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PROJECT PERFORMANCE ASSESSMENT REPORT

NIGER

PILOT PRIVATE IRRIGATION PROMOTION
(CREDIT 27070)

NATURAL RESOURCES MANAGEMENT PROJECT
(CREDIT 27960)

AGRO-PASTORAL EXPORT PROMOTION PROJECT
(CREDIT 33630)

June 25, 2008

Sector Evaluation Division
Independent Evaluation Group

Currency Equivalents (annual averages)

Currency Unit = CFA Franc (CFAF)

1991	US$1	282
1992	US$1	265
1993	US$l	283
1994	US$l	555
1995	US$l	499
1996	US$l	512
1997	US$l	584
1998	US$l	590
1999	US$l	616
2000	US$l	712
2001	US$l	733
2002	US$l	697
2003	US$l	581
2004	US$l	528
2005	US$l	527
2006	US$l	523

Fiscal Year

Government: January 1 to December 31

Director-General, Evaluation	:	Mr. Vinod Thomas
Director, Independent Evaluation Group (World Bank)	:	Ms. Cheryl Gray
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IEGWB Mission: Enhancing development effectiveness through excellence and independence in 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 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, IEGWB annually assesses about 25 percent of the 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 Bank management have requested assessments; and those that are likely to generate important lessons.

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

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

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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 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.

Bank Performance: The extent to which services provided by the 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 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.

Contents

This report was prepared by Jumana Farah (consultant), who assessed the project in December 2007, under the supervision of Chris Gerrard (task manager). Rose Gachina provided administrative support.

Tables

Principal Ratings

PILOT PRIVATE IRRIGATION PROJECT (CREDIT 27070)

	ICR*	***ICR Review****	***PPAR***
Outcome	Satisfactory	Satisfactory	Highly Satisfactory
Institutional Development Impact**	Modest	Substantial	———
Risk to Development Outcome	———	———	Significant
Sustainability***	Likely	Likely	———
Bank Performance	Satisfactory	Satisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Satisfactory

NATURAL RESOURCES MANAGEMENT PROJECT (CREDIT 27960)

	ICR*	***ICR Review****	***PPAR***
Outcome	Satisfactory	Satisfactory	Satisfactory
Institutional Development Impact**	High	High	———
Risk to Development Outcome	———	———	Moderate
Sustainability***	Likely	Likely	———
Bank Performance	Satisfactory	Satisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Satisfactory

AGRO-PASTORAL EXPORT PROMOTION PROJECT (CREDIT 33630)

	ICR*	***ICR Review****	***PPAR***
Outcome	Unsatisfactory	Unsatisfactory	Unsatisfactory
Institutional Development Impact**	Negligible	Negligible	———
Risk to Development Outcome	———	———	High
Sustainability***	Unlikely	Unlikely	———
Bank Performance	Unsatisfactory	Unsatisfactory	Unsatisfactory
Borrower Performance	Unsatisfactory	Unsatisfactory	Unsatisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible Bank department. The ICR Review is an intermediate IEGWB product that seeks to independently verify the findings of the ICR.
**As of July 1, 2006, Institutional Development Impact is assessed as part of the Outcome rating.
***As of July 1, 2006, Sustainability has been replaced by Risk to Development Outcome. As the scales are different, the ratings are not directly comparable.

Key Staff Responsible

PILOT PRIVATE IRRIGATION PROJECT (CREDIT 27070)

Project	***Task Manager***	***Division Chief/ Sector Manager***	***Country Director***
Appraisal (1991)	Sidi Jammeh	Salah Darghouth	Whitney Foster
Completion (2001)	Mahaman Salifou	Joseph Baah-Dwomoh	Geoffrey H. Bergen

NATURAL RESOURCES MANAGEMENT PROJECT (CREDIT 27960)

Project	***Task Manager***	***Division Chief/ Sector Manager***	***Country Director***
Appraisal (1994)	Abdelkrim Oka	Cynthia Cook	Olivier Lafourcade
Completion (2002)	Noel Chabeuf	Joseph Baah-Dwomoh	Antoinette Sayeh

AGRO-PASTORAL EXPORT PROMOTION PROJECT (CREDIT 33630)

Project	***Task Manager***	***Division Chief/ Sector Manager***	***Country Director***
Appraisal (2000)	Daniel Sellen	Joseph Baah-Dwomoh	Antoinette Sayeh
Completion (2005)	Remi Kini	Joseph Baah-Dwomoh	Madani M. Tall

Abbreviations and Acronyms

ANIPEX	Agence Nigérienne de Promotion des Exportations (Niger Agency for Export Promotion)
ANPIP	Association Nigérienne de Promotion de l'Irrigation Privée (Niger Private Irrigation Promotion Association)
APEP	Agro-Pastoral Export Promotion Project
APL	Adaptable Program Loan
ASAPI	Programme d'Appui à la Sécurité Alimentaire par la Petite Irrigation (Support to Food Security through Small-Scale Irrigation Program)
CAS	Country Assistance Strategy
CBNRM	Community-Based Natural Resources Management
CBPP	Community-Based Procurement and Disbursement Procedures
CDD	Community-Driven Development
CEDEF	Commission pour l'Elimination de la Descrimination à l'Endroit de la Femme (Commission to Eliminate Discrimination Against Women)
CFAF	CFA Franc — the currency of the West African Monetary Union
CILSS	Comite Inter-Etats pour la Lutte contre la Sècheresse dans le Sahel (Inter-State Committee for Drought Control in the Sahel)
COFO	Commission Fonciere d'Arrondissement (Land Tenure Commission)
CRAAP	Comités Régionaux d'Appui aux Activités du Projet (Regional Committees for Support to Project Activities)
CSO	Comité de Suivi et Orientation (Steering Committee)
ERR	Economic Rate of Return
EU	European Union
FAO/CP	United Nations Food and Agricultural Organization Cooperative Program
FRR	Financial Rate of Return
GIE	Groupes d'Interet Economique (Groups of similar economic interests)
GIS	Geographic Information System
GON	Government of Niger
GTZ	German Agency for Technical Cooperation
ICR	Implementation Completion Report
IEG	Independent Evaluation Group
IEGWB	Independent Evaluation Group – World Bank
IFAD	International Fund for Agricultural Development
IGNN	Institut Géographique National du Niger (National Geographic Institute)
INS	Institut Nationale de la Statistique (National Institute of Statistics)
IRR	Internal Rate of Return
LUCOP	Programme de Lutte contre la Pauvreté (Fight Against Poverty Program)
M&E	Monitoring and evaluation
MCPEC	Mouvement des Caisses Populaires d'Epargne et de Credit (Apex Savings and Credit Union)
MDG	Millennium development goal
MDR	Ministère du Développement Rural (Ministry of Rural Development)
MTR	Medium-Term Review
NGO	Non-Governmental Organization
NIYYA	Specialized private advisory services group
NNRMP	National Natural Resources Management Program
NPV	Net Present Value
RM	Natural resources management
NRMP	Natural Resources Management Project
ONVPE	Organisation Nigérienne des Volontaires pour la Préservation de l'Environnement (Nigerien Organization of Volunteers for the Conservation of the Environment)
PAC	Pragramme d'Actions Communautaires (Community Action Program)
PAD	Project Appraisal Document

PAFAGE	Projet d'Appui, Formation, et d'Assistance en Gestion de l'Environnement (Training and Support to Environmental Management Project)
PAFRIZ	Projet d'Appui et Formation sur le Riz (Rice Project)
PASP	Projet Agro-Sylvo-Pastoral (Agro-Sylvo-Pastoral Project)
PDO	Project Development Objective
PHRD	Policy and Human Resources Development
PIP2	Private Irrigation Project – Phase 2
PMU	Project Management Unit
PPAR	Project Performance Assessment Report
PPF	Project Preparation Facility
PPIP	Pilot Private Irrigation Promotion Project
PRSP	Poverty Reduction Strategy Paper
QAE	Quality at Entry
QAG	Quality Assurance Group
QER	Quality at Entry Review
QSA	Quality of Supervision Assessment
RDPF	Rural Development Policy Framework
SAR	Staff Appraisal Report
SCU	Savings and Credit Unions
SDR	Stratégie de Développement Rural (Rural Development Strategy)
SEIAS	Socioeconomic Impact Assessment Surveys
SIM	Système d'Informations sur les Marchés (Market Information Systems)
SIRN	Système d'lnformation sur les Ressources Naturelles (Natural Resource Information Network)
SNDICER	Stratégie Nationale de Développement de l'Irrigation et de la Collecte des Eaux de Ruissellement (National Strategy for Irrigation Development and Water Harvesting)
SOCOPAP	Association of niébé exporters
TTL	Task Team Leader
UNDP	United Nations Development Programme
UTA	Unité Technique d'Appui (Technical Assistance Unit)
WAEMU	West African Economic and Monetary Union

Preface

This is the Project Performance Assessment Report (PPAR) prepared by the Independent Evaluation Group (IEG) for three projects in Niger: The Pilot Private Irrigation Promotion Project (PPIP), the Natural Resources Management Project (NRMP), and the Agro-Pastoral Export Promotion Project (APEP).

The PPIP was approved in FY95 for a credit of US$6.8 million. At closing, 18 months behind schedule in December 2001, total project costs were US$5.2 million, 69 percent of the appraisal estimate of US$7.5 million.

The NRMP was approved in FY96 for a credit of US$26.7 million with agreed cofinancing from Denmark and Norway of US$8.7 million. At closing, 6 months behind schedule in September 2002, total costs were US$ 27.4 million, 67 percent of the appraisal estimate of US$ 42.7 million. Cofinancing from Norway was disbursed at 88.4 percent while that of Denmark never materialized, which brought total cofinancing to US$1.9 million, or 22 percent of the appraisal estimate of US$8.7 million.

The APEP was approved in FY00 for a credit of US$10.4 million. At closing on time in October 2005, total costs were US$12.7 million, 6 percent over the appraisal estimate of US$12.1 million.

This report is based on the Implementation Completion Reports (ICRs) prepared by the Africa Region, the Credit Agreements, Staff Appraisal Reports, project documents and files, and discussions with Bank staff and other stakeholders, including the Government of Niger, project implementing agencies, donors, the private sector, NGOs, and beneficiaries. An IEG mission visited Niger in December 2007. The cooperation and assistance of central government and regional officials and staff, non-governmental stakeholders, donors, and other interested parties are gratefully acknowledged.

These projects were selected for a PPAR because of their support for complementary aspects of agricultural development in Niger, because of their innovative approaches to assisting the government’s policy of disengaging from the provision of services and forging a strong partnership with the private sector, and because of some questions raised by IEG’s ICR reviews. Including PPIP and APEP in the present PPAR also provided the opportunity to compare the outcomes of these projects with those of similar projects in Mali which IEG assessed in 2007.

Following standard IEG procedures, the draft of this PPAR was sent to the borrower for comments before it was finalized. The Borrower had no comments on the report. In accordance with the Bank’s disclosure policy, the final report will be available to the public following submission to the World Bank’s Board of Executive Directors.

Summary

1. With sixty-one percent of its population living on less than a dollar a day and an average per capita income estimated at US$280 in 2006, Niger is considered the poorest country in the world. Niger's economy is largely agrarian — predominantly rainfed — characterized by a low level of agricultural productivity, a large informal sector, and a relatively large public sector. Both the Government of Niger and the World Bank recognize that the agriculture sector is a major potential source of economic growth. Niger's Poverty Reduction Strategy Papers (2001 and 2007), the Government's National Natural Resources Management Program (1992) and Rural Development Strategy (2003), and the Bank's Country Assistance Strategies (1994, 1997, and 2003) all emphasize the importance of improving the access of rural populations to economic opportunities, through irrigation and trade, in order to promote conditions for sustainable economic growth in the sector, enhanced food security, and sustainable management of natural resources.

2. The three projects reviewed in this PPAR were implemented under the tutelage of the Ministry of Rural Development, and aimed to assist the Government of Niger in implementing its policies of (a) disengaging from the provision of services, (b) forging a new and strong public-private partnership, and (c) providing the basic enabling environment for a sustainable private sector-led agricultural growth and natural resources management. **The Pilot Private Irrigation Promotion Project (PPIP)**, which was approved in April 1995, aimed to promote private small-scale irrigation in Niger through testing and disseminating technologies that would meet small-farmer requirements and capabilities. **The Natural Resources Management Project (NRMP)**, which was approved in December 1995, constituted the first five-year time-slice of Government's long-term National Natural Resources Management Program whose ultimate objective was to reverse the process of land and natural resource degradation in order to secure sustainable agricultural production and growth, and alleviate poverty. NRMP's specific objectives were (a) to assist rural communities design, finance, and implement community-based natural resources management plans, and (b) to assist the Government of Niger build national capacity to design national natural resources management policies and coordinate diverse related initiatives. **The Agro-Pastoral Export Promotion Project (APEP)**, which was approved in June 2000, aimed to give private sector enterprises and producers the tools for increased production, profitability, and marketing of agro-pastoral products, and to increase exports to regional and international markets.

3. This PPAR rates the overall outcome of PPIP as **highly satisfactory**. The project achieved its immediate objective of promoting simple, low-cost and high-return small-scale irrigation technologies which meet small-farmer requirements and capabilities. PPIP successfully demonstrated the potential of the small-scale irrigation sector to bring about substantial improvements in productivity, thereby increasing food security. It has provided the ingredients to motivate smallholders to adopt adapted technologies, and the stepping stone to launch small-scale irrigation more broadly in Niger.

4. The PPAR rates the overall outcome of NRMP as **satisfactory**. Overall, there has been a noticeable reversal in the process of land and natural resource degradation in Niger according to a detailed assessment study in 2005 on the impacts of desertification control in

Niger, and the NRMP project has been one of several donor projects that has contributed to this achievement. NRMP successfully provided government institutions and communities with the tools necessary to better and sustainably manage the country's natural resources. NRMP covered more than twice the area it targeted at appraisal, and pioneered the introduction of community-based procurement procedures (CBPP), an approach to further foster grass-roots decision making, and later adopted by other donors. CBPP was also cited by government officials to have contributed to Government's efforts in implementing its decentralization law.

5. The PPAR rates overall outcome of APEP as **unsatisfactory**. APEP was not able to increase agro-pastoral exports despite a favorable environment for export development. The project's influence on aggregate national production and exports of agro-pastoral products was negligible. The project's efforts resulted in a mere 0.4 percent share of national agro-pastoral exports during the life of the project. This unsatisfactory outcome was caused by significant shortcomings in project design and implementation arrangements which were too ambitious, did not generate a strategic and integrated approach to export development, and did not take proper consideration of the country's constraints.

6. Several lessons — both positive and negative — relating to project design have emerged from this review:

(1) **Empowering communities to take control of the implementation of their own development plans improves community ownership and motivation to engage in sustainable development practices.** Both the PPIP and the NRMP worked very closely with the beneficiaries to generate grass-roots demand for project activities. In the case of PPIP, successful testing and innovative dissemination of low-cost small-scale irrigation technologies played decisive roles in technology promotion and led to a steady increase in their adoption despite the population's low literacy rate. In the case of NRMP, the introduction of CBPP empowered the communities by putting them in charge of designing, recruiting and paying for the implementation of their collectively developed community development plans. This significantly improved community ownership and motivation to engage in sustainable natural resources management practices, and increased community investments.

(2) **Export development needs to follow a well-defined strategy, and a commodity chain approach needs to emphasize producer-exporter linkages.** APEP was not able to help increase agro-pastoral exports, despite a favorable environment for export development, for two main reasons: the absence of a coherent export strategy, and missing links between producers and exporters. APEP allocated its matching funds on subprojects on an *ad hoc* basis, spreading its resources too thinly, not focusing on commodities that had the best export potential, nor selecting beneficiaries based on the economic viability of their activities. It also neglected the importance of linking producers and exporters to develop sustainable supply chains with free-flowing information on opportunities and market standards, so that exports of high quality incremental production would result.

(3) S**imilar agricultural development projects in neighboring countries can have opposite outcomes due to the quality of project preparation, the level of engagement of the implementing agencies, and the prevailing land tenure security situation.** Niger's PPIP had a highly satisfactory outcome, while Mali's PPIP had a highly unsatisfactory outcome (assessed in a PPAR by IEG in 2007). In Niger, the implementing agency, ANPIP, was fully engaged in project activities and worked very closely with the farmers — testing simple low-cost and high-return small-scale irrigation technologies, demonstrating test results, and creating advisory services groups. This motivated farmers to invest in these technologies from their own resources. In Mali, the project's implementing agency — the Agricultural Supply Chain Promotion Agency (APROFA) — was not fully engaged, did not work closely with farmers, and did not activate project activities on time to encourage farmer demand for small-scale irrigation. Differences in land tenure security also played a decisive role in both projects' outcomes. In Niger, its Rural Code provided farmers and pastoralists with the incentive of land tenure security to invest in their lands and livestock herds. In Mali, where land tenure law is still traditional, Malian farmers hesitated to and mostly did not invest in lands that they did not officially own.

Niger's APEP had an unsatisfactory outcome while Mali's Agricultural Trading and Processing Promotion Pilot Project (ATPPP) had a moderately satisfactory outcome. In Mali, the ATPPP took four years from inception to Board approval which made possible an in-depth preparation process. In Niger, the APEP took only six months from inception to Board approval. The hasty process resulted in a shallow analysis of implementation risks and ineffective mitigation measures, and the deferral of important activities to project implementation. Also, Mali's ATPPP financed the rehabilitation or establishment of collective export infrastructure such as handling/processing and storage facilities, while Niger's APEP included a matching grant facility that dispensed highly subsidized funds to individual associations of producers or exporters. This probably influenced the diverging outcomes of the two projects by causing Malian exporters to work harder to maximize their profits from the use of the collective assets which were accessible to the different groups at predetermined and set times, while the individual Nigerien associations were secure in having the assets on their own lands whether they made use of them or not.

Vinod Thomas
Director-General
Evaluation

1. Background

1.1 Niger is, by most measures, the poorest country in the world. It was ranked 177 out of 177 countries on the UNDP's Human Development Index in 2006. Sixty-one percent of Niger's population lives on less than a dollar a day and the average per capita income was estimated at US$280 in 2006. Rural areas account for almost 80 percent of the country's population estimated at 14 million, the majority of whom live along a narrow band of arable land on the country's southern border. About 90 percent of the population relies on agriculture for their livelihood. Niger's economy is largely agrarian — predominantly rainfed — characterized by a low level of agricultural productivity, a large informal sector, and a large public sector. In 2006, agriculture — including forestry and fishing — accounted for 43 percent of national GDP, the highest sectoral share, and for 33 percent of total exports.

1.2 The Government of Niger and the World Bank recognize that the agriculture sector is a major source of economic growth. Niger's Poverty Reduction Strategy Papers (2001 and 2007), the Government's National Natural Resources Management Program (1992) and Rural Development Strategy (2003), and the Bank's Country Assistance Strategies (1994, 1997, and 2003) all emphasize the importance of improving the access of rural populations to economic opportunities, through irrigation and trade, in order to promote conditions for sustainable economic growth in the sector, enhanced food security, and sustainable management of natural resources. The World Bank has been strongly supporting the implementation of the Government's poverty reduction, and rural and natural resources development strategies through its lending portfolio which includes investments in rural development, promotion of agricultural exports, irrigation, and a community action program to support development programs at the community level.

1.3 **The Pilot Private Irrigation Promotion Project (PPIP)**, which was approved in April 1995 as a pilot operation, aimed to promote private small-scale irrigation in Niger through testing and disseminating technologies that would meet small-farmer requirements and capabilities. Total costs were US$5.2 million at completion. **The Natural Resources Management Project (NRMP)**, which was approved in December 1995, constituted the first five-year time-slice of Government's long-term National Natural Resources Management Program whose ultimate objective was to reverse the process of land and natural resource degradation in order to secure sustainable agricultural production and growth, and alleviate poverty. NRMP was a community-driven development operation whose specific objectives were (a) to assist selected rural communities in designing, financing, and implementing community-based natural resources management plans, and (b) to assist the Government of Niger (GON) in building national capacity to design national natural resources management policies and coordinate diverse related initiatives. Total costs were US$ 27.4 million at completion, making this the largest of the three projects being reviewed in this PPAR. **The Agro-Pastoral Export Promotion Project (APEP)**, which was approved in June 2000, aimed to give private sector enterprises and producers the tools for increased production, profitability, and marketing of agro-pastoral products, and to increase exports to regional and international markets. Total costs were US$12.7 million at completion.

1.4 All three projects were implemented under the tutelage of the Ministry of Rural Development (MDR), and aimed to assist the Government of Niger in implementing its policies of (a) disengaging from the provision of services, (b) forging a new and strong public-private partnership, and (c) providing the basic enabling environment for a sustainable private sector-led agricultural growth and natural resources management.

2. Pilot Private Irrigation Project (PPIP)

Objectives

2.1 The objective of the Pilot Private Irrigation Project (PPIP) was to promote the development of private irrigation in Niger, by promoting technologies which would meet small-farmer requirements and capabilities.[1] PPIP was to help increase small-farmer productivity and incomes, and improve rural well-being. The project focused primarily on the poorest small irrigation farmers, and selected private commercial irrigators.

Design and Implementation

2.2 PPIP was a four-year pilot for capacity building in small-scale private irrigation which had five components:

- **Private Irrigation Management Agency** (US$2.0 million at appraisal, 27 percent of project costs): to build the institutional and technical capacity of the already established association of private irrigators which was the designated implementing agency;
- **Small-scale Mechanized Irrigation** (US$1.8 million at appraisal, 24 percent of project costs): to test and disseminate simple, low-cost mechanized technologies for small irrigation farmers;
- **Improved Manual Irrigation Technology** (US$0.8 million at appraisal, 11 percent of project costs): to test and disseminate improved small-scale manual irrigation technologies and help local artisans manufacture them;
- **Environmental Protection** (US$0.3 million at appraisal, 4 percent of project costs): to monitor shallow aquifer levels, and soil and water quality in the project zones, and implement some soil erosion control work; and
- **Savings and Credit Schemes** (US$0.9 million at appraisal, 12 percent of project costs): a package of technical assistance and training services for promotion of savings and credit schemes in the project area.

2.3 Project preparation took five years, during which more than one approach to developing private small irrigation were considered. At the request of the Bank's project design team, the Government of Niger (GON) established the Niger Private Irrigation Promotion Association (ANPIP) in 1992, an autonomous body staffed from the private

1. This is a composite statement, merging the statements of objectives in the project's Staff Appraisal Report, page 14, and Development Credit Agreement, Schedule 2.

sector, to implement the project. The Staff Appraisal Report (SAR) identified four risks to project implementation, three of which related to the GON, such as subjecting ANPIP to bureaucratic controls and pressures of political patronage, the inability to provide counterpart contributions, and potential government interference through restrictive legislation and controls that could stifle grass-roots initiatives in financial intermediation. The fourth risk related to the possible misuse of public funds on the part of ANPIP.

2.4 The project preparation team built several mitigation measures into the project design, such as joint Government-Bank performance reviews as well as requiring the GON to make up-front, followed by annual, deposits into an account for counterpart funds and to provide an appropriate legal framework for grassroots savings and credit unions. The SAR also incorporated clear performance criteria for ANPIP, pre-approved annual work programs, training, adequate internal regulation and monitoring systems, and strict enforcement of ANPIP's operational guidelines as safeguards against managerial risks. There was no formal Quality at Entry (QAE) Review, since the project predated the establishment of the Quality Assurance Group (QAG) within the Bank, and no logical framework since the project predated this requirement too. At the recommendation of the mid-term review (MTR), the project was retrofitted in 1999, a monitoring and evaluation unit was created inside the project management unit (PMU), and more emphasis was put on testing and improving manual irrigation techniques versus mechanized techniques, since they fit better within most Nigerien farmers' socioeconomic conditions.

2.5 The mitigation measures proved effective and no significant implementation problems were reported, except for delays in and lower amounts of counterpart funding than agreed-upon at appraisal. The GON provided only 43 percent of its agreed contribution by project closing due to the country's deteriorating public finance situation at the time of the project. But this did not cause major delays in execution. The Bank's task team leader (TTL) delayed in giving some "no objections" for procurement and disbursement transactions sought by the project during the first part of the project, but this was resolved once a TTL was appointed in Niamey.

2.6 Many government officials, both inside and outside the Ministry of Rural Development (MDR), were initially unenthusiastic about the idea of a private entity — created at the insistence of the Bank's project design team based on project preparation findings — managing the project and public funds. But the GON did not interfere with the management of the project's public funds and became very supportive of the project when the irrigation technologies were developed and farmers from all over the country expressed enthusiasm for this new approach. MDR actually reassigned some of the project activities — such as extension and environmental monitoring — from governmental agencies to ANPIP, due to the agencies' lack of public funds and non-adherence to the World Bank's procedures. The monitoring of shallow aquifers did not take place as planned, though, since the installation process for the piezometers was inadequate, which did not permit a good reading and interpretation of data.

Outcome

2.7 PPIP has successfully demonstrated the potential of the small-scale irrigation sector to bring about substantial improvements in productivity, and thereby increasing food security. It has provided the ingredients to motivate smallholders to adopt adapted technologies that are low-cost and high-return, so that the small-scale irrigation sector has flourished. This PPAR upgrades the overall outcome of the project from satisfactory (in the ICR) to **highly satisfactory**.

Table 1. Development Objectives and Outcome of PPIP

Development Objective	Relevance	Efficacy	Efficiency
Promote the development of private irrigation in Niger, by promoting technologies which meet small-farmer requirements and capabilities	Substantial	High	High
Overall Project Outcome		**Highly satisfactory**	

RELEVANCE

2.8 Niger's overarching development objective at project preparation was to reverse the trends of declining levels of per capita income and social welfare. To that end, GON had decided to foster a public-private partnership aimed at achieving sustainable economic growth, higher levels of income growth, and poverty alleviation. The government's strategy in the irrigation sector was to reduce the role of the state in managing irrigation schemes and to promote smaller-scale private ownership and management. The Bank's country assistance strategy (CAS) of 1994 supported this private sector-led development strategy, as stated in one of the CAS' four building blocks "***building public and private sector institutions to promote private sector based growth***."

2.9 The government's Rural Development Strategy (SDR) of 2003 supported the expansion of irrigation — including small private irrigation — and the modernization of agriculture as a means to reduce poverty and increase food security. The government's Poverty Reduction Strategy Papers (PRSPs), which were approved in 2001 and 2007, supported irrigation development as one of their priority sectoral interventions, and the government's national strategy for irrigation development and water harvesting (SNDICER), which was approved in 2005, also supported small private irrigation as one of the irrigation categories to be developed in Niger. What is noteworthy about this current irrigation strategy, however, is its departure, to some extent, from a private sector-led approach and a return to the concept of large irrigated perimeters developed by government and collectively managed by farmer cooperatives. The Bank's 2003 CAS emphasized small private irrigation in one of its four pillars — "***the development of productive sectors, especially in rural areas, to mitigate vulnerability and stimulate income generation***" — which addresses Niger's high vulnerability to climatic shocks and food insecurity. But the CAS also expressed some reservations about the conclusions of the 2001 PRSP that production and growth would be fueled equally by increased private and public investment in the rural sector (irrigation). The CAS stated that this would need further examination and research.

2.10 Thus, the objective of PPIP was fully aligned with GON's strategy in the 1990s, but to a lesser extent in its current strategy. On the other hand, the objective of PPIP remains fully aligned with the Bank's strategy.

2.11 PPIP's components and activities were highly appropriate to achieving its objective, since these address most of the constraints of the small irrigation subsector, notably, the inefficient irrigation techniques; limited information on, and access to, commercial markets for products and factors of production; lack of access to financial services; and lack of access to basic technical and farm management skills. The project activities provided specialized assistance and training to help build the technical and institutional capacity necessary to overcome these constraints, and provided an incentive for greater private investments in farmer-owned and operated small-scale irrigation schemes through promotional work, studies, and price and market information collection.

2.12 This PPAR concurs with the ICR that quality at entry and project design were satisfactory. The project objective statement was simple and understandable, but could have been more precisely worded. The design fostered ownership at the grass-roots level by empowering beneficiaries through their associations, and accounted for institutional constraints and risks by incorporating flexibility and the participation of stakeholders in project oversight and decision making. One of PPIP's greatest contributions to development outcomes was its flexibility — recognizing that promoting a private approach in a rural environment such as Niger, which has been highly dependent on public interventions, is a slow and complex process. Constant adjustments were necessary throughout the five and a half years of project activity. The first two years were spent in promoting the approach, sensitizing, training and organizing. It is only in the third year that project activities started to be implemented. Results did not materialize until the fifth year of the project.

2.13 The project design predated the Bank's requirement to elaborate a logical framework but was retrofitted after the MTR. The indicators selected in the SAR were measurements for the project's inputs and some outputs at project's closure. No outcome or impact indicators were identified. After the MTR, adequate outcome indicators were identified and quantified, which made it possible to measure project outcome and benefits.

2.14 Both project objective and design are highly relevant. However, in light of the government's current irrigation strategy which to some extent represents a departure from the private sector-led approach and a return to the previous approach of large irrigated perimeters, relevance is rated **substantial** and not high.

EFFICACY

2.15 The small-scale irrigation subsector in Niger is flourishing. The Bank's financial and technical support from 1995 to 2007 — through PPIP and its follow-on operation, the Private Irrigation Project, Phase 2 (PIP2) — has led directly to the following:

- An additional 16,000 ha of land belonging to about 22,300 farmers has been put under small-scale irrigation;
- 3,138 manual and 10,485 mechanized pumps have been installed by project beneficiaries;
- 4,132 tube wells have been dug and 2,357 conventional wells rehabilitated or dug following improved traditional practices;
- 25,600 small-scale irrigators have been grouped into groups of similar economic interests (GIEs) and adhering to the apex organization ANPIP;
- 29,297 farmers became members of decentralized savings and credit unions (SCUs);

- 61 groups of advisory services have been formed; and
- 558 craftsmen have been trained on the manufacture and maintenance of irrigation equipment and farm implements.

2.16 This bright picture has materialized because of PPIP. Both GON and donors credit PPIP with launching the small-scale irrigation subsector in Niger on a broad scale. PPIP has indeed established a solid base for launching small-scale irrigation by successfully adapting, testing and disseminating low-cost irrigation technologies, by organizing farmers into groups with common economic interests, by motivating them to join credit unions, and by creating advisory services groups. PPIP (a) introduced the pedal pump and simple water distribution systems, not known previously in Niger; (b) improved the manual pump[2] and reduced its cost by about one half, (c) made recommendations for less expensive but robust mechanized pumps, and (d) reduced the costs of tubewells by about two thirds from US$400 to US$120 by testing different material and drilling techniques. One of the factors in its success was its demand-driven approach to small-scale irrigation. PPIP created high demand for irrigation equipment through the encompassing and effective dissemination of its tests results. It carried out publicity through demonstrations in farmers' fields, fairs, and at road sides, radio and television broadcasts, brochures, books, and technical notes. It also encouraged craftsmen to lease irrigation equipment for one season to undecided farmers.

2.17 PPIP made small-scale irrigation accessible to small farmers by reducing the costs of the needed technologies and equipment, and increasing the return on farm investment. The benefit-cost ratio of a combined investment in a tubewell, a manual pump and water distribution system reached a rewarding 3.5:1. The project also succeeded in establishing a sustainable supply chain of irrigation equipment by training craftsmen in the manufacture and maintenance of the simple irrigation equipment retained by the project. The irrigation manufacturing business continues to flourish: One craftsman in the Region of Dosso, south of Niamey, reported to the PPAR mission that he had 10 staff in 2000, and 100 today. Some of those who have trained in his business have opened their own. His revenues have increased by about 50 percent since 2000. Project benefits cited by beneficiaries to the PPAR mission, and confirmed in PIP2's progress report of August 2007, include yield increases compared to a no-project scenario, that reached 45 percent for onions, 175 percent for wheat, and 186 percent for cabbage.[3] PIP2's progress report also confirmed high margins per hectare for small-scale irrigation, reaching up to $6,224 for onions and US$7,884 for tomatoes.

2.18 Other important successes of the project include the launching of specialized private advisory services groups which are filling the gap left by public institutions, such as extension services, which have lacked funds, staff and competence. These groups, who acquired their expertise through interning and training under PPIP, have increased from 2 in

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2. One of the project's outputs was a manual pump totally manufactured in Niger and called "commitment and courage".

3. Additional benefits have included farming all year round which provided seasonal employment and limited the exodus of youth by about 40 percent; better technologies for post-harvest conservation of crops; lower consumer prices; a healthier nutrition and easier food preparation; and other social benefits such as competition among farmers which has awakened the rural population, and the opportunity for mutual assistance.

1998 to 59 in 2007.[4] Another success was the pioneering style of project management: ANPIP, a private association of irrigation farmers and professionals of related disciplines was designated as implementing agency to manage public funds. This approach was successful on the one hand, because ANPIP was an interlocutor respected by GON, other donors, and beneficiaries who kept a good working relationship with them, and because it was a cushion against political interference.[5] On the other hand, ANPIP proved successful in eliciting support and the right to represent grass-roots beneficiaries, in promoting the Government's private sector strategy for development of small-scale irrigation, in effectively organizing irrigation farmers, in devising an efficient communication strategy, and in providing services to its members such as training, advisory services, and distributing inputs closer to the field. GON, the Bank and beneficiaries all praised ANPIP's managerial capacities.

2.19 Finally, PPIP achieved partial results in mobilizing its beneficiaries to form saving and credit unions. The results were less than projected at project design and MTR, mainly due to the traditional no-savings culture[6] caused by extreme poverty and poor harvests. Twenty seven schemes were established with farmers funds — five of which benefited from small donor trust funds — and GON respected the autonomy and the private character of these schemes. However, the small amount of savings mobilized (US$60 per member) made possible only modest loans (an average of US$243 per loan). In addition, only 18 percent of the loans were devoted to irrigation; most were used to finance social events as well as diverse commercial and other productive activities. By 2007, five schemes had been liquidated, and only 8 of the remaining 22 schemes were performing, following strict financial management rules as approved by MCPEC, the apex Savings and Credit Union.[7]

2.20 In light of the major impact which PPIP has had on facilitating the launching of the small-scale irrigation sector, and despite the mixed results obtained in the savings and credit unions activities, efficacy is rated **high**.

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4. One of them, the NIYYA group, was formed in 1998 with 7 staff. It managed an average of US$622/month in irrigation development funds. In 2007, this group now counts 25 staff with a diverse range of technical expertise to include livestock production, rural development, and environment, distributed over 3 regional offices to cover all of Niger. They are working with several donors and managing an average of US$6,220 per month — ten times as much as when they started. They report being better paid now for the same work. Several similar groups were created after internship and training at NIYYA.

5. PPIP's national director and ANPIP's management resisted requests of politicians and other government officials to show favoritism in selecting beneficiaries of project funds and training, as well as in awarding contracts.

6. The rural finance sector is performing poorly. PIP2 dropped its microfinance development subcomponent in 2005 and an IFAD-financed Pilot Microfinance Project did not proceed to a second phase because of poor results.

7. MCPEC, the apex organization, has experienced shortages in operational funds and some financial mismanagement which prompted GON to place it under the tutelage of the Ministry of Finance in 2001. It has not been able to follow some of its member credit and saving schemes closely and no longer guarantees their operational integrity.

EFFICIENCY

2.21 The project's SAR did not calculate an economic rate of return (ERR) because of PPIP's institution-building and service nature. However, the ICR calculated an ERR for two of the project's components — the Small-scale Mechanized Irrigation and the Improved Manual Irrigation — because these achieved results that can be expressed in financial and economic terms. The ICR found the ERR for the mechanized irrigation to be 66 percent and that for the manual irrigation to be 68 percent, and cited the following among the most significant indicators making it possible to appraise the results of the project on the incomes of beneficiaries:

- The net margin of farms using mechanized pumps averaged US$1,304 with a standard deviation of US$639, a minimum of US$390 and a maximum of US$2,189, according to a survey conducted by the project on some beneficiaries operating mechanized pumps;

- The acquisition of a pedal pump makes it possible to triple the cultivated area and to increase net income by 156 percent, from US$222 to US$568, according to a survey conducted by the project on some beneficiaries operating non-mechanized pumps;

- Economic profitability is around 104 percent for the mechanized technologies, and 217 percent for the manual technologies, according to the same surveys.

2.22 The ICR also mentioned that the savings and credit schemes cover the poorest and help alleviate their poverty level by providing them with means to develop income-generating activities. The project made it possible for 5,473 persons to receive small loans amounting to US$1.3 million, with the funds coming from their own deposits.

2.23 The farmers, whom the PPAR mission met, confirmed their high degree of satisfaction with small-scale irrigation, and the financial benefits they received from such investments. They praised the project for helping them generate these extra benefits. The 2007 monitoring and evaluation report of PIP2 also confirms high margins per hectare for small-scale irrigation, reaching up to US$6,224 for onions and US$7,884 for tomatoes. PPIP has clearly demonstrated that small-scale irrigation can be highly remunerative. Efficiency is rated **high**.

Risk to Development Outcome

2.24 Sustainability of the benefits acquired under PPIP is threatened by three concerns associated with the follow-on project PIP2, and a fourth which falls outside the control of either project. First, the design of PIP2 includes a matching grant facility, to enhance the availability of rural credit, which provides funds to farmers for the purchase of small-scale irrigation equipment. The cost-shares of these grants are 80 percent from PIP2 and 20 percent from the farmer. PIP2 has observed in 2007 that many farmers, taking advantage of these matching grants, have been purchasing mechanized pumps rather than manual pumps, even if their farming conditions did not require mechanized pumping.[8] This is threatening the

8. PPIP has motivated the sale of 1,082 manual pumps. No mechanized pumps sales were recorded, probably because PPIP did not provide a credit facility. On the other hand, PIP2 established a target of 4,550 manual

sustainability of the successful supply chain of manual pumps established under PPIP. This matching grant facility has also caused the EU donor who is financing a parallel but smaller project — the Support to Food Security through Small-Scale Irrigation (ASAPI), 2001–2007 — to complain to MDR at PIP2's appraisal that the matching grant would prevent ASAPI from implementing and disbursing from its credit component. Neither the Bank nor MDR paid attention to this complaint, and the EU had to divert its credit component funds to other activities to enable them to disburse the earmarked funds.

2.25 Second, in 2007, both MDR and the Bank's project TTL have withdrawn their vote of confidence in ANPIP, which was the implementing agency for PIP2, PPIP's sequel. And thus, ANPIP is no longer PIP2's implementing agency since April 2007. ANPIP's prospects for institutional and financial sustainability had been very high since it was respected by GON, donors and its members alike, and had attracted more funds from other donors in addition to those of PPIP and PIP2.[9] However, ANPIP did not prove to have sufficient integrity to manage the large PIP2 financing — about US$40 million — and seems to have caved in to political pressure.[10] MDR took over management of PIP2 and the present PPAR thinks that the GON is not likely to repeat the experience of having a private entity manage public funds in the near future. This is undermining to some extent the desired public-private partnership for development, and the private-led initiative to develop irrigation, supported by GON at the inception of PPIP.

2.26 Third, PPIP was assigned an environmental category B, since it was designed to create the necessary capacity to make future on-farm investments profitable, sustainable, and environmentally sound. PPIP did not threaten to deplete the shallow aquifers mainly because of its pilot nature and because the water extraction it encouraged was within the capacity of the aquifer to regenerate. However, with the large expansion in irrigation that has taken place under PIP2, which draws mainly on underground water resources, careful monitoring has become a necessity. PIP2's MTR in 2005 reported that 99 sites within the project area were, or would be, fragile as a result of irrigation practices, and recommended aquifer recharge and an environmental assessment for all subprojects financed by PIP2 to enable a rational

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pumps and 5,936 mechanized pumps to be sold as a direct result of the different incentives provided by the project. PIP2's 2007 monitoring indicators show that 2,056 manual pumps and 10,485 mechanized pumps have been sold to farmers touched by the project, i.e. 1 manual pump is sold for every 5 mechanized pumps. This represents 45 percent and 177 percent of the targets set at PIP2's appraisal for manual and mechanized pumps, respectively.

9. During the life of PPIP, ANPIP managed two other externally-funded projects which related to food security and had an irrigation component, one financed by the French donor and the other by the West African Development Bank. It has managed three additional projects since the start of PIP2, financed by the EU and FAO.

10. ANPIP had appointed a new national director for PIP2 whose appointment seems to have been political and imposed on ANPIP and the Bank. The national director yielded more political power than ANPIP's management and selected project beneficiaries and awarded contracts based on criteria not in conformity with those agreed by GON and the Bank during project appraisal and negotiations. This resulted in misappropriation of some funds and ineligibility of some expenses. The Bank's project management issued several warnings to ANPIP, but did not have sufficient power to replace the national director. GON had to return the ineligible expenses to the Bank. The Bank then insisted on removing ANPIP's responsibility for project implementation. MDR and other GON officials who had never really accepted a private entity managing public funds took the opportunity to have project implementation responsibility fall back to MDR. This, unfortunately, is not guaranteed to shield the allocation of project funds from continued political favoritism.

continuation of irrigation activities. If environmental monitoring and mitigation are not implemented, expansion of small-scale irrigation may become an environmental risk.

2.27 The fourth concern relates to rural credit. The apex Savings and Credit Union, MCPEC, has not been able so far to stand on its own feet. MCPEC and its member SCUs were undermined by few cases of misappropriation of funds in the past so that the Ministry of Finance put MCPEC's management under tight, but provisional control in 2001. As a result, MCPEC lost credibility and could not market itself as a paid service provider to donors, as ANPIP did, to increase its operating budget and has not, therefore, been able to provide free support and audit services to half of its members. MCPEC reorganized and let go of 16 (out of 51) of its members in 2005–2006, as some were liquidated and others were quasi non-operational,[11] and grouped its remaining members into 2 equal groups, performing and non-performing.[12] The non-performing group does not pay membership fees and has to pay MCPEC for advisory and audit services when requested. Although the deposits of both groups have doubled since PPIP closed, the non-performing group risks mismanagement of funds since it benefits from little follow-up and guidance. This reduces client confidence in these schemes and may reduce deposits over the long run, leading to an inevitable decrease in its ability to provide loans. This would ultimately reduce farmers' access to credit to purchase small-scale irrigation.

2.28 The four concerns put PPIP's achievements at a substantial risk. Risk to development outcome is rated **signficant**.

Bank and Borrower Performance

BANK PERFORMANCE

2.29 The Bank's preparation team carefully considered several alternatives, including a line of credit to promote the small-scale irrigation subsector in Niger, and finally settled on a phased operation with a narrow focus on testing and disseminating simple, low-cost smallholder irrigation technologies and institution-building in the pilot phase. The Bank's project design team insisted on having a private association that represented beneficiaries to manage the project.[13] The project's success can in large part be attributed to this narrow focus and innovative institutional design. The project team also incorporated an environmental conservation component to monitor aquifer extraction, which was very appropriate for a country set to expand irrigation but with scarce replenishable water resources.

2.30 The Bank's project supervision team closely supervised the private implementing agency, conducting 15 supervision missions at an average of more than two per year because

11. Eight of the savings and credit schemes created by PPIP had been liquidated by 2002.

12. Eight and eleven savings and credit schemes created by PPIP belong to the performing and non-performing groups, respectively.

13. SAR, page 15, paragraph 5.4: "Based on the disappointing experience with public irrigation agencies, it was deemed necessary to establish an association of private irrigators, hereinafter referred to as the Agency. The Agency has already been established with private legal status in order to insulate it from the ex ante control and political interference that prevented public agencies from effectively performing their responsibilities as executing agency of past irrigation programs."

of PPIP's pilot nature. The project was retrofitted with a logical framework after the MTR, some of its indicator targets revised, and a monitoring and evaluation unit created within ANPIP which contributed to a sound evaluation of project achievements. The Bank appointed a project TTL in Niamey which helped address project requests and issues promptly, an additional ingredient to the project's success. The Bank's project management advanced the preparation of the second phase in order to minimize the transition period between the pilot phase and the investment operation.

2.31 Although some GON officials, both inside and outside MDR, considered ANPIP to be an inappropriate implant imposed by the Bank, and in spite of the woes that ANPIP experienced, relating to political interference rather than its institutional structure, Bank performance is rated **satisfactory**.

BORROWER PERFORMANCE

2.32 A multidisciplinary Nigerien group, assisted by an FAO/CP team, participated actively in PPIP's design and preparation. Farmer organizations, various NGOs and representatives from all the counterpart agencies were consulted. The design benefited greatly from the leadership and vision provided by the main counterparts in the ministries of Planning, Finance and Rural Development which ensured that the project fitted well within the country's context. Although the GON provided counterpart funds with some delay and incompletely because of limited financial resources at the time, but this did not cause major delays in execution. When MDR was unable to respond to project needs in relation to extension, facilitation of input accessibility, price and market information, due to limited funds, it transferred management of these activities to ANPIP. It also placed management of the rural microfinance component with MCPEC. However, many GON officials inside and outside MDR were unenthusiastic about private entities managing public funds and expressed displeasure at the fact that ANPIP was created by the project to manage the project. Support to PPIP was elicited only when farmers expressed their appreciation for this new approach to irrigation development and enthusiasm for the technologies developed. Nonetheless, throughout the project GON did not interfere in the management of project funds, and respected the autonomy and private character of the savings and credit schemes, as well as its commitment to a public-private partnership for the development of irrigation.

2.33 The implementation agency, ANPIP, fulfilled its obligations with due diligence. It installed the necessary tools and procedures to ensure that financial and administrative management was carried out in accordance with Bank and GON rules. Procurement procedures were respected, the recruitment process was transparent, and competent staff were hired. Upon closing of the Bank-financed Extension Services Project, ANPIP was proactive to encourage fresh university graduates who interned at ANPIP to fill the gap and not disrupt project implementation. Thus, two advisory services groups constituted by young graduates were able to advise farmers on the procurement and use of new technologies. Project reporting was regular and comprehensive. ANPIP succeeded in maintaining good working relationships with GON, the Bank, and farmer associations. ANPIP's performance was assessed highly satisfactory by GON and beneficiaries.

2.34 In spite of MDR's lukewarm ownership of the project during its initial stages, Borrower performance is rated **satisfactory** because the GON continued to support PPIP's objectives and modus operandi throughout the project's life and because MDR and ANPIP ensured smooth project implementation.

Monitoring and Evaluation

2.35 Monitoring and evaluation (M&E) was critical for a pilot operation like PPIP, since moving to a second phase required the assurance that the objectives of the pilot phase were achieved. The design of PPIP preceded the Bank's requirements for a logical framework, and thus did not include one. The SAR identified a set of performance indicators which, although little more than input and output indicators, were nonetheless quantified with end-of-project targets, and specified that implementation progress was to be reported on a quarterly and yearly basis. The SAR made provision for monitoring the performance and recharge characteristics of the shallow aquifers and the danger of excessive extraction.

2.36 PPIP was retrofitted with a logical framework following the MTR. New outcome indicators were added, some indicator targets were revised to better reflect the potential of activities,[14] and a monitoring and evaluation unit was created within ANPIP which contributed to a valid assessment of the project achievements. Monitoring progress was done through monthly visits to the field by ANPIP's director general and heads of departments, a series of surveys and studies, and the regular field data collection by the M&E unit staff. Quarterly and yearly reports were prepared in a comprehensive and regular way. The data collected was analyzed and used to inform the Bank's and ANPIP's teams on decision making such as reallocating resources to higher impact activities.[15] Monitoring of shallow aquifers did not take place as planned though, since the installation process of the piezometers was inadequate which did not permit a good reading and interpretation of data.

2.37 Monitoring and evaluation is rated **substantial.** The monitoring and evaluation of PPIP's achievements confirmed that the country was ready for an expansion of the pilot phase. Thus PIP2 was launched on a nation-wide scale. This assessment proved, ex post, to be correct since PIP2 has exponentially multiplied PPIP's achievements in terms of land surfaces put under small-scale irrigation, from about 1,100 ha at PPIP's closing to the current 16,000 ha.

14. For example, targets for improved hand dug wells methods tested and mechanized water distribution technologies tested were lowered because enough had already been done and project resources could be better used elsewhere, and targets for established savings and credit associations were also lowered because MCPEC advised that the communities' capacities did not meet appraisal expectation. Targets for craftsmen trained in irrigation equipment production and maintenance and for manual pump sales motivated by the project were increased because the project was obviously on its way to exceed the appraisal targets.

15. After the MTR, PPIP put more emphasis on testing and improving small-scale manual irrigation techniques versus the mechanized techniques, because the MTR highlighted the fact that manual irrigation fitted better than mechanized irrigation within most of the Nigerien farmers' socioeconomic conditions.

3. Natural Resources Management Project (NRMP)

Objectives

3.1 The Natural Resources Management Project (NRMP), which was approved in 1995, constituted the first five-year time-slice of the GON's long-term National Natural Resources Management Program (NNRMP) which was elaborated in 1992 and whose ultimate objective was to slow down, stop and ultimately reverse the process of land and natural resource degradation in order to secure sustainable agricultural production and growth, alleviate poverty, and improve the living conditions of Niger's rural communities. NRMP was a community-driven development (CDD) operation whose specific objectives were (a) to assist selected rural communities in different agro-ecological zones in designing and implementing community-based natural resources management (CBNRM) plans for their lands and to provide them with the necessary know-how, information, technical and financial resources within a proper institutional and legal framework; and (b) to assist the GON in building national capacity to promote, assist and coordinate the diverse natural resources management (NRM) initiatives within the framework of a long-term national program, as well as in designing a comprehensive set of national NRM policies and strategies.

Design and Implementation

3.2 Representing the first five years of the implementation of the NNRMP, NRMP implemented the innovative and demand-driven CBNRM approach for a more coherent management and use of the renewable natural resources on a wide scale in Niger.[16] It addressed problems identified as a result of the poor performance of earlier projects — some being too sectoral and top-down, others being multidisciplinary but with no links between sectoral components. NRMP had 4 components:[17]

- Design and Implementation of CBNRM Plans (US$26.7 million at appraisal, 63 percent of project costs): to help 380 communities prepare and carry out community-based land use and NRM plans;

- NRM Support Operations (US$7.5 million at appraisal, 18 percent of project costs): to train all project stakeholders, conduct awareness campaigns, and build up a data base and an information network on the national natural resource base;

- Implementation, Management and Monitoring Support (US$0.2 million at appraisal, 0.5 percent of project costs): to draft policy documents, monitor policy implementation, and establish three Land Tenure Commissions; and

16. The CBNRM approach was tested through several pilot projects in the Sahel in the 1980s. The "Terroir" or local community lands, management concept was endorsed during a regional conference in Ségou, Mali, in May 1989 organized by the Club du Sahel and the Interstate Committee to Combat Desertification in the Sahel (CILSS), where representatives of rural communities, donors, governments and NGOs agreed that this approach needed to be tested on a larger scale in the Region. Since then, substantial investments have been made to promote this approach in Niger and elsewhere in the Sahel.

17. There was no complete list of components in the SAR section, "Detailed Project Description." Instead, components were extracted from the project costs summary table in the SAR, page 15.

- Monitoring and Evaluation, Project Management, and PPF Refunding (US$5.7 million at appraisal, 13 percent of project costs).

3.3 The SAR identified 3 risks to project implementation in relation to (a) the willingness and ability of communities to commit to the project objectives and engage in participatory planning and long-term investments; (b) MDR's capacity to implement the program; and (c) the implementation of M&E activities including the competence and motivation of staff, efficient data collection and flow of information. The project design incorporated several measures to mitigate the first risk, including conducting awareness and information campaigns, focusing on technological packages consistent with those adopted by the national agriculture extension services, working only with interested groups, and involving farmers in the planning and selection of activities. To mitigate the second set of risks relating to MDR's capacity, annual reviews would concentrate on performance, and the project would work closely with MDR to identify corrective action. As to the risks related to M&E, close supervision would help address these.

3.4 In spite of five changes of administration and general political instability, the GON maintained strong support for the NNRMP and to the project. It followed through on the MTR recommendation to introduce simplified community-based procurement and disbursement procedures (CBPP), despite some internal resistance, which immediately accelerated disbursements earmarked for the implementation of CBNRM plans and dramatically increased community investments.[18] The PMU was given a large degree of autonomy over project implementation, and communities were given autonomy in owning their NRM plans. Project staff was recruited quickly and at the requisite level.

3.5 Project implementation faced some, but no insurmountable obstacles. The design team failed to anticipate that the planned degree of cofinancing by GON and the other donors would not materialize — a combined total of US$8.7 million from Denmark and Norway. Although the government contribution was delayed and incomplete and the Danish contribution never came about,[19] this only affected the scope of the project to some extent but not the overall implementation of activities.[20] There were two informal suspensions of disbursements in 1999, due to disagreements between the Bank's project TTL and national project management over outsourcing some project activities to the Nigerien Organization of Volunteers for the Conservation of the Environment (ONVPE), a local NGO, whose performance was not at the level required. The MTR pointed out strongly that NRMP's regional teams had mainly performed desk work and had had limited direct contact with communities, that operational expenses had reached almost 70 percent of the allocated budget after only three years of implementation while community investments had fallen

18. Only 300, or 23 percent of the subprojects representing implementation of CBNRM plans, out of the total of 1,300 subprojects funded by the project, were funded in the first 3 years of the project, i.e. prior to the mid-term review. Subproject financing more than tripled after the introduction of the CBPP.

19. The ICR, paragraph 5.1, reported that the grant never materialized due to the political turmoil in Niger in 1997.

20. This was because government contribution was reduced by that amount which was counterpart to the Danish cofinancing, and the Danish funds were not earmarked for specific activities. Also, the sharp increase in community investment after the MTR increased the contribution from beneficiaries and reduced the need for government counterpart funding for the implementation of related activities.

behind schedule reaching only 14.6 percent of budget allocations. Therefore, it was felt necessary then to bring about a turnaround in the PMU to improve national project management. The PMU coordinator was replaced, field-level staff were extensively redeployed to allow for more direct engagement with the communities, and new rules on allowances and per diem were introduced to alleviate budget pressure on operational expenses. These measures, combined with the introduction of CBPP, improved operational efficiencies and reversed the disbursement imbalance that had existed before the MTR.

Outcome

3.6 Overall, there has been a noticeable reversal in the process of land and natural resource degradation in Niger according to a detailed assessment study in 2005 on the impacts of NRM projects on desertification control in Niger, and the NRMP has been one of several donor projects that has contributed to this achievement. NRMP successfully provided government institutions and communities with the tools necessary to better and sustainably manage the country's natural resources. The project outcome is rated **satisfactory**.

Table 2. Development Objectives and Outcome of NRM

Development Objective	Relevance	Efficacy	Efficiency
Assist rural communities in designing and implementing CBNRM plans and provide them with the necessary know-how, information, technical and financial resources, within a proper institutional and legal framework	Substantial	Substantial	Substantial
Assist GON in building national capacity to promote, assist and coordinate NRM initiatives within the framework of a long-term national program, as well as in designing a comprehensive set of national NRM policies and strategies	Substantial	Substantial	Not Rated
Overall Project Outcome		**Satisfactory**	

RELEVANCE

3.7 The objectives of NRMP were fully aligned with the GON's strategy in natural resources management at the time since it constituted the first five-year time-slice of the government's 1992 NNRMP. The GON had also prepared a Rural Code in 1993, designed to establish a legal and social framework for determining land use patterns and rights, which NRMP helped to implement. NRMP was fully in line with GON's Rural Development Policy Framework (RDPF), adopted in 1992 as well, which focused on NRM, the empowerment of rural communities, an improved policy-making process, and the redefinition of the role of the State and decentralization. The project objectives were fully in accordance with the Bank strategy at the time since two of the major objectives of the 2004 CAS were to reverse environmental degradation and improve food security. The CAS also supported further reforms in the agriculture sector, including giving local communities autonomy to manage natural resources, improving land tenure, and implementing the Rural Code.

3.8 NRMP's objectives remained highly relevant to the GON and Bank development strategies of more recent years. Both Niger's first PRSP in 2001 and the Bank's 2003 CAS, which supported that PRSP, focused on fostering integrated development of natural resources and environmental preservation through environmentally sound land use policies, a rational management of natural resources, and a continued implementation of the Rural Code in their second pillar: "***The development of productive sectors, especially in rural areas, to mitigate vulnerability and stimulate income generation.***" Integrated development of natural resources and environmental preservation were again stressed in GON's 2003 Rural Development Strategy and the 2007 PRSP.

3.9 The preparation of NRMP started in 1987 and took seven years. Final appraisal was delayed to incorporate lessons learned from other projects, implement some prior pilot operations, and due to an "in transition government" in the early 1990s. The final project design benefited from lessons learned and had the opportunity to conform to new directions in GON's development strategy. NRMP's objectives were well articulated and its design incorporated all ingredients to achieve its objectives — i.e. technical and financial assistance to communities for the design and implementation of CBNRM Plans; natural resource information update and networking, research and studies; policy formulation and implementation support; and capacity building for all stakeholders.

3.10 The project design preceded the Bank's requirement to elaborate a logical framework, and the project was not retrofitted with a logical framework later, because of the extensive M&E system that was devised at appraisal.[21] But retrofitting the project with a logframe would have simplified matters and made it possible to check project progress more readily, since the M&E system was very elaborate and complicated, which might have been confusing for those who had to use it, especially in Niger where national capacities were limited.

3.11 Taking all these factors into consideration, the overall relevance of project objectives and design is rated **substantial**.

EFFICACY

3.12 Despite often qualitative data, a clear trend in reversing environmental degradation has been observed in Niger, as reported by the Sahel Studies,[22] an assessment study published in 2006 on the impacts of NRM projects on desertification control in Niger. This study reviewed the long-term effects of the different NRM and land use planning activities for the past 30 years to answer the question whether it paid to invest in sustainable land management. It found that cereal yields increased by an average of 19 percent in the managed zones; the tree cover became 10 to 20 times denser despite rapid population growth; groundwater levels rose by a remarkable 7 meters in some areas allowing for a dramatic increase in garden vegetable farming; women's socioeconomic status improved; and rural-to-

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21. Two sets of indicators were defined at the design stage, for implementation progress and for impacts at the level of both objectives, and some targets were set. It was not possible to set ex ante targets for all indicators due to the demand-driven nature of the project's investments in the implementation of CBNRM plans.

22. The Sahel Studies are part of the reflections CILSS and its partners have initiated on the future of the United Nations Convention to Combat Desertification in the Sahel countries. The study took place in Niger in 2005 and concentrated on the Regions of Tillaberi, Tahoua, and Maradi where NRMP operated. It was carried out by a multidisciplinary team made up of scientists from the Moumouni University at Niamey, the Université Libre of Amsterdam, the US Geological Survey Center, and the International Resources Group.

urban migration became less significant. NRMP is one of several donor projects[23] that has contributed to these achievements. This PPAR, however, focuses on the achievements of NRMP's specific objectives as opposed to the long-term objectives of the government's National NRM Program.

3.13 Regarding its first objective, NRMP covered more than twice the area it targeted at appraisal,[24] which represented one-third of the entire population of the five participating districts. Every community that was assisted by the project developed its own CBNRM Plan and most communities effectively implemented their plans drawing on NRMP's funds earmarked for community subprojects.[25] Overall, a net area of 233,775 ha was covered with improved land management interventions by the end of the project, representing 11 percent of the total gross area of 2 million ha touched by the project.

3.14 NRMP put the users of natural resources at the center of the action, and demonstrated how to facilitate sustainable development at the grass-roots level. NRMP's approach elicited a constructive collective participation from the local communities, and a responsible attitude. Enthusiasm rose to record levels when NRMP pioneered the introduction of CBPP, an approach to further foster grass-roots decision making, and later adopted by other donors such as the EU in their Rice Project (PAFRIZ, 2002–2007). The introduction of CBPP was also cited by government officials to have contributed to GON's efforts in implementing its decentralization law. The project also established decentralized and community-driven financing mechanisms — or savings and credit unions (SCUs) — in several areas to support a multi-sectoral range of subprojects after its closing. The NRMP's remaining undisbursed funds, equivalent to US$1.7 million,[26] were used to form the SCUs and to help communities continue with implementing their CBNRM plans until the follow-on project — Community Action Program (PAC) — was approved in 2003.

3.15 Communities met by the PPAR mission enumerated many community benefits:[27] technology transfer, preservation and increased productivity of their lands, higher value put on the natural resources belonging to them, higher revenues, and literacy. They said that it

23. Projects such as the IFAD Special National Project, the GTZ Agro-Sylvo-Pastoral Project, the CARE International Agroforestry Project, and the EU Tahoua Rural Development project.

24. The original target was to cover 380 rural communities (then understood as villages or hamlets, with an average population of 700), or a total of 270,000 people, living on a land area of 1 million ha. Ultimately, the NRMP touched 126 rural communities (including 568 villages and hamlets) with an average population of 4,000, or a total of over 566,000 people, living on a land area of 2 million ha. This outcome is related to the fact that beneficiaries could freely determine the scope of the villages/hamlets they considered to envelop their community, perceived as a group of people recognizing that they share many things in common, usually a land area, history, culture, beyond ethnic and language barriers, and determined, under this project to share some of their future.

25. A bit less than one-quarter of the 1,300 completed subprojects directly benefited women.

26. The bulk of the project funds, i.e. for the implementation of the CBNRM plans, were disbursed very slowly up to the mid-term review. After the changes effected in project management and the introduction of CBPP, disbursement increased more than 3-fold, as described under "Design and Implementation" above. However, at closing, six months behind schedule, some funds earmarked for implementation of CBRNM plans remained unused because some procurement and receipt of contracts could not be finalized by closing. US$1.7 million of these funds were then used to form the SCUs.

27. The Niebere-Bella and Dar Essalam communities in the Birni district.

would have been very difficult to make a living without the NRMP. They particularly praised subproject financing whether this was from NRMP's funds proper or the established credit unions. One community of farmers was able to purchase livestock and then double its herd, thereby increasing the fertility of their soils by adding manure.[28] A group of women were able to prevail over their husbands to lease them a large area of land to plant vegetables irrigated with the assistance of the project. Now they have extra income and a more diversified source for feeding their families. One farmer benefited from 4 increasingly larger loans from his community's credit union. His net income from the investments he made in fattening cattle was about US$350, not a small amount in rural Niger. He used this extra income to invest in the rehabilitation of some of his lands and to meet the needs of his family for food and clothing. The credit unions of these communities were reported to have no loan recovery issues, and to have increased their operating capital by about 30 percent since their establishment in 2002.

3.16 However, on the downside, GTZ who has financed two NRM projects since the 1980s in close vicinity to NRMP — the Agro-sylvo-pastoral Project (PASP, 1998–2003) and the Fight Against Poverty (LUCOP, 2004–2006) — has reported that communities assisted by NRMP are not engaging in spontaneous sustainable NRM actions. GTZ has further said that CBPP did not by itself bring about a change in attitude towards better NRM as the project's design stressed more training on the financial aspects rather than the technical. Other important reasons include the fact that NRMP continued to finance subprojects until its closing, to which community co-financing only contributed 5 to 10 percent. Unfortunately, this was echoed by the president of the Niébéré-Bella community in Birni, who said that now that they are no longer funded by NRMP, the community suffers and still does not feel confident enough to be proactive and seek financing from other donors.

3.17 With respect to the second objective, NRMP presented a revolution in monitoring natural resources and brought together the tools and elements necessary for decision making. The project was instrumental in strengthening national capacities for mapping and environmental monitoring through equipping the National Geographic Institute (IGNN) and the Ministry of Environment's Technical Assistance Unit (UTA), and training their staff. As a result, IGNN produced the first reliable digital maps in Niger which used GIS to elaborate digital geo-reference maps with six layers. This was highly appreciated by the GON and donors since, previously, Niger could only copy its old maps locally or have them reprinted in France, and was unable to meet the donors' needs for specific maps necessary to plan and supervise development interventions. This also enabled the Institute to create derivative products such as town and touristic maps. Its map sales, which bring in an average CFAF18 million, or US$26,000, a year, have enabled IGNN to invest in more equipment. The UTA built a comprehensive database on natural resources and a Natural Resource Information Network (SIRN), enabling it to produce thematic maps based on the basic IGNN maps, such as a land use map for Niger's agricultural zone south of the 16th parallel. UTA now follows the evolution of natural resources and land use and provides data to decision makers, donors, and local communities to develop sustainable NRM plans. Their work has made it possible to

28. This community lived next door to a Peul village, known for their herds and pastoralism. However, due to deep rooted mistrust and conflicts, the Peul community did not share or sell its manure produce to the farmer community which had no other means to add manure to their lands to increase their productivity.

track the encroachment of the Grand Sahara from Libya and Chad. Both entities are being contracted by GON and donors to work on more projects.[29]

3.18 The density and substantive training supported by NRMP was highly appreciated by all the partners in development — GON, donors, and local communities alike. It facilitated the drafting of manuals and guidelines on NRM; the development of simple, standard contract templates adapted to local community needs and capacities; the design and implementation of simple participatory monitoring and evaluation systems; and the adaptation of procurement and disbursement procedures to rural communities, enabling their tendering and supervision of subprojects. NRMP's training left a residual effect and an imprint on Niger's development course: key trainees found themselves elected by the communities to municipality councils, and extension agents formed NGOs that partnered with other projects at NRMP's closing. Through the financing of studies and consultancies, NRMP set the stage for policy formulation and implementation. Project assistance contributed to the drafting, implementation and monitoring of the Forestry Code; the National Action Program of the Convention to Combat Desertification; the Rural Development Policy Framework; the Law on National and Regional Development — or Decentralization law; and Niger's first PRSP in 2001.

3.19 NRMP, along with other Bank and other donors' projects,[30] also contributed to the implementation of the Rural Code, Niger's land tenure policy, which creates a platform for dialogue and peaceful coexistence between farmers and pastoralists, resolving land ownership and tenure issues in the project area of intervention.[31] NRMP financed studies to develop some texts of the Rural Code and the establishment of Land Tenure Committees (COFOs) in 5 Districts (against only 3 Districts planned at appraisal). In addition, 200 grassroots COFOs were created at the village level. These COFOs are playing a key role in administering legal land titles in compliance with the Rural Code. Land tenure transactions were delivered by these COFOs which facilitated project implementation as approval of subprojects necessitated clarification on land tenureship in order not to create conflict. Opposition by some village chiefs to the implementation of the Rural Code has been recorded nationwide because it removed their power over allocating lands, but mitigation measures have been incorporated in the Code.[32] One incident in the project area was reported

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29. For example, IGNN is currently negotiating an agreement with the Ministry of Finance to digitize the land tenure registry for about CFAF100 million or US$207,470. UTA has become counterpart to an Italian-financed project, the Training and Support to Environmental Management Project (PAFAGE), which assists GON in the environmental management decision making process. Both entities are also being asked to produce various maps to GON and donors.

30. Niger has agreed with the donor community that all pertinent donor projects would help in the formulation, refining, and implementation of the Rural Code. The Bank has been doing so through training the Rural Code staff, financing studies to develop some texts within the Rural Code — which is still an evolving document — and establishing and equipping Land Tenure Committees (COFOs) at the district, commune, and community levels.

31. One farmer expressed his extreme satisfaction for getting his land title after having paid CFAF10,000/ha, or US$14.00, for surveying and a final CFAF1,000, or US$1.40, to get his legal title. Although this could be an enormous expense to most of the rural population in Niger, he said that this was little compared to the peace of mind he got and the knowledge that his heirs will not have a problem ascertaining their land rights.

32. Mitigation measures include a village committee assisting the chiefs in vetting requests for land titling, fully absorbing the village chiefs in the democratization process by making them members of the COFOs at the

whereby ownership of a piece of land was contested, but this was resolved quickly through the intermediation of the community. The PPAR mission was not able to collect sufficient data to determine whether women were treated differently when it came to approving and issuing land titles in the project area. However, in general, women do not have as easy access to land as men, although this may improve with the advent of the Commission to Eliminate Discrimination Against Women (CEDEF) program which is already ratified by Parliament. The Permanent Secretary of the Rural Code told the PPAR mission that it would be better at the moment to concentrate on giving widows the right to own and manage the land inheritance of their underage orphan children.

3.20 In spite of the shortcomings mentioned in this PPAR in relation to the project's first objective, overall project efficacy is rated **substantial**. The NRMP elicited a concerted response by communities to manage their natural resources in a sustainable way, and helped the GON increase its capacity to coordinate, formulate and implement NRM policies and strategies, all of which contributed to the noted reversal in environmental degradation in Niger.

EFFICIENCY

3.21 The project preparation team did not attempt to estimate a financial rate of return (FRR) because NRMP included a large institutional support component whose benefits were difficult to quantify, and because of the demand-driven nature of subproject investments which did not allow a precise ex-ante determination of the final composition of community activities and their success rate. However, illustrative benefits and costs from a sample of activities estimated the net present value (NPV) at CFAF20,000 or US$29,[33] and the internal rate of return (IRR) to range from 16 percent to 35 percent. Two socioeconomic impact assessment surveys (SEIAS) were carried out by independent consultants hired by the project, one at MTR, and the other at project closing. The social or economic rate of return (ERR) for the entire project was estimated at 41 percent, all implementation expenses accounted for. The ERR increased to 104 percent when operational costs were excluded. The ICR calculated the average NPV for a package of 10 income-generating activities (out of the approximate 15 adopted by a large number of farmers) to be about CFAF37,000 or US$53. Activities initiated by women though were among those with the lowest NPV (e.g., peanut oil production, and small animal fattening).[34]

3.22 The NRMP did not appear to be as financially efficient as other similar projects such as the GTZ PASP. Based on rough calculations made by the PPAR mission, NRMP's costs per ha of rehabilitated land were about US$62 per ha compared to about US$24/ha for PASP — about 158 percent more to achieve the same result. One explanation for this is that the NRMP financed land rehabilitation and NRM subprojects at an average of 90 percent, while PASP followed a decreasing incentive structure over its 15 years of existence (1988–2003),

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commune and department levels, and the possibility to complain to the local administration and justice officials if problems persist.

33. Based on US$1 equal CFAF697 in 2002.

34. NPVs ranged from CFAF9,000, or US$13, for peanut oil production to CFAF304,900, or US$437, for nursery production. These values can be juxtaposed against the cost of one family labor day, which ranged from CFAF750 or US$1.1 to CFAF1,000 or US$1.4 in the project zones.

which totally stopped in 1998.[35] Nonetheless, the NRMP, on its own, generated a high return on community investments, and thus efficiency is rated **substantial**.

Risk to Development Outcome

3.23 Regarding sustainability of CBNRM plans, the project effectively demonstrated that transfer of responsibilities to rural communities can lead to rapid sustainable development gains. A number of first-generation communities appear to have reached a degree of autonomy in terms of NRM planning and implementation. Some second generation communities have also emerged, aided by the SCUs created with the encouragement of the project and the deposit of US$1.7 million, the project's undisbursed funds at project closing, with an average amount per community of US$14,000 in September 2002. These SCUs have become an important source of community self-financing, and in a few cases, such as Toudou in Boboye District in 2002, the CBNRM plans were financed using SCUs resources at twice the amount provided by the NRMP project. These SCUs appear to be well managed and sustainable as illustrated by the Asusun Raya Karkara SCU in the district of Dogondoutchi, whose members have increased by 61 percent since 2003, whose deposits and guarantee capital increased nine-fold, and whose lending volume three-fold. In parallel, its non-repayment rate decreased from 12 percent in 2003 to 8 percent in 2007. However, the noted lack of pro-activity and spontaneity in some communities to seek additional funding from other donor or their own sources may eventually hamper a continued progress in the preservation and development of natural resources. This PPAR is of the opinion that this could very well be true to a varying degree according to the capacity level of the different communities, but is certainly exacerbated by the fact that Bank projects are of a relatively short duration, compared to those of some bilateral donors who are in the country for the long haul and whose projects are much smaller in geographical coverage, thereby allowing them to give more individual attention to the communities.

3.24 On the institutional and NRM policy formulation and implementation front, NRMP helped set the stage for an irreversible institutional process for monitoring and evaluation of natural resources by building capacity within governmental institutions to collect, process, digitize, and interpret data following modern technologies, as well as produce reliable maps, all of which can efficiently inform decision makers in the elaboration and implementation of NRM policies. The two institutions at the base of this process, IGNN and UTA, have been able to engage with other donors and to offer their services on a commercial basis to the government and donors alike, as described under the section "Efficacy" above. In addition, IGNN has been able to reinvest in its capital equipment and enabled to participate in the Global Mapping Project — a collective global effort to produce an environmental map of the world, including land use at a 1 kilometer square resolution, within the Agenda 21 framework adopted at the Earth Summit in 1992. In parallel, UTA has been upgraded from a unit to a Division — the Division of Statistics and Forestry Cartography — within the Ministry of Environment.

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35. The PASP financed land rehabilitation and NRM activities through a food-for-work program from 1988 to 1993, and specific food aid activities before the harvest season, when food shortages occur, from 1994 to 1998. Financial support to communities stopped totally up to the end of the project in 2003.

3.25 The establishment of district and village level COFOs, which are now operational and delivering land titling transactions, has advanced the implementation of the Rural Code. The project has also aided GON's decentralization policy through the introduction of the innovative CBPP process which has put communities in charge of the implementation of their own development plans. A spirit of sustainable management of natural resources has been largely instilled in government and local stakeholders through intensive awareness and training programs, which is now being perpetuated through key community leaders elected to office, emerging NGOs whose members have been trained by NRMP, and communities which have been awakened and are able to elaborate development plans centered around the sustainable use of their natural resources. Also knowing that community-level NRM will continue to benefit from external financing for the foreseeable future through projects such as PAC which is the first phase of an APL, and the GTZ LUCOP, the risk to NRMP's development outcomes is considered **moderate**.

Bank and Borrower Performance

BANK PERFORMANCE

3.26 The Bank took its time to design NRMP and incorporated carefully analyzed lessons learned from other projects and its own pilot operations in other Bank-financed projects. The final project design had the opportunity to conform to new directions in GON's development strategy. Supervision was extensive and thorough, and was aided by missions fielded by Bank Resident Mission staff on an *ad hoc* basis. Two socioeconomic impact assessments occurred, one in 2000 and the other in 2002. The project team dealt effectively with implementation issues as these arose such as recommending the redeployment of project field staff; tightening control over project operational expenses; appraising the follow-on PAC project; and preparing a work program covering the transition period. Most importantly, the project team introduced CBPP which improved project performance, and accelerated implementation and disbursements. This placed communities at the center of the tendering process for subprojects as well as in the driver's seat for managing their own NRM plans, which facilitated the achievement of project objectives and increased beneficiary ownership and the sustainability of NRM plans. Overall, Bank performance is **satisfactory**.

BORROWER PERFORMANCE

3.27 NRMP was developed at the request of GON whose commitment to the project and its objectives remained consistently high throughout the project duration. It worked in close collaboration with the Bank to prepare the project, regarded as a key instrument to advance the RDPF which highlighted land degradation as the most serious threat to Niger's development strategy. MDR provided strong support to the PMU and gave it a large degree of autonomy over project implementation. MDR was always keen to follow up on supervision recommendations as exemplified by its support for the Bank's project TTL recommendation to introduce CBPP procedures despite some internal objections, viewing this as part of the implementation of its decentralization policy. MDR also gave communities autonomy in owning their NRM plans. It went along with the Bank's project TTL recommendation to change national management of the project to improve project performance. Disagreement over the award of a contract to one NGO caused the Bank to informally suspend disbursements twice for short periods. But this situation was resolved quickly. Towards the end of NRMP, MDR helped ensure the sustainability of NRMP's achievements by transferring NRMP's physical assets, and as much of its human assets as possible to the follow-on PAC project. Although the GON did not pay its counterpart contribution in full or in a timely manner, project implementation did not suffer much.

3.28 As to the implementing agency, its performance was only marginally satisfactory during the first three years of project implementation, but improved dramatically after the change in management, and the speedy implementation of the Bank's recommendations to redeploy field staff and to put tight controls on operational expenses. This contributed to a greater degree of direct engagement with communities in the field, a significant strengthening in the PMU's organizational capacity to implement CBNRM plans, and more rational use of the operational budget. This, together with the introduction of the CBPP procedures allowed the implementation of more than 77 percent of the community projects in the remaining life of the project. Overall, Borrower performance is **satisfactory**.

Monitoring and Evaluation

3.29 The project design team gave prominent attention to monitoring and evaluation within NRMP. An international consulting firm assisted the PMU in the design of an elaborate M&E system which covered all aspects of project implementation progress, outputs, and outcome. The project selected four primary indicators to monitor project performance during annual reviews — covering NRM plans approved, proportion of village land placed under sustainable management systems, implementation level of CBNRM plans, and the level of cofinancing by local communities. Impact monitoring and evaluation was performed at three levels: the individual investment level to appreciate the efficacy of each technology; the community level to measure the effects of the package of actions proposed in the CBNRM plans; and the overall program level to appreciate the degree to which the institutional, legal and technological support activities created the proper enabling environment for project's success. Reporting was regular and comprehensive on a trimestrial and annual basis.

3.30 A national natural resource assessment was carried out by the project towards the beginning of its implementation, thereby providing a baseline for monitoring and evaluating all NRM activities. Project monitoring was managed by the PMU's M&E Director and carried out by the project's regional teams assisted by local technical staff and the full participation of community members. M&E performance was put under tight supervision which helped improve M&E processes and data collection and management. It also served as a model for a national M&E system at the level of the UTA. The M&E was utilized by the Bank and national project teams and helped take corrective actions to speed up project implementation and increase project performance such as the introduction of the CBPP and tighter controls on the project's operational expenditures. Benefits accruing from M&E utilization also included the updating of the national database on natural resources and the elaboration of thematic maps; the drafting of manuals and guidelines on NRM; the discovery of the Grand Sahara encroachment from Libya and Chad which is prompting GON to direct its efforts to address the issue; and the ability to participate in the Global Mapping Project to produce an environmental map of the world, including land use. NRMP's M&E also guided the appraisal of the follow-on PAC project. M&E is rated **high**.

4. Agro-Pastoral Export Promotion Project (APEP)

Objectives

4.1 The Agro-Pastoral Export Promotion Project (APEP)'s objective is, as stated in its PAD, "***producers and exporters are efficiently supplying the agro-pastoral export market, reacting to market changes, and seizing opportunities.***"[36] The project was a private sector development intervention, and was to give private sector enterprises and producers the tools for increased production, profitability, and marketing of agro-pastoral products, and to increase exports to regional and international markets.

Design and Implementation

4.2 APEP was a five-year project focused on technical assistance and the alleviation of physical bottlenecks to export marketing through a matching grant facility. It had four components:

- **Trade Promotion and Information Services** (US$2.10 million at appraisal, 17 percent of project costs): a cluster of activities including product and market identification and development, and trade information services.

- **Institutional Support to Producer and Exporter Organizations** (US$1.30 million at appraisal, 11 percent of project costs): a variety of support and advisory services to existing and potential organizations.

- **Export Promotion Grant Facility** (US$6 million at appraisal, 50 percent of total project costs): a demand-driven matching grant facility made available to the organizations assisted or formed under the second component.

- **Project Management** (US$2.65 million at appraisal, 22 percent of total project costs)

4.3 The Project Appraisal Document (PAD) identified eight risks, expressed as assumptions, relating to the efficient use of information and research findings provided through the project; producers' and exporters' willingness to organize, train, cost-share, and ability to generate eligible proposals for subprojects' financing; and the ability to secure competent local project management and implementation capacity. The project design team rated two of the eight risks as modest and the rest as negligible, and concluded that the overall risk rating was modest. The project design factored in such mitigation measures as a proper communication and dissemination strategy, outsourcing, flexible cost-sharing, an active M&E, and the hiring of competent staff.

4.4 A Quality Enhancement Review (QER) of the project in 2000 raised a broad range of issues: highlighting the need for a more precisely defined objective; questioning whether the project was designed in a way that would help address the most critical constraints in the

36. Project Appraisal Document, page 2.

export sector;[37] underlining the highly supply-driven nature of the advisory services; calling attention to the ambitious nature of the terms of reference for the project's Steering Committee (CSO) which was also responsible for vetting subproject proposals; expressing reservations as to whether the required local capacity existed; and identifying significant weaknesses in the analysis of the environmental impact of the project, deeming it too general with limited mitigation measures. The QER further found that the project monitoring system was one of the weakest aspects of the project design, an issue that was again raised by the mid-term review. It concluded that the difficulty to recruit local project management and secure implementation capacity constituted by far the biggest risk for this project.

4.5 The project benefited from stable macro and fiscal policies and GON's continuing and strong commitment to export and private sector development. Nonetheless, implementation problems appeared early on, and several of the risks identified came to pass. It was harder than thought to recruit key staff such as the procurement specialist, a position that took more than two years to be filled satisfactorily. Inexperienced staff, and lack of internal controls resulted in a series of ineligible expenditures and misappropriation of funds. Procurement delays of goods and services delayed implementation of some project activities.

4.6 The project did not develop a coherent export promotion strategy due to a number of factors:

- Critical studies were delayed;
- The PMU was not proactive in communicating and working with stakeholders to ensure that subprojects were designed and implemented with a view to improve export performance;
- The CSO's composition and performance[38] adversely affected the decision making process for approving subprojects;
- The subproject approval process experienced lengthy delays as the CSO failed to maintain its planned meeting schedule;[39]
- A misplaced add-on focus on poverty alleviation,[40] not included in the original project design, led to the approval of subprojects, even if they had a weak dossier and

37. These are: (a) **Lack of information and adherence to quality standards in agro-pastoral production**: ignorance of prices, selling opportunities, and needs of foreign consumers; (b) **Poor marketing infrastructure**: Inadequate transport routes and insufficient storage facilities; and (c) **Inadequate access to financing**: No rural development banks exist, and most producers and exporters have limited capital and no collateral, and are not eligible for commercial loans.

38. The CSO was composed of nominated individuals functioning on a pro bono basis, and the proposal approval process did not have adequate safeguards against political interference or conflicts of interest.

39. The chairman of the CSO explained that convening the committee was a factor of the number of quality proposals to vet. Since that number was small, there was no need to meet as frequently as planned.

40. The project started out as a non-poverty targeted intervention (PAD, page 1), but somewhere along the line after Niger's first PRSP was ratified in 2001, its focus shifted under pressure to have development investments benefit the poor to the largest extent possible. In one example, the main justification given by the CSO for approving a weak dossier has been "poverty reduction" — i.e., that the subproject deserves to be financed because it was submitted by a group whose members are said to be poor. The poverty focus here was misplaced, as the project is more likely to benefit those who are already somewhat skilled, have a certain business acumen, and are already engaged in productive agricultural enterprises.

export prospects, just because they were submitted by groups whose members were said to be poor.

4.7 A deficient quality of subproject proposals resulted in an unacceptable rejection rate of 77 percent in the first period of project implementation. This was mitigated, after the midterm review, by creating regional committees for the support of project activities (CRAAPs) to help the PMU pre-screen proposals before submittal to the CSO for final approval, which helped reduce the reject rate but caused a significant overrun on the budget allocated to project management. Finally, the M&E system did not function as intended and did not help influence decision making.

Outcome

4.8 Although there were some positive outcomes from the project in relation to the organization of the sector and individual revenues from exports, greater awareness of the factors that contribute to a successful agro-pastoral export performance, and a better definition of the potential of the agro-pastoral export sector, the project's influence on aggregate national production and exports was negligible. Overall project outcome is rated **unsatisfactory**.

Table 3. Development Objectives and Outcome of APEP

Development Objective	Relevance	Efficacy	Efficiency
producers and exporters are efficiently supplying the agro-pastoral export market, reacting to market changes, and seizing opportunities	Modest	Modest	Modest
Overall Project Outcome		Unsatisfactory	

RELEVANCE

4.9 The objectives of the project were fully aligned with the government's and the Bank's development and assistance strategies at the time. The Bank's 1997 CAS stated that "***the promotion of open economic policies and regional linkages to take advantage of external growth opportunities***" as one of its three principal goals. The GON adopted an "Agricultural Growth and Rural Poverty Alleviation Strategy" in 1999 which established agricultural export development as a key element of the government's economic policy in an overall context that was conducive to increased revenues from exports.[41] The government's first PRSP in 2001 provided a framework for implementing sectoral strategies that sought to achieve significant progress towards the Millennium Development Goals (MDGs), and set forth a national development program around four central pillars, two of which were: "***the development of productive sectors, especially in rural areas, to mitigate vulnerability and stimulate income generation***," and "***the strengthening of institutional and individual capacity within and outside Government, at the central and local level.***" The PRSP also

41. In preparation for regional integration under the West African Economic and Monetary Union (WAEMU), Niger had implemented a comprehensive tax reform in the 1990s and reduced and simplified external trade restrictions. In parallel, the devaluation of the CFAF in 1994 boosted the competitiveness of exports on regional markets.

identified several sources of economic growth including expanded trade in agro-pastoral products within the subregion and beyond. The Bank's CAS of 2003 was fully aligned with the 2001 PRSP in this respect.

4.10 The GON issued its Rural Development Strategy (SDR) in 2003, and the related action plans in 2006. The SDR revolved around 10 structural programs, one of which is "***professional groups and organization of the commodity chains***" with four subprograms covering capacity building for professional organizations, trade in agro-pastoral products, and provision of growth opportunities in the rural sector. The newly approved PRSP in 2007, echoed the SDR in that it proposed to support activities within a rural development cluster program such as diversification of crop production (targeting crops for which Niger has a comparative advantage such as onions, niébé, gum arabic, sweet peas), livestock and byproducts production (specifically meat and skins and hides), and the development of marketing infrastructure (such as facilities for storage and conservation, and export terminals). These activities were seen as an engine of accelerated and sustainable economic growth.

4.11 Thus, APEP's development objective clearly reflected both the GON's and the Bank's past and present priorities, but it was too vaguely formulated and overly ambitious to achieve in 5 years in light of the vastly informal and deeply unorganized characteristics of the agro-pastoral export sector at the time.

4.12 The project components and activities were aligned with the PDO and could have contributed to the achievement of positive outcomes except for the significant shortcomings in project design and implementation arrangements. This PPAR concurs with the ICR that project design was unsatisfactory, since the project was not designed in light of the country capacities and business conditions. The principal shortcomings could be summarized as follows:

- *Lack of a strategic, integrated approach to export development*. This is evidenced by several examples: First, it was known from the appraisal and midterm evaluation reports that enterprises and cooperatives that were already active in the subsectors had the highest potential of bringing in increased export revenues. Nevertheless, this group of beneficiaries represented less than 25 percent of total beneficiaries financed through the Export Promotion Grant Facility. Second, the project had an imbalanced emphasis on activities. It emphasized much more the development of production capacity among smallholder farmers and on forming individual producer and exporter groups as opposed to linking them together to develop sustainable supply chains that could provide feedback on and respond to market demand.[42] The project preparation team probably felt that representatives of producers and exporters would work harmoniously together once they were grouped in one commodity chain association. Here, the project design failed to take into consideration, for example, the traditional informal approach to marketing, or the level of individualism, illiteracy, and poverty

42. The mid-term and ICR evaluations identified numerous cases where small producers had achieved a production increase but nevertheless, saw their revenues decline since they were unable to establish linkages with the export market.

which were not conducive to a speedy and efficient interaction and cooperation between stakeholders.

- *Inadequate management structure for the Export Promotion Grant Facility*. At project design, there was a growing consensus within the Bank that matching grant funds, in order to be effective, should be managed by independent technical experts, preferably from the stakeholder private sector, with clear and transparent criteria and ex-post controls by government. The design of APEP's matching fund did not reflect this consensus,[43] but rather gave responsibility to approve subprojects to the CSO which was led by government officials working on a pro bono basis. The result was a cumbersome approval process without adequate safeguards against political interference or conflicts of interest, and no coordinated action towards improving agro-pastoral export performance.

- *Inadequate number of the PMU staff and regional representation*. For a project that was national in coverage and innovative in nature, PMU staffing was glaringly deficient. The central PMU was composed of one coordinator, 9 specialists, and two satellite offices were staffed with one PMU representative each. Even with the possibility of outsourcing some tasks, project staff were not able to get a grip on project implementation.

- *Inadequate awareness of the significant implementation risks*. The PAD listed eight risks, deeming most of them negligible, thereby removing the necessity for project design to devise stronger mitigation measures. The implementation experience showed that most of these risks did significantly hamper the achievement of the project's objective.[44] One risk was not anticipated at design, relating to the capacity of the PMU to screen subproject proposals. Indeed, the PMU required continuing capacity building support throughout the duration of the project and had to be reinforced by the addition of the CRAAPs, which in turn contributed to a significant cost overrun for project management (by about US$2 million, equivalent to twice the original allocation).

4.13 The PAD included an extensive logical framework with numerous output and outcome indicators at the PDO and component levels. Since the PDO was vaguely stated, the indicators did not fare better, and were to a great extent, inadequate, unclear and not measurable. They were not time-bound either. After the midterm review, the PDO indicators

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43. As mentioned in the ICR, page 15, the original project design called for complete delegation of project management to a team of independent experts. At the objection of GON that the capacity for managing such a project did not exist in Niger, a compromise was reached whereby the PMU was to manage components 1 and 2, and assess the validity of sub-project proposals under component 3 — the core of the project. The final decision on these proposals was to be taken by the CSO.

44. Examples included the inability of many producer and exporter organizations to articulate their demand effectively, which resulted in an initial 77 percent reject rate in proposals; the difficulty to mobilize expert project staff which resulted in ineligible expenses and misappropriation of funds; the system abuse in accessing matching grants whereby many associations were associations in name only and in reality were a front for a few individuals to gain access to grant financing; and the faulty decision making process on the part of the CSO in selecting subproject proposals to be financed by the project, many of which were neither economically viable nor alleviated poverty if this was the intention.

were revised and made more specific and measurable, but this revision did not have any bearing since the M&E system never monitored outcomes but rather, only project inputs and some outputs (discussed further below). While an environmental analysis was conducted at project preparation, the QER pointed out that this contained limited mitigation measures and inadequate guidance on responsibilities, scheduling, costs, and procedures for processing projects.

4.14 The significant shortcomings in the design and implementation arrangements indicate that the project did not incorporate the extensive lessons of past operations relating to clear objectives and performance indicators, an effective monitoring and evaluation system, the sustainability of investments, and eliciting an entrepreneurial spirit among beneficiaries.[45] Therefore, in spite of the relevance of the project PDO, overall relevance is rated **modest**.

EFFICACY

4.15 Project outcome indicators — increased production and exports of project beneficiaries, and decreased transport costs — were not monitored on a regular basis. But according to one-time data compiled by the project M&E towards the end of the project, APEP assisted the export associations in signing 15 export contracts worth of about US$846,000 during the life of the project. This represented 0.4 percent of national exports of agro-pastoral products over the same period. Data compiled by the PPAR mission[46] indicates that national export revenues from the commodities supported by the project[47] decreased by an average of 21 percent from 2002 to 2006. Only two commodities supported by the project showed an increase in export revenues for the same period: gum arabic whose revenues quadrupled, and hides and skins whose revenues increased by 20 percent. National export quantities of all commodities supported by the project decreased on the most part, except for onions, gum arabic, and hides and skins which increased by 39 percent, 365 percent, and 27 percent, respectively.[48] This leads to the conclusion that APEP could have used its resources better by concentrating on fewer commodities, those that were the most remunerative and had a chance to impact exports the most.

4.16 The effects on individual beneficiaries' revenues were mixed. Evidence compiled at the time of the mid-term review indicated that some beneficiary producers saw their revenues decrease although their production increased because they could not connect with export markets, so that their incremental production did not bring in the additional hoped for

45. PAD, pages 11 and 12.

46. Calculations based on national statistics published by the National Institute of Statistics (INS) and on data in select donors reports. Figures are not available for all commodities supported by the project.

47. The agro-pastoral commodities supported by the project were seven: gum arabic, livestock/meat, niébé, onions, sesame, skin and hides, and sweet peas.

48. Several factors come to play in the decreasing trend in national exports of agro-pastoral products over the 2002–2006 period. Production and exports of agro-pastoral commodities were severely affected by the 2004 drought and locust infestation. Crops and animals were lost due to lack of water, feed and greater vulnerability to disease. In addition, official export statistics do not record exports made through the informal channels, which are said to reflect somewhere from 10 to 50 percent of total exports. It is noted here that international prices did influence export revenues as in the case of onions, whose exports in tonnage increased but the monetary equivalent decreased.

revenues.[49] On the other hand, the ICR reports that business turnover for some export associations increased by 10 percent to 500 percent — the latter being one exceptional case of an onion exporter. Empirical evidence collected by the PPAR mission indicated that some beneficiaries saw a significant increase in export revenues as a direct result of APEP's assistance, from 35 percent to 100 percent.[50] All these beneficiaries showed a marked entrepreneurial spirit, market knowledge, and a keen sense of business which contributed to their success.

4.17 MDR and donors credit APEP for being the first project in Niger to work on the commodity chain approach. Other donors followed suit, such as FAO which financed the elaboration of a national strategy for gum arabic in 2002–2003, and the EU which financed an agro-pastoral census in 2004. APEP had an important strategic effect by demonstrating the export potential for agro-pastoral products, and making Niger known on the regional and international level as an exporter of agro-pastoral products.[51] APEP had a significant effect on several vital aspects of the agro-pastoral export sector, including (a) improving the availability and quality of information on product prices and market opportunities;[52] (b) assisting in the creation of a national standards committee in 2004 inside the Ministry responsible for Commerce which issued two project laws on standards for onions and dried meat in 2006; and (c) most importantly, helping to restructure rural and export organizations around commodity chains — a highly appreciated benefit since it helped stakeholders group into commodity-centered associations, to get to know each other, to work together, and to begin to explore the collective interest and benefit. The final achievement of this activity was the creation of the Niger Agency for Export Promotion (ANIPEX), the apex organization of agro-pastoral producer and exporter association, lodged at the Chamber of Commerce to create synergy and to foster sustainability. By way of transition arrangements, the responsibility for providing services to producer and exporter organizations at project closure was transferred to ANIPEX. Several donors considered the idea and establishment of ANIPEX to be the most important outputs of the project.

49. Midterm Review aide-mémoire, page 3, and ICR, page 8.

50. This is illustrated by two examples: (a) A livestock fattening enterprise, headed by a woman, which benefited from APEP through investments in infrastructure (fences, storage hangar, milking machines, etc.). This business was able to increase the efficiency of its operation, double and increase the productivity of its stock in animals, and increase its exports after contacts made with the assistance of APEP. The woman business manager's share of the benefits accrued allowed her to send two of her children to study abroad; (b) An association of niébé exporters (SOCOPAP) which benefited from a storage hangar near the border with Nigeria, trade promotion events, etc. Its revenues from exports increased by 35 percent since project closure in 2005, as they were able to penetrate new export markets in Ghana and Togo as a direct result of APEP's trade promotion activities. They cite other benefits such as increased business net worth and the ability to access larger loans because of their increased turnover.

51. APEP succeeded in presenting Niger as an exporter of gum arabic with an important tonnage of good quality, according to GON and GTZ.

52. Information was disseminated through several publications, two of which were published by the project, and a project website. Trade promotion events and exchange visits of Nigerien and neighboring countries' traders took place with project support. A number of studies were commissioned covering export potential to the subregion, quality norms, etc. APEP also provided capacity building support for the crop and livestock Market Information Systems (SIMs) which provided information on national markets; and the creation of a freight exchange mechanism which aimed to provide information on transport services.

4.18 However, this APEP-sponsored institutional reform in the rural and export sector generated much criticism as well. APEP should have placed more emphasis on instilling an entrepreneurial and professional spirit in more stakeholders, and on strengthening the linkages between producers and exporters so that information on opportunities and market standards would flow freely, and exports of high quality incremental production would result. The PPAR mission found evidence to support these criticisms. Producers and exporters expected to have the costs of their market prospection travels covered by outside entities such as donor projects, ANIPEX, or the Chamber of Commerce. Many of the organizations that were formed during the project time period no longer exist, suggesting that many were facades, formed only to access project funds. The production-export sector is still not professionalized — contracts are not formalized in writing, traders sell what they can get from farmers, not what the market asks for, and little or no feedback is given to farmers on market needs. ANIPEX draws much of this criticism since it was not able to generate funds and, thus, could not provide services to its members in the form of training, collection and dissemination of prices and data on export markets, and connections to new export markets. It was not able also to recruit new members, and to assume the role of a strategic partner or forge relationships with other donor projects to help export the extra production of producer organizations supported by other donors. Its membership dwindled since APEP closed — ANIPEX now counts only a dozen members compared to 100 members at project closure.

4.19 APEP's positive outcomes are the reasons why MDR considers the project a success, while the ICR views the outcome as unsatisfactory. MDR did not expect to significantly increase agro-pastoral exports by the end of the five-year project, when no financing was provided directly to farmers for inputs and to exporters to buy the produce and transport it to its destination markets. MDR viewed APEP as only preparing the ground, an essential and unavoidable step for increased exports.

4.20 However, in light of APEP's stated objective, its few strategic and institutional successes, and notwithstanding its positive outcomes on select individual beneficiaries, this PPAR rates efficacy as **modest**.

EFFICIENCY

4.21 The PAD had estimated an economic rate of return (ERR) of 48 percent to demonstrate the soundness of the project. This analysis was based on a cost-benefit methodology that calculated economic and financial returns using the "with-project and without-project" criterion. The ICR questioned whether this methodology was appropriate given that it applied primarily to projects with benefits measurable in monetary terms, and stated that data was not available to conduct a reliable ex post cost-benefit analysis. Three of APEP's four components — information services and trade promotion, capacity building, and project management — were difficult to quantify in monetary terms and only the Grant Facility component had the potential to generate export revenues. But the cost-benefit methodology was inappropriate for measuring the potential benefits of this component as well, since the matching grants were not based on a clear-cut threshold for ERR but were also meant to satisfy social targets such as benefiting women's groups or other organizations of relatively poor individuals. The ICR concluded that the cost-effectiveness methodology would have been a better choice as it applies to projects which benefits cannot be quantified.

4.22 APEP demonstrated that it could have a spectacular effect on individual beneficiaries, but not a significant aggregate effect on the agro-pastoral export sector as a whole. It is not possible to calculate an ERR for the subprojects financed by APEP,[53] since only 25 percent of the Grant Facility funds went to enterprises that had the potential to bring in revenues from exports. But it can be safely assumed that the ERR for the subprojects, if these could be calculated, would not match the 48 percent mentioned in the PAD. Comparing the costs of the subprojects (which amounted to US$5.5 million) with the value of exports that ensued (US$846,000), one can infer that APEP was not an efficient investment from a purely financial perspective. Efficiency is thus rated **modest**.

Risk to Development Outcome

4.23 The picture is not encouraging, looking ex post at the status of the producers and exporters associations supported by the project, the state of the trade promotion and information services, and the likelihood of continued improvements in production and exports of the subprojects that were successful. Only 8 months after project closure, the ICR pointed out that only 40 percent of the 57 organizations that received project support were functional and that an even smaller portion could survive independently from the project. The PPAR mission found that this prediction came true since only about a dozen organizations (compared to 100 at project closure) are paying members of ANIPEX, the intended successor to APEP. ANIPEX itself is struggling and reports that the membership dues are not sufficient for it to provide services to its members. At the intellectual level, it has not been able to develop a viable strategy, to the disillusionment of one Dutch NGO which was ready to partner with ANIPEX and provide it with technical assistance.

4.24 The exporters whom the PPAR mission met lamented that comprehensive information on prices and opportunities on export markets is no longer collected. While they try to get information from their contacts in neighboring countries, they reported that this is not enough. The EU is assisting the Ministry of Animal Resources to acquire and publish information on the markets in Nigeria, but the related project is too limited in its scope and coming to an end soon. The producers and exporters who were assisted by APEP reported to the PPAR mission that funds were needed to maintain the level of production attained and the infrastructure acquired at the time of APEP. The majority of them did not meet the eligibility criteria[54] for loans from commercial banks, and they found it difficult to access financing except sporadically from other donor projects, and not necessarily for the activities needed.[55]

4.25 In conclusion, risk to development outcome is **high** without continued foreign support. The GON is currently preparing a new export promotion project for Bank financing.[56]

53. ICR, page 24.

54. Eligibility criteria are mainly the ownership of a savings account in addition to a salaried activity, a proven successful trade, or a title to a property of value.

55. Agricultural inputs, infrastructure maintenance, prospection visits to export markets, etc.

56. Agro-Sylvo-Pastoral Markets and Exports Development Project (PRODEX), in the pipeline for FY09.

Bank and Borrower Performance

BANK PERFORMANCE

4.26 APEP was a fast-track project, taking only about six months from concept to appraisal. Despite this short period of time, the preparation team was able to develop a strategically relevant operation. However, as detailed under “Relevance”, a QER identified significant shortcomings in the project’s design and implementation arrangements from the start, which the MTR highlighted again at mid term. Following this, some improvements were made by revising the performance indicators, focusing the project on a limited number of high-value products, and adopting a more demand-driven approach towards advisory services. However, there were no substantial improvements in the implementation arrangements, or the M&E approach.

4.27 The Bank’s Quality Assurance Group conducted a Quality of Supervision Assessment (QSA) in 2004, which found that the project team was proactive in securing a PHRD grant to provide intensive capacity-building for the PMU when it was needed, in bringing in outside specialists to the MTR who added substantial value to the process, and in taking the necessary steps to resolve the issue of ineligible expenditures, including actions taken by the Country Director. On the other hand, the QSA found that supervision engaged mostly in problem–solving, which overshadowed attention to the export promotion objectives which were the heart of the project, to the selection of best quality subprojects, to monitoring of project progress, and to environmental and safeguards issues. The QSA rated quality of supervision marginally satisfactory.

4.28 Due to the shortcomings in design, implementation arrangements, and supervision which contributed heavily to the inability of the project to monitor its progress and achieve its objective, Bank performance is rated **unsatisfactory**.

BORROWER PERFORMANCE

4.29 Initially, MDR wanted APEP to finance exports outright but gradually showed commitment to APEP’s concept and maintained its commitment to private sector development throughout the project’s duration. The implementing agency, MDR, cooperated closely with the Bank’s project TTL to resolve some of the implementation issues identified by the MTR, but kept questioning APEP’s approach that did not include a line of credit for farmers, and did not correct the deficiencies identified in CSO performance. Shortcomings in the technical and financial analysis of subprojects and in respect of the eligibility criteria were evident.

4.30 The PMU never developed a strategic plan to guide the formulation and analysis of subprojects, and lacked pro-activity in communicating and working with stakeholders to ensure that subprojects were designed and implemented with a view to improve the export performance of the subsectors. Financial management was lacking as were subproject approval process, and monitoring and evaluation. Bank management had to allocate additional resources to support its project supervision team and to finance extra technical assistance for the PMU. This translated into a gradually improving performance towards the end of the project, but no improvements took place with respect to M&E. In this light, this

PPAR downgrades the ICR's rating of Borrower performance from moderately unsatisfactory to **unsatisfactory**.

Monitoring and Evaluation

4.31 Deficiencies in M&E design are rooted in the vaguely stated project objective, and the choice of numerous indicators that were to a great extent, inadequate, unclear and not measurable, as well as there being only one PMU staff responsible for M&E at the sub-national and national levels, who was responsible for monitoring project management and results, and supervising the monitoring and evaluation of environmental impact of subprojects. These responsibilities were too much for one person alone, considering the national coverage of the project and the wide ranging subproject activities. Indicators were not time-bound and did not include simple and measurable indicators, such as the number of export contracts signed by Nigerien exporters, the types and quantities of products available for export produced by project beneficiaries, exports by project beneficiaries, etc., which would have made it possible to monitor project progress, inform decision making, and measure project outcomes. Although a baseline study was envisaged at appraisal, this was not conducted until 2003, half way through the project. After the mid-term review in 2003, the PDO indicators were revised and made more specific and measurable but still difficult to collect data for.

4.32 M&E implementation mainly involved presenting data in annual reports on project inputs and outputs, i.e. disbursements, procurement, training, fairs/workshops, external visits, studies, and number of subprojects. Towards the end of the project, a final M&E report included the measurement of such indicators as the number, volume and value of the contracts signed by the beneficiary exporters of the project up to 2004. This information would have been of great value if it had been collected and analyzed periodically since the beginning of the project. Unfortunately this was not the case, and the information did not have the opportunity to influence decision making on subproject selection and the allocation of the matching Grant Facility funds, nor did it help the project in the much needed task of defining a strategy to help increase overall exports of agro-pastoral products. The QER, the MTR, and the QSA all pointed to the weak M&E design and implementation. Thus, the overall quality of project monitoring and evaluation is rated **negligible**.

5. Other Issues (Safeguards, Fiduciary, Unintended Outcomes — Positive and Negative)

Pilot Private Irrigation Project (PPIP)

5.1 The PPIP demonstrated the profitability of small-scale irrigation and helped launch it on a national scale. Small-scale irrigation draws heavily on Niger's underground water resources from shallow aquifers, some of which are fragile and do not regenerate above the rate at which water is being extracted. The GON's capacity to monitor aquifer withdrawal is not yet up to speed and at the requisite level, which if not given adequate attention, may cause the expansion of remunerative small-scale irrigation to turn into a high environmental risk.

Natural Resources Management Project (NRMP)

5.2 The introduction of CBPP significantly improved community ownership and motivation to engage in sustainable natural resources management practices. An unintended beneficial effect was departing from the previous practice of relying upon cumbersome government procurement procedures and large businesses and contractors based in the capital, and selecting local enterprises instead, often from the informal sector, better known by community members and with whom negotiations were easier. This process strengthened local enterprise and had a positive impact on the local economy. It also built up the negotiating and tendering capacities of communities and in many cases revealed hitherto unknown capabilities within largely illiterate communities.

5.3 Disagreement over the award and conditions of a contract to one local NGO, ONVPE, to provide advisory services to communities, caused the Bank to informally suspend disbursements twice for short periods because ONVPE was not fulfilling the terms of its contract and was not adhering to its status of an NGO. But this situation was resolved quickly with the support of MDR.

Agro-Pastoral Export Promotion Project (APEP)

5.4 APEP was designated as an environmental category B operation, subjected to a partial environmental assessment as well as an environmental analysis at project preparation. Nonetheless, the QER identified significant weaknesses in the analysis of potential environmental impacts, pointing out that the project's environmental assessment document contained limited mitigation measures and inadequate guidance on responsibilities, scheduling, costs, and procedures for processing projects. The MTR and QSA reported non-compliance with the Bank's safeguard policy on involuntary resettlement. The PPAR mission was told that this involved subproject financing to groups of farmers to intensify their crop production. The FAO expert participating in the MTR reported that APEP had financed several crop production intensification subprojects with parcel fencing on pasturelands and traditional transhumance corridors. Since pastoralists lost access to these traditional pasturelands and corridors, the Bank's safeguard on involuntary resettlement should have been triggered. The project argued that this was not the case because APEP never financed subprojects on lands without a proper land title, and that project funds went to groups and not individuals which meant that prior community approval had been given. However, funding subprojects financed by groups or associations does not automatically mean that everyone in the group has agreed to a course of collective action and that there is no need to monitor the compensation process through the elaboration and implementation of a resettlement plan. Land use conflicts arise easily in a country like Niger which is known for its pastoralism and transhumance. The project design team should have anticipated an issue of this type, and incorporated mitigation measures such as a proper investigation, a resettlement plan, or resettlement policy framework, since the risk existed.

5.5 Concerning fiduciary compliance, the PMU's inexperienced staff, and lack of internal controls resulted in a series of ineligible expenditures and misappropriation of funds totaling US$115,000, as well as a number of delays in justifying expenditures. The situation improved when the PMU recruited a more competent procurement specialist, and the Bank's project management provided intensive capacity building on fiduciary aspects in the form of a long-term technical assistance.

6. Lessons and Considerations for Future Development

6.1 Several lessons — both positive and negative — relating to project design have emerged from this review:

(1) Empowering communities to take control of the implementation of their own development plans improves community ownership and motivation to engage in sustainable development practices.

6.2 As demonstrated by the example of both the PPIP and the NRMP, eliciting demand for low-cost small-scale irrigation technologies by farmers in the PPIP, and putting communities in charge of designing, recruiting and paying for the implementation of their collectively developed community development plans in the NRMP, resulted in the successful achievement of project objectives. In both cases, intensive sensitization and awareness campaigns as well as regular direct contact with the targeted beneficiaries were at the base of projects' activities.

6.3 In the case of PPIP, well targeted and innovative publicity towards farmers — including radio and TV broadcasts, road-side demonstrations, and seasonal leasing of equipment with no obligation to buy — played a decisive role in technology promotion and a steady increase in their adoption despite the population's low literacy rate. Farmers made investments in the purchase and installation of small-scale irrigation equipment almost totally from their own funds and through the community saving and credit unions (SCUs) which they formed. Funds for these SCUs were mobilized almost totally by farmers themselves, with the exception of five out of the 27 SCUs established, which benefited from small donor trust funds.

6.4 In the case of NRMP, the introduction of CBPP put grassroots beneficiaries at the center of the action, and significantly improved community ownership and motivation to engage in sustainable natural resource management practices, as demonstrated by the fact that 77 percent of the requests for financing from project funds were presented after the CBPP was put into effect. An unintended beneficial effect was the unique opportunity to depart from the common practice of relying upon cumbersome government procurement procedures and large businesses and contractors based in the capital. The selection of local enterprises instead had a positive impact on the local economy.

(2) Fast-track investment operations may easily miss achieving their development objectives.

6.5 APEP took only about six months for its preparation and design. As a result, the project design ideas did not mature enough. The preparation process failed to define the broad lines of an export strategy for agro-pastoral products, and the poor design did not match country capacities and business conditions. Nor did the preparation team anticipate the seriousness of the implementation risks it identified, almost all of which came to pass while the proposed mitigation measures were not effective, which contributed heavily to an unsatisfactory project outcome, despite the strategically relevant objectives. In addition, one risk relating to the capacity of the PMU to screen subproject proposals was not identified. This contributed to a significant cost overrun of project management costs by about US$2 million, equal to twice the original allocation.

6.6 A project such as APEP should have been a pilot operation, or a first time-slice of a longer APL investment operation, given the difficult environment it had to navigate through. This included the first attempt to take a commodity chain approach to marketing and exports, a nonexistent export strategy, a highly informal export sector, inadequate availability of local technical and managerial expertise, a highly individualistic culture among stakeholders, an insufficient entrepreneurial spirit, a low literacy rate, and an insufficient exposure to foreign market standards. A pilot could have prepared the ground, determining the best commodities to concentrate on, and focusing on linking exporters to producers. Subsequent investments could have then assisted stakeholders over a longer haul to maximize revenues from exports.

(3) Export development needs to follow a well-defined strategy, and a commodity chain approach needs to emphasize producer-exporter linkages.

6.7 The prevailing economic situation in Niger had established an enabling environment for export development. The GON had engaged in a comprehensive tax reform, reducing and simplifying external trade restrictions in preparation for regional integration under the West African Economic and Monetary Union in the 1990s, and the devaluation of the CFAF in 1994 had boosted the competitiveness of exports on regional markets. However, APEP was not able to position Niger to take advantage of these favorable conditions for two main reasons: the absence of a coherent export strategy, and missing links between producers and exporters.

6.8 APEP did not help define an export development strategy early on. Thus, it allocated its matching funds on subprojects on an *ad hoc* basis, spreading its resources too thinly and not focusing on commodities that had the best export potential, such as onions and the livestock sector. A misplaced add-on focus on poverty alleviation, not included in the original project design, exacerbated this situation, leading to the approval of subprojects, even if they had a weak dossier, just because they were submitted by groups whose members were said to be poor. As a result, enterprises that were somewhat skilled, had a certain business acumen, were already active in the commodity subsectors, and had the highest potential of bringing in increased export revenues represented less than 25 percent of total beneficiaries financed through APEP.

6.9 Although APEP was praised for its institutional building of producer and exporter associations, it neglected the importance of linking them together to develop sustainable supply chains with free-flowing information on opportunities and market standards, so that exports of high quality incremental production would result. These linkages did not form spontaneously either, as traders still tried to sell what they could get from farmers, not what the market asked for, and little or no feedback was given to farmers on market needs and standards. Here, the project did not take into consideration, for example, the traditional informal approach to marketing, or the level of individualism, illiteracy, and poverty which were not conducive to a speedy and efficient interaction and cooperation between stakeholders.

(4) Similar agricultural development projects in neighboring countries can have opposite outcomes due to the quality of project preparation/design, the level of engagement of the implementing agencies, and the prevailing land tenure security situation.

6.10 It is interesting to note that similar projects with similar development objectives — small-scale irrigation promotion and agricultural products export promotion — implemented in two neighboring countries with similar socio-economic conditions — Niger and Mali — had opposite outcomes.[57]

6.11 Niger's PPIP, which was approved in FY95, had a highly satisfactory outcome while Mali's PPIP, which was approved two years later in FY97 had a highly unsatisfactory outcome. The major differences between the two projects which resulted in their opposite outcome ratings concern the level of engagement of the implementing agency and the degree of land tenure security.

6.12 Niger's PPIP implementing agency, ANPIP, was fully engaged in project activities and worked very closely with the farmers. The successful testing of simple low-cost and high-return small-scale irrigation technologies, the encompassing and effective demonstration and dissemination of tests results, and the creation of advisory services groups helped motivate farmers and generate high interest in, and demand for, the small-scale irrigation technologies to the extent that Nigerien farmers invested in these technologies from their own meager resources. Although these activities were built into the design of Mali's PPIP, the project's implementing agency — the Agricultural Supply Chain Promotion Agency (APROFA) — was not fully engaged. It was implementing another Bank project, the Agricultural Trading and Processing Promotion Pilot Project (ATPPP) and did not devote sufficient time to PPIP, work closely with the farmers, or activate project activities on time to generate demand for small-scale irrigation from farmers. It showed little interest in PPIP which resulted in its highly unsatisfactory outcome.

6.13 Another factor that played a decisive role in the respective outcome ratings of both projects was land tenure security. Niger, aided by the international community, had decided to put land tenure security at the heart of national development, and was fully committed to provide farmers and pastoralists with the incentive of land tenure security — whether land ownership or land-use rights — to motivate them to invest in their lands and livestock herds. Niger's government simplified the process by decentralizing it to the community level through the establishment of Village Land Tenure Commissions, and subsidized its costs. Since the GON is fully committed to this process, it has also built in legal measures to protect the rights of land ownership seekers. Such was not the case in Mali which decided not to tackle this thorny subject yet. As a result, Malian farmers hesitated to invest in lands that they did not officially own in fear of having their land-use "rights" revoked when these lands gained in value due to the investments in irrigation. This was demonstrated by the fact that Mali's PPIP generated initial high interest and demand by farmers to participate in project activities — which included a small land tenure component to encourage farmers to start the process of formalizing their land tenure situation. Once farmers understood that this

57. IEG assessed the outcomes of the two Mali projects in 2007 in a previous PPAR of three agricultural development projects in Mali – Report No. 40206, dated June 25, 2007 – which has been publicly disclosed. The same consultant, Jumana Farah, prepared both PPARs.

component was not going to finance all the costly and centralized process, which outcome would not be necessarily respected by the village chiefs, farmers lost interest in the project and did not participate in PPIP. Mali's PPIP resulted in only 10 ha of rehabilitated irrigated land and no new investments in small-scale irrigation schemes, compared with the expectation at appraisal of 400 ha of rehabilitated irrigated land and the establishment of 600 ha of newly irrigated land. By contrast in Niger, it is estimated that an additional 1,100 ha were put into use through the promotion of small-scale irrigation technologies.

6.14 As to the agricultural export promotion projects in Mali and Niger, Mali's Agricultural Trading and Processing Promotion Pilot Project (ATPPP) which was approved in FY95 had a moderately satisfactory outcome, while Niger's Agro-Pastoral Export Promotion Project (APEP) which was approved in FY01 had an unsatisfactory outcome. This was despite the fact that both projects faced the same challenging environment to their implementation, i.e., a highly informal sector, limited access to information, technical and marketing know-how, weak professional associations, inadequate access to credit, lack of export infrastructure, and ineffective quality control of exports. The opposite outcomes can be attributed to shortcomings imbedded in project preparation and design.

6.15 To start with, Mali's ATPPP took four years from inception to Board approval which made it possible to hold participatory workshops with potential private sector beneficiaries, to establish an export promotion strategy and action plan, to test private initiatives in agro-processing, to test internal and export markets and transport modes, and to conduct specific studies. This in-depth preparation process helped the design ideas to mature, and to realistically assess the country's capacities and other implementation risks which allowed the elaboration of mitigation measures that proved effective. Most importantly, ATPPP was designed as a pilot operation due to the challenging environment it had to navigate through. Despite the testing of project ideas, the conduct of studies, and the elaboration of an export strategy, the design team still felt necessary to widen the testing through ATPPP rather than engage in a full-fledged operation. In comparison, Niger's APEP took only six months from inception to Board approval. The hasty process resulted in a shallow analysis of the implementation risks and ineffective mitigation measures. A key factor of success such as the elaboration of a solid and integrated export strategy which should have guided the funding of subprojects did not get proper attention.

6.16 In addition, Mali's ATPPP financed the rehabilitation or establishment of collective export infrastructure such as handling/processing and storage facilities, while APEP included a matching grant facility that dispensed highly subsidized funds to individual associations of producers or exporters. This probably influenced the diverging outcomes of the two projects. It might have caused Malian exporters to work harder to maximize their profits from the use of the collective assets which were accessible to the different groups at predetermined and set times, while the Nigerien exporters were secure in having the assets on their own lands whether they made use of them or not. Finally, staffing of the regional branches of the projects' implementing agencies seems also to have influenced project outcomes. Mali's ATPPP regional branches were each staffed with 3 high-level staff in addition to 4 support staff, while Niger's APEP regional branches were only composed of one project representative with 2 support staff. APEP's regional staff were not able to get a proper handle on project activities, nor to follow beneficiaries closely.

Annex A. Basic Data Sheets

Pilot Private Irrigation Promotion (Credit 27070)

Key Project Data *(amounts in US$ million)*

	Appraisal estimate	*Actual or current estimate*	*Actual as % of appraisal estimate*
Total project costs	7.5	5.2	69.3
IDA Credit	6.8	5.0	73.5
Government	0.7	0.2	28.6

Cumulative Estimated and Actual Disbursements

	FY96	*FY97*	*FY98*	*FY99*	*FY00*	*FY01*	*FY02*
Appraisal estimate (US$M)	2.9	4.8	5.9	6.5	6.9	6.8	6.8
Actual (US$M)	0.0	1.2	2.0	3.0	4.2	5.2	5.9
Actual as % of appraisal	0.0	25.0	33.9	46.2	60.9	76.5	86.8
Date of final disbursement:	Fourth quarter FY02 (April-June 2002)						

Project Dates

	Original	*Actual*
Initiating memorandum		03/02/1990
Appraisal		06/17/1991
Board approval		04/18/1995
Effectiveness	12/19/1995	07/19/1996
Mid-Term Review	06/30/1998	05/17/1999
Closing date	06/30/2000	12/31/2001

Staff Inputs (staff weeks)

	No. of Staff Weeks	*US$'000*
Identification/ Preparation		388
Appraisal/Negotiations		120
Supervision		309
ICR		26
Total		842

Mission Data

	Date (month/year)	No. of persons	Staff days in field	Specializations represented	Performance rating	Rating trend
Identification/ Preparation	03/23/1990 06/16/1990 07-08/1993 10/17/1993	6		ECON (2), AG, HDG, IRR	S	S
Appraisal/ Negotiation	12/11/1994	1		ECON	S	S
Supervision 1	06/17/1996	1		ECON, AG	S	S
Supervision 2	10/23/1996	2		ECON, AG	S	S
Supervision 3	03/24/1997	3		ECON, AG, PROC.	S	S
Supervision 4	06/28/1997	2		ECON, AG	S	S
Supervision 5	10/06/1997	6		ECON, AG	S	S
Supervision 6	02/2/1998	4		ECON, AG	S	S
Supervisión 7	01/06/1999	3		ECON, AG	HS	S
Supervision 8	05/17/1999	7		ECON, AG	HS	S
Supervision 9	01/31/2000	6		ECON, AG, FIN	HS	S
Supervision 10	01/15/2001	5		ECON, AG, FIN	HS	S
Completion	06/25/2001	6		ECON, AG, FIN, PROC	HS	S
	03/13/2002	2		AG	HS	S

Specializations Represented: AG: Agriculture; ECON: Economics; FIN: Finance; HDG: Hydrology; PROC: Procurement; IRR: Irrigation

Performance Rating: HS: Highly Satisfactory; S: Satisfactory

Other Project Data

Borrower/Executing Agency: Ministry of Rural Development

FOLLOW-ON OPERATIONS

Operation	Credit no.	Amount (US$ million)	Board date
Private Irrigation Project – Phase 2 (PIP2)	CR-36210	36.4	03/19/2002

Natural Resources Management Project (Credit 27960)

Key Project Data *(amounts in US$ million)*

	Appraisal estimate	*Actual or current estimate*	*Actual as % of appraisal estimate*
Total project costs	42.68	31.32	73.5
IDA Credit	26.7	26.41	98.9
Cofinancing	8.70	1.93	22.8
Government	7.23	2.98	41.2

Cumulative Estimated and Actual Disbursements

	FY97	*FY98*	*FY99*	*FY00*	*FY01*	*FY02*
Appraisal estimate (US$M)	5.2	9.7	14.7	20.2	25.2	26.6
Actual (US$M)	2.7	6.2	10.4	14.3	18.5	22.2
Actual as % of appraisal	51.9	63.9	70.7	70.8	73.4	83.5
Date of final disbursement:	Third quarter FY03 (January-March 2003)					

Project Dates

	Original	*Actual*
Initiating memorandum		04/17/1987
Appraisal		04/14/1994
Board approval		12/1995
Effectiveness	07/05/1996	10/10/1996
Mid-Term Review	03/31/1999	01/02/2000
Closing date	03/31/2002	09/30/2002

Staff Inputs (staff weeks)

	No. of Staff Weeks	*US$'000*
Identification/ Preparation	225.5	423.9
Appraisal/Negotiations	69.3	200.8
Supervision	197.23	478.4
ICR	9.22	43.2
Total	501.25	1146.3

Mission Data

	Date (month/year)	No. of persons	Specializations represented	Performance rating	Rating trend
Identification/ Preparation	04/17//1987				
Appraisal/ Negotiation	06/28/1997				
Supervision 1	10/15/1996	1	NRM	S	HS
Supervision 2	03/15/1997	2	NRM, LEG	S	S
Supervision 3	12/13/1997	5	M&E, FM, GI, AGS, TTL	S	S
Supervision 4	11/25/1998	4	AGS, C(2), PO	S	S
Supervision 5	02/20/2000	4	TTL AGS, IP, FA	S	S
Supervision 6	08/21/2000	2	TTL, AGS	S	S
Supervisión 7	02/05/2001	2	TTL, AGS	HS	HS
Supervision 8	02/05/2001	2	TTL, AGS	HS	HS
Supervision 9	05/03/2002	2	TTL, AGS	HS	HS
Completion	10/10/2002	3	E, TTL, ED		

Specializations Represented: AGS: Agricultural Services; C: Consultant; E: Economist; ED: Editor; FA: Financial Analyst; FM: Financial Management; GI: Geographic Information; ; IP: Implementation Specialist; LEG: Legal; M&E: Monitoring and Evaluation; NRM: Natural Resource Management; PO: Program Officer; TTL: Task Team Leader.

Performance Rating: HS: Highly Satisfactory; S: Satisfactory

Other Project Data

Borrower/Executing Agency: Ministry of Rural Development and Communities

FOLLOW-ON OPERATIONS

Operation	Credit no.	Amount (US$ million)	Board date
Programme d'Actions Communautaires (Community Action Program) - PAC	H-0250	35.0	03/20/2003

Agro-Pastoral Export Promotion (Credit 33630)

Key Project Data *(amounts in US$ million)*

	Appraisal estimate	*Actual or current estimate*	*Actual as % of appraisal estimate*
Total project costs	12.04	12.71	105.6
IDA Credit	10.35	10.24	98.9
Cofinancing	0.99	1.53	154.5
Government	0.70	0.94	134.3

Cumulative Estimated and Actual Disbursements

	FY01	*FY02*	*FY03*	*FY04*	*FY05*	*FY06*
Appraisal estimate (US$M)	1.9	3.8	6.1	8.4	10.4	10.4
Actual (US$M)	0.3	1.8	4.2	8.0	10.7	10.8
Actual as % of appraisal	15.8	47.4	68.9	95.2	102.9	103.8
Date of final disbursement:	First quarter FY06 (July-September 2005)					

Project Dates

	Original	*Actual*
Initiating memorandum		11/10/1999
Appraisal		04/17/2000
Board approval		06/01/2000
Effectiveness	03/12/2001	03/12/2001
Mid-Term Review	10/06/2003	10/06/2003
Closing date	10/31/2005	10/31/2005

Staff Inputs (staff weeks)

	No. of Staff Weeks	*US$'000*
Identification/ Preparation		30
Appraisal/Negotiations		211
Supervision		376
ICR		43
Total		660

Mission Data

	Date (month/year)	No. of persons	Staff days in field	Specializations represented	Performance rating	Rating trend
Identification/ Preparation	06/19/1999	3		TTL, RDS, AG		
	10/09/1999	3		TTL, RDS, AG		
Appraisal/ Negotiation	03/13/2000	11		SM, TTL, RDS, LEG, FMS, TTA, SDS, FA, OA, PS, AG		
Supervision 1	05/25/2001	2		CO-TTL (2)	S	S
Supervision 2	10/26/2001	8		RDS, FA, CM, ME, TTA, PA, SDS, PSS	S	S
Supervision 3	06/28/2002	10		PM (2), ASE, AG, MS, E, CS, PA, FA	U	S
Supervision 4	02/27/2003	11		RDS, ASS (2) SPS, PA, E, PM, LS, FA, TS, ENV	U	S
Supervision 5	04/15/2004	8		TTL, ASS, SDS, SM, PS, FM, PC, PS	S	S
Supervision 6	10/27/2004	5		TTL, PA, NC, M&E, SSA	S	S
Supervisión 7	01/18/2005	8		TTL, ASS, SDS, PS, FM, SOO, PA, C	S	S
Supervision 8	05/27/2005	6		TTL, ASS, PS, FM, C, PA	S	S
Completion		2		TTL, E		

Specializations Represented: AG: ASS: Agricultural Services Specialist; ASE: Agricultural Services and Extension; Agro economist; CS: Communication Specialist; C: Consultant; CM: Country Manager; E: Economist; ENV: Environmentalist; FA: Financial Analyst; FMS: Financial Management Specialist; LEG: Legal; LS: Livestock Specialist; TTL: ME: Macroeconomist; M&E: Monitoring and Evaluation; MS: Marketing Specialist; NC: National Coordinator; OA: Operations Analyst; PS: Permanent Secretary; PC: Project Coordinator; PM: Project Management; PA: Program Assistant; PSS: Private Sector Specialist; Procurement Analyst; PA: PS: Procurement Specialist; RDS: Rural Development Specialist; SM: Sector Manager; SOO: Senior Operations Officer; SDS: Social Development Specialist; SSA: Sub-Project Analyst; TTA: Task Team Assistant; TTL: Task Team Leader,: TS: Trade Specialist.

Performance Rating: S: Satisfactory; U: Unsatisfactory

Other Project Data

Borrower/Executing Agency: Interministerial – To be determined

FOLLOW-ON OPERATIONS

Operation	Credit no.	Amount (US$ million)	Board date
Projet de Développement des Exportations et des Marchés Agro-Sylvo-Pastoraux (Agro-Sylvo-Pastoral Market Development and Export Promotion Project) - PRODEX	Q-6020	Around US$15 million	Expected 2nd quarter of FY09