencia De Estrada	Consultant	LCSPT	
Sergio Ivan Carmona Maya	Consultant	LCSUW-HIS	
Sylvie Debomy	Sr Urban Planner	LCSDU	
Xiaoping Wang	Senior Energy Specialist	SEGES	
Supervision/ICR			
Koffi Ekouevi	Senior Economist, TTL	GEE04	

Martin Ochoa	Senior Operations Officer	LCCHN	
Leonel Jose Estrada Martinez	Procurement Specialist	GGO04	
Jose Simon Rezk	Senior Financial Management Specialist	GG022	
Ruth Tiffer-Sotomayor	Senior Environmental Specialist	GEN04	
Lara Born	Energy Specialist	GEE01	
Elisabeth Maier	Operations Officer	GEE05	
Melisa Gaitan Fanconi	Consultant	GE004	
Elizabeth Sanchez	Program Assistant	GE004	
Farah Mohammadzadeh	Consultant	GE004	
Karina Rodriguez	Consultant Environmental Analysis		
Mariela Mena	Consultant Social Development		
Nestor Ntungwanayo	Consultant		

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY04	25.30	124.04
FY05	62.32	274.64
FY06	12.99	59.45
Total:	**100.61**	**461.32**
Supervision/ICR		
FY06	10.04	57.44
FY07	26.53	145.11
FY08	37.81	199.80
FY09	64.95	267.31
FY10	34.84	145.86
FY11	18.67	141.14
FY12	20.18	170.90
FY13	14.02	130.32
FY14	19.56	109.09
FY15	24.96	132.95
FY16	12.38	83.70
FY17	1.80	24.80
Total:	**284.74**	**1608. 46**

Annex 5. Beneficiary Survey Results *(if any)*

The project did not carry out a formal beneficiary survey. The team's social specialist and other team members had many opportunity to meet with stakeholders and local authorities to mainly discuss ownership and sustainability issues of project results.

Annex 6: Stakeholder Workshop Report and Results *(if any)*

Not applicable

Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR

EXECUTIVE SUMMARY PIR
Prepared by the Government of Honduras

1. PROJECT GOAL

The goal of the development of this project was to increase the access, quality, and sustainability of infrastructure services (roads, water, sanitation, and electricity) for economically disadvantaged populations of 53 municipalities grouped within seven selected Associations of Municipalities ("mancomunidades" in Spanish, hereinafter simply "associations") and to develop local management capabilities for the planning and provision of infrastructure services.

2. PRIMARY BENEFICIARIES

The total estimated number of direct beneficiaries is 550,791 persons, all of whom are resident in communities located within the zone of influence of each of the beneficiary Municipality Associations, of which 275,395 are women and 94,245 are members of indigenous groups.

Additional beneficiaries of the actions of the PIR are the public and private institutions which support and participate in the decentralization and sustainability of the sub-projects which were implemented.

3. IMPACTS AND EFFECTS BY PROJECT COMPONENT

4.1 Project Component: Participatory Planning at the Local Level for the Provision of Comprehensive Infrastructure Services

This project component achieved its objective which was: (i) the selection of seven (7) Associations of municipalities based on the criteria established in the Project Operations Manual, (ii) an analysis of the infrastructure needs of 40 municipalities (prioritization) of five Associations of Municipalities (MAMCEPAZ, GUISAYOTE, MAMBOCAURE, MAMNO, and MANCOSOL), (iii) promotion and application of a participative methodology involving the communities, local authorities, and development sector agencies in the development of annual plans for rural infrastructure (PAIR´s).

4.1.1 Results Achieved

a) Associations and municipalities have improved their performance, management abilities, and the administration of their strategic municipal development plans, (PED Municipal), Association development plans, and strategic objectives for territorial development.
b) Implementation of a participative methodology resulting in an exercise to prioritize needs on the part of local governments in consultation with the populations (bottom-up investment prioritization).

4.1.2 Impact of the Results Achieved

a) Associations with the ability to independently manage and administer resources for their own development needs.
b) Consolidation of the follow-up and monitoring of the planning process within the Associations.
c) Prioritization of 92% of the sub-projects included in the Annual Infrastructure Plans (PAIRs).
d) Improvements in living conditions for the local populations.

4.2 Project Component: Handover of Infrastructure Services:

This component was subdivided into three sub-components: ***1.*** *Rural Roads,* ***2****. Repair, expansion, and or construction of new Water and Sanitation Systems, and* ***3.*** *Rural Electrification by: i) extension of the national grid, ii) off-grid energy projects, iii) establishment of a national solar energy market,* ***4****. Strengthening existing local infrastructure provision services*.

Table 3 shows a summary of the financial participation in the execution of a total of 9,860 sub-projects of the project component, with the greatest expenditure being in the Rural Roads sub-component with an expenditure of USD $18.96 million, followed by Water and Sanitation with an expenditure of USD $17.6 million, and Rural Electrification with an expenditure of USD $17.521 million.

4.3 Project Sub-component: Rural Roads

This sub-component had as an objective to carry out: (i) Reconstruction/improvement of rural roads (ii) A pilot project for road maintenance (creation of micro-enterprises); (iii) Interventions in critical points outside of the primary rural road network; (iv) Interventions in critical points of the primary rural road network (unpaved); (v) Pavement of the municipal kilometer.

For the pilot project for routine maintenance and preservation of the road network, eight (8) Associated Micro-Enterprises for Roadway Preservation for Rural Roads (MEACV-CR) were created and contracted. These groups were established as legal entities and registered in the Economic Social Sector with the Ministry of Industry and Commerce, with each one composed of 14 people including men and women who lived within the communities adjoining the roads to be maintained, in order to assure the sustainability of the Rural Roads Rehabilitation projects, and with the idea that once the project funds were depleted, the groups could be contracted by each of the municipalities for roadway maintenance in such a way that the efforts would be self-sustainable. The total investment dedicated to the MEACV-CR was USD $0.778 Million for contracting and supervising the eight (8) MEACV-CR for the period from July, 2011 through the end of June, 2013, to provide routine maintenance for a total of 593.04 km of roadways.

The approach proved to be non-sustainable within the Project time frame, given that once the financial resources devoted to this objective were depleted, the municipalities failed to contract for the continuation of services and so this initiative was terminated. In its place, in order to provide additional financing for routine maintenance of rural roads, a new strategy was implemented for the creation of Roadway Maintenance Committees for each of the projects, made up of residents in the project area, who were provided with basic tools (distributed by the companies who carried out the sub-projects) and the necessary training to carry out minor, routine maintenance activities.

4.3.1 Results Achieved

a) A reduction in transportation costs and time to different destinations (schools, markets, workplaces, hospitals, etc.)

b) An increase in the number of inter-urban transportation businesses providing services.

c) Improvement in access to foods which are not produced locally.

d) Improved circulation of vehicles and people.

e) The impact in buying and selling activities carried out within the beneficiary communities was measured by the change in prices of products or merchandise bought and sold within the communities, before and after the road rehabilitation project.

f) The organization of micro-enterprises for the maintenance of rural roads was very important for the road network in general and even more so in the case of rural roads, because these roads connect small communities which are isolated and generally lacking in communications with the rest of the country.

4.3.2 Impact of the Results Achieved

a) Financial sustainability of the municipalities. Tax collections increased as a result of the taxes levied as a contribution for improvements and permits for the operation of informal transportation businesses.

b) Social. A reduction in maternal–child mortality rates as a result of improved access to health centers and hospitals and improved possibilities to access preventative measures.

c) Creation of new work opportunities. The formation of new businesses in the informal economy.

d) Tourism. Municipalities were more accessible for tourists.

4.4 Sub-component: Water and Sanitation

The goal for this sub-component was to increase coverage in rural areas, improve the sustainability of services and the promotion of better hygiene through the following types of sub-projects: rehabilitation and expansion of new water systems, solutions for rural sanitation, and a pilot project for the operation and maintenance of water and sanitation projects.

4.4.1 Results Achieved

a) A reduction in the contamination of soils and water tables; reduction in the propagation of flies and disease carrying mosquitoes; increased resistance to the development of viruses, bacteria, and parasites; in addition to creating an enhanced level of human dignity.

b) Improvement in hygiene conditions for family members, such as personal hygiene, and kitchen cleanliness, which has provided a positive change in food handling; and improved cleanliness in other parts of the household, helping to reduce the incidence of disease.

c) Access to quality, treated, water within the house or the property, reducing expenses for the purchase of medicines as a result of improved health.

d) Availability of water for more than 11 hours each day when there is no shortage of water, and 4.7 hours per day when there is a shortage, which implies a savings of 11 hours per day and is equivalent to the time previously required to carry water to the house.

4.4.2 Impact of the Results Achieved

a) A reduction in the workload for women and children who no longer have to travel long distances to bring this vital liquid to the family; and it improved utilization of their time for other activities.

b) Educational benefit. The availability of potable water allows children to attend school as they no longer need to assist their mothers in transporting water to the household.

c) Sustainability for Potable Water and Sanitation projects. Through the local Water Boards, which are community non-profit organizations, the maintenance and operation of the water and sanitation systems is guaranteed.

4.5 Sub-component: Rural Electrification

This sector was intended to carry out the following electrification sub-projects: (i) extension of the national electrical grid, y (ii) electrification of communities off of the grid.

4.5.1 Extension of the National Electrical Grid

15,357 households with electric energy, with the greatest number of households connected within the MAMCEPAZ Association.

4.5.1.1 Results Achieved

a) 15,357 new connections to the electrical grid through the installation of 844.48 kilometers of transmission and distribution lines for electrical energy.

b) More than 92,142 people with access to the national electrical grid in 286 communities with a total investment of Lps. 225, 374,044.

c) Productive activities. The arrival of electric energy to the communities opened opportunities for people to carry out productive activities which generate income and contribute directly to an increase in household incomes, a mechanism which has a positive impact in the reduction of poverty through the generation of additional household income, which was not available prior to the project.

4.5.1.2 Impact of the Results Achieved

a) The use of electric appliances for homes and businesses.

b) Access to communications through the Internet and cellular phones.

c) An increase in the number of businesses and in evening working hours; additional time for studies in classrooms and at home, and additional recreation time.

d) A reduction in the use of fuel at the household level.

e) Availability of street lighting.

4.5.2 Electrification with off Grid Energy

Table 11 shows the types of solar/photovoltaic systems (SFV) by department (state) and installed capacity.

Table 11. Solar Systems by Type and Department (State)

No.	DEPARTMENT (State)	30 Watts	36 Watts	40 Watts	50 Watts	60 Watts	65 Watts	72 Watts	75 Watts	80 Watts	85 Watts	100 Watts	110 Watts	120 Watts	150 Watts	160 Watts	TOTAL SFV	Capacity in Peak Watts
1	Atlantida	3	0	128	1	14	133	0	3	4	15	0	0	0	16	3	320	18,965
2	Choluteca	7	27	66	304	122	131	0	49	75	8	3	0	0	7	0	799	28,583
3	Colon	38	1	47	17	52	150	2	9	22	21	0	0	0	22	0	381	36,970
4	Comayagua	37	0	268	50	0	105	6	0	3	21	8	3	0	1	0	502	31,143
5	Copan	11	0	19	11	213	256	2	19	1	26	1	0	0	18	0	577	33,516
6	Cortes	7	0	138	0	5	229	0	0	0	32	1	0	0	6	0	418	63,329
7	El Paraiso	49	4	71	147	66	312	16	57	161	88	2	1	0	2	0	976	84,749
8	Francisco Morazan	80	3	126	399	193	90	0	22	4	14	0	0	0	27	3	961	115,533
9	Intibuca	0	0	4	3	93	167	8	6	18	27	1	0	0	10	0	337	35,532
10	Islas de La Bahia	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	30
11	La Paz	0	2	4	23	103	124	11	55	5	24	0	0	1	22	0	374	26,521
12	Lempira	1	15	41	35	111	115	11	23	2	4	0	0	0	3	0	361	28,250
13	Ocotepeque	0	28	29	24	47	72	0	5	0	8	0	0	0	4	0	217	16,105
14	Olancho	59	11	208	111	345	371	4	67	93	109	10	7	0	69	3	1,467	53,414
15	Santa Barbara	0	43	12	25	336	122	13	28	6	11	13	0	0	13	0	622	171,638
16	Valle	0	0	3	1	7	0	0	0	16	0	0	0	0	0	0	27	2,507
17	Yoro	66	0	128	12	81	391	0	18	34	71	3	0	0	14	0	818	1,507
18	Gracias a Dios	3	0	0	1	0	51	0	9	0	0	0	0	0	5	0	69	20,383
	TOTALS	**362**	**134**	**1,292**	**1,164**	**1,788**	**2,819**	**73**	**370**	**444**	**479**	**42**	**11**	**1**	**239**	**9**	**9,277**	**768,677**

Table 12. Institutional Strengthening Activities of the Sub-component

RESULT	Unit	Total
Training in the Operation and Maintenance of Household Photovoltaic Solar Systems (SFV)	**Persons**	**17.958**
Training in the Operation and Maintenance of School Photovoltaic Solar Systems (SFV)	**Persons**	**744**
Beneficiaries of Household Photovoltaic Solar Systems (SFV)	**Persons**	**61,314**
Audio-Visual Equipment for Interactive Classes in Schools (Sound Systems, TVs, and DVDs)	**Unit**	**744**

4.5.2.1 Results Achieved

a) An increase in the coverage of electrification in dispersed and isolated rural areas of the country, areas which cannot be covered by the National Electric Energy Company (ENEE).

b) A reduction of 141,632 tons in the emission of CO_2 through the installation of 9,227 systems:

   i. The contribution to the reduction of CO_2 by the PROSOL, micro hydroelectric project known as La Atravesada and the renewable energy project known as Las Champas is a total of: 7,081 Tons of CO_2 each year, 28,327 Tons of CO_2 in five years, achieving a reduction of 141,636.93 Tons of CO_2 over a 20 year period.

   ii. A contribution to compliance with goals 7A and 7C of the seventh objective of the Millennium Development Goals: "Guarantee Environmental Sustainability" through the reduction of CO_2 emissions and an increase in the number of improved water systems.

c) The suppliers of photovoltaic solar systems (SFV) have improved the quality of their equipment installations as a result of training provided by PIR/FHIS and the need to comply with the quality levels for equipment and installation required by the Project.

d) Businesses accredited by PIR/FHIS have increased their equity and grown their markets reaching a greater number of rural communities in the country, a situation which has led to their becoming better known in the market.

e) Incomes have also increased for the chain of recyclers and providers of lead acid batteries and other recyclable materials, as a result of the construction of two recycling collection centers in strategic locations with the objective of recycling the batteries from photovoltaic systems as well as other similar waste.

4.5.2.2 Impact of the Results Achieved

a) An increase in family wealth and credit worthiness because the Photovoltaic System constitutes a tangible asset which is very useful in the event of a credit analysis due to its potential for income generation (in the informal economy).

b) An improvement in the quality of life in the area of health due to reduced exposure to smoke.

c) Teachers and students in the schools which now have electric energy have diversified their techniques for teaching/learning through the use of audiovisual equipment.

d) The risk of Household fires has been reduced.

e) Family ties have been strengthened through the activities carried out by the group such as, sharing relaxation time (watching films or videos together), improved family and social communications through the ability to recharge cellular telephones (previously people had to travel to distant locations to charge the batteries, and for that reason they were used only for short calls and later switched off).

For both of the electrification sub-projects, having electrical energy in the communities represented progress and improved welfare (satisfying the need for an improvement in living conditions).

4.6 Component: Micro-finance Services for SSD Sub-programs.

While this program component was originally designed so that the funds could be administered by a second level financial institution, the institutions of this type which were operating in the country at the time did not show any interest in administering the fund. As a result of this limitation, the World Bank, in October 2007, proposed that the FHIS (Honduran Social Investment Fund) should contract a Micro-finance Specialist as a link between FHIS and the Fund Administrator (Micro-finance Institutions - 2nd level) who could serve to channel the funds to the users of PROSOL, and for that reason it was necessary to create policies, standards, processes, and legal documents, to administer the micro-credit funds and to define the necessary parameters to accredit micro-finance institutions, modifying the approach in 2013 from a Line of Credit to a Revolving Line of Credit in order to provide flexibility for the Micro-finance Institutions in accessing the funds.

In 2008, a process was initiated to accredit four (4) Micro-finance Institutions and once the geographic coverage of PROSOL was expanded one (1) additional Micro-finance Institution was accredited in 2010, and two (2) more in 2011, for a total of seven (7) Micro-finance Institutions (FUNDAHMICRO, PRISMA, ADICH,

COMIXMUL, Hermandad de Honduras, FUNED, and CREDISOL). Seven (7) Loan Agreements were signed between FHIS and the accredited Micro-finance Institutions for a total of Lps. 32.25 million, and loans were approved and disbursed in the amount of Lps. 24.8 Million, which represented 77% of the total amount of the agreed funds available to the Micro-finance Institutions. The operations have been a success with the recuperation of 94.8% of the capital as of 30 June, 2015 and interest paid in the amount of Lps. 3.345 Million, resulting in total payments of Lps. 26.845 Million, and an amount of Lps. 1.3 Million in capital and interest pending repayment to ADICH as of December, 2015.

Technical assistance was provided to the Micro-finance Institutions for the management of the Revolving Line of Credit to cover 50% of shared costs in the amount of Lps. 3.011 Million out of a total of Lps. 4.5 Million, which is equivalent to USD $0.30 Million, and represented a support of 67% towards the costs of institutional development.

The Micro-finance Institutions provided micro-credit loans for 1,886 Solar Systems to an equal number of families, for a total amount of Lps. 22,064,464.70, and an average loan amount per system financed of Lps. 11,699.00. Some of the users of these systems did not receive a subsidy because there were none available, however they did receive loans with special micro-credit conditions for the Solar Energy Credit Line.

512 SFV were financed using the Additional Revolving Line of Credit Financing of Lps. 6.8 Million as of 30 June, 2016, and of this total amount Lps. 2.2 Million of capital has been repaid and Lps. 0.8 Million has been paid in interest. The demand for credit for SFVs was underestimated and during this first phase there was a relationship of 32% of systems acquired by credit and 68% with cash. For the Additional Financing period this relationship changed, and the assigned funds were insufficient so it was necessary to use the loan repayments received by the Micro-finance Institutions for the initial loans. As a result, the relationship changed to 48% of purchases on credit and 52% with cash. For the Additional Financing period, only four (4) Micro-finance Institutions participated (PRISMA, ADICH, COMIXMUL y CREDISOL), and these did not have sufficient capacity to cover the demand in the areas covered by the solar system suppliers.

4.6.1 Results Achieved

a) The Micro-finance Institutions have diversified their portfolio of financial products and expanded their geographical coverage. Through the execution of the revolving line of credit, they have developed their abilities for rural finance management.
b) Borrowers from PROSOL are now participating in the micro-finance industry throughout the country.
c) A number of institutions in the country, such as the Covelo Foundation and the IDB, have initiated similar projects motivated by the success of the PIR.

4.6.2 Impact of the Results Achieved

The microfinance institutions have developed their capacity to manage loan funds from other financing institutions for renewable energy projects.

4.7 Component: Strengthening Local Capacity and Technical Assistance for Policy Development

Under this component, activities were undertaken to strengthen the capacity of the implementing agencies; reinforce key actors at the local level (UTI and communities); strengthen key actors at the central level (FHIS and other agencies in the sector; SERNA, SANAA, CONASA, ENEE); this support included training and the provision of equipment and vehicles.

Given the focus of the Project on decentralization and strengthening management abilities at the local level, the PIR contributed by providing the Inter-municipal Technical Units (UTI´s) with the office equipment and vehicles necessary to carry out their activities, as well as on-going training in technical, financial, and

environmental topics with the goal that each Association, after having been strengthened, would be able to independently access and manage the resources required for their own development. At the same time, the PIR financed a number of consultancies as a strategic part of the strengthening program, such as contracting an Engineering Technical Advisor (ATI) for each Association, with decreasing levels of financial support so that each Association would assume the responsibility for financing this support after the close of the Project, as well as specific consultancies targeted to promote participative mechanisms for the selection and prioritization of sub-projects, the development of local policies, the management of environmental licenses, as well as the design of sub-projects, including those which were carried out with Project funds, as well as others which were financed from other sources by the Associations themselves.

The FHIS, working through the PIR, also undertook some centralized development interventions, in order to compensate for the management weaknesses of those UTI´s which were not able to administer expensive, very complex, or major sub-projects in their communities.

Through the training activities, the abilities of the participants were improved, expanding their knowledge and improving their abilities and competencies in order to carry out the required tasks efficiently and, consequently, reduce the frequency of supervision.

4.7.1 Results Achieved

The provision of vehicles, computers, office equipment, furnishings, and training on the part of the ATIs, were all conceived as part of a strategy to strengthen the local abilities of the Associations, the UTIs, and ENEE and SANAA as strategic partners.

4.7.2 Impact of the Results Achieved

Institutional strengthening has been a fundamental policy in order to effectively achieve the objectives of the Project. Beginning with the design stage, institutional strengthening was conceived as a complement and a full partner to the financial investment in the sub-projects.

4.8 Component: Management, Supervision, and Evaluation of the Project

The project design included a team for monitoring and evaluation (M&E) of the UCP to compile and consolidate the data and provide periodic updates regarding the performance, achievement of intermediate results, and the high level impacts of the Project. This approach would allow corrective measures to be applied as needed. The primary data sources included: i) field reports from the UCP technical team, ii) quarterly and annual reports, iii) special baseline studies for the four (4) Associations, iv) economic and impact evaluations of the results, v) external audits of the financial statements.

Table 16. Results of the Progress Reports

RESULT	Unit	Quantity
Establishment of baseline data for four (4) Associations (GUISAYOTE, MAMNO, MAMCEPAZ, and MAMBOCAURE) and the Social Impact Evaluation for two (2) Associations (CRA and CHORTI).	**Report**	**1**
Impact Evaluation for the Rural Infrastructure Project, PIR	**Report**	**1**
Economic and Financial Analysis of the Project	**Report**	**1**
External Audits of the Financial Statements of the Project	**Report**	**10**

4.9 Component: Immediate Response Mechanism (IRM)

This component, included with the Additional Financing, was included with the goal of providing support in order to respond to an Eligible Emergency, should such a case occur; however no such situation occurred during the implementation of the Project.

5. CROSSCUTTING THEMES

5.1 Environment

In order to assure environmental and social sustainability and comply with the World Bank Policy on Environmental Security (OP/BP/GP 4.01), an instrument known as the Conceptual Framework for Environmental and Social Management was developed. Initially in this document, the following Safeguard policies were activated: Environmental Assessment (OP/BP 4.01), Indigenous Peoples (OD/BP 4.10), Physical Cultural Resources (OP/BP 4.11) and Involuntary Resettlement (OP/BP 4.12).

With the Additional Financing, the Conceptual Framework for Environmental and Social Management was modified to become a Framework for Environmental and Social Management, in which the Safeguard Policies were activated for the following: Environmental Assessment (OP/BP/GP 4.01); Physical Cultural Resources (OP/BP 4.11) Natural Habitats (OP/BP 4.04); Forests (OP/BP 4.36); Involuntary Resettlement (OP/BP 4.12); and Indigenous Peoples (OP 4.10).

5.1.1 Results Achieved

a) A multidisciplinary approach was developed for environmental management with a social focus. In this way, the steps and instruments were defined to use in each phase of the project (pre-feasibility, design, implementation, operation, and maintenance) as well as designating those responsible for the implementation at each stage.
b) Through the implementation of the Framework for Environmental and Social Management (MGAS), an awareness building campaign was carried out regarding environmental issues for the technical staff involved in the development and review of the design for the projects, as well as for those contractors involved in the implementation process.
c) With this unified approach to Environmental Management the projects were designed and carried out taking into account the goal of minimizing the negative impacts generated by the construction and operation of the projects, significantly reducing the passive environmental effects in those places where the projects were implemented, taking into account the specific conditions of the area along with the identification of risks and vulnerabilities, environmental and social sustainability, etc.
d) A definition of the applicable procedures and instruments for any type of project or means of financing, in compliance with the legal requirements regarding environmental licenses for the projects.

5.1.2 Impact of the Results Achieved

a) This approach brought about better designs (the designers included technical environmental aspects which were identified at the pre-feasibility stage, and included these in the designs for the projects, which should then translate into better execution of these).
b) The supervision of compliance with the environmental management requirements was included in the bid packages, the implementation contracts, and the contracts for project supervision, in order to assure strict compliance throughout the execution of the project.
c) A sense of ownership was developed within the communities regarding the sub-projects by involving them as social controllers for the projects which were carried out under the Additional Financing, demanding compliance with the contract terms, not only regarding the technical aspects of the project, but also regarding environmental management.

5.2 Social

The original Project framework included the policies for Indigenous Peoples (OD/BP 4.10) and Involuntary Resettlement (OP/BP 4.12).

5.2.1 Results Achieved

a) There was a clearly defined methodology and policy for the early identification of social impacts and protocols for actions to be taken in the event that these were encountered.
b) The Project identified the presence of ethnic groups in areas where the sub-projects would be carried out in order to guarantee compliance with Agreement No. 169 of the OIT. All of this was done in order to achieve the execution of sub-projects without affecting the residents of the area of influence or to compensate them in the event of any impacts, while respecting the customs and beliefs of the ethnic groups.

5.2.2 Impact of the Results Achieved

a) The monitoring and verification of rights of way – beginning with the pre-feasibility stage of the project – contributed to minimizing any negative impacts through the incorporation of social and environmental factors in a multidisciplinary way throughout the process.
b) The corresponding regulations for the development of sub-projects in areas of ethnic groups were followed as defined in compliance with Agreement No. 169, as well as the policies of the World Bank, assuring that these groups were consulted and informed at all times regarding the development of the sub-projects.
c) Empowerment of local communities regarding the sub-projects.
d) Encouragement of citizen accountability groups.

6. LESSONS LEARNED

a) Interaction among: beneficiaries – municipal governments – associations – local government agencies – Project Coordination Unit, is fundamental in order to achieve the goals and objectives of the Project. This interaction occurs – as in the case of the PIR – when the various actors involved take ownership of the Project and commit themselves to its goals and objectives.

b) Having a Project Coordination Unit (UCP), with sufficient technical and financial autonomy was a determining factor which allowed the Honduran Social Investment Fund (FHIS) to achieve a satisfactory level of execution as established in Credit Agreement BM 4099-HO, 5289-HN and then in the GEF-TF055698 Grant.

c) Having a well-established system for planning and a corresponding system for monitoring and evaluation (M&E), allows for effective, economical, and efficient Project execution.

d) Having the right administrative instruments, such as, an Operations Manual, budgetary standards, Annual Operating Plans, (POAs), etc., and applying these in a disciplined manner - allowed the Project Coordination Office to achieve all of the programmed activities.

d) Regarding the point made in the letter c), we want to affirm that the establishment of a Monitoring and Evaluation (M&E) Unit greatly facilitated the follow-up for day-to-day technical operations and facilitated an on-going observation of progress towards the proposed products and objectives.

f) The policy decision to decentralize the operations of the Project – taking all the required precautions, especially starting with continuous training – empowered the joint Project executors (Associations) and promoted a standard of excellence in management through their commitment to the goals and objectives. This approach, in addition to creating trust among members of the beneficiary population, also helped to develop local abilities to be able to execute other development projects in the future.

g) The strategy to benefit the municipalities in the most efficient and effective way through the Associations, helps to strengthen local institutions, governance, and democracy; while contributing to the transparency and credibility of the process.

h) When local actors have the opportunity to participate actively in the decision-making process for the development of projects, their experience tends to be more positive and their attitudes towards the projects are ones of greater commitment. In the PIR/FHIS Project, participation of the beneficiaries has taken a number of different forms (local consultation, project support committees, maintenance teams, financial support, in-kind support, or contributions of unskilled labor), with different opportunities for participation responding to the different possibilities or interests of distinct individuals.

i) Those projects which contributed to improving the lives of marginalized groups, who generally lack access to basic services, by including them in the social, cultural, and labor aspects of the projects, contributed to the reduction of the inequality gap. Through the PIR, 550,791 people have had the opportunity to be direct beneficiaries of at least one of the sub-projects.

BORROWER/IMPLEMENTING AGENCIES COMMENTS ON THE ICR

i) Risk Assessment: Regarding to the risk consisting in the difficulty of the Inter Municipal Technical Units to implement the project, the PCU gave constant assistance to the Technical Units to implement the project as a mitigation measure in technical, environmental, O&M and fiduciary issues.

ii) Post-completion Operation/Next Phase: Regarding to the micro-enterprises for road maintenance, none of them is currently in operation due to the lack of municipal funding. This approach proved to be unsustainable and was not considered for the AF, and it was substituted by local committees of road maintenance, formed by beneficiaries of the rural roads rehabilitated.

iii) Performance in road access and infrastructure generated by the project were short of the targets, due to the cancellation of AF resources, and M&E weaknesses: The revised target of rural population with access to an all-season road was 45%, not 40%. The percentage achieved was 91% of the rural population with access to an all-season road, in other words, the project achieved the 202% of the target value. (See the attached table). Regarding to the length of rural roads rehabilitated, the target was not achieved because of the reduction of the resources of the AF.

iv) Regarding to the Lines of credit in Microfinance, the target value of resources provided by the bank was USD$ M 1.53, however, the amount of funds given in credit under the project was USD$ M 2.14, reaching the 139.29% of the target value. (Reference 69. Other achievements to reinforce technical capacity and sustainability include the following).

v) The revised target value for number of integrated mancommunal infrastructure plans was seven (7). The amount of integrated mancommunal infrastructure plans achieved by the project was seven (7), reaching the 100.00% of the target (Reference 69 vi).

vi) Performance in water access surpassed the expected levels in terms of access, and water and sewerage connections: The target of new piped household water connections resulting from the project intervention was 4,652. However, the amount of new piped household water connections resulting of the project intervention was only 3492, reaching the 75% of the target. (Reference 65 iv) Performance in water access surpassed the expected levels in terms of access, and water and sewerage connections).

vii) (i) The number of people (92,142) provided with access to electricity by household –Grid was exceeded, with performance reaching 104 percent of the last target value, (ii) the number of people (63,492) with access to electricity by household connections (Off Grid) was exceeded, with results achieving 124 percent of the last target value, (iii) the percentage of population (76 percent) in target areas with access to electricity service, provided with adequate quality and sustainability was 230 percent achieved, compared to the last target value. (Reference 66 Results were overall very strong in terms of electricity access and connections).

viii) Achievements related to road, water access were beyond projected levels: The target of number of people in rural areas provided with access to sanitation under the project was missed, reaching the 70 percent of the revised target. (Reference 58).

ix) The target for water boards trained in operations and maintenance was exceeded (226 waters boards), reaching 211 percent of the last updated target value (107). (Reference 68, iii)

x) The share of rural population with access to improved water services in supported localities is about 84 percent of the mancomunidades population. (Reference Component 2&3: Infrastructure Service Delivery WATER/SANITATION Infrastructure and beneficiaries.

Annex 8. Comments of Co-financiers and Other Partners/Stakeholders
Not applicable

Annex 9. List of Supporting Documents

(i) The World Bank: Aide Memoires of Project Supervision, 2006-2016

(ii) _____: Implementation Status and Results Reports, 2016

(iii) _____:Project Document on a Proposed Grant From The Global Environment Facility Trust Fund for a Rural Electrification Project, Report No 34092-HN, November, 2005

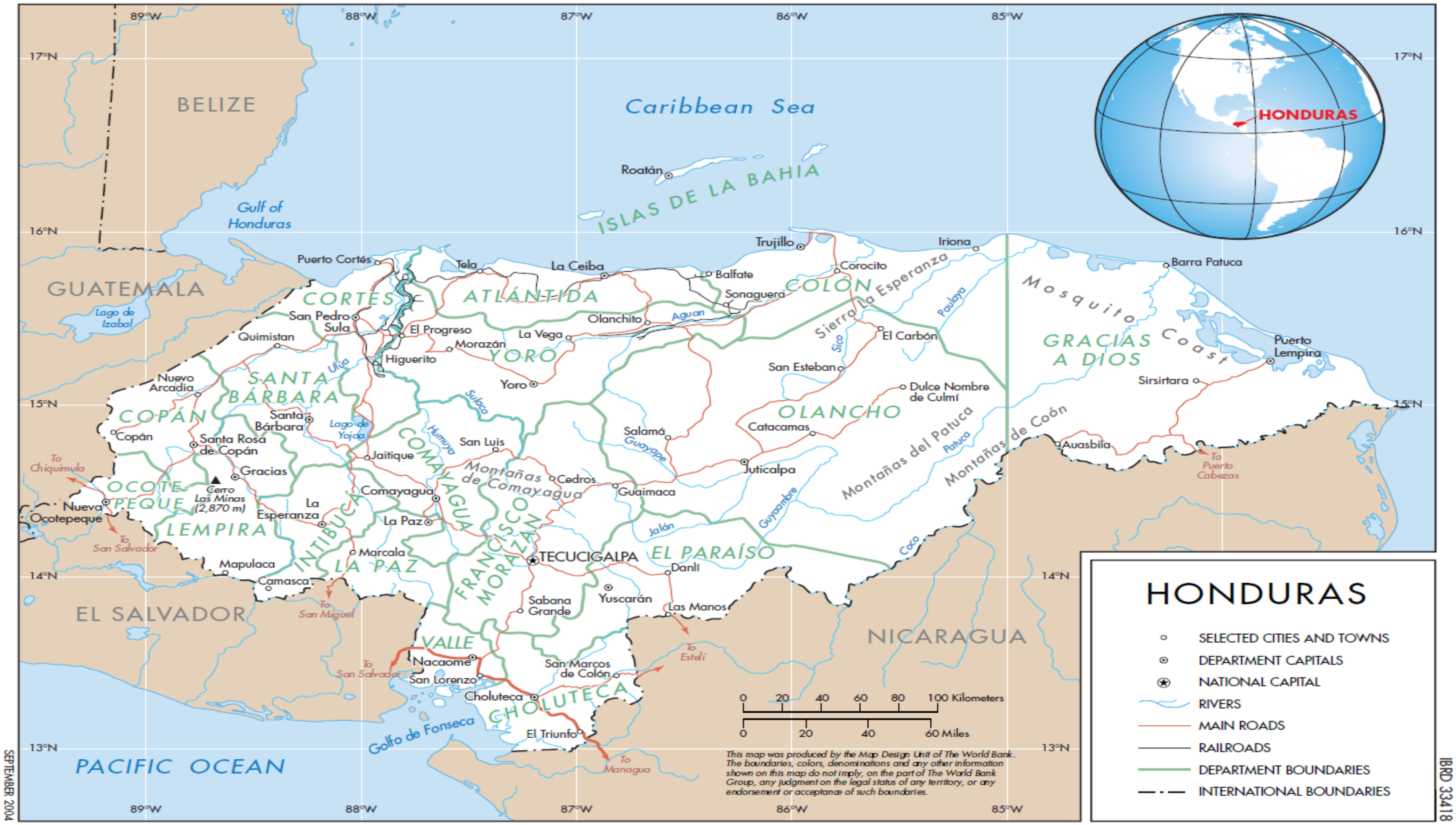
(iv) _____:Project Appraisal Document On A Proposed Credit To The Republic of Honduras For A Rural Electrification Project, Report No 32464-HN, My 2005

(v) _____:Project Paper on a Proposed Credit to the Republic of Honduras for a Rural Electrification Project, Report No 32464-HN, My 2005, Report no 76239-HN, May 2013

(vi) _____Restructuring Paper on a Proposed Project restructuring of Honduras Rural Infrastructure Project, Report no RES21111, October 2015.

(vii) PIR Resumen Ejecutivo Prestatario Para El ICR, Project Coordination Unit, December 2016

Annex 10: MAP



HONDURAS
SELECTED CITIES AND TOWNS
DEPARTMENT CAPITALS
NATIONAL CAPITAL
RIVERS
MAIN ROADS
RAILROADS
DEPARTMENT BOUNDARIES
INTERNATIONAL BOUNDARIES
Caribbean Sea
PACIFIC OCEAN
BELIZE
GUATEMALA
EL SALVADOR
NICARAGUA
Gulf of Honduras
Golfo de Fonseca
ISLAS DE LA BAHIA
Roatán
CORTÉS
ATLÁNTIDA
COLÓN
YORO
SANTA BÁRBARA
COPÁN
OCOTEPEQUE
LEMPIRA
INTIBUCÁ
LA PAZ
COMAYAGUA
FRANCISCO MORAZÁN
EL PARAÍSO
OLANCHO
GRACIAS A DIOS
VALLE
CHOLUTECA
TECUCIGALPA
Puerto Cortés
Tela
La Ceiba
Trujillo
Iriona
Balfate
Corocito
Sonaguera
Olanchito
San Pedro Sula
El Progreso
Morazán
La Vega
Quimistan
Higuerito
Yoro
Nuevo Arcadia
Santa Bárbara
Copán
Santa Rosa de Copán
Gracias
Cerro Las Minas (2,870 m)
Nueva Ocotepeque
La Esperanza
Jaitique
San Luis
Comayagua
La Paz
Marcala
Mapulaca
Camasca
Cedros
Guaimaca
Salamá
Catacamas
Juticalpa
San Esteban
El Carbón
Dulce Nombre de Culmí
Barra Patuca
Puerto Lempira
Sirsirtara
Auasbila
Danlí
Yuscarán
Las Manos
Sabana Grande
Nacaome
San Lorenzo
Choluteca
San Marcos de Colón
El Triunfo
Mosquito Coast
Sierra La Esperanza
Montañas del Patuca
Montañas de Coón
Montañas de Comayagua
Lago de Yojoa
Lago de Izabal
To Chiquimula
To San Salvador
To San Miguel
To Estelí
To Managua
To Puerto Cabezas
17°N
16°N
15°N
14°N
13°N
89°W
88°W
87°W
86°W
85°W
0 20 40 60 80 100 Kilometers
0 20 40 60 Miles
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