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The World Bank

Report No: ICR00001758

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IBRD-71520, IBRD-76890, TF-51601 and TF-53822)

ON A

LOAN

IN THE AMOUNT OF US$60 MILLION EQUIVALENT

TO THE

GOVERNMENT OF THE PHILIPPINES

FOR

SECOND AGRARIAN REFORM COMMUNITIES DEVELOPMENT PROJECT

June 30, 2011

Sustainable Development Department
Philippines
East Asia and the Pacific Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective December 31, 2010)

Currency Unit = Philippine Peso (PhP)
USD1.00 = PhP43.84

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
ALDA	ARC Level of Development Assessment
ARB	Agrarian Reform Beneficiary
ARC	Agrarian Reform Community
ARCDP 1	Agrarian Reform Communities Development Project
ARCDP2	Second Agrarian Reform Communities Development Project
CARP	Comprehensive Agrarian Reform Program
CAS	Country Assistance Strategy
CPO	Central Project Office
DA	Department of Agriculture
DAR	Department of Agrarian Reform
DOF	Department of Finance
GOP	Government of the Philippines
IA	Irrigators' Association
ICC	Investment Coordination Committee
IOMG	Infrastructure Operations and Maintenance Group
IU	Infrastructure Unit
KPI	Key Performance Indicator
LBP	Land Bank of the Philippines
LGU	Local Government Unit
MDFO	Municipal Development Fund Office
MOA	Memorandum of Agreement
MTPDP	Medium Term Philippine Development Plan
NEDA	National Economic and Development Authority
NIA	National Irrigation Administration
O&M	Operation and Maintenance
PAD	Project Appraisal Document
PCFC	Peoples' Credit and Finance Corporation
PDO	Project Development Objective
PDP	Philippine Development Plan (formerly MTPDP)
PPO	Provincial Project Office
PO	Peoples Organization

Vice President:	James W. Adams
Country Director:	Bert Hofman
Sustainable Development Leader:	Mark C. Woodward
Project Team Leader:	Maria Theresa G. Quinones
ICR Team Leader:	Maria Theresa G. Quinones

COUNTRY: THE PHILIPPINES
Project Name: Second Agrarian Reform Communities Development Project

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A. Basic Information			
Country:	Philippines	Project Name:	Second Agrarian Reform Communities Development Project
Project ID:	P071007	L/C/TF Number(s):	IBRD-71520, IBRD-76890,TF-51601,TF-53822
ICR Date:	06/30/2011	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	Government of the Philippines (GOP)
Original Total Commitment:	USD50.0 M	Disbursed Amount:	USD58.7 M
Revised Amount:	USD58.7 M		
Environmental Category: B			
Implementing Agency: Department of Agrarian Reform (DAR)			
Co-financiers and Other External Partners: None			

B. Key Dates				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	01/08/2001	Effectiveness:	06/04/2003	06/04/2003
Appraisal:	05/15/2002	Restructuring:		05/12/2009[1]
Approval:	11/26/2002	Mid-Term Review:	07/18/2005	09/05/2005
		Closing:	12/31/2007	12/31/2010

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

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

[1] Original Loan was restructured in view of the USD10 million Additional Financing (AF) loan. This was approved by the World Bank Board on March 19, 2009. The processing of the AF loan required the second extension of the loan closing date to December 31, 2009.

Overall Bank Performance:	Satisfactory	Overall Borrower Performance:	Moderately Satisfactory

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

D. Sector and Theme Codes		
	Original	**Actual**
Sector Code (as % of total Bank financing)		
Agricultural marketing and trade	25	35
General public administration sector	25	6
Roads and highways	25	58
Water supply	25	1

Theme Code (as % of total Bank financing)		
Land administration and management	25	2
Participation and civic engagement	25	5
Rural policies and institutions	25	5
Rural services and infrastructure	25	88

E. Bank Staff		
Positions	**At ICR**	**At Approval**
Vice President:	James W. Adams	Jemal-ud-din- Kassum
Country Director:	Bert Hofman	Robert Van Pulley
Sector Manager:	Mark C. Woodward (Sustainable Development Leader)	Rahul Raturi
Project Team Leader:	Maria Theresa G. Quinones	Frank Fulgence K. Byamugisha
ICR Team Leader:	Maria Theresa G. Quinones	
ICR Primary Authors:	Maria Theresa G. Quinones and Dorothy Lucks	

F. Results Framework Analysis

Project Development Objectives (PDO)

The overall goal of the project was to reduce rural poverty and enhance the quality of life of the target beneficiaries, comprising primarily of agrarian reform beneficiaries. The objective of the project was to significantly raise household incomes and the quality of life of the people in the targeted Agrarian Reform Communities (ARCs) by improving their productive assets, rural infrastructure and access to key support services.

No revision was made on the PDO.

(a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1:	**Increase in average real net household income.**[2]			
Value	PhP65,300 & PhP66,540 (average for the first 3 and 4 batches, respectively)	20%	N/A	21% and 41%
Date	12/31/2003	Three years after joining the project.	N/A	Three years after joining the project; and at the end of the project (12/31/2010), respectively.
Comments	<u>Three years after joining the project</u>: • 105% achieved as per the PAD target. • Average increase per household reached 21% for the four batches. • Increases per batch were: (a) 23% for CY 2003 ARCs; (b) 14% for CY 2004 ARCs; (c) 19% for CY 2005 ARCs; and (d) 33% for CY 2006 ARCs. The relatively lower rate of increase for CY 2004 ARCs was attributed to damages and losses in crops, business assets and other properties due to a series of strong typhoons that hit the ARCs in 2006 and 2007. • Increments in income were generated from the following activities: (a) on-farm (58%); (b) off-farm (16%); and (c) non-farm (26%). <u>End of the project (December 31, 2010)</u> • 205% achieved.			

[2] 124 ARCs joined the project in different batches (i.e., 45 ARCs in CY 2003, 32 in CY 2004, 21 in CY 2005, and 26 in CY 2006). Monitoring of indicators, which needed to be tracked over a period of three years, was therefore based on the individual ARC's year of entry or batch.

	• Average increase per household reached 41% for the four batches. • End of project value was much better due to the completion of and benefits generated from infrastructure subprojects (especially irrigation)[3]. • Increases per batch were: (a) 51% for CY 2003 ARCs; (b) 33% for CY 2004 ARCs; (c) 44% for CY 2005 ARCs; and (d) 32% for CY 2006 ARCs. • Increases came from the following activities: (a) on-farm (64%); (b) off-farm (8%); and (c) non-farm (28%). Based on a difference of differences analysis, incremental average income for project ARCs, three years after joining the project, had increased by 13.9%, compared to control group ("without " project ARCs). The difference further widened to 16.8% in 2010. (See Annex 3.)

Indicator 2:	**Increase in cropping intensity on irrigated area within the ARCs.**			
Value	100%	140%	N/A	198%
Date	12/31/2003	12/31/2010	N/A	12/31/2010
Comments	141% achieved as per the PAD target. This was due to increase in the number of cropping per year because of the completion of project-funded irrigation facilities. (Excluded cultivation of new areas after completion of roads and bridges which improved access to farms.)			

Indicator 3:	**Increase in average yields per hectare.**			
Value	0%	15%	N/A	17% and 21%
Date	12/31/2003	Three years after joining the project.	N/A	Three years after joining the project; and 12/31/2010, respectively.
Comments	113% and 140% achieved as per the PAD target, three years after joining the project and by the end of the project, respectively. This was calculated using three major crops (rice, corn and coconut). Increases per ARC batch, three years after joining the project, were: (a) 13% (2003); (b) 27% (2004); (c) 7% (2005); and (d) 22% (2006). Average yields further increased by 21% for all batches at the end of the project. Increase was attributed to the farm technologies introduced by the project through the Farmers' Field School, training on Integrated Pest Management and use of certified seeds. Provision of irrigation systems and facilitation of credit access for agricultural inputs under the project also contributed in increasing yields. (Note: Excluded increases in yield attributed to the cultivation of previously idle lands of about 5,266 hectares and to crop diversification such as planting			

[3] Twenty-two (22) irrigation subprojects were completed in 2009/2010. The contribution of these subprojects was significant given that the average household incomes for ARCs, with and without irrigation, in 2010 were 47% and 38%, respectively.

	of off-season vegetables, tree crops and legumes.)

Indicator 4:	**Average real increase in household business assets[4].**			
Value	PhP34,061 & PhP36,211 (average for 3 and 4 batches, respectively)	10%	N/A	31% and 47%
Date	12/31/2003	Three years after joining the project.	N/A	Three years after joining the project; and 12/31/2010, respectively.
Comments	310% and 470% achieved as per the PAD target, three years after joining the project and by the end of the project, respectively. Business assets acquired comprised of farm machinery, transportation equipment, enterprise equipment, livestock and commercial trees. Increases per batch three years after joining the project, were: (a) 46% (2003); (b) 22% (2004); (c) 26% (2005); and (d) 26% (2006).			

Indicator 5:	**Reduction in travel time after completion of roads.**			
Value	10.75 minutes per kilometer	50%	N/A	69%
Date	12/31/2003	12/31/2010	N/A	12/31/2010
Comments	138% achieved as per the PAD target. The travel time was reduced to an average of 3.36 minutes per kilometer.			

Indicator 6:	**Increase in access to support services.**			
Value	0	848 services	N/A	2,405 services
Date	12/31/2003	12/31/2010	N/A	12/31/2010
Comments	284% achieved as per the PAD target. ARC community organizations/groups accessed external services related to : (a) medical and health (32%); (b) agricultural technical support (30%); (c) enterprise development and livelihood assistance support (7%); (d) financial/credit (6%); (e) educational (6%); and (f) other services (19%). The project's assistance and capacity building activities empowered the community groups to network and link with service providers. Completion of roads and bridges also facilitated easier access to these services.			

[4] Business assets were valued at depreciated market value.

(b) Intermediate Output Indicator(s)

(i) Rural Infrastructure Component

Indicator	Baseline Value	Original Target Values	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1:	**Infrastructure subprojects completed conform to stated priorities in the ARC development plan.**			
Value	0%	100%	N/A	100%
Date	12/31/2003	12/31/2010	N/A	12/31/2010
Comments	100% achieved as per the PAD target. All the 260 subprojects were included in the respective Comprehensive ARC Development Plans and are thus considered to be priority investments.			

Indicator 2:	**Infrastructure units (IUs)[5] built.**			
Value	0 IU	1,500 IUs	N/A	348 IUs and 1,590 IUs
Date	12/31/2003	12/31/2006	N/A	12/31/2006; and 12/31/2010, respectively.
Comments	23% and 106% achieved as per the PAD target, by end 2006 and end 2010, respectively. The national government policy, which increased the Local Government Units' (LGUs') counterpart/equity share for infrastructure subprojects, affected the timely implementation of subprojects. Nevertheless, with project restructuring and extension of the loan closing date, the target IU was exceeded at 106% by the end of project.			

Indicator 3:	**Infrastructure subprojects provided with annual budget by LGUs for operation and maintenance (O&M).**			
Value	0%	100%	N/A	100%
Date	12/31/2003	12/31/2010	N/A	12/31/2010
Comments	100% achieved as per the PAD target. The LGUs fully complied with the Sub-Project Agreement which required them to allocate annual maintenance budget for infrastructure subprojects. Otherwise, the subproject grant financing would be converted into an LGU loan if infrastructure O&M is not sustained for a period of ten years.			

[5] An infrastructure unit (IU) is composite physical equivalent of one kilometer of rural road construction.

Indicator 4:	**Infrastructure subprojects meet quality of O&M[6] as defined in the Project Operational Manual.**			
Value	0%	100%	N/A	100%
Date	12/31/2003	12/31/2010	N/A	12/31/2010
Comments	100% achieved as per the PAD target. In addition to the regular project monitoring, the completed infrastructure subprojects were monitored annually by a multi-agency Inspectorate Team led by DAR. During the period 2007-2010, a total of 142 subprojects were inspected by the Team in which 80%, 19% and 1% were graded "Good", "Fair" and "Bad", respectively. The subprojects with "Fair" or "Bad" rating were primarily those damaged by the series of typhoons, but have since been repaired by the LGUs/ARCs using their own resources.			

Indicator 5:	**ARCs with irrigation systems have Irrigators' Associations (IAs) managing and maintaining them.**			
Value	0 IA	35 IAs	N/A	9 IAs and 35 IAs
Date	12/31/2003	12/31/2008	N/A	12/31/2008; and 12/31/2010, respectively.
Comments	100% achieved as per the PAD target which is based on the actual irrigation systems completed. A prerequisite of the project was for all irrigation subprojects to have functioning IAs that participate and/or take the lead in pre-construction, construction and O&M activities. In 2008, there were already 34 IAs involved in various project activities. However, since only 9 subprojects were completed at that time, only 9 IAs therefore were required to manage and maintain their irrigation subprojects. At the end of the project, however, all the 35 irrigation subprojects have functioning IAs.			

(ii) Agriculture and Enterprise Development Component (See PDO Indicator Nos. 3 and 4 for the increase in yield and household business assets, respectively.)

Indicator 6:	**Percentage of beneficiaries adopting project-introduced technology.**			
Value	0%	30%	N/A	45% and 50%
Date	12/31/2003	Three years after joining the project.	N/A	Three years after joining the project; and 12/31/2010, respectively.
Comments	150% and 167% achieved as per the PAD target, three years after joining the			

[6] Based on the ratings patterned after the Philippines' Department of Public Works and Highways, i.e., "Good" (subproject is fully functional and is well-maintained); "Fair" (subproject is generally in good condition but requires minor corrective maintenance); "Bad" (subproject is damaged, partially functional and requires immediate repair); and "Severe" (subproject is dysfunctional). If a subproject is rated as "Bad" or "Severe" on three successive annual assessments, the grant part of the project investment would be converted into an LGU loan.

	project and by end of the project, respectively. The number of training participants who adopted the project-introduced technology were 54,624 (out of 120,598) and 70,849 (out of 142,426), three years after joining the project and by December 2010, respectively. The higher than expected adoption rate was due to field-based training, capacity building for extension staff and provision of starter kits to the trainees which they had to repay in-kind, for distribution to the next-in-line training graduates in a form of a loan.

(iii) Community Development and Capacity Building Component

Indicator 7:	**Peoples Organizations (POs) achieved an increase in organizational maturity.**			
Value	Level 3	75%	N/A	60% and 75%
Date	12/31/2003	12/31/2006	N/A	12/31/2006; and 12/31/2010, respectively.
Comments	80% and 100% achieved as per the PAD target, by end 2006 and end 2010, respectively. There were only 180 POs at the start of the project. However, with the expansion of project coverage from 80 to 124 ARCs in CY 2006, the project likewise increased its coverage to 237 POs which became the "self-revised target". Given that majority of the newly-covered POs had lower organizational maturity (OM) levels, more time and assistance were needed to improve their OM levels. Nevertheless, the self-revised target was achieved at the end of the project.			

Indicator 8:	**Increase women's participation in decision making on project activities.**			
Value	54% woman-officers in ARC organizations (proxy indicator)	No quantifiable target set.	N/A	60% woman-officers in ARC organizations
Date	12/31/2003	12/31/2010	N/A	12/31/2010
Comments	No target was set for this indicator. Instead, the percentage of woman-officers in the ARC organizations was used as a proxy indicator wherein a 6% was realized. Other proxy indicators monitored were: (a) women membership in POs which increased from 7,475 to 15,876; and (b) Bank's rating on gender responsiveness which was satisfactory throughout the project implementation period.			

Indicator 9:	**Community-initiated and implemented subprojects undertaken by each ARC.**			
Value	0 subproject	10 subprojects per ARC (total of 1,240 subprojects)	N/A	2,030 subprojects
Date	12/31/2003	12/31/2010	N/A	12/31/2010

Comments	164% achieved as per the PAD target. Examples of subprojects implemented were tree planting, establishment of herbal gardens, supplemental feeding and nutrition program, coastal clean-up, immunization, cattle fattening, road concreting, etc. Funds used for these activities were sourced from internally generated funds (primarily savings and capital build-up) and donations received.

(iv) ARCs' Access to Financial Services Component

Indicator 10:	**ARC cooperatives achieve access to external financing.**			
Value	0%	60% (75 coops)	N/A	42% (52 coops) and 80% (100 coops)
Date	12/31/2003	12/31/2006	N/A	12/31/2006; and 12/31/2010, respectively
Comments (inclu. % achievement)	70% and 133% achieved as per the PAD target, by end 2006 and end 2010, respectively. The target was partially achieved in 2006 as some cooperatives needed institutional strengthening first before becoming eligible for credit. Nevertheless, the target was exceeded (133%) by the end of the project in 2010. Credit sources were national and local banks, microfinance institutions and NGO microfinance program. Access to these institutions was facilitated by the project.			

Indicator 11:	**ARC POs undertake savings activities.**			
Value	72 POs (out of 180 POs)	80% (144 POs)	N/A	104% (188 POs)
Date	12/31/2003	12/31/2010	N/A	12/31/2010
Comments	130% achieved as per the PAD target. Target was exceeded due to additional POs that were covered as a result of project expansion and improved financial capability of the POs The savings target was also exceeded with total incremental savings reaching PhP40.7 million (455% of target).			

Indicator 12:	**Increase in capitalization (capital build-up/CBU fund) of ARC POs.**			
Value	PhP30 million	50%	N/A	43% (PhP12.78 million) and 173% (PhP51.82 million)
Date	12/31/2003	During three-year operating period.	N/A	During three-year operating period; and 12/31/2010, respectively.
Comments	Target was partially achieved (86%) during the three-year operating period, but eventually achieved 346% of the PAD target by end of the project. This was due to limited credit support for livelihood activities available initially. The launching of the micro-enterprises and agricultural credit activities by the project in 2005 enabled households and POs to start or expand their business enterprises and subsequently intensified CBU generation.			

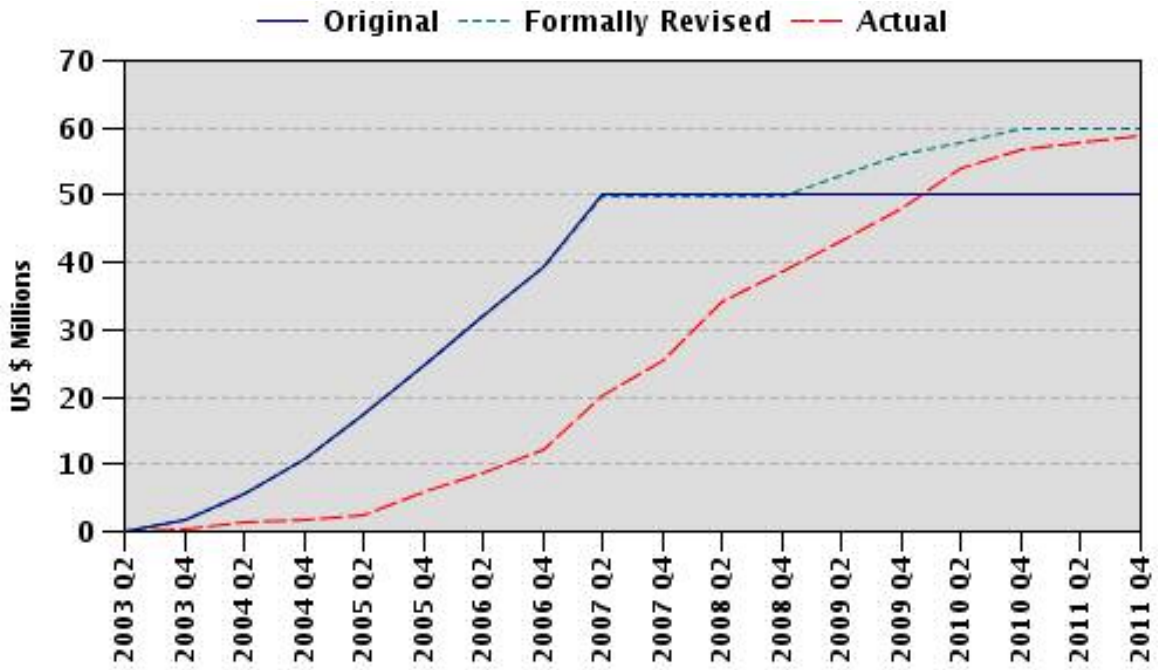
G. Ratings of Project Performance in Implementation Status Report (ISRs)

No.	Date ISR Archived	Development Objective	Implementation Performance	Actual Disbursements (in USD million)
1	12/18/2002	Satisfactory	Satisfactory	0.00
2	06/05/2003	Satisfactory	Satisfactory	0.50
3	12/08/2003	Satisfactory	Satisfactory	1.50
4	04/13/2004	Satisfactory	Satisfactory	1.76
5	10/19/2004	Satisfactory	Satisfactory	2.33
6	06/20/2005	Satisfactory	Satisfactory	5.85
7	11/08/2005	Moderately Satisfactory	Moderately Unsatisfactory	7.40
8	05/01/2006	Satisfactory	Moderately Satisfactory	10.67
9	02/08/2007	Satisfactory	Moderately Satisfactory	21.92
10	10/15/2007	Satisfactory	Satisfactory	30.88
11	03/12/2008	Satisfactory	Satisfactory	36.19
12	08/05/2008	Satisfactory	Satisfactory	38.93
13	01/12/2009	Satisfactory	Satisfactory	43.43
14	06/03/2009	Satisfactory	Satisfactory	46.60
15	12/09/2009	Satisfactory	Satisfactory	53.73
16	01/13/2010	Satisfactory	Satisfactory	54.22
17	06/02/2010	Satisfactory	Satisfactory	56.38
18	09/25/2010	Satisfactory	Satisfactory	56.97
19	03/07/2011	Satisfactory	Satisfactory	57.51

H. Restructuring

The project was restructured in view of the USD10 million Additional Financing loan which was approved on March 19, 2009. Moreover, during the Bank-wide review and reconciliation of Loan Agreements and Project Appraisal Documents (PADs), the list of performance indicators in the project Loan Agreement was updated with the addition of two PAD indicators on: (a) reduction in travel time; and (b) access to key support services.

I. Disbursement Profile



1. Project Context, Development Objectives and Design

1.1 Context at Appraisal

The project was designed to support the overarching objective of the updated Medium-Term Philippine Development Plan (MTPDP, 1999-2004) and the Bank's Country Assistance Strategy (CAS, 2003-2005) which was to restore sustainable economic growth through greater poverty reduction and equity. It aimed to address two of the four major themes of the MTPDP that were likewise supported by the CAS, namely: (a) promoting macroeconomic stability and equitable growth; and (b) accelerating environmentally sustainable rural development with social equity. The succeeding CAS (2006-2008 and 2010-2012/13) and MTPDP (2005-2010) continued to emphasize the importance of economic growth and social inclusion as integral national strategies for poverty reduction and prosperity.

Land reform through the Comprehensive Agrarian Reform Program (CARP[7]) has been an important Government Strategy in alleviating rural poverty since 1987. The twin objectives of the CARP are to: (a) increase agricultural productivity; and (b) improve farmers' income primarily through land transfer and increasing land productivity. It also provides support services to Agrarian Reform Communities (ARCs) to complement land transfer and improve land use. At the time of project preparation, less than half of the 1,410 ARCs were only partially provided with basic support services to improve the transferred lands due to limited resources. The Department of Agrarian Reform (DAR) approached the Bank for technical and financial assistance to expand the provision of support services and cover some of the remaining ARCs. During the predecessor project (Agrarian Reform Communities Development Project or ARCDP1), the demand for these support services was found to be high, particularly for rural access (farm-to-market roads and bridges), irrigation systems and agricultural and enterprise development. Results from ARCDP1 also showed that investments in integrated support services, in partnership with the Local Government Units (LGUs) under whose political jurisdiction the ARCs[8] were located, were successful in reducing poverty and increasing sustainability of project investments.

1.2 Original Project Development Objectives (PDO) and Key Indicators

The objective of the project was to significantly increase household income and the quality of life in 80 ARCs by improving their productive assets, rural infrastructure and access to key support services. Key performance indicators (KPIs) were: (a) 20% change in real net household income, three years after joining the project; (b) 140% increase in cropping intensity on irrigated areas, three years after joining the project; (c) 15% increase in average yields per hectare of main agricultural crops, three years after joining the project; (d) average of 10% real increase in household business assets, three years after joining the project; (e) 50% reduction in travel time, after roads have been constructed/improved by the project; and (f) increase in ARCs' access to support services and assistance.

[7] Comprehensive Agrarian Reform Law (Republic Act No. 6657).
[8] ARCDP1 covered 102 ARCs during the period 1997-2003.

1.3 Revised PDO and Key Indicators

The PDO and KPIs remain unchanged throughout the project life.

1.4 Main Beneficiaries

The project originally targeted 80 ARCs involving about 70,000 households, most of whom were agrarian reform beneficiaries (ARBs) with average incomes below the poverty line. After the Mid-Term Review (MTR), the project accepted additional ARCs/LGUs which expanded the coverage to 124 ARCs, with about 154,500 ARC households (including some 10,500 Indigenous Peoples households). These ARCs cover 484 villages in 119 municipalities across 18 provinces. The number of beneficiaries did not take into account additional population in adjacent communities who were also served through road access and reduced transport costs. Other households outside of the ARCs benefited through income and employment generated from upstream enterprises as a result of increased agricultural production and enterprise activities in the project areas.

1.5 Original Components

The project had the following six components. The implementation of these components was done in an integrated manner to enhance their synergistic effects aimed at achieving the PDO.

Component 1: Community Development and Capacity Building (USD4.90 million, 5.26% of total cost). This component focused on: (a) increasing active community participation and self-reliance in ARC planning processes and implementation of integrated community-identified priorities; (b) building the capabilities of ARC Peoples Organizations (POs) through community mobilization and planning activities; and (c) strengthening the capacity of DAR and LGUs to support appropriate development activities in the target ARCs. These investments in the social capital facilitated beneficiaries' and other key stakeholders' participation in project activities, access to key support services and sustainability of investments.

Component 2: Rural Infrastructure (USD69.50 million, 74.65% of total cost). This component financed community-based and small-scale physical infrastructures that supported agricultural and enterprise activities in the ARCs, based on the assessment of their needs and priorities identified during the ARC development planning process. It involved the construction and rehabilitation of rural access roads and bridges, communal irrigation, potable water supply, multi-purpose buildings and solar dryers. The selection of subprojects took into account technical feasibility and economic viability as well as willingness of the LGUs to provide support, including counterpart financing or equity.

Component 3: Agriculture and Enterprise Development (USD10.70 million, 11.49% of total cost). This component focused on increasing agricultural and enterprise productivity in the ARCs and supporting the development of new and improved market opportunities. Activities were directed towards improving farm and non-farm production using the ARCs' productive assets and linking them to other resources and markets.

Component 4: Access to Financial Services/Support to Rural Finance (USD2.10 million, 2.26% of total cost). This component focused on the provision of agricultural finance services through ARC cooperatives and micro-finance services to POs and individual entrepreneurs. These were done in partnership with the Land Bank of the Philippines, People's Credit and Finance Corporation, and various microfinance organizations. These financial services helped improve the utilization of the beneficiaries' productive assets and in the marketing of their produce.

Components 5 and 6: Implementation Support; and Project Management, Monitoring and Evaluation (USD5.90 million, 6.34% of total cost). Implementation support covered the provision of technical assistance and services to partner LGUs, DAR Provincial Project Offices (PPOs) and ARCs in the: (a) preparation of ARC development plans; (b) preparation of feasibility studies and detailed engineering for proposed infrastructure subprojects; (c) procurement and financial management; and (d) subproject monitoring. It also financed support for overall coordination, management, monitoring and evaluation of project activities at the national and field levels.

1.6 Revised Components

The project components remained unchanged throughout the project life.

1.7 Other Significant Changes

Changes in the Cost Sharing Arrangement for Infrastructure Subprojects, Project Scope and Project Period. The project was designed based on the national government's mandated cost-sharing scheme which was applied during ARCDP1. Under this scheme and depending on the income class of the LGUs, 70%-90% of the total cost of rural infrastructure subprojects was treated as a grant from national government, while the remaining 10%-30% represented the counterpart of the LGUs and/or beneficiaries. After the loan was approved by the World Bank Board, the government issued a national policy regarding a new LGU cost sharing scheme for all foreign-assisted projects that would be processed by the Government's Investment Coordination Committee (ICC), starting January 2003. Although the project was approved by the ICC in July 2002, the new scheme was retroactively applied to the project. This scheme varied significantly from the project design as this required the LGUs to provide 50%-100% of the infrastructure subproject costs[9] as counterpart, compared to the previous 10%-30%.

The change in the cost sharing arrangement significantly delayed project implementation as it took some time for most LGUs/ARCs to mobilize counterpart funding. Some LGUs also withdrew from the project, while others were only able to finance an average of one to two (1-2) subprojects, compared to the average of three to five (3-5) that had been projected during project preparation. Consequently, it was decided during the MTR Mission to accept new LGUs/ARCs that would be able to provide the required counterpart funding, thus increasing the project

[9] The new LGU cost-sharing arrangement had also adversely affected other World Bank-supported projects such as the Second Mindanao Rural Development Project.

coverage from 80 to 124 ARCs. The entry of additional LGUs/ARCs, though, required longer implementation period which resulted in three extensions of the Loan Agreement closing date.

Change in Fund Management Arrangements. Based on the original design, project fund management was entirely vested on the DAR. This was however modified after Loan Agreement effectiveness when the Department of Finance (DOF) requested that fund management for rural infrastructure subprojects be coursed through the DOF's Municipal Development Fund Office (MDFO). (The MDFO is the primary conduit for releasing national government funds to LGUs, as regards foreign-assisted projects). This change was documented through an amendment of the Loan Agreement and involved the opening of a Special Account for MDFO.

Additional Financing (AF) Loan. The USD10 million AF covered the shortfall in the project's budget for the completion of 22 communal irrigation subprojects. The shortfall was due to the appreciation of the Philippine Peso (PhP) against the US Dollar (USD) and local inflationary factors since 2006. The foreign exchange rate at appraisal was PhP50.00 to USD1.00, but the average rate during implementation was PhP45.00 to USD1.00.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

Soundness of the Background Analysis. The project built on the lessons and experiences from ARCDP1 and other community driven development (CDD) projects in the country and in the region. A series of stakeholders' consultation workshops (including dedicated workshops for marginalized groups, particularly Indigenous Peoples and women) was conducted to assess and confirm the priority needs in the target areas, potential and opportunities for development, capacity of the LGUs and beneficiary-communities, as well as presence and capacity of other implementing partners and service providers. The various preparatory and consultation activities upheld the following as key to addressing the PDO: (a) improvement and integration of basic support services for ARCs that include provision of rural infrastructures, community empowerment and capacity building, and diversification of farm and non-farm income opportunities; (b) partnership with LGUs, national agencies, micro-finance institutions, civil society and other service providers; (c) participatory and community-based planning, implementation and operation, maintenance and sustainability of investments; and (d) continuation of ARCDP1 policy of converting the infrastructure subproject grant into an LGU loan if the completed subproject is not properly maintained. A Quality at Entry (QAE) review undertaken in 2003 rated the project satisfactory.

Assessment of the Project Design. The project design proved to be relevant in terms of helping address the national poverty reduction agenda and the priority needs and demands of the target beneficiary-communities. It built on the ARCDP1 design, with an additional component to improve access to rural financial services given the credit constraints in the ARCs. The component interventions and safeguards measures were appropriate to the ARC context and were well within the capacity of the various implementing partners. Implementation arrangements were also largely appropriate and resulted in the desired outcomes, even with challenges encountered in the funds flow mechanisms. Nevertheless, the design could have anticipated the

change in the cost sharing scheme for infrastructure subprojects by identifying mitigating measures and/or determining restructuring options to address the possible risks.

Adequacy of Government's Commitment. The project was a priority of the government and thus high importance was placed in ensuring thorough preparation. A team was designated by DAR to spearhead project design and ensure compliance with necessary documentary requirements. Sufficient staff complement and counterpart funding were also made available by DAR all throughout the project preparation period, even when there were budget delays at the national level.

Assessment of Risks. Critical risks correctly identified at appraisal were: (a) a deteriorating macroeconomic situation that might have led to inadequate counterpart funds from the government and LGUs; (b) weak capacity of many LGUs to implement the project; and (c) the possibility that funds would not be efficiently and effectively used for the intended purpose. To address these, the following mitigation measures were incorporated in the project design: (a) a requirement for the LGUs to allocate upfront a budget for the first year of subproject implementation; (b) more training of LGUs on overall project management (including procurement and financial management) and engagement of NGOs and other service providers to help in project implementation; and (c) the installation of a closer monitoring system, including regular follow-up of LGUs' submission of their financial management and liquidation reports.

2.2 Implementation

Facilitating Factors. The project was implemented based primarily on the original design. The key approaches mentioned in Section 2.1 above led to the accomplishment of output and outcome targets. Other key factors that contributed to the project's successful implementation were: (a) the established and functional structure of the DAR and the National Irrigation Administration (NIA) from the national to the LGU level; (b) effective working relationships that were established during the project between and among the project operational partners; and (c) the strong commitment of the ARCs and LGUs to implementation outcomes. (There was no Quality at Supervision review undertaken by QAG for the project.)

Implementation Challenges. As noted above, the revision in the LGU cost sharing requirements for infrastructure subprojects significantly affected and delayed implementation. A majority of the participating LGUs had limited capacity to provide sufficient counterpart funds within the required timeframe. As this was a national policy and was beyond the project's control, various options and strategies were discussed during the project's MTR Mission which led to the decision to invite new LGUs with sufficient financial capacity to participate in the project. However, the expansion led to an increase in the number of ARCs from 80 to 124, thus stretching project management and resources beyond the original project design. This necessitated three extensions of the loan closing date to allow for an additional implementation period. Nevertheless, the project team was able to cope with the expanded scope and increase in beneficiaries.

Two other major financial impediments, outside of the project's control, had affected its timely execution. The first was the re-enactment of the national budget in 2006 and 2007, which

delayed the flow of counterpart funds. This was addressed by the DAR providing "bridging funds" to the project, thus enabling the project to pay its obligations to contractors and suppliers. The second occurred during the period September 2005 to April 2008 when the USD:PhP exchange rate dropped to about 63% of its 2005 level, leading to a budget shortfall. The shortfall was addressed with the approval of the USD10 million Additional Financing loan in March 2009.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

M&E Design. The project's M&E system was anchored in the Logical Framework which specified the PDO and key performance indicators at the impact, outcome and output levels. The system was composed of: (a) a management information system which included a database system called the "Field Implementation Support and Coordination (FISC) System" for tracking physical accomplishments; (b) results M&E; and (c) impact evaluation. The system was designed to gather data and generate reports for use in management decision-making. It also facilitated the flow of data and information at different levels of the project, i.e., Central Project Office (CPO), PPOs and DAR Foreign Assisted Projects Office (FAPsO). This database system was initiated during ARCDP1 and was enhanced and fully operationalized under the project. Nevertheless, while specific targets were identified for each indicator, the project failed to specify the target increase for the indicator on "women's participation in the project's decision making activities". This, however, did not deter the project from proactively engaging women in all project activities.

M&E Implementation and Utilization. An extensive baseline study was conducted at the start of the project, the results of which were used in improving the design of the M&E system. The baseline was further complemented by the project component data that were collected at the ARC level using the Data Capture Forms. The forms were submitted to the PPO for data encoding and consolidation with the Rural Infrastructure monitoring reports generated by the LGUs' Local Project Offices (LPOs).

The project also tracked the results of the major KPIs on an annual basis as follows: (a) KPIs on household income, crop yields and organizational maturity were drawn from the DAR's annual survey on ARC Level of Development Assessment (ALDA); (b) KPIs on household business assets and cropping intensity were generated from focused group discussions with ARC beneficiaries conducted by the PPOs and Municipal Agrarian Reform Officers; (c) KPIs on infrastructure units handed over to the ARCs, reduction in travel time, and increased access of ARCs to key support services and assistance were gathered from the in-house monitoring systems generated by the CPO and PPOs; and (d) the KPI on quality of infrastructure maintenance was generated from the FAPsO M&E Unit data. The project also developed a monitoring tool to generate data on benefits of completed and operational infrastructures. The PPOs collected the data through focused group discussions with the Barangay Implementing Teams and other ARC representatives. These were submitted to the CPO on a semestral basis.

Overall, the M&E system was well-designed and well-implemented. The quality and reliability of the data and information were satisfactory. The data gathered were used by the project staff and the DAR Management in reviewing the project's progress, as well as in improving the

strategy and focus of project interventions. The M&E database has also been transferred to the FAPsO M&E Unit so that ARC monitoring can continue beyond the project period.

2.4 Safeguard and Fiduciary Compliance

Safeguard. Three safeguard policies were triggered under the project, i.e., indigenous peoples (IPs), involuntary resettlement and environmental assessment. The project established the required frameworks which guided and ensured compliance with these policies. Specifically, all infrastructure subprojects were required to have the right-of-way negotiations addressed/negotiated and documented before any activity commenced. Subproject environmental management plans also formed part of the subprojects' plans and their implementation was regularly monitored by the project staff and the Bank. In addition, a Bank-administered trust fund (Japan Social Development Fund) helped the project further improve the mainstreaming of IPs in ARC development. (Key outputs of this trust fund have also been adopted by the National Commission on Indigenous Peoples and other agencies to operationalize the IP Rights Act.) The safeguards ratings were consistently at satisfactory level throughout the project life.

Fiduciary. Compliance with procurement guidelines and procedures was generally satisfactory and no misprocurement case was encountered. The financial management (FM) compliance performance, however, varied, given that many stakeholders/offices were involved and that transactions, although small, were likewise numerous. At the level of some LGUs/ARCs, adherence to the FM guidelines required significant technical assistance and monitoring, although rated overall as moderately satisfactory. Particularly in CDD type of activities, which involved many stakeholders with varying capacities, it was necessary to have more frequent and closer follow-up by the CPO, as well as by the Bank Task Team, to ensure complete documentation and timely submission of FM and audit related reports. Annual audit findings were generally unqualified, with a few qualified findings that had all been addressed and/or complied with by the relevant offices.

2.5 Post-Completion Operation/Next Phase

The project has robust phase-out and sustainability mechanisms. The partnerships between and among DAR field offices, ARCs, LGUs, government agencies and financing institutions that were established through the project are being continued. The capacity building of beneficiary-organizations, such as cooperatives, Irrigators' Associations, water users' associations, barangay/village road groups, etc., on the operation and maintenance (O&M) of project investments ensured satisfactory subproject O&M. At the end of the project, the 142 subprojects inspected by an inter-agency Inspectorate Team (out of the total 259 completed subprojects) were all given a rating of "Good".

Furthermore, the capacity building of the implementing agencies' staff and the allocation of budget support for continuing follow-on and monitoring of project activities contributed to the sustainability of investments. However, it is important that the budget is released on time so that follow-on activities can be implemented as scheduled.

Discussions are ongoing among DAR, the Department of Agriculture (DA) and the Bank regarding a new project that would build on the project experiences and lessons learned. The emerging thrusts of the new project are on rural agribusiness and market-oriented value chain development. The DA, DAR and the Department of Environment and Natural Resources (DENR) have also signed a joint Memorandum seeking to converge their respective initiatives in rural development. The new project would provide an opportunity to harmonize the rural development efforts of these three agencies for greater effectiveness and efficiency.

3. Assessment of Outcomes

Overall satisfactory implementation was achieved, with all the project key performance indicators being met, and in some cases, significantly exceeding the targets, by the end of the project. Beneficiaries' income, household assets and access to support services all increased. (Please refer to Section F. Results Framework Analysis for details.)

3.1 Relevance of Objectives, Design and Implementation

Relevance of Objectives. The project development objective of significantly raising the target beneficiaries' household income and their quality of life was and remained highly relevant and consistent with the current key development priorities of the Bank and the country. Both the Bank's Country Assistance Strategy (2010-2012/13) and the recently-approved Philippine Development Plan (2011-2016) are anchored to the framework of inclusive growth and poverty reduction.

Relevance of Design and Implementation. The project design and the corresponding implementation strategies were appropriate in achieving the objectives set. The use of: (a) participatory and CDD approaches; (b) mutually reinforcing packages of investments; (c) stakeholders' ownership and accountability for the investments' operations and maintenance; (d) focus on sustainability mechanisms at various levels (DAR, NIA, LGUs and ARCs); and (e) effective implementation arrangements and M&E, enabled the project to accomplish its expected outputs and outcomes.

3.2 Achievement of Project Development Objectives

Increase in Income. The project had fully achieved its first objective of raising household incomes. The increase in the average real net household income of 21%[10] (against the target of 20%) three years after joining the project, and 41% at the end of the project, can be attributed at least in part to project investments. About 74% of the incremental income came from farm/agriculture-related activities which was generated from: (a) agriculture and enterprise technology assistance which directly contributed to increase in yields, crop diversification and additional sources of household income; (b) access to agricultural and micro-finance services amounting to PhP104.07 million which the project had facilitated for ARC cooperatives, farmers and micro-entrepreneurs to establish and/or expand their productive activities; (c) rehabilitation

[10] Based on a difference of differences analysis, the incremental average income for project ARCs, three years after joining the project, has increased by 13.9%, compared to the control ARCs ("without" project ARCs). This further increased in 2010 to 16.8%.

and/construction of 35 irrigation facilities which improved water availability for production and resulted in increased utilization of agricultural land and cropping intensity in 5,358 hectares; (d) investment in 15 post harvest facilities that addressed the need for crop drying and storage areas, thus helping decrease spoilage and maintain quality of produce; and (e) opening and/or rehabilitation of 198 roads and bridges (covering a total of about 1,084 kilometers) which improved access between production areas and local markets, and reduced travel time and transportation cost.

Improved Quality of Life. The second objective of enhancing the quality of life of the people in the target ARCs by improving their productive assets, rural infrastructure and access to key support services had also been achieved. As this is directly related to the first objective, the various project investments mentioned above also triggered improvements in the overall quality of life as follows: (a) ARCs' access to health, educational and technical support and services had improved as a result of improvement in the road network supported under the project. Over 2,400 services (284% of the original target) have been accessed by the ARCs from development partners and services providers, mostly on medical, health and agricultural technical services; (b) organizational development and capacity building activities empowered community organizations to implement and/or expand their livelihood and social welfare activities (2,030 subprojects or 164% of the target) for their members and the communities in general; and (c) technical and financial assistance interventions made possible the establishment of 8,905 (194%) and 723 (188%) household and cooperative level enterprises, respectively, which either became the main sources of livelihood and/or supplemented the beneficiaries' income source. These helped in building the beneficiaries' resilience to shocks and enabled further investments. The community facilities such as multi-purpose centers and water systems also addressed the need for potable water and post-harvest services. Furthermore, activities that proactively involved women and IPs have ensured that the project interventions were highly relevant to the key priorities of these marginalized groups, and helped improve their quality of life.

3.3 Efficiency

The economic efficiency of the project was satisfactory. The higher level of investment costs due primarily to exchange rate changes (please refer below) was more than counterbalanced by higher coverage in terms of both ARCs and number of beneficiaries, hence, creating a larger base for project benefits.

Cost of Investments. The overall costs were 12% higher than initially projected in peso (PhP) terms due to implementation delays; and 24% higher in dollar (USD) terms as a result of the dollar weakening against the PhP during the project period. Nevertheless, when adjustments were made for the timing of investments, the real unit investment (per hectare) in irrigation was in line with PAD estimates. For roads, the real unit (per kilometer) investment costs were higher because the roads funded under the project were part of the rural road network, rather than simply village access roads.

Cost per Beneficiary-Household. The project's total cost was estimated to be about USD1,070 per household for the target 70,000 households, at appraisal. Given expansion in project coverage, the actual cost per household significantly decreased at USD610 for the 154,500

households covered. As such, average project cost per household was significantly lower than initially planned. At the household level, benefits from the project were substantial as elaborated below.

Benefits. The estimated benefits for the infrastructure components were higher than had been assumed in the PAD due to increased benefits per unit of infrastructure. Traffic volumes and corresponding benefits were higher for roads, while the expected real long-run rice (and other commodity) prices, in the case of irrigation, were projected at higher real levels in 2011 than they had been in 2002. In these regard, the resultant recalculated EIRR for the project, based on the weighted average of different investments was 29%, compared with 22% at appraisal.

Real incomes of project participants were found by DAR's monitoring data to have increased by an average of 41% in real terms by 2010. This increase was compared with the results from a control group of 31 ARCs which were not covered by foreign-assisted projects (i.e., "without" project ARCs). Using data collected in the same way for the same period and using the same parameters, the increase in the control group's real income was only 21%. The difference between the average household incomes of the two groups can be considered as the average benefit "attributable" to the project. Furthermore, multiplying the increase in income by the number of households, and converting to economic terms as well as comparing the resultant project incremental benefits to actual project costs led to an EIRR of 67% and an economic benefit cost ratio of 3.2 (using a 12% real discount rate). This suggests that the estimate of the weighted average EIRR at 29% is quite conservative.

3.4 Justification of Overall Outcome Rating

Rating: Satisfactory

The overall outcome rating is satisfactory given that the: (a) objectives, design and implementation of the project were and remained relevant; (b) project development objective was achieved; and (c) economic efficiency was satisfactory.

3.5 Overarching Themes, Other Outcomes and Impacts

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

Poverty in the country is predominant in rural areas (70%) where most of the ARCs in the country are located. The increase in real net household income in the participating ARCs had been substantial (21% and 41%) which contributed to alleviating poverty. The project also generated positive residual effects on poverty reduction within the vicinity of the ARCs through: (a) improved access for interior villages which also use the ARCs' roads and bridges; (b) increased employment opportunities from the creation of new and expansion of existing farm and non-farm enterprises; and (c) irrigation of farms outside of the ARCs but serviced by project-funded irrigation subprojects.

The project's activities on gender mainstreaming facilitated involvement of women in decision making and implementation of both project and non-project funded activities. Women-membership in community organizations and cooperatives more than doubled (112% increase) and woman-officers increased from 54% to 60% during the project period. (The government's

planning agency had consistently rated the project as satisfactory in its annual gender mainstreaming/responsiveness review.)

The integrated and synergistic approach of the project through its various components also resulted in strengthening of POs, particularly in improving their skills and capacity in implementing subproject activities and/or accessing resources for their priority needs. The 237 POs strengthened through training and other capacity building activities also demonstrated that investment in social capital was critical for ensuring the sustainability of project investments.

(b) **Institutional Change/Strengthening**

The project contributed to improved capacity within national and provincial DAR offices and 119 LGUs. These institutions received training and professional development assistance. Many of the LGUs had no previous experience in managing externally-funded projects and thus, required training in the preparation of feasibility studies, contract management, procurement and financial management, among others. The DAR field personnel, on the other hand, were strengthened towards more efficient delivery of support services and facilitating linkages with other development partners. This also improved the capacity of DAR to provide support to local planning, project implementation and management as envisioned in Republic Act 9700. The improved capacity of both the DAR and the LGUs was reflected in the overall satisfactory implementation and performance of the project.

The project likewise supported some key provisions of the Indigenous Peoples Rights Act (IPRA), especially in ensuring the involvement and participation of Indigenous Peoples (IPs) in ARC development, simplification of the Free and Prior Informed Consent (FPIC) process, and the improvement and production of an Ancestral Domain Sustainable Development and Protection Plan (ADSDPP) manual/brochure, including the preparation of 25 ADSDPPs in IP communities within the project sites. NIA's fiduciary capacity and compliance with the Bank's procurement and financial management guidelines were also strengthened through the project.

(c) **Other Unintended Outcomes and Impacts**

There were additional benefits that were generated by the project. These benefits were also realized in ARCDP1, although in ARCDP2, more data were collected to substantiate the occurrence of such benefits. Road construction did not only contribute to improved access but also led to the cultivation of previously idle lands. Another benefit was the increase in land values, particularly those adjacent to new or improved infrastructure facilities such as roads. On average, land values rose from PhP268,000 per hectare before the project to PhP652,000 (or PhP479,000 per hectare in real terms) after the project[11]. The increase in land values raised in turn the value of the capital asset of the beneficiaries, which tend to spur local economic growth, as well. As earlier mentioned, a number of roads funded by the project were part of the rural road network connecting several ARC and non-ARC villages. Benefits from reduced travel time and wear and tear on vehicles are also being enjoyed by households in adjacent non-ARC villages.

[11] Based on data from 117 infrastructure subprojects.

3.6 Summary of Stakeholder Workshops

Field consultations were conducted as part of the ICR Mission to determine the perspective of each stakeholder group with respect to project implementation and performance. There were 344 participants representing diverse stakeholder groups drawn from a sample of large, medium and small provinces. The participants included representatives from farmers' cooperatives, Irrigators' Associations (IAs), POs, IP organizations, LGUs, national agencies, private sector and academe. Discussions focused on: (a) what each stakeholder group regarded as the project's major achievements, challenges and gaps; (b) the relevance, effectiveness and efficiency of project strategies and interventions; and (c) innovation, sustainability and partnership.

The broad consensus reached by the stakeholders included: (a) project design was very relevant and contributed towards income targets being reached or exceeded; (b) real net income increase was far higher than the computed 21% increase three years after joining the project (this was validated through comprehensive examples of increases in yields, cropping intensity and other indicators); (c) decentralized management by the province and communities was important for achieving targets, local ownership and accountability; (d) Bank procurement and financial management requirements were initially difficult to implement but that the eventual benefits in terms of efficient contracting, management and completion of subprojects made these efforts worthwhile; (e) despite changes in local political leadership, the LGUs continued their support for project investments; and (f) DAR and the LGUs have become active partners, with each acknowledging the importance of each other's role. (Please see details in Annex 5.)

4. Assessment of Risk to Development Outcome

Rating: Moderate

The risk to development outcome is assessed as moderate. Clear O&M arrangements were established for infrastructure subprojects which made up around 70% of the loan and considered a major investment contributing to the attainment of the PDO. At the level of the ARCs and LGUs, community-based O&M groups responsible for the proper use of the facilities were organized and trained, while yearly budgets have been allocated to ensure ready funds for O&M activities. To date, all infrastructure subprojects have met quality O&M as defined in the Project Operational Manual, including those damaged by successive typhoons, which have all been subsequently repaired.

The ARC organizations continue to grow and there is greater effort within these communities toward exploring better markets on an on-going basis. Project interventions had also increased the resilience of the targeted communities to respond to and recover from natural calamities as noted during field visits. These were due to greater access to credit, improved organizational capacity and stronger partnerships at the local level.

However, risks associated with natural calamities cannot be predicted, but will most likely increase particularly in typhoon-prone areas, as the effects of climate change intensify.

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry
Rating: Satisfactory

The Bank performance was rated satisfactory in the Quality at Entry Assessment by the Quality Assurance Group (QAG). The Bank Team was composed of both international/national staff and consultants who had been involved in ARCDP1 and other community driven development type of projects. As such, relevant experiences and lessons learned in these projects were considered in project design and preparation. The team also conducted a series of formal and informal consultation meetings with different stakeholders to gather and validate key design data and information. These contributed to the thorough appraisal of the different aspects of the project and helped the Borrower further improve the project's overall design, implementation arrangements and strategic relevance.

The Bank Team likewise ensured that fiduciary arrangements were adequate and that provision was made to address and comply with safeguard requirements. In special consideration of the IP Safeguards and gender concerns, the Bank Team required that separate consultations be done with IPs and women.

However, the change in the cost sharing scheme for infrastructure subprojects was not anticipated as the oversight agencies had barely started discussing the subject at the time that project appraisal was almost completed. Nevertheless, options for restructuring were identified and implemented during supervision. In addition, there was no specific target agreed on one particular indicator, i.e., increase in women's participation in the project's decision making activities. This, however, did not deter the project from proactively engaging women in all project activities.

(b) Quality of Supervision
Rating: Satisfactory

The Bank's performance during the implementation phase was satisfactory. Supervision was intensive, with review missions conducted at least twice a year and focused on assessing the project's progress towards achieving the PDO. All missions were composed of project component specialists, as well as safeguards and fiduciary specialists. As the majority of the Bank Team members were based in the country, follow-on meetings/short missions were conducted, especially at the time when the project was facing challenges. These helped address issues in a timely manner, including the cost sharing scheme, opening the project to new ARCs/LGUs, and the corresponding catch-up plan. Mission "writeshops" were also held wherein the Bank and the project team jointly analyzed and agreed on the strategic actions and steps to improve implementation.

Building on the lessons learned in ARCDP1, the Bank Team also paid closer attention to ensuring the establishment of M&E system at all levels early on in the project, including the

conduct of baseline survey. Review missions specifically focused on the progress in each component and assessed how they interacted to support the achievement of relevant output and outcome key performance indicators and PDO.

No Quality at Supervision Assessment was made by QAG during implementation.

(c) Overall Bank Performance
Rating: Satisfactory

The overall Bank performance is rated satisfactory as it played a proactive role in ensuring quality preparation, design and implementation of the project. This was performed by building on the Bank's global experiences and practices, as well as being sensitive to and taking into account national and local situations, opportunities and challenges.

5.2 Borrower Performance

(a) Government Performance
Rating: Moderately Satisfactory

The overall performance of the central and local government agencies was satisfactory, although MDFO was delayed in implementing several critical actions. The LGUs played a major role in implementation in line with the government's decentralization policy. They provided substantial funds and resources to the project which was more than three times the appraisal estimates (from USD6.56 million to USD20.5 million) to cover the needs of the ARCs, as well as the increase in the required equity sharing for infrastructure subprojects. The Land Bank of the Philippines (LBP) and the People's Credit and Finance Corporation (PCFC) also actively participated in the project and extended their services and financial assistance to the beneficiaries even if some of them were located outside their original priority areas. On the other hand, the NIA had been delayed in commencing detailed engineering and design activities during the initial phase. Nevertheless, its performance improved in the course of implementation, especially during the AF implementation phase where it exerted extra efforts to accelerate the completion of irrigation subprojects.

The MDFO's performance is rated moderately unsatisfactory. Project operations were adversely affected by delays in funds releases for infrastructure subprojects, the cost of which totaled to almost 70% of the loan. The Special Account was activated by MDFO only in February 2005 (or 20 months after loan effectiveness), thus delaying subproject activities. This was exacerbated by further delays in the processing of financial documents and claims. While there had been some improvements in fund releases, these were not consistently observed in the processing of payments.

The ICC's performance is rated moderately satisfactory. The ICC prioritized the review and approval of the project, thus paving the way for the quick and smooth transition between ARCDP1 and this project, and spared the project from losing momentum and the services of its competent staff. Priority attention was also accorded to the project in the processing of the Additional Financing (AF) loan. However, delays were encountered given that this was the first

AF loan for the country and that the government had to study first the new Bank facility. It should be noted though that in the processing of the AF, the government allowed a modified funds flow arrangement wherein DAR was given full responsibility for managing the AF loan and which ensured the timely release of funds to NIA. Nevertheless, the affordability and related issues on the cost sharing arrangement for infrastructure subprojects should have been addressed by the ICC as these have been a major challenge for the project, as well as for other foreign-assisted projects in the country.

(b) Implementing Agency Performance
Rating: Satisfactory

The performance of DAR, the main implementing agency, is rated satisfactory throughout the project period. A full complement of skilled and competent staff was made available to the project. The DAR Management also had taken a direct and proactive role in supporting project implementation. In many cases, DAR had independently taken action in the interest of effective project implementation, particularly in providing bridge financing whenever the project experienced cash flow problems. Specifically in 2006 and 2007, when the government operated on a re-enacted budget (i.e., no national budget was passed by the Congress, thus prompting the government to operate based on the preceding year's budget), DAR provided bridge financing to ensure that project operations were not disrupted. DAR again provided bridge financing when the project experienced significant delays in the processing of funds/claims by MFDO, as well as when the project encountered delays in securing a budget cover for the AF operations.

DAR's regular and project staff at both the central and field level had also been proactive in addressing the various needs of project partners and clients. Feedback gathered from the LGUs and communities indicated that the project did not only help them improve their communities; it also helped improve their skills in project development and implementation. In a number of cases, the skills and experiences gained by the LGUs in this project enabled them to qualify for assistance from other projects and/or facilitated access to other development opportunities.

(c) Overall Borrower Performance
Rating: Moderately Satisfactory

The overall performance of the government is rated moderately satisfactory. Although implementation delays were experienced due to the increase in the LGU cost sharing for infrastructure subprojects and the delays in funds releases, all the major target outputs and key performance indicators were achieved or significantly exceeded within the extended loan period. It is recognized that to a large extent, the satisfactory performance of the project can be attributed to the: (a) strong support provided by DAR particularly in proactively finding solutions to implementation problems; and (b) partner-LGUs' commitment to and ownership of project activities and investments.

6. Lessons Learned

The lessons related to the achievement of the project's development objectives, particularly on the sustainability of project interventions and contribution to the wider agricultural and rural development goals, are as follows:

(a) **Convergence of Stakeholders Support.** Project interventions were anchored on the Comprehensive ARC Development Plans which were prepared by the ARCs. As these plans contain all the priority needs of the ARCs, including those beyond the scope and limited resources of the project, the LGUs/ARCs encouraged and proactively sought participation of other development players. These coordinated support and complementation of resources proved effective in facilitating the critical and connected interventions that generated greater benefits and outcomes. ARCs with integrated and substantial support from a range of stakeholders also demonstrated that they were more organizationally able to generate economic and social benefits from a range of investments.

(b) **Cost Sharing Arrangements.** The cost sharing arrangements among project beneficiaries, LGUs and the project had maximized available resources, thus benefiting the greatest number of people. However, the new cost sharing scheme applied in this project was too high for most lower-income LGUs. Participation in the project became difficult for LGUs/ARCs that could not generate the required equity. The project countered this effect, to some extent, through higher investment in agriculture and livelihood enterprises, improved access to rural finance, and stronger focus on leveraging resources from other stakeholders to assist the ARCs. Nevertheless, the cost sharing arrangement should be regularly reviewed to assess its implications on the overall countryside development and poverty reduction initiatives.

(c) **Mechanisms for Sustainability.** Building on the experiences of ARCDP1 and other demand driven initiatives, the project introduced and consistently implemented the following measures to help increase the likelihood of sustainability and reduce the risk of project gains being lost, viz., (i) investing in capacity building and empowerment of community organizations, barangay (village) implementing teams (BITs) and LGU local project offices for them to take the lead in the execution and O&M of project activities and investments; (ii) provision of conditional grants which could be converted into an LGU loan if the O&M of completed subprojects if found unsatisfactory; (iii) establishment of linkage and partnership between the ARCs/LGUs and service providers (government agencies, non-government organizations, financing institutions, seed companies, academe, etc.); (iv) mainstreaming of post-project/follow-on activities into the DAR regular activities which are monitored through staff/personnel performance evaluation system; and (v) incorporation of the Comprehensive ARC Development Plans (CARCDPs) into the LGU Development Plans, with corresponding allocation of financial and technical support for the continuation of project activities, including O&M of infrastructure investments.

(d) **Integrated and Synergistic Interventions.** Development interventions, for these to be effective in improving the income and welfare of the intended client, should involve a holistic and integrated package of assistance. These include investments in capacity building

and skills development of target beneficiaries (social capital), technical and financial assistance for livelihood and income enhancement, and infrastructure development. The mix and level of these interventions should depend on the priority needs and capacity of the beneficiaries, including the availability of service institutions.

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

(a) Borrower/implementing agencies

None.

(b) Co-financiers

Not applicable.

(c) Other partners and stakeholders
(e.g., NGOs/private sector/civil society)

None.

Annex 1. Project Costs and Financing

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

Components	Appraisal Estimate (USD millions)[12]	Actual/Latest Estimate (USD millions)	Percentage of Appraisal[13]
Rural Infrastructure	61.08	69.50	113.8
Agri. Enterprise Development	8.22	10.70	130.2
Access to Financial Services	2.29	2.10	91.7
Community Development and Capacity Building	1.76	4.90	278.4
Field Implementation Support	2.92	5.90	134.7
Project Management	1.46		
Total Baseline Cost	77.73	93.10	119.8
Physical Contingencies	4.93	-	-
Price Contingencies	5.17	-	-
Total Project Costs	87.83	93.10	106.0
Front-end fee PPF	0.00	-	-
Front-end fee IBRD[14]	0.10	0.53	525.0
Total Financing Required	87.93	93.63	106.5

(b) Financing

Source of Funds	Type of Co-financing	Appraisal Estimate[15] (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
National Government		16.93	10.5	62.0
Local Government Units		6.56	20.5	312.5
Participating Financial Institutions		0.00	0.4	87.8
Agrarian Reform Beneficiaries		4.44	3.5	
International Bank for Reconstruction and Development		60.00	58.7	97.8

[12] Includes estimated cost in the PAD (2002) plus estimated additional costs to be financed as shown in the documents supporting the Additional Financing loan (2009).
[13] As a percentage of PAD plus Additional Financing added together.
[14] At the time of the PAD (2002), no provision was made for a front end fee for the orginial loan. However, a front end fee of 1% of the loan (USD100,000) was provided in the Additional Financing loan as per the Project Paper (2009). Eventually, a front end fee of 1% of the original loan (USD500,000) was included in the Loan Agreement (2003), but the front end fee for the Additional Financing loan was reduced to 0.25% (USD25,000).
[15] Includes estimated financing in PAD plus Additional Financing.

Annex 2. Outputs by Component

The major components of the project were designed to interlink and contribute towards achieving the KPIs as shown in the project's conceptual framework (Figure 1). Project interventions and targets for each barangay (village) and ARC were defined on a demand-driven basis.

Figure 1: **Second Agrarian Reform Communities Development Project Conceptual Framework**

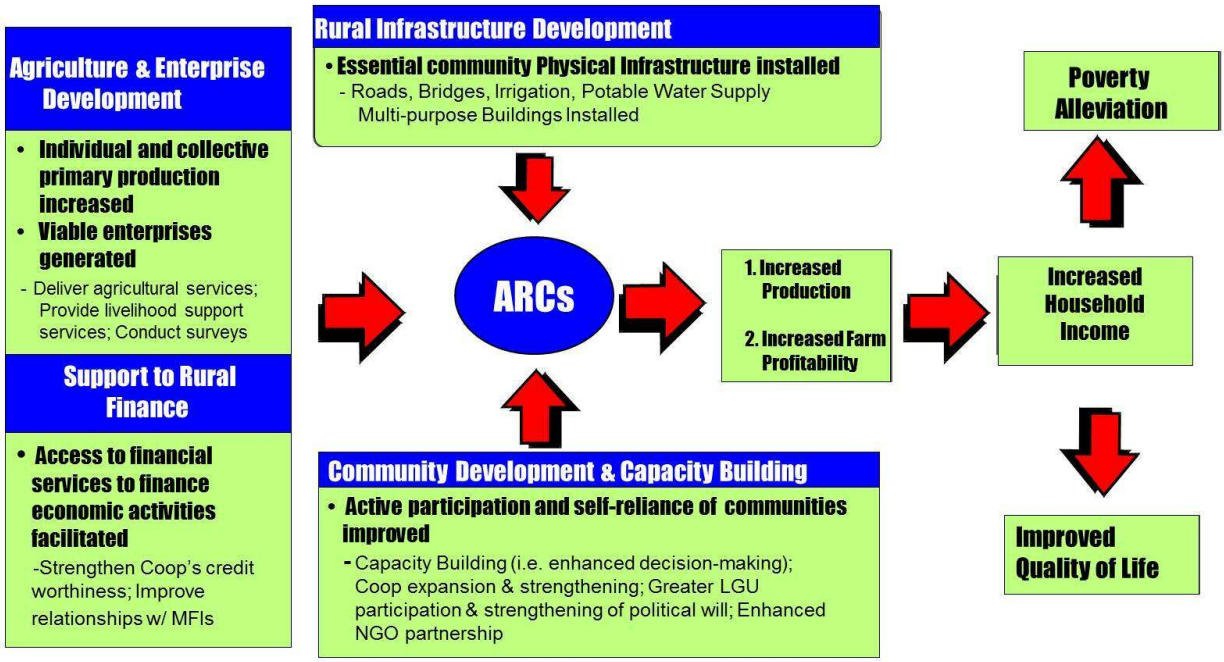


Figure 2 presents the project's accomplishments vis-à-vis targets at the component level as of December 31, 2010. It shows that all of the components attained over 100% of their targets. Several components substantially exceeded their targets with a mean accomplishment of output per target of 140%[16]. This was due to continuing activities supported by DAR, LGUs and the communities' own resources beyond the completion of component inputs but still achieving outputs within the project period.

[16] The accomplishment weighted by value of investment showed a performance of 115%. The government weighed the performance in a different way such that performance cannot exceed 100%. Using the government's approach, the project weighted accomplishment was 100%.

Department of Agrarian Reform

Second Agrarian Reform Communities Development Project (ARCDP2)

(ARCDP2 Loan No. 7152-PH including Additional Financing Loan No. 7689-PH)

Figure 2. Overall and Component Level Accomplishment

As of the 4th Quarter of 2010

Components	Indicators	Global Target* (June 2003 - Dec. 2010)	Global Accomplishment as of 4th Qtr 2010	Accomplishment (%)	Relative Weighted Accomp (based on investment)
1. CDCB Component				**206.75**	**15.86**
a. Community Development	No of Community-based projects implemented	1,519	2,030	133.64	3.08
b. Organizational Development	a. Amount increase in CBU	15,149,705	51,820,574	342.06	7.73
	b. increase in membership (no)	12,909	27,251	211.10	
	c. Amount increase in savings	8,954,766	40,701,156	454.52	
c. Capacity Building	a. No of training	4,117	4,467	108.50	2.88
	b. No of Pax of training	93,542	132,436	141.58	
d. Advocacy and Networking	No. of services and assistance accessed	848	2,405	283.61	2.18
2. RI Component				**100.54**	**72.05**
a. FS/DE preparation	has	6,000 **	6,008	100.13	10.76
b. Rural Infrastructure					
1. roads		1,084 **	1,084	100.00	33.39
1.1 construction	km	445 **	445	100.00	
1.2 rehabilitation	km	639 **	639	100.00	
2. bridges	lm	396 **	396	100.00	3.61
c. Irrigation					
1. CIP/CIS	has	4,993 **	4,993	100.00	12.64
2. SWIP	has	310 **	365	117.74	2.48
d. Community Infrastructure					
1. PWS	HHs served	3,357 **	3,357	100.00	8.42
2. Multi-Purpose Centers	units	15 **	15	100.00	0.38
3. Solar Driers	units	15 **	15	100.00	0.36
3. AED Component				**172.61**	**14.43**
a. Enterprise Development & Mgmt	No of enterprises established (household)	4,583	8,905	194.31	4.06
b. Technology Promo, Transfer & Commercialization	No. of Adoptors on improved technologies	47,245	70,849	149.96	3.13
c. Market Development & Promotion	No. of contract growing/joint venture agreements forged	334	801	239.82	5.01
d. Subdivision of Collective CLOA	Hectares subdivided	4,460	4,744	106.37	2.22
Support to Rural Finance				**117.74**	**5.10**
a. Assistance to ARC Coops	No of coops accessing credit	75	100	133.33	2.88
b. Assistance to Microfinance institutions	no of active clients served	38,232	39,079	102.22	2.22
4. Project Management				**100.00**	**7.98**
a. Personnel Hired/supported	number	180	180	100.00	3.19
b. Estab't/maintenance of project offices	no of offices	18	18	100.00	2.39
c. Procurement of vehicle/equipment	%	100%	100%	100.00	1.60
d. others		100	100	100.00	0.80
TOTAL				**139.53%**	**115.41%**

* Targets were increased due to additional ARCs covered by the project in 2006.

** Based on subprojects approved.

Component 1: Community Development and Capacity-Building. Overall accomplishment was 207%. This component had four major sub-components: (a) community development; (b) organizational development; (c) capacity-building; and (d) advocacy and networking. Outputs included increases in community-based projects, capital build-up (CBU), membership in People's Organizations (POs), savings, training, and services accessed. By the end of the project, this component had achieved 207% of its measurable targets. In fact, quantitative targets for each of the aforementioned outputs had been reached or exceeded since the end of 2009, when funding for the component was fully absorbed.

Organizational strengthening laid down the institutional foundation for sustainable infrastructure use (Component 2) and enterprise development (Component 3). A major accomplishment of this component was to organize Infrastructure Operation and Maintenance Groups (IOMGs) in order to support the sustainable use of completed infrastructure subprojects. Out of 409 such groups, all are operational as of December 2010 except three IOMGs for irrigation subprojects that have been completed by the loan closing date. These remaining IOMGs are expected to be operational once the irrigation system starts its operations. The project also organized Barangay Implementing Teams (BITs) that enabled the beneficiaries to take responsibility for project implementation activities, and to anticipate measures supportive of post-project sustainability.

(a) **Community-Based Projects.** A total of 2,030 "self-help projects" had been completed, representing 134% of target. These included establishment and maintenance of community vegetable and tree nurseries; construction of toilet facilities, bus shelters, and other small facilities; and clearing of drainage canals.

(b) **Capital Build-Up (CBU).** Total cumulative CBU reached PhP51.82 million or 342% of target. This signifies the increasing institutional and financial capital base of the POs.

(c) **Membership in POs.** As of the end of 2010, PO membership had grown to 27,251 (211% of target). The membership increase demonstrated the greater involvement of community members in development activities.

(d) **Savings.** Total savings amounted to PhP40.701 million or 455% of target. The increase in savings was mainly achieved through establishing savings programs within co-operatives with well functioning financial intermediation services. The savings and CBU generated were used by the POs for their livelihood capitalization and social programs.

(e) **Training.** The project carried out 4,467 training activities (109% of target), such as PO strengthening and IOMG seminar-workshops. These were attended by 132,436 participants, representing 142% of target.

(f) **Services Accessed.** Advocacy and networking activities by the ARCs resulted in the ARCs being able to access a total of 2,405 new services (284% of target). Services included: (i) medical and health (32%); (ii) agriculture technical support (30%); (iii) enterprise development and livelihood assistance support (7%); (iv) financial assistance

(6%); (v) educational assistance (6%); and (vi) other services (19%). This demonstrated increasing ability of the ARCs to independently access support for ongoing development. It also showed how convergence of support at the local level contributes to overall accomplishments.

Component 2: Rural Infrastructure. The project completed 260 subprojects which corresponded to 101% of the component's global target. This component was the largest project investment and involved three major types of subprojects: (a) rural access; (b) irrigation; and (c) community infrastructure.

(a) **Rural Access Subprojects.** Around 75% of the infrastructure subprojects were on rural access. The project rehabilitated 124 farm-to-market roads and constructed 74 other roads. Rural access subprojects were consistently identified as top priority by the ARCs, and almost always immediately led to visible socio-economic improvements in local communities. The total of 198 road subprojects serving 99 ARCs spanned an aggregate of 1,083.95 kilometers, with a total cost of PhP2,226.58 million. In addition, 12 bridges, with a total length of 396.28 linear meters and costing PhP89.92 million, were constructed as part of 10 of the road subprojects.

(b) **Irrigation Subprojects.** A total of 35 subprojects located in 28 ARCs were covered by the project, with an aggregate service area of 5,358 hectares, and a budget of PhP735.61 million. Of these, 28 were communal irrigation projects/systems (CIP/CIS) implemented by the NIA, and the rest were small water impounding projects (SWIPs) and run-of-river systems implemented by the LGUs. The NIA-implemented subprojects were equally divided between new construction (CIP) and rehabilitation/expansion of existing facilities (CIS). Irrigation water delivery led to substantial improvements in cropping intensity.

(c) **Community Infrastructure Subprojects.** These included construction of 15 multi-purpose centers (MPCs) and 11 potable water supply systems serving at least 3,357 households. All but one of the 15 MPCs included a multi-purpose building with concrete solar dryer. The project achieved 100% of its community infrastructure target at a cost of PhP74.16 million.

Component 3: Agriculture and Enterprise Development. The four sub-components under this component were: (a) enterprise development and management; (b) technology promotion, transfer and commercialization; (c) market development and promotion; and (d) subdivision of collective Certificates of Land Ownership Awards (CLOAs). Together with improved infrastructure support (Component 2), organizational strengthening (Component 1) and access to credit (Component 4), this component enabled farmers to engage in productive market-based agri-based enterprises and thus improve their incomes. This component achieved 173% of its overall target.

(a) **Enterprise Development and Management.** The number of household level enterprises established under the project reached 8,905 or 194% of target. These included hog and goat raising, vegetable production, food pressing, sari-sari stores and welding shops. In addition, the project also supported 723 PO-based enterprises such as vermiculture,

agricultural input trading, meat shop, post-harvest processing and farm implement rental. These accounted for 188% of the target.

(b) **Technology Promotion, Transfer and Commercialization.** The project financed 4,617 training activities and cross visits with a total of 156,120 participants. These activities, combined with microfinance services (see Component 4 below), contributed to the wider and increased adoption of viable technologies among the project beneficiaries. The number of adoptors reached 70,849, which was 150% of the target. The main barrier to adoption was access to financing.

(c) **Market Development and Promotion.** The project facilitated a total of 801 contract growing and joint venture agreements between farmers and buyers, representing 240% of the target. These activities supported the PO based enterprises, out grower services and off-season vegetable production, among others.

(d) **Subdivision of Collective CLOAs.** A total of 4,744 hectares (106% of target) covered by 2,384 CLOAs was surveyed and subdivided into individual lots for 1,864 beneficiaries. The subdivision of land promoted on-farm investment and also provided a clearer process for access to formal finance.

Component 4: ARCs Access to Financial Services. Under this component, the project facilitated links between ARC cooperatives/organizations and microfinance institutions. The overall accomplishment was 118%. Under the innovative Micro Finance Solutions (MICROSOL) Project and Agri-Finance Solutions (AGRISOL) Project, ARCDP2 enabled 100 ARC cooperatives (133% of target) to access credit, thus benefiting 39,079 clients (102% of target). The Microfinance Innovations in Cooperatives (MICOOP) Program introduced in the latter stage of the project, based on the learning from AGRISOL and MICROSOL, demonstrated remarkable growth in terms of loans accessed for productive enterprises by the participating farmers' cooperatives. As a result, the cooperatives experienced substantial increases in their assets, savings and share capital.

Components 5 and 6: Field Implementation Support; and Project Management, Monitoring and Evaluation. These components achieved 100% of targets defined among others in terms of: (a) establishment and maintenance of project offices at the national and provincial levels; (b) hiring of suitable project management and technical personnel; and (c) procurement of vehicles and equipment. The Central Project Office achieved full completion of activities under the supervision of the DAR-FAPSO and in coordination with DAR Provincial Offices and NIA.

Annex 3. Economic Analysis

1. **Cost per ARC and Beneficiary Household.** At appraisal, the project had an estimated total cost of USD75 million and projected to cover 70,000 households within 80 ARCs. However, there was an adjustment in project coverage between appraisal (2002) and actual implementation. During implementation, the project cost increased to USD93.63 million and covered 154,500 households within 124 ARCs. Nevertheless, the cost per ARC and beneficiary household was reduced from USD938,000 to USD755,000 and from USD1,070 to USD610, respectively.

2. **LGU Contributions.** The original cost tables were based on LGUs' providing a total of USD6.56 million of funding, which was about 11% of the total cost of infrastructure. During implementation, there were changes in cost sharing arrangements - with LGUs being required to fund a greater portion of the cost of infrastructure from their own resources. Using the same definitions as applied at appraisal and based on project costs on capital investment (excluding cost of right-of-way and O&M commitment costs), the final estimated project costs and financing amounted to USD20.5 million, which is more than threefold increase in LGU contribution.

3. **Poverty Profile.** The increase in project geographical scope meant that the project was more thinly spread than initially envisaged and typically implemented in "wealthier LGUs" or LGUs that can afford the increased cost sharing requirement. As a result, the project had impacted on households with higher income than was envisaged at appraisal. Average household income of families entering the project was about PhP64,400 (in real 2002 peso terms), compared to an appraisal estimate of PhP45,000.

4. **Overall Project Costs.** The overall project costs at PhP4.4 billion (USD93.63 million) were higher than envisaged at appraisal, i.e., 12% and 24% in peso and dollar terms, respectively. The PhP increase largely resulted from a longer implementation period than planned, while the higher USD figure also reflected dollar devaluation against the PhP. In addition, the overall structure of actual project costs compared to those estimated at appraisal changed as actual investments for rural infrastructure were demand driven. The design assumption was that 45% would be for village access/rural roads, 36% for irrigation, 3% for farm roads, 6% for potable water and 10% for other social infrastructure. Ex-post, actual investment was dominated by rural roads (74%) and irrigation (24%) leaving investment of only 2% in other infrastructure, mainly potable water. No investments were made in farm roads/tracts. A significant tree crop planting activity had also been envisaged, but this was never implemented as a specific subproject.

Ex-Post Review of Completed Subprojects

5. The method of analysis used for EIRR analysis was reviewed during various implementation support missions and found to be thorough and acceptable. After making some adjustments to the methodology used, the estimated ex ante returns from a sample of 172 subprojects was reviewed. The review validated the levels of benefits compared to both the: (a)

initial assumptions made in the PAD models; and (b) estimates made at the time of subproject approval. These ex ante EIRRs (19.3%) for infrastructure were generally slightly lower than estimated at appraisal (19.7%), but were still above the 12%-15% cut off point used by the Government for different types of infrastructure projects. Below is the summary table of subproject analysis, including broad findings:

Summary Of Sub Project Analyses								
	Number of SPs	**HH Benefitting**	**Investment**	**B:C Ratio**	**NPV**	**EIRR**	**Adj EIRR 1/**	**EIRR PAD**
Road Construction	75	30,208	749,143	1.25	191,095	18.5%	15.1%	21%
Road Rehabilitation	55	18,745	917,971	1.25	221,933	18.2%	14.8%	21%
Irrigation	20	3,228	399,373	1.60	208,197	23.0%	18.8%	19%
Water Supply	10	3,392	31,938	1.21	7,332	20.9%	17.0%	22%
Multipurpose Centres	12	5,457	19,961	1.20	4,699	21.7%	17.7%	15%
Total	**172**	**61,030**	**2,118,386**	**1.35**	**633,256**	**19.3%**	**15.7%**	**19.7%**
Proportion of Project Management Costs 2/			*312,026*		312,026			
Situation after Adjusting for Infrastucture Support				**1.15**	**321,230**	**15.7%**		
1/ After adjustment for PCO engineering costs								
2/ Most of the support would take place in the first year of a sub project, or before, therefore the NPV of this is assumed to be equal to the cost.								

6. **Rural Roads.** Traffic volumes for both "with and without project" were substantially higher than in the PAD model. This was to be expected, because many of the roads chosen for upgrading were part of the rural road network (roads which connect a community to the existing system) rather than purely village access roads. The average road length of 5.5 km was similar to the 6 km PAD base model assumption, but the directly served population at 1,800 was well below the PAD model figure of 3,500. Ex post data on traffic volumes indicated a "without project" road usage of 51 car equivalents per day, compared with 33 that were assumed in the PAD. Similarly "with project" road usage was also higher than the PAD estimate at 191 car equivalents per day, compared to the PAD model estimate of 76. Unit vehicle operating cost (VOC) savings were also estimated by DPWH to be slightly higher in real terms than in CY 2002. On the negative side, real unit costs of roads, expressed in constant currency terms were about 13% higher than in the PAD model and there were substantial construction delays.

7. Overall, the estimated EIRR of the average road was 19%. This was based on savings in vehicle running costs and driver and passenger time savings. (The same approach as in the PAD.) If passenger time savings were excluded, the figure would fall to 15%. These ex post figures pretty well confirm the ex ante calculations, suggesting that the direct returns from rural road infrastructure have been adequate but not spectacular.

8. In addition to these benefits, other economic benefits resulting from improved roads included reduction in transport time from manual or bicycle haulage and savings in travel time for foot traffic. Data collected separately by the CPO as regards road subprojects also reconfirmed: (a) substantial land price increases in areas along the roads; and (b) large savings in travel time. The economic benefits associated with these two items were largely captured within the VOC savings.

9. **Irrigation**. Compared with the situation envisaged in the PAD, construction investments per hectare was higher, both for new construction (PhP159.400/ha) and rehabilitation (PhP101,700/ha) – the PAD estimated PhP100,000 and PhP70,000 respectively. However, considering that irrigation investments were made on average in 2008/2009 but the PAD figures were in 2002 prices, the real[17] increase was 11% for new irrigation and 1% for rehabilitation.

10. On the 12 irrigation schemes first completed, the base (without project) cropping intensity was higher than envisaged at appraisal (about 150%), but with some of it low yielding. Post project cropping on those schemes was over 200%. Overall, the increase in cropping intensity from irrigation was expected to be at least 50%. Taking account of the likely increased cropping intensity and updated rice prices (estimated based on WB projections), the base EIRR from irrigation using the same type of model as in the PAD was 28%, compared to 19% at appraisal.

11. **Other Activities.** As a result of the wider project coverage, the likely benefits from the components on community development/capacity building and agriculture/enterprise development, as well as other project activities which were designed to enhance project participants' access to external services, were expected to be higher than the PAD estimates. On the cost side, total project costs, excluding direct infrastructure investment, but including project management and LGU implementation support amounted to USD22.5 million. Applying the same assumptions used at appraisal (i.e., 2.5% per annum income increase over and above what might otherwise had been achieved for households within project supported ARCs) would give an estimated NPV from "other activities" of about PhP2.9 billion in 2002 currency terms (about USD65 million), compared with the USD20 million PAD estimate. The EIRR would be 79% compared with 29% in the PAD. However, considering the wider project coverage and therefore a thinner spread of benefits and subprojects, a lower base case estimate was used. With a 1.25% increase in household income resulting from the "soft investments" under the project, over a six year period (Years 4-9) and the gain "held" until CY 2017 (fifteen-year evaluation period), the EIRR for these "soft investments" would be 50%. If the gain were only held until CY 2013, the EIRR would still be 47%.

12. The cut off point for a 15% EIRR for the "soft" components would be an annual average household income increase of 0.35% per annum for six years (Years 4-9), whereas in the PAD, the cut off figure was 1.1%. Clearly it was difficult to know what level of household income gain to attribute to this element of the project. However, the fact that according to the ALDA surveys, the average household income gain three years after an ARC joined the project was a real 21% in total[18] (30% by CY 2009 and 41% by CY 2010), suggests that the 1.25% per annum assumption is very conservative.

Weighted Average EIRR for the Project

13. The table below compares estimates of the project EIRR at the time of the PAD and at ICR, taking into account the different investment levels. The estimated overall EIRR calculated by weighting individual EIRRs by investment, gives an overall figure of 29% compared to the

[17] Aggregate Philippine inflation, as measured by the CPI was 43.4%, between 2002 and the average of 2008 and 2009.
[18] The equivalent of more than 6% per annum for three years.

PAD estimate of 22%. Broadly therefore, the updated estimate of the project's EIRR is well above that originally estimated in the PAD.

Estimate of Project Base Costs and Weighted Economic Returns

		PAD Figures			ICR Figures				
		Proj Cost	Percent	Likely	Proj Cost	Percent	Likely		Notes
		US$ M	Cost	ERR	US$ M	Cost	ERR		
Rural Infrastructure									
	Village Access	22.8	32.3%	21%	50.1	53.8%	19%		
	Farm Roads	1.6	2.3%	22%	-				
	Irrigation	18.1	25.7%	19%	17.9	19.2%	28%		
	Potable Water	3.3	4.7%	22%	1.5	1.6%	15%		*Conservative assumption; no ex post analysis on potable water therefore 15% cut off used*
	Other Social Infrastructure	5.1	7.2%	15%					
Agri-Enterprise Development									
	Tree Crop Devt	4.6	6.5%	25%	10.7	11.5%			
	Other - Training etc.	5.0	7.1%	29%			50%	)	*Overall EIRR based on average hh real income growth. In PAD assumed to increase at 2.5% p.a. for 6 years (years 4-9), attributable to the activities supported by these project elements. In ICR, rate assumed halved to 1.25%.*
Land Titling		2.1	3.0%	29%				)	
Strengthening Coop. & Microfinance Institutions		2.4	3.4%	29%	2.1	2.3%	50%	)	
Institutional Dev. & Capacity Building		1.8	2.6%	29%	4.9	5.3%	50%	)	
CMARP and Policy Studies		0.3	0.4%	29%	5.9	6.3%		)	
LGU Implementation Support		2.4	3.4%	29%			50%	)	
Project Management		1.0	1.4%	29%				)	
Total BASELINE COSTS		70.5	100%		93.1	100%			
Averages Weighted by Investment				22%			29%		

Whole Project Approach

14. In the PAD, a further analysis was done to estimate what level of household benefits would be needed to achieve an acceptable EIRR, assuming no without-project growth. It was found that an average annual growth in real project household income of 4.6% per annum for 6 years from project Year 4, equated to an overall 15% rate of return. This implied that by Year 10, real household income would be 31% higher than at the start of the project. The PAD assumed household income in 2002 averaged PhP45,000 across the project area, thus for the project to show a 15% EIRR, and assuming zero real growth without project, household income in 2012 of PhP59,000 (in constant Peso terms), would be required.

15. Using the same methodology, but taking into account the actual average base incomes of PhP64,400 in real 2002 Peso terms (or PhP66,540 in net real 2003 Peso terms), the 154,500 direct beneficiary households and the actual project costs of PhP4.4 billion, household incomes would need to increase by only a real 1.07% per annum for six years on average for the project to show a 15% EIRR.

16. However, the assumption of no "without project" growth implied that all income increases were attributable to the project which is not realistic. One way of estimating attributable income growth is to compare income growth of project-supported ARCs with performance over the same time period of other ARCs which were not covered by foreign assisted projects (FAPs). Comparing in this way should help eliminate exogenous factors, such as weather or commodity prices which would affect both sets of data more or less equally.

17. Data collected from ALDA[19] reports and set out in the project's KPIs showed real average per capita income growth of 21% (three years after joining the project), which increased to 30% in CY 2009 and 41% in CY 2010. This was compared to the results for the same years from a control group of 31 non-FAPs ARCs as presented in the table below.

Difference of Differences Analysis (real 2003 PhP per hh)				
	Base Real Income	3 years after joining	2009	2010
ARCDP2				
Weighted average real income per hh	66,540	80,328	86,359	93,771
Increase in PhP		13,788	19,819	27,231
Percent Increase		20.7%	29.8%	40.9%
Control				
Weighted average real income per hh	74,689	79,158	84,584	90,149
Increase in PhP		4,468	9,895	15,460
Percent Increase		6.0%	13.2%	20.7%
Difference of Differences				
Change Absolute per hh		9,320	9,924	11,771
Percent Change compared to WoP		13.9%	14.6%	16.8%
Attributable Change as % of Base Income		14.7%	16.5%	20.2%
Amount of Attributable change (PhP)		9,807	11,004	13,458

18. An economic analysis was run, based on these differences. Within this, it was assumed that after three years, incremental average income from project ARCs would increase by 13.9% compared to the control (without project). Subsequently, the difference was assumed to have increased to 14.6% by CY 2009 and to 16.8% by CY 2010 over and above the "without project" scenario. From 2011 onwards, it is conservatively assumed that no further relative improvement would occur. In relation to real 2003 base income, these "attributable" improvements were 14.7%, 16.5% and 20.2% for three years after joining the project, CY 2009 and CY 2010, respectively.

19. On the cost side, all project costs were included and provision was made for continued maintenance of infrastructure beyond the project period. A simple assumption was made that all costs and benefits were subject to a standard economic conversion factor of 0.833 as in the PAD. Based on this, the EIRR of the project (evaluated over 15 years) is 67% and the benefit cost ratio (using a 12% opportunity cost of capital) is 3.32. The NPV in CY 2002, expressed in terms

[19] ARC Level of Development Assessment (ALDA) is DAR's data collection and performance measurement system.

of 2002 constant Pesos was PhP3.9 billion. The table below provides the base case results and sensitivity analysis on the benefits assumptions.

Sensitivity Analysis – Whole Project Assessment

Scenario	Real increase in income of Project ARBs by 2010		Resultant EIRR	NPV of Project in 2002 - const 2002 PhP M (OCC=12%)	Economic Benefit: Cost Ratio at (OCC=12%)
	Compared to entry (total)	Compared to entry (attributable)			
Base Case. Improvement in income compared to control accepted at face value through 2010. No Incremental Improvement beyond (over 15 years).	40.9%	20.2%	67%	3,903	3.2
Continued Benefits Improvement continues relative to WoP at 2% p.a. after 2010.	40.9%	20.2%	67%	4,131	3.3
Lower Levels of attributable Benefits.	40.9%	15%	48%	2,437	2.4
	40.9%	10%	29%	1,028	1.6
	40.9%	7%	15%	182	1.1

20. The project is not very sensitive to assumed changes in benefits beyond CY 2010. Making the assumption that attributable benefits would continue to increase at 2% per annum after that date rather than remaining constant would only have a marginal impact on EIRR or benefit cost ratio. Much more important would be any changes in the proportion of total income increase that is considered attributable to the project. Based on the difference of differences analysis between project ARCs and the control group, it had been estimated that of the 40.9% average real income uplift between joining the project and CY 2010, 20.25% or roughly half was attributable. But if the attributable benefits were only 10% or only a quarter of the total income uplift, then the EIRR would fall to 29% and the benefit cost ratio to 1.6. Consequently, the benefits attained through the project were found to be robust and likely to be sustained, assuming no major exogenous factors.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team Members

Names	Title	Unit	Responsibility/ Specialty
Preselyn Abella	Finance Officer	CTRDM	Financial Management
Dominic Reyes Aumentado	Senior Procurement Specialist	EAPPR	Procurement
Jonas Garcia Bautista	Consultant		Environmental and Social Safeguards
Fabrizio Bresciani	Rural Dev. Economist	EASPS	Economist
Peter J Mallari Carreon	Team Assistant	EACPF	Project Support
Aisha Lanette N. De Guzman	Financial Management Specialist	EAPFM	Financial Management
Salvador Jiao	Consultant		Rural Infrastructure Engineer
Victoria Florian S. Lazaro	Operations Officer	EASPS	Social Safeguards
Dorothy Lucks	Consultant		Agriculture & Enterprise Dev., Rural Finance, Community Dev., M&E
Andrew Garcia Mendoza	Program Assistant	INTOP	Project Support
Jose Tiburcio Nicolas	Operations Officer	EASSO - HIS	Social Safeguards
Maria Loreto Padua	Social Development Spec.	EASPS	Social Safeguards
Idah Z. Pswarayi-Riddihough	Sector Manager	AFTEN	Task Team Leader
Esperanza Sadiua	Program Assistant	IEGCS	Project Support
Noel Sta. Ines	Senior Procurement Specialist	EAPPR	Procurement
Ismael Tabije	Consultant		Rural Infrastructure Engineer
Josefo Tuyor	Senior Operations Officer	EASPS	Environmental Safeguards
Cesar Umali	Consultant		Monitoring and Evaluation
Paul Harrison	Consultant		Economist

(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		
FY01	37	165.47
FY02	35	210.19
FY03	16	57.61
FY04	1	1.34
FY05		0.00
FY06		1.25
FY07		0.01
FY08		0.00
Total	89	435.87
Supervision/ICR		
FY01		0.00
FY02		0.00
FY03	8	28.70
FY04	28	89.40
FY05	27	56.03
FY06	24	70.74
FY07	27	95.54
FY08	28	121.32
FY09	6	0.00
Total	148	461.73

Annex 5. Stakeholders' Workshop Report and Results

Field consultations were conducted as part of the ICR Mission to determine the perspective of each stakeholders' group with respect to project implementation and performance. There were 344 participants from diverse groups including cooperatives, IAs, POs, IP organizations, LGUs, national government, private sector and academe.

Discussions focused on: (a) what each stakeholders' group regarded as the project's major achievements and challenges/gaps; (b) relevance, effectiveness and efficiency of strategies and interventions; and (c) innovation, sustainability and partnership. The main results are presented below:

1. Relevance to Beneficiary Needs and Local Conditions. The project design contributed towards income targets being reached or exceeded.

2. Effectiveness in Achieving Outcomes. The management of the project, being decentralized in the hands of the province down to the communities, was important for achieving targets, local ownership and accountability.

a. ***Planning.*** The strategic and business plans enabled the ARC households to systematically and effectively prioritize and implement interventions based on available resources.

b. ***Rural Infrastructure.*** The construction/improvement of roads and irrigation was identified as among the project's "greatest successes" because of the immediate income and benefits derived from these.

c. ***AED "Roll-Over" Scheme.*** The starter kits which were provided to an initial group of training participants were recognized as an effective strategy to ensuring the adoption of training inputs. The recipients were required to pay these in-kind or in-cash and the repayments/proceeds were distributed to the next-in-line training participants (graduates) in a form of a loan, and the roll-over/cycle goes on. However, there was concern on the limited number of starter kits that were made available for each training, especially in courses where there were big numbers of participants.

d. ***Rural Finance.*** The MICOOP model had been very successful and had already expanded operations, even if started late in the project.

3. Efficiency in Maximizing Benefits from Project Resources. The implementing partners found that the Bank requirements for procurement and financial management were initially difficult to implement, but the eventual benefits to them in terms of efficient contracting, management and completion of subprojects made compliance worthwhile.

a. ***Financial Management.*** This can be further simplified based on lessons learned from the project and other similar projects.

b. ***Scale of Investments.*** Allocation of more resources for agriculture and enterprise development activities had been proven to have generated greater incomes and benefits. These have also partly compensated for the expected impact of infrastructure subprojects on incomes and livelihood opportunities (in view of the limited infrastructure investments as a result of LGU counterpart limitation).

c. ***Land Development.*** It is important for the farmers to be assisted in developing their lands to be irrigated to ensure maximization of investments, generation of income and contribution to food sufficiency.

4. Impact. Participants indicated that actual household income growth was far higher than the estimated 21% increase in income (three years after joining the project). For instance, ARBs engaged in corn farming reported that their incomes have approximately doubled.

5. Innovation. Beneficiaries recognized the project's innovative strategies and activities which have ensured project adaptability to changing and unique local needs and conditions.

a. ***Local Convergence.*** Important sustainability safeguards measures are being achieved through local convergence and partnership approach.

b. ***Climate Change Adaptation.*** Climate-resistant measures had already been adopted in the design of irrigation systems across provinces.

6. Sustainability. In majority of the LGUs, despite political changes, new officials had continued their support for project investments. This reflected the strong community ownership and relevance of the investments prompting the new officials to maintain the LGUs' priority attention to these investments.

a. ***Enforcement of Local Ordinances.*** There is a need for LGUs to continue the strict enforcement of ordinances necessary to maintain project-financed infrastructure.

b. ***Inspectorate Team.*** This mechanism for inspection of infrastructure was recognized to be an important strategy for following up on needed repair and maintenance activities by the concerned parties.

c. ***Continuing Training on the Operation and Maintenance (O&M) of Infrastructure Subprojects.*** Continuing education and training on the O&M roles and responsibilities was necessary in view of changes in the composition/membership of O&M groups (IOMGs and BITs).

7. Partnerships. As a result of the project, the DAR and the LGUs had become active partners with each acknowledging the important role that each other play.

a. ***Trigger for Inclusive Partnerships.*** The project was seen to have not only strengthened inter-agency and public-private partnerships but have also expanded the scope of

partnerships, as well as paved the way for other institutions to better serve the community.

b. ***Confidence-Building.*** The project served as platform to continually build mutual trust among stakeholders who may have been adversaries before.

Annex 6. Summary of Borrower's ICR

1. **Introduction.** The Second Agrarian Communities Development Project was launched in 2003 and was designed to build on the successes of and lessons learned from the first project (ARCDP1, 1997-2003). The project reflected the objectives of the Philippine Government's Comprehensive Agrarian Reform Program which aims to reduce inequity in land ownership and increase productivity and incomes in the rural areas by improving land tenure and providing integrated support services to farmers. Specifically, the project supported the DAR's key operating strategy for development of ARCs and sought to broaden the gains from ARCDP1 by covering more ARCs nationwide. ARCDP2 was consistent with the overarching objectives of the MTPDP 1999-2004 as well as the updated MTPDP 2005-2010.

2. **Project Objectives.** The project's development objective was to significantly raise household income and quality of life of people in selected ARCs by improving their productive assets, rural infrastructure and access to key support services.

3. **Project Scope and Beneficiaries.** The project originally targeted 80 ARCs involving about 70,000 farm households in 13 provinces. Subsequently, coverage was expanded to 124 ARCs located in 119 municipalities across 18 provinces. These ARCs had a total population of 751,984 with 154,507 households including 10,487 IP households. Most of the households were agrarian reform beneficiaries with average incomes below the poverty line.

4. **Project Components.** The project as designed had six components which were implemented in an integrated and synergistic manner that worked positively towards achievement of the desired project outcomes.

5. ***Community Development and Capacity Building*** (US$4.90 million, 5.26% of total cost)**.** The component aimed to: (a) increase active community participation and self-reliance in ARC planning processes and implementation of integrated community-identified priorities; (b) build the capabilities of ARC POs through community mobilization and planning activities; and (c) strengthen the capacity of DAR and LGUs to support appropriate development activities in the target ARCs.

6. ***Rural Infrastructure*** (US$69.05 million total, 74.65% of total cost). The component financed small-scale physical infrastructures that supported agri-enterprise activities in the ARCs, based on the community's assessment of its needs and priorities. It involved the construction and rehabilitation of rural access roads and bridges, communal irrigation, potable water supply, multi-purpose buildings and solar dryers. Subprojects supported took into account the willingness of LGUs to provide support including counterpart financing.

7. ***Agriculture and Enterprise Development*** (US$10.70 million total, 11.49% of total cost). The component aimed to increase agricultural and enterprise productivity in the ARCs and supported development of viable new and improved market opportunities. Activities were directed towards strengthening farm and non-farm production using existing resources, market opportunities and interests of the ARCs.

8. ***Access to Financial Services/Support to Rural Finance*** (US$2.10 million total, 2.26% of total cost)**.** The component focused on the provision of agri-finance services though ARC cooperatives and other conduits; and provision of microfinance services through partnership with the Land Bank of the Philippines, People's Credit and Finance Corporation, and various microfinance organizations.

9. The ***Implementation Support*** and ***Project Management, Monitoring and Evaluation*** components (US$5.90 million total, 6.34% of total project costs) covered the provision of technical assistance and services to partner LGUs, DAR-PPOs and ARCs; coordination of various project activities at the national and field levels; and financing of the overall management, monitoring and evaluation activities of the project.

10. The project components remained relevant and unchanged throughout the project life. The design of the project was flexible enough to adopt certain enhancements in the components' strategies and activities based on actual field conditions.

11. **Institutional and Implementation Arrangements.** The project was implemented under the full supervision and responsibility of the DAR as the project executing agency. The DAR's FAPsO, through the CPO, was responsible in overseeing the overall implementation of the project. The CPO exercised functional supervision of the 18 PPOs which were in turn responsible for the execution of the project at the field level. DAR entered into collaborative partnerships with other national government agencies, LGUs, non-government organizations (NGOs) and private sector organizations to implement the various components and activities of the project.

12. **Significant Changes.** These included the following: (a) adoption of a new NG-LGU cost-sharing scheme for the project which increased the LGUs' counterpart in the cost of rural infrastructure subprojects from 10%-30% under ARCDP1 to 50%-100% under ARCDP2; (b) the change in NG-LGU cost sharing scheme necessitated the expansion of project coverage from the original 80 ARCs to 124 ARCs and three extensions of the loan closing date; (c) project fund management was designed to be handled solely by the DAR but after loan effectiveness, fund administration for rural infrastructure subprojects was reverted to the MDFO; and (d) an Additional Financing loan of USD10.0 million was secured as a result of the shortfall in loan proceeds brought about by the appreciation of the Philippine Peso against the US Dollar starting from 2005.

13. **Project Achievements and Outcomes.** The project was successful in fully achieving its KPIs indicating that the project has contributed significantly in uplifting the lives of ARC households. Project investments have been sustained and supported further economic growth in the ARCs.

14. ***Increase in average real net household income, three years after ARCs joined the project.*** Based on the results of the ARC Level of Development Assessment (ALDA) survey conducted annually by DAR and tracked by the project, the average weighted real net household

income in the 124 ARCs (four batches)[20], has increased by 21% from an average baseline value of PhP66,540 (in real 2003 peso terms) to PhP80,328 three years after the ARCs joined the project. This is slightly higher than the KPI target of 20%. Average net household income increased by 41% by end of the project.

15. ***Increase in cropping intensity (in irrigated areas).*** Achievement was 198% as of December 2010, surpassing the KPI target of 140%. The 35 irrigation subprojects financed under the project have contributed to the increased cropping intensity in the ARCs.

16. ***Increase in average yields per hectare three years after joining***. Per ALDA data, average yields of major crops (irrigated rice, corn and coconut) in the ARCs three years after joining increased by 17%, exceeding the KPI target of 15%. This has further increased to 21% by the end of the project.

17. ***Increase in business assets per household three years after joining***. Achievement was 31% (PhP11,135) from the baseline average of PhP36,211, substantially surpassing the KPI target of 10%. The increase was 47% (PhP17,020) by December 2010. ARC households invested most of their business assets in permanent crops and trees, livestock and poultry, and pre- and post-harvest facilities.

18. ***Reduction in travel time.*** With the completed construction or improvement of 198 road subprojects, average travel time was reported to have reduced by 69% or from about 11 minutes to 3.36 minutes per kilometer.

19. ***Increased access of ARCs to key support services and assistance.*** ARCs accessed 2,405 (284% of the KPI target of 848) various types of services which were not directly supported or financed by the project.

20. ***Other major component outputs and outcomes.*** Component KPIs were also fully achieved by end of the project. Under the Capacity Building and Community Development Component, 75% of 237 POs assisted (100% of target) increased in their level of organizational maturity; women's participation in decision-making in project activities had increased; and 2,030 community-based subprojects were undertaken (164% of target). In ARCDP1, the Barangay (village) Implementing Team (BIT) played a pivotal role in mobilizing wider and more effective community participation in the project. Under ARCDP2, 498 BITs were organized and trained to operationalize the project's different components. The Infrastructure Committee of the BIT transformed into the Infrastructure Operation and Maintenance Group (IOMG) and was trained to operate and maintain subprojects turned over to the ARCs. A total of 409 IOMGs were organized and fully functional by end of the project.

21. Under the Rural Infrastructure Component, 260 subprojects with a total cost of PhP3.126 billion were completed and turned over to the ARCs by December 30, 2010. These included 198 roads covering an aggregate length of 1,084 kilometers and serving 99 ARCs; 12 concrete

[20] The ARCs' entry to the project was done in batches. ARCDP2 covered 45 ARCs during the first year (2003), 32 ARCs in 2004, 21 ARCs in 2005 and 26 ARCs in 2006. Most of the ARCs covered in 2005 and 2006 were either expansion ARCs or replacement to ARCs whose LGU withdrew participation from the project.

bridges with total length of 396 linear meters as component of 10 roads; 35 irrigation subprojects with a total service area of 5,358 hectares; 15 multi-purpose centers; and 11 potable water systems serving about 3,357 households. These subprojects comprised a total of 1,590 Infrastructure Units (IUs) or 106% of the KPI target of 1,500 IUs. All subprojects implemented by LGUs were provided with an annual budget for O&M. Completed subprojects were monitored on an annual basis by the DAR-FAPsO to ensure compliance by the LGUs and ARCs with O&M standards. Similar to ARCDP1, the project imposed the policy of conversion of the LGU grant into loan in case the LGU defaulted on its O&M obligation.

22. Under the Agriculture and Enterprise Development Component, the target KPI of 30% adoption rate was also achieved. About 54,624 or 45% of 120,598 training participants adopted project-introduced technologies three years after joining the project, which further increased to 50% (70,849 out of 142,426 training participants by end of the project). The provision of training with materials, (i.e., starter kits in the form of seeds/planting materials, animals) and promotion of roll-over procedures for project investments in crops, livestock, poultry and non-farm enterprises were extensively pursued.

23. Access of ARCs to financial services was facilitated through the Micro-Finance Solutions Program and the Agri-Finance Solutions Program through which 100 ARC cooperatives (133% of target) were able to access financing, and benefited 39,079 clients. In tandem with the PO-strengthening activities, 188 POs (104% of target) were capacitated to undertake savings activities. Capital build up funds of POs estimated at PhP30 million at baseline increased by 43% three years after joining the project and 173% by end of the project.

24. **Safeguards and Fiduciary Compliance.** The World Bank supervision missions have consistently rated the project's compliance to environment and social safeguards (on IPs, land acquisition and rehabilitation of project affected persons, and gender) as satisfactory. At the onset of implementation, the project adopted and operationalized development frameworks and procedural guidelines that helped project implementers comply with safeguards. The project's financial management activities have complied with the World Bank's fiduciary requirements although the project has met various challenges beyond its control since the start of implementation, including delays in funding releases.

25. **Key Factors Affecting Implementation and Outcomes**

26. ***Change in NG-LGU Cost Sharing.*** The project was prepared under a cost-sharing arrangement similar to ARCDP1. However, the GOP's adoption of the new NG-LGU cost-sharing policy for ARCDP2, after the project was negotiated and approved by the World Bank Board and despite the DAR's repeated requests for reconsideration, increased the equity share of participating LGUs to 50%-100% of the total cost of infrastructure subprojects (from 10%-30% under ARCDP1). With the higher equity requirement, LGUs limited the number of subprojects they could support from an average of 3-5 to only 1-2 subprojects per ARC. The reduced interest and absorptive capacity of LGUs adversely affected the physical and disbursement performance of the project's Rural Infrastructure Component. At mid-term, take-up of subproject grants was so small that the bulk of the loan allocated for subprojects was still unused. This led to expansion of project coverage and three extensions of the loan closing date.

27. ***Change in Fund Management Arrangement.*** Originally, the ICC and the Bank approved full project fund management to DAR. However, after loan effectiveness, fund management for infrastructure subprojects was reverted to MDFO, upon the request of DOF. Thus, project funds were channeled through two accounts: DOF-MDFO for the loan proceeds specifically for rural infrastructure and DAR for all other eligible expenses. Financial management performance of DAR had been consistently satisfactory but delays in release of funds by MDFO had significantly constrained timely completion of infrastructure subprojects.

28. The project likewise experienced substantial constraints in funds flow caused by: (a) the national government operating under a re-enacted budget in 2006 and 2007 which delayed the flow of government counterpart funds; and (b) exchange rate fluctuations which created a budget shortfall that particularly affected irrigation subprojects. Funding constraints were mitigated by DAR providing bridge-financing to the project and the approval of the Additional Financing. Another challenge faced by the project was adverse weather condition (e.g., typhoons and drought) which caused suspension of infrastructure works and damages to agricultural production in many ARCs.

29. Facilitating factors included: (a) use of community-driven and participatory approaches in all stages of project implementation, including project sustainability; (b) strong commitment and participation of ARCs, LGUs and other project stakeholders that helped increase ownership of project investments and gains; and (c) the project's strong tie-up and collaboration with service providers (such as other government agencies, NGOs, and the private business sector) facilitated the convergence and complementation of various support services accessed by the ARCs. The DAR has consistently provided strong commitment and support through: (a) close management and supervision of the project; (b) timely engagement of qualified and competent staff at the CPO and PPOs; (c) provision of adequate budget support including bridge-financing; and (d) sustained coordination with the project's oversight agencies and implementing partners.

30. **Lessons Learned.** These included: (a) the revised NG-LGU cost-sharing policy should have been pilot-tested prior to its formal adoption and institutionalization by concerned implementing agencies; (b) the establishment of a revolving bridge-fund as a stop-gap measure for cash-flow related issues is worthy of consideration in other projects where problems with MDFO processing continue to be a challenge; (c) regular and frequent consultations with project stakeholders resulted in timely resolution of project-related issues; and (d) adoption of strategies such as roll-over investment schemes, expanded role of the BIT and the innovative financial services programs maximized the spread of benefits to more ARC households.

31. **Sustainability.** The project had a robust phase-out and sustainability mechanism that drew on learnings from ARCDP1. Sustainability mechanisms included turn-over of infrastructure and O&M to the communities through the IOMGs and LGUs with regular inspections conducted by DAR and potential conversion of grant to loan if infrastructure is not maintained. Barangay (village) development plans were integrated in Municipal Development and Investment Plans to ensure continued budget support for ARCs' post-project sustainability activities after project phase out. The capacity-building activities for existing DAR and LGU staff have increased the likelihood that mainstreamed and follow-on activities would be supported.

Annex 7. List of Supporting Documents

1. The Govt. of the Philippines, "Comprehensive Agrarian Reform Law", June 1988.

2. The World Bank, "Country Assistance Strategy (1999-2002)", Report No. 19355-PH, May 11, 1999.

3. The World Bank, "Country Assistance Strategy (2003-2005)", Report No. 24042-PH, April 30, 2002.

4. The World Bank, "Country Assistance Strategy (2006-2008)", Report No. 32141-PH, May 17, 2005.

5. The World Bank, "Country Assistance Strategy (2010-2012)", Report No. 47916-PH, April 2009.

6. The World Bank, "Second Agrarian Reform Communities Development Project, Project Appraisal Document", Report No. 24020-PH, October 31, 2002.

7. Second Agrarian Reform Communities Development Project, Loan Agreement No.7152 PH, January 22, 2003.

8. Second Agrarian Reform Communities Development Project, Project Paper for the Proposed Additional Financing, Report No. 47536-PH, February 18, 2009.

9. Second Agrarian Reform Communities Development Project – Additional Financing Loan Agreement No. 7689-PH, May 12, 2009.

10. Second Agrarian Reform Communities Development Project - Central Project Office, "ARCDP Operations Manual", December 2003.

11. Second Agrarian Reform Communities Development Project - Central Project Office, "ARCDP Monitoring and Evaluation of the Maintenance of Completed and Turned-Over Infrastructure Subprojects", November 2003.

12. Second Agrarian Reform Communities Development Project - Provincial Project Offices, "Provincial Implementation Completion Reports by ARCDP Province", 2009.

13. Second Agrarian Reform Communities Development Project - Central Project Office, "ARCDP Progress Report for the World Bank ICR Mission", March 2011.

14. University of the Philippines Los Banos Foundation, Inc. (UPLBFI), "ARCDP2 Impact Assessment Study”, November 2009.

IBRD 33466R4

PHILIPPINES

- SELECTED CITIES
- PROVINCE CAPITALS
- REGION CAPITALS
- NATIONAL CAPITAL
- RIVERS
- MAIN ROADS
- RAILROADS
- PROVINCE BOUNDARIES
- REGION BOUNDARIES
- INTERNATIONAL BOUNDARIES

I Ilocos
1 Ilocos Norte
2 Ilocos Sur
3 La Union
4 Pangasinan

CAR Cordillera Admin. Reg.
5 Abra
6 Apayao
7 Benguet
8 Ifugao
9 Kalinga
10 Mountain Province

II Cagayan Valley
11 Batanes
12 Cagayan
13 Isabela
14 Nueva Vizcaya
15 Quirino

III Central Luzon
16 Aurora
17 Bataan
18 Bulacan
19 Nueva Ecija
20 Pampanga
21 Tarlac
22 Zambales

NCR National Capital Reg.

IV-A CALABARZON
23 Batangas
24 Cavite
25 Laguna
26 Quezon
27 Rizal

IV-B MIMAROPA
28 Marinduque
29 Mindoro Occidental
30 Mindoro Oriental
31 Palawan*
32 Romblon

V Bicol
33 Albay
34 Camarines Norte
35 Camarines Sur
36 Catanduanes
37 Masbate
38 Sorsogon

VI Western Visayas
39 Aklan
40 Antique
41 Capiz
42 Guimaras
43 Iloilo
44 Negros Occidental

VII Central Visayas
45 Bohol
46 Cebu
47 Negros Oriental
48 Siquijor

VIII Eastern Visayas
49 Biliran
50 Eastern Samar
51 Leyte
52 Northern Samar
53 Samar
54 Southern Leyte

IX Zamboanga Peninsula
55 Zamboanga del Norte
56 Zamboanga del Sur
57 Zamboanga Sibugay
--- Zamboanga City

X Northern Mindanao
58 Bukidnon
59 Camiguin
60 Lanao del Norte
61 Misamis Occidental
62 Misamis Oriental

XI Davao Reg.
63 Compostela Valley
64 Davao del Norte
65 Davao del Sur
66 Davao Oriental

XII SOCCSKSARGEN
67 North Cotabato
68 Sarangani
69 South Cotabato
70 Sultan Kudarat

XIII Caraga
71 Agusan del Norte
72 Agusan del Sur
73 Dinagat Islands
74 Surigao del Norte
75 Surigao del Sur

ARMM Autonomous Reg. in Muslim Mindanao
76 Basilan
77 Lanao del Sur
78 Maguindanao**
79 Sulu
80 Tawi-Tawi

** Shariff Aguak (Maganoy) and Sultan Kudarat serve as co-capitals of the province.

* Executive Order 429, May 23, 2005, provides for the transfer of Palawan province (#31) from Region IV to Region VI; Administrative Order 129 holds EO429 in abeyance until an implementation plan is approved by the President.

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