Document of
The World Bank

Report No: ICR00003038

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IBRD-74840)

ON A

LOAN

IN THE AMOUNT OF US$ 30.0 MILLION

TO THE

REPUBLIC OF COLOMBIA

FOR A

SECOND RURAL PRODUCTIVE PARTNERSHIPS PROJECT

December 14, 2015

Agriculture Global Practice
Mexico and Colombia Country Management Unit
Latin America and Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective December 31, 2014)

Currency Unit = Colombian Pesos (Co$)
Co$1.00 = US$0.0005
US$1.00 = Co$2,000.68

FISCAL YEAR
January 1 to December 31

ABBREVIATIONS AND ACRONYMS

AIS	Secure Agricultural Income Program *(Programa Agro Ingreso Seguro)*
CAR	Regional Agricultural Centers *(Centros Agrícolas Regionales)*
CIAT	International Center for Tropical Agriculture
CIN	National Inter-Sectoral Commission *(Comisión Intersectorial Nacional)*
CPF/CPS	Country Partnership Framework/ Country Partnership Strategy
DNP	National Planning Department
DP	Development Plan
EFA	Economic and Financial Analysis
ELSCA	Latin American and Caribbean Household Food Security Scale
EIA	Environmental Impact Assessment
EIRR	Economic Internal Rate of Return
EMP	Environmental Management Plan
FARC	Revolutionary Armed Forces of Colombia
FNPV	Financial Net Present Value
FIR	Financial Internal Rate of Return
GIZ	German Agency for International Cooperation
IBRD	International Bank of Reconstruction and Development
ICR	Implementation Completion Report
INCODER	Colombian Institute for Rural Development *(Instituto Colombiano para el Desarrollo Rural)*
IPM	Integrated Pest Management
IRR	Internal Rate of Return
ISR	Implementation Status Reports
M&E	Monitoring and Evaluation
MADR	Ministry of Agriculture and Rural Development *(Ministerio de Agricultura y de Desarrollo Rural)*
MTR	Mid-Term-Review
NDP	National Development Plan
NPV	Net Present Value

OGA	Local Management Organization (*Organización de Gestión Acompañante)*
OGR	Regional Management Organization *(Organización de Gestión Regional)*
OM	Operational Manual
PAAP	Productive Partnerships Project (*Proyecto Apoyo Alianzas Productivas*)
PAD	Project Appraisal Document
PCU	Project Coordination Unit
PDO	Project Development Objective
PO	Producer Organization
PPF	Project Preparation Facility
SA	Departmental Secretariats of Agriculture
SENA	National Service for Apprenticeship (*Servicio Nacional de Aprendizaje*)
SEPA	Procurement Plan Management System
SP	Social Plan

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COLOMBIA
Second Rural Productive Partnerships Project

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A. Basic Information			
Country:	Colombia	Project Name:	Second Rural Productive Partnerships Project
Project ID:	P104567	L/C/TF Number(s):	IBRD-74840
ICR Date:	12/11/2015	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	REPUBLIC OF COLOMBIA
Original Total Commitment:	USD 30.00M	Disbursed Amount:	USD 30.00M
Revised Amount:	USD 30.00M		
Environmental Category: B			
Implementing Agencies: Ministry of Agriculture and Rural Development			
Cofinanciers and Other External Partners:			

B. Key Dates				
Process	**Date**	**Process**	**Original Date**	**Revised / Actual Date(s)**
Concept Review:	01/29/2007	Effectiveness:	01/17/2008	01/17/2008
Appraisal:	05/07/2007	Restructuring(s):		01/17/2013 12/19/2014
Approval:	08/21/2007	Mid-term Review:	10/15/2010	11/29/2010
		Closing:	09/30/2013	06/30/2015

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 Unsatisfactory
Quality of Supervision:	Satisfactory	Implementing Agency/Agencies:	Moderately Satisfactory
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):	No	Quality at Entry (QEA):	None
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)		
Agro-industry, marketing, and trade	56	50
Central government administration	7	10
General agriculture, fishing and forestry sector	37	40
Theme Code (as % of total Bank financing)		
Rural markets	67	70
Rural policies and institutions	33	30

E. Bank Staff		
Positions	At ICR	At Approval
Vice President:	Jorge Familiar Calderon	Pamela Cox
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F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document)

To increase rural competitiveness and build up rural entrepreneurship in poor rural communities in a sustainable manner through demand-driven partnership schemes with the commercial private sector.

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

N/A

(a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Total sales volume of the producer organizations reaches a cumulative Colombian pesos (Co$) 350 billion in year 5			
Value (quantitative or Qualitative)	0	350		571.9
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target exceeded (163%). Sales volume can be expected to increase further in the near future, given that (i) a significant number of partnerships started after 2012, and (ii) many involve the production of perennial crops with longer production cycles.			
Indicator 2 :	75% of the participating producer organizations will have a manager			
Value (quantitative or Qualitative)	0	75%		83%
Date achieved	01/17/2008	09/30/2013		12/31/2014
Comments (incl. % achievement)	Target exceeded (111%). At project completion, 601 of the 725 producer organizations that were actively engaged in a partnership had an adequately performing manager (i.e. met the minimum 7 out of 10 performance criteria established by the project).			
Indicator 3 :	75% of participating producer organizations will maintain a system of accounts			
Value (quantitative or Qualitative)	0	75%		80%
Date achieved	01/17/2008	09/30/2013		12/31/2014
Comments (incl. % achievement)	Target exceeded (107%). 580 of the 725 producer organizations that were actively engaged in a partnership were maintaining a system of accounts. Similar to PDO Indicator 2, the system had to meet minimum performance criteria as verified by the OGR.			
Indicator 4 :	75% of alliances have cumulatively recuperated at least 70% of the competitive grant they were expected to return to the revolving fund as programmed in their annual operating plan			
Value (quantitative or Qualitative)	0	75%		50%
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target partly achieved (67%). 50% of producer organizations had returned 70% or more of the grant into the revolving fund. The lower-than projected recuperation rate is due to initial implementation delays and many partnerships producing perennial crops.			

Indicator 5 :	80% of the OGR have their contracts yearly renewed			
Value quantitative or Qualitative)	0	80%		88%
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target exceeded (110%). At project completion, 88% of the OGRs were having their contracts renewed annually. The high rate of contract renewals was maintained throughout the life of the project, reflecting the consistently satisfactory performance of OGRs			
Indicator 6 :	Local governments provide Co$22 billion of funding			
Value quantitative or Qualitative)	0	22.0		104.5
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target exceeded (475%). With Co$104.5 billion, the amount of funding provided by local governments far exceeded the amount called for in the project design. This demonstrates the PCU's effectiveness in leveraging contributions from local governments.			
Indicator 7 :	75% of participating producer organizations still formally selling to a commercial partner 24 months after project support termination			
Value quantitative or Qualitative)	0	75%		80%
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target exceeded (107%). Of the 725 partnerships that were operating at completion, 134 had been active for more than 24 months after project support had ended. Of those 134 partnerships, 107 (80%) were still formally selling to a commercial partner.			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Number of profiles received (which comply with eligibility criteria)			
Value (quantitative or Qualitative)	0	900		3,081
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target exceeded (342%). At completion, out of a total of 4,244 profiles received, 3,081 were judged to have complied with the eligibility criteria. Following a slow start, the number of profiles received increased rapidly (e.g. >1,000 proposals in 2014).			

Indicator 2 :	Number of profiles received by indigenous and afro-Colombians			
Value (quantitative or Qualitative)	0	45		522
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target exceeded (1116%). Of the 3,081 submitted profiles that complied with the eligibility criteria, 522 (17%) were submitted by indigenous people or people of Afro-Colombian descent. This high participation rate was not anticipated at preparation.			
Indicator 3 :	Months between pre-investment study and first disbursement			
Value (quantitative or Qualitative)	0	3		5.7
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target partly achieved. In retrospect, it is clear that the target was overly ambitious, given the rigorous preparation process and large volume of proposals. Although the PCU could have cut corners, to its credit it chose to comply with all steps.			
Indicator 4 :	Number of pre-investment studies			
Value (quantitative or Qualitative)	0	325		1,070
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target exceeded (329%). Of the 3,081 eligible profiles submitted, 1,070 (35%) advanced to the feasibility study stage. This proportion is as anticipated (36%) but the large number of feasibility studies results from the number of profiles submitted.			
Indicator 5 :	Number of training events for different actors			
Value (quantitative or Qualitative)	0	250		589
Date achieved	01/17/2008	09/30/2013		12/31/2014
Comments (incl. % achievement)	Target exceeded (235%). Nearly 600 training activities were carried out during project implementation. Training activities targeted not only producers, but also implementing organizations such as OGAs and OGRs.			
Indicator 6 :	Number of new partnerships in operation			
Value (quantitative or Qualitative)	0	300		725
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target exceeded (242%). At completion, 725 partnerships established under PAAP-II were actively participating in a partnership scheme. This higher than expected number was made possible by the significant increase in government co-financing since 2011.			

Indicator 7 :	Number of beneficiary families in new partnerships in operation			
Value (quantitative or Qualitative)	0	25,500		42,552
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target exceeded (167%). The project directly benefited two-thirds more families than anticipated. In addition, the M&E system shows that it indirectly benefited 11,057 families. These indirect benefits are confirmed by the impact evaluation (Annex 6).			
Indicator 8 :	Number of indigenous and afro-Colombians who are beneficiaries			
Value (quantitative or Qualitative)	0	1,275		9,252
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target exceeded (726%). This target was exceeded more than six-fold. The proportion of proposals by these groups was close to the projections, but because partnerships involved more beneficiaries their share was larger than anticipated (22% versus 5%).			
Indicator 9 :	Number of women who are head of households			
Value (quantitative or Qualitative)	0	2,550		9,922
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target exceeded (389%). With 9,922 households, the number of female-headed households benefiting from the project was nearly four times higher than anticipated (23% of all beneficiaries, compared to the projected 10%).			
Indicator 10 :	Number and percentage of EMP satisfactorily implemented (cumulative)			
Value (quantitative or Qualitative)	0	83%		88%
Date achieved	01/17/2008	09/30/2013		12/31/2014
Comments (incl. % achievement)	Target exceeded (106%). 88% of partnerships had implemented their EMP in a satisfactory manner, exceeding the target value of 83%. Compliance with environmental safeguards policies was rated "Satisfactory" throughout the life of the project.			
Indicator 11 :	Number of social plans satisfactorily implemented			
Value (quantitative or Qualitative)	0	83%		86%
Date achieved	01/17/2008	09/30/2013		12/31/2014
Comments (incl. % achievement)	Target fully achieved (103%). 86% of partnerships had implemented their SP in a satisfactory manner. Compliance with social safeguards policies was rated "Satisfactory" throughout the life of the project.			

Indicator 12 :	Monitoring system properly operating			
Value (quantitative or Qualitative)	No	Yes		Yes
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target fully achieved. A sophisticated M&E online platform was built to capture not only overall project results, but also allowed monitoring of outputs and outcomes of individual partnerships at centralized and decentralized levels.			
Indicator 13 :	Timely and unqualified audits			
Value (quantitative or Qualitative)		Yes		No
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target partly achieved. In the early years of implementation, audits were timely and unqualified. Compliance deteriorated in 2012 following a change in government auditing procedures and the 2012-2015 audits were submitted late, requiring waivers.			
Indicator 14 :	Compliance with the operational manual			
Value (quantitative or Qualitative)		Yes		Yes
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target fully achieved. Throughout the life of the project, the PCU implemented the project in compliance with the operational manual.			
Indicator 15 :	Timely preparation of progress reports			
Value (quantitative or Qualitative)		Yes		Yes
Date achieved	01/17/2008	09/30/2013		06/30/2015
Comments (incl. % achievement)	Target fully achieved. Throughout the life of the project, progress reports were submitted on time and to the satisfaction of the World Bank.			

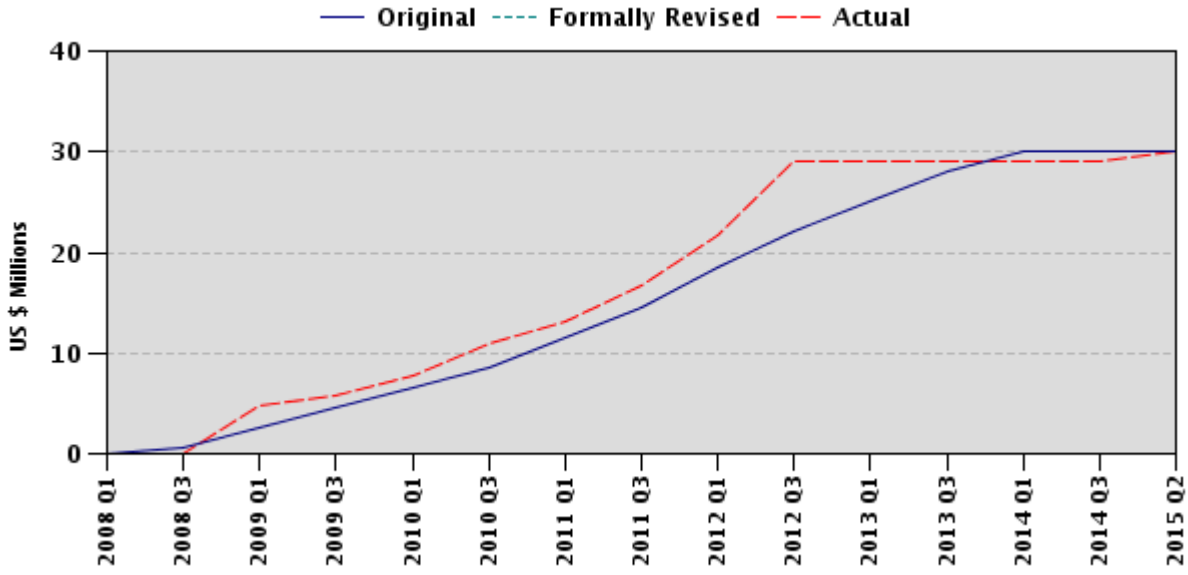
G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	10/01/2007	Satisfactory	Satisfactory	0.00
2	04/11/2008	Satisfactory	Satisfactory	3.00
3	09/26/2008	Satisfactory	Satisfactory	4.15
4	04/13/2009	Satisfactory	Satisfactory	5.84
5	10/27/2009	Moderately Satisfactory	Satisfactory	7.76
6	05/08/2010	Moderately Unsatisfactory	Moderately Unsatisfactory	11.76
7	05/27/2010	Moderately Unsatisfactory	Moderately Unsatisfactory	11.76
8	01/08/2011	Moderately Satisfactory	Moderately Satisfactory	16.78
9	08/13/2011	Moderately Satisfactory	Satisfactory	21.78
10	03/28/2012	Satisfactory	Satisfactory	29.10
11	09/22/2012	Satisfactory	Satisfactory	29.10
12	04/24/2013	Satisfactory	Satisfactory	29.10
13	12/13/2013	Satisfactory	Satisfactory	29.10
14	01/26/2014	Satisfactory	Satisfactory	29.10
15	08/20/2014	Satisfactory	Satisfactory	29.10
16	02/11/2015	Satisfactory	Satisfactory	30.00
17	07/22/2015	Satisfactory	Satisfactory	30.00

H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		DO	IP		
01/17/2013	N	S	S	29.10	CD-approved. Level Two Restructuring: (i) closing date extension by 15 months to allow for adequate supervision of the subprojects approved during 2012 until the end of their implementation period and (ii) reallocation of loan proceeds of US$2.0 million to cover the additional PCU supervision costs over the longer implementation period.
12/19/2014	N	S	S	30.00	CD-approved. Level Two Restructuring for closing date extension by six months to June 30, 2015 to allow for (i) the preparation of the final impact evaluation, (ii) the submission of audit reports, and (iii) the necessary arrangements to transition PAAP program to MADR.

I. Disbursement Profile



1. Project Context, Development Objectives and Design

1.1. Context at Appraisal

1. **Country and Sector Background.** Poverty in Colombia has long been disproportionately rural and closely linked to agriculture. In 2007 when the Second Rural Productive Partnerships Project (PAAP-II) was appraised, the rural poverty rate stood at 68%, and most of the 8 million rural poor were engaged in small-scale agriculture. The sector was characterized by slow growth, low productivity, a weak human capital base, and a high level of informality. Lacking access to improved technologies and modern inputs, many producers were uncompetitive, and most remained effectively cut off from markets. The agricultural policies prevailing in the country at the time made extensive use of subsidies, which benefited mainly commercial producers while at the same time undermining their ability to compete in export markets (World Bank 2003). The effects of these policies were particularly unfortunate because Colombia was in the process of entering into a free trade agreement with the USA and other countries, which increased the pressure to become more competitive.

2. **Government Sector Strategy.** Colombia's 2006-10 Development Plan (DP) formulated by the National Planning Department (DNP) included two objectives of direct relevance to the agricultural sector: (i) increasing the participation of the agricultural sector in international markets and expanding internal markets, and (ii) increasing rural income through the promotion of agriculture entrepreneurial activities, agribusinesses, rural tourism, and microfinance. In pursuit of these objectives, the DP set out three main initiatives: (i) stabilizing the incomes of producers, for example through the Agro Ingreso Seguro (AIS) Program; (ii) strengthening health and food safety standards, for example through the Sanitary and Phyto-sanitary Systems Program; and (iii) raising the incomes of the rural poor, for example through the Rural Productive Partnerships Project.[1] While the First Rural Productive Partnerships Project (PAAP-I) was a pilot designed to link smallholder producers with commercial partners, under the DP the Second Rural Productive Partnerships Project (PAAP-II) was strategically aligned with the objectives of the AIS Program, which sought to generate income improvements and strengthen competitiveness of rural producers in response to the challenges of globalization and the country's trade opening. Poverty alleviation remained a concern, however, and the DP included a separate equity pillar which emphasized the need to improve income generation capacity among the rural poor by increasing agricultural productivity, promoting rural entrepreneurship, and supporting agribusinesses.

3. **Rationale for World Bank assistance.** At appraisal, the World Bank had long been engaged in supporting rural development efforts in Colombia. Over the course of the previous two decades, it had financed several decentralized rural development projects, as well as a considerable amount of analytical work.[2] From 2002 until early 2008, it supported the First

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[1] To avoid confusion, the Rural Productive Partnerships Project is referred to in this Implementation Completion Report as the First Rural Productive Partnerships Project (PAAP-I, P041642).

[2] Earlier World Bank-financed operations included the Agriculture Technology Development Project, the Peace and Development APL I, the *Magdalena Medio* Regional Development I and II, and the *Sierra Nevada* Sustainable Development Project. In addition to supporting lending operations, the World Bank had conducted

Productive Partnerships Support Project, which used an innovative approach to link smallholder producer organizations with the private commercial sector. The effectiveness of the approach had been demonstrated by the spreading of an entrepreneurial culture among rural producers, strengthening of local institutional capacity, and the generation of increased income and employment in rural communities. In September 2006, the Government of Colombia asked the World Bank to finance a follow-up operation, citing the positive results of the first phase and referring to the Bank's global experience in implementing projects to enhance rural competitiveness.

1.2. Original Project Development Objectives (PDO) and Key Indicators

4. The Project Development Objective (PDO) is to increase rural competitiveness and build up rural entrepreneurship in poor rural communities in a sustainable manner through demand-driven partnerships with the commercial private sector.

5. The Key Indicators relate to three main sub-themes that are embedded in the Project Development Objective: (i) competitiveness, (ii) entrepreneurship, and (iii) sustainability.

Key Indicators for Competitiveness:

- The total sales volume by the producer organizations under all partnerships reaches at least a cumulative Colombian pesos (Co$) 350 billion in year 5

Key Indicators for Entrepreneurship:

- At least 75% of participating producer organizations have a manager
- At least 75% of participating producer organizations maintain a system of accounts
- At least 75% of participating producer organizations have cumulatively recuperated at least 70% of the competitive grant (i.e., the government financial incentive, or Incentivo Modular) they were expected to return to the revolving fund as programmed in their annual operating plans

Key Indicators for Sustainability:

- At least 80% of regional management organizations (OGR) have their contracts yearly renewed
- Local governments provide over a period of five years at least Co$22 billion as co-financing to the partnership investments
- At least 75% of the producer organizations remain linked to commercial partners 24 months after the end of project support to that partnership

1.3. Revised PDO and Key Indicators, and reasons/justification

6. The original PDO and Key Indicators as stated in the legal agreements did not change during the life of the Project.

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sector studies focusing on rural competitiveness (Report No. 27523), land policy (Report No. 27942), and rural finance (Report No. 27269).

1.4. Main Beneficiaries

7. The main beneficiaries of the Project were the 25,500 small and medium-sized rural producer households that were to be enrolled in productive partnerships. The Project was designed to operate nationwide, but the initial focus was on Departments characterized by a high concentration of rural poor and having the minimum amount of infrastructure needed for agricultural products to reach markets. Each year, the National Intersectoral Commission (CIN) specified which Departments and commodities were to be prioritized, consistent with the policy guidelines issued by the Ministry of Agriculture and Rural Development (MADR). From 2008 to 2012, the Project operated in 27 of Colombia's 32 Departments. Following a change in government priorities that was reflected in 2013 in a significant increase in co-financing, activities were expanded to cover all 32 Departments.[3]

8. The eligibility criteria for producer organizations wanting to submit partnership proposals were spelled out in the operational manual. To encourage participation of specific disadvantaged groups, it was decided that at least 2,550 producer households included in partnerships supported through the Project (10% of total planned beneficiaries) would be headed by women and that at least 1,275 producer households (5% of total planned beneficiaries) would be made up of indigenous people or people of Afro-Colombian descent. These targets were reflected in the project results framework. To promote the participation of indigenous people and people of Afro-Colombian descent, an Indigenous and Afro-Colombian Peoples Development Framework was prepared incorporating inclusion practices that had been used successfully during the first phase. The framework called for the PCU to carry out culturally adapted promotional activities and consultations involving the two groups, and it accorded preferential treatment during the selection process to partnership proposals submitted by these two groups.

1.5. Original Components

9. The Project had three components: (i) partnership promotion and preparation: (ii) partnership implementation; and (iii) management, monitoring and evaluation.

Component 1: Partnership promotion and preparation (US$12.32 million, of which IBRD US$3.41 million)

10. Component 1 financed information campaigns in partnership with regional and local governments, as well as national and regional business round tables that were designed to communicate and publicize the Project's annual competitive calls for partnership proposals to rural producer organizations and the private agri-business sector. It also covered the expenses related to the evaluation and ranking of partnership proposals, the preparation of pre-investment feasibility studies for pre-selected partnerships, the preparation of all legal documentation and agreements for the final selection, the approval process for the government financial incentive, and the establishment of a business and operational plan for each partnership.

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[3] From 2013 onwards, calls for proposals were issued in all 32 Departments, but no partnerships were financed in the Department of Vichada, because the proposals received from the Department of Vichada did not make it through the selection process.

Component 2: Partnership implementation (US$327.13 million, of which IBRD US$24.42 million)

11. Component 2 financed grants (known as the Incentivo Modular) that were awarded to beneficiary producer organizations for use in improving on-farm infrastructure; purchasing machinery and equipment; financing consumable inputs such as seed, fertilizer, and veterinary supplies; or paying for hired labor. Component 2 also paid for technical advisory services, marketing studies, and training activities designed to increase the productivity and entrepreneurial capacity of the beneficiary producer organizations (these were usually carried out by local non-governmental organizations, private consulting firms, universiti4es, and research institutions). Finally, Component 2 supported training and capacity building activities that benefited intermediaries, such as the Regional Management Organizations (OGR) and Local Management Organizations (OGA).

12. The Incentivo Modular could not exceed 40% of the total partnership investment cost, and it was initially capped at Co$4 million per beneficiary producer household. In 2012, under Decree No. 321/02, this cap was increased to Co$5 million, to offset the loss in purchasing power that had occurred due to inflation. The grant amount could be increased to a maximum of Co$6 million per beneficiary producer household during the course of subproject implementation if the partnership could demonstrate that it had mobilized an additional Co$2 million per household in commercial credit.[4]

13. Based on the positive experience of the first phase, the Incentivo Modular was administered under the supervision of a Trust Company and was paid out in three tranches to individual trust accounts controlled by each beneficiary producer organization. The operational manual specified that the grant disbursements were conditioned on the funds being used in accordance with the partnership business plan and under the supervision of the Trust Company and MADR. Also based on the experience of the first phase, a portion of the Incentivo Modular was supposed to be paid into a revolving fund managed by the producer organization, as programmed in the partnership's annual operating plan.

14. In summary, the typical financing package for a productive partnership financed under Component 2 was composed of: (i) the Incentivo Modular; (ii) the contributions of the beneficiary producer households (e.g., labor, land, and materials); (iii) the contributions of the commercial partner (e.g., technical assistance, packaging materials, seeds, and fertilizers); (iv) contributions by the Departmental Secretariat of Agriculture and the local municipal government; (v) commercial credit (in some cases); and (vi) support received from other collaborating institutions (e.g., the national service for apprenticeship, SENA).

Component 3: Management, monitoring and evaluation (US$6.12 million, of which IBRD US$1.48 million)

15. Component 3 financed project administration costs associated with the Project Coordination Unit (PCU), paid for staff in the Rural Development Directorate (DDR) of MADR who were involved in project implementation, and covered operational costs

[4] For example, if the partnership obtained a credit of Co$100,000 per household, the government financial incentive could be increased by Co$100,000 per household. This 1:1 relationship would be respected up to a maximum of Co$2 million per household.

associated with running the Monitoring and Evaluation (M&E) system, carrying out evaluation studies, and commissioning yearly technical and financial audits. The central PCU in Bogota was staffed with a project coordinator, technical specialists (in agribusiness, environment, social development, etc.), fiduciary staff, and M&E specialists. The national level staff based in the PCU in Bogota were supported by eight decentralized regional teams.

1.6. Revised Components

16. There were no revisions to the original components.

1.7. Other significant changes

17. **Extensions of the project closing date.** The original closing date was September 30, 2013. On January 17, 2013, the closing date was extended by 15 months, until December 30, 2014, to allow for adequate supervision and support of the subprojects approved during 2012 until the end of their implementation period, which typically ranged from 18 and 24 months. On December 19, 2014, the closing date was extended a second time by six months, to June 30, 2015. By then the loan was almost fully disbursed, but the extension was considered necessary to allow sufficient time for: (i) the preparation of the final impact evaluation being carried out by an independent consulting firm, (ii) the submission of overdue audit reports for 2012 and 2013, and (iii) the putting in place of the necessary policy, fiduciary, and operational arrangements needed to transition the Rural Productive Support Program to MADR.

18. **Reallocation of loan proceeds.** The first closing date extension in January 2013 was accompanied by a reallocation of loan proceeds. US$2 million were reallocated from the category Consultants' Services to Cost-Sharing Transfers to cover the additional supervision costs that would be incurred by the PCU over the longer implementation period.

2. Key Factors Affecting Implementation and Outcomes

2.1. Project Preparation, Design and Quality at Entry

19. **Background analysis.** Following the receipt of the Government's request for a follow-on operation to the First Rural Productive Partnerships Project, the same World Bank team that was engaged in supervising the first phase was charged with preparing the second phase. Working in close collaboration with the PCU, the World Bank team prepared the follow-on operation in just under 12 months (Concept Review Meeting to Effectiveness). The team was careful to note the implementation experience of the first phase, and it identified a number of bottlenecks that needed to be avoided in the follow-on operation. For example, it identified the need to strengthen decentralized implementation capacity and delegate more responsibility to the regional level as a way of ensuring faster, more efficient, and more sustainable implementation of subprojects. A second concern was to shorten the subproject preparation cycle, without compromising on the quality of the pre-investment studies and the strength of the partnership arrangements. A third concern was to reduce the transaction costs associated with establishing commercial partnerships, as a way of ensuring greater engagement by the private sector. In addition, the World Bank team recognized that efforts were needed to ensure the provision to beneficiary producer organizations of enhanced, more sustained technical assistance, along with training in organizational and managerial capacities.

20. **Project design.** The design of PAAP-II was fundamentally sound. Because PAAP-I was a pilot that used an innovative and previously untested design, implementation of the original project had been characterized by a steep learning curve. PAAP-II benefited from this experience, and many lessons learned during the first phase were reflected in the design of the second phase.

21. **PDO and PDO Indicators.** The PDO was defined in a way that was relevant, adequate, and in line with the Government of Colombia's priorities. The PDO indicators were concretely defined at the outcome level and focused on results that were attributable to project-supported activities. The PDO indicators were closely related to the activities and objectives of each component. To ensure that the indicators would be monitored properly, care was taken to ensure that the PCU had strong M&E capacity at the central and particularly at the regional level.

22. **Partnership selection process.** The transparent and competitive process used to select partnerships under the first phase had been identified as a key factor generating credibility among beneficiary producers and the private sector. At the same time, the evaluation procedure used had proved effective for ensuring the participation of disadvantaged groups, such as indigenous peoples and people of Afro-Colombian descent. The same basic partnership evaluation process was maintained in the design of the project.

23. **Encouraging private sector participation.** Another lesson from the first phase adopted in the design of the Project was the importance of actively involving prospective commercial partners in the partnership building process, to overcome the widespread distrust prevailing in the private sector about working with smallholder producer organizations. The project design included resources that would allow the PCU to reach out to potential commercial partners through the organization of national and regional business round tables, among other measures.

24. **Involvement of financial institutions.** Under PAAP-I, many participating producer organizations had experienced difficulty accessing commercial credit. The design for PAAP-II therefore included stronger measures to entice financial institutions to provide credit to the selected partnerships. Use of the revolving funds mechanism was made mandatory, and producer organizations were encouraged to use it as a tool to finance their continuing operations. A secondary objective of the revolving funds was to allow producer organizations to build up their credit worthiness, which was expected to enable them to obtain commercial financial credit.

25. **Implementation arrangements.** The principal implementation agency was the Ministry of Agriculture and Rural Development (MADR). The Project Coordination Unit (PCU) was situated within the Rural Development Directorate of MADR. The PCU coordinated activities at the national and regional level, drawing on the services of multiple actors, many of them decentralized (see Annex 2). In recognition of the uneven capacity of the decentralized actors and institutions, the project design included initiatives and activities to strengthen the capacity of the participating institutions.

26. **Risk assessment and mitigation.** At appraisal, Overall Project Risk was assessed as "Moderate," and proposed risk mitigation measures were considered appropriate. The risk assessment exercise was influenced by the experience of the first phase of the Project, as few of the risks that had been identified in PAAP-I had materialized. In retrospect, the risk

assessment appears to have been appropriate, as the two risks rated "Substantial" are the ones that turned out to be the most relevant. The first risk rated "Substantial" was: *Banking sector not willing to provide finance for crop production*. The second risk rated "Substantial" was: *Planned transfer of the PCU to MADR may reduce quality of project management*. Mitigation measures were proposed for both risks, but in the end the mitigation measures proved only partly effective (see Sections 2.2 and 2.5).

2.2. Implementation

27. Implementation Progress was rated "Satisfactory" from effectiveness up until mid-2010. At that point, the rating was downgraded to "Moderately Unsatisfactory" for about eight months due to significant delays in implementation progress caused mainly by cuts in counterpart funding (described below). After corrective measures were taken by the Government and implemented by the PCU (discussed below), in early 2011 the rating was upgraded to "Moderately Satisfactory," and seven months after that it was upgraded again to "Satisfactory." The "Satisfactory" rating was maintained until project closing in mid-2015. Despite a somewhat uneven implementation experience, at project completion almost all of the PDO and Intermediate Result Indicators had been achieved, and in a number of cases performance exceeded end-of-project targets, sometimes substantially. Factors that affected implementation, positively and negatively, are described next.

28. **Fluctuations in government co-financing.** Three national elections took place during implementation, resulting in changes in budgetary allocations to the Project that affected implementation performance. Between 2008 and 2010, the budget twice was reduced by significant amounts, and as a result the number of partnerships financed for a long time remained well below planned levels. After the change in government that occurred in mid-2010, allocations to the Project were significantly increased, which allowed a rapid expansion in the number of partnerships financed and a scaling up in coverage to include the entire national territory. Following the re-election of the Santos administration in 2014, government financing decreased again as the newly installed leadership in MADR reassessed national rural development priorities while awaiting the outcomes of the Havana peace talks. This slowed disbursements to existing partnerships and led to a temporary moratorium on the approval of new sub-projects.

29. **Adjustments to implementation procedures.** The decline in government funding that occurred between 2008 and 2010, combined with higher than expected fixed costs, led to implementation delays during the early life of the Project and negatively affected ratings for implementation progress. Following recommendations made by several World Bank supervision missions and repeated in the 2010 Mid-Term-Review (MTR), the PCU responded by making adjustments to operating procedures that allowed it to work more efficiently. Significant changes were made to administrative processes that increased the responsibility of the Regional Management Organizations, narrowed the scope of the pre-investment feasibility studies, shortened the subproject implementation period to 18-24 months to align it with the agricultural production cycle, and lowered the number of payment tranches to the trust company from three to one. The PCU also intensified its outreach to the private sector and regional stakeholders, which allowed it to more effectively promote the productive partnerships approach among these groups and increase their engagement in the project. These actions led to efficiency gains in implementation and to an upgrade in project ratings.

30. **Leveraging of resources from new stakeholders.** Another recommendation made by World Bank supervision missions was for the PCU specifically to seek out additional resources from other stakeholders to offset the cuts that had been experienced in the MADR budget. The PCU consequently stepped up its engagement with stakeholders, notably local governments, and as a result the amount of co-financing increased tremendously. At project completion in mid-2015, the amount of co-financing received from government agencies and other partners had exceeded projections by more than four-fold. Beginning in 2011, the additional funds made possible a major increase in the number of partnerships financed, with the end-of-project total eventually exceeding the end-of-project target.

31. **Production losses due to adverse weather.** From 2009 to 2011, unusually adverse weather significantly affected a large number of subprojects. Especially between the second half of 2010 and first half of 2011, unprecedented precipitation hit the country in the form of an extreme *ola invernal* (a weather phenomenon influenced by La Niña), causing severe negative impacts on agricultural production. Beginning in 2014, some regions of the country felt the effects of new episode of the weather phenomenon El Niño. Extended and intense droughts, particularly along the Atlantic coast, negatively affected agricultural production in many areas. While most agricultural production activities regularly are subjected to variable weather, during the life of the Project the effects appear to have been unusually severe in many parts of the country. The final impact evaluation carried out in early 2015 revealed that the vast majority of beneficiary producers reported having suffered significant losses during project implementation from fire (97%), from flooding (87%), from landslides (82%), from drought (42%), and from outbreaks of diseases (34%). These weather conditions had serious adverse impacts on production and sales, and on the producers' ability to repay into their revolving funds.

32. **Delays in transitioning PAAP to MADR.** To ensure institutional sustainability, the project design called for the activities being supported under the Project to be transitioned eventually to MADR and for the PCU to be integrated into MADR's administrative structure. During the Mid-Term-Review, however, it was determined that direct integration of the PCU would not be possible because of MADR hiring regulations, which stipulate that staff recruitment must be carried out according to Colombian national labor law. Despite this obstacle, the World Bank and the Government agreed to maintain their commitment to transition the Productive Partnerships Program to MADR following the closing of the Project. In the wake of the 2014 national elections, changes in leadership and strategy within MADR created uncertainty about the Government's commitment to the productive partnerships approach. Even though a plan to transfer implementation responsibility to MADR following the closing of the Project had been prepared and approved by DNP and the Ministry of Finance and Public Credit, delays in decision-making within MADR had adverse consequences for the then ongoing subprojects. In addition, these delays affected 124 subprojects that had been selected from the 2014 call for proposals and approved for full government-financing, but which remained without funding after project completion (these 124 unfunded sub-projects stood to benefit more than 6,300 producer households).

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

33. **M&E design.** The design of the project results framework was adequate. The PDO Indicators are clear, measurable, and directly linked to the three principal sub-themes embedded in the PDO (competitiveness, entrepreneurship, and sustainability). Although the

Results Framework adequately captures the majority of expected project outputs and outcomes, in retrospect some indicators might have been defined differently, and some end-of-project targets set at more realistic levels. For example, the PDO indicator that measures total sales realized by participating producer organizations measures the nominal value of sales denominated in current Colombian pesos. Use of this unit of measurement is prone to risks, however, because factors beyond the control of the Project can dramatically affect the nominal value of sales (such as inflation and exchange rate volatility). For this reason, a more appropriate unit of measurement might have been the percentage change in volume of sales compared to a baseline year. Similarly, in the case of the PDO indicator that measures the repayment rate for the revolving funds, even though the majority of revolving funds remain in operation and are being maintained, the end-of-project target proved to be very ambitious. This highlights the difficulty of setting targets for indicators at appraisal, especially in cases involving innovative practices for which no benchmark values are available during the design stage.

34. **M&E implementation.** M&E implementation was more than adequate. Monitoring data on project activities, outputs, and outcomes were collected at centralized and decentralized levels, allowing the project results framework to be fully populated. Over time, the PCU made numerous adjustments to the way it monitored progress of individual partnerships, taking into account lessons learned from experience. Depending on the nature of the information and the collection cost, some indicators were monitored monthly, others quarterly, and still others yearly. Responsibility for collecting information was clearly defined and distributed as appropriate among producer organizations and commercial partners, OGAs and OGRs, and PCU staff. Collection of information by producer organizations and commercial partners and by OGAs and OGRs was complemented by regular verification field visits carried out by PCU staff. During the initial years of project implementation, data collection activities weighed heavily on OGAs and OGRs, and the MTR mission carried out in 2010 reported that many were struggling to keep up as the number of partnerships proliferated. The launch in early 2011 of the M&E online platform brought significant efficiency gains in the collection of monitoring data, and from that point on the M&E system functioned very smoothly.

35. It is worth noting that the Project's M&E online platform has been recognized by numerous internal as well as external users as a best practice model. It can be used not only to capture, store, analyze, and access information about the performance indicators appearing in the project results framework, but it also contains a wealth of additional information about the partnerships, including the size and composition of their membership, the nature of their productive activities, their business and management processes, information of their annual operating plans, etc. In addition, it can be used to archive and allow password-protected access to pre-investment studies, progress reports, evaluations, and other materials related to the project.

36. A final point about the M&E online platform is that it contains information about indirect beneficiaries, specifically, households belonging to producer organizations that did not receive the government financial incentive grant but that benefited indirectly from collective goods and services financed through the Project, such as common infrastructure and community-level technical assistance. This information proved extremely useful in the estimation of spillover effects.

37. **M&E utilization.** During implementation, information from the Project's M&E online platform allowed the PCU, the World Bank supervision team, and the Government to monitor the status of individual subprojects and to track implementation progress of the overall Project. The fact that information could be accessed easily and shared quickly contributed to more efficient communication between the central PCU, the OGAs and the OGRs, and the World Bank supervision team, which allowed emerging problems to be identified and addressed before they became unmanageable.

38. In addition to supporting real-time management activities, information from the M&E online platform was used for several studies. For example, the sampling strategy used for the Economic and Financial Analysis (EFA) summarized in Annex 4 was based on information from the M&E online platform. Similarly, the final impact evaluation of the Project carried out in 2015 combined data collected from 899 beneficiary producers and 1,481 control group producers with data obtained from the M&E online platform (details of the final impact evaluation are presented in Annex 6). Finally, in 2014 the International Center for Tropical Agriculture (CIAT) used information from the M&E online platform to assess the effectiveness of the Project in reaching disadvantaged groups (i.e., indigenous people and people of Afro-Caribbean descent) and in serving post-conflict zones, using the data of the Project's M&E system.

2.4. Safeguard and Fiduciary Compliance

39. **Safeguards compliance.** PAAP-II was classified as Category B and triggered the following safeguards policies: Environmental Assessment (OD/BP 4.01), Natural Habitats (OD/BP 4.04), Forests (OD/BP 4.36), Pest Management (OD/BP 4.09), and Indigenous Peoples (OD/BP 4.20). Because inconsistent monitoring of safeguards compliance had been identified as a weakness under PAAP-I, measures were introduced under PAAP-II to ensure more consistent safeguards monitoring. Throughout implementation, the PCU was staffed with a qualified environmental and social development specialist whose role was to monitor compliance with the applicable requirements. As a further incentive, the results framework included indicators relating to the satisfactory implementation of the Environmental Management Plans (EMP) and Social Plans (SP). These measures taken at the PCU level were reinforced at the subproject level. Information regarding environmental and social safeguards was disseminated during every call for partnership proposals, and subproject proposal templates included sections specifically dedicated to environmental and social safeguards compliance, which ensured that subprojects with unacceptable environmental and social risks were dropped during the selection process.

40. **Environmental safeguards.** Compliance with environmental safeguards policies was rated "Satisfactory" throughout the life of the Project. Each productive partnership was required to undertake an Environmental Impact Assessment (EIA) and to prepare and implement a fully-funded Environmental Management Plan (EMP). Typically the EMPs included training on good agricultural practices, and in many cases also obligated producer organizations to obtain certification showing that production met environmental standards as required by the commercial partner. As reflected in the Intermediate Results Indicator, at Project completion 88% of partnerships supported by the Project complied satisfactorily with the EMP implementation requirements. The implementation of the EIA and the EMP was supervised by the OGAs and OGRs. Throughout implementation, the Regional Environmental Authorities (CAR) monitored the Project's environmental impacts, and it never identified any

negative effects caused by Project-supported activities. MADR did not receive any complaints relating to adverse environmental impacts generated through activities related to the Project. On the contrary, the Project generated positive externalities that benefited the environment, as it encouraged the adoption of good agricultural practices.

41. **Social safeguards.** Compliance with social safeguards policies was rated "Satisfactory" throughout the life of the Project. As reflected in the Intermediate Results Indicator, at Project completion 86% of the partnerships supported by the Project were found to have complied satisfactorily with the social plan implementation requirements. As mentioned previously, an Indigenous Peoples and Afro-Colombians Development Framework was prepared which included the implementation of culturally adapted promotional activities and consultations regarding the calls for subproject proposals. Also, in the selection of partnership subproject proposals, preferential treatment was given to proposals received from indigenous peoples and people of Afro-Colombian descent, to ensure that these two disadvantaged groups were not excluded from the opportunities provided by the Project. At project closing, the end-of-project target relating to the participation of indigenous people and people of Afro-Colombian descent were greatly surpassed. With 9,252 beneficiary households from these groups participating in partnerships at project completion (instead of the assumed 1,275), the Project successfully reached and included indigenous and Afro-Colombian peoples in its activities.

42. **Procurement.** The Project's procurement function was rated "Satisfactory" by most implementation support missions (procurement was rated "Satisfactory" 13 times and "Moderately Satisfactory" 3 times out of 16 total ratings). During implementation, two ex-post procurement reviews were conducted (in 2011 and 2014). Minor inconsistencies were detected in a small number of cases regarding compliance with World Bank procurement procedures, but despite these shortcomings, the vast majority of procurement processes were performed in conformity with World Bank policies and procedures. Supervision missions and reports of the ex-post procurement reviews consistently led to the preparation of action plans designed to strengthen procurement functions and encourage the use of the World Bank Procurement Plan Management System (SEPA). No fraud or corruption issues were detected during implementation.

43. **Financial Management and Audits.** The Project's financial management function was rated "Moderately Satisfactory" by most implementation support missions (financial management was rated "Moderately Satisfactory" 12 times and "Satisfactory" 4 times out of 16 total ratings). The implementing agency had qualified staff working on financial management issues, and most of the time they provided timely interim financial reports. Nevertheless, hiring of auditors was consistently delayed, and the implementing agency required close supervision and support. In general, audit opinions were unqualified, but audit performance from 2012 onwards was deficient. Waivers had to be granted by the World Bank due to the late submission of the 2012, 2013, 2014, and final audits.

2.5. Post-completion Operation/Next Phase

44. **Transition arrangements.** The project design called for the Productive Partnerships Program that was being supported through PAAP-I and PAAP-II to be transitioned to MADR following the termination of World Bank financing. In mid-2014, the PCU prepared a transition plan that laid out a route by which implementation responsibility could be shifted to MADR. In late 2014, the transition plan was reviewed and accepted by MADR, DNP, and the

Ministry of Finance and Public Credit. The PCU subsequently began to implement the agreed actions, transferring administrative records, technical materials, and equipment to the Rural Development Directorate of MADR. Because a change in leadership in MADR occurred around this time, implementation of the transition plan fell behind schedule. The implementation delays were compounded by uncertainties about whether or not funding would be made available by MADR to ensure continuity in the monitoring of ongoing partnership subprojects, as well as financing of 124 new partnership subprojects that had been selected in the 2014 call for proposals. At the time this ICR was being prepared, MADR was continuing to express its commitment to maintain the Productive Partnerships Program, but no decision had been taken regarding the institutional arrangements under which the Program would be operated.

45. **Maintenance arrangements for infrastructure.** Many of the productive investments financed under the Project are being maintained through the initiative of producer organizations. Based on data collected from 83 partnerships, the impact evaluation estimates that 82% of producer organizations are continuing to collect annual fees from the members to finance operations and maintain infrastructure, especially the common goods that constituted the majority of the investments (e.g., cooling tanks, bulk storage facilities, and collection centers).

46. **Sustainability of institutional capacity.** In a similar vein, the strengthened institutional capacity attributable to the Project has proved to be enduring. The training provided to producers and producer organizations went far beyond the teaching of improved production practices, as training activities also covered topics such as business development, accounting principles and methods, and enterprise management. The results of the beneficiary survey (Annex 7) show that the capacity-building activities supported by the Project benefited not only individual producers and producer organizations, but also commercial partners. One of the most important benefits identified during the national and regional stakeholder consultation workshops (Annex 8) was the hands-on training provided to community-level organizations, which allowed them to assist producer organizations "in a holistic manner" (quoted from Annex 8). The success of this holistic approach to capacity building is reflected in the fact that the majority productive partnerships have continued to operate even after project support has long ended. Continued monitoring of PAAP-I partnerships indicates that 62% of first phase partnerships were continuing to operate seven years after PAAP-I closed. In the case of PAAP-II partnerships, 80% of producer organizations are continuing to sell to a commercial partner 24 months after project support ended. In addition, the vast majority of producer organizations have demonstrated the ability to establish new partnerships when an earlier partnership dissolves (Annex 7).

47. **Future prospects for productive partnerships in Colombia.** There can be little doubt that the productive partnerships approach will continue to feature in the Government's rural development strategy going forward. The success of the Productive Partnerships Program is clearly recognized in the current National Development Plan (NDP), which includes several initiatives that appear to have been modeled on the PAAP-II implementation experience. Furthermore, since mid-2014 DNP has been engaged in the preparation of the *Misión para la Transformación del Campo* (Mission to Transform the Countryside), also known as the *Misión Rural,* which lays out the Government's vision for rural development in the country over the next 20 years. A centerpiece of the agricultural development strategy described in the *Misión*

Rural is a proposed initiative to promote *Alianzas Incluyentes* (Inclusive Alliances), which are explicitly modeled on the productive partnerships supported under PAAP-I and PAAP-II. The goals of the *Alianzas Incluyentes* initiative are ambitious; the *Misión Rural* envisions expanding coverage from the approximately 43,000 families supported under PAAP-II to about 230,000 families by 2025 and about 570,000 families by 2035. While fiscal realities could constrain these ambitious plans and lead to a more modest rate of expansion, the Government's commitment to continue using the productive partnerships approach seems beyond question.

3. Assessment of Outcomes

3.1. Relevance of Objectives, Design, and Implementation Arrangements

Rating: High

48. **Relevance of objectives.** The PAAP-II objectives of increasing rural competitiveness and sustainably building up rural entrepreneurship in poor rural communities were highly relevant at appraisal, and they remain highly relevant at project completion. The 2014-18 National Development Plan (NDP) contains three main pillars: (i) strengthen the peace-building process and ensure sustainability to allow the country and its citizens reach their full potential as a nation; (ii) integrate the rural sector and its communities to close the social gap and to enhance connectivity for productive inclusion and access to public goods, social services and information; and (iii) reduce social and territorial urban-rural disparities through the development of the rural sector to ensure equal opportunities. The NDP highlights the need to improve the productive capacities and business skills of rural communities, which it suggests can be achieved through promotion of producer organizations, the strengthening of partnership arrangements that stimulate increased agricultural production and trade, and the provision of training in business plan development, among other activities. In all of these areas, the objectives pursued under PAAP-II are well aligned with the NDP.

49. The PAAP-II objectives remain highly relevant not only for the Government but also for the World Bank. The Colombia Country Partnership Strategy (CPS) FY12-16 describes three main areas of engagement: (i) expanding opportunities for social prosperity; (ii) promoting sustainable growth with enhanced climate change resilience; and (iii) promoting inclusive growth with enhanced productivity. PAAP-II contributed to all three areas, particularly the third, by supporting activities designed to improve the productivity and competitiveness of small rural producers, increase their engagement in formal markets, and generate dynamic public and private sector involvement.

50. **Relevance of design.** The approach to rural transformation embedded in the project design -based on promoting entrepreneurship and improving competitiveness among smallholder farmers by engaging them in demand-driven partnerships with the private sector, while at the same time strengthening decentralized institutions- was highly relevant at appraisal and remained highly relevant at project completion. The NDP and the *Misión Rural* both cite the PAAP-II experience and indicate that the productive partnership approach is one of several that the Government can use to move smallholders away from rural welfare programs and get them engaged in commercially viable enterprises. The success of PAAP-II in linking smallholders to markets is especially relevant in the context of the various free trade agreements into which Colombia has entered in recent years, which are likely to expose

Colombian producers to increased competition and require them to develop new, more entrepreneurial skill sets.

51. **Relevance of implementation arrangements.** The Project's implementation arrangements -especially the use of transparent, competitive calls for proposals that were evaluated using an inclusive yet decentralized process- proved extremely effective for generating successful and sustainable productive partnerships. The implementation arrangements worked well under a wide range of circumstances, as evidenced by the fact that the Project was able to serve many different types of beneficiaries, including beneficiaries from so-called "disadvantaged groups," such as indigenous people, people of Afro-Colombian descent, women, and people living in post-conflict areas. Based on the PAAP-II experience, similar implementation arrangements have since been replicated in other projects and countries. By 2015, more than 20 World Bank projects in Latin America, Africa, and Asia have adopted features of the productive partnerships approach.

3.2. Achievement of Project Development Objectives

Rating: Substantial

52. The Project Development Objective implicitly includes three principal sub-objectives: (i) increase rural competitiveness, (ii) build up rural entrepreneurship in poor rural communities, and (iii) do so in a sustainable manner. The following assessment of the Project's efficacy is based on the degree of achievement of the PDO indicators, taking into account as well complementary information from the impact evaluation conducted by an independent consulting firm. (The Data Sheet presents the full list of indicators and achievements, and Annex 6 summarizes the main findings of the impact evaluation.)

53. **Increase in rural competitiveness.** Achievement of this sub-objective is rated Substantial, based on PDO Indicator 1. At appraisal, the cumulative value of sales by all beneficiary producer organizations was expected to reach Co$350 billion. This target was exceeded by 63%. At project closing, the cumulative value of sales stood at approximately Co$572 billion.

54. Examination of the sales data reveals that the target value was exceeded because the number of productive partnerships formed was much higher than anticipated (725 partnerships were formed, more than double the target of 300 partnerships set at appraisal). In contrast, the average value of sales per partnership was lower than anticipated. Three factors appear to have constrained the value of sales per partnership: (i) the budget cuts experienced during the early years of implementation, which delayed the establishment of many partnerships; (ii) the fact that many more partnerships than anticipated involved perennial crops (e.g., cacao, rubber, lime, mango, avocado), which take a long time to become established, delaying the start-up of sales; and (iii) a series of extreme weather events, which adversely affected agricultural production and sales in many parts of the country. These factors slowed the growth of sales by many partnerships relative to projections, but they may well turn out to be temporary. For most partnerships, the value of sales continues to increase, and it seems very likely that the projected average value of sales per partnership may yet be achieved.

55. Evidence from the impact evaluation further supports the conclusion that the Project increased the competitiveness of beneficiary producer organizations. The impact evaluation results show that beneficiary producers have considerably greater access to sales contracts,

collection centers, and transport services for their products compared to control group producers (all differences being statistically significant at the 1% or 5% significance level). Similarly, producers benefiting from the Project have better access to improved, certified inputs and credit for productive investments, and they also reinvest a relatively large part of their net revenues in their agricultural production compared to the control group. Moreover, when comparing the production area at the beginning of the Project and at its completion, the impact evaluation finds a significantly larger increase in the land area for cultivation between beneficiary producers (5.4 hectares) and the control group (4 hectares). The impact evaluation also shows significant income and employment generation impact among beneficiary producers (see Section 3.5 and Annex 6).

56. **Build-up of rural entrepreneurship.** Achievement of this sub-objective is rated Substantial, based on PDO Indicators 2, 3, and 4. By project closing, 83% of participating producer organizations had a manager, exceeding the target set at appraisal of 75%. Similarly, by project closing, 80% of participating producer organizations were maintaining a system of accounts, exceeding the target set at appraisal of 75%.[5] Finally, at project closing 50% of producer organizations had recovered at least 70% of the grants made from their revolving funds, falling short of the target set at appraisal of 75%.

57. With respect to PDO Indicator 4, although the target set at appraisal was achieved only partially, closer examination of the data on the recovery of grants made from the revolving funds reveals a more nuanced picture (see Table A3.4 in Annex 3). Three results stand out. First, across the entire universe of producer organizations, on average 64% of the grants made from revolving funds were recovered, not far below the 70% recovery level used in establishing the target. Second, among the 50% of producer organizations that achieved the target recovery rate of 70%, the average amount recovered was 98%, significantly higher than the 70% target. Third, most of the producer organizations that had not achieved the target recovery rate of 70% are involved in the production of perennial crops (e.g., cacao, rubber, and mango). Because of the long initial start-up period for perennial crops, production and sales start later than for annual crops, limiting producers' ability to repay the grant in early years. Taken together, these results show that the revolving funds are working reasonably well, and as production and sales pick up in partnerships involved in the production of perennial crops, it is likely that the target set at appraisal will be achieved.

58. **Sustainability of partnerships.** Achievement of this sub-objective is rated Substantial, based on PDO Indicators 5, 6, and 7. At project closing, 88% of the Regional Management Organizations (OGR) were having their contracts renewed annually, exceeding the target set at appraisal of 80%. Also at project closing, the PCU had succeeded in mobilizing Co$104.5 billion in co-financing (mainly from municipal governments), far exceeding the target set at appraisal of Co$22 billion. Finally, at project closing 80% of the partnerships that had been

[5] Indicators 2 and 3 were considered successfully achieved based on standardized evaluation procedures carried out by the OGRs. For instance, Indicator 2 relating to management was considered successfully achieved only when it had been established by the OGR that (i) a manager was in place, and (ii) the manager was performing satisfactorily with respect to at least 7 out of 10 pre-defined criteria.

operating for 24 months or more were actively linked to a commercial partner, exceeding the target set at appraisal of 75%.[6]

59. Further evidence to support the conclusion that the partnerships formed under PAAP-II will endure comes from the impact evaluation. Productive activities are more likely to be sustained when producers actively reinvest in their enterprises. The impact evaluation data show that beneficiary producers are more likely than the control group to reinvest part of their net revenues into their enterprise. In addition, a significantly higher share of beneficiary producers obtained credit for productive investments than producers in the control group (see Annex 6 for details).

3.3. Efficiency

Rating: Substantial

60. An ex-post Economic and Financial Analysis (EFA) was carried out to measure the economic efficiency of the Project. The EFA is based on data collected from a sample of 56 sub-projects drawn from a population of 257 sub-projects that had completed at least one cycle of production and sales by the end of 2014, among other criteria. The sample of 56 sub-projects was selected using a three-step procedure. In the first two steps, the sample was stratified to ensure inclusion of sub-projects from different geographical regions and different sub-sectors. In the third step, the final selection of sub-projects was done randomly. Primary data were collected on these 56 subprojects and combined with secondary data obtained from project records to calculate measures of economic and financial performance based on incremental net benefits generated by the sub-project investments. The EFA results are relevant for 727 sub-projects, representing 83% of the IBRD loan of US$30 million.[7] (Additional details about the EFA, including the sampling and evaluation methodology, are described in Annex 4.)

61. At appraisal, based on the assumption that 300 productive partnerships would be financed and using a discount rate of 12%, the Financial Internal Rate of Return (FIRR) to the direct investments in subprojects was estimated at 24%, the Economic Internal Rate of Return (EIRR) at 15%, and the aggregate Financial Net Present Value (FNPV) at US$67 million. When indirect costs were included (i.e., pre-investment feasibility studies, technical assistance and capacity, and project management and monitoring costs), the FIRR decreased to 18% and the EIRR remained at 15%.

62. At completion, the economic and financial indicators were recalculated[8] based on actual costs and revenue flows recorded up until the time of project closing combined with projections for the remainder of the 15-year period of analysis. Reliance on projections was

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[6] Indicator 7 was estimated based on a relatively small number of partnerships. Of the 725 partnerships operating at project closing, only 134 had been active for more than 24 months. Of those 134, 107 were still linked to a commercial partner (80%). To provide additional evidence on the sustainability of partnerships, the sample was expanded by including partnerships that had been formed in PAAP-I. In the expanded sample, 79% of producer organizations reported a continuing active partnership with a commercial partner.

[7] The number of 727 partnerships covered by the EFA differs from the number of 725 partnerships in operation at project completion, because the data for the EFA date from mid-December 2014, when 727 partnerships had signed subproject agreements. By project completion, two of those partnerships had not started operations.

[8] The ex-ante EFA done at appraisal used a slightly different methodology than the ex-post EFA done at completion, which should be taken into account when comparing results.

necessary because many sub-projects involved perennial crops with long gestation periods, leading to deferred benefit streams.

63. **Financial analysis results:** Using a discount rate of 12%, the FIRR was estimated at 29% and the FNPV at US$132 million.[9] When indirect costs were included, the FIRR decreased to 27% and the FNPV to US$124 million. To test the robustness of these results in the face of possible adverse technical, climate-, or market-related events, net incremental income was reduced by 20%; under this scenario, the FIRR decreased further to 25% and the FNPV to US$90 million.

64. **Economic analysis results:** Using a discount rate of 12%, the EIRR was estimated at 26% and the aggregate ENPV at US$96 million. When indirect costs were included, the EIRR decreased to 25% and the ENPV to US$89 million. When net incremental income was reduced by 20% to reflect the impacts of possible adverse technical, climate-, or market-related events, the EIRR decreased to 22% and the ENPV to US$63 million.

3.4. Justification of Overall Outcome Rating

Rating: Satisfactory

65. The overall outcome rating is based on the High relevance, Substantial efficacy, and Substantial efficiency of the investments.

3.5. Overarching Themes, Other Outcomes and Impacts

66. The conclusions presented in the following sub-sections draw on several sources of information: (i) the final impact evaluation conducted in 2015; (ii) the targeted impact assessment led by the International Center for Tropical Agriculture (CIAT) in 2014; (iii) views expressed by participants in nine stakeholder workshops held in 2015; and (iv) monitoring data from the Project M&E system.

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

67. **Poverty.** The final impact evaluation carried out in 2015 used propensity score matching techniques to compare the experience of project beneficiaries with that a control group. The impact evaluation concluded that the net income of project beneficiaries increased on average by 29% compared to the control group, while gross income increased by 20%. Consistent with this finding, the impact evaluation also found a significant difference between beneficiary producers and members of the control group in the perception of economic well-being. Increased income was not an explicit objective in the Results Framework (increased income is considered a long-term outcome that should not be measured at the level of individual projects), but the finding is nevertheless significant because higher-order objectives of the Project were to increase the income of beneficiaries and reduce poverty. The impact evaluation also found that, compared to the control group, project beneficiaries realized significant improvements in savings and access to credit (including from the revolving funds). Finally, the impact evaluation determined that the Project generated significant amounts of employment. All of these findings support the idea that the Project made a significant

[9] If the costs are included of non-paid labor (family labor) valued at market wage rates, the FIRR decreases to 21% and the FNPV to US$67 million.

contribution to poverty reduction. The impact evaluation results relating to savings, credit, employment generation, and spillovers are described in more detail below and in Annex 6.

68. The CIAT impact assessment carried out in 2014, which focused specifically on disadvantaged groups (i.e., indigenous people, people of Afro-Colombian descent and internally displaced populations), similarly generated evidence that the Project has had a significant and positive impact on the income of beneficiary households. Since the CIAT study focused on a sub-group of project beneficiaries, the results cannot be extrapolated to the larger population, but they are consistent with the results of the impact evaluation. The CIAT study concluded that the income of beneficiary households that received productive and business training under the project is 34% higher than the income of households that did not receive training, in part because the beneficiary households receive on average 120% more income from sales of the product produced under the partnership than other households. The income effects remain positive and significant three years after project support to the partnerships ends. The study found also that the benefits extend beyond income gains: households that received productive and business training have a 10% greater probability of being classified as food secure than households that did not receive training. This effect persists even three years after project support ended. Results of the CIAT study are summarized in "Productive Partnerships: An effective instrument for the inclusion of vulnerable population groups in diverse contexts of Colombia."

69. **Gender.** Promoting gender inclusion was not an explicit objective, but the Project Results Framework included an Intermediate Results Indicator that measured participation by female-headed households. The Project was highly successful in reaching women producers; direct project beneficiaries included 9,922 female-headed households, far more than the end-of-project target of 2,550 female-headed households. Female-headed households thus represented 23% of all beneficiary households.

70. **Disadvantaged groups.** Direct project beneficiaries included 9,252 households headed by indigenous people and people of Afro-Colombian descent, far exceeding the target of 1,275 such households. The CIAT study compared the performance of partnerships involving people from these two disadvantaged groups to partnerships involving people from other groups and found that the former performed as well and in some cases even better than latter (CIAT 2014).

71. **Conflict-affected zones.** The Project operated effectively in many extremely challenging environments, including conflict-affected areas. Data from the Project's M&E system show that about 15% of beneficiary households are located in conflict-affected zones and that participation in those zones increased steadily over time.

(b) Institutional Change / Strengthening

72. PAAP-II helped institutionalize the productive partnerships approach within MADR by contributing to the establishment of policies, procedures, and human resources needed to support, manage, and monitor hundreds of partnerships throughout the country. The Project also contributed to building decentralized capacity, both in the public and private sector: important legacies of the Project include the many Regional Management Organizations that today are specialized in the provision of managerial and financial intermediary services, as well as the many private firms and civil society organizations with experience in providing technical assistance services as Local Management Organizations.

73. An important key to the success achieved by the Project in affecting institutional change was the enormous amount of training provided to key actors. During its lifetime, the Project sponsored 589 trainings and workshops that targeted many different groups. This training clearly made a difference: a recurring theme in the beneficiary assessment workshops is that the Project was extremely successful in combining classroom training with hands-on learning (see Annex 8).

(c) Other Unintended Outcomes and Impacts

74. **Private sector engagement.** One outcome that was not foreseen at preparation was the degree of engagement of the private sector. Based on the experience of PAAP-I, the PCU made a deliberate effort under PAAP-II to reach out to agribusiness firms, with the objective of countering their inherent distrust of working with public institutions and smallholder producers. This effort paid off: at completion, 369 new commercial partners had become involved with PAAP-II, with each new commercial partner participating in 1.8 partnership subprojects on average. The PAAP-II partnerships were established with a mix of large firms (42% of partnerships), medium-sized firms (38%), and small firms (20%). The contribution made by these commercial partners to the Project exceeded expectations, as many commercial partners ended up providing technical assistance and/or financing investments in productive infrastructure that directly benefited their partnering producers.

75. **Employment generation.** Although employment generation was not an explicit objective, it is important to note that the Project generated a large number of new jobs. Extrapolating from the results of the EFA, it is estimated that the 725 partnerships created under PAAP-II generated approximately 10,150 new jobs. In addition to supporting the creation of new jobs, the Project also had a positive impact on existing jobs, as wages paid to existing workers increased during the course of project implementation (see Annex 6).

76. **Spillover effects.** The focus in this ICR is on the benefits that have accrued to direct beneficiaries, but it is important to note that the Project generated considerable spillover benefits that have accrued to non-beneficiary producers. More than 11,000 rural households that were not members of a producer organization enrolled in a PAAP-II sub-project nevertheless adopted (at their own expense) improved practices promoted through the Project or were able to benefit from collective goods paid for by the Project. These spillover benefits are documented in the impact evaluation (Annex 6), which included as one of its control groups "nearby producers." One significant spillover effect is the 24.4% higher gross income found for "nearby producers" compared to "distant producers," showing that the impact of PAAP-II on Colombia's rural sector was amplified beyond direct project beneficiaries (see Annex 6).

3.6. Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

77. **Impact evaluation.** The impact evaluation involved structured surveys with 899 beneficiary households, 582 distant control group households, and 899 nearby control group households drawn from a sample of 83 partnerships. As part of the same impact evaluation, interviews were also conducted with representatives of 80 producer organizations and 80 commercial partners. The impact evaluation concluded that the Project exceeded most key targets and had statistically significant impacts on targeted beneficiaries in several socio-economic aspects compared to the control group. For example, data collected as part of the impact evaluation show that the net and gross income of project beneficiaries increased by 29% and 20%, respectively, when compared to the net and gross income of the control group.

Similarly, the impact evaluation found that the Project had led to a significant increase in employment within beneficiary producer organizations compared to non-beneficiary producer organizations. Further details and findings relating to the impact of the Project on key socio-economic variables are presented in the Data Sheet, Sections 3.2 and 3.5, and in Annex 6.

78. **Beneficiary survey.** The questionnaires used for the impact evaluation survey included a number of questions designed to assess why various stakeholder groups decided to participate in the Project, their perceptions of the relevance of the Project in meeting their needs, and their level of satisfaction with the goods and services that they received. The main finding of the beneficiary survey findings are summarized in Annex 7.

79. **Stakeholder workshops.** To complement the quantitative evidence obtained through the impact evaluation and the beneficiary survey, the Project organized eight regional stakeholder workshops and one national stakeholder workshop. The purpose was to capture the perceptions of the main stakeholder groups regarding the successes of the Project, identify bottlenecks encountered during implementation, and collect lessons learned. More than 300 representatives of beneficiary producer organizations, commercial partners, OGAs, OGRs, Departmental Secretariats of Agriculture, and other institutions participated in these stakeholder workshops. Benefits identified by the participants include the strengthened relationship between producers and commercial partners, the adoption of good agricultural practices to improve product quality, the opening of access to new markets, the inclusiveness of decision-making processes, and increases in income and improvements in the standard of living of many producers. Participants in the workshops stressed the need to reduce bureaucracy and delays in the partnership selection process, better integrate researchers and academics in research and development activities, improve the relevance of training activities, and strengthen partnerships even after the flow of project resources has ended. (The main findings are summarized in Annex 8.)

4. Assessment of Risk to Development Outcome

Rating: Moderate

80. **Sustainability of outcomes.** A number of factors can be expected to contribute to the sustainability of outcomes after closing of the Project: (i) strengthened institutional capacity in the agricultural sector at national and especially regional level; (ii) strengthened technical and managerial skills of producers and producer organizations, as reflected in the use of improved inputs and production practices; (iii) improved access to productive infrastructure financed through the government financial incentive; (iv) existence of revolving funds, most of which are being maintained by producers, and resources which are frequently used to support partnership activities; and (v) increased collaboration among public and private sector actors.

81. **Performance and reputational risks.** Despite the factors mentioned above, several risks remain that pose a threat to development outcomes. The largest risk stems from the continuing uncertainty surrounding the Government's commitment to the Productive Partnerships Program. MADR management has repeatedly stated that it intends to continue the productive partnership approach, but the level of financial resources to be provided remains unclear. If the PCU is not maintained and assigned an adequate operational budget, ongoing partnerships will likely suffer from a lack of robust supervision, and the Project's M&E system will be unable to collect and record new data. The lack of support from the PCU would likely be mitigated by the capacity that already exists within many producer organizations and the

strength of existing partnerships, which will allow them to continue to operate even in the absence of continued support. Some partnerships-especially new ones that are not yet well established- are likely to fail, however, which could undermine the strong image of success that PAAP has established over the years.

82. **Other risks.** As was highlighted in the ICR of PAAP-I, macroeconomic and weather risks remain potential threats to the sustainability of the project outcomes. However, many partnerships have demonstrated resilience in the face of adverse macroeconomic and weather shocks, so this risk is considered moderate to low.

5. Assessment of Bank and Borrower Performance

5.1. Bank Performance

(a) Bank Performance in Ensuring Quality at Entry

Rating: Satisfactory

83. When PAAP-II was prepared, both the justification and the rationale for World Bank support were solid. The Project directly addressed the Government's rural development priorities at the time, and it was well aligned with the World Bank Country Partnership Strategy FY07-FY11.

84. Preparation of the Project was made easier by the fact that the Task Team was able to build on the implementation experience of a well-established and successful first phase operation. It must be recognized that the team that prepared PAAP-II had carefully assessed the experience of PAAP-I, recognizing key lessons learned, and incorporating those lessons learned into the design of the follow-on operation. At the project level, adjustments were made to the Results Framework, monitoring and evaluation plan, financial management and procurement procedures, and safeguards enforcement systems that streamlined implementation and reduced some of the obstacles that had plagued PAAP-I. At the sub-project level, adjustments were made to the eligibility criteria, identification and screening procedures for proposals, implementation support mechanisms, and evaluation procedures that reduced start-up times, lightened administrative burdens on beneficiaries, and increased the rate of successful outcomes.

85. The results of these adjustments are reflected in the fact that PAAP-II achieved virtually all of its major objectives, succeeded in institutionalizing the productive alliances approach within MADR, trained a large cadre of people and organizations in the implementation of productive partnerships, and will leave behind hundreds of thriving partnerships whose prospects for continued growth and enduring success appear bright.

(b) Quality of Supervision

Rating: Satisfactory

86. Throughout the life of the Project, World Bank task teams carried out two supervision missions per year. The teams, comprising mainly World Bank staff but complemented as needed with external consultants, consistently included a full complement of technical, fiduciary, and safeguards specialists. During the supervision missions, the task teams worked closely with their counterparts in the PCU to monitor ongoing activities, track progress

achieved against the performance indicators, identify emerging challenges, and find timely solutions. The aide memoires and Implementation Status and Results (ISR) reports filed following the supervision missions show that the task teams consistently paid close attention to detail, realistically assessed progress and challenges, regularly made constructive and proactive recommendations to address problems, and followed up on agreements made.

87. The close and trusting relationship that developed between the World Bank task teams and the PCU was not affected adversely by several changes in leadership (four different Task Team Leaders served on the Project throughout its lifetime). A hand-over mission was carried out prior to every change to introduce the incoming Task Team Leader to key contacts in MADR and in the PCU, provide opportunities to interact with other task team members in the field, and familiarization with ongoing project activities.

88. The implementation support provided by the World Bank task teams was continuous, but not always entirely consistent. On several occasions, changes in World Bank operational policies and procedures, or changes in the ways in which existing operational policies and procedures were implemented, led to minor implementation delays as the PCU adjusted. For example, in 2014 task teams across the World Bank were instructed to tighten up with respect to the application of certain procurement procedures; in the case of PAAP-II, the perception of the PCU was that the rules of the game had changed, as supporting documentation that previously had been considered acceptable started being sent back for revisions.

89. In addition to providing implementation support, the World Bank task teams acted as global ambassadors for the productive partnerships approach. Because PAAP was one of the first World Bank-supported projects to use the productive alliances approach, it attracted a great deal of attention not only within Colombia but throughout Latin America and even beyond. Task team members invested considerable time and effort in making presentations to different groups about the PAAP experience. As the effectiveness of the approach started to become apparent, interest in PAAP grew, and requests to visit the Project proliferated. Particularly during the final years of implementation, the World Bank received many requests from government agencies, non-governmental organizations, development agencies, producer organizations, and other groups to help arrange learning exchanges and study tours.

(c) Justification of Rating for Overall Bank Performance

Rating: Satisfactory

90. The World Bank identified a project that directly addressed the government's rural development priorities and was well aligned with the World Bank Country Partnership Strategy, produced a design that was appropriate for the objectives, and successfully incorporated lessons learned from the earlier operation. During implementation, World Bank task teams provided close and continual supervisions, were responsive to ongoing needs, and proactive in addressing emerging challenges.

5.2. Borrower Performance

(a) Government Performance

Rating: Moderately Unsatisfactory

91. Government commitment to the Project varied throughout the course of implementation. Three national elections were held during the life of the Project, each of which resulted in changes in government priorities that affected the fortunes of the Project.

92. The government that was voted into office during preparation was keen to build on the success of PAAP-I, and it supported the preparation process with ample human and financial resources. However when a fiscal crisis broke out in 2008, shortly after effectiveness had been declared, the amount of counterpart funds provided was significantly reduced. This caused serious implementation delays that for a while jeopardized the achievement of the development objective and led to the downgrading of the overall project rating to Moderately Unsatisfactory for about eight months in 2010.

93. In 2010, national elections led to the inauguration of a new government. This government was strongly supportive of the rural development agenda and sharply increased the amount of counterpart funding provided to the Project, making it one of the best-financed projects in the Ministry of Agriculture and Rural Development (MADR). From 2011 to 2014, the commitment of the government to the Project was satisfactory, and as a result implementation performance improved significantly.

94. In 2014, following another national election, the returning administration became more ambivalent about the productive partnerships approach, and amidst a fiscal downturn the Ministry of Finance and Public Credit did not make a firm financial commitment to finance a third phase of the Project.

95. Based on the experience described above, Overall Government Performance is rated Moderately Unsatisfactory.

(b) Implementing Agency Performance

Rating: Moderately Satisfactory

96. The PCU within MADR was responsible for implementing PAAP-II. The performance of the PCU and the performance of MADR differed considerably, which was possible because the PCU operated with a certain degree of autonomy.

97. Generally speaking, the PCU performed well throughout the life of the Project. The PCU was staffed by qualified and highly engaged professionals, many of whom were very committed to the Project and who carried out their activities with great dedication in the face of an ever-changing institutional environment. The PCU management team ably oversaw the successful implementation of a large and diverse work program, made certain that activities and outcomes were well documented, ensured that fiduciary functions were carried out in compliance with World Bank and government policies and procedures, and maintained proactive communications with partners and stakeholders at national and departmental levels. The PCU management team was especially effective in instilling a learning culture among the staff, making effective use of the Project's well-developed M&E system to identify lessons learned that could be used to adjust and improve operating procedures. With support from the

management team, PCU staff pursued their assigned tasks with enthusiasm while demonstrating flexibility and agility in incorporating lessons learned based on feedback received from partners and stakeholders. The *esprit de corps* established within the PCU proved especially important during the periodic phases when political support for PAAP waned and budget allocations decreased. Despite the generally satisfactory performance, the PCU exhibited a number of weaknesses typical of project implementation units, some of which took longer than expected to resolve. Notable among these was the inconsistent performance in complying with fiduciary requirements, including the timely submission of financial management reports and annual audits (it should be noted, however, that the late submission of financial reports was due in part to forces beyond the control of the PCU).

98. In contrast to the consistently satisfactory performance of the PCU, the performance of MADR was more variable. MADR adequately supported the Project throughout much of its life, especially between 2011 and 2014 when PAAP enjoyed strong political support from the Presidency, but changes in leadership within MADR sometimes undermined this support. Lack of MADR support was particularly problematic during the final phase of the Project, which unfortunately coincided with the turnover of many senior management positions. The resulting institutional paralysis severely affected PAAP by delaying the preparation and timely implementation of the transition plan, reducing the availability of resources to sustain ongoing activities, and creating uncertainty about the future of the PAAP program. As the project closing date of December 30, 2014 approached, it became clear that MADR was unprepared to assume responsibility for the supervision of the approximately 120 sub-projects then under implementation, so the government requested a six-month extension of the closing date to allow time for the preparation of a transition plan. The transition plan was duly prepared and approved by DNP and the Ministry of Finance and Public Credit, but following the closing of the Project on June 30, 2015, it was not fully implemented. This led to interruptions in the implementation of on-going sub-projects, undermined the viability of the PAAP program within MADR, and threatened the sustainability of the positive impacts that had been achieved by the Project.

99. Based on the generally satisfactory performance of the PCU and the varying performance of MADR, Overall Implementing Agency Performance is rated Moderately Satisfactory.

(c) Justification of Rating for Overall Borrower Performance

Rating: Moderately Satisfactory

100. Based on the Government Performance rating of Moderately Unsatisfactory and the Implementing Agency Performance rating of Moderately Satisfactory, and taking into account the fact that the Project achieved a Satisfactory outcome, Overall Borrower Performance is rated Moderately Satisfactory.

6. Lessons Learned

101. **The productive partnerships approach can be a cost-effective way to boost productivity, expand production, improve competitiveness, and link farmers to markets.** The approach is flexible and can be adapted to fit the needs of many different target groups, value chains, and production environments. It has the capacity to serve not only well established producer groups but also disadvantaged groups.

102. **Selection of sub-projects through an open, competitive process based on clearly defined technical evaluation criteria can be crucial for establishing credibility among stakeholders and avoiding political interference.** Project beneficiaries—both producer organizations and their commercial partners—have consistently indicated that the process used by PAAP ensured that sub-projects were approved based on their merit, leaving few opportunities for financing to be steered by government officials or local authorities to friends and associates.

103. **Accompanying producer groups over an extended period while they grow and mature is crucial for ensuring long-term success.** Instead of providing a one-off injection of resources to launch a commercial partnership, PAAP accompanied producer organizations over the course of their partnership subproject implementation period (18-24 months), with the goal of building the capacity needed to ensure long-term survival. Technical assistance provided under the Project focused on strengthening productive capabilities and complementary training in managerial competencies and business development skills.

104. **Transition planning for World Bank-financed projects should begin early and not left to the final months of implementation.** Ideally, transition planning should begin at the time of the Mid-term Review and be monitored continuously thereafter. This will help to ensure that project-supported activities can be moved smoothly to government agencies following the closing of the World Bank loan, without suffering disruptions.

105. **Successful projects that are not effective in communicating their achievements to key audiences may have difficulty securing funding going forward.** Despite a wealth of evidence showing the positive results achieved by PAAP, MADR has struggled to secure funding for a follow-on operation. One reason appears to be that key decision makers in DNP and in the Ministry of Finance and Public Credit appear to be unfamiliar with the achievements of the PAAP program.

106. **CGIAR Centers are a source of information, knowledge, and capacity that can be tapped to support project design and implementation activities.** The impact assessment carried out by CIAT provided insights leading to important lessons learned that not only have helped document the outcomes of PAAP-I and PAAP-II but also will be extremely useful in informing the design of future operations. The CIAT study has been particularly influential in making the case that the productive partnerships model can effectively serve disadvantaged groups in the population.

Comments on Issues Raised by Borrower/Implementing Agencies/Partners

107. The implementing agency (MADR) confirmed its agreement with the ICR conclusions and ratings (the formal response appears in Annex 9). The Borrower's Completion Report (summarized in Annex 10) does not raise any significant issues that contradict the findings of this ICR or demand an explanation.

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in US$ million equivalent)

Components	Appraisal Estimate (US$ millions)[10]	Actual/Latest Estimate (US$ millions)[11]	Percentage of appraisal value (%)
Component 1: Partnership promotion and preparation;	5.61	12.32	220
Component 2: Partnership implementation	114.81	327.13	285
Component 3: Management, monitoring and evaluation	2.53	6.12	242
Total Project Costs	**122.95**	**345.57**	**281**

(b) Financing (in US$ million equivalent)

Source of Funds	Type of Co-financing	Appraisal Estimate (US$ millions)	Actual/Latest Estimate (US$ millions)	Percentage of appraisal value (%)
Borrower (Government of Colombia)	Counterpart	12.93	90.63	701
International Bank for Reconstruction and Development (IBRD)	Loan	30.00	29.31	98
Local Governments (Prov., District, City) of Borrowing Country	Counterpart	24.84	31.81	128
Other Sources of Borrowing (e.g. other development agencies)	Grant	12.00	3.49	29
Local Farmer Organizations and Commercial Partnership	Counterpart	43.18	190.33	441
Total Project Costs		**122.95**	**345.57**	**281**

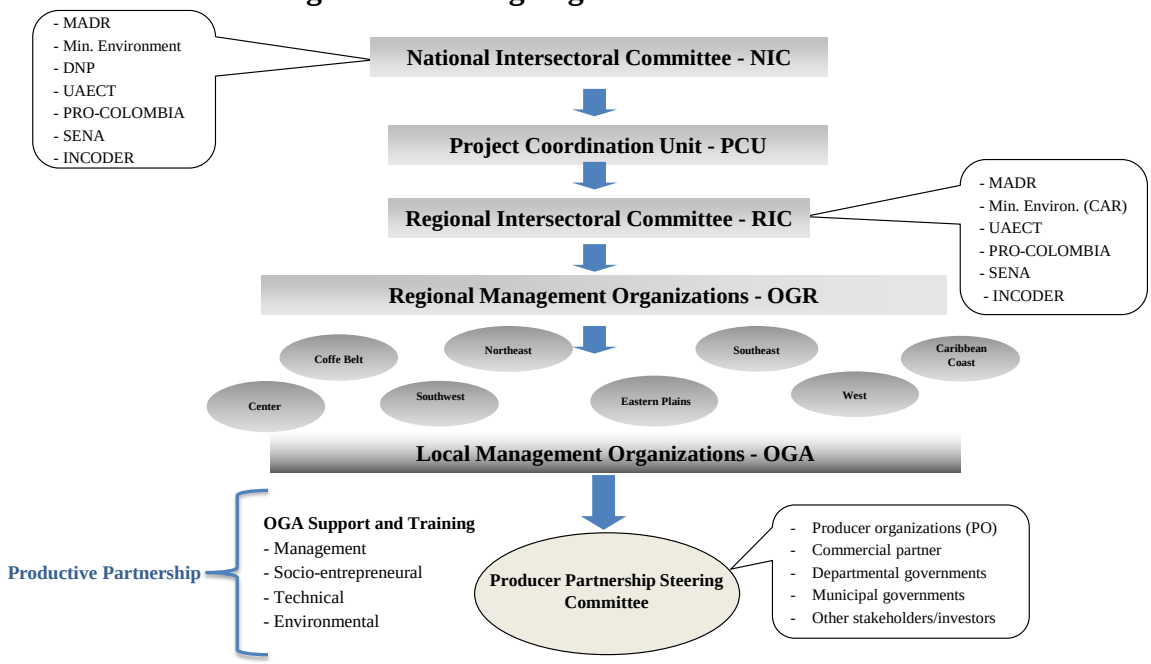
[10] The Project Budget and Financing Plan in Annex 5 of the PAD includes an arithmetic error. Converted using the exchange rate used in the PAD (US$1 = CO$2,200), the Total Project Cost of CO$270,480 million is equal to US$122.945 million. The correct value is reported here.

[11] Based on the Project Monitoring and Evaluation System.

Annex 2. Institutional Arrangements

A2.1 The main institutions involved in PAAP-II are depicted in Figure A2.1. Their respective responsibilities are briefly described below.

Figure A2.1 Organigram of main institutions



Source: MADR, 2014

A2.2 **The Ministry of Agriculture and Rural Development (MADR)** implemented the Project through the Rural Development Directorate (DDR). In addition, MADR's Productive Value Chains Directorate provided technical advice to the Project through its participation in the National and Regional Intersectoral Committees (see below).

A2.3 **The National Intersectoral Committee (NIC)** supervised the overall implementation of the Project. The NIC was headed by the Minister of Agriculture in MADR and included representatives of the Ministry of Environment (MinAmbiente), the National Planning Department (DNP), the Administrative Unit for Territorial Consolidation (UAECT), the National Export Promotion Institute (Pro-Colombia), the National Apprenticeship Service (SENA), and the Colombian Rural Development Institute (INCODER).

A2.4 **The Project Coordination Unit (PCU)** managed the day-to-day operations of the Project. The PCU was composed at the national level of a project coordinator and specialists in agribusiness, environment, social development, fiduciary analysis, accounting, monitoring and evaluation, as well as administrative support staff. The national PCU was complemented by eight regional teams each comprising a regional coordinator, experts in agribusiness, finance, environment, social development and project administration.

A2.5 **The Regional Intersectoral Committees (RICs)** were created for each of eight regions. Each RIC was responsible for: (i) defining the launch dates for the competitive calls for subproject proposals and the business round tables; (ii) approving the proposals selected by the Departmental Secretariats of Agriculture; and (iii) approving the grant awarded to each partnership. The RICs were composed of local representatives of the same institutions represented in the national committee.

A2.6 **The Departmental Secretariats of Agriculture (SAs)** disseminated information about the invitations to submit subproject proposals and received and ranked the profiles based on technical criteria. They also participated in the RIC and co-financed partnerships.

A2.7 **The Regional Management Organizations (OGRs)** were NGOs, consulting firms, chambers of commerce, universities and other institutions with demonstrated capacity to manage the process of structuring, preparing, and supervising the implementation of partnerships. The OGRs were contracted competitively on a long-term basis to provide the following services: (i) evaluation of the partnership subproject proposals presented to the SAs; (ii) supervision of partnership preparation and structuring; (iii) supervision and monitoring partnership implementation; (iv) reviewing and approving changes in the composition of the government financial incentive grant to the partnerships under their supervision; (v) assessing the performance of the OGAs that provided technical assistance to the partnerships; and (vi) functioning as a secretariat for the RICs. Some OGRs involved in PAAP-II had participated in the implementation of the first phase project.

A2.8 **Local Management Organizations (OGAs)** were private rural development organizations specialized in the provision of certain goods and services and having knowledge of local conditions. They assisted the partnerships during preparation, and provided the partnerships with transfers of management skills and technology during implementation. OGAs were selected competitively by the partners from a roster of OGAs approved by the OGRs. Their services were paid by project funds. Some OGAs involved in PAAP-II had already participated in the implementation of the first phase project.

Annex 3. Outputs by Component

A3.1 The Second Rural Productive Partnerships Project (PAAP-II) consisted of three components. This annex briefly summarizes the outputs achieved under each component.

A3.2 **Component 1: Partnership promotion and preparation** (US$12.32 million, of which IBRD US$3.41 million)

A3.3 Component 1 supported the identification and preparation of partnerships. This involved several steps, including the issuing of annual competitive calls for partnership proposals, the evaluation of partnership subproject proposals after they had been submitted, the preparation of pre-investment feasibility studies for pre-selected partnerships, the preparation of all necessary legal documentation, the approval of the financial incentive, and the establishment of a business and operational plan for each partnership.

A3.4 The partnership selection process worked as follows: Every year, the Departmental Secretariats of Agriculture (SAs) launched sensitization campaigns that culminated in calls for partnerships proposals. After the period for submitting proposals ended, the SAs conducted an initial evaluation of the proposals that had been received and pre-selected a certain number (the number of proposals pre-selected in each Department was determined by MADR). The SAs then forwarded the pre-selected proposals to the Regional Management Organizations (OGR), which conducted a separate evaluation. The top 40% proposals ranked by the OGRs were selected for pre-investment feasibility studies. The OGRs carried out pre-investment feasibility studies to determine whether the proposed partnerships were viable based on technical, commercial, financial, environmental, and social criteria. The PCU presented the results of the pre-investment feasibility studies to the National Intersectoral Committee (NIC), which reviewed the proposals and approved those that had been rated as viable. To complete the process, legal agreements were drawn up among the partnership stakeholders, and operational plans were defined

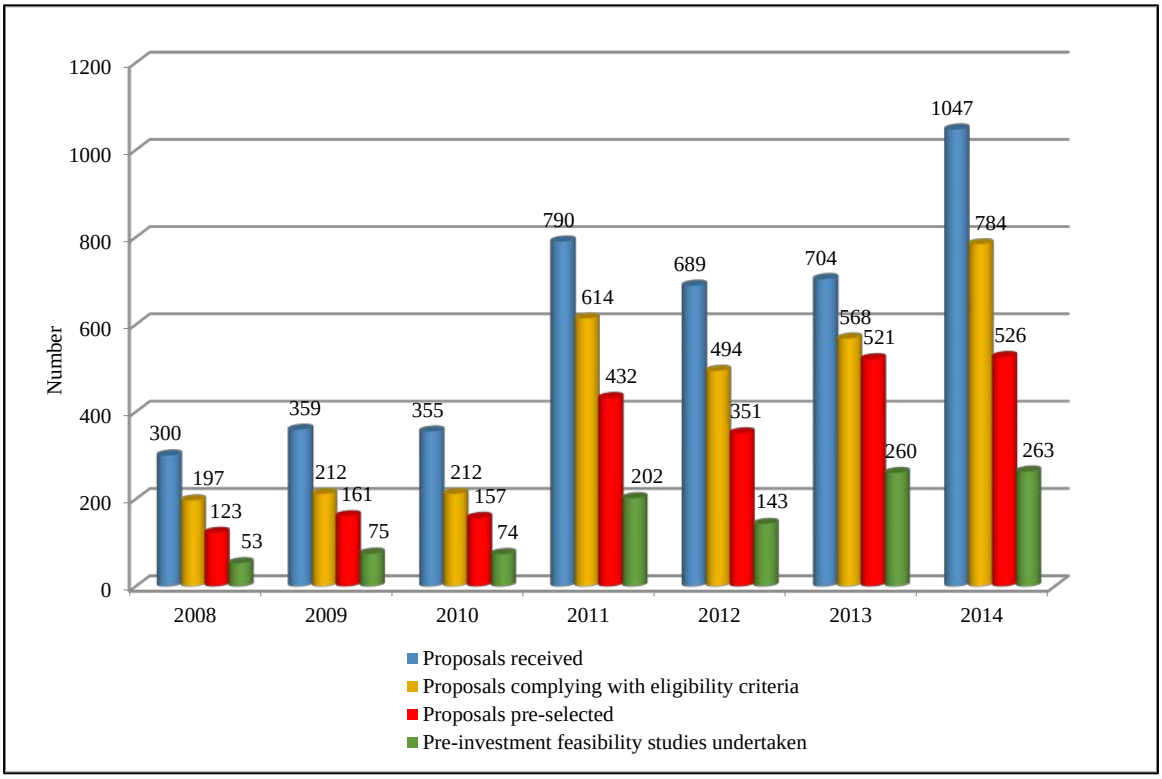
A3.5 Between 2008 and 2014, seven calls for partnership proposals were issued. In total, more than 4,200 proposals were received, of which 3,081 were judged to have complied with the eligibility criteria. Detailed information about the partnership proposal selection process appears in Table A3.1 below.

Table A3.1. Target versus actual outputs related to partnership proposals

	Target (number)	Actual (number)	Actual as % of Target
Calls for proposals launched	5	7	140
Proposals received	n/a	4,244	
Proposals complying with eligibility criteria	900	3,081	342
of which indigenous people and Afro-Colombians	*45*	*522*	1,160
Proposals pre-selected	n/a	2,271	
Pre-investment feasibility studies undertaken	325	1,070	329
Partnerships approved and established	300	744	248

A3.6 Trends in the number of partnership proposals received, accepted, and pre-selected and the number of pre-investment studies undertaken are shown in Figure A3.1.

Figure A3.1. Trends in partnership proposals, 2008-14



A3.7 **Component 2: Partnership implementation** (US$327.13 million, of which IBRD US$24.42 million)

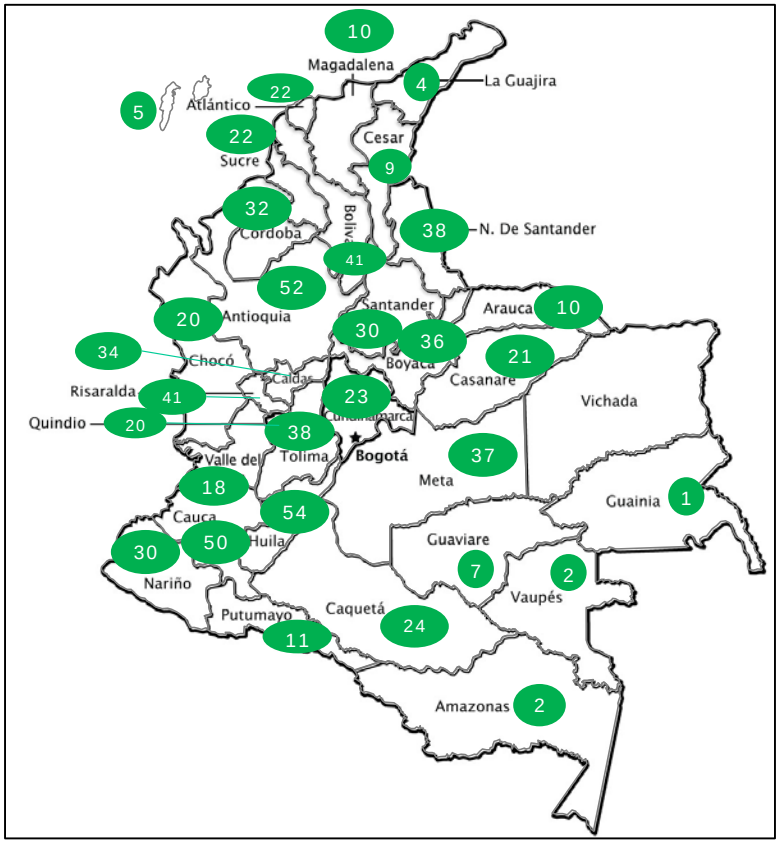
A3.8 Component 2 supported the implementation of the partnerships identified and prepared under Component 1. Matching grants (known as *Incentivos Modulares*, or government financial incentives) were awarded to fund the activities laid out in the partnerships' business plans, including construction of on-farm infrastructure, purchasing of machinery, equipment, and consumable inputs, and payment of labor costs. Component 2 also covered expenses related to securing technical advisory services, preparing studies, and contracting training to increase the productivity and entrepreneurial capacity of beneficiary producer organizations. Finally, Component 2 supported the activities of project intermediaries, particularly the OGRs and OGAs.

A3.9 The partnerships established under PAAP-II proved to be enduring. At project completion, 725 of 744 partnerships established during PAAP-II (97.4%) were still operating. Of the 19 partnerships that were no longer operating, just over 40% had discontinued operations because their productive activities had been adversely affected by climatic shocks (e.g., flooding, severe precipitation, or drought), and about 40% more had discontinued operations because of implementations issues (e.g., lack of coordination among members of the producer organization, failure of the municipality to provide promised funding, lack of security).

A3.10 The number of beneficiaries served by partnership subprojects established under PAAP-II was somewhat smaller than anticipated. Each partnership subproject served 58.5 beneficiaries on average, compared to 85 beneficiaries projected at appraisal. The number of beneficiaries per partnership was lower than projected in part because as it became clear that the most successful partnerships were those with strong solidarity between the members of the participating producer organization, the PCU scaled back efforts to encourage expansion of producer organizations. In addition, as the Project expanded into more remote, less densely populated areas of the country, it became increasingly difficult to identify large producer organizations.

A3.11 Coverage of the Project was extensive. At project completion, partnerships were operating in 31 of Colombia's 32 Departments. The densest coverage was achieved in the Departments of Antioquia, Huila, Cauca, Risaralda, Bolivar, Meta, and Norte de Santander (see Figure A3.2).

Figure A3.2. Partnership subprojects financed, by Department (number)



A3.12 Beneficiaries included both direct beneficiaries and indirect beneficiaries. In total, 42,552 producer households benefited directly from PAAP-II. Of the households that benefited directly, about 23% were households headed by women and about 22% were households made up of indigenous people or people of Afro-Colombian descent. An additional 11,057 producer households benefited indirectly, in the sense that they belonged to producer organizations that did not receive the government financial incentive grant but still benefited from collective goods, such as community infrastructure, technical assistance, etc. In other words, an additional 26% of non-beneficiary producers compared to the baseline Trends in key output indicators financed under Component 2 are shown in Table A3.2. (Sales data are not included, as they are discussed elsewhere in Section 3.2 and Annex 4.)

Table A3.2. Trends in outputs under Component 2, 2008-15

	2008	2009	2010	2011	2012	2013	2014	2015
Partnerships in operation (cumulative)	32	56	103	224	411	627	727	725
Departments with partnerships in operation	27	27	27	27	27	31	31	31
Direct beneficiaries (cumulative)	2,423	4,227	7,101	14,289	24,314	36,571	42,813	42,552
of which women heads of household (cumulative)	*168*	*911*	*1560*	*3,101*	*5,348*	*6,936*	*9,922*	*9,922*
of which indigenous people or people of Afro-Colombian descents (cumulative)	*n/a*	*749*	*1,347*	*2,956*	*6,22*	*8,471*	*9,252*	*9,252*
Indirect beneficiaries (cumulative)	n/a	n/a	n/a	n/a	4,465	7,720	11,062	11,057
OGRs contracted	8	8	8	8	8	8	8	8
OGAs contracted	20	37	36	70	155	178	164	95
Training and capacity-building activities provided (cumulative)	60	95	160	197	262	499	589	589

A3.13 PAAP-II was active in many different sub-sectors, with the heaviest concentration in specialty coffee, cacao, fruits (especially fruits with short production cycles), and livestock. PAAP-II financed productive investments over a vast area; by completion, sub-projects had financed investments on approximately 67,000 hectares. Table A3.3 and Figures A3.3 and A3.4 display the distribution of key partnership characteristics of subprojects in operation by major product lines.

Table A3.3. Partnership subproject characteristics, by major product line

Product line	**Number of partnerships**	**Direct beneficiaries**	**Hectares**	**Total investments partnerships** (Co$ millions)	**Grant investments partnerships** (Co$ millions)
Fruits (short-cycle)	146	7,235	7,119.25	103,608	28,618
Cocoa	144	9,706	18,082.50	164,864	37,262
Livestock	117	6,220	15,563.35	143,476	26,476
Specialty coffee	102	7,844	10,127.85	155,164	32,941
Other	73	4,165	8,646.23	74,466	16,490
Fruits (long-cycle)	59	3,421	5,075.14	43,036	11,967
Minor crops	47	1,800	557.01	34,738	7,590
Vegetables	37	2,044	2,466.15	31,646	8,626
TOTAL	**725**	**42,552**	**67,717.48**	**751,491**	**170,158**

Figure A3.3. Partnerships by major product line

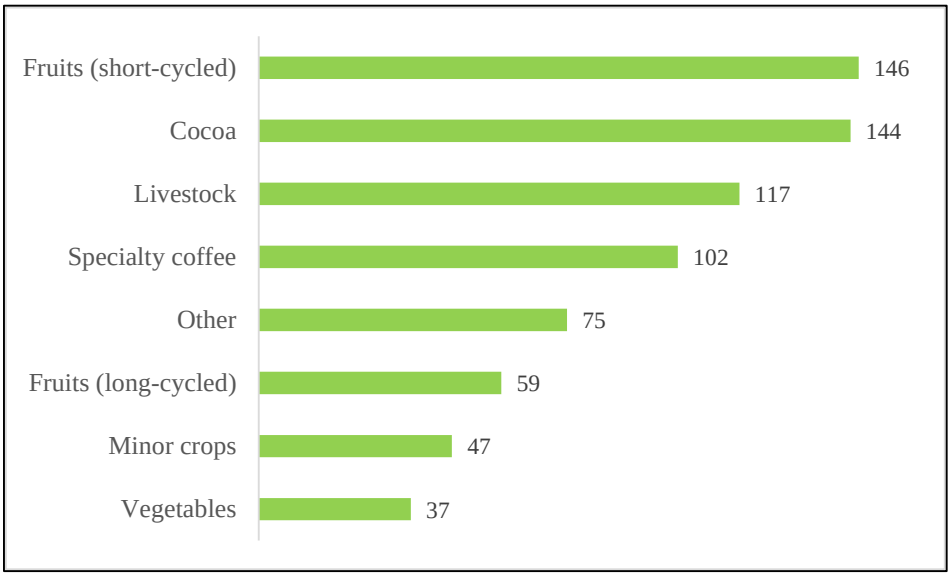
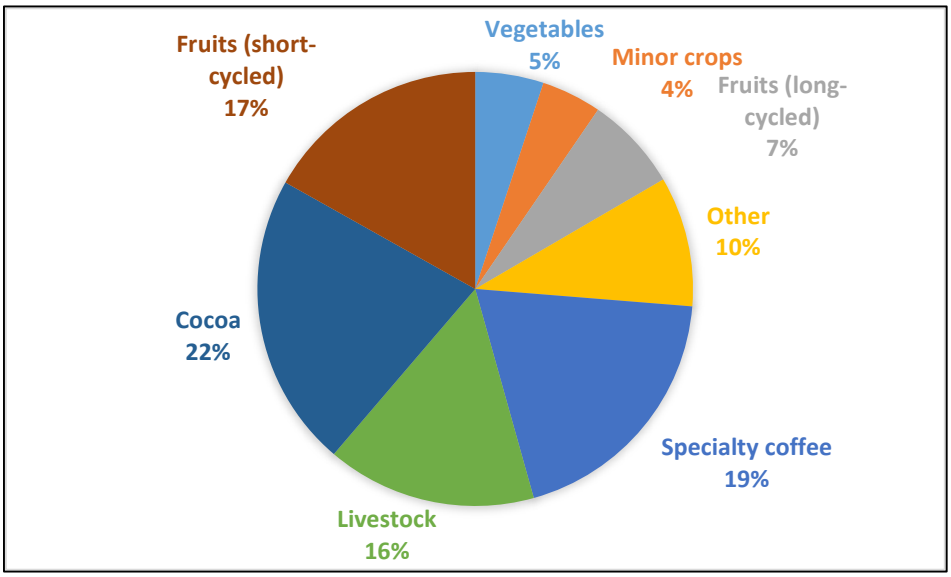


Figure A3.4. Percentage of government grant investment by major product line



A3.14 PAAP-II was extremely effective in leveraging co-financing, not only from the central government, but also from decentralized governments at the Departmental and municipal levels. At completion, the total budget of PAAP-II stood at Co$104.5 billion, nearly five times the Co$22 billion projected at appraisal.

A3.15 PAAP-II engaged actively with the private sector. By closing, 369 new commercial partners had entered into PAAP-II partnerships, and 73 commercial partners that had participated in PAAP-I partnerships remained engaged throughout the second phase (some of these also entered into new, additional partnerships during PAAP-II). The PAAP-II partnerships were established with a mix of large firms (42% of partnerships), medium-sized

firms (38% of partnerships), and small firms (20% of partnerships). The contributions of these commercial partners included mainly technical assistance (e.g., workshops, demonstrations, visits to processing plants) but also productive infrastructure (e.g., cooling tanks, storage facilities, packaging materials).

Table A3.4. Evolution of the revolving funds, by product line

	Programmed repayments agreed in business plan (Co$ millions)	**Cumulative actual repayments as of June 30, 2015** (Co$ millions)	**Repayment rate (%)**
Cereals	129	179	138
Yam	259	357	138
Plantain	790	942	119
Avocado	465	483	104
Beans	1,010	1,042	103
Aquaculture and fisheries	1,135	940	83
Specialty coffee	8,290	6,407	77
Vegetables	633	468	74
Figs	130	93	72
Rubber	504	356	71
Blackberry	686	457	67
Panela (raw sugar)	416	224	54
Animal husbandry	4,584	2,429	53
Fruits	1,919	938	49
Mango	272	113	42
Cocoa	5,762	2,006	35
Beekeeping	473	153	32
Forestry	30	8	26
Livestock	36	5	13
Total/Average	**27,522**	**17,599**	**64**

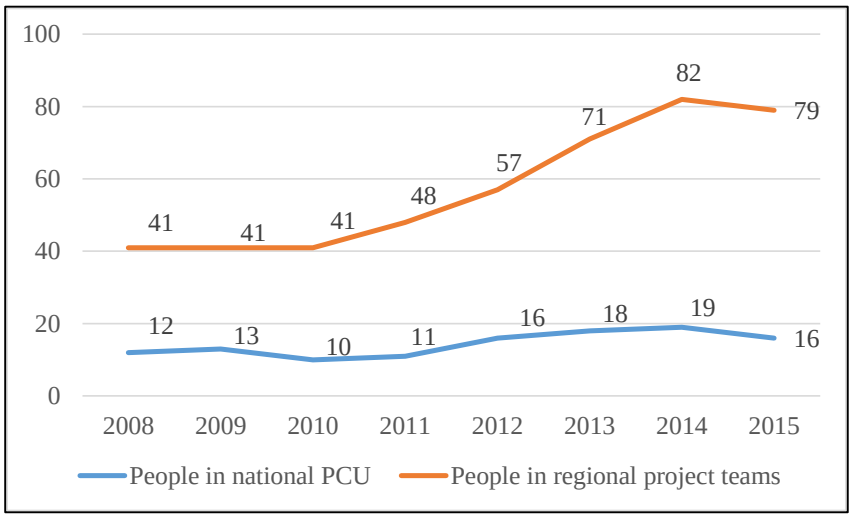
A3.16 PAAP-II supported the establishment of revolving funds, which were initially financed using funds recovered through the partial repayment scheme of the government financial incentive grant managed by the producer organizations. The idea behind the revolving funds was to provide producer organizations with a mechanism that they could use to finance their continuing operations. By completion, 399 revolving funds were in operation. As reflected in PDO Indicator, once a revolving fund had been established, the goal was to recover 70% of the funds that were scheduled to be repaid. Although this target was not achieved (see discussion in Section 3.2), across all producer organizations that had revolving funds, the average recovery rate was 64% of the repayments programmed in their business plans, not much below the 70% target (see Table A3.4). For many product lines, the repayment rate into the revolving fund significantly exceeds the 70% target, reflecting the very high repayment

rate (98%) of the 50% of producer organizations that exceed the 70% threshold. It is noteworthy as well that most of the producer organizations which do not meet the 70% repayment threshold produce perennial crops (e.g., cacao, forestry), which have long gestation periods, limiting producers' ability to repay quickly.

A3.17 **Component 3: Management, monitoring and evaluation** (US$6.12 million, of which IBRD US$1.48 million)

A3.18 Component 3 covered project management costs at the national and regional level. It financed the Project Coordination Unit (PCU), paid for staff in the Rural Development Directorate (DDR) of MADR who supported the Project, as well as operational costs for the monitoring system, evaluation studies, and yearly technical and financial audits. The central PCU in Bogota was staffed by a project coordinator, several technical specialists, and a team of fiduciary specialists (see Annex 2). The PCU was supported by eight teams operating at the regional level. The number of PCU staff increased gradually over time as the number of partnerships grew and demand for their services increased (Figure A3.5).

Figure 3.5. Human resources in PCU and regional project teams



A3.16 Throughout the life of the project, the PCU produced all required progress and fiduciary reports, including independent audits. As described in Section 2.4, audits were unqualified, but audit performance was deficient from 2012 onwards, as the Bank had to grant waivers due to the late submission of the 2012, 2013, 2014, and final audits.

A3.17 An important achievement of the PCU was the establishment of a Monitoring and Evaluation (M&E) online platform, which provided access to information on progress achieved against the project indicators, as well as information about the various partnerships (participants, membership of the participating producer organizations, productive activities, business activities, etc.). The M&E online platform also served as a repository for all PAAP-II related pre-investment studies, reports, and training materials. Data available through the project M&E online platform was used for many studies, including the Economic and Financial Analysis (EFA), the CIAT impact assessment, and the final impact evaluation.

Annex 4. Economic and Financial Analysis

A4.1 Annex 4 summarizes the results of the ex-post Economic and Financial Analysis (EFA). In addition to describing the methodological framework used for the IEFA, it presents the main financial/economic feasibility indicators and compares them to those calculated at project appraisal. The detailed tables and appendices of the Economic and Financial Analysis can be found in the project files.

A4.2 **Overall project outcome and impact.** The main economic benefit generated by the Project have been increases in net income realized by participating producer groups. These increases in net income can be attributed mainly to increases in production, productivity (yield), cultivated area, volume of marketed products, and/or product quality (unit price). Economic benefits also have been generated in the form of increased seasonal and permanent employment within participating agribusiness firms. Although difficult to quantify and value, an important additional benefit has been the empowerment of many participating producer organizations through capacity building and technical assistance, which has increased their ability to work effectively and efficiently with commercial partners and build long-term relationships. Finally, the Project has generated environmental benefits, since beneficiaries were mandated to develop environmental management plans that have helped to mitigate negative environmental externalities.

A4.3 **Project outputs.** In providing co-financing in support of 746 productive partnership subprojects, the Project strengthened producer organizations in 54 sub-sectors. The support provided to producer organizations proved to be enduring: of the 746 producer organizations involved in PAAP-II sub-projects, only 19 (3% of the total number of supported partnerships) had stopped operating by December 2014.[12] The 727 productive partnership subprojects still operating in December 2014 were benefiting 42,713 direct beneficiaries.[13]

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[12] The sub-projects that stopped operating included four involving plantain; three involving mango; two involving cocoa; two involving specialty coffee; two involving aquaculture; and one each involving livestock, maracuya, sugar, bamboo, cotton and melina). The total investment of the cancelled partnerships represented COP 14.3 million, of which COP 3.6 million was financed through Incentivo Modular.

[13] The numbers of 746 partnerships established and 727 partnerships in operation used in the Economic and Financial Analysis (EFA) differs from the numbers of 744 partnerships established and 725 partnerships in operation at project completion, as the EFA was launched in mid-December 2014, when 727 partnerships had a signed subproject agreements. By project completion in June 2015, it had become clear that two of those partnerships would not be able to start operating due to problems in the induction process.

Table A4.1. Total productive partnerships co-financing by the project (in US$ million)

	Subprojects			Investment		Source of funds			
						Incentivo modular		Counterpart	
Subsector	**No**	**%**	**Bene-ficiaries**	**COP m**	**%**	**COP m**	**%**	**COP m**	**%**
Cocoa	146	20	9,906	84.89	21	19.11	23	64.78	77
Coffee	102	14	7,849	78.17	20	16.54	21	61.63	79
Livestock (*)	113	16	6,099	70.13	18	13.09	19	57.04	81
Plantain	55	8	2,854	18.55	5	5.28	28	13.27	72
Rubber	36	5	1,766	18.00	5	3.46	19	14.54	81
Avocado	25	3	1,466	9.81	2	2.69	27	7.12	73
Blackberry	24	3	1,238	8.77	2	2.35	27	6.42	73
Aquaculture	17	2	660	6.56	2	1.39	21	5.17	79
Others	209	29	10,875	101.46	26	22.04	22	79.42	78
TOTAL	**727**	**100**	**42,713**	**395.33**	**100**	**86**	**22**	**309**	**78**

(*) Include milk and double purposes

A4.4 **Eligible investments.** Support was provided in the form of (i) the Incentivo Modular (mainly used to pay for on-farm infrastructure; machinery and equipment; consumable inputs such as planting materials and fertilizers; labor; etc.), and (ii) technical assistance and training. The maximum grant per household was established in the PAD at US$1,818, which could increase to US$2,726, if the partnership was able to obtain an additional US$909 or more per family in the form of commercial credit. While the amount of financing provided by the Project through the Incentivo Modular was limited to 30% of the partnership investment costs, the remaining 70% could come from different sources, including producer contributions (usually provided in kind as land, labor, equipment and/or materials, all valued at market prices); agribusiness partner contributions (often technical assistance, packaging materials, seeds, fertilizer); local government contributions (usually financing); and contributions from other partners such as the National Service for Apprenticeship (SENA), NGOs, or development agencies.

Methodological approach for Ex-Post Analysis

A4.5 The financial and economic cost-benefit analysis entailed three distinct phases: (i) population definition, sample selection, and review of secondary information to identify information gaps; (ii) field data collection and validation of data through telephone conversations with the producer organizations; and (iii) data aggregation and analysis.

A4.6 The sample for the EFA was selected in November 2014, using secondary information and the project data base. Because many of the partnerships that were operational at that time were still getting established and had not recorded significant sales, the following criteria were used to define the eligible partnerships from among the 727 partnerships that were in operation at that time, to ensure that partnerships selected for inclusion in the EFA would be sufficiently mature to allow estimation of benefits:

(i) Partnerships that had completed the implementation of the sub-project funded through the matching grant, as indicated by the disbursement of the final tranche of the Incentivo Modular by 31 December 2014;

(ii) Partnerships active in one of the main productive sub-sectors,[14] defined as sub-sectors that had received at least of 2.5 percent of the total investment support provided by the Project (these included cocoa, specialty coffee, livestock, plantain, rubber, avocado, blackberry, and aquaculture);

(iii) Partnerships that had completed at least one cycle of production and sales

A4.7 Application of these criteria reduced the number of partnerships eligible for inclusion in the EFA to 257 partnerships, These 257 partnerships had investments in sub-projects totaling US$146 million, or about 37% of the total investments made in sub-projects under PAAP II. The difference between total number of approved sub-projects (746) and the number of sub-projects included in the population eligible for inclusion in the EFA (257) stemmed from the fact that a significant number of sub-projects had been approved during the later years of project implementation, so many did not meet the criterion of having completed at least one cycle of production and sales. Out of US$146 million in total investment associated with the 257 eligible partnerships, US$31 million (21%) came from the Project through the Incentivo Modular, whereas US$115 million (79%) was contributed by beneficiaries, local governments, or other sources.

Table A4.2. Universe of productive partnership subprojects (in US$)

	Subprojects			Investment		Source of funds			
						Incentivo modular		Counterpart	
Subsector	**No**	**%**	**Bene-ficiaries**	**COP m**	**%**	**COP m**	**%**	**COP m**	**%**
Cocoa	89	35	6,255	52	36	11	22	41	78
Coffee	43	17	3,588	34	23	7	21	27	79
Livestock	56	22	393	34	23	6	18	28	82
Plantain	20	8	1,116	7	5	2	27	5	73
Rubber	11	4	487	5	3	1	19	4	81
Avocado	12	5	711	5	3	1	25	4	75
Blackberry	16	6	857	6	4	2	27	4	73
Aquaculture	10	4	393	4	3	1	20	3	80
TOTAL	**257**	**100**	**13,800**	**146**	**100**	**31**	**21**	**115**	**79**

[14] To facilitate the analysis, partnerships in the sub-sectors of dairy cattle and dual purpose cattle were grouped and called "dual purpose cattle," and partnerships in the fish farming and tilapia production lines were grouped in “aquaculture.”

A4.8 Table A4.3 shows the regional distribution of the sub-projects in the population. Over one-half of the sub-projects were located in the Andean Region, followed by the Pacific and Caribbean regions.

Table A4.3. Regional distribution of the productive subprojects

Region	Partnerships
Andina	149
Caribe	35
Pacifico	45
Orinoquia-Amazonia	28
Total	**257**

A4.10 From this population, a sample of 56 sub-projects was selected through a 2-stage process stratified by main sub-sectors and geographic location. From each of the 8 most important sub-sectors, 7 sub-projects were selected so as to have a minimum critical number to assess the efficiency of investments in each of these sub-sectors (see Table A4.4).[15] One sub-project could not be visited due to security concerns during the period of field work and had to be dropped from the sample. This occurred very late in the survey so it was not possible to replace it with another sub-project. The final selection of partnerships (after stratification) was done on a random basis. However, given the geographic dispersion of the population and the limited resources in terms of time, human and transportation costs, geographic proximity was taken into account during the final selection. Therefore, the productive partnership sub-projects were located along four routes: Route 1 (Risaralda); Route 2 (Quindios and Caldas); Route 3 (Meta) and Route 4 (Valle del Cauca).

Information gathering and systematization

A4.11 Information available in the M&E system for each of the productive subprojects in the sample was extracted, analyzed, and systematized. Based on this analysis, gaps were identified in the data needed to conduct the ex-post cost-benefit analysis. An Excel-based data collection tool was designed to ensure consistency in data collection while allowing for sufficient flexibility to reflect specificities of each sub-sector. To assess the performance of the productive subprojects, past data on key technical and financial parameters were collected from the producers associations. In addition, the most likely scenarios for the future evolution of these parameters were discussed with producer organizations and other key informants for both the “with” and “without project” situation.

[15] One sub-project could not be visited due to security concerns during the period of field work and had to be dropped from the sample.

Table A4.4. Sample of productive partnerships subprojects (amount in US$ million)

	Sub-projects	Beneficiaries		Investment		Source of funds			
						Incentivo Modular		Counterpart	
	No	No	%	US$ m	%	US$ m	%	US$ m	%
Cocoa	7	425	15	3.33	13	0.85	26	2.43	74
Special	7	537	18	4.58	18	1.02	22	3.56	78
Livestock	7	248	9	3.37	13	0.53	16	2.85	84
Plantain	7	487	17	2.44	10	0.76	31	1.68	69
Rubber	6	260	9	2.95	12	0.49	17	2.46	83
Avocado	7	325	11	2.08	8	0.60	29	1.48	71
Blackberry	7	399	14	3.45	14	0.77	22	2.68	78
Aquaculture	7	230	8	3.37	13	0.66	20	2.71	80
TOTAL	55	2,911	100	25.52	100	5.66	22	19.86	78

Calculation of efficiency parameters

A4.12 Using the primary and secondary data, a detailed ex-post cost benefit analysis was conducted for each of the 55 subprojects, covering a 10-year period. In addition to the Internal Rate of Return (IRR), the following parameters were estimated (by partnership and by family): incremental annual net income, employment generated (family, seasonal and permanent), and incremental Net Present Value (NPV) using a discount rate of 12 percent to reflect the opportunity cost of capital.

A4.13 The IRR and NPV were calculated from both the financial and the economic perspective, using market and economic prices, respectively. Given the importance of family labor (which in many cases accounted for the bulk of production costs), the FIRR was calculated both with and without family labor valued at market wage rates. For the economic analysis, conversion factors for Colombia estimated by the Planning National Department DNP [16] were used to transform market prices into economic prices. Table A4.5 displays the conversion factors used in this analysis.

[16] The conversion factors were obtained from the Sub-directorate of Projects and Information for the Public Investment. For further details, refer to: https://www.dnp.gov.co/programas/inversiones-y-finanzas-publicas/Paginas/Metodologias.aspx

Table A4.5. Conversation factors used to convert from market prices to economic prices

Category	Conversion Factor
Standard Conversion Factor for agricultural investment	
Conversion Factor for agricultural investment	0.91
Shadow price - Outputs	
Coffee	0.94
Milk	0.85
Livestock (dual purpose dairy and meat)	0.90
Other agricultural (including aquaculture)	0.91
Shadow price - Inputs	
Works, materials, and agricultural inputs	0.79
Machinery and agricultural equipment	0.77
Agricultural services (including transportation)	0.79
Other costs	0.80
Shadow price - Labor	
Skilled/qualified labor	1.00
Non-skilled/qualified labor (CEPAL)	0.60
Administrative labor	0.49

Source: DNPA and CEPAL

A4.14 Based on the results of the sample analysis, average incremental net income flows were calculated for each sub-sector. This provides the basis for the extrapolation of results from the sample to the universe of the eight sub-sectors by multiplying the average cost and revenue streams by the number of sub-projects in each sub-sector.

Ex Post Economic and Financial Analysis of Productive Partnerships

A4.15 Out of the 55 sub-projects analyzed, 43 sub-projects (79%) were found to have FIRRs above 12%, and 12 sub-projects (21%) were found to have FIRRs below 12%. The low returns of some sub-projects is attributable to the long delays in sub-project implementation due to late disbursement of counterpart funds from other public funding sources. In case of rubber, the 15 year period covered by the analysis does not capture the full benefits stream, given that rubber trees have a seven-year gestation period and a productive life spanning several decades.

A4.16 Aggregated financial and economic indicators are displayed in Tables A4.6 and A4.7. FIRRs range from 18% (rubber) to 38% (plantain) and average 29% across sub-sectors. Adding the incremental costs of family labor valued at market rates reduces the FIRR to 21% on average. The overall EIRR is 26%, ranging from 16% (rubber) to 40% (plantain). The aggregate FNPV is US$132 million, which falls to US$67 million if family labor valued at market rates is included. The ENPV comes to US$96 million.

Table A4.6. Financial and economic indicators for the universe of partnerships

Sub-sector	SP	Benefi-ciaries	Invest-ment	Employ-ment	Internal Rate of Return (%)			Net Present Value (US$ m)		
					FIRR 1	FIRR 2[a]	EIRR	FNPV 1	FNPV 2[a]	ENPV
Cocoa	89	6,255	52	1,359	29	19	20	51.49	22.86	34.00
Coffee	43	3,588	34	733	36	28	32	35.88	19.27	23.48
Livestock	56	393	34	193	20	18	18	12.38	9.43	9.88
Plantain	20	1,116	7	738	38	20	40	13.75	3.91	9.26
Rubber	16	487	5	132	18	14	16	1.78	0.55	1.20
Avocado	12	711	5	128	31	21	24	2.60	0.77	1.14
Blackberry	11	857	6	289	32	28	35	9.37	6.96	9.51
Aquaculture	10	393	4	132	24	21	27	1.65	0.990	2.02

[a] *Including family labor valued at market prices*

A4.17 The above analysis takes into account only direct investment costs. Considering also indirect costs (e.g., costs associated with partnership preparation, technical assistance and project management and monitoring costs proportionate to the share of the investment analyzed), the FIRR and FNPV fall to 27% and US$124 million respectively (see Table A4.7). Applying economic prices, the EIRR and ENPV decline further to 25% and US$89 million, respectively.

Table A4.7. Aggregate financial and economic indicators

Universe	FIRR	FIRR [a]	EIRR	FNPV [a]	FNPV	ENPV
	(%)			(US$ m)		
1st scenario: Direct investment costs	29	21	26	131.92	66.84	96.23
2nd scenario: Including indirect costs	27	20	25	123.76	58.68	88.85
3rd scenario: Sensibility analysis - Reduction of 20% of net incremental income	25	18	22	90.01	37.94	62.97

[a] *Including family labor valued at market prices*

A4.18 **Sensitivity analysis.** To test the robustness of the results against adverse technical, climate or market related events, sensitivity analysis was conducted on the full-cost scenario (i.e., including proportionate indirect costs) by imposing a 20% reduction of net incremental income. The results were found to be quite robust, with the FIRR decreasing only slightly to 25% and the FNPV to US$90 million. Applying economic prices, the EIRR falls further to 22% and the ENPV to US$62 million.

A4.19 **Employment creation.** On average, each partnership generated 14 full time jobs. Extrapolating from these results to the entire population of subprojects, it is estimated that PAAP-II generated nearly 3,750 full time jobs. Partnerships involved with production of plantain and blackberry generated the largest number of full time jobs on average (37 jobs and 26 jobs, respectively). If the rate of employment creation is similar among all 746 sub-projects supported by the Project, then the total number of equivalent jobs created would be approximately 10,444.

A4.20 **Incremental income.** In 2014, average annual incremental net income per beneficiary generated by subprojects ranged from US$193 (cocoa) to US$4,754 (aquaculture). The low incremental net income observed in some sub-sectors (e.g., cocoa, avocado, and rubber) is due to the long gestation periods for these commodities, which results in negative returns during the first few years when trees are still maturing and have not begun to produce. When average annual incremental net income is calculated for the period Year 3 through Year 15, the average net returns look considerably more attractive, ranging from US$1,863 per beneficiary (plantain) to US$4,400 (livestock).

Comparison of ex ante and ex post EFA results

A4.21 In comparing the results of the ex post EFA with those of the ex-ante EFA, several methodological differences need to be taken into account. First, the ex-ante analysis was mainly based on business plans for about 50 sub-projects funded under PAAP-I, combined with ex-post data from a small sample of only eight sub-projects. Second, the analysis was based on total net benefits rather than on incremental net benefits, and hence no “without project” scenario was considered. Third, in the ex-ante analysis, the commodities analyzed (fish, onion, sugar, mandarin oranges, African palm) and used as basis for estimating the overall project returns turned out to be quite different from the commodities that actually benefited from the investment.

Annex 4.1: Ex-post analysis of productive partnership sub-projects sample

A4.22 **Cocoa partnerships.** The Project has supported 146 cocoa partnerships, with a total investment value of US$84 million (21% of total investments in productive partnerships), of which US$19 million was contributed by the Incentivo Modular. Cocoa partnerships benefited 9,906 producers (23% of all project beneficiaries).

A4.23 Seven cocoa partnerships were analyzed in detail: ASOVICA, ASOPROBEL, PROASPEN, PALENQUE, UNION TEMPORAL RIO DUDA, AGROSABANA, and ASOCAMPOARIRI. These seven partnerships represent a total investment value of US$3.27 million, of which US$0.8 million was contributed by the Incentivo Modular. Investment costs fell into the following categories: agricultural inputs (40%); equipment and capital goods (6%); technical assistance (15%); labor (10%); Social and Environmental Plans (10%); OGA (16%) and hired management (3%). Out of seven cocoa partnership subprojects analyzed, all reported increases in cultivated area, six reported increases in yields, two reported improvements in the quality of their cocoa, and one reported receiving higher prices.

A4.24 The average investment in cocoa partnership subprojects was US$0.46 million (of which US$0.12 million was contributed by the Incentivo Modular). The financial and economic indicators for each subproject. The average FIRR and FNPV are 19% and US$0.25 million (or US$4,231 per beneficiary). Eliminating the incremental costs of family labor valued at market wage rates from the analysis, the IRR increases to 29% and the resulting NPV to US$0.57 million (or US$9,529 per beneficiary). The average EIRR for the seven partnerships is 20% resulting in an average ENPV of US$0.38 million (or US$6,292 per beneficiary) applying a 12% discount rate.

A4.25 On average, the incremental annual net income per productive subproject after project year 3 is US$172,629 (and US$2,990 per family).[17] Cocoa partnerships also show an important average increase of annual family labor of 3.35 person/days (equivalent to 12 person/year), and an average increase of annual seasonal labor (paid worker) of 848 person/days (equivalent to 3 person/year). Little permanent employment is created at the level of the associations: an average of 0.71 person/year (depending on the partnership).

A4.26 **Specialty coffee partnerships.** The Project has supported 102 coffee partnerships benefiting 7,849 producers (18% of the total project beneficiaries). The total investment value was US$78 million (20% of total investments in productive partnerships), of which US$17 million was contributed by the Incentivo Modular.

A4.27 Seven coffee partnership subprojects were analyzed in detail: CAFEMASU, ASOAPIA, ASOCAFES, ACOC CAFÉ SANO, CUCHILLA DE DAN JUAN, APECAFEQ, and ALTOS DE LA SIERRA. The total investment volume amounts to US$4.5 million (including US$1.02 contributed by the Incentivo Modular). On average, investment costs fell into the following categories: agricultural inputs (30%); equipment and capital goods (22%); Social and Environmental Plans (17%); OGA (15%); technical assistance and training (13%); and hired management (2%).

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[17] Including family labor valued at market prices.

A4.28 The average investment in special coffee partnership subprojects was US$0.65 million (of which US$0.15 was contributed by the Incentivo Modular). The average FIRR and FNPV are 28% and US$0.44 million, respectively (or US$5.51 per beneficiary). Removing the costs of family labor valued at market wage rates, the IRR increases to 36% and the resulting FNPV to US$0.84 million (US$10,352 per beneficiary). From the economic perspective, average EIRR and ENPV are 32% and US$0.54 million (or US$6,717 per beneficiary) when applying a 12% discount rate.

A4.29 The project investment has impacted on the productive base of the associations. Therefore, out of seven special coffee subprojects analyzed, five reported increases in cultivated area, all seven reported increases in yield, six reported improvements in coffee quality, and three reported receiving higher prices.

A4.30 On average, the incremental annual net income per productive subproject after project year 3 is US$183,647 (or US$2,474 per beneficiary). Coffee partnerships have generated an average annual increase of non-paid labor of 2,755 person/days (equivalent to 10 person/year) and of seasonal labor of 2,095 person/days (equivalent to 7 person/year). On average, non-permanent employment has been generated in the coffee partnerships, with the exception of ASOCAFES that has recruited a manager.

A4.31 **Livestock partnerships.** The Project has supported 113 livestock partnerships with a total investment value of US$70 million (18% of total investments in productive partnerships), of which US$13 million was funded by the Incentivo Modular and US$57 million by the counterparts, benefiting 6,099 producers (14% of the total number of beneficiaries).

A4.33 Seven livestock partnerships were evaluated: AGROGANAL I, AGROGANAL II, CORELAC, ASOLHER, APRAGEN, ASOPROAGRO, and ALMEGAN. The total investment value of US$3.37 million included US$0.52 million contributed by the Incentivo Modular IM. On average, investments fell into the following categories: agricultural inputs (34%); equipment and capital goods (22%); OGA (18%); Social and Environmental Plans (11%); technical assistance and training (10%); and hired management (4%). Out of the seven livestock projects analyzed, all have shown increases in milk production per cow, six have reported increased birth rates, three reported having received higher prices, three have reported increased lactation periods, and one has reported increased grazing areas.

A4.34 The average investment in livestock partnership subprojects was US$0.48 million (of which US$0.07 was contributed by the Incentivo Modular).

A4.35 The average FIRR and FNPV per partnership are 18% and US$0.16 million (or US$4,753 per beneficiary), respectively. By removing the “unpaid” family labor valued at market wage rates, average FIRR increases to 20% and the FNPV rises to US$0.22 million (US$6,242 per beneficiary). The average EIRR and ENPV are 19% and US$0.17 million per partnerships (US$4,978 per beneficiary) applying a 12% discount rate.

A4.36 On average, the incremental annual net income per productive subproject after project year 3 is US$137,203 (or US$4,400 per beneficiary). The impact in term of employment generation has been low across the analyzed partnerships: 1.63 non-paid person/year and 0.68 person year for seasonal jobs were created. One permanent employment has been generated on average per livestock partnership.

A4.37 **Plantain partnerships.** The Project has supported 55 plantain partnership sub-projects in the plantain sector with a total investment value of US$19 million (5% of total investments in productive partnerships), of which US$5 million was funded by the Project and US$13 million by diverse counterparts contributions, benefiting to 2,854 producers or 7 percent of the total project beneficiaries.

A4.38 Seven plantain partnerships were evaluated: AGROPEBERL, APLABAL, ASOPLABEL, ASOPLAGEN, I, ASOPLAPIA, ASOPLAPIA II, and FRUTANDINA, representing an average total investment of US$2.43 million (including US$0.76 million that was contributed by the Incentivo Modular). Each plantain partnership benefited 70 producers. Investments fell into the following categories: Equipment and capital goods (12%); agricultural inputs (44%); labor (16%); technical assistance and training (5%); Social and Environmental Plans (7%); OGA (13%) and Manager (2%). Out of seven plantain subprojects analyzed, five reported increases in cultivated area, all seven reported increases in yield, and two reported having received higher prices.

A4.39 The average investment in plantain partnership subprojects was US$034 million (of which 0.10 was contributed by the Incentivo Modular). Average FIRR and FNPV were estimated at 20% and US$0.19 million (or US$2,811 per beneficiary). Removing the costs of family labor valued at market wage rates, the FIRR increases to 38% and the resulting FNPV to US$0.68 million (or US$9,883 per beneficiary). The average EIRR for the 7 partnerships is 40%, resulting in an average ENPV of US$0.64 million (or US$9,250 per beneficiary) applying a 12% discount rate.

A4.40 On average, the incremental annual net income per productive subproject after project year 3 is US$121,927 (or US$1,863 per beneficiary). On average, plantain partnerships generate relatively more employment, as they lead to increased use of family labor (an additional 26.87 persons / year) and increased use of seasonal paid workers (an additional 9 persons / year, equivalent to an increase in permanent employment of one person / year.)

A4.41 **Rubber partnerships.** The Project has supported 36 rubber partnerships for an investment value of US$18 million. Of this amount, US$3 million was contributed by the Incentivo Modular, and US$15 million came from counterpart funding, benefiting a total of 1,766 producers.

A4.42 Because of security issues, it was not possible to meet with or collect data from ASOPROCAVIS II was not possible due to reason of public order, so only six out of seven partnerships were analyzed: ASCULTICAUCHO, ASOHECALDAS I, ASOHECALDAS II ASOHECESAR, CORPOCAME, and VILLA LA PAZ. The total investment in rubber sub-projects totaled US$2.9 million (including US$0.48 million contributed by the Incentivo Modular), benefiting an average of 260 producers per subproject. Investments fell into the following categories: Equipment and capital goods (11%); agricultural inputs (39%); labor (3%); technical assistance and training (11%); Social and Environmental Plans (11%); OGA (21%) and Manager (3%). Out of seven rubber subprojects analyzed, 5 reported increases in cultivated area and in yield, and 2 reported improvements in rubber quality.

A4.43 The average investment in rubber partnership subprojects was US$0.49 million (of which 0.08 was contributed by the Incentivo Modular).

A4.44 The average FIRR and FNPV are 14% and US$0.05 million (or US$1,166 per beneficiary), respectively. Eliminating in the incremental flows the costs of family labor valued at market wage rates, the IRR increases to 18% and the resulting NPV to US$0.16 million (or US$3,756 per beneficiary). The average EIRR for the 6 partnerships is 16% resulting in an average ENPV of US$0.11 million (or US$2,528 per beneficiary) applying a 12% discount rate.

A4.45 On average, the incremental annual net income per productive subproject after project year 3 is US$111,918 (and US$2,696 per family[18]). Rubber partnerships also show an increase on average of annual family labor of 1,565 person/days (equivalent to 5.43 person/year), and an average increase of annual seasonal labor (paid worker) of 523 person/days (equivalent to 1.82 person/year). Little permanent employment is created at the level of the associations: an average of 1 person/year (depending on the partnership).

A4.46 **Avocado partnerships.** The Project has supported 146 avocado partnerships sub-projects that sum up to an investment value of US$10 million (2% of total investments in productive partnerships), of which US$3 million was contributed by the Incentivo Modular and US$7 million came from counterpart funds. Cocoa partnerships benefited 1,466 producers (3% of the total project beneficiaries).

A4.47 Seven avocado partnerships were analyzed in depth: APATEX APROARÉ, ASOAGROACEBAL, ASOFRUTOS, ASOHOFORMA, ASOPROQUIN and FUNDEA. These seven partnerships represented a total investment value of US$2.08 million, of which US$0.59 was contributed by the Incentivo Modular. Investments fell into the following categories: Equipment and capital goods (16%); agricultural inputs (34%); technical assistance (14%); Social and Environmental Plans (15%); OGA (17%) and Manager (4%). Out of seven avocado subprojects analyzed, six reported increases in cultivated area, all seven reported increases in yield, and five reported increase in prices received. The average investment in avocado partnership subprojects was US$0.29 million (of which US$0.08 million came in the form of a contribution from the Incentivo Modular).

A4.48 The average FIRR and FNPV are 21% and US$0.15 million (or US$3,323 per beneficiary), respectively. Eliminating in the incremental flows the costs of family labor valued at market wage rates, the IRR increases to 31% and the resulting NPV to US$0.36 million (or US$7,793 per beneficiary). The average EIRR for the seven partnerships is 24% resulting in an average ENPV of US$0.17million (or US$3,785 per beneficiary) applying a 12% discount rate.

A4.49 On average, the incremental annual net income per productive subproject after project year 3 is US$87,083 (and US$2,037 per beneficiary). Cocoa partnerships also show an important average increase of annual family labor of 2,087 person/days (equivalent to 7 person/year), and an average increase of annual seasonal labor (paid worker) of 839 person/days (equivalent to 3 person/year). Little permanent employment is created at the level of the associations: an average of 0.55 person/year (depending on the partnership).

A4.50 **Blackberry partnerships.** The Project has supported 24 blackberry partnerships that sum up to an investment value of US$9 million (2% of total investments in productive

[18] Including the cost of non-paid labor valued at market prices.

partnerships), of which US$2 million was contributed by the Incentivo Modular and US$6 million by counterpart. Cocoa partnerships benefited 1,238 producers (3% of all project beneficiaries).

A4.51 Seven partnerships were analyzed in depth: AFRUZAP, ASMOBEL, ASOCOMPARTIR, ASOFRUMO, ASOMORA, COPAC, and FRUTIMORA. They represented a total investment value of US$3.44 million, of which US$0.76 was contributed by the Incentivo Modular. Investments fell into the following categories: Equipment and capital goods (18%); agricultural inputs (39%); technical assistance (13%); Social and Environmental Plans (10%); OGA (17%); and Manager (3%). Among the seven blackberry subprojects analyzed, all reported increases in cultivated area and in yield, four reported having received increase in prices, and one reported having significantly improved blackberry quality. The average investment in blackberry partnership subprojects was US$0.49 million (of which 0.10 came through the Incentivo Modular contribution).

A4.52 Average FIRR and FNPV are 28% and US$0.43 million (or US$7,628 per beneficiary), respectively. Eliminating in the incremental flows the costs of family labor valued at market wage rates, IRR increases to 32% and the resulting NPV to US$0.58 million (or US$10,270 per beneficiary). The average EIRR for the 7 partnerships is 35% resulting in an average ENPV of US$0.59 million (or US$10,431 per beneficiary) applying a 12% discount rate.

A4.53 On average, the incremental annual net income per productive subproject after project year 3 is US$171,235 (and US$3,251 per beneficiary). Blackberry partnerships also show an important average increase of annual family labor of 3,339 person/days (equivalent to 12 person/year), and an average increase of annual seasonal labor (paid worker) of 3,744 person/days (equivalent to 13 person/year). Little permanent employment is created at the level of the associations: an average of 1.68 person/year (depending on the partnership).

A4.54 **Aquaculture partnerships.** The Project has supported 17 aquaculture partnerships for a total investment value of US$7 million (2% of the total investments in productive sub-projects), of which US$2 million was contributed by the IM and US$5 million by counterpart. Aquaculture partnerships benefited 660 producers (22% of all project beneficiaries).

A4.55 Seven aquaculture partnerships were analyzed in depth: MEDIO BAUDO, ASOPISAN, PAAS, ASOPEZ, AGROCAMTO, COOPISAIPE, and COOPEZCA, representing a total investment value of US$3.37 million, of which US$0.66 was contributed by the Incentivo Modular. Average investments essentially fell into the following categories: Equipment and capital goods (10%), agricultural inputs (41%), labor (15%), technical assistance (11%), Social and Environmental Plans (6%), OGA (14%), and Manager (3%). Among the seven aquaculture subprojects analyzed, all seven reported reductions in mortality and increases in the density of fish, six reported having received higher prices, and five reported increases in cultivated area. The average investment in aquaculture partnership subprojects was US$0.48 million (of which US$0.09 million was contributed by the Incentivo Modular).

A4.56 The average FIRR for aquaculture projects is 21%, and the average FNPV is US$0.20 million (or US$6,087 per beneficiary). Removing the cost of family labor valued at market wage rates, the IRR increases to 24%, and the NPV rises to US$0.29 million (or US$8,885 per beneficiary). The average EIRR for the seven partnerships is 27% resulting in an average ENPV of US$0.32 million (or US$9,831 per beneficiary) applying a 12% discount rate.

A4.57 On average, the incremental annual net income per productive subproject after project year 3 is US$122,420 (and US$3,518 per beneficiary). Aquaculture partnerships also show important increases in the use of family labor of 2,388 person days (equivalent to eighth full time jobs per year), and an average increase of annual seasonal labor (paid worker) of 1,139 person/days (equivalent to four full-time jobs per year). Little permanent employment is created at the level of the associations, however: aquaculture projects generate only around 1 person/year (depending on the partnership).

Annex 5. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Ethel Sennhauser	Sector Manager	LCSAR	
Marie-Helene Collion	Lead Agricultural Specialist	LCSAR	Team Leader
Pierre Werbrouck	Senior Agricultural Specialist	LCSAR	Team Leader
Natalia Gomez	Senior Rural Development Specialist	LCSAR	
Jean-Claude Balcet	Senior Agriculture Economist	AFTA1	
Jeannette Estupinan	Sr Financial Management Specialist	LCSFM	
Jose M. Martinez	Senior Procurement Specialist	ECSO2	
Jairo A. Arboleda	Consultant	LCSSO	Safeguards Specialist
Beatriz Elena Franco	Program Assistant	LCC1A	
Supervision/ICR			
Laurent Msellati	Practice Manager	GFA04	
Wilhelmus Gerardus Janssen	Lead Agricultural Specialist	GFA07	Team Leader
Natalia Gomez	Senior Rural Development Specialist	LCSAR	
Mary Lisbeth Gonzalez	Senior Social Development Specialist	GSURR	
Jeannette Estupinan	Sr Financial Management Specialist	LCSFM	
Gabriel Penaloza	Procurement Specialist	LCSPT	
Jean-Claude Balcet	Consultant	AFTA1	Agricultural Economist
Pierre Rondot	Consultant	MNSAR-HIS	Agricultural Specialist
Michelle Friedman	Junior Professional Associate	LCSAR	
Mia Overall	Junior Professional Associate	LCSAR	
Carmine Paolo de Salvo	Junior Professional Associate	LCSAR	
Pamela Carolina Alvarez Zurita	Program Assistant	GFA04	
Michael Morris	Lead Agricultural Specialist	GFA04	Team Leader
Luz Berania Diaz Rios	Senior Agribusiness Specialist	GFA04	
Alexandra Christina Horst	Junior Professional Officer	GFA04	
Sandra Ximena Enciso Gaitan	ET Consultant	GGODR	Procurement Specialist
Gustavo de Montalvao G. Abath	Program Assistant	GFA04	

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	US$ thousands (including travel and consultant costs)
Lending		
FY07	19.23	90.75
FY08	3.89	15.62
Total:	**23.12**	**106.37**
Supervision/ICR		
FY08	5.42	29.07
FY09	10.61	48.86
FY10	25.75	120.13
FY11	20.73	118.21
FY12	25.44	132.50
FY13	19.81	130.43
FY14	11.23	81.89
FY15	43.27	210.75
Total:	**162.26**	**871.84**

Annex 6. Summary of Impact Evaluation

A6.1 This Annex summarizes the main results of the impact evaluation of the project conducted in 2015. To estimate the Project's results and impacts, an independent firm (Econometria) implemented structured household surveys with 899 beneficiary producers and 1,481 comparable control group producers. The household survey questionnaire modules captured main socio-economic household and production characteristics to assess the Project's effect on results, PDO outcomes, as well as longer-term impacts. The sampling strategies to select beneficiary producers and control group producers for the evaluation, as well as the quasi-experimental methodologies used for the intermediary results and impact analyses are described below.

A6.2 To complement the information collected through the producer household surveys, additional in-depth interviews were held with representatives of 80 producer organizations and 80 commercial partners, which were chosen randomly to be representative for their respective population. The objective of these complementary interviews was to capture additional information to assess producer organizations' and commercial partners' roles in determining the project's intermediary results and impacts, and to control for relevant determinants in the impact analysis. Finally, additional findings from of these surveys regarding producer organizations' and commercial partners' views on satisfaction, advantages, and challenges of the Project are presented in Annex 7.

Sampling and Methodology

A6.3 **General sampling strategy.** Three types of producers were sampled for the impact evaluation: (i) beneficiary producers of the Project, i.e. the "treatment group" (ii) control group producers who lived in or near the localities of the beneficiary producers, i.e. the "nearby control group", and (iii) control group producers who lived far from the localities of the beneficiary producers, i.e. the "distant control group". To be selected into the (nearby and distant) control group sample, non-beneficiary producers had to have the same or very similar characteristics as the beneficiary producers in terms of the eligibility criteria for project participation (e.g., the criteria defined in the calls for proposals, such as social, demographic, and economic characteristics, but also in terms of agricultural production and size). This similarity between beneficiary and control groups is crucial to obtain reliable results which can be attributed to the Project, as it controls for self-selection in the impact analysis and enables the estimation of spillover effects generated by the project. The sampling strategy was designed to be able to estimate statistically significant differences in average results between treatment and control at a 95% confidence level.

A6.4 **Sampling of beneficiary partnerships and producers (treatment group).** To select the beneficiary producers to be interviewed for the impact evaluation, in a first step partnerships of the Project were selected according to the following criteria: partnerships to be selected (i) had to have finalized all investments financed through the government financial incentive grant provided through PAAP-II, (ii) had to have passed at least one production cycle, and (iii) had to have passed one cycle of sales. At the time of the impact evaluation design (early 2015), these criteria resulted in a population of 202 partnerships for the analysis. Furthermore, it is important to note that the impact evaluation sample is stratified on the main

productive systems supported through the government financial incentive grant (i.e., specialty coffee, cacao, dairy cattle livestock, blackberry, other short-cycled fruits, such as plantain and others). Within each of these productive system strata, simple random sampling was applied to select the partnerships for the impact evaluation sample. Of those selected partnerships, beneficiary producers were divided in strata based on the size and amount of the government financial incentive grant they had received. For the final impact evaluation sample, beneficiary producers within each stratum were selected randomly, so that the proportion of strata in the impact evaluation sample mirrored the proportion in the population. It is important to note that the sampling strategy for the impact evaluation is based on project characteristics as of December 31, 2014; some of the characteristics had changed slightly by project closing (e.g., total number of partnerships and beneficiaries, investments made per productive system, etc.). Yet, the overall results of the impact evaluation can be expected to be valid.

A6.5 The sampling strategy resulted in a final sample of 899 beneficiary producers from 83 PAAP-II partnerships located in 86 municipalities. The distribution of those beneficiary producers across the productive system strata is displayed in Table A6.1.

Table A6.1. Beneficiary producers by productive system

Production system	Beneficiary producers interviewed
Cocoa	134
Specialty coffee	148
Dairy cattle	153
Blackberry	139
Other (short-cycled fruits)	325
Total	**899**

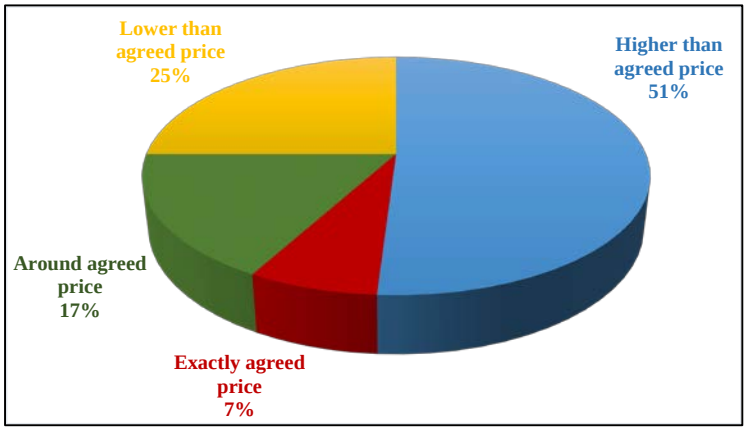
A6.6 **Sampling of control group producers.** The sampling design for the impact evaluation included two control groups, “distant” and “nearby.” The distant control group can be considered the control group commonly used in impact analyses. As the producers sampled in the distant control group are expected not to have been influenced by project activities (given that they are far outside its radius of action), the results found for these groups can be considered as the “pure” counterfactual to the beneficiary household treatment group. In addition, the impact evaluation included a nearby control group to assess whether the Project generated externalities to non-beneficiaries and thereby created potential spillover effects beyond the Project’s direct beneficiaries. The measurement of potential positive spillover effects is important, because ignoring their existence can lead to an underestimation of the overall impact of a project (e.g., when producers who benefited from spillovers are selected into the control group). The nearby control group for the impact evaluation of PAAP-II was composed of producers who lived in or near the localities of the beneficiary producers, but did not directly benefit from the Project. Producers in both control groups were randomly selected from non-beneficiary producers who lived in or near the localities of the beneficiary producers (nearby control group) and/or who lived far from the localities of the beneficiary producers (distant control group). The final control group sample was composed of 582 distant control group producers and 899 nearby control group producers.

A6.7 **Methodologies used for analyses.** Due to the lack of representative baseline data, the analyses on intermediary results and impacts used quasi-experimental methodologies. Regarding the comparison of results for the beneficiary producers to the control group producers, it is important to recall that both nearby and distant control group producers had to have the same or very similar characteristics as the beneficiary producers. As a result, propensity score matching was used to pair beneficiary producers and control group producers with the same or very similar characteristics to reduce confounding biases in the impact analysis. For the analysis of intermediate results, differences in means in the variables of interest between beneficiary producers (i.e., treatment group) and control group producers are presented. For estimating the Project's impact, difference-in-differences analysis was used. Finally, expansion factors were used to make the results representative of the population of partnerships evaluated.

Intermediate results related to the PDO

A6.8 **Increase in competitiveness.** From the descriptive statistics based on the producer household surveys, one finds that the majority of sales prices obtained by beneficiary producers were at least around what was agreed with the commercial partners. As shown in Figure A6.1, 51% of project beneficiary producers agree that their product's sales price turned out to be higher than initially agreed with the commercial partner. 57% of them believe that this was caused by market prices generally being higher than expected at the agreement. Of the 25% who received a sales price lower than agreed with the commercial partners, 70% similarly explain this by changes in the overall market price.

Figure A6.1. Actual sales prices compared to agreed prices



A6.9 When assessing other aspects that relate to competitiveness, the results show that—compared to control group producers—beneficiary producers have considerably greater access to sales contracts, collection centers, and transport services for their products. Similarly, more producers benefiting from the Project have access to improved, certified inputs and obtained credit for productive investments, and they also more of them reinvest part of their net revenues in their agricultural production compared to the control group. These reinvestments in productive assets can be expected to lead to further increases in sales in the future. Table A6.2 displays the differences in means between the treatment group (i.e., beneficiary producers) and

the distant control group on aspects related to competitiveness, as well as some respective impact regression results. All but one differences between treatment and control producers are statistically significant at the 1% or 5% significance level.

Table A6.2. Results on competitiveness

		Project beneficiaries (treatment)	Non-beneficiaries (distant controls)	Differences in means
Producers	with access to improved, certified inputs	71.7	44.1	***
	with access to collection center(s)	3.5	3.3	**
	reinvesting from net revenues in their agricultural production	66.4	57.0	*
Producers who went from not having to having	a transport system for the marketing of products	19.8	8.4	***
	contracts or agreements for the sale of products	49.3	11.3	***
	credit for investments in productive activities	25.6	16.1	***

Note: Significance level * 10% ** 5% ***1%

	Access to improved, certified inputs	A transport system for the marketing of products	Contracts or agreements for the sale of products
Coefficients from impact analysis	0.269 ***	0.101 ***	0.262***

Note: Significance level * 10% ** 5% ***1%

A6.10 When comparing the production area at the beginning of the Project and at its completion, the impact evaluation finds a significantly larger increase in the land area for cultivation between beneficiary producers and the control group. At project completion, project beneficiaries cultivate an average of 5.4 hectares compared to 4 hectares for non-beneficiaries. The data also reveal that about half of the beneficiary producers started to produce new crops during project implementation: for instance, 73% of the sampled cocoa producers who participated in partnerships started to grow new crops, which demonstrates flexibility and search for alternatives.

A6.11 **Building up entrepreneurship.** The impact evaluation results also show that PAAP-II has led to an increase in entrepreneurial skills among beneficiary producers compared to producers who did not benefit from the Project. For example, a statistically significant larger portion of beneficiary producers went from not managing to managing accounts and/or

registries due to the project. Furthermore, a significantly higher percentage of beneficiary producers gained access to technical assistance than the control group, in both group and individualized assistance. Another important finding is that access to market information through cell phones or the internet is significantly higher for beneficiary producers at project completion than for the control group producers. Table A6.3 displays those findings in terms of differences in means and regression results.

Table A6.3. Results on entrepreneurship

% of producers who went from not having to having	Project beneficiaries (treatment)	Non-beneficiaries (distant controls)	Differences in means
technical assistance given in groups	46,7	22,2	***
technical assistance given individually	30,6	11,7	***
accounts or records management	30,8	12,3	***
access and using cell phone or internet for market information	13,2	4,6	***

Note: Significance level * 10% ** 5% ***1%

	Technical assistance given in groups	Technical assistance given individually	Managing accounts or records
Coefficients from impact analysis	0,174***	0,143***	0,168***

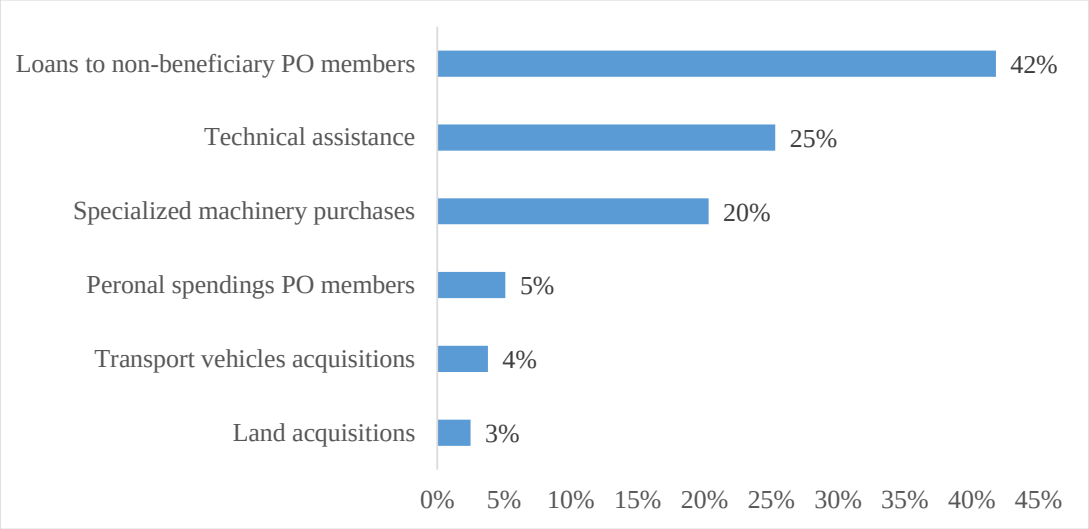
Note: Significance level * 10% ** 5% ***1%

A6.12 **Sustainable production and partnerships.** The first result to consider regarding sustainability is the duration of productive partnerships established during project implementation, as in many businesses new partnerships fail during the first year. In this regard, it is noteworthy that 97.5% of the PAAP-II partnerships continue to be active at project completion. 65% of the partnerships which were sampled for the impact evaluation and which had completed the investments through the financial government incentive still had their initial commercial partner. In terms of maintenance of the productive investments made by the Project at the producer organization level, the survey results from 83 beneficiary partnerships in the impact evaluation show that 82% of beneficiary producer organizations collect annual fees from their members to finance their operations and to maintain its capital infrastructure. Another factor which influences the sustainability of production is related to productive reinvestments, and as described above, beneficiary producers are more prone to reinvest part of their net revenues in productive activities than the control group. In line with this finding, a

significantly larger proportion of beneficiary producers obtained credit for productive investments than producers in the control group (25.6% compared to 16.1%). Similarly, 18% of beneficiary producers state to have savings for future investments or unforeseen expenses compared to 7.8% of control group producers. This difference is significant at the 1% significance level.

A6.13 The data also show significant improvements in beneficiaries' savings and access to credit, including financing from the revolving funds. Regarding the latter, a related interesting finding is that the funds collected through the revolving funds are mainly used for (i) giving out loans to non-beneficiary producers of the same producer organization (42%), financing technical assistance (25.3%) and (iii) purchasing specialized machinery (20.3%). This result demonstrates that the revolving funds are fulfilling their purpose, and these investments can be expected to have a positive impact on the sustainability of production beyond the direct project beneficiaries.

Figure A6.2. Use of revolving funds



Beyond PDO results: Impacts on income and employment

A6.14 **Income increases.** The results of the impact evaluation show large positive and statistically highly significant average income effects. As displayed in Table A6.4, the net income of project beneficiaries increased on average by 29% compared to the control group, at a significance level of 5%. Similarly, the increase in gross income is estimated to be 20% higher on average than for the control group, at a 10% significance level. As propensity score matching was used in the analysis to ensure a control group with the same or very similar characteristics, this increase in income can be attributed to the project. Underlining this finding, when asking about producers' perception of their economic well-being, beneficiary producers rate themselves on average at 3.1 out of 5 (i.e., highest well-being) compared to 2.9 for control producers. This difference is statistically significant at the 1% significance level, and equivalent to a 4% increase out of the highest score of 5. Although increases in beneficiary

incomes was not an explicit objective of the Project, the ultimate goal of such development operations is poverty reduction, which evaluation results attributed to PAAP-II confirm.

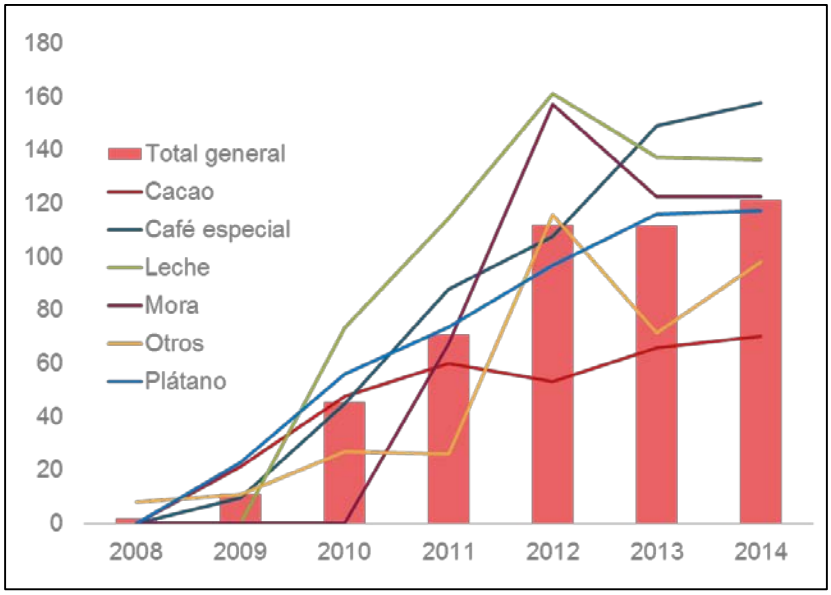
Table A6.4. Income effects

	Difference in gross income (Treatment-Control)	Difference in net income (Treatment-Control)
Coefficients from impact analysis	0,199***	0,292***

Note: Significance level * 10% ** 5% ***1%

A6.15 **Employment generation.** PAAP-II also led to the creation of new employment in the beneficiary producer organizations. The data of the impact evaluation show that before the Project appeared, a producer organization employed on average 1.7 persons at least half-time, while this number had increased to an average of 2.8 persons at project completion. In other words, average total employment growth within the producer beneficiary organizations during the life of the Project was 65%. The three most common types of new jobs created are administrative manager, accountant, and technical support. The impact evaluation not only finds an increase in the number of jobs at the producer organization level, but also in the number of day-labor employed and the wage paid for it. Figure A6.3 shows the increase in day-labor used over time by product line analyzed in the impact evaluation. Furthermore, in all product lines the wage of day-labor increased by 50% between 2008 and 2014.

Figure A6.3. Increase in use of day laborers



A6.15 **Spillover effects.** As described above, the impact evaluation included the nearby control group to assess whether the Project generated positive externalities to non-beneficiaries.

Compared to the distant control group, nearby control groups producers had a higher likelihood of interacting with beneficiary producers, as demonstrated by Table A6.5.

Table A6.5. Differences of control groups in interactions with project beneficiaries

	Nearby controls	Distant controls	Differences in means
Interacts with a project beneficiary	55%	17%	***
Friends	65%	77%	
Family	36%	7%	***
Neighbors	55%	28%	**
Member of the same producer organization	3%	10%	*
Fellow community group	5%	1%	**

Note: Significance level * 10% ** 5% ***1%

A6.16 The analysis found significant spillover effects in income for non-beneficiary producers living near well-performing project partnerships. Specifically, the average increase in gross income of those producers was 24.4% higher than for producers in the distant control group. This result shows that the impact of PAAP-II on Colombia's rural sector was amplified beyond direct project beneficiaries.

Annex 7. Beneficiary Survey Results

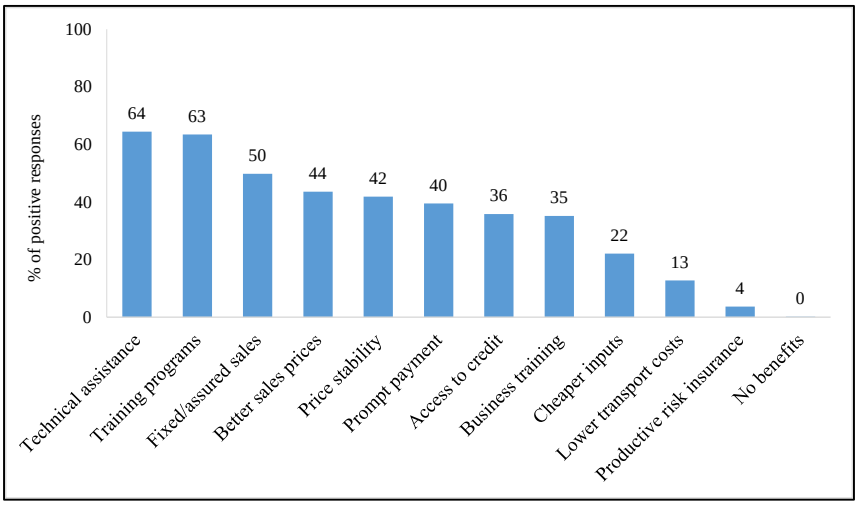
A7.1 To complement the focus of the impact evaluation on assessing project outcomes (Annex 6) and the focus of the stakeholder workshops on qualitative results (Annex 8), the several questions were added to the questionnaire used for the impact evaluation. The aim was to gather information from different project beneficiaries (i.e., participating producers, representatives of producer organizations, and commercial partners) regarding their motives to participate in project-supported activities and enter into a productive partnership, to learn about the advantages and disadvantages experienced from this participation, and their overall satisfaction with their productive partner and project institutions, among other issues. The results of this beneficiary survey are summarized below by type beneficiary. They are based on structured interviews with 899 beneficiary producers, 80 representatives of producer organizations, and 80 commercial partners participating in PAAP-II. The selection of the interviewees was based on stratified random sampling (details on the sampling methodology appear in the final evaluation report and are summarized in Annex 6).

A7.2 **Producers.** Producers' motivations enter into a productive partnership with a commercial partner were mostly related to securing sales and prices and the opportunity to obtain technical assistance and training. Table A7.1 displays the distribution of yes/no responses of beneficiary producers interviewed to different questions on motivations. These expectations were largely achieved by the Project, as demonstrated by figure A7.1.

Table A7.1 Motivation to enter into a productive partnership

Motivation	Yes	No
Fixed/assured sales	78%	22%
Obtain trainings	77%	23%
Better sales prices	73%	28%
Technical assistance	71%	29%

Figure A7.1. Advantages for producers



A7.3 The most common advantages that producers state to have obtained from participating in PAAP-II are technical assistance and training, as well as secure sales and better prices. 74% of producers believe that their business management skills have improved thanks for the support of PAAP-II, and 58% of them believe this improvement to have been substantial.

A7.4 Other advantages mentioned by producers relate to their membership in a producer organization (PO). For instance, 70% of producers state that belonging to their PO has allowed them to improve their negotiating power. Of those, 43% believe this improvement has been substantial. Similarly, 74% of producers believe that belonging to the PO has helped them in increasing their production levels. 27% believe this increase to be significant, 62% to be moderate, and 11% to be little.

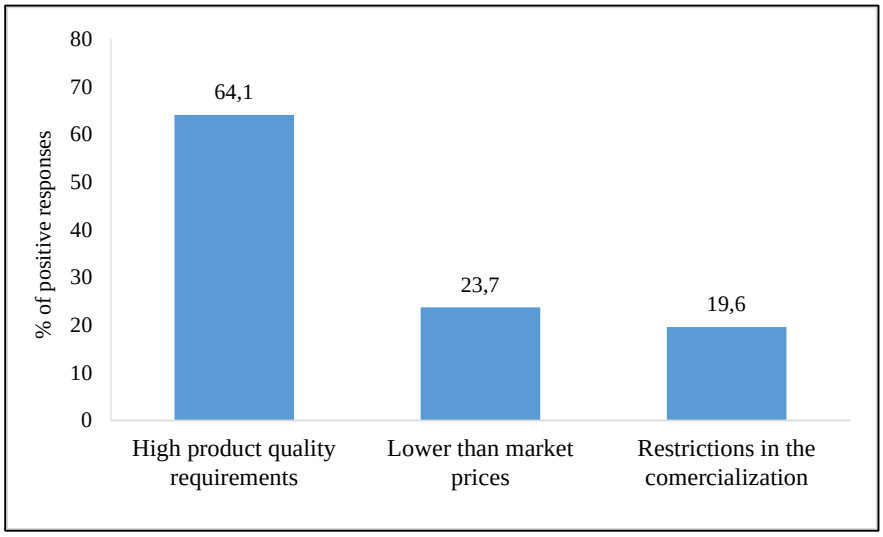
A7.5 Regarding the difficulties of participating in the Project, the problems mentioned most often were slow administrative processes and compliance with the eligibility criteria.

Table A7.2. Problems in entering productive partnership

Entry problems	Yes	No
Slow administrative process	25%	75%
Eligibility criteria	19%	81%
Many documents needed	18%	82%
No problems	2%	98%

A7.6 Also, producers stated several disadvantages that they encountered from belonging to productive partnership. The most common one that 64% of producers agreed to is the need to comply with high product quality requirements asked for by the commercial partner. However, overall 6% of producers rated the performance of their commercial partner as excellent, 39% as good, 34% as regular, 14% as bad, and 7% did not express an opinion.

Figure A7.2. Disadvantages for producers



A7.7 **Producer Organizations.** For purposes of the survey, 82 representatives of producer organizations (PO) were interviewed. 84% of POs rated the support received from PAAP-II as adequate, mainly because the Project (i) encouraged agricultural activities in the region, (ii) stimulated the formation of additional partnerships, and (iii) promoted the active participation of the partnership partners. Specifically, satisfaction ratings of the partnership establishments between the POs and the producers as well as the commercial partners were high. Similarly, POs stated to be largely satisfied with the performance of the OGR and OGA during project implementation, reflected by ratings of no less than 3.8 out of 5 (i.e., high satisfaction) on the different activities of these institutions (see tables below).

Table A7.3. Satisfaction with partnerships

Assessment factor	Rating (1 = not satisfied at all; 5 = highly satisfied)
Establishment of partnership between producers and producer organization	3.96
Establishment of partnership between commercial partner and producer organization	3.82
Role of the producer organization steering committee	3.99

Table A7.4. Satisfaction with Regional Management Organization (OGR)

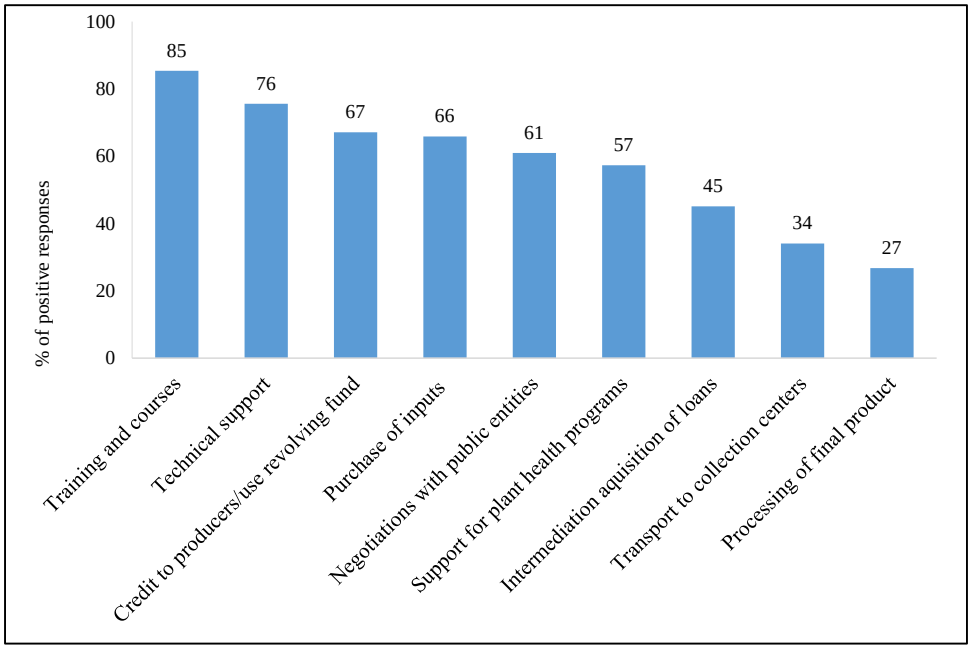
Assessment factor	Rating (1=not satisfied at all; 5=highly satisfied)
Financial resources management	4.06
Technical resource management	4.05
Support in developing partnership operational plan	4.05
Coordination of technical assistance plans, social plan, and environmental management plan	4.05
Training and capacity-building in management issues	4.05
Provision of training to partnership manager	3.98
Performance	3.98

Table A7.5. Satisfaction with Local Management Organization (OGA)

Assessment factor	Rating (1=not satisfied at all; 5=highly satisfied)
Monitoring and supervision of partnerships	4.07
Relationship with producer organizations	4.02
Review of partnership investment proposals	3.94
Institutional strengthening of support entities	3.91
Formulation and supervision of annual operating plan	3.88
Capacity building in business management of producer organizations	3.84
Search and outreach to commercial partners	3.80
Relationship with local governments to leverage funds	3.79

A7.8 Producer organizations provided different types of support to the producers, led by training activities and technical support, but also in form of credit (e.g., from the reserves of the revolving funds). The figure below displays different support activities in order of frequency.

Figure A7.3. Support received by members of producer organizations



A7.9 When POs were asked about different benefits that they perceive to have obtained as well as key acquisitions made after joining the project, market expansion was most commonly agreed to. However, decreases in costs and access to specialized machinery also were commonly cited (see Table A7.6).

Table A7.6. Benefits from membership

Benefits received from participating in partnership	Producers responding affirmatively (%)
Market expansion	71
Decrease in input costs	50
Decrease in storage costs	39
Bought specialized machinery	34
Obtained certificates	26
Bought vehicles for transport	7

A7.10 Related to the above and similar to the producer responses, POs named secure sales and prices as well as technical assistance and training to be key advantages derived from their participation in PAAP-II. Moreover, prompt payment and better prices due to higher product quality were stated as well (Figure A7.4). In terms of disadvantages, high product quality requirements again was mentioned most commonly, and it was also pointed out that prices agreed with the commercial partners at the establishment of the partnership sometimes turned out to be lower than market prices at the time of harvest/sales. Also, 28% of POs criticized that it was not possible for all member of the PO to join PAAP-II (Figure A7.5).

Figure A7.4. Advantages for producer organizations

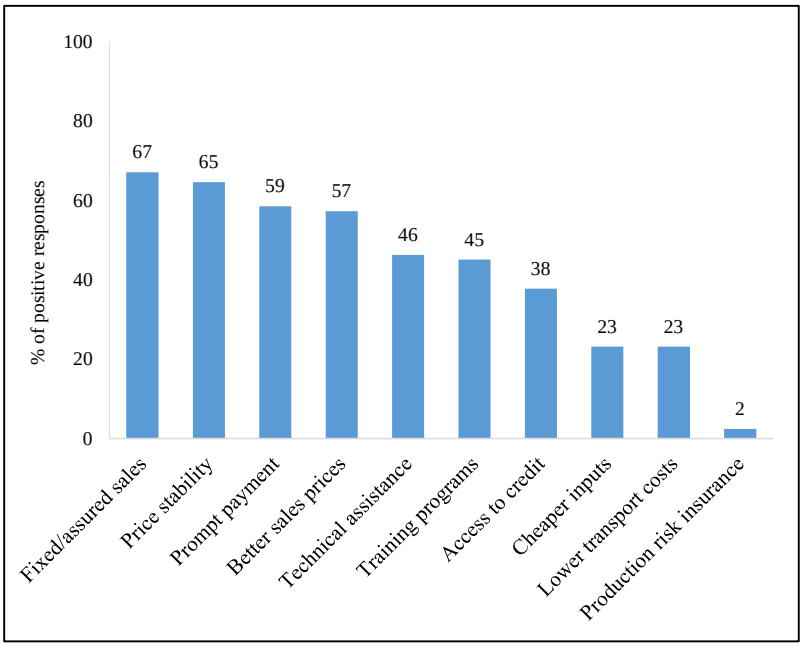
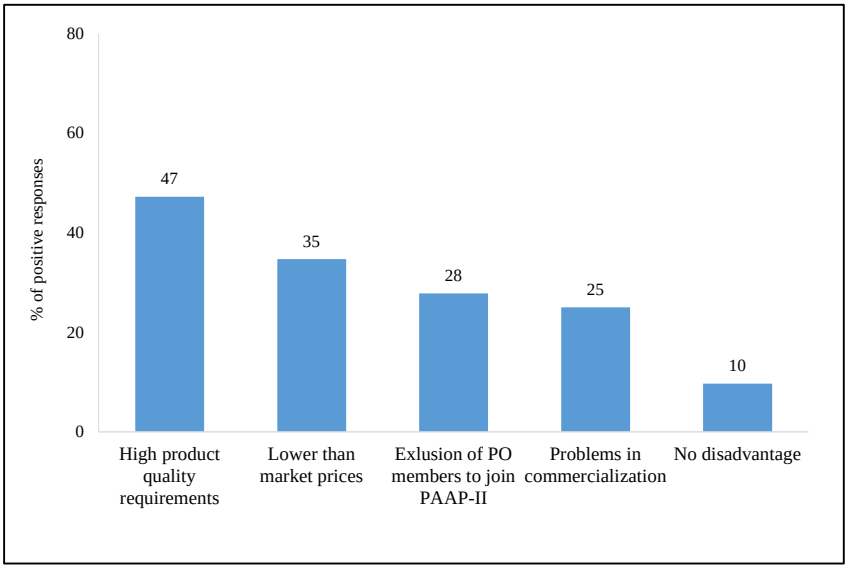


Figure A7.5. Disadvantages for producer organizations



A7.11 Finally, regarding the relationship with their commercial partner, 65% of POs confirmed that they maintained the partnership with the same commercial partner since the beginning of the Project. Of the 35% who changed their commercial partner, the main reasons in order of frequency were that (i) the price agreed in contract turned out to be less than the market price at time of harvest, (ii) the PO had problems with transporting the product to the commercial partners' collection center, (iii) the commercial partner did not comply with the contract agreement, and (iv) the PO had problems in meeting the product quantities and/or quality standards required by the commercial partner. Those POs that terminated the partnership rated the difficulty they had in finding a new commercial partner as 3 out of 5 (1 meaning very easy, 5 meaning very difficult).

A7.12 **Commercial partners.** The beneficiary survey interviewed 80 commercial partners. About 50% of them were wholesale marketers, 38% food processors, and the rest largely retailers and agents for municipal or local supermarkets. The majority (90%) stated that they primarily serve the domestic market. The majority (40%) were small companies (50 or fewer employees), 33% were large companies (more than 200 employees), and 27% were medium-sized companies (between 51 and 200 employees). More than 90% of commercial partners agreed to the statement that their motivation to enter a productive partnership with smallholder producer organizations was driven by business reasons, but also by corporate social responsibility. Nearly two-thirds (63%) of commercial partners confirmed that they were contacted by the PO to establish a partnership, 15% said they were invited by an OGA, and in 14% of cases the commercial partners reached out to producer organizations. The table below shows that small companies, many involved in food processing, established the largest number of partnerships with producer organizations in PAAP-II.

Table A7.7. Average number of partnerships by type of commercial partner

Type of agribusiness firm	Number of partnerships
Overall	7
Large companies	12
Medium-sized companies	6
Small companies	3
Food processing companies	10
Trading companies	5

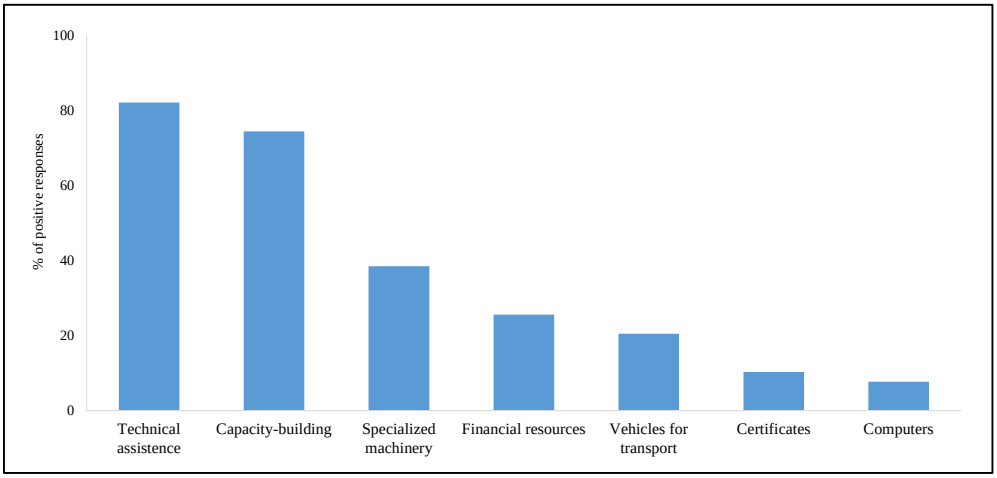
A7.13 Similar to producers and POs, commercial partners expressed a high level of satisfaction with different aspects of project implementation. Satisfaction rates also are high with regard to product quantity and quality delivered to the commercial partners (see table below). Specifically, 64% of commercial partners stated they received products transacted under partnership agreements on time as agreed, 4% stated that products were delivered early, 14% stated that products were delivered late, and 18% stated that they had not set a specific delivery time among the partners.

Table A7.8. Satisfaction ratings

Benefits received from participating in partnership	Rating (1 = not satisfied at all; 5 = highly satisfied)
Establishment of partnership between commercial partner and producers	4.18
Establishment of partnership between commercial partner and PO	4.28
Product quantity agreed	3.44
Product quality obtained from producer organization	3.86

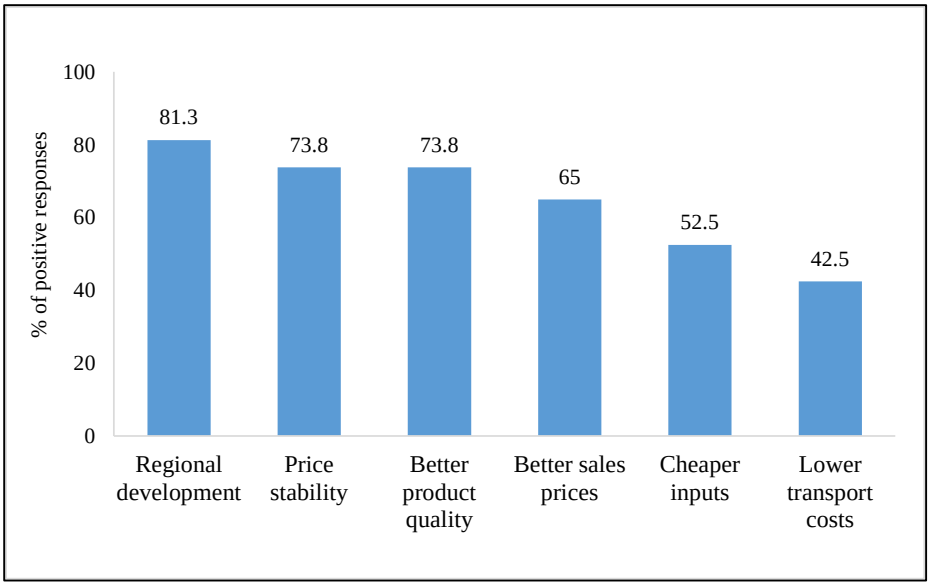
A7.14 The satisfaction of the commercial partners with the partnership was also reflected in that fact that 48% confirmed to have provided (financial) support to their partner PO. The figure below demonstrates that this support took mostly the form of technical assistance, capacity-building, but also the provision of specialized machinery and financing.

Figure A7.6. Commercial partners' support to producer organizations



A7.15 Also in line with producers and producer organizations, commercial partners agreed that the main advantages of PAAP-II were related to stable sales and better prices due to higher product quality. 81% of commercial partners agreed that the Project has contributed to the regional development. Regarding sustainability, 60% of commercial partners confirmed that the producer was sustained even after project support ended.

Figure A7.7. Advantages to commercial partners



Annex 8. Stakeholder Workshop Report and Results

A8.1 In April and May 2015, the Project Coordination Unit organized a series of regional workshop and one national workshop (the latter held in Bogota) to capture the main stakeholders' perceptions on the successes of the Project, to identify the challenges and bottlenecks encountered during project implementation, and to express lessons learned and resulting recommendations for improvements. As shown in Table A7, more than 300 representatives of project beneficiary producer organizations, commercial partners, OGA, OGR, Departmental Secretariats of Agriculture, and other institutions related to the Project participated in these stakeholder workshops. The selection of the participants was based on their role and relationship with the Project. In the case of producer organizations, most commonly the legal representative participated in the workshops. Of the commercial partners, the person in charge of managing the relationship with the producer organizations or the technical person for purchases/shopping was invited. From the Government agencies, officials involved in the management committees of the partnerships participated. Other participants (e.g., from academia) had generally a thorough knowledge of PAAP-II and a high degree of involvement in the development of partnerships (e.g. CIAT which conducted an assessment on the impact of the productive partnerships on disadvantaged groups).

Table A8.1. Stakeholder workshop participants

Region	Workshop participants (number)								
	Producers	Commercial Partners	OGR	OGA	Government agencies	Associations	Academia	Other	TOTAL
Southwest	4	5	8	5	6	7	2	0	**37**
West	6	4	11	8	2	0	1	2	**34**
Coffee Belt	5	9	11	8	16	1	0	3	**53**
Caribbean Coast	6	2	10	9	8	0	0	0	**35**
Central	3	3	10	4	2	5	1	7	**35**
Southeast	6	2	10	11	9	2	2	0	**42**
Eastern Plains	14	5	6	9	7	0	0	0	**41**
National	0	3	0	1	21	3	0	16	**44**
TOTAL	**44**	**33**	**66**	**55**	**71**	**18**	**6**	**28**	**321**

A8.2 The different workshop participants were divided in four stakeholder groups to understand their different opinions regarding standardized guiding questions: (1) beneficiary smallholder producers and producer organizations, (2) commercial partners, private sector companies, and associations, (3) Government agencies, and (4) non-governmental organizations, international development agencies, and academia. The workshops were conducted with support from the German Agency for International Cooperation (GIZ) using Metaplan, a standardized methodology developed by GIZ to effectively guide workshop discussions (described in *Guía de Sistematización*, GIZ, 2006).

A.8.3 The results of each meeting were summarized in a workshop document and the synthesis of all nine workshop discussions is described in the publication "Alianzas productivas. Sistematización de una experiencia exitosa" (Colombian Ministry of Agriculture and Rural Development, 2015). The following summarizes the main opinions collected from the various stakeholders during these workshops on project benefits and successes, challenges and bottlenecks in its implementation, as well as lessons learned and resulting recommendations. Several of these qualitatively collected responses are in line with the findings of the beneficiary survey (Annex 7) and the impact evaluation (Annex 6).

Benefits and successes of the project (by stakeholder group)

(i) Smallholder producers and producer organizations

- The Project is demand-driven and promotes the adoption and the importance of the relationship between producer and the commercial partner as the main mechanism for the development of a successful business
- The Project strengthens the financial stability of the producer organization through the establishment of the revolving fund
- The Project fortifies the social cohesion within the producer organization and to help it pursue its purpose as defined by its members

(ii) Commercial partners, private sect companies, and associations

- The Project ensures the adoption of good agricultural practices to improve product quality, which will eventually be a unique characteristic demanded by the market
- The Project opens access to new markets and stimulates the involvement of smallholder producers (and marginalized populations) in value chains, during a time of increased interest by consumers in inclusive business and corporate social responsibility
- The Project generates capacities within the company, in terms of strengthening its relationship with smallholder producer organizations

(iii) Government agencies

- The Project combines training and capacity-building with hands-on practice, allowing to assist organized rural communities in a holistic manner
- The Project serves the interests of both commercial companies and rural communities
- The Project is participatory in decision-making processes, and its permanent monitoring systems allows it to present results reports to the supervisory agencies

(iv) NGOs, international development agencies, and academia.

- The Project contributes to our social objective to empower small producers and to develop sustainable production skills among the rural population
- The Project develops agricultural instruments with small producers, bringing them closer to formal markets in a sustainable manner and away from welfare projects
- The Project determines the organization and community participation, improving the standard of living and income of the project beneficiaries

Challenges and bottlenecks of project implementation (by topic)

(i) Administrative issues

- Delays caused by late disbursements from entities such as municipalities or SENA, which could be resolved by permanent alerts from the OGR or MADR
- Communication problems with the trust company due to lack of infrastructure in the regions (e.g. the practice of managing physical documents instead of digital)
- Insufficient training on the procedures for contracts and payments

(ii) Subproject proposal formulation

- Inconsistency in the investment plans with regard to the logic of the resource implementation
- Misunderstandings between those who make the pre-investment studies and those who subsequently execute the partnership
- Insufficient consultations on the subproject planning with the main actors

(iii) Preparation of subproject implementation

- The time between the submission of the subproject proposal, the formulation of the pre-investment studies, and the implementation of the subproject may take up to 1.5 years, which leads to the discouragement of the producers and even to the withdrawal of some of the partners, and/or changes in productive conditions initially proposed
- The provision of the government financial incentive grant is slow
- The schedule for producers to attend the trainings provided should be more flexible

(iv) Relationship among stakeholders

- Coordination problems among the different stakeholders
- Partnership committees tend to procrastinate necessary decisions
- Lack of planning and continuity of processes during times of changes in regional governments

(v) Social ties

- Unsatisfactory ethical soundness among partners to avoid conflicts of interest
- Skepticism of producers regarding the proposed partnership scheme
- Communication with accompanying organizations lacks proper channels that allow to know the status of the subproject

(vi) Territorial vulnerability

- Insufficient state programs that support the formulation of agricultural projects
- Institutional weakness to effectively support agricultural producers
- Lack of precise and reliable data based on statistics for informed decision-making

(vii) General risks identified by stakeholders

- Lack of precision in defining the responsibilities of the OGA
- Problems related to the repayment to the revolving funds by the producers
- Little support provided after the first year of investment

Lessons learned and recommendations (by topic)

(i) Administrative issues

- Reduce bureaucracy in the trust administration
- Shorten the process time between subproject selection and their approval
- Ensure the timely delivery of funds by the co-financiers

(ii) Capacity building

- Put even greater emphasis on training processes
- More strongly promote the importance of good agricultural practices, as their continuous application ensures land not to degrade in the short-term
- Modify the proposal selection process, so that not only traditional supply chains projects are considered but also allow for agricultural innovation projects

(iii) Relationship among stakeholders

- Reach out and consult more with the private sector, so that the productive projects reach economies of scale and do not suffer from a lack of commercial partners
- Improve communications on the project's progress to farmer organizations and other interested actors
- Invite academia to be more integrated into the Project through training, research and development

(iv) Access to resources

- All producers related to the Project should adopt changes in their practices and new technology to reach progress and development in the agricultural sector
- Budgetary ceilings per municipality should be applied and more resources should be allocated to the poorest regions and municipalities
- Continue to strengthen the partnerships even after the execution of the project resources are completed

Annex 9. Comments of Co-financiers and Other Partners/Stakeholders

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Bogotá, D.C.

BANCO MUNDIAL
07 DIC 2015
RECIBIDO

Señor
Erwin De Nys
Líder de Programa para Desarrollo Sostenible
Banco Mundial en Colombia
Ciudad

Respetado señor De Nys:

El pasado 25 de noviembre recibimos el borrador del informe de cierre del préstamo BIRF 7484 que soportaba parcialmente el Proyecto Apoyo a Alianzas Productivas del Ministerio de Agricultura y Desarrollo Rural, documento preparado por el equipo del Banco Mundial. Hemos revisado con atención este informe y consideramos que refleja los principales resultados obtenidos por el Proyecto así como las condiciones y dificultades que se presentaron a lo largo de estos ocho años de operación de la segunda fase.

El informe es coherente con otras evaluaciones externas[1] realizadas al Proyecto, las cuales han validado sus resultados y lo ponderan de manera positiva como un instrumento probado para la generación de mejores condiciones de los pobladores rurales y de competitividad para el sector agropecuario colombiano. Es una razón de más para volver a ratificar el interés del gobierno colombiano en ampliar su alcance y cobertura, y de invitar al Banco Mundial a ayudarnos a trascenderlo a un modelo de política pública agropecuaria, tan necesario en estos momentos de cambios institucionales por los que atraviesa esta cartera.

Notamos también que el informe establece oportunidades de mejora en el desempeño del gobierno y en la participación del Ministerio, especialmente en lo relacionado con las bajas contrapartidas presupuestales que se presentaron en los primeros años de operación del Proyecto, situación que hoy vuelve a estar latente debido a la situación fiscal por la que atraviesa el país; así como en las

[1] Evaluación de Impacto de la fase II del PAAP realizada por la UT Econometría – SEI (2015); Evaluación Económica y Financiera Ex Post realizada por FAO (2015) y el estudio "Alianzas Productivas: Un instrumento efectivo de inclusión productiva, versátil ante diferentes condiciones de vulnerabilidad y contextos regionales" realizado por CIAT con el apoyo financiero de la Fundación Ford.

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circunstancias que se presentaron para definir la transición en la operación del Proyecto. Tomamos estas notas con especial atención, no sin antes ratificar una vez más que el gobierno colombiano tiene la firme voluntad de profundizar la intervención rural a partir de este instrumento y de aprovechar la experiencia internacional del Banco Mundial.

Finalmente informamos que en la revisión más puntal del informe, el Equipo de Implementación del Proyecto ha realizado algunas precisiones y comentarios al documento, los cuales ya han sido enviados para revisión del equipo del Banco Mundial en Colombia y Washington.

Agradezco de antemano su atención a la presente y quedamos atentos a sus consideraciones.

Cordialmente,

Aurelio Iragorri Valencia
Ministro de Agricultura y Desarrollo Rural

Copia:

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Annex 10. Summary of Borrower's ICR

A10.1 The Second Rural Productive Partnerships Project (PAAP II) was a follow-up project to the World Bank-financed Productive Partnerships Support Project, whose lessons learned and results were incorporated into the design and operations manual of PAAP-II.

A10.2 During implementation, PAAP-II was affected by various changes in the government's budget allocations. Budget cuts were experienced in 2008, 2009 and 2010, which led to initial delays in project implementation. The slow start-up of the Project in terms of partnership projects was overcome by the larger-than-planned budget allocations beginning in 2011.

A10.3 Given the large scale of the Project and the need to ensure a full and thorough monitoring of the partnerships in operation until the end of the subproject support, it was necessary to request two extensions to the loan. The first request was to extend the Project end date until December 2014 and included the allocation of US$2 million of unallocated loan funds. The second request was to extend the project end date until June 2015 for the purpose of preparing a transition plan that would allow the PCU to hand over project operations to the Ministry of Agriculture and Rural Development (MADR) in an orderly manners

A10.4 The activities of PAAP-II aimed to address two key issues of Colombia's rural development agenda: the persistent poverty and low competitiveness in rural areas. This objective was achieved, as the Project supported an increase in rural competitiveness and entrepreneurship through 725 partnerships that provided support to producer organizations for their agribusiness activities and ensured demand for their products from the formal private sector.

A10.5 At appraisal the Project was expected to benefit 25,500 smallholder producers and their families in the agricultural sector. This goal was exceeded, as PAAP-II benefited 42,552 farmers who participated in partnerships in operation.

A10.6 The Project was successful in reaching disadvantaged groups, which participated in a large percentage of partnerships (22% of partnerships). The Project thus served as a means for advancing the social inclusion of indigenous, Afro-Colombian and displaced peoples, while also proving to be a good platform for addressing needs in post-conflict areas.

A10.8 The project results demonstrate that smallholder farmer are able collectively to intervene in the market, fulfill commercial agreements, develop negotiating capacity, and take advantage of being organized to competitively and sustainably integrate into value chains.

A10.9 PAAP-II generated real savings in the beneficiary project organizations, which at the end of project implementation were operating 399 revolving funds. This demonstrates that the revolving fund mechanism works and is a potential tool for linking smallholder producers to the conventional banking system.

A10.10 PAAP-II involved the commercial partners from very early in the subproject cycle, including them in the development of partnership proposals as well as in the structuring and execution of the pre-investment feasibility studies. These measures significantly improved business indices from the beginning of the production phase. In addition, the design and integration of specific logistics and marketing tools was an important development from the

first phase project. At the end of the project, 80% of partnerships have a large or medium-sized company as commercial partner. Meanwhile, 20 large companies are participating in 38% of partnerships in operation.

A10.11 The Project strengthened capacity among organizations representing the stakeholders involved in the supported partnerships (e.g., smallholder producers, consultants for the pre-investment studies, technical assistants, business management apprentices, and teachers) by implementing strategies that allowed them to overcome technical and organizational weaknesses in different areas. The capacity-building strategy promoted by the Project was based on a clear vision of agribusiness and helped bring about a paradigm shift for small-scale agricultural production.

A10.12 The Project succeeded in building partnerships at the local, regional and national levels, involving both public and private stakeholders. It allowed for the joining of efforts and resources to support the rural population through a feasible and profitable business model, which would also lead to the compliance with expected project indicators and results. In other words, PAAP-II established an excellent platform for institutional coordination, which has had a particularly positive effect in vulnerable areas.

A10.13 The Project managed to leverage resources from other sources: including the contributions made by the beneficiary producer groups themselves, 4.6 Colombian pesos were leveraged for every 1 Colombian peso invested through the government incentive grant. The project resources (including leveraged funds) were administered in an efficient manner: project administration and management costs represented only 4.98% of total investments.

A10.14 The Project made important conceptual and operational contributions to the MADR by conceptualizing and operationalizing a "pathway to competitiveness" for smallholder producers, which can be used in support of the government’s policy of linking organizations representing smallholder producer s with the formal financial system.

A10.15 During the second phase of the project, the PCU improved many operational policies and procedures. It introduced effective new procedures for establishing partnerships, streamlined processes for evaluating partnership proposals and pre-investment studies, tightened up project implementation and management activities, and strengthened monitoring and evaluation practices. With the help of these changes, PAAP-II was able to develop powerful instruments and build up an institutional infrastructure of great credibility recognized and valued at the regional and national level.

A10.16 PAAP-II developed a monitoring and evaluation online system, which allowed for the active participation of all stakeholders involved in the implementation of the partnerships. The system also served as a dissemination tool and platform with permanently available training materials and tutorials.

A10.17 The management of financial resources through a trust company and the use of one-time disbursements to trusts managed by the partnerships themselves (*patrimonios autonomos*) helped to streamline project activities and eliminated restrictions to project execution within the same fiscal year. This was an important factor in allowing the Project to achieve its targets.

A10.18 The Project was active in 86 sub-sectors, covering not only agriculture but also livestock, forestry, and aquaculture. As the Project was based on open competitive calls for

partnership proposals, it responded to demand in different areas of the country, where the local actors defined the product lines.

A10.19 Given the successful results of the project implementation, an approved transition plan was elaborated with objective of continuing and extending the productive partnerships approach. The transition plan gave an outline of potential future operations under Colombian legislation and within the Ministry of Agriculture and Rural Development. At the time of this report, however, this plan has not been fully implemented.

Annex 11. List of Supporting Documents

CIAT. (2014). Productive Partnerships: An effective instrument for the inclusion of vulnerable population groups in diverse contexts of Colombia. International Center for Tropical Agriculture. Cali, Colombia.

DNP. (2014). National Development Plan 2014-2018. National Planning Department. Bogotá Colombia.

DNP (2014). Misión para la Transformación del Campo. National Planning Department. Bogota Colombia.

DNP. (2006). National Development Plan 2006-2010. National Planning Department. Bogotá, Colombia.

Econometría S.A. (2015). Impact Evaluation Report. Bogotá, Colombia.

Econometría S.A. (2015). Beneficiary survey results. Bogotá, Colombia.

Escobar, G., Palacios, M.T., Cruz Doren, M.E., and Lizarazo Beltrán, M.O. (2010). Mid-term Impact Evaluation Report "Misión de Evaluación de Medio Término Proyecto de Apoyo a Alianzas Productivas –PAAP fase II". Bogota, Colombia.

FAO. (2015). Economic and Financial Analysis. United Nations Food and Agriculture Organization. Rome, Italy.

GIZ. (2015). Materials and Metaplan methodology systematization stakeholder workshops. German Agency for International Cooperation. Bogotá, Colombia.

GIZ. (2006). Guía de Sistematización. German Agency for International Cooperation. Bogota, Colombia.

MADR. (2015). Borrower Implementation Completion Report. Ministry of Agriculture and Rural Development. Bogota, Colombia.

MADR. Operational Manual (OM). Ministry of Agriculture and Rural Development. Colombia, Bogota.

MADR. Project Monitoring System. Website: http://alianzasproductivas.minagricultura.gov.co

MADR. (2015). Stakeholder consultation workshops systematization report "Alianzas productivas. Sistematización de una experiencia exitosa". Ministry of Agriculture and Rural Development. Bogotá, Colombia.

MADR (2015). Various presentations on the project. Ministry of Agriculture and Rural Development. Bogota, Colombia.

World Bank. (2014). Project Restructuring Paper. Washington DC, USA.

World Bank. (2013). Project Restructuring Paper. Washington DC, USA.

World Bank. (2011). Colombia Country Partnership Strategy. Washington DC, USA.

World Bank. (2009). Implementation Completion Report Colombia Partnerships Support Project P041642. Washington DC, USA.

World Bank. (2008-2015). Supervision Aide Memoires and Implementation Status Reports. Washington DC, USA.

World Bank. (2007). Project Appraisal Document. Washington DC, USA.

World Bank. (2007). Loan Agreement. Washington DC, USA.

World Bank. (2003). Colombia Agricultural and Rural Competitiveness. Report No. 27523-CO. Washington DC, USA.

MAP


IBRD 33388R1
SAN ANDRÉS, PROVIDENCIA and SANTA CATALINA
San Andrés
Providencia
Santa Catalina
COLOMBIA
Caribbean Sea
PACIFIC OCEAN
PANAMA
ECUADOR
PERU
BRAZIL
R.B. DE VENEZUELA
Lago de Maracaibo
Puerto Bolívar
Riohacha
LA GUAJIRA
Santa Marta
Barranquilla
Pico Cristóbal Colón (5,775 m)
ATLÁNTICO
Cartagena
Valledupar
MAGDALENA
CESAR
Magangué
Sincelejo
SUCRE
El Banco
Montería
Acandí
Turbo
CÓRDOBA
BOLÍVAR
Ocaña
NORTE DE SANTANDER
Cúcuta
Bucaramanga
Socorro
Yarumal
ANTIOQUIA
SANTANDER
BOYACÁ
ARAUCA
Arauca
Medellín
Quibdó
CHOCÓ
Chiquinquirá
Tunja
CASANARE
Yopal
Puerto Carreño
Puerto Nuevo
ALDAS
Manizales
CUNDINA MARCA
RISARALDA
Pereira
Armenia
QUINDÍO
BOGOTÁ
Ibagué
Girardot
Villavicencio
San Pedro
Chaviva
Gaviotas
VICHADA
Santa Rita
Buenaventura
Buga
Palmira
VALLE DEL CAUCA
Cali
TOLIMA
DISTRITO CAPITAL
San Juan de Arama
META
Puerto Inírida
Neiva
HUILA
Popayán
CAUCA
Guapi
Garzón
San Vicente del Caguán
San José del Guaviare
Mapiripana
GUAINÍA
Tabaquén
Brujas
Tumaco
NARIÑO
Florencia
Calamar
GUAVIARE
Pasto
Mocoa
Miraflores
Mitú
San Rafael
Yavarate
Iplales
PUTUMAYO
Puerto Asís
CAQUETÁ
VAUPÉS
Macujer
Puerto Huitoto
Puerto Leguízamo
Puerto Pizarro
Lérida
Puerto Santander
Leticia
Locas de Cahuinari
La Pedrera
AMAZONAS
El Encanto
Cordillera Occidental
Cordillera Central
Cordillera Oriental
Magdalena
Cauca
Atrato
Sinú
Meta
Vichada
Guaviare
Vaupés
Caquetá
Putumayo
Guainía
Negro
Amazonas
Casanare
Tomo
Arauca
Zulia
Catatumbo
Pato
Caguán
Caquetá
Putumayo
Amazonas
75°W
70°W
10°N
5°N
0°N
COLOMBIA
CITIES AND TOWNS
DEPARTMENT CAPITALS
NATIONAL CAPITAL
RIVERS
MAIN ROADS
RAILROADS
DEPARTMENT BOUNDARIES
INTERNATIONAL BOUNDARIES
0 80 160 240 320 Kilometers
0 40 80 120 160 200 Miles
GSDPM
DECEMBER 2013