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PROJECT PERFORMANCE ASSESSMENT REPORT

WHAT WORKS

MALI

Rural Community Development Project

Report No. 120119

SEPTEMBER 29, 2017

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PROJECT PERFORMANCE ASSESSMENT REPORT

REPUBLIC OF MALI
RURAL COMMUNITY DEVELOPMENT PROJECT

(IDA-41130, IDA-48230)

September 29, 2017

Financial, Private Sector, and Sustainable Development
Independent Evaluation Group

Currency Equivalents (annual average)

Currency Unit = CFA franc (CFAF)

2006	US$1.00	CFAF 550
2007	US$1.00	CFAF 498
2008	US$1.00	CFAF 452
2009	US$1.00	CFAF 458
2010	US$1.00	CFAF 458
2011	US$1.00	CFAF 490
2012	US$1.00	CFAF 507
2013	US$1.00	CFAF 496
2014	US$1.00	CFAF 477

Abbreviations and Acronyms

ANICT	National Agency for Communal and Territorial Investments
CDD	community-driven development
ERR	economic rate of return
GoM	Government of Mali
ICR	Implementation Completion Report
ISN	Interim Strategy Note
IEG	Independent Evaluation Group
PACR	Projet d'Appui aux Communautés Rurales (Rural Community Development Project)
PAD	Project Appraisal Document
PAIB	Grassroots Hunger and Poverty Initiative Project
PDSEC	Plan de Développement Economique et Social de la Commune
PPAR	Project Performance Assessment Report
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WFP	World Food Program

Fiscal Year

Government: January 1 – December 31

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Contents

This report was prepared by Lauren Kelly, Senior Evaluation Officer, IEG and Amber Stewart (Consultant), who assessed the project in March through August 2017. The report was peer reviewed by Leif V. Brottem, Assistant Professor, Global Development Studies, Grinnell College, and panel reviewed by J. W. Van Holst Pellekaan. Vibhuti Narang Khanna and Jean-Jacques Alain Ildevert Ahouansou provided administrative support.

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Principal Ratings

Rural Community Development Project (IDA-41130, IDA-48230)

	*ICR**	*ICR Review**	*PPAR*
Outcome	Satisfactory	Satisfactory	Moderately Unsatisfactory
Risk to Development Outcome	Moderate	Significant	Significant
Bank Performance	Satisfactory	Satisfactory	Moderately Unsatisfactory
Borrower Performance	Satisfactory	Moderately Satisfactory	Moderately Satisfactory

* The Implementation Completion and Results (ICR) report is a self-evaluation by the responsible World Bank department. The ICR Review is an intermediate IEG product that seeks to independently verify the findings of the ICR.

Key Staff Responsible

Project	Task Manager or Leader	Practice Director	Country Director
Appraisal	Daniel Moreau	Mary Barton-Dock	A. David Craig
Completion	Bleoue Nicaise Ehoue	Martien Van Nieuwkoop	Paul Noumba Um

IEG Mission: Improving World Bank Group development results through excellence in independent evaluation.

About this Report

The Independent Evaluation Group assesses the programs and activities of the World Bank for two purposes: first, to ensure the integrity of the Bank's self-evaluation process and to verify that the World Bank's work is producing the expected results, and second, to help develop improved directions, policies, and procedures through the dissemination of lessons drawn from experience. As part of this work, IEG annually assesses 20-25 percent of the World Bank's lending operations through field work. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming studies or country evaluations; those for which Executive Directors or World Bank management have requested assessments; and those that are likely to generate important lessons.

To prepare a Project Performance Assessment Report (PPAR), IEG staff examine project files and other documents, visit the borrowing country to discuss the operation with the government, and other in-country stakeholders, and interview World Bank staff and other donor agency staff both at headquarters and in local offices as appropriate.

Each PPAR is subject to internal IEG peer review, Panel review, and management approval. Once cleared internally, the PPAR is commented on by the responsible World Bank department. The PPAR is also sent to the borrower for review. IEG incorporates both World Bank and borrower comments as appropriate, and the borrowers' comments are attached to the document that is sent to the World Bank's Board of Executive Directors. After an assessment report has been sent to the Board, it is disclosed to the public.

About the IEG Rating System for Public Sector Evaluations

IEG's use of multiple evaluation methods offers both rigor and a necessary level of flexibility to adapt to lending instrument, project design, or sectoral approach. IEG evaluators all apply the same basic method to arrive at their project ratings. Following is the definition and rating scale used for each evaluation criterion (additional information is available on the IEG website: http://ieg.worldbankgroup.org).

Outcome: The extent to which the operation's major relevant objectives were achieved, or are expected to be achieved, efficiently. The rating has three dimensions: relevance, efficacy, and efficiency. *Relevance* includes relevance of objectives and relevance of design. Relevance of objectives is the extent to which the project's objectives are consistent with the country's current development priorities and with current World Bank country and sectoral assistance strategies and corporate goals (expressed in Poverty Reduction Strategy Papers, Country Assistance Strategies, Sector Strategy Papers, Operational Policies). Relevance of design is the extent to which the project's design is consistent with the stated objectives. *Efficacy* is the extent to which the project's objectives were achieved, or are expected to be achieved, taking into account their relative importance. *Efficiency* is the extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives. The efficiency dimension generally is not applied to adjustment operations. *Possible ratings for Outcome:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Risk to Development Outcome: The risk, at the time of evaluation, that development outcomes (or expected outcomes) will not be maintained (or realized). *Possible ratings for Risk to Development Outcome:* High, Significant, Moderate, Negligible to Low, Not Evaluable.

World Bank Performance: The extent to which services provided by the World Bank ensured quality at entry of the operation and supported effective implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of supported activities after loan/credit closing, toward the achievement of development outcomes. The rating has two dimensions: quality at entry and quality of supervision. *Possible ratings for World Bank Performance:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Borrower Performance: The extent to which the borrower (including the government and implementing agency or agencies) ensured quality of preparation and implementation, and complied with covenants and agreements, toward the achievement of development outcomes. The rating has two dimensions: government performance and implementing agency(ies) performance. *Possible ratings for Borrower Performance:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Preface

This is a project performance review of the *Rural Community Development Project* (PACR) financed by the International Development Association (IDA) and implemented between 2005 and 2014 across four regions of Mali. Original financing was anticipated to be US$64 million including a US$60 million IDA credit and US$4 million borrower contribution. Actual costs were US$71.2 million because of two additional financings.

The project sought to improve the living conditions of rural communities by providing access to basic socioeconomic services and a sustainable increase in income, while promoting improved natural resource management practices. Designed at a time when Mali had just begun to operationalize its decentralization policy, by putting national and local structures in place, the project represents the World Bank's first large-scale investment in support of this aim.

Methodology: This assessment was based on a review of World Bank project documentation, supplemented by several sources of primary and secondary data collected during a field mission to Mali conducted between May 8 and May 30, 2017. Secondary data collected included the original Management Information System, 2009 census data, and fiscal transfers between the National Agency for Communal and Territorial Investments (ANICT) and all project (and nonproject communes). The data for the period 2001 to 2010 was obtained from Grinnell College, and for the period 2011, 2012–17, from ANICT (there were no transfers in 2012 because of the coup d'état that occurred that year). Primary data collection gathered the perceptions of the affected commune councils and mayors, service users and service providers, and the cooperatives that received grants for private productive assets. Specifically, the assessment conducted 12 commune council group interviews and 36 cooperative group interviews. In addition, the assessment collected data on distance and population to test the project's service delivery metrics and targets. The field methodology is described in Appendix C of this report.

The project assessment will provide inputs into the Independent Evaluation Group's (IEG's) Fiscal Decentralization and Subnational Finance and Citizen Engagement Macroevaluations.

The report was prepared by Lauren Kelly, Senior Evaluation Officer, IEGSD, who led the assessment mission. The mission was supported by a team of international and local consultants including Amber Stewart, Moussa Sacko, Mohamed Touré, and Bilaly Konaté. Judith Lewetchou Efouefack provided valuable research support. The report was peer reviewed by Leif V. Brottem, Assistant Professor, Global Development Studies at Grinnell College. It was panel reviewed by J. W. Van Holst Pellekaan, Senior Agriculture Consultant, IEG. The mission is grateful to Moussa Sidibe and Maimouna Abdoulaye Dite Koura Diarra for their excellent country office support.

Following standard IEG procedures, a copy of the draft report was sent to the relevant government officials and agencies for their review and feedback but no comments were received.

Summary

Mali's decentralization process has been long in the making but short on its promised delivery of poverty reduction and national cohesion. Mali continues to be one of the poorest countries in the world, ranking 176 out of 188 on the Human Development Index (UNDP, 216), with over half of its population living in poverty, which is highly concentrated in rural areas. Though Mali has put in place administrative structures to support decentralization, in part for more effective service delivery, these efforts have not had adequate financial resources to provide basic services to a vast swath of its rural population.

Mali´s challenges are compounded by its population growth rate. Its population is expected to double from 18 million persons in 2016 to 35 million by 2035. Population growth and migration patterns will pose future challenges for the decentralization process in Mali, which will have a notable effect on service access in rural areas. In Mali, the persistent dependency on farming–and the concomitant search for farm and grazing land–is leading to growth in the most distant and remote areas, increasingly distant from commune centers where services are located. In these remote areas, commercial activity is also least viable because of high transport costs and lack of market access, among other factors.

Role of the World Bank. Since the mid 1990s, the World Bank has allocated about US$100 million to Mali's decentralization process through its support for two key projects: the Rural Community Development Project (*Projet d'Appui aux Communautés Rurales*, or PACR, 2006–14)—the subject of this assessment report—and a predecessor pilot, the *Grassroots and Hunger Initiative*, implemented before decentralization structures were in place, between 1998 and 2004. Specifically, PACR was designed to improve the living conditions of rural communities by providing access to basic socio-economic services (e.g. education, health) and a sustainable increase in income (through local private investments), while promoting improved natural resource management practices.

Relevance of Project Objectives and Design. The objective of improving the living conditions of rural communities was, and remains, *substantially relevant*. Relevance could be enhanced by pivoting the objective toward improving local governance and public resource management while anchored in meaningful citizen engagement for increased legitimacy. Project design is rated *modest,* however, because several design features–such as the need for better complementarity (between public and private investments), non-transparent participation criteria, inadequate inclusion criteria, and the forced establishment of cooperatives–were only modestly relevant to achieving the project aims.

A notable design tension was the desire of the State to achieve political legitimacy by extending investment to remote areas of Mali that, while underserved, are also inhospitable to commercial activities. The use of country systems–namely, the newly established *National Agency for Communal and Territorial Investments* (ANICT)–also undermined efforts to achieve clear financial targeting. Commune selection criteria are not evident, for example. In contrast to project indications that funds were needed to smooth service delivery to more

remote areas, no such patterns emerge from the data analyzed. The use of country systems fell prey to existing "rules of the game" characterized by a degree of collusion between ANICT and select commune heads, and between ANICT and entrepreneurs, which at times resulted in inefficient choices or poor-quality infrastructure (for example, in the purchase of building materials).

Results. This assessment finds that the project only *modestly* contributed to improved living conditions by (1) providing access to basic socioeconomic services, with more achievements noted for education than for health; and by (2) expanding private investment opportunities, with a greater a greater rate of success associated with investment in agricultural activities than in transformation, commercialization, or livestock rearing. Location mattered for service access (especially for health) because more investment per capita was made in the *Chef Lieu* (commune center) than in other villages within the commune. Social capital also mattered; the success of the private investment opportunities required access to land, water, finance, bargaining power, and markets, among other factors.

Access to Education. The project enabled 10,440 children to access new or improved education services at a one-time cost of US$375 per student. Owing to deep under-investment in this sector, Mali's primary schools were only accommodating a fraction of eligible children at the time of project design. Community Schools, such as those financed by PACR, have filled a vital service delivery gap. Though credible commune and village level education data were not obtainable, regional data show an overall increase in primary enrollment in the targeted regions over the project period. Across all four regions, overall enrollment increased by between 14 percent and 18 percent (MDGs, 2003; Ministry of Education, 2010). These achievements were possible owing to the supplemental financing provided by donors, including the World Bank, nongovernmental organizations (NGOs) and by communities. The project did not report on quality or literacy, however, which matters for connecting access to living standards. Because of the 2012 coup d'état and subsequent insecurity, 501 schools (including some financed by the World Bank) were closed, forcing 150,000 children out of school prematurely (OCHA, 2017).

Access to Health. Owing to the low number of health centers financed by PACR, and the paucity of care and equipment observed by the IEG mission, this assessment finds that PACR only partially contributed to increased access to health services in project areas. Overall, although in Mali the presence of health clinics has increased since the late 1990s, the average distance to health centers for rural populations is increasing because of human geography patterns. Rural citizens are increasingly residing in informal areas, or hamlets and are thus not counted as part of the communal development plan, which is used to determine access requirements, including by PACR. This finding has implications for future project design, especially as it relates to Mali's indigenous-migrant relationships. Migrants frequently make up the majority of hamlet residents and remain deprived of public infrastructure resources because of political economy concerns over land tenure and gestures of independence vis-à-vis their indigenous hosts (Brottem, 2017).

Productive Investments and Sustainable Income. The project sought to increase the average income of rural inhabitants by an amount superior to the then national poverty line ($0.88/day). However, no income targets were set and data provided by the project on income cannot be verified. To address this information gap, IEG conducted a stratified set of cooperative group interviews to draw lessons about what worked and what didn't work to stimulate income through private local rural investments. The following findings emerged from the cooperative analysis:

- Farm investments (inputs, including new seed or support for crop diversification) were more successful than transformation and commercialization activities, and livestock rearing. These latter investments were made in the absence of market or value chain analysis.

- Because of the project's requirements that groups form cooperatives, existing economic groups reshaped themselves to access project finance. The cooperative model was characterized by collective action challenges, including free-riding and predatory behavior on the part of elite group members. These dynamics contributed to the poor performance of some of the subprojects, especially in the livestock sector.

- Land was a constraining factor. While conditions varied, land was often gifted by a village chief, which proved to be unsustainable in the long run (land was asked to be returned once it was cultivated). Available land was often too far away from homesteads and this affected the success of the productive investments (too far away to regularly oversee).

- The project also lacked social accountability tools to empower cooperatives' members vis à vis suppliers. The low quality, or durability, of the productive equipment was a frequent cause of project failure, as expressed in the cooperative interviews. Female cooperatives reported that they felt uncomfortable reporting poor equipment or that they lacked the right to reject it from the field agent, who was in nearly all instances a man. Gender, overall, was not addressed well in project design, regarding the way that women would participate in local priority setting and investment decision-making along cultural lines.

Value for Money. The project's methodology for conducting its economic rate of return analysis was flawed. It was based on a nonrepresentative sample. This project's value for money assessment is questionable because in the highest case scenario (a 32 percent rate of return), poor beneficiaries would have just reached the international poverty line. Many of the better-performing investments, those that upgraded agriculture or diversified crops, would have contributed to risk mitigation and household resilience, but not to sustainable poverty reduction, especially in the face of shocks. Because of excessive risk, the project also incurred a US$10 million loss (40 percent failure rate for private local investments). Co-financing requirements would also have created a level of indebtedness for groups experiencing failed investments. The project did not assess the economic contribution of the basic socioeconomic services; nor did it measure the effectiveness of training, valued at US$5–6 million. Because of these findings, *efficiency is rated Modest*.

Outcome. The overall outcome of the project is rated **Moderately Unsatisfactory.**

Risks. In the future, there is a substantial risk that rural citizens in Mali, especially an increasing number of hamlet residents, will be underrepresented in municipal level development planning. There is also a substantial risk that many basic services will not be effectively operated or maintained, especially in the increasingly insecure areas of the center and north of the country. Because of the 2012 coup, approximately $667,000 of investments in the Tombouctou area were reported as lost, though several emergency projects supported by the World Bank are working currently to restore services in these areas.

Lessons

Investment in rural service delivery requires an informed analysis and consideration of human geography, including factors that influence population movement and household investment decisions. In Mali, an increasing percentage of the rural population is living outside of formally recognized administrative areas–in hamlets as opposed to villages. In the PACR project, the use of existing administrative systems, budgeting, and planning tools was insufficient to address the needs of those living in “informal” settlements or hamlets. Neglecting these human geography dimensions can reinforce income inequality and exacerbate societal tensions. Gender is also a key factor to consider; women migrants who reside in hamlets are the most disadvantaged in access to productive factors.

Rural productive investments made through community-driven development (CDD) projects should build on established skills sets and tested economic relationships. They should avoid promoting excessively risky behavior by offering options to expand ongoing, profitable activities linked to agriculture. Support for transformation or commercialization activities should be underpinned by market and value chain analysis which is poverty- and gender-sensitive. In the PACR project that is the subject of this assessment, the most successful productive investments were associated with established productive groups who were enabled to choose their investment based on their skill sets and existing knowledge of local markets.

Projects can be used to demonstrate the benefits of citizen engagement, but mechanisms to promote sustained engagement must extend beyond project boundaries. Projects can lay the groundwork for more inclusive local development planning by demonstrating the benefits of participation to local policy makers. These efforts can lower perceived risks about participation if local government is engaged. But for a project to have sustained participation effects, attention must be paid to–and indicators need to measure–the influence of the participatory mechanisms on local planning processes in the absence of the project, including the expectations raised and how demand manifests itself in the local systems the project has sought to influence.

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José Carbajo Martínez
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1. Background and Context

1.1 On the agenda since 1977, decentralization in Mali gained new momentum with democratization in the 1990s. Decentralization provided a platform for the new civilian regime to redefine the nature of the state after decades of military rule and dictatorship. It also had the purpose of bolstering state legitimacy in the north, following the Tuareg rebellion of 1990. Decentralization, building on traditions that harked back to the Malian Empire, was framed as a political solution to the state's security and development challenges (Baudais, 2006; Whitfield 2009).

1.2 As such, following its first democratic election, Mali adopted a legal framework for decentralization in 1993, and by 1999 had put in place 682 new rural communes and several institutional structures at the regional and local levels. In 2002, the Government of Mali officially transferred responsibility for health services, education, and water to the municipal level. But the devolution of these responsibilities was not accompanied by sufficient or predictable budget transfers from the central government, and local resource mobilization lacked basic public infrastructure and the means to attract or raise investment.

1.3 A World Bank pilot project implemented in the northern region of Mopti, the *Grassroots and Hunger Initiative (1998-2004),* tested various ways that communities could participate in Mali's decentralization process.[1] A follow-on project, the *Rural Community Development Project* (PACR, 2006–2014) – the project under assessment–took this concept to scale in 54 communes across four of Mali's northern and southern regions. But the project's conceptualization was fraught with challenges owing to the newness of the national decentralization process.

1.4 That is, while the political vision for Mali's "decentralization project" was strong on the Malian side at this time, implementation modalities were not. The World Bank displayed a reticence during the early days of decentralization to over-rely on country systems, thus leading to a debate about project arrangements between the government and the World Bank, and to substantial delays. On the one hand, the World Bank determined that directly funding communes was too risky. Newly formed communal administrations lacked financial management skills and would need to be trained prior to receiving project grants. On the other hand, the proposed alternative, the newly formed *National Investment Agency for Territorial Collectivities* (ANICT)—an initiative of the European Commission—while well placed, was deemed too bureaucratic, too centralized, and too slow and expensive (including a 5 percent administration charge).[2] The World Bank's original plan to run the project through the Ministry of Social Development was rejected on the grounds that it would create parallel systems. Unable to move forward, and under the threat of project cancellation, the World Bank provided a portion of the project finance to ANICT, as a "top-up" to increase the overall level of communal financing. Though the decision was accompanied by several provisos to promote transparency and accountability, it had the unfortunate effect of bifurcating the project, a topic that is explored in full in this assessment.[3]

1.5 Throughout implementation, a series of challenges affected the project: foremost of these was another Tuareg Rebellion staged in January 2012, followed by the ousting of President Touré in a coup d'état over his handling of the crisis. Consequently, the project was suspended for six months as part of an overall freeze of all World Bank activity in Mali per Operational Policy 7.30. Following the lifting of the suspension, the project team performed a level 2 Restructuring to extend the project's closing date from June to December 2013 because of conflict-related implementation delays. To its credit, just following the Tuareg Rebellion, the World Bank had also sought additional financing to aid the conflict-affected communities in the areas of Kidal and Gao. However, the request was dropped because security quickly deteriorated.

1.6 Since the project closed in 2014, two of the project's four targeted regions have been severely affected by protracted crises. To the extent that data were available, project outcomes in these areas are made available in this report. However, owing to the security situation and regulations restricting travel to the north, primary data collection for this report is limited to the two regions (Sikasso and Segou) in the South.

2. Objective, Design, and their Relevance

2.1 **Project Development Objective**. The objective of the *Rural Community Development Project* was to improve the living conditions of rural communities by providing access to basic socioeconomic services (for example, education, health) and a sustainable increase in income (through local private investments), while promoting improved natural resource management practices.

2.2 **Theory of Change.** The project's theory of change posited that increased citizen participation in Mali's decentralization process, in its local and communal development processes, can generate more relevant, more cost-effective, and more sustainable local investments than supply-led processes, and that this involvement can, in turn, lead to enhanced livelihoods through better access to services and through more sustainable streams of local income. Based on lessons from a pilot, the project included access to both public services and private assets. The lesson learned was that access to services was necessary but not sufficient. Income-generating activities were needed to, at the very least, maintain essential services (schools, clinics, and water), as well as to stimulate the local economy.

2.3 **Project Design.** The project was sequenced to finance a grassroots sensitization campaign in preparation for the rollout of two investment funds: a Communal Investment Fund (US$14.6 million) and a Private Productive Investment Fund (US$ 25.5million). The Communal Investment Fund was provided as budget support to ANICT, the agency charged with supporting the construction of local schools, clinics, wells, and local socioeconomic infrastructure. The Private Productive Investment Fund was designed as a matching grant scheme to catalyze investment in agriculture and non-agricultural economic activities in rural areas. An additional US$9 million was spent on national coordination and regional project implementation.

2.4 This assessment found that although the grassroots campaign, in some areas, supported the development of participatory needs assessments and prioritization processes, most of this finance was used to identify potential grant recipients for the productive investment fund, instead of for the broader stated aim of engaging citizens in local development planning. Local development financing for public services and public assets was intended to be awarded by the Commune Council to villages based on needs articulated in the Local Development Plan—a participatory village needs assessment that would be overseen by the Commune. Public assets, while placed in one village, were intended to be accessed by citizens of other villages, within a set maximum distance (5 km for schools, 15 km for clinics) or against a set carrying capacity (for water, 400 persons per well).

2.5 **Project Dates and Costs**. The project was implemented between 2005 and 2014. Original financing was anticipated to be US$64 million including a US$60 million IDA credit and US$4 million borrower contribution. Actual costs were US$71.2 million because of two additional financings. The project sought additional finance and an extension of the closing date by one year to respond to the effects of the global financial crisis on food and oil prices (2009–10). An additional US$11.2 million was used to (i) top up the project components and to (ii) provide recurrent finance (for example, salaries) for the newly built schools and health centers. A large share of the additional finance (40 percent) was also used for training.

Relevance of Objective

2.6 The project development objective was "to improve the living conditions of rural communities" by providing access to basic services and a sustainable increase in income, while promoting improved natural resource management practices."[4] The objective was substantially relevant at the time of project design, when Mali's newly created rural communes lacked access to public infrastructure and basic social services. Basic service provision was a key theme of Mali's Poverty Reduction Support Strategy and its Country Assistance Strategy (FY04–06) that sought to alleviate rural poverty through better service provision, rural infrastructure, and investment in agriculture and non-farm activities.

2.7 The objective statement itself, however, lacks specificity and has measurement challenges. "Access to services" is a weak aim. To measure improved living standards, the objective statement should have included a reference to the quality of services and their sustained use, and by whom. The statement is also overly complex considering the capacity constraints of the host country. It requires the measurement of income and behavioral change (natural resource management practices) at the household and individual levels.

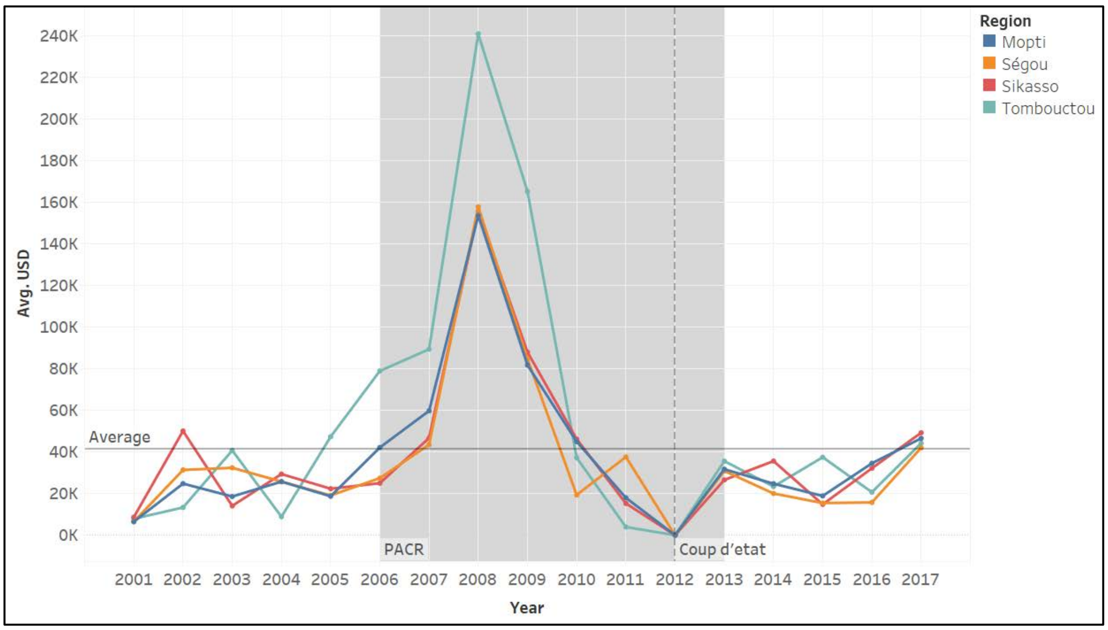
2.8 At the time of writing this report, the objective of improving rural living conditions remained substantially relevant. It is aligned with Mali's Systematic Country Diagnostic (2015) and Country Partnership Framework (2015), both of which stress the criticality of improving rural livelihoods for sustainable poverty reduction. However, if written today, a more relevant statement would be oriented toward improved local governance, and toward more transparent and effective public resource and financial management. It would also include the role of citizens in the oversight of these processes. Increasing societal fragmentation—including in the south—should also prompt attention to enhancing social cohesion to dampen the drivers of fragility, especially with regard to perceived inequality in accessing donor-funded opportunities.

2.9 At appraisal and at the time this report was prepared, the relevance of the project Objective is rated Substantially Relevant.

Relevance of Project Design

2.10 PACR was relevantly designed to fill critical financing gaps for rural service delivery. Data collected by this assessment point to the paucity of funding that was and is made available in rural areas for basic service delivery.[5] As depicted in Figure 2.1, the average level of public finance allocated to participating rural communes prior to the project was between US$19,000 and US$25,000 per annum. This amounted to an average annual per capita contribution of US$1.06 in Mopti, US$1.70 in Segou, US$1.10 in Timbouctou, and US$1.42 in the Sikasso region.[6] The PACR project provided roughly half of all public finance made available to project communes during the project period, amounting to total commune budgets that were, on average, three times higher than in the pre-project period.[7]

Figure 2.1. Average Annual Commune Budget, 2001–17 (PACR Communes Only)

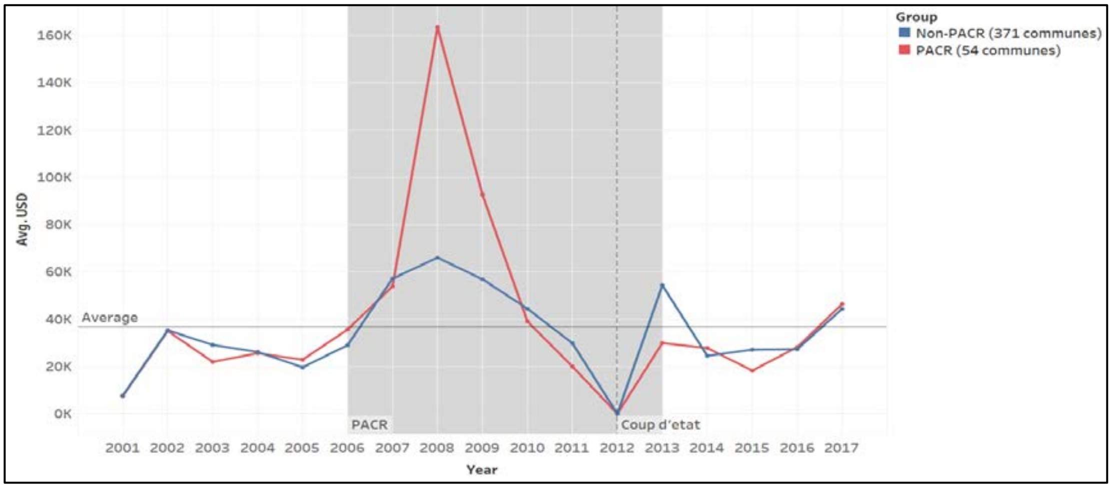


2.11 Although PACR relevantly and significantly filled this gap, the truncated disbursement schedule risked undermining parallel efforts to strengthen and support local public finance management for improved budgetary decision-making, enhanced transparency, and oversight. Project finance equal to three times the average transfer for public services was channeled to project communes over a very short period (figure 2.1).[8]

TARGETING

2.12 **Project design lacked transparent area selection and participation criteria.** The project targeted poor regions but there is no verifiable information provided by the project, or identified by this assessment, on the rationale for commune selection. Seventy percent of all the country's poor reside in three its southern zones, in North and South Sikasso and in the south of Ségou (Hoogevan, 2015). In Sikasso, 80 percent of the population lives below the poverty line. But apart from regional selection, the project did not provide a transparent description of commune selection. This assessment compared the average amount of public finance provided to project and non-project (rural) communes in the targeted regions before, during, and after the project (Figure 2.2).[9] The analysis suggests that project financing did not supplement, or stretch, existing finance to smooth distribution to remote areas; rather, it topped up certain communes in response to unknown political preferences.[10]

Figure 2.2. Average Annual Commune Budgets in Targeted Regions 2001–2017



2.13 For private goods, this evaluation revealed that in the absence of selection criteria, participation was negotiated at the commune and village levels (including deference to elders) and determined by the ability of groups to pay (contribute co-finance).

2.14 Public works contracts were administered by contractors who were known to and used by the national and regional ANICT offices. Community co-financing requirements were fixed by ANICT and depended on the capacity of the commune and the nature of the investment.[11] The assessment found that co-financing requirements were often unaffordable and were thus discreetly provided by the contractor, who would then subtract the contribution from payment later received from ANICT. As identified by this assessment, this arrangement sometimes had a negative impact on quality of construction and durability of infrastructure. A more relevant design would have dropped the requirement for a cash contribution, retained requirements for in-kind support, and put in place mechanisms for meaningful oversight, grievance redress, and participation in procurement, management, monitoring and reporting about the quality of the services and works.

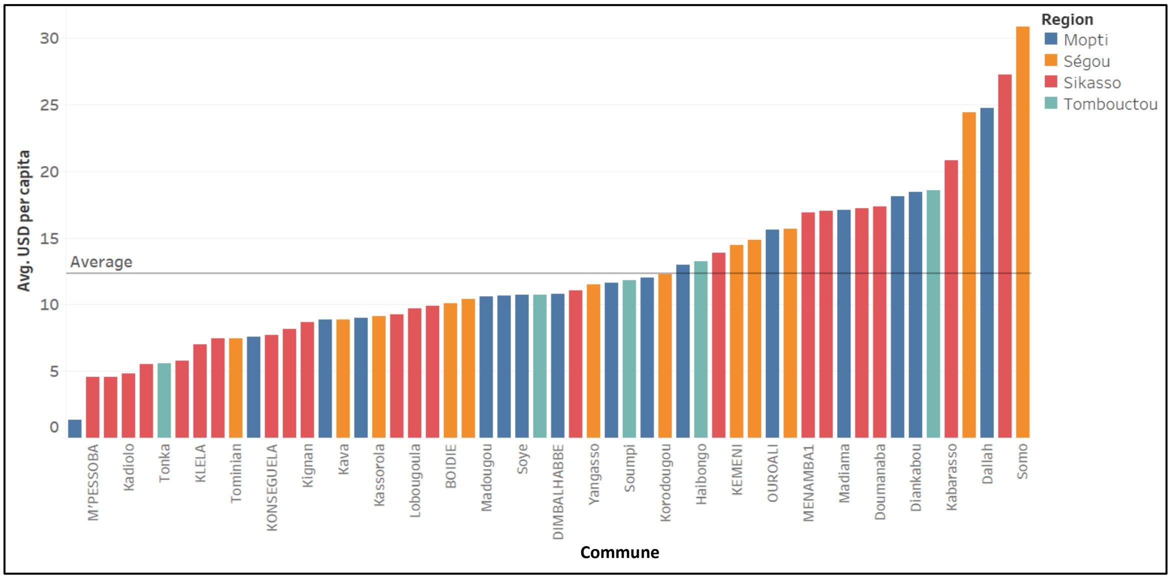
COMPLEMENTARITY

2.15 Project design was based on the theory that although the provision of publicly financed social services in rural areas is critical, these cannot be maintained without sustained sources of income. Hence, the two parts of the project—the public services and the productive investments—would need to be co-located within the communes. This assessment found that because of the project design the two parts were managed separately and lacked synergy. They had different implementation modalities and selection criteria, and often were not co-located geographically. Only 17 percent of all villages targeted received both public and private investments. Though some services are shared between communes (for example, health centers), education is local and requires local household contributions.

SOCIAL INCLUSION AND ACCOUNTABILITY

2.16 The project design lacked integrated mechanisms to support social inclusion and accountability at the commune and village levels. For the service delivery component, the project used country systems (ANICT) to channel funds to the targeted communes. This is a political system influenced by power dynamics and established relationships between regional local ANICT representatives and mayors. The allocation of project funds for public services, as assessed by this review on a per capita basis, was skewed (Figure 2.3).[12] Though the Implementation Completion and Results report (ICR) indicates that expenditures were higher in more remote communes, in communes where villages are dispersed, and where service delivery costs are high, no such patterns emerge from the data collected and analyzed by this project assessment.

Figure 2.3. PACR Average Public Investment per Capita, by Commune



2.17 **Elders versus Youth**. There are changing patterns and expectations in rural Malian society between elders and youth about land and labor, to the effect of changing labor patterns among young men (out of farming) and the continued retention of lineage land in the hands of elders. However, the project lacked attention to youth dynamics and this risked aggravating already strained social tensions. At meetings convened by the assessment team, youth groups who expressed resentment about the project's neglect of youth. Youth cooperatives visited by the assessment team demonstrated strong organizational skills and some provided evidence of viable, or profitable, cooperative models.

2.18 **Autochthone versus Allochthone**. Project design also did not account for the different levels of social capital enjoyed by different groups in Mali's rural areas. In Malian society, the male descendants of the original occupants of an area (*autochthone*) own and control land appropriation and its use. Females have access to land through marriage, but cannot own land. Persons not linked to these extended families, who have migrated (*allochthon*e), can lease land from landowners (*autochthone*), but do not own land. The wives of allochthone can only gain land access through their husbands. Project design does not differentiate between these different social identities, which would have a material effect on an individual or group's ability to run a successful private enterprise.

2.19 **Gender.** Prior to 2015, Mali's decentralization law did not include gender quotas at the national or subnational level (since 2015, the quota has been set at 30 percent). The project design lacked an analysis of the way by which gender would be considered with regard to participation in local priority setting and investment decision making. Very few women were represented in the commune councils visited by the assessment team, and interviews with women council members attested to the fact that their representation overall was quite low. Gender disaggregated indicators were initially limited to the number of girls enrolled in school; the ICR added an anticipated ratio of female project beneficiaries.

2.20 **Cooperative formation.** The project design required recipients of the productive investment fund to form cooperatives. Cooperatives have been ubiquitous in Mali and well organized in the south, where cotton cooperatives have operated since the creation of the *Compagnie Malienne pour le Développement du textile* (CMDT) in 1974. But in other areas, including some of the PACR project areas, individuals are more comfortable with dues-paying economic associations that provide collective benefits (such as collective procurement and group lending) while maintaining decentralized and individual investment responsibility. PACR required these associations to transform into cooperatives, which required a more centralized arrangement that created, as reported by cooperatives, a lot of free rider and collective action challenges that had not been there before.

2.21 This assessment concluded that several of the project's design features, such as the need for better complementarity between the assignment of public services and private investment opportunities, non-transparent participation criteria, inadequate inclusion criteria, and the forced establishment of cooperatives, were only modestly relevant to achieving improved living conditions of rural communities in four target regions in Mali.

3. Efficacy

3.1 **Evaluability (M&E Design).** There was a fundamental difference between the different value propositions associated with the project concept by the three task managers who respectively designed, implemented, and closed the PACR project. Despite the very tangible development objective—of improving living conditions—the original results framework was mainly focused on measuring the quality of participation. This is because the original task management of this project viewed services and assets means to deepen community participation in the newly structured decentralization process, not as the end. Thus, project indicators were geared toward measuring the quality of participation and the link between participation and service delivery, mainly through perception surveys (for example, the percentage of beneficiaries that perceive an improvement in participation in local development planning; the percentage of communities that perceive an improvement in access to basic services). Though the project's process goals are laudable, the original project design lacked adequate technical indicators to attributably track progress toward the overarching objective.

3.2 These inadequacies were partially addressed in a revision to the results framework that was undertaken as part of the additional financing. No overarching indicator or metrics (for example, consumption, assets, or wealth) were introduced to measure the objective of improved living conditions, but several output indicators were added to approximate the project's contribution to achieving this aim. Foremost among these were indicators introduced to track (i) access to basic socioeconomic services and (ii) sustained income attributable to the project's micro-projects.

3.3 Though these indicators were better aligned with the objective statement, they lacked specificity, baseline data, and the data collection tools needed to provide attributable and plausible project evidence. For example, the main indicator developed for service delivery was that by project end, 80 percent of the villages supported by the project would have adequate access to basic social services (as defined by a clinic within 15 km, school within 5 km and one water access point for 400 people). The project reported an achievement rate of 87 percent. However, the indicator is "fuzzy" for several reasons:

- The indicator implies that only "villages supported by the project" would be measured and assessed against the indicator target. However, the project intervened at the commune level, including the provision of communal infrastructure (such as clinics). To measure access, the project would have needed to measure the average access of all persons living within all villages of a targeted commune. Within the 54 communes, there are 1,041 villages. Project-level data obtained and analyzed by this assessment reveal that only 27 percent (278 villages) of all villages received at least one basic socioeconomic service.

- A better measure of access would have been village "reach."(Table 3.1). By obtaining publicly available administrative data and pairing this with the MIS database provided to the IEG team, this assessment finds that village reach ranged from a 43 percent in Sikasso to 22percent in Tombouctou. This difference may in part be explained by widely varying population densities across regions: Sikasso has an estimated 31.3 people per square kilometer whereas Timbuktu only has 0.6 people per square kilometer.[13]

Table 3.1 Number of Villages Reached per Communes (Public Services)

% of Villages Reached Per Commune	*Sikasso (21 Communes)*	*Segou (12 Communes)*	*Mopti (16 Communes)*	*Timbuktu (5 Communes)*
	Number of Communes			
Less than 20%	1	5	5	2
Between 20–30%	6	3	6	1
Between 30–50%	5	3	4	1
More than 50%	10	1	1	0

3.4 This indicator also lacks an indication as to whether the project was responsible for providing all three services or whether attainment of the goal is measured against the achievement of one, two, or three of the main services offered as part of the project menu. It also lacks any measure of service delivery use, maintenance, or quality.

3.5 The main indicator linked to the project's sustained income (sub) objective was attributable and outcome-oriented, but it lacked specificity and was too sophisticated to have been introduced late in the project cycle. The main income indicator was that by project end, "at least 60 percent of the productive projects would have generated average annual income per member superior to the daily poverty line."

3.6 The main measurement challenges for this indicator were the lack of a baseline and the lack of income targets. The magnitude of change is not made clear. The project also used a poverty line of CFAF 398 per day, equivalent to US$0.88 a day at mid-term, which, while in line with national standards, was 30 percent less than the universal poverty line of US$1.25/day set by the World Bank at that time (2008). If the average project beneficiary was living below the poverty line, then in the highest case scenario—utilizing ERR estimates of 30 percent—the income level would just cross the poverty line (and there is no indication in the metric whether the calculation is gross or net). This assessment finds such an increase a paltry objective for a project that makes available US$23 million to 908 cooperatives for private productive investment opportunities, and an additional US$5–6 million for technical assistance and training.

3.7 **Development Objective**. PACR was designed to improve the living conditions of rural communities by providing access to basic socioeconomic services (for example, education, health) and a sustainable increase in income (through local private investments), while promoting improved natural resource management practices. In the absence of an overarching indicator to validate or assess this main aim, this assessment uses the theory of change (section 2.2) to assess the contribution of the sub-objectives of service delivery and local private investment toward the aim of improving living conditions. The aim of improving natural resource management practices, while highly important for the sustainability of the interventions, is not essential to the achievement of the overall objective and thus is considered but not integrated into the efficacy rating.

Access to Basic Socio-Economic Services

3.8 PACR financed 388 investments to improve local public service delivery.[14] The bulk of the investment supported access to education, health, and domestic water supply (Table 3.2). This assessment considers, but does not limit its analysis of achievements to, the access indicators used by the project. Access to education was defined as being within 2 km of a primary school, access to health as being within 15 km. Access to water supply was defined by a carrying capacity of 400 persons per well. Secondary data and commune- and village-level field assessments were used to weigh in on service delivery quality.

Table 3.2 Total and Average Cost per PACR intervention type

Sector	Cost	Cost - % of total	# Projects	# projects - % of total	Average cost per project
Education	$ 4.3m	38%	141	36%	$ 30,407
Health	$ 2.9m	26%	80	21%	$ 36,222
Hydraulic	$ 1.7m	15%	83	21%	$ 20,515
Public Infrastructure	$1.4m	13%	50	13%	$ 28,368
Commercial Infrastructure	$781,000	7%	31	8%	$ 25,193
Land Development	$92,600	1%	3	1%	$ 30,861
Total	**$ 11,179,822**	**100%**	**388**	**100%**	**$ 28,814**

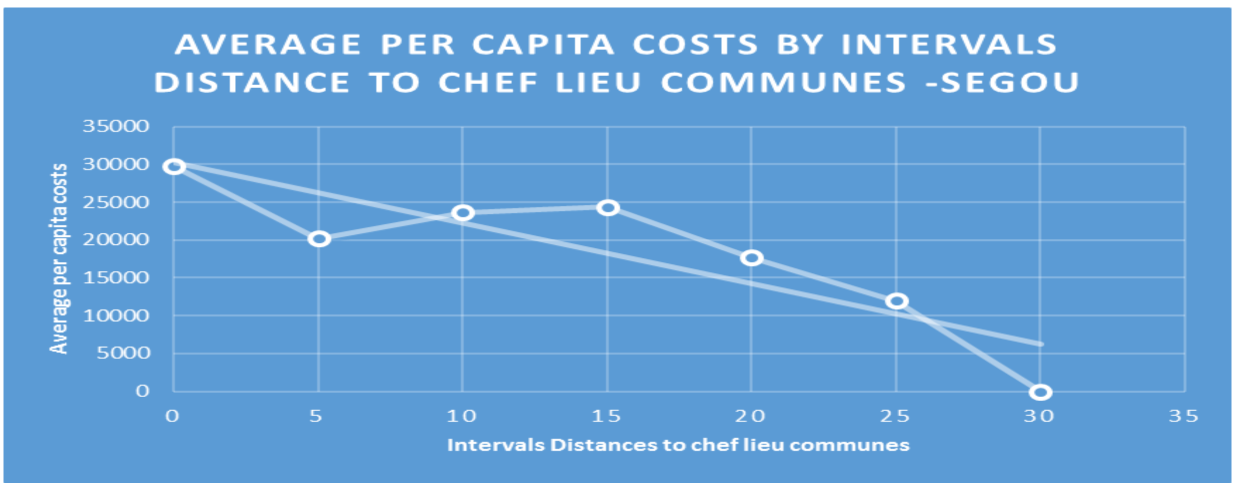
3.9 **Access to Education**. As compared to other types of infrastructure constructed by the project (and other donors), schools were the most frequently occurring, or repeating, within communes. Using the access standard of 2 km, this assessment finds the project *substantially* contributed to increasing access to primary and secondary education in the project areas. PACR financed 141 education su-projects, including the construction of 109 schools, with just over half of all subprojects implemented in the region of Sikasso. Applying the national average of 45 students per class, PACR would have enabled 10,440 children to access improved or new educational services at a total cost of US$375 per student (including funds used for construction and salary "top-ups." Project data did not allow this assessment to disaggregate the funding of recurrent costs from construction costs.)

3.10 At the time of project design, owing to deep underinvestment in this sector, national public primary schools only accommodated a fraction of the country's eligible school-age children. Community Schools, like the ones financed by the project, have filled a vital service delivery gap. This assessment found that the education infrastructure financed by the project spurred state and local investment at many levels. Three-room school houses, built with project finance, became eligible for a state teacher subsidy. Field observations and interviews also confirmed that the three-room schoolhouses attracted other donor support for latrines (UNICEF), equipment, materials, and curriculum materials.

3.11 Although credible commune and village level education data were not obtainable, regional data point to an overall increase in primary enrollment in the regions targeted by PACR. Across all four regions, overall enrollment increased by between 14 percent and 18 percent (MDGs, 2003; Ministry of Education, 2010). These achievements were made possible by the education financing provided by donors, including the World Bank, nongovernmental organizations (NGOs), and by communities themselves. The project did not report on education quality or literacy, however, which matters for achieving higher living standards. Also, because of the 2012 coup d'état, and the subsequent insecurity, 501 schools (including some financed by the World Bank) were closed, forcing at least 150,000 children out of school prematurely (OCHA, 2017).

3.12 Education was not equally accessible, however. For all services provided—including education—distance to the mayoral seat, or the *Chef Lieu*, matters in terms of access. Population and distance data collected by this assessment reveal that access to services, on a per capita basis in Segou, declines with distance from the commune center (Figure 3.1).

Figure 3.1. Average Per Capita Investment in Education by Distance to Chef Lieu

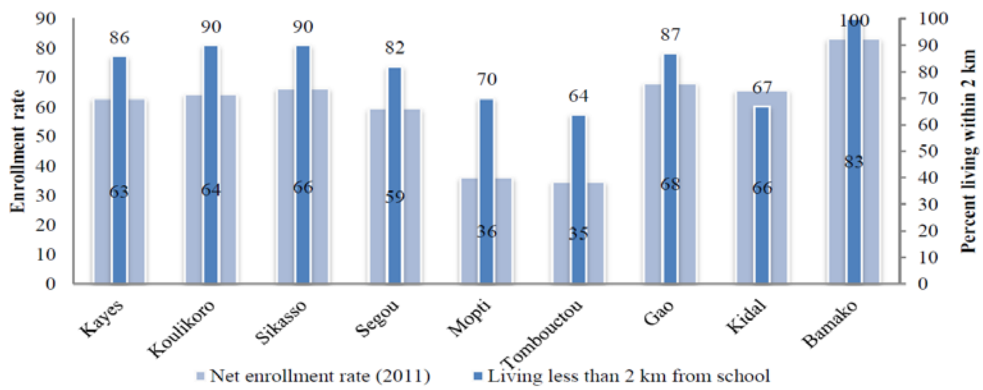


3.13 The project did not report on the quality of education or the use of education services. Enrollment and retention—in the absence of learning attainment metrics—would have been better proxy indicators for improved living standards. Recent World Bank research indicates that as of 2009, more than 80 percent of Mali's eligible population lived within 2 km of a primary school (Figure 3.2. Hoogevan, 2015). Yet almost 60 percent of Mali's six and above was uneducated. Enrollment rates (as of 2011) significantly lagged behind access rates in the project areas of Mopti and Timbuktu, for example, where only one-third of children were enrolled, and this was prior to the 2012 coup that left 500,000–800,000 out of school. Interviews with villagers in Sikasso and Segou pointed to reasons for the low enrollment rate that included household decisions to divide children's time between school and work, and high school fees.

Figure 3.2. **Access to Education Exceeds Enrollment in all Regions with Large Gaps in Mopti and Timbuktu**

ACCESS TO HEALTH SERVICES

3.14 Based on the low number of health centers financed, and the paucity of care and equipment that was found to exist in the birthing centers (maternities), this assessment finds



Source: EMOP 2011 (enrollment) and RGPH 2009 (distance). Authors' calculations.

that the project only *modestly* delivered health services to the target areas. PACR financed 80 health projects across all four regions, with half implemented in Sikasso. Of the total, only 14 were health centers.[15] The most frequently occurring investment was the repair or construction of a maternity or the provision of a small amount of equipment (often for maternities). Based on field observations, this assessment interpreted access to health services—at a distance of 15 km or less—as access to a health center with a practitioner, medicine, and equipment. Although the maternities improved birthing conditions, as understood through interviews, they offer a narrow range of services, are ill-equipped, and lack access to water and sanitation.

3.15 For the most part, project-financed health centers are situated in the *Chef Lieu*, which is reasonable, given the need to agglomerate health investments and to attract skilled practitioners to livable rural areas. However, a new study shows that Mali's population is expanding more rapidly in expansive communes (which can be as large as several hundred km) as compared to areas with higher levels of administrative density (Brottom 2017). This expansion is occurring because of the pursuit of farmland. The study finds that, as a result, while access to health services has increased overall since 1998, the average distance to medical centers has increased in recent years owing to this human geography dimension (Brottom, 2017). Hamlet residents, or the allochthone groups discussed previously in this assessment, would probably not have received access to health services through the PACR project.

Sustainable Increase in Income

3.16 Incom**e** is reported in the ICR, but the data are not credible (Table 3.3). In the region of Sikasso, for example, the ICR estimated average income on the basis of two site visits, in a region that included 295 productive investments, or one-third of all investments.

Table 3.3 ICR-Reported Individual Incomes (CFAF) from PACR Productive Investments

Region	*# of Productive Investments*	*# with income per member < CFA 145 000*	*% of income per member < CFA 145 000*	*# with income per member > CFA 145 000*	*% of Income per member >CFA 145 000*
Sikasso	2	1	50%	1	50%
Segou	14	8	57%	6	43%
Mopti	19	8	42%	11	58%
Timbuktu	17	9	53%	8	47%

3.17 Nevertheless, in the absence of a baseline, the project set a target that 60 percent of the productive microprojects would generate an average annual income per member superior to the daily poverty line. The reported result was 63 percent. This result was based on a review of the net present value (in 2013) of 27 productive investments (five gardens, 10 dry crops, five Livestock, four Processing & Trade activities and three crafts). The project financed 908 private productive subprojects at a project cost of US$25.3 million (Table 3.4). If 63 percent of the productive micro-projects (572) were successful in generating a net profit, it stands to reason that the remaining 336 subprojects, valued at US$9.3 million, failed. A loss of wealth at this level, in one of the world's poorest countries, should not be written off lightly. This assessment therefore concluded, based on this evidence gathered (see below), that if the US$9.3 million would have been ploughed into ongoing agricultural activities, for better seeds or fertilizer – much less value would have likely been lost.

Table 3.4. PACR Private Productive Investments

Region	*Costs US$millions*	*# Projects.*	*US$ per project*
Sikasso	$8.22	295	$27,871
Segou	$5.46	228	$23,927
Mopti	$7.51	257	$29,239
Timbuktu	$4.12	128	$32,180
Total	**$25.31**	**908**	**$27,875**

IEG's Cooperative Analysis

3.18 To supplement the lack of quality data on the income or living conditions that may have been achieved through the private productive investments, IEG conducted group interviews with 35 cooperatives in 24 different villages within 10 different communes (for selection criteria, see methodology Annex B). Using a small "n" approach, the assessment sought to learn lessons about what type of investment may have worked and why, and what type were the least successful and why, to inform future programming. The small "n" approach was also used to test project assumptions respecting cooperative group behavior and the relationship of these groups to the wider society. The project had posited that private productive assets were necessary to fund the use, maintenance, and operations of the social services that were situated in the same communes.

3.19 Overall, IEG's small "n" analysis suggests that that, while simple investments designed to expand and diversify agricultural activities worked, investments in transformation and commercialization—poultry farms and livestock fattening—tended to fail. These latter investments accounted for more than 50 percent of the private productive investment overall. The reasons for failure (and success)—that cannot be extrapolated but may be suggestive of project-wide challenges—were derived from IEG's group (cooperative) interviews. The following lessons emerged:

3.20 *The most successful investments came from established productive groups who were enabled to deliberately and thoughtfully choose their investment based on their established skill sets and their own knowledge of local markets.* Of the 21 cooperatives that reported that they had been "pushed" to take up a new activity—often transformation—19 reported project failure to the IEG assessment team. Examples of new activities that failed included butcher cooperatives that went into the business of tanning and leather product sales; cashew producers that took up cashew transformation including drying, roasting, and sales; peanut farmers who took up commercial sesame production, and farmers who got into the livestock rearing and fattening business. Successful new activities were often simpler and nearly always founded in an activity the group was doing before the investment, including seed production, shea butter processing, and sales or the establishment of a new village garden to support vegetable sales.

3.21 *Co-financing requirements forced rural producers into relationships that had not been previously tested.* Economic groups changed size in response to the project incentives—growing to accommodate co-financing requirements—or shrinking to capture project benefits. This was especially true of investment projects that required a large amount of capital upfront, such as for the purchase of large livestock (such as cattle). In the cases assessed, large groups were found to pool resources to afford the investment, but invariably, a small subset of the group benefited, because only a small subset of members had adequate access to land, fodder, and water to sustain the assets. In other cases, the group shrank because members could not afford the financing requirement. None of the livestock projects assessed were found to be successful. On the basis of interviews with livestock producers and other villagers, the IEG assessment team found that instead of of fattening or breeding the stock, as intended, the 90 percent subsidy was used to buy the stock and to sell stock back to the market at a reduced price, for immediate gain. In other cases, IEG found that cooperatives lacked adequate access to resources to sustain the livestock, and incurred a loss.

3.22 *Lack of market access was cited as a major constraint.* The project did not conduct feasibility studies, or market analysis, prior to making the rural investments available. Cashew cooperatives, for example, advised the IEG team that after supplying drying and roasting equipment the project did not help them to enter the cashew market. Without this support, the equipment was allowed to fall into disrepair and the cooperatives returned to basic production. The *jatropha* cooperative was emblematic of this shortfall: having produced the jatropha oil, the cooperative found itself beholden to a single buyer whose purchase price was so low the cooperative abandoned the investment. The *jatropha* cooperative reported that they needed help with the "business" side of the investment. Another cooperative was encouraged to invest in mango drying equipment despite their objections that dried mango was not part of the local dietary regime; the activity was dropped after two seasons of losses due to lack of sales, and the equipment now sits unused.

3.23 *Land was also a constraining factor. Though conditions varied, land was often gifted by the village chief to support the cooperative investment.* The location of land also mattered. Groups that invested in poultry farming reported to the IEG assessment team that the primary reason for their failure was that the land allocated for the coop was too far from their homes. The project rejected beneficiary requests to engage in backyard chicken farming, the preferred modality for groups visited; because the project was designed to support a cooperative model, requests for individual "backyard" arrangements were rejected. Poultry coops located far away were reportedly ravaged by snakes and birds.

3.24 *The project also lacked a social accountability mechanism to empower the "buyer" or the cooperative member vis à vis the project facilitator and equipment providers*. No project-level mechanisms were put in place to prevent actors, on all sides, from "taking a cut." The low quality, or durability, of the productive equipment was a frequent concern expressed by cooperative members. Female cooperatives advised the IEG team that they felt uncomfortable reporting poor equipment or that they did not feel they had a right to reject it from the field agent or service provider, who was in nearly all instances a man. This was true even though the women had been informed that they had the right to make objections at the time of delivery if warranted. Indeed, training or capacity-building activities were insufficient to overcome such challenges, endemic to highly patriarchal societies.

PROMOTING IMPROVED NATURAL RESOURCE MANAGEMENT

3.25 Improved natural resource management was part of the project development objective. Mali's national rural development strategy emphasized the need to address rural development and agriculture holistically. At Appraisal, the project set a target that at least 140 communes would undertake natural resource management investments. It was not clear how this target was developed since the community driven development approach, by design, allows communities to decide on investments according to their own priorities. The indicator was dropped at mid-term since no commune had chosen to undertake a natural resource management investment with project resources. Instead, a new indicator was introduced at mid-term that aimed to have "50 percent of all community based organizations involved in the program implement improved natural resource management practices." While the project reported that this target was exceeded (70 percent) there was no baseline and there is no evidence in the ICR to support this. The project supported environmental activities, but these investments were mainly related to safeguards (see Bank Performance section), or environmental management practices such as solid and liquid waste management, health and worker safety, etc. This assessment found only one line item (for US$15,000) in the data related to environmental investment (for reforestation), in a village in the region of Sikasso.

GENDER DISAGGREGATED ACHIEVEMENTS

3.26 The ICR reported that women's empowerment occurred by reducing the burden of chores through the provision of access to facilities and equipment, and by increasing incomes, "and thus their participation in family expenses."[16] The facilities and equipment cited (hulling, food processing, and mills)[17] were provided as productive investments, and in effect acted as a driver of the income increase rather than a separate achievement in and of itself. Concerning income and increased contribution to family expenses, evidence on income increases was shown to be weak (see discussion on "Sustainable Increase in Income"). However plausible, no evidence for increased contribution to family expenses was specified, nor was there evidence for a clear link between that and empowerment in the Malian context. Otherwise, the ICR reported that 39 percent of productive investments went to women and that 36 percent of beneficiaries of capacity-building activities were women. Indicators of the impact of these activities on women's empowerment were not specified.

3.27 In conclusion, this assessment finds that the project contributed only modestly to improved living conditions by providing access to basic socioeconomic services, with more achievements noted for education than for health; and by expanding private investment opportunities, with a greater rate of success associated with investment in agricultural activities than in transformation, commercialization, or livestock rearing.

4. Efficiency

4.1 **Economic Rate of Return (ERR)**. The project did not conduct an economic or financial return analysis at appraisal, owing to the demand-driven nature of the subproject approach (investment funds). It produced, insufficiently, a With or Without Project Scenario for seven productive investments. At close, the project calculated an ERR for the Productive Investment Fund that was based on 27 successful micro-projects across five investment areas (village garden, dry crop, livestock, processing, and trade and crafts). The project estimated an overall ERR of 28.4 percent, on average for these productive activities, over a 15-year period, and 36.7 percent if two additional activities were to be added (bee keeping and aquaculture). The sensitivity analysis covering the five investment areas estimated that a 10 percent increase in costs would reduce the overall ERR from 28.4 percent to 27.7 percent, and that a 10 percent cost increase coupled with a 5 percent decrease of benefits would reduce the overall ERR to 27.2 percent. If beekeeping and aquaculture are included, a cost increase of 10 percent would reduce the overall ERR to 33.5 percent. A 10 percent cost increase coupled with a 5 percent decrease in benefits would reduce the ERR to 32.1 percent.

4.2 **Value for Money**. This project poses a strong value-for-money question. First, though the above analysis suggests that the productive investments financed by the project would, on average, earn a 32 percent rate of return, this report has pointed out that the income associated with this return would barely nudge rural residents out of poverty, based on the reported earnings collected in the cooperative focus groups and as compared to the international poverty line. The successful investments, especially those that upgraded agriculture or diversified crops, would have contributed to risk mitigation and household resilience, but not to sustainable poverty reduction, especially in the face of shocks. Second, as shown by the analysis in this report, 40 percent of the productive investments—at a project value of US$10 million—failed. Because there was a co-financing requirement, these targeted beneficiaries were worse off after the project than before it. This raises a question about the acceptable level of risk that should be promoted or tolerated in allocating resources through a productive investment fund. The project also did not measure the effectiveness of training, and therefore a value-for-money assessment of the US$5–6 million spent on training is unobtainable.

4.3 **The project did not conduct an economic analysis of the basic social services and village-level infrastructure that it constructed.** The project design was based on a theory that community-controlled procurement of materials and labor can result in savings of more than 70 percent in the cost of microprojects as compared to projects in which procurement is managed centrally by the implementing agency. The assumption has been borne out in other CDD projects, but this project did not devolve procurement authority to community members. Rather, with the decision to centralize resources within ANICT, the contracting, procurement, and labor details of the public works were managed centrally.

4.4 The ICR states that as compared to other forms of service and goods provision, the "savings in infrastructure costs were significant," that the "quality of infrastructure was perceived as good," and that these sentiments were "echoed by local officials and community members." There is also a statement that "some local officials and community members estimated that the completed works were likely to have a longer lifespan than government-built works." But no evidence is provided, through for example, a comparison of infrastructure costs or quality between the project and those of government of Mali or other donor models. It is plausible, however, that in the project model, strict adherence to rules, accountability, and community decision making and inclusion reduced leakage and delays.

4.5 Because of the lack of analysis of an "average" set of productive investments, the large loss that was incurred (including co-financing commitments), and the lack of analysis of the relative savings derived from the community-driven model of local infrastructure development, efficiency is rated **Modest.**

5. Ratings

Outcome

5.1 The overall outcome of the project is rated **Moderately Unsatisfactory**. The project development objective of improving the living conditions of rural communities was and remains *substantially relevant*. Relevance could be enhanced by pivoting the project aim toward improving local governance and public resource management by anchoring these in meaningful citizen engagement. Project design is rated *modest*, however, because several of the its design features such as the need for better complementarity, nontransparent participation criteria, inadequate inclusion criteria, and the forced establishment of cooperatives, were only modestly relevant to achieving improved living conditions of rural communities in four target regions in Mali. Living conditions were improved through the provision of basic socioeconomic services, with more substantial gains made in providing education access as compared to more modest achievements in health. Though income was not accurately captured, simple agricultural investments improved living conditions more substantially than investments in transformation and livestock rearing, which had negligible or negative impacts. These latter investments lacked linkages to the broader rural economy, market access, leverage, and negotiating power. Efficiency is *modest* because of the lack of an economic rate of return (ERR) of an "average" set of productive investments, and the relatively large amount of funding that was lost in financing complex subproject investments.

Risk to Development Outcome

5.2 *Institutional Risks*. The project's theory of change posited that increased citizen engagement in Mali's local development processes would lead to more equitable service delivery, and that these services would be more fully owned by the communities that had chosen and partly financed them. Although not reported in the implementation completion report or in the external evaluation, PACR helped several of the communes visited finance and implement their Local Economic and Social Development Plans (*Plan de Développement Economique et Social de la Commune*, PDSEC). In all cases, this support facilitated wide participation in the development of the plan and a comprehensive recording of village needs. After PACR, only one of the communes visited had re-engaged in this process; the others cited costs and capacity as the main constraints preventing them. Interviews with several mayors reinforced this finding, that communes in the PACR area had not been able to redo their PDSEC, and that they were seeking NGO or donor finance. The communes consistently expressed the desire to engage in a more participatory and comprehensive process to map village service delivery needs as a way to more accurately request public financing.

5.3 There is a substantial risk that rural citizens in Mali will be underrepresented in municipal level development planning. As noted in the ICR, many of the innovations tested by the project to connect communities and their priority needs to municipal planning and budgeting processes may not last: "…it seems challenging that these innovations and reforms will be sustained or expanded beyond PACR" (ICR. 23). The ICR goes on to say that "PACR has given communities their first taste of engaging local government in exercising voice in the choice, implementation, and monitoring of subprojects. But because of the absence of institutionalized processes for negotiation and voice in budgeting and planning, this experience may remain in a project bubble" (ICR p.23).

5.4 *O&M Risks*. There is a substantial risk that many of the basic services provided by the World Bank are not being effectively operated or maintained, especially in the increasingly insecure areas of the center and north of the country. Investments in the north were affected by the 2012 coup d'état and ensuing rounds of insecurity and conflict. Because of the coup, the regional project implementation unit of PACR was closed. The project estimated that approximately $667,000 of investments in the Tombouctou area were lost because of the conflict. More recently, with the resurgence of violence, it is estimated that 501 schools closed in 2016, including some supported by the PACR and its predecessor project. These school closings have resulted in, at the minimum, 150,000 children leaving school prematurely.

5.5 The Risk to Development Outcome is rated **Substantial**.

World Bank Performance

QUALITY AT ENTRY

5.6 Quality at entry was challenged by a prolonged approval process. There was a lapse of more than three and a half years between the initial Project Concept Note review meeting held in October 2002 and effectiveness, declared in March 2006. The ICR indicates this lapse was owing to the lack of an effective task team leader transition process but research conducted for this assessment attributes the delays to a disagreement over implementation modalities.

5.7 Risk to financial management was underestimated by the World Bank during preparation. The project's risk to financial management was rated moderate during appraisal. This rating was based on a conclusion drawn from the 2002–03 Mali *Country Financial Accountability Assessment*, which found that Mali's "own control systems are operating more efficiently despite a few weaknesses in the supervision of projects." Project risk was rated modest because of the "experience and capacity" of the financial outsourcing arrangements and because the project's financial management team drew from the existing pilot project. However, the PACR project was the first project in support of decentralization to fully use country systems. As such, early in the project cycle, there were delays in the submission of the interim financial reports especially for the communal investments managed by ANICT.

5.8 Procurement risks were appropriately flagged, but project design lacked local-level accountability and reporting mechanisms. Overall project procurement risk was rated *High* by the Project Appraisal Document, owing to lack of borrower capacity, absence of standard bidding at the national level, insufficient capacity of local contractors to contract subject to ICB, and at the time of project appraisal, concerns about corruption. This assessment explored the procurement rules that defined the bidding criteria for the public and private investments, and contracts, financed by the project. The procurement stipulated that all investments under US$50,000 could be procured under simplified procedures for community participation in procurement. The average cost of the 908 productive investments ranged from US$25,000 for agriculture investments to US$33,000 for livestock investments. Only a handful of productive investments exceeded US$50,000.

5.9 The implication, therefore, is that most of the works procured would be supplied through simplified procedures. This is a reasonable arrangement owing to the lack of qualified bidders available in rural Mali, but in parallel to these procedures, the project did not put accountability measures in place at the village level. These could have taken the form of transparent, village-level accounting; scorecards; audit committees; local grievance redress mechanisms, etc.

5.10 The project's initial results framework was sensitively designed to monitor and report progress against the project's higher-level objective of achieving more meaningful participation in Mali's local development processes. However, it was not designed to measure the project objective.

5.11 Quality at entry is rated **Moderately Unsatisfactory**.

QUALITY OF SUPERVISION

5.12 World Bank supervision made several corrective efforts to address project implementation challenges. Early in the project cycle, a joint World Bank–Government supervision mission raised concerns about the quality of the microprojects financed under the project. Thus, the mission recommended a suspension of microproject funding “pending the adoption of a revised manual of procedures with implementation arrangements more suited to community development funds and the completion of a technical audit of the investments.” Consequently, eight grant agreements were cancelled. A technical audit commissioned by supervision found ineligible expenditures of between US$140,000 and US$160,000 that were subsequently reimbursed. As a result of World Bank supervision, financial management improved over the life of the project. Audit reports were delivered on time, and none led to qualifications on overall management. The ICR rated financial management satisfactory, despite the difficulties.

5.13 The monitoring and results framework was adjusted at midterm to better align it with the project development objective, but weak indicators and the absence of a baseline limit the extent to which the project’s development outcomes can be measured.

5.14 Safeguards were also adequately identified and managed during implementation. The project is classified as a Category B project. The project triggered Operational Policy 4.01 (Environmental and Social Assessment) and OP 4.09 (Pest Management). Consistently with this classification, the project put in place an Environmental Management Framework which was used to screen individual microproject approvals during project implementation. The ICR reported, and this assessment validated, satisfactory compliance with the Environmental Management Framework, noting good environmental practices, proper analysis and anticipation of micro-projects, relevant preventative measures, training programs, and supervision by regional directorates in charge of environmental protection.

5.15 Quality of supervision is **Moderately Satisfactory.**

5.16 Together, these ratings lead to an overall rating of World Bank performance of **Moderately Unsatisfactory.**

Borrower Performance

GOVERNMENT PERFORMANCE

5.17 Government commitment to the Rural Community Development project, following its strong commitment to the pilot Grassroots and Hunger Initiative project, was, at the time of the project, indicative of its strong support for decentralization and the role of local government in service delivery. The government of Mali ensured strong central and regional staffing. It also “stayed on course” following the 2012 national coup d’état, the six-month suspension of World Bank projects, their resumption, and the eventual close-out of the project. According to interviews with the regional project implementation units in Segou, Sikasso, and Mopti, the regional offices were well equipped with computers, printing machines, internet, phones, vehicles, and sufficient fuel. They also had sufficient human resources. Each had roughly 10 project staff, drivers, and other office support. Regional project staff reported that they had sufficient resources to fulfill the project mandate.

5.18 Government performance is rated **Satisfactory.**

IMPLEMENTING AGENCY PERFORMANCE

5.19 Implementation was challenged by the bifurcation of the project. ANICT implemented the communal services portion of the project. Although, as this assessment indicates, services were delivered, there were several improper expenditures, a need to return funds, as well as some subproject cancellations. More generally, while ANICT supported the construction of critical infrastructure in some of the poorest areas of Mali, the implementation procedures lacked accountability mechanisms that could have identified and corrected for poor contractor performance. The productive investments were implemented by the PACR project management unit, at the central level, in the *Bureau Central de Gestion du PACR* and at the regional level, through four regional project implementation units. As demonstrated by this review's assessment of the private productive investments, the national and regional teams, though extremely dedicated to project outcomes, were not equipped to oversee the private investments technically.

5.20 Implementing Agency performance is rated **Moderately Unsatisfactory**.

5.21 Together, these ratings lead to an overall rating of Borrower performance of **Moderately Unsatisfactory.**

6. Lessons

6.1 **Investment in rural service delivery requires an informed analysis and consideration of human geography, including the factors that influence population movement and household investment decisions.** In Mali, an increasing percentage of the rural population is living outside of formally recognized administrative areas—in hamlets as opposed to villages. In the PACR project, the use of existing administrative systems, budgeting, and planning tools was insufficient to address the needs of those living in "informal" settlements, or hamlets. Neglecting these human geography dimensions can reinforce income inequality and exacerbate societal tensions. Gender is also a key factor; women migrants who reside in hamlets are the most disadvantaged, in terms of access to the productive factors.

6.2 **Rural productive investments made through CDD projects should build on established skills sets and tested economic relationships.** They should avoid promoting excessively risky behavior by offering options to expand ongoing, profitable activities, linked to agriculture. Support for transformation or commercialization activities should be underpinned by market and value chain analysis that is poverty- and gender-sensitive. In Mali, in the PACR project, the most successful productive investments are associated with established productive groups who were enabled to deliberately and thoughtfully choose their investment based on their established skill sets and their own knowledge of local market.

6.3 **Projects can be used to demonstrate the benefits of citizen engagement, but mechanisms to promote sustained engagement must extend beyond project boundaries**. Projects can lay the groundwork for more inclusive local development planning by demonstrating the benefits of participation to local policy makers. These efforts can lower perceived risks about participation if local government is engaged. But for a project to have sustained participation effects, attention must be paid to–and indicators need to measure–the influence of the participatory mechanisms on local planning processes in the absence of the project, including the expectations raised and how demand manifests itself in the local systems the project has sought to influence.

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1 See IEG’s PPAR of the Projet d’Appui aux Initiatives de Base 2017 (forthcoming).

2 Mali Community Based Rural Development Project, Concept Document (not dated, likely mid-2002), p.17.

3 Mali Rural Community Development Project Quality Enhancement Review minutes, 12 January 2005.

4 The legal objective of PACR is the same objective in the Project Appraisal Document.

5 ANICT data 2001–11 obtained from Grinnell College; ANICT data from 2012–17 obtained from ANICT (June 2017); project data obtained from PACR project team (2017).

6 Based on 2009 Census Data for the population

7 Based on 2009 Census for the population and ANICT data (2001–16) for the commune budgets.

8 ANICT data 2001–11 obtained from Grinnell College; ANICT data from 2012–17 obtained from ANICT (June 2017); project data obtained from PACR project team (2017).

9 ANICT data obtained by IEG did not specify funding sources; other donors use ANICT.

10 Before and after the project, all rural communes in the four regions received roughly the same amount of ANICT funding. During the project, average flows to the 54 targeted communes exceeded the average transfer to non-PACR communes ($57,795 vs. $45,268 across the entire period, with the largest difference in 2008: $163,506 vs. $66,003). Financial flows were halted in 2012 because of the coup, and northern areas received more just after, but financial flows returned to a relatively even distribution from 2014 onward.

11 PACR Implementation Manual, p.56.

12 Dangol-Bore, Mopti received the lowest per capita share ($1.34). Somo, Segou received $30.86 per capita.

13 Derived from census data (Institut National de la Statistiques, République du Mali), cited on https://www.citypopulation.de/Mali-Cities.html.

14 This differs from the ICR-reported 501 investments because of differences in approaches to “counting” the investments. Original PACR data counted public and private investments differently: for public investments, the construction of a school/health clinic, its furnishing, and the provision of equipment were each counted as separate projects, whereas for private investments, the construction of a building and all associated equipment or other material provisions were counted as one comprehensive project. IEG sought a standardized approach to counting all investments, which merged data for public investments with private investment data. This reduced the count from 501 to 388 socioeconomic subprojects.

15 The most frequent investment was a maternity (41 percent), followed by equipment (30 percent), health center (18 percent), enclosure (15 percent), renovation (9 percent), housing (8 percent), and dispensary (4 percent). Distribution, however, varies by region. Maternities made up 60 percent of all health investments in Sikasso, but only 6–33 percent in the other three regions, where the construction or rehabilitation of health centers was more common (IEG, 2017).

16 ICR, p. 21.

17 ICR, p. 49.

Appendix A. Basic Data Sheet

MALI RURAL COMMUNITY DEVELOPMENT PROJECT

Key Project Data (amounts in US$ million)

	Appraisal estimate	*Actual or current estimate*	*Actual as % of appraisal estimate*
Total project costs	64.0	71.2	111.25%
Grant amount	6.0.0	69.9	116.5%
Cancellation			

Cumulative Estimated and Actual Disbursements

	FY06	*FY07*	*FY08*	*FY09*	*FY10*	*FY11*	*FY12*	*FY13*	*FY14*	*FY15*
Appraisal estimate (US$M)	7.2	19.8	32.9	46.4	57.2	60	60	60	60	60
Actual (US$M)	3.02	7.2	15.40	23.42	42.07	51.66	61.34	71.44	74.07	74.07
Actual as % of appraisal	41%	36%	46%	50%	73%	86%	102%	119%	123%	123%
Date of Final Disbursement	September 2014									

Project Dates

	Original	*Actual*
Concept Review		10/8/2002
Board approval		9/15/2005
Signing		10/3/2005
Effectiveness		3/24/2006
Closing date	6/17/2012	12/31/2013

Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget only)	
	No. of staff weeks	**USD Thousands (including travel and consultant costs)**
Lending		
FY01	2.23	9.27
FY02	9.71	36.97
FY03	50.24	181.13
FY04	17.43	106.98
FY05	35.62	169.61
FY06	15.18	77.43
TOTAL	**130.41**	**581.39**
Supervision/ICR		
FY06		17.48
FY07	21.05	88.51
FY08	15.30	53.08
FY09	22.71	82.26
FY10	11.16	49.85
FY 11	13.48	54.19
FY12	21.23	96.00
FY13	15.08	73.61
FY14	16.57	80.95
TOTAL	**138.66**	**595.93**

Appendix B. List of Persons Met

Government of Mali		
Diarra, Yacouba Tieman	Former Head, M&E PACR	Ministry of Agriculture
Cisse, Modibe	Director General	National Agency for Collective Territorial Investments
Cissouma, Edouard	Head of M&E	National Agency for Collective Territorial Investments
Macky, Alpha	Deputy	National Agency for Collective Territorial Investments
PACR Project Staff		
Keita, Olivier	Head of M&E, PACR, Mopti Region	M&E Officer, Fondation Stromme, Mali
Kone, Kalilou	Head of M&E, PACR, Sikasso Region	MEAL Officer, AVSF- Agronomes et Veterinaries Sans Frontieres, Mali
Camara, Mohamed	Head of Regional Project Implementation Unit, Segou Region	Technical Assistant PACEPEP, DANIDA, Denmark, Cooperation Mali
Keita, Bakary	M&E Officer, Segou	Education Project Officer, Afgha Khan Foundation, Mali
Coulibaly, Boubacar	Assistant to Project Leader, Segou	Planning and MEAL Officer, PAT- Porgramme d'Appui a la Transition, Mali.
United Nations, Bilateral and Regional Development Banks		
Dentice, Allesandra	Deputy Representative	UNICEF
Mistycki, Veronique	Resource Mobilization Specialist	UNICEF
Kollies, Ute	Chef de Bureau	OCHA
Seid, Fatouma	Representative	FAO
Bilaterals		
Boutroux, Thierry	Assistant Director	Agence Francaise de Developpement (AFD)
Neri, Beatrice	Head of Section, Rural Development	Delegation of the European Union in Mali
Bambara, Moussa	Director, Peace, Democracy and Governance	USAID Mali
Camara, Amadou	Resilience Program Coordinator	USAID
Clark, Donald	Special Advisor	USAID
	Acting Bureau Chief	USAID
Dioum,Macky Amadou	Principle Agro-Economist	African Development Bank
Fredette, Marc-Andre	Ambassador	Embassy of Canada
NGOs		
Douvan, Yawo	Mission Director	CARE Mali
		CARE Mali

World Bank		
Rogy, Michel	Program Leader, Sustainable Development, Guinea, CAR, Chad, Mali, Niger (AFCW3)	Bamako, Mali CMU World Bank
Um, Paul Noumba	Former Country Director Mali	Current Country Director AFCS1, World Bank
Yamouri, Najat	Senior Social Development Specialist	Washington DC World Bank
Durand, Olivier	Task Manager, PACR	Tashkent, Uzbekistan World Bank
Ehoue, Nicaise	Task Manager, PACR	Washington DC World Bank
Hans Hoogevan		Washington DC, World Bank
International NGOs		
Douvon, Yawo	Country Director	CARE International Mali
Diallo, Mamadou Diarafa	Country Director	Water Aid Mali

Appendix C. Evaluation Methodology

Project Development Objective. The objective of the Rural Community Development Project was to improve the living conditions of project supported rural communities by providing access to basic socio-economic services and a sustainable increase in income, while promoting improved natural resource management practices.

Theory of Change. The project's theory of changes posits that increased citizen participation in Mali's decentralization process, in its local and communal development processes, can generate more relevant, more cost-effective, and more sustainable local investments than supply led processes, and that this involvement can, in turn, lead to enhanced livelihoods through better access to services and through more sustainable streams of local income. Based on lessons from a pilot, the project included access to both public services and private assets. The lesson that was learned was that access to services were necessary but not sufficient. Income generating activities were needed to, at the very least, maintain the services (schools, clinics and water) that were being provided by the project, as well as to stimulate the local economy. Central to the theory of change were two project design elements ("the means"). These are (1) training and capacity building for programming, designing, and managing collective local investments and the ability of service providers to effectively participate and contribute to the overall livelihoods aim. (2) And, local development financing. Local financing was provided in the form of two local development funds: a communal investment fund and a productive enterprise fund. Public services and assets included support for education, health, wells, commercial structure (Market), public infrastructure (roads, culverts, bridges) and land development (in 3 cases). Private assets included agricultural support, livestock, processing and commercialization, artisanal, and forestry (in 1 case).

Local development financing for public services and public assets was intended to be awarded by the Commune Council to villages based on needs articulated in the Local Development Plan – a participatory village needs assessment that is overseen by the Commune. Public assets - while placed in one village - were intended to be accessed by citizens of other villages, within a set maximum distance (5 km for schools, 15 km for clinics) or against a set carrying capacity (for water, 400 persons per well).

The PACR project included 54 communes across four regions (21 in Sikasso, 12 in Segou, 16 in Mopti, and 5 in Timbuktu). All communes received village level support for public services although the distribution is highly variable. For example, in Sikasso, 43% of villages were reached in any given commune whereas in the three other regions, between 22-25% of villages were reached.

Table C1. Distribution of Public Services

% of Villages Reached Per Commune	Sikasso (21 Communes)	Segou (12 Communes)	Mopti (16 Communes)	Timbuktu (5 Communes)
	Number of Communes			
Less than 20%	1	5	7	3
Between 20 – 30%	5	3	4	1
Between 30-50%	7	4	4	1
More than 50%	8	0	1	0
Total Below Average	29%	67%	69%	60%
Total Above Average	71%	33%	31%	40%

All 54 communes also received support for private productive assets. The distribution of private assets is more even across regions. In Segou and Sikasso, 57-62% of all villages in a given commune, on average, received a private asset. In Mopti and Timbuktu, the average was between 50-54%. This difference is attributable to the fact that the project intended that communal assets would be shared.

The IEG assessment conducted a correlation analysis between the distribution of public and private assets. Apart from Timbuktu, no correlation could be identified.

Data Cleaning. To merge the different PACR datasets with each other and with external data, IEG undertook an extensive effort to clean the data. Data cleaning is always necessary for any kind of analysis, but especially so in a context like Mali, where local languages are primarily spoken but not written, local government systems and record-keeping are relatively new institutions, and rapidly growing populations mean administrative designations change relatively frequently. For example, geographic names do not always have a "correct" spelling. "Koulibaly" is the same as "Coulibaly," is the same as "Koulibali." Therefore, IEG had to manually code each data set in order to correctly match one piece of data pertaining to a village to another piece of data in that same but differently spelled village. In another example, many villages in Mali have hamlets, which are often counted administratively as part of the village. If a hamlet becomes sufficiently large, however, it can be deemed its own separate village. This would be simple enough except that such changes are rarely recorded as occurring at a specific date and records are often incomplete. In this way, it can be unclear as to whether a hamlet was counted as part of another village, or simply left out of a dataset.

Sampling Frame. This assessment utilized the *Commune* as the unit of analysis. It used a purposive sample of communes that exhibited *either low or high reach* with regard to the distribution of public services and public assets. In total, 16 of the 54 communes exhibited low reach (less than 20% village coverage) and 9 of the 54 communes exhibited high reach (more than 50% coverage). Because commune size varied (from 8 to 55 villages), and could have an impact on reach, the sample sought to reflect this variety. Finally, due to security reasons, IEG was not authorized to visit any project communes in Mopti or Timbuktu.

In Sikasso, five of 21 (24%) total project communes were visited and, in Segou, three of 12 (25%) total project communes were visited. The eight communes selected based on these criteria are listed in the below table.

Région	*Cercle*	*Commune*	*Number of Villages*	*Number of Villages that received a Public Asset*	*Reach (percentage of Villages that received a Public Asset)*
Ségou	Baroueli	Boidie	25	6	24%
Ségou	Bla	Kemeni	11	5	45%
Ségou	Bla	Yangasso	32	4	13%
Sikasso	Kadiolo	Loulouni	29	5	17%
Sikasso	Koutiala	Kolonigue	12	8	67%
Sikasso	Koutiala	M'Pessoba	21	6	29%
Sikasso	Sikasso	Sanzana	8	2	25%
Sikasso	Sikasso	Tella	8	7	88%

At the village level, IEG purposively selected the villages that received the most assets (a combination of public and private) to test the project's theory of change.

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Evaluation Sample - Public Assets									
Region	**Cercle**	**Commune**	**Total No. Villages**	**No. Villages with at least 1 PACR public investment**	**Percent Villages with at least 1 PACR public investment**	**Education Project(s)**	**Health Project(s)**	**Water Project(s)**	**Public Infrastructure Project(s)**
Ségou	BAROUELI	BOIDIE	25	6	24%	- Two (2) 3-room schools	- One (1) maternity - One (1) equipment	- Two (2) large wells	- One (1) Enclosure
Ségou	Bla	KEMENI	11	5	45%	- Five (5) 2-room schools	- One (1) equipment	- One (1) borehole	- Two (2) solar power
Ségou	Bla	Yangasso	32	4	13%	- Two (2) 3-room schools	- Two (2) maternities - One (1) health center renovation	n/a	n/a
Sikasso	Kadiolo	Loulouni	29	5	17%	n/a	n/a	- Two (2) large wells	- Two (2) bridges - Two (2) roads - Two (2) other
Sikasso	Koutiala	KOLONIGUE	12	8	67%	- Three (3) 1-room schools	- Four (4) maternities - One (1) equipment	n/a	- One (1) road - One (1) other
Sikasso	Koutiala	M'PESSOBA	21	6	29%	- Three (3) 2-room schools - Two (2) other	- Two (2) maternities - One (1) maternity rehab - Two (2) equip/furniture	- One (1) borehole	n/a
Sikasso	Sikasso	Sanzana	8	2	25%	- One (1) 3-room	- One (1) dispensary	n/a	- One (1) other

						school - One (1) furniture			
Sikasso	Sikasso	Tella	8	7	88%	- Four (4) 1-room schools - Two (2) 2-room schools - One (1) 1-room school - One (1) furniture	- One (1) maternity	n/a	n/a

Evaluation Sample - Private Assets									
Région	**Cercle**	**Commune**	**Total No. Villages**	**No. Villages with at least 1 PACR private investment**	**Percent Villages with at least 1 PACR private investment**	**Agriculture Project(s)**	**Livestock Project(s)**	**Processing & Marketing Project(s)**	**Artisanal Project(s)**
Ségou	BAROUELI	BOIDIE	25	8	32%	- Three (3) staple - Two (2) high-value crops (HVC) - One (1) irrigation - Two (2) other	- Two (2) poultry - One (1) dairy	- One (1) staple - One (1) high-value crop (HVC)	- One (1) metalworking
Ségou	Bla	KEMENI	11	7	64%	- One (1) staple - Three (3) HVC - Two (2) irrigation	- One (1) dairy - One (1) cattle - One (1) poultry	- One (1) staple - Three (3) HVC	- One (1) workshop - One (1) cosmetics
Ségou	Bla	Yangasso	32	26	81%	- Four (4) staple - Fifteen (15) HVC - Two (2) irrigation	- One (1) cattle - One (1) poultry	- Nine (9) staple - Eight (8) HVC - One (1) dairy	- One (1) artisan center
Sikasso	Kadiolo	Loulouni	29	19	66%	- Nine (9) staple - Four (4) HVC - One (1) irrigation	- One (1) cattle - One (1) poultry - One (1) sheep - One (1) pisciculture	- One (1) staple - Three (3) HVC	n/a
Sikasso	Koutiala	KOLONIGUE	12	6	50%	- Two (2) HVC	- Two (2) cattle - One (1) poultry	- One (1) staple - One (1) HVC	- One (1) leather
Sikasso	Koutiala	M'PESSOBA	21	9	43%	- One (1) staple - Two (2) HVC	- One (1) cattle - Four (4) poultry	- One (1) staple - One (1) HVC	- One (1) artisan center

Evaluation Sample - Private Assets									
Région	**Cercle**	**Commune**	**Total No. Villages**	**No. Villages with at least 1 PACR private investment**	**Percent Villages with at least 1 PACR private investment**	**Agriculture Project(s)**	**Livestock Project(s)**	**Processing & Marketing Project(s)**	**Artisanal Project(s)**
						- Two (2) irrigation	- Two (2) sheep		
Sikasso	Sikasso	Sanzana	8	6	75%	- Three (3) staple - One (1) HVC	- One (1) dairy - One (1) cattle - Three (3) poultry	- One (1) staple - One (1) HVC	n/a
Sikasso	Sikasso	Tella	8	8	100%	- Eight (8) staple	- Three (3) poultry - One (1) sheep	n/a	n/a

Evaluation Protocols

National Level. At the national level, IEG met with relevant World Bank, national, and international stakeholders to understand the context in which PACR was designed and implemented.

Regional Level. At the commune and village level, the assessment interviewed the Commune Council and the Community Based Organizations supported by PACR. The assessment was designed to derive lessons about the factors that influenced communal decision-making and that determined the allocation of the project resources. Issues that were probed included the process of group formation, the quality of facilitation, participation and representation of villages in local decision making during and after project close, influence of certain persons in decision-making, the level of transparency and information sharing between the commune and the villages, etc.

At the commune level, IEG met with the Commune Council (conseil communal) of elected members, which commonly included the Mayor, Secretary General of the elected Mayor and three adjutants, and the Sub-Prefect (sous préfet), an executive tasked with carrying out the directives voted by the Council. IEG also met with relevant public service committees, such as those for health and education. These commune-level meetings focused on the choice, placement and use of the public infrastructure constructed through PACR (schools, clinics or wells). By the end of the project, 80% of villages supported by the project had adequate access to basic social services. This was defined using the following metrics:

- Clinic within 15 km,
- School within 5 km
- 1 water access for 400 people

At the village level, the assessment was designed to also validate the contribution of the project to the project development objective of improved livelihoods through enhanced access to services through the communal services and increased income through the productive projects. To this end, IEG met with PACR- supported Community Based Organizations and probed for INF quality, by conducting spontaneous site visits approved by the Commune Council and interviews with service providers (teachers, clinicians) and service users (students, patients).

For CBOs, the assessment utilized the data that was provided in the ICR about the viability of the CBOs by project end to test the resilience of these organizations with regard to the capacity to represent and influence citizen interests in local development planning. The protocol focused on evaluating changes derived from PACR, including:

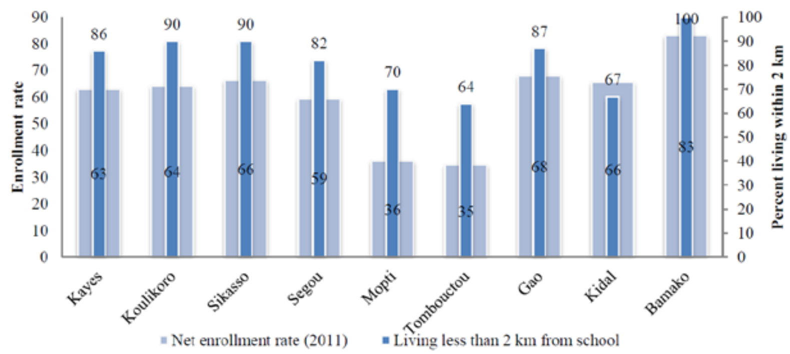
- group structure (including group size and legal status, regular statutory meetings and the rate of renewal of the mandate of decision bodies' members, and resources)
- productive viability (revenue generation, economic activity, marketing and commercialization)

For the latter focus, IEG made a simple calculation to test the viability of the income stream that had been generated by the PACR productive asset by???. The project set a target of having at least 60% of productive projects generate an average annual income per member superior to the daily poverty line. The target did not indicate how much income above the poverty line was expected.

Living Conditions

This assessment goes further than the results framework of the project attempting to determine and report on relevance, quality and use.

Relevance of Service Outlay was assessed by utilizing data and findings from relevant country research and other evaluations on gaps in services and the constraints associated with their under-delivery and use. For example, while levels of education in Mali are very low – almost 60% of the national population aged six and above has no education (for the North, this figure is 80%) - more than 80 percent of the total population lives within 2 km of a school as of 2009. Analysis conducted by *Hoogeveen et al. (*2015) of the percentage of the population that lives within 2km from a school as compared to enrollment rates (Figure A1), suggests that access is not the binding constraint to increased enrollment. The largest gaps appear in PACR project areas, in Mopti and Timbuktu, where between 64-70 of school aged children are estimated to have access with 2km to a school but where only between 35-36 percent of these same children are enrolled.



Source: EMOP 2011 (enrollment) and RGPH 2009 (distance). Authors' calculations.

Quality and Use. The assessment uses quality and use of the public services and assets as a proxy for improved living conditions. It also looked in the standards that were used (these were national standards) to determine access to judge their relevance and sufficiency. To probe use and quality, IEG conducted site visits of all public assets provided by PACR in the assessment villages and conducted interviews of service users and service providers. Access was tested by measuring the distance between the public services and assets and the furthest village expected to use that service or asset in the commune.

The assessment utilized the findings on relevance, quality and use to determine whether, based on the literature, there was likely to be an improvement in some villagers' living condition due to the service provided. For example, a preliminary literature review reveals that enhanced access to and use of public services in Mali would yield increased HH consumption and income: that preventative health care results in a 20 percent increase in HH consumption level in Mali and that each additional of education in Mali increases earnings by about 6-7%. Being literate is associated with on average a 40% increase in consumption in rural areas.

To test PACR's Theory of Change, IEG also compared PACR public services that were chosen in a participatory manner to other similar investments in the PACR villages that were chosen or financed in a non-participatory way. The comparison sought to assess whether the PACR supported investments were more relevant, cost-effective and sustained.

Sustained Income

To gain insights on whether sustained income effects were achieved through the private productive assets that were distributed, IEG interviewed recipients of these grants in the villages about the sustainability and income potential of the investments made by PACR. For each productive asset, the assessment worked with the grant recipient to conduct a present-day cost-benefit analysis to determine the return that could be expected from the asset, or the contribution that could be expected to household income. Cooperatives were chosen on the basis of their location in line with the commune selection criteria described above. IEG interviewed all cooperatives that received Bank financing that were able to be contacted in the communes that were selected for the public inquiry. For ethical purposes, the names of the villages and the names of cooperatives have been removed from the Annex. Researchers seeking follow-on work can obtain this data from IEG directly.

Appendix D. Stakeholder Mapping based on Influence and Interest

POWER/InFLUENCE	- INTEREST/LEVEL of PARTICIPATION	+
+	Ministry of Economy and Finance ANICT World Bank Supervision Teams	World Bank Design Team National Agency for Local Communal Investments PACR PMU National Commune Councils (Regional and National) Communes that were selected by PACR Traditional Forms of Governance (Village Chiefs)
—	UNDP UNICEF USAID WFP	Communes that were not selected by PACR Villages and Villagers that were selected by PACR Community Based Organizations in PACR Parents Associations Socio-professional associations PACR Regional Project Implementation Units Local Project Field Agents Local Private Sector Service Providers

Appendix E. Findings from Cooperative Interviews

	Location	Cooperative	Group Interview Takeaways	PACR Assets	Cofinancing (on average 10%)	Profit?
1	Sanzana Commune Sanzana Village	Cinporogo Copoerative	The Cooperative was supported by PACR. The PACR helped 23 women formerly in an 100 person association to form a cooperative. The cooperative makes peanut butter which they sell locally in the commune. There was no evidence of packaging, marketing, etc. They do not grow peanuts – they have to import it – so after the purchase costs – they are making about 3500 CFA per week (152 CFA per person per week). They received an electric peanut grinder, a husker. They also earn money by renting out these pieces of equipment. The women were trained on how to repair their equipment and they indicated that they had. The women were also pushed to finance a mango drying machine, despite the fact that the group insisted that dried mangoes are not really part of the dietary regime of the area. They were able to recoup the costs during the first year, but after not making a profit for two years in a row, they abandoned the machine. Since it was a fixed asset, they could not liquidate it. A third item financed was a maize grinder. Upon receipt the group thought that the machinery looked like it was of low quality, but were hesitant to speak up, because the President of the Group was not there. They also noted that in the face of a male agent, they felt as if they did not have the power to question the quality of the machine procured through the investment. The President of the Cooperative tried to return the machine, but this was not allowed by the agent, and the agent never reported this to Sikasso. The machine has never been used and they were not able to sell it because of its low quality.	Peanut Grinder Husker Mango drying machine Maize grinding machine	US$3,945 (2m CFA) 182,000	3500 CFA per week (152 CFA per person per week). It would take 11 years at this rate to recoup the costs.
	Sanzana Commune Sanzana Village	Yitime Campale	PACR helped to form a mixed cooperative (female and male). Prior members were part of an association that produced feed for poultry. The cooperative was transformed to produce corn products for consumption to increase their income. They received support for rehabilitating the mill and grinder. They received technical training on how to produce corn meal. They are selling the corn meal locally. They reported earning 50,000 CFA (US$100) or $10 per person per month. Their biggest constraint is marketing, and networks. They association appears to save, pool, their funds, and to invest in the cooperative. The women appeared strong -they were vocal. This was a good investment but it lacks market linkages.	Rehabilitated mill Rehabilitated grinder	US$1200 608,400 CFA	They reported earning 50,000 CFA (US$100) or $10 per person per month. They recouped their costs in one year.
2	Tella Commune Koulupenebougu Village	Nioupagagnon "Work Hard Today for a Better Tomorrow"	They were in an association with a President. They produced organic fertilizer. PACR trained them on how to form a cooperative. As a cooperative, they are able to attract training. The cooperative wanted to do poultry, but they did not get the materials they needed. They wanted backyard chicken farms. instead, the ADC insisted that the poultry be kept outside the village, far away from their homes. At night, the chickens were attacked by snakes, or birds. The sense that the assessment team got was that the PACR team had a "way" of doing things- there was a pressure to have larger cooperative projects to meet disbursement ratios. Also, it was hard to procure land in the village proper. They did not get any training. The cooperative also reported that the structure was bought at a price much higher than the market price. Incinerators were distributed but no one knew what they were supposed to use these for, so they gave them to the Mayor and now the Mayor uses it to burn paper.	Poultry Heating Lamp Training Materials for a Hen House warheouse	US$1,747	The cooperative failed, but the individuals retained some chickens. It was not possible to collect financial data.
3	Tella Commune Tella Village	Danaya "Trust"	They were in an association. It is an all male group. PACR helped them form a cooperative. They have 25 members. This cooperative also experienced the same problems as other cooperatives that got poultry in Tella. They wanted to have backyard poultry farms – but the ADC insisted that they place the birds in a cooperative pen in an area where land was available – that was far away from their home. The only people that received training were the three leaders of the organization. The birds that	Poultry Heating Lamp Training Materials for a	US$1703 (863,421 CFA)	450,000 CFA in 15 months or US$35 per person over 15 months before the project failed. They did not recoup their costs but they kept

	Location	Cooperative	Group Interview Takeaways	PACR Assets	Cofinancing (on average 10%)	Profit?
			were given to the cooperative were not appropriate for the climate – they all died. They also did not know that the cocks would eat the chicks – so they were placed together. The project earned 450,000 in 15 months or US$35 per person over 15 months before the project failed.	Hen House Moto-taxi to transport and sell eggs		the assets so there might be some revenue generation associated with this, but it was not detected by the team.
4	Tella Commune Tella Village	Diekawili	This was an all-female association organized into a cooperative by PACR. There are 22 members. The women were part of a savings group before the cooperative was formed. The ADC proposed the sector. The women asked for a hangar where they would keep the sheep -- but when the project arrived, the ADC gave them materials for a small house for the sheep, similar to the chicken houses. There was also a problem with the sheep that were from another part of Mali or another country. They lost a lot of sheep – a lot died- it was too expensive to feed, care, and vaccinate the sheep. The project supplied a veterinarian but he never visited this co-op in spite of the fact that they called the vet several times. They instead used a local veterinarian. When the local veterinarian vaccinated the sheep, six died immediately. They made 130,000 by selling the remaining sheep.	Sheep Sheep lodgings Training Warehouse Well for water for sheep	US$1,323.00 670,500 CFA	The project failed but they recouped CFA 130,000 by selling off the remaining sheep.
5	Loulouni Commune Soroble Village	Benkadi "We get along well"	There was an association of 30 persons that PACR helped become a cooperative of 20. The selection was done by eliminating multiple family members that had been together in the association. The choice was delegated to the families. During the first year, the coop increased their production due to the cash they received which they used to buy better seed. However, during drought years, their production declined. The project did not provide irrigation. They reported a "free-rider" problem – the head of the cooperative reported that he was unhappy with the cooperative model because there were too many free riders. Next time, the want individual support from the World Bank.	Warehouse/Storage Wagon Cash for purchasing donkeys and cars	1,225,000 FCFA ($2,416)	No financial data but there was a report of increased and sustained production. Production is limited however because of a lack of access to water (irrigation).
6	Loulouni Commune Loulouni Village	Anacarde "Cashews"	There was an association of 26 famers. PACR transformed them into a cooperative of 12 people. It was decided by the elders that the youth would join the cooperative since the activities concerned transformation which is not familiar to the elders. Everyone contributed. However the cooperative has chosen to retain its focus on cashew production reporting that the price for raw cashews has increased dramatically from 1500 CFA for 5 kilos to 4000 CFA for 5 kilos today. They have chosen to retain this focus because it is profitable. They chose to abandon the transformation project because there is no buyer for the transformed product. PACR did not provide support for market access, including all of the necessary value chain activities that could have helped the cooperative produce, package, market and sell the transformed products. It appears that the project was limited to the allocation of equipment and training.	Drying equipment Cutting equipment Roaster Building	US$3,358.00 (1,702,375 FCFA)	Total loss. The cashew farmer does not use the equipment provided by the project since he has no access to markets for transformed product, nor mechanisms to supply buyers in a sustainable way.
7	Loulouni Commune Seou-Korani	Agro-sylvopastoral Coop de Seou-Korani	There was no formal association before PACR. It was unclear how the cooperative was formed. The PACR cooperative included 20 persons. But only two people contributed to the acquisition of the asset. This was due to a misunderstanding about how much the sub-project would cost. The Cooperative bought 12 cows. The Cooperative also said that this kind of project is not common in the area – that most of the area is occupied by agriculturalists, so the co-op wanted to access cows to access milk which is scarce. They wanted to access fresh milk for consumption and also to sell the surplus. They received support for artificial insemination but it only produced one calf that lived. Today, inly two of the original 12 cows are alive and these have been given to caretakers to help them produce the milk. There are now more young calves. The cooperative reported that maybe things did not go well because "they were cursed" (black magic) because they went against the cooperative will.	Cash for 12 milk cows Hanger for the cows Small storage room TA for insemination and vaccinations	US$2298.00 (1,165,080 FCFA)	Total loss.
8	Loulouni Commune Zanso Village	Bemakam "We are more competitive than you"	Bemakam was an association of that traded maize. PACR helped them transform into a cooperative to produce maize. They were gifted land and made a profit at first, but at the third year, the land was withdrawn (why) and the project ended. The cooperative then got assistance from IFDC for rice production. In this case, they used their own land to produce rice and this has generally been working.	Land gifted by the Village Chief Maize Mills	US$1479.00 (750,000 FCFA)	They made US$2960. However, investment was cut short because land that had been gifted by the village chief was taken back and is now being used

	Location	Cooperative	Group Interview Takeaways	PACR Assets	Cofinancing (on average 10%)	Profit?
				Motorized ploughing machine Storage Wagon Cow		by the Chief's family.
9	Loulouni Commune Louloni Village	Benkadi "We get along well"	Benkadi was an association of 296 women that became a cooperative because of PACR. The cooperative included 32 women. The transformation process was hard and long. The membership fee was 40,000 CFA (roughly US$80) -- the ability to pay determined participation. Once the cooperative was formed, the 32 women attest that the cooperative is a good mechanism for achieving profits. The cooperative started with Shea Nut butter – which was the same activity which they were doing before as part of the association. Individually, they were also transforming cassava, and they were individually growing peanuts on other farmers' fields. The secret of success as reported by the cooperative was the support by the project for activities they already knew how to do. They had positive impressions of the ADC, but the quality of the equipment provided by the project was poor. The co-op only had the power to choose the supplier, but they were not able to oversee the choice of equipment or its quality. The machines were working at first, well enough to make a profit and reinvest in other machines. They also use the byproducts of the Shea Nuts for soap and fuel; and cassava biproducts for animal feed and for washing. This was not a part of the PACR training – it was training received from another project.	Mills Presses Buildings Motobike Traninin g	US$3492.00 (1,770,420 FCFA)	For peanut butter, they have made $20,710 since the investment started or $647 since 2009. The cooperative reported that are making a profit for 5 other economic activities supported by PACR. Evidence of this includes the fact that the Co-op hires a mill operator and a housekeeper for the business center. They also hire seasonal labor. They also give loans to farmers to produce cassava which they then buy.
10	Sikasso Region Koutiala Circle M'Pessoba Village Kintieri	Dunkafa "Food Security"	They are a maize cooperative of 30 persons. They were a maize association of 15 for 5 years before PACR. They received training in literacy, mills, maize transformation and financial management and access to market techniques. PACR introduced transformation. The cooperative spent 3-4 years trying to transform maize. They stopped because they could not access market – they had not received support for packaging, labeling, branding, marketing, transportation, etc. They now just produce maize and they store the maize in the warehouse and sell it to buyers coming from Bamako. The only benefit seems to be the warehouse so they can store the maize which they sell for 125 CFA-200CFA per kilos. They reported being able to store 8 tons.	Warehouse Maize grinding mill Training	1.1 M CFA US$1,833.	Transformation had no return. But the warehouse seems to be providing financial value, but this cannot be quantified.
					1.2	
11	Sikasso Region Koutiala Circle M'Pessoba Village Kintieri	JigiSèmè	The women worked together before PACR. They were not clear about their organizational status – unclear about whether they are in an association or a cooperative. They were 50 persons now they are 100 persons. The women are exploiting 1 ha village garden fenced by PACR. The women sell the vegetables but they reported it is not easy to access the market. They were also concerned that on many persons are making	Seeds Hand Tools Training Fence	814,000 CFA out of 11 million CFA (cofinancing was US$1,356)	Based on data collected on onion production and sales, the women could be making 134,000 or US$223.p
12	Sikasso Region Koutiala Circle M'Pessob Village Kintieri	ShemaraTom "Poultry Farming"	They were an association before of about PACR helped them form a 24 member cooperative. They wanted to have backyard hen and chicken houses so they could care for then, but PACR said they needed to collectivize. PACR decided to put the collective hen house far away from the village for "health reasons" They built 1 Hen House for each member. PACR provided them with heat lamps (2) but they did not work. All of the roosters died because they were not the kind the cooperative asked for. The project gave them a vet who normally cares for cows.	Fence Warehouse Chicken Coop 48 roosters A well + Land provided by the head of village	920,00 CFA US$1533.00	There is no return on the PACR project.

	Location	Cooperative	Group Interview Takeaways	PACR Assets	Cofinancing (on average 10%)	Profit?
13	Sikasso Region Koutiala Circle Koloingue Commune Morabela Village	Dunkafa "Eat"	They had an association before PACR. They were 17 Persons. PACR transformed them into a cooperative of 8 persons. They were maize farmers. With PACR, the eight persons began to transform maize. Others were not able to join because they could not afford it. The 8 persons took out family loans at 0% interest rate of a total of 1.9m CFA. (US$3166). They have not yet paid off the loan. They have 400,000 (US$667) left to go. However. at 0%, they are paying it off slowly. The assessment found that the generator is broken and the cooperative cannot afford to fix it. The other equipment was in disrepair but still functioning. When asked if the cooperative could afford to repair the equipment if it broke down, they said they would need to pay the loan off first. They are farmers, and they make most of their money from growing and selling rice and corn – not by transforming it. They appreciate the additional income they can earn from transformation but said that it has been very hard for them to gain access to a market. This past year they began renting a car and paying a driver to take the milled grain directly to Bamako (this happened only once). They said that PACR did not help them get market access.	Building Thresher Grinder Generator Land Mill 1 ton of Maize	1,719,890 CFA. (US$3392).	Still paying off US$3166 loan after five years, $667 left to go. At 0% interest from family, there are proceeds from the transformed maize but these are hard to calculate, and the cooperative said most of this has gone towards paying down the loan. The cooperatives said they had not yet made profit from the project.
14	Sikasso Region Koutiala Circle Koloingue Commune Morabela Village	Benkadi "If you are together you are better"	They were a cooperative before PACR of 33 and they continued to work with PACR as a cooperative with the same number. They decided to do cow fattening – buying and selling cows. The project did not work. They planned to buy the cows between Nov-Jan so that the price would be low. But they did not receive the PACR funds until March when the price was high. They bought the cows, but told PACR that they could not afford to feed the cows. They also could not sell the cows with the three months that they had planned. PACR then gave them money to support the cows. The cooperative was able to sell the cows but they lost money. The lesson that the cooperative had from this project was the need to think about the market before investing in cow fattening.	Cow Pen Well Warehouse Money to buy 30 cows	5,436,050 CFA ($10,722)	The cooperative lost money.
15	Sikasso Region Koutiala Circle Koloingue Commune Morabela Village	Jekabara "more strong if we work together"	They were a cooperative before of 14 and they stayed 14 people. They were butchers and with PACR they were supported in drying and selling leather. It was their idea/ The cooperative reported making a little bit less than 1 million CFA from the activity. They suffered because of the crises. The main factories for transforming and exporting leather are in Burkina Faso and Bamako and the factories closed. After the crises, they stopped doing it – thye even have left over dried skins.	Storage drying machine Fridge Fire extinguisher Tools	706,850 CFA ($1394)	They lost money.
16	Segou Region Bla; Kemeni Commune ; Sokè	Benkadi "If they are together that's nice" or "to get together and agree on things"	Before PACR they were an association of 43 people and after PACR they were a cooperative of 50 people. Both before and after they worked on shay transformation. They invested in a vegetanble garden. They reported selling more than they eat. They produced potatoes, onion, and tomatoes. They sell the vegetables on the roads and they sell part of it at the local market. Before PACR, tey were individually selling vegetables. But then the head of the village gave them land. The problem is water is not always accessible. Sometimes the gardenworks, but last year the rain destroyed the crop. They got money from PACR to learn how to do pest management. They used neam to control the pests. The group earns 150,000 CFA annually or 3000 CFA each or US$5 each. However, out of the total earnings, they used 100,000 CFA to buy seeds and then they distribute these seeds to all members in the cooperative. They therefore report having 50,000 CFA left when probed about the 50,000 the members said this is used for savings. So in the end, it does not appear that this garden makes a profit. However, it is important for consumption. If the group had to pick an investment all over again, they reported not wanting to pick a garden. They would want to invest in a silo to store their onions so they can sell the onions off season to make more money. They also reported that the main issue is access to water so they want a tank.	Money, seeds for garden, handplough, village garden	1,505,936 FCFA ($2970)	
17	Segou Region Bla Cercle Kemeni Commune Tremesso Village	Benkadi "Being Together makes Us Strong"	Prior, they were a 25 member farm labor cooperative. After PACR, they are 70 members. The cooperative engaged in sesame, both seed production and transformation. The cooperative reported that the investment did not work well because of the poor quality of the land and the lack of fertilizers. The cooperative also thinks they can make more money transforming peanuts.	Cows, warehouse, sesame seeds, sesame oil presses	416,871 FCFA ($822)	No financial data available.

	Location	Cooperative	Group Interview Takeaways	PACR Assets	Cofinancing (on average 10%)	Profit?
18	Segou Region Bla; Kemeni Commune ; Kemeni	Balanzan Noumani "It is a name of a tree where they did traditional events "	Carpenter, blacksmith, and (soudeur) workshop. PACR helped them build the workshop on a plot of land provided by the head of the village. There are 33 people in the cooperative. All of these people worked together before the project but not organized. They have always been artisans. They make and sell doors, metal, and woodworks. Before they all worked separately and sold locally. They used to compete before and that would lower the price. Now they have a cooperative. They still compete but they set a base price. The prices are better and they are able to exchange knowledge. Now they villagers know where to access their products.	Workshop with 3 hangars , and 2 warehouses,Training	1,394,772 FCFA ($2751)	unknown
19	Segou Region Bla; Kemeni Commune ; Kanouala o Village	Jèyésse Cola "You are powerful if you are together "	Jatropha		624,810 FCFA ($1232)	
20	Segou Region Bla; Kemeni Commune ; Kanouala o Village	Cèssiri "If you are together, you can agree on things	Prior to PACR there were 13 people in an association, and after PACR there were 14 people. They were peanut farmers and made peanut butter both before and after the project. Both before and after the projet, they were selling the peanut butter on the local markets. They reported that the machines they received broke but they were able to fix them. Before the project they did not have machines. They would pay for the grinding services for their peanuts. It costs them 1,000 CFA to grind 100 kilos of peanuts and this produces 40 packs of peanut butter. They sell their peanut butter for between 500 – 1500 CFA. The problem is they lack access to market. Now there is also a problem that the peanut butter is not selling well because there were too many people doing it. But the group used to sell peanut butter, each member could sell 3 packets a week and 1250 CFA or US$2.	Warehouse For peanuts Husking and Grinding Machines Farm Tools Money to buy peanuts	909,800 FCFA ($1795)	each member could sell 3 packets a week and 1250 CFA or US$2.
21	Segou Region Bla Cercle Kemeni Commune Tremesso Village	Benkadi "Together You are Strong"	They were an association of 35 members and became a cooperative of 32 cooperatives due to PACR. They were buying and selling millet before PACR. With PACR, they decided to grow Jatropha because of the presence of a jatropha oil factory 25 km away from the village. They received 3ha from the Village Chief. But, it didn't work. The cooperative was not equipped to negotiate with the factory, the single buyer. They needed help with the "business' end of the business. The jatropha trees were then were hit by disease just as PACR was closing so they could not receive any support from the project for this. They have now returned to their original activity of buying and selling cereals.	Money for Jatropha trees Training Wagon Two cows Farm tools Got 2 ha from the village chief	872,151 FCFA ($1720)	Reported not making a profit
22	Segou Region Bla Kokosso Village	Cimprogo Sege "To reinforce family ties"		Warehouse for dried okra Dryer for the Okra Cows	No such cooperative listed for Kokosso	

	Location	Cooperative	Group Interview Takeaways	PACR Assets	Cofinancing (on average 10%)	Profit?
				Hand plough Training in literacy, packaging, pricing and marketing technics		
23	Segou Region Bla Cercle Kemeni Commune Tremesso Village	Kile o Teki "May God Help Us"	They were an association of 25 members and became a cooperative of 35 members. This was a bovine project. The project reportedly failed at design. They estimated that cows would cost 125,00 CFA but the actual cost of the cows were 200,000- 225,000 CFA. The cooperative bought 53 cows and lost 2.25 million selling them. For example, they gave 11 cows to a buyer that never came back with their money. The felt that they needed more support in the market – knowing how to make deals and who to trust. They bought, fattened, and sold cows 8 times. After, they decided to conduct this business individually.	53 cows		The Cooperative took a loss on the PACR investment.
24	Segou Bla Sorge Village	Niètaa "If you are looking for something, to get that thing, you have to get there."	They were an association of 11 people before PACR and now they are a cooperative with 11 people also. Before PACR they had a poultry business. After PACR they still do the same thing. They formed a cooperative because this was the only way to get money from donors. With the PACR money they bought small chickens and chicken feed. Their idea was to sell them. However, there were many sickness related to the poultry businesses and this complicated the business. Because of the looming decease threat, they sold off all their children at a low price. They are preparing to restock their poultry farm after the disease passes. The group makes income primarily from farming, fishing, and forestry, not from this activity.	Chicken House Fences Feed Money to buy chickens. Well poultry food and feeding tools		
25	Segou Region Baraoueli Circle Bodie Commune Segeula Village	Danaya	They had a 100 person association before PACR and with PACR, transformed into a 64 person cooperative. However, only 6 people participated in the PACR project contributing 100,000 CFA each. The project was designed to purchase cows, with the reported aim of making milk available to drink (which this assessment noted in the cooperative interview did not seem like a good economic rationale for the investment). The cooperative reported that 6 of the 18 cows dies during a storm when the roof collapsed on the cows. The assessment found that the hangar had collapsed, that the celling of the building had collapsed, that the seed machine was broken, and found no evidence of cows. The cooperative reported that the cows had been distributed to the individual members. The behavior of the individual members is unclear, with regard to their choices or the individual return they have made on the redistributed cows (which was not the aim of the project.	18 cows Hangar Building Feed production equipment	1,989,966 FCFA ($39245)	The cooperative model was unsuccessful. Individual members may have made money selling their cows at market price or the milk products derived, but the project as it was described failed.
26	Segou Region Baraoueli Circle Bodie Commune Bodie Village	Cesiri Ton "Hard Working"	They were an association of 22 people and became a cooperative of the same number under PACR. The Cooperative Entry Fee was 12,000 CFA per member. The group had been engaged in transformation activities supported by the government before the PACR project but these activities failed. PACR helped them develop a seed production business. The cooperative is working. Each member produces seeds and sells the seeds to the cooperative, that in turn sells the seeds to a buyer.	Seeds Fertilizers Storage Training	457,250 FCFA ($902)	Farmers earn a max. gross profit of 125,000 or $208 (minus expenses) on the production and sale of the seeds of their farm. The cooperative is capable of making a gross revenue of 2 million CFA (US$3000). Thi is split three ways for (1) reinvestment; (2) operating costs; (3) and payouts. So

	Location	Cooperative	Group Interview Takeaways	PACR Assets	Cofinancing (on average 10%)	Profit?
						that each cooperative member on average earns an additional $45 per the payout.
27	Segou region Yangasso Commune Sien Markela Village	Jakefo "Agreeing on the Same thing"	Prior to PACR there were 25 people in this group and after PACR there were 30. Prior to PACR, the group was buying cereals and selling them on the market. With PACR, they added a garden. The garden is fruit tree garden. They take the fruit and sell the fruit at on the market. They can make 150,000 CFA per harvest, and they harvest one time per year. They need a water pump. The members used a lot of fruits for consumptions.	F	743,300 FCFA ($1466)	150,000 CFA gross profit annually/ 30 or $8.33 each. They also all earn income from other economic activities.
28	Segou region Yangasso Commune ,N'Tieresso Village	Danaya ''trust	They were a gardening associative with 30 people before PACR and after PACR they were also a gardening cooperative with 35 people. With PACR they expanded their activities. According to the group, the garden is working. With each harvest, they can make 500,000 CFA. With this money they put aside 100-,000 CFA for investment back into the garden. They report earning 11,000 CFA eac plus they have food to eat. They also got a peanut grinding mill. They made peanut paste. The mill worked for two years and then iit broke. When the mill worked, they could make 150,000 CFA per year for the group, but now it's broken. They tried to repair the machine but they could not find anyone that could help them. They are planning to buy a new machine but they do not have enough money yet.	Fences, seeds and training.		500,000 CFA for harvest or US$833. This is $24/person. There are also consumption benefits at the household level.
29	Segou region Yangasso Commune ,Yangasso Village	Badenyaton (Sisterhood)	They group was an association before PACR with 35 persons. They did soap transformation. They are now a 45 person cooperative. They still do soap transformation. However, they added transformation of milk, fruit, fruit juices, etc. While the group indicated that their equipment is still working they also say that we could not visit the shop because they are closed for the whole month. Other members at the meeting said that they are not longer in business.	Warehouse, space for transofmring products, cash for inputs, 0.25 hectars of land, and trasnformation equipment.	674,100 FCFA ($1330)	Unknown
30	Segou region Yangasso Commune ,Bougoura Village	Jèkadi (Good to be together)	This was a 7 person association before PACR, and it is now a 17 person cooperative. They have the same job as they have before but they have grown the business. In a fact, they have formed a carpenters' union. The head of the workshop sets the price for everyone and with all carpenters in the area under the same roof, they are making better revenues. However, during the site visit the assessment noted that most of the equipment were rusted and broken. When probed, the cooperative indicated that 6/10 piece of equipment were at very poor quality. They also did not get the equipment that they wanted. According to the group, they wanted to refuse the equipment that had been delivered and for which they paid, but PACR would not allowed them to do this. Some of the equipment did not even last for 2 months. They are still working but with other tools they have bought. In fact, they have rely on the tools of the head of the union.	Artisan Center, workshop, carpentry tools, training	1,174,556 FCFA ($2317)	
31	Segou region Yangasso Commune ,Sien Markala Village	Jigiya ton	They were a 37 person cooperative and became a 50 person cooperative after PACR. With PACR, they bought 4 cows. Thy used the cows for farming. They have access to veterinarian. They keep the cows at the presidents and the treasurers house. The assessment team notes that it is unclear how 50 persons share 4 cows. According to the group, the president and the treasurer take care of the cows. The cooperative members get to « rent the cows » at a lower price than the market rental rates and the cooperative also rent out the cows to non-cooperative members.	Animal traction equipment, cows, money for fertilizer and seeds, and 2	694,596 FCFA ($1370)	Unknown

	Location	Cooperative	Group Interview Takeaways	PACR Assets	Cofinancing (on average 10%)	Profit?
			According to the group, the grinding mill is working. Peanut production has increased. They sell the peanuts to Yangasso. They were already doing this before but PACR helped them to increase their production. They already had access to actors in the market, so they did not need this from the project. When probe about the size of their cooperative, many members of different cooperatives that were interviewed, that they could not afford the co-financing. So many people had to join the group. Also, they decided to include their children in the cooperative so they can learn skills and take over these investments in the event of sickness or old age. And that way, the children can take care of their parents in old age.	hectares of land. A grinding mill; money for peanuts, training on cooperaive and financial manangement ; 1 hectare of land for peanuts.		
32	Segou region Yangasso Commune Wakoro Village	Binkady	Fonio There were 60 people in the association before PACR and now there are 80 persons in the cooperative. They are mainly focused on transformation of fonio. They are doing OK. Before PACR, they were only gardening. They can sell fonio for 600 CFA a kilo and they can sell 40 kilos a week. However, after being probed, the assessment learned that the equipment is no longer working. So while, profit was made during the project, it does 1not appear that the group was able to use the equipment to generate profit anymore.	Money for grain purchase , warehouse, training, ½ hectare of land ; dryer tarp, a big bucket, a roaster, chairs, scales.	575,580 FCFA ($1135)	600 CFA x 40/week = 24,000 Potential to make 24,000 CFA or US$40 a week / 80 persons = $0.50 / person / week.
33	Segou region Yangasso Commune ,Yangasso Village	Benkan (agreement)	Cattle They were an association of 32 people before PACR and now they are a cooperative of 31 people. They bought 24 cows and sold them. They took a loss. They vowed they would never do it again. The group reported one problem is being of not having enough water for themselves as well as for their cows. They also commented on the fact that the price of joining the cooperative was too high. They had to pay 2500 CFA or US$4 / person just to join. This did not include co-financing of the cows.	Livestock pen, storehouse, well, cash for cows, training, 1 hectare of land.	1,990,774 FCFA ($3927)	
34	Segou region Yangasso Commune ,Niana Markala Village	Benkady	Onions, vegetable garden The group reported that this was a failed project. They believed that there was a poor feasibility study dpone by PACR as to whether you could garden the land that they were given. There was a lack of water on the land or nearby the land. There are wells but none of the wells had water. The group only utilizes the half the hectare of land because they could not water the whole thing. From the garden, they can make 100,000 CFA or $167. No number of the people in the group.	Garden, fences, two wells, two warehouses, no training, 1 hectare of land given by village chief.	1,581,900 FCFA ($3120	100,000 CFA or US$167.