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Report No. 24419

#### PROJECT PERFORMANCE ASSESSMENT REPORT

#### REPUBLIC OF NIGER

Small Rural Development Operations Project (Credit 1890-NIR)

Agricultural Services Support Project (Credit 2355-NIR)

National Agricultural Research Project (Credit 2122-NIR)

June 25, 2002

Sector and Thematic Evaluation Group Operations Evaluation Department

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### Currency Equivalents (annual averages)

Currency Uni	it: CFA Franc	
1988	US\$1.00	CFAF 298
1990	US\$1.00	CFAF 285
1992	US\$1.00	CFAF 265
1994	US\$1.00	CFAF 555
1996	US\$1.00	CFAF 520
1998	US\$1.00	CFAF 550
2000	US\$1.00	CFAF 688

## **Abbreviations and Acronyms**

CAS	County Assistance Strategy
CDF	Community Development Fund
CEDDA	Contro ná signal do maharaha a manamiana (Dania

CERRA Centre régional de recherche agronomique (Regional Agronomic Research

Center)

CGIAR Consultative Group on International Agricultural Research

CORRA Comité régionaux de la recherche agronomique (Regional Agricultural

Research Committee)

CRA Capital Replacement Account
ICR Implementation Completion Report
IDA International Development Association

INRAN Institut national de la recherche agronomique du Niger (National Agricultural

Research Institute of Niger)

ICRISAT International Crop Research Institute for the Semi-Arid Tropics

NGO Nongovernmental organization
OED Operations Evaluation Department
PPAR Project Performance Assessment Report

PNRA Projet national de recherche agricole (National Agricultural Research

Project)

PPODR Projet de petites opérations de développement rural (Small Rural

Development Operations Project)

PRSAA Programme de renforcement des services d'appui à l'agriculture

(Agricultural Services Support Project)

PRSP Poverty Reduction Strategy Paper

ROCAFREMI Réseau ouest et centre africain de recherche sur le mil (Western and Central

African Network for Millet Research)

SAR Staff Appraisal Report
SRO Small rural operation
VEW Village extension worker

Fiscal Year

Government April 1 – March 31

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Office of the Director-General Operations Evaluation

June 25, 2002

#### MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT Performance Audit Report on Niger

Small Rural Development Operations Project (Credit 1890-NIR) Agricultural Services Support Project (Credit 2355-NIR) National Agricultural Research Project (Credit 2122-NIR)

Attached is the Performance Audit Report prepared by the Operations Evaluation Department (OED) on the above projects.

For the Small Rural Operations Project (PPODR), the Board approved a credit of SDR 7.1 million (US\$9.3 million equivalent) on September 14, 1988. The Swiss government provided co-financing of SF 12.5 million (US\$7.8 million equivalent). After two extensions, the credit closed on June 30, 1998; the Swiss grant, also extended twice, closed on April 30, 1999.

The Agricultural Services Support Project (PRSAA) was approved by the Board on June 12, 1992, and became effective on January 25, 1993. The credit was for an amount of SDR 12.9 million (US\$18.0 million equivalent) and it was closed on June 30, 1998, with about 99 percent of the credit disbursed.

The National Agricultural Research Project (PNRA) was approved by the Board on July 18, 1990, and became effective in July 1991. The credit was for an amount of SDR 15 million (US\$19.9 million equivalent) and it closed on December 31, 1998, with 99 percent of the credit disbursed. The government of Niger was expected to contribute US\$3.5 million, but its final contribution was only US\$1.7 million. USAID contributed US\$1.4 million for a total project cost of about US\$22.5 million.

PPODR aimed to improve the institutional capacity of rural people to appraise, fund, and manage small-scale operations in areas such as irrigation and soil conservation. PRSSA aimed to improve agricultural extension methods, to establish closer links between agricultural extension and research, and to improve relations between village extension workers and farmers. PNRA aimed to improve the national agricultural research system, to upgrade the research system in a major way, and to enhance the two-way flow of information between farmers and the agricultural research community. Thus the three projects were related and complementary, especially PPODR and PRSAA. Both these projects had large extension components between which farmers were not always able to distinguish. While farmers knew the extension agent who was visiting the village, they did not necessarily know with which project the agent was associated. PNRA was also involved in extension activities since researchers were training extension agents.

This assessment rates the overall project outcome for **PPODR** as *satisfactory*. The project's objectives remain highly relevant today and have been substantially achieved. Extension agents who benefited from the training were well prepared to work for NGOs in the evaluation and appraisal of SROs, which benefits Niger. The costs of implementing some SROs could have been less if more engineering studies had been conducted. However, these studies are time consuming and would have

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slowed down the investment rate in new SROs in the last years of the project. The importance of conducting engineering studies in the process of appraising SROs is now well recognized, especially because one-quarter of the 48 SROs which were active by December 1995 have had to be abandoned due to water limitation factors.

This assessment rates the outcome of **PRSAA** as *moderately satisfactory*. The project's objectives remain highly relevant for both the Government of Niger and the World Bank. There was a considerable reorganization of the extension service during the life of the project, excellent collaboration among three ministries at the local level as well as a significant buildup of human capital at all levels of government, thanks to the link between extension and research that was established. Unfortunately, these positive impacts were not sustainable. No adequate indicators are available to determine whether the project was too costly, and any indicators would have to be, for the most part, subjective. An important factor that helped to inflate costs was the lack of rigor in monitoring and in the administration of the project.

The assessment rates the outcome of **PNRA** as *unsatisfactory*. All three supporting criteria—relevance, efficacy and efficiency—have been rated modest.

Several factors appear to contribute to the better outcome of the PPODR compared to that of the PRSAA and PNRA. The first could be the long preparation and design period that led to the implementation of PPODR as compared with those of the other two projects. As mentioned in the ICR, "IDA invested a substantial time (1981-88) and resources in the project preparation work to ensure ownership by the borrower and appropriate institutional design." A second factor was the continuity of the staff associated with PPODR. A third factor could be the different nature of the projects. It was perhaps easier to establish performance indicators and to monitor the evolution of a project like PPODR than those like PRSAA or PNRA. Fourth, PPODR was financed jointly with the Swiss Agency for Development and Cooperation, which participated in supervision missions and contributed to the achievement of the project objectives. It is possible that the joint supervision helped to improve the outcome of the PPODR since this enabled both parties to exchange views regarding the evolution of the project, and to share responsibility for suggesting ways to address problems as they arose.

There is a trade-off between careful preparation of projects and the need to implement them quickly when the problems are acute. However, the importance of closely monitoring pilot projects to identify potential complications and find appropriate solutions at this stage cannot be over-emphasized.

Experience with this project confirms a number of OED lessons:

- (1) Proactive institutional development is particularly important to achieving successful outcomes of agricultural research and extension projects. This includes national policy reforms, a conducive legal framework, appropriate incentives and career development opportunities, efficient administration and financial management that is appropriately decentralized, and adequate monitoring and evaluation.
- (2) Measures to promote sustainability of the outcome of a project should be well designed at appraisal and incorporated in a project. In the case of PRSSA and PNRA, this would include a long-term financing plan for the recurrent costs associated with research and extension in the cases of PPODR, a legally binding status for both the capital replacement account (CRA) to maintain and replace machinery and equipment and the community development fund (CDF) to finance collective projects for the benefit of the whole community.

<sup>1.</sup> ICR for the PPODR, p. 10.

(3) When investing in a very expensive long-term project like increasing agricultural R&D capacity, an initial assessment must be made as to the likelihood of the initial planned outcome being achieved. Research systems are very expensive to startup and to maintain. For example, when investing in the long term at the Ph.D. level, funds should be made available to the young researchers for at least three years when they return. These funds would help the researchers to start research programs and develop a research network. In the case of PNRA, when researchers came back with their degrees, the project was terminating and research funds were no longer available. New equipment is constantly required because of the change in technology. All of this increases the costs of the R&D plan and means a rigorous assessment of the realism of the plan must be made before starting the project.

Attachment

The

OED Mission: Enhancing development effectiveness through excellence and independence in evaluation.

#### **About this Report**

The Operations Evaluation Department 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, OED annually assesses about 25 percent of the Bank's lending operations. Assessments are conducted one to seven years after a project has closed. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming country evaluations; those for which Executive Directors or Bank management have requested assessments; and those that are likely to generate important lessons. The projects, topics, and analytical approaches selected for assessment support larger evaluation studies.

A Project Performance Assessment Report (PPAR) is based on a review of the Implementation Completion Report (a self-evaluation by the responsible Bank department) and fieldwork conducted by OED. To prepare PPARs, OED staff examine project files and other documents, interview operational staff, and in most cases visit the borrowing country for onsite discussions with project staff and beneficiaries. The PPAR thereby seeks to validate and augment the information provided in the ICR, as well as examine issues of special interest to broader OED studies.

Each PPAR is subject to a peer review process and OED management approval. Once cleared internally, the PPAR is reviewed by the responsible Bank department and amended as necessary. The completed PPAR is then sent to the borrower for review; the borrowers' comments are incorporated into the document that is sent to the Bank's Board. When an assessment report is released to the Board, it is also widely distributed within the Bank and to concerned authorities in member countries.

#### **About the OED Rating System**

The time-tested evaluation methods used by OED are suited to the broad range of the World Bank's work. The methods offer both rigor and a necessary level of flexibility to adapt to lending instrument, project design, or sectoral approach. OED evaluators all apply the same basic method to arrive at their project ratings. Following is the definition and rating scale used for each evaluation criterion (complete definitions and descriptions of factors considered are available on the OED website: http://wbln1023.worldbank.org/oed/oeddoclib.nsf/ 232d43ae09e87ac985256966007cc257/acaeb95358e99e578525698c005190da?OpenDocument).

Relevance of Objectives: 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). Possible ratings: High, Substantial, Modest, Negligible.

Efficacy: The extent to which the project's objectives were achieved, or expected to be achieved, taking into account their relative importance. Possible ratings: High, Substantial, Modest, Negligible.

Efficiency: 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. Possible ratings: High, Substantial, Modest, Negligible.

Sustainability: The resilience to risk of net benefits flows over time. Possible ratings: Highly Likely, Likely, Unlikely, Highly Unlikely, Not Evaluable.

Institutional Development Impact: The extent to which a project improves the ability of a country or region to make more efficient, equitable and sustainable use of its human, financial, and natural resources through: (a) better definition, stability, transparency, enforceability, and predictability of institutional arrangements and/or (b) better alignment of the mission and capacity of an organization with its mandate, which derives from these institutional arrangements. Institutional Development Impact includes both intended and unintended effects of a project. Possible ratings: High, Substantial, Modest, Negligible.

**Outcome:** The extent to which the project's major relevant objectives were achieved, or are expected to be achieved, efficiently. *Possible ratings:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

**Bank Performance:** The extent to which services provided by the Bank ensured quality at entry and supported implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of the project). *Possible ratings:* Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.

**Borrower Performance:** The extent to which the borrower assumed ownership and responsibility to ensure quality of preparation and implementation, and complied with covenants and agreements, towards the achievement of development objectives and sustainability. Possible ratings: Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.

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This report was prepared by Dr. Robert Romain, Laval University, Quebec, and Dr. Hartley Furtan, University of Saskatchewan, Saskatoon (consultants), under the supervision of Chris Gerrard (task manager). William B. Hurlbut edited the report. Marcia Bailey provided administrative support.

# **Principal Ratings**

	Outcome	Sustainability	Institutional Development	Borrower Performance	Bank Performance
Small Rural O	perations Project				
ICR	Satisfactory	Uncertain	Substantial	Satisfactory	Satisfactory
OED Review	DED Review Satisfactory Uncertain		Substantial	Satisfactory	Satisfactory
PPAR	Satisfactory	Likely	Substantial	Satisfactory	Satisfactory
Agricultural S	ervices Support Pr	roject	-		
ICR	Unsatisfactory	Uncertain	Partial	Deficient	Deficient
OED Review	Unsatisfactory	Unlikely	Modest	Highly Unsatisfactory	Unsatisfactory
PPAR	Moderately Satisfactory	Unlikely	Modest	Unsatisfactory	Unsatisfactory
National Agric	cultural Research F	Project			
ICR	Unsatisfactory	Unlikely	Partial	Deficient	Deficient
OED Review	Unsatisfactory	Unlikely	Modest	Unsatisfactory	Unsatisfactory
PPAR	Unsatisfactory	Unlikely	Modest	Unsatisfactory	Unsatisfactory

# **Key Staff Responsible**

	Task Manager	Division Chief	Department Director
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Completion	Sidi Jammeh	Joseph Baah-Dwomoh	Theodore Ahlers
Agricultural Se	ervices Support Project		
Appraisal	Jiri Cerych	Salah Dargouth	Katherine Marshall
Completion	Yves-Coffi Prudencio	Joseph Baah-Dwomoh	Theodore Ahlers
National Agric	ultural Research Project		
Appraisal	Daniel Moreau		
Completion	Yves-Coffi Prudencio	Joseph Baah-Dwomah	Theodore Ahlers

## **Preface**

This is a Project Performance Assessment Report (PPAR) on three projects financed by the International Development Association (IDA) in the Republic of Niger: Small Rural Operations (PPODR; Credit 1890-NIR), Agriculture Services Support (PRSAA; Credit 2355-NIR), and National Agricultural Research (PNRA; Credit 2122-NIR).

The Board of the World Bank approved PPODR on September 14, 1988, for a credit of SDR 7.1 million (US\$9.3 million equivalent). The Swiss government provided co-financing of SF 12.5 million (US\$7.8 million equivalent). After two extensions, the credit closed on June 30, 1998; the Swiss grant, also extended twice, closed on April 30, 1999.

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PNRA was approved by the Board on July 18, 1990, and became effective in July 1991. The credit was for an amount of SDR 15 million (US\$19.9 million equivalent) and it closed on December 31, 1998, with 99 percent of the credit disbursed. The government of Niger was expected to contribute US\$3.5 million, but its final contribution was only US\$1.7 million. USAID contributed US\$1.4 million for a total project cost of about US\$22.5 million.

This report was prepared by Robert Romain and Hartley Furtan (consultants) under the supervision of Chris Gerrard (OED task manager). It is based upon the Implementation Completion Report (ICR) prepared by the Africa Region for each project, the Staff Appraisal Reports, credit documents, project files, discussions with World Bank staff and a mission to Niger. Robert Romain visited Niger from May 7 to 28, 2001. This mission included interviews with government officials, implementing agencies, and project beneficiaries, project site visits, and a closing workshop with government and other private and public stakeholders. OED gratefully acknowledges the full cooperation of all government officials visited and consulted during the mission.

Mr. Seydou Yayé, director of the Monitoring and Evaluation Division at the Ministry of Planning, accompanied Dr. Romain during his mission in Niger. In collaboration with Mr. Salifou Mahaman, Rural Development Specialist at the World Bank Country Office in Niamey, Mr. Yayé planned and scheduled all the meetings and field trips of the mission. This collaboration and Mr. Yayé's knowledge of the Niger government administration and officials greatly facilitated the mission. The synthesis of the two-day workshop, which was prepared by a local consultant, Mr. Mahamane Goni Boulama, is in Annex B.

Following standard OED practice, the draft assessment report was sent to the borrowers for review and comment before it was finalized. No comments were received.

## 1. Background, Methodology, and Overall Outcomes

- 1.1 The Small Rural Development Operations Project (PPODR) aimed to improve the institutional capacity of rural people to appraise, fund, and manage small-scale operations in areas such as irrigation and soil conservation. The Agricultural Services Support Project (PRSSA) aimed to improve agricultural extension methods, to establish closer links between agricultural extension and research, and to improve relations between village extension workers and farmers. The National Agricultural Research Project (PNRA) aimed to improve the national agricultural research system, to upgrade the research system in a major way, and to enhance the two-way flow of information between farmers and the agricultural research community.
- 1.2 Thus the three projects were related and complementary, especially PPODR and PRSAA. Both these projects had large extension components between which farmers were not always able to distinguish. While farmers knew the extension agent who was visiting the village, they did not necessarily know with which project the agent was associated. PNRA was also involved in extension activities since researchers were training extension agents.
- 1.3 IDA first proposed a small rural operations project in 1980, and it funded project preparation and approved a credit of US\$430,000 for three pilot projects in 1981. The Ministry of Rural Development started the three pilot projects in mid-1982. While the pilots sought to increase agricultural productivity by making investments specific to small sites, the requisite institutional capacity to exploit th'e opportunities created by these small investments also had to be present for these projects to be successful. Accordingly, the PPODR aimed to facilitate the development of the necessary institutional capacity as well as provide the initial funding for small rural operations (SROs). In addition, the project also intended to help the government set up and harmonize the rules for how the SROs would be funded initially and how renewed investments would be made in the projects.
- 1.4 In October 1987, the Niger government requested IDA help to set up and finance a pilot project to link the extension system to the agricultural research system and provide local farmers with some direct voice in the extension process. The institutional structure was not in place for the research and extension activities to be driven by the needs of the local producers. PPODR financed the pilot, which was expanded in 1990 to include livestock extension in three districts along the country's borders with Nigeria and Benin. An evaluation of the pilot project, which concluded that more extension work, improved extension methods, and better coordination with research would improve agricultural productivity in Niger, led directly to the PRSAA.
- 1.5 While Niger had been self-sufficient in food up to 1990, increasing population was putting greater and greater stress on the agricultural resource base. Past attempts to introduce improved farm management techniques had been disappointing because they did not respond adequately to farmers' constraints and priorities. In addition to improving communication between farmers and researchers, the PNRA aimed to start a major upgrade of the agricultural research system, including improved buildings and laboratories, new staff and research professionals, better communication with other researchers throughout Africa, and more operating funds.

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#### ASSESSMENT METHODOLOGY

- 1.6 The OED mission that visited Niger in May 2001 was divided into three stages. The first, which lasted three days, consisted of visiting with government officials in Niamey. The second, which lasted 12 days, was spent on field trips visiting with officials and beneficiaries in the regions where the projects were conducted, researchers in the regional research centers (CERRAs), and completed subprojects in several villages. The third stage consisted of preparing and holding a two-day closing workshop with representatives of government and other public and private organizations. The participants were asked to confirm or to oppose OED's preliminary findings regarding the main strengths and weaknesses of the three projects, as well as to draw the main lessons from the projects.
- 1.7 This PPAR relies more on the information collected during the field trips than on meetings in Niamey, since government officials at both the regional (département) and subregional (arrondissement) levels were more familiar with the outcomes of the projects than those in Niamey. Mr. Yayé and the local staff made significant efforts to invite former project participants (coordinators, village extension workers, etc.) to the meetings, even though some of them had already retired or were working elsewhere. This assessment focuses on points that are not, or little discussed in the ICRs, and on points where there is a difference between this assessment and that of the ICR. Where this assessment agrees with the ICR, mainly new justifications that are not mentioned in the ICRs are presented in order to minimize duplication.

#### **OVERALL OUTCOMES**

- 1.8 This assessment agrees with the ICR and OED review for **PPODR** and rates the project outcome **satisfactory**. The project's objectives remain highly relevant today and have been substantially achieved. Extension agents who benefited from the training were well prepared to work for NGOs in the evaluation and appraisal of SROs, which benefits Niger. The costs of implementing some SROs could have been less if more engineering studies had been conducted. However, these studies are time consuming and would have slowed down the investment rate in new SROs in the last years of the project. The importance of conducting engineering studies in the process of appraising SROs is now well recognized, especially because one-quarter of the 48 SROs which were active by December 1995 have had to be abandoned due to water limitation factors.
- 1.9 The outcome of **PRSAA** was rated unsatisfactory in the ICR and OED reviews. However, the information gathered during the present assessment suggests that this rating was too severe. This assessment rates the outcome as **moderately satisfactory**. The project's objectives remain highly relevant for both the Government of Niger and the World Bank. There was a considerable reorganization of the extension service during the life of the project, excellent collaboration among three ministries at the local level as well as a significant buildup of human capital at all levels of government, thanks to the link between extension and research that was established. Unfortunately, these positive impacts were not sustainable. No adequate indicators are available to determine whether the project was too costly, and any indicators would have to

1. In addition to usual project documents and files, the mission also reviewed several documents that were obtained in Niger, in particular, the "Répertoires des PPODR" of the three départements that were included in PPODR (Tillaberi, Dosso, and Tahoua), which were prepared by the Ministry of Planning and dated September 1998; the annual reports of the Institut national de la recherche agronomique du Niger (INRAN); as well as other documents and studies from the World Bank Country Office in Niamey, INRAN, and several ministries of the Government of Niger, at the central, regional, and sub-regional levels.

be, for the most part, subjective. An important factor that helped to inflate costs was the lack of rigor in monitoring and in the administration of the project.

- 1.10 The assessment agrees with the rating of the outcome of the **PNRA** in the ICR and OED review and rates the project outcome unsatisfactory. All three supporting criteria—relevance, efficacy and efficiency—have been rated modest.
- 1.11 Several factors appear to contribute to the better outcome of the PPODR compared to that of the PRSAA and PNRA. The first could be the long preparation and design period that led to the implementation of PPODR as compared with those of the other two projects. As mentioned in the ICR, "IDA invested a substantial time (1981-88) and resources in the project preparation work to ensure ownership by the borrower and appropriate institutional design." A second factor was the continuity of the staff associated with PPODR. A third factor could be the different nature of the projects. It was perhaps easier to establish performance indicators and to monitor the evolution of a project like PPODR than those like PRSAA or PNRA. Fourth, PPODR was financed jointly with the Swiss Agency for Development and Cooperation, which participated in supervision missions and contributed to the achievement of the project objectives. It is possible that the joint supervision helped to improve the outcome of the PPODR since this enabled both parties to exchange views regarding the evolution of the project, and to share responsibility for suggesting ways to address problems as they arose.
- 1.12 There is a trade-off between careful preparation of projects and the need to implement them quickly when the problems are acute. However, the importance of **closely** monitoring pilot projects to identify potential complications and find appropriate solutions at this stage cannot be over-emphasized.

## 2. Project Objectives and Components

- 2.1 The objectives of the **PPODR** were (1) to develop local capacity to prepare, appraise, execute, and evaluate small rural development operations (SROs) with active participation of the rural population, and (2) to strengthen the capacity of provincial and district technical staff to assist farmers in the design, preparation, and execution of SROs. The main components of the project were:
  - Support to field technical services: Finance for equipment, venicles, and operating costs associated with the preparation, appraisal, and execution of SROs and with improvement of extension services.
  - *Training* for officials in the Ministry of Planning, the Directorate of Regional Development and Microréalisations, and local groups in evaluating small investment projects.
  - SRO Investments: Finance for productive short- and long-term investments in SROs (such as bottomland development, small irrigated farming, fruit trees, soil conservation, and water harvesting) which would increase production, create jobs, and raise rural living standards. Organization and development of mandatory payments by direct beneficiaries (1) in capital replacement accounts for the beneficiaries of the SROs to maintain and replace SROs over time, and (2) in community development funds for the members of the local community who did not receive an investment grant also to benefit from the project.

<sup>2.</sup> ICR for the PPODR, p. 10.

- **Studies** to provide better knowledge of the physical environment and socio-economic conditions in the project areas.
- 2.2 The general objective of **PRSAA** was to strengthen agricultural, livestock, and environmental protection extension services in order to generate increased production and sustained growth of farmers' incomes. Building on the experience gained during the implementation of a pilot project, the main components of the project were:
  - More efficient organization of extension services, supported by adequate human and physical resources at the farm, regional and national levels.
  - Regular and continuous training of responsible officials at each level.
  - Strengthening the linkages between extension, and national and regional agricultural research in order to find solutions to farmers' problems.
  - Strengthening relations between crop, livestock, and environment services.
  - Functional literacy and numeracy training for women and men, including stepped-up promotion of participation by women in rural development and in village activities and management.
- 2.3 The general objective of **PNRA** was to strengthen national agricultural research planning and implementation, while ensuring that the research would be responsive to farmers' needs and constraints, and taking into account research conducted elsewhere. Viewed as the first five-year phase in the long-term development of the agricultural research system in Niger, the project had four major components:
  - Organizational strengthening to build up management ability in INRAN, the National Agricultural Research Institute of Niger, so that it could manage an ongoing agricultural research program. This included organizational changes, expanding the number of scientists and research assistants, creating areas of specialization or excellence for each of the research stations, and closer contact with the CGIAR system in general and ICRISAT in particular.
  - Support for research programs to build an adaptive research system that would facilitate feedback between the extension system and the research community. A major focus was to be farming systems research, which included three subprograms, the economics of major agricultural commodities, analysis of farming systems, and evaluation of improved technology at the farm level.
  - Training and technical assistance to prepare and implement a Human Resources Development Master Plan, which would include a detailed set of job descriptions, clear career planning, educational training, and management training. Two particular emphases were recruitment of skilled scientists, technicians, and managers, and training in research management.
  - Works and equipment to finance civil works, vehicles, equipment, and supplies. The project was to rehabilitate existing research infrastructure and facilities, furniture, offices, and laboratories, both in Niamey and in research stations in more remote areas of Niger.

## 3. Project Implementation

3.1 Implementation of **PPODR** was the responsibility of the Directorate for Regional Development and Micro-projects (*Direction du développement régional et des micro-réalisations*) within the Ministry of Planning. The project covered nine *arrondissements* in three *départements*,

and its administration was decentralized at the *arrondissement* level. This contributed to the development of improved local skills in appraising and evaluating SROs, as well as in financial management as nine separate accounts were created at the *arrondissements* level.

- 3.2 The decentralization of the administration of PPODR greatly facilitated administration of the funds and significantly decreased delays in payments—outcomes much appreciated by the beneficiaries as well as by the local service and input suppliers and by local officials. Some central government officials even told the assessment mission that efforts should be made to decentralize the administration of all future projects. While the ICR mentions that abuses in managing decentralized accounts were reported early in the project, the government took immediate actions to sanction the agents involved, and the abuses appear to have stopped since no such actions were reported or alluded to during this assessment.
- 3.3 Implementation of **PRSAA** was the responsibility of the Ministry of Agriculture and Livestock in informal association with the Ministry of Hydraulics and Environment and the Ministry of National and Higher Education. The implementation anticipated an expanded extension service. The number of village extension workers was to increase and become polyvalent. The polyvalence of the village extension workers was to be achieved by (1) intensive training of those village extension workers who were willing and capable of becoming polyvalent, and (2) adapting the curriculum of the agricultural training in the *Institut pratique de développement rural* (Institute of Applied Rural Development) at Kollo, so that each pupil would receive training in both agriculture and livestock.
- Implementation of **PNRA** was to be under the direction of the director general of INRAN, who would report to the Management Council (*Conseil d'Administration*) on the orientation and management of the institute. The director general was to receive support and advice from the Scientific Committee on the major scientific orientation of INRAN. Two ad hoc advisory groups were to be set up: the Donor Consultative Group and the National Committee on Research Programs. The director general was also to be supported in the implementation by the Administrative and Finance Directorate in Niamey, and the Scientific Directorate at Kollo. These two groups were to carry out a specific plans for pushing the changes in how research was done down through the system.
- 3.5 The implementation of PRSAA and PNRA did not go as well as that of PPODR. As discussed later, frequent staff changes on both the Bank and the borrower side made it difficult to ensure a rigorous line of administrative supervision. The highly centralized administration of PRSAA and PNRA was often a major stumbling block: long delays were associated with the administration process. Both projects took a relatively long time to become operational, which contributed to poor mid-term reviews. This may have been due to a lack of supervision, a major cause of the poor overall performance of these projects, as discussed in detail below. Although the performance of both projects improved toward the end, the relatively short period covered by the projects was not enough to address these problems.

## 4. Ratings: Overall Outcome

RELEVANCE: WERE THE PROJECTS' OBJECTIVES RIGHT?

4.1 In the recent *Document* intérimaire de stratégie pour la réduction de la pauvreté (interim PRSP) published by the Government of Niger in October 2000, PPODR and PRSAA can be

directly connected to four of the five strategies for the rural sector (Section 5.1 on the Policy for the rural sector): management of the natural resources, food security, intensification and diversification of productions, and organization of the rural communities. Only the fifth strategy, aimed at improving the access to credit for the rural communities, is not among the objectives of the two projects.

- 4.2 The objectives of PNRA cannot be explicitly found in the interim PRSP. However, it could be argued that at least the first three strategies of the policy for the rural sector could not be carried out, at least not sustainably, without research. However, the magnitude of the project is perplexing, both in its ambitious research objectives and its physical capacity building: 47 percent of the US\$20.4 million of total credits were invested in civil works, vehicles, and equipment. This is substantial considering the high level of risk associated with PNRA. The most significant risks, based on the findings of this mission, were not adequately identified in the SAR because it did not appropriately account for:
  - The relatively low average level of expertise (education) and research experience of the INRAN researchers.
  - The low probability that researchers with deficient research records (by international standards) would be able to develop national and international research programs without further training.
  - The relatively long delays in increasing their research capabilities (by means of training at the masters or Ph.D. level in foreign countries).
  - The delay required after graduation, even from a prominent school, to establish a strong research program.
  - The high probability that senior or productive researchers would leave INRAN due to non-competitive salaries or unsatisfactory working conditions.
- 4.3 Most objectives of the project could have been reached even if the magnitude of the project had been significantly less. The facilities built far exceeded the needs of INRAN: more laboratories are now available than there are researchers to make good use of them; a newly built research facility at Tahoua is nearly empty; and houses for researchers built at the Bengou Research Station are empty. The objective related to the development of strong national and international research programs was too ambitious considering the average performance and experience of researchers in INRAN.
- The most recent County Assistance Strategy (1997) focuses on three areas: human resource development, improved water management, and expansion of regional growth opportunities. PPODR and PRSAA can clearly be connected to the first two strategies. PNRA can be connected with the Bank's most recent strategy only indirectly, but was more directly associated with the previous CAS (1994), as one of its stated strategies was to support agricultural and infrastructural development.
- 4.5 The objectives of PPODR and PRSAA remain **highly** relevant today both for the Government of Niger's development strategy and for the Bank's intervention strategy. The relevance of PNRA is rated **modest**. This rating reflects the indirect association of PNRA with the strategies of the Bank and the borrower, and the excessively ambitious aims of some objectives and the means used to achieve them.

#### EFFICACY: DID THE PROJECTS ACHIEVE THEIR STATED OBJECTIVES?

#### **PPODR**

- 4.6 The first objective of building the local institutional capability to prepare, appraise, execute, and evaluate small rural development operations (SROs) with active local participation was achieved. A few dossiers prepared by local agents during the project have been examined and found to be very well done. This reflects excellent training, which contributed to a build up of human capital in Niger.
- 4.7 The second objective of strengthening the capacity of provincial and district technical staff to assist farmers in the design, preparation, and execution of SRO was also achieved. During the project, farmers were very satisfied with the extension services they received.
- 4.8 Clear evidence of achievement of the training of extension agents is that after project completion, the agents who benefited from the training were well prepared to succeed at tests required by other parties (NGOs or projects financed by different countries) to work for them in the evaluation and appraisal of SROs. Several agents went to work for these organizations after the completion of PPODR.
- 4.9 Slightly fewer SROs were financed (88) than estimated at the time of appraisal (96). Hence, the physical objective is rated as substantially achieved, as in the OED review and the ICR. The ICR also notes a change in the orientation of the project during the last few years of implementation—a change that was jointly accepted by the Government of Niger and IDA—to focus on consolidating the achievements of ongoing SROs rather than financing new ones.<sup>3</sup>
- 4.10 The impact of the project on social issues is ambiguous. The impact on poverty and food security is clearly positive for the beneficiaries of the SROs in the short run, but it is unlikely to be sustainable. During PPODR, farmers benefited from extension services that helped to increase production and revenues. The overall impact on poverty in the local communities has been negligible, however.
- 4.11 A characteristic of PPODR was the creation of two accounts when an SRO was financed: a capital replacement account (CRA) to maintain and replace machinery and equipment, and a community development fund (CDF) that was to benefit the whole community (village). The beneficiaries were to make payments into the CDFs from revenues generated by the SROs, and these funds were to be used to finance collective projects or investments to alleviate poverty in the villages. However, the contributions were never substantial. In fact, all the groups visited by the assessment mission had only one account and no clear distinction was made between the two types of payments, when payments were made. Moreover, the funds are managed exclusively by the beneficiaries or by the village chief, and they are mainly used for their benefit: beneficiaries are acting as if the funds belonged only to them. Moreover, there is a lack of transparency in the management of the account. A rare exception was the village that used these funds to purchase vaccines for the whole population when a case of hepatitis hit the village.
- 4.12 On the gender issue, PPODR financed (and encouraged the formation of) SROs where the groups were composed of both men and women. Also, several groups owning and operating an SRO were made up entirely of women. However, no data were collected during the project to

<sup>3.</sup> ICR for the PPODR, pp. 3-4.

evaluate the impacts on women, and the project did not discriminate or favor a gender group specifically. The ICR rated this objective as partially achieved, but the justification is unclear. This assessment rates the impact of PPODR on the gender issue as modest.

4.13 The overall efficacy of PPODR is rated **substantial**. The two general objectives were met. The shortcomings relate to a few components of the project, especially to the operation of the CRA and the CDF. This implies that the impacts of the project on increasing revenues of the rural population and on increasing food security have been modest; but these were not explicit objectives in the SAR or in the Development Credit Agreement. The SROs were supposed to contribute to an economic spin-off in the communities.

#### **PRSAA**

- 4.14 The reorganization of the extension service has been achieved. At the local (arrondissement) level, good collaboration and coordination of the activities of three ministries was established. However, collaboration and cooperation was less evident at higher levels of the ministries.
- 4.15 The most important contribution of the project has been the significant buildup of human capital through personnel training at all levels of government. Almost all persons that were interviewed emphasized this point. The multidisciplinary training received by the VEWs made extension much more effective. This was highly appreciated by farmers since they did not have to meet with three or four agents to get their questions answered.
- 4.16 A link between extension and research was established and institutionalized. During the last year of the project, 89 percent of the planned monthly technology review meetings were held (77 percent over the span of the project). At these meetings, researchers trained the subject matter specialists on various extension themes (technologies). These themes were to be taught to the VEWs and ultimately to farmers. Researchers also answered questions on problems that farmers faced and for which the subject matter specialists did not have solutions. Considering all the time and effort that researchers put into preparing the meetings, the flow of information from research to extension that has been established is a significant achievement.
- 4.17 The flow of information from extension to research was less satisfactory. Three Regional Agricultural Research Committees (CORRAs) were initiated under PNRA, but they never functioned properly. The CORRA was a regional forum where farmers, extension agents, researchers, and administrators met to discuss rural development issues and propose a research agenda to find solutions to problems. The CORRAs were supposed to meet once a year but met only once in each of the three regions. The ICR also notes that on-farm trials were fewer than planned and that the quality of the tests was "often poor and led to few findings and minor impacts." A potential reason is that several researchers in INRAN were being trained outside of Niger under PNRA during that period.
- 4.18 A important output of PRSAA that field trips revealed is that the training and visit (T&V) method the project used to provide extension services was greatly appreciated by farmers. They could count on regular visits by the agent, even though fortnightly visits may not have been necessary. The mission was told that this approach is used by some NGOs and other projects currently active in the country.
- 4.19 PRSAA had substantial impacts on literacy and numeracy training. In addition to the factual evidence presented in the ICR, it is worth mentioning that the Ministry of Education

developed a new teaching program based on the extension themes that were promoted, and this was highly appreciated by the participants. Moreover, there was excellent collaboration between VEWs and the instructors: the VEWs were regularly invited to participate in the classes, especially when a new extension theme was introduced. The VEW helped the instructor present the theme and participated in the discussion of technical aspects of the theme. The mission was told that this teaching program attracted participants who would not have attended the literacy program otherwise, and some of them still had reading capabilities thanks to the program. It may not be a representative example, but when the mission visited a library, there was a farmer who had participated actively in the literacy program. This farmer could still read relatively well when the mission handed him a book even though he had not read a line since the program ended.

- 4.20 The literacy and numeracy program also had a gender impact. Several accomplishments are summarized in the ICR, including the appointment of extension staff especially in charge of women's activities, and the introduction of extension themes of particular interest to women in the training schedule. The mission was also told (by a women's representative) that a supplementary factor contributed to increase the literacy of women. When a village requested literacy and numeracy training, this village was required to open two classes simultaneously, one for women and one for men. If there were not enough female candidates (minimum of 25 women), usually because men were forbidding the women to attend, then the program was not offered in that village. Other accomplishments of PRSAA regarding the gender issue were recognized during the two-day workshop that closed the mission to Niger; they are presented in Annex B, section III-4.
- 4.21 Several indicators used to evaluate the performance of the project are partial by nature and may even be misleading. For example, a large number of villages visited each week by a VEW is not necessarily a good measure of productivity. Obviously, short visits may not be as rewarding and useful for farmers as longer, more instructive ones. Similarly, the frequency of the visits may also be misleading as a performance indicator. Less frequent but timely visits may be more productive.
- 4.22 Nonetheless, it became evident during the interviews that some people, both VEWs and supervisors, were not performing in a satisfactory manner, but they were very rarely penalized. Part of this shortcoming is due to an inadequate monitoring and evaluation system. In fact, at the beginning of the project, the mission was told that no serious M&E was performed. An effective M&E system was implemented only in the later part of the project.
- 4.23 There were significant delays in the transfer of funds from the central government to the local authorities. This decreased productivity of the VEWs because they could not make the necessary repairs to the vehicles when needed, and they often had to wait many days before receiving coupons for gasoline. The highly centralized administration system of the project has been pointed out as a major factor causing delays.
- 4.24 Good indicators to measure the efficacy of a project such as PRSAA are not easy to define. Poverty reduction and sustained growth in revenues cannot really be achieved within five years and almost all economic measures could be biased in such a short period, due for instance to varying weather conditions. The adoption of new technologies often requires a long period and, as pointed out by several participants in the two-day closing workshop of the mission, an indicator measured at a the completion of a project, especially of a project that lasted only a few years, may in fact reflect the benefits of previous projects that promoted the same, or a similar technology (see paragraph 4.43). This is especially true in a country where production risks are extremely high and where the great majority of the population is illiterate.

4.25 The points discussed above lead us to rate the efficacy of the project substantial, which is higher than the ICR and OED ratings. This upgrade reflects the fact that all components of the project that were targeted to reach the objective of poverty reduction and increased rural incomes have been achieved, in our view, satisfactorily, even though objective and quantifiable performance indicators are not available. The components include a better organization of extension services during the life of the project, excellent collaboration among three ministries at the local level, the establishment of a significant flow of information from research to extension, a considerable buildup of human capital at all levels of government, and a substantial achievement of the functional literacy objective. Moreover, our general impression during the field trips was that this project contributed to make farmers aware of alternative technologies that, even though they had not been adopted yet, could contribute significantly to improve their standard of living. Factors such as absence of appropriate credit facilities or repair parts precluded the adoption of several technologies but such factors are associated with the sustainability of the project and will be addressed in a subsequent section.

#### **PNRA**

- 4.26 This project, as the ICR notes, was seriously deficient in that no performance indicators were established at the start against which to evaluate the project. That said, the ICR rated the achievement of the first objective—to improve priority-setting and resource allocation methodology, taking into account farmers' needs and resource conservation—as partial. This assessment agrees with the ICR that the achievement of this objective is modest because most of the governance bodies that were established to ensure adequate priority-setting and resource allocation did not function effectively.<sup>4</sup>
- 4.27 The second objective—improving the coordination in the formulation and execution of national and international agricultural research programs—is rated substantial in the ICR. The justification of the ICR for the substantial rating consists of the creation of a Scientific Directorate and multidisciplinary research programs, setting up committees to evaluate internal research proposals to be financed by PNRA, and holding annual meetings to discuss research results and proposals for the coming year in which external partners are invited to participate. This organization of research and the activities that are described are common basic features of all research centers or institutes. (It is not possible to compare the present organization and activities of INRAN to the situation before PNRA because the information to do so is not available.) Even though the justifications presented for the ICR rating are technically correct, shortcomings that are not mentioned support an efficacy rating of modest for this objective.
- 4.28 The coordination and execution of national and international research programs should reflect joint research projects and scientific publications such as refereed journal articles. Discussions with researchers in the CERRAs and analysis of INRAN annual reports reveal that few joint research programs were undertaken during PNRA. The reason is that researchers were able to get sufficient research funds from the project to perform their experiments and did not have to elaborate and conduct international projects. Another reason is that a large proportion of researchers attended training programs to upgrade their knowledge. Therefore, few researchers were available to conduct research, and time constraints prevented them from developing international research programs.

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<sup>4.</sup> See the ICR for the PNRA, p. 3.

- 4.29 As to scientific publications, there are none, except for the annual report of INRAN that summarizes the major research findings. To our knowledge, no refereed journal articles have been published on the findings of the projects financed by PNRA. Also, there are no internal research bulletin series where research results could be reported. Without publications, it is difficult for researchers to establish international collaborations with renowned research centers or institutes. (According to Dr. Ouendeba, coordinator of the ROCAFREMI, ICRISAT, the publication rate is also very low in other scientific organizations in Africa.) Another negative impact of not publishing research results is that the same, or very similar experiments could be conducted more than once over the years by different researchers. In fact, such repetition did occur because the original results were unpublished, and hence no longer available.
- 4.30 The most important source of information to conduct up-to-date research is the scientific literature. Unfortunately, the scientific literature is not readily available to researchers in Niger: there are no reading rooms where current literature (journals and reports from other research centers or institutes) can be consulted.
- 4.31 There are four CERRAs (at Niamey, Kollo, Maradi, and Tahoua), which are specialized in research domains according to their comparative geographical location. In reality, this organization of the research is on paper only, and the research that is being conducted in the CERRAs reflects the interests of the researchers. A striking example is the CERRA at Tahoua, which is specialized in agro-pastoral issues but has only two researchers, neither of which works in this area.
- 4.32 This assessment agrees with the ICR that the third objective of improving research planning, budgeting, and financial management was only partially achieved. Full achievement of these objectives was constrained by the lack of budget lines for research projects and subprojects, and by long procurement delays through the ministerial channels.
- 4.33 The training component of the fourth objective has been highly achieved, while the achievement of the other components on improving staff planning, recruitment, and career development is modest. Short-term and long-term training programs were available to INRAN staff. This contributed to a significant increase in INRAN's research capacity (noted in the ICR). The number of scientists with masters or Ph.D. degrees doubled between 1993 and 1998, but this change is mainly due to an increase in the number of scientists with masters degrees. The number of researchers with Ph.D.s remained constant at 10 over the period.
- 4.34 Recruitment and staff planning have been difficult. Several researchers have quit INRAN and found jobs elsewhere; unfortunately, this includes several senior researchers. One reason is financial; salaries in international organizations are considerably higher (up to three times) than those offered by INRAN. A second reason is the lack of career development opportunities within INRAN. Statutes for the staff (scientists and technicians) have been drafted but never adopted by the government, probably because of budgetary constraints. Several outsiders interviewed by the assessment mission characterized INRAN researchers as civil servants because their career development is no different than that of other government employees. The absence of these statutes, therefore, does not encourage productivity and performance in research.
- 4.35 Considering that senior researchers usually have other employment opportunities, it is difficult for the director of INRAN to require that specific research projects be conducted, and to force some researchers to work at CERRAs in remote towns: a job opportunity at Tahoua, for example, has been vacant for more than a year and no application has been received.

- 4.36 The objective of strengthening linkages among research, extension services, and farmers has been substantially achieved in one way (research-extension), while it has been modestly achieved in the other way (extension-research). Researchers have greatly collaborated with the extension service and have made significant efforts to conduct research and testing on sites located on farms. However, the CORRAs did not functioned properly. Details are provided in the ICR.<sup>5</sup>
- 4.37 Contrary to what the ICR says, the high-yielding hybrid sorghum NAD1 was not developed with PNRA input. It was developed before PNRA, but the project contributed funds to test the hybrid on farms at many locations in the country. The mission was told that the demand for this variety of sorghum far exceeds the available supply, even though testing results by INRAN showed that this variety could not grow in the more humid part of Niger due to the development of mold. There is obviously a serious problem in the marketing of this product.
- 4.38 The civil works and equipment component of the project has been substantially achieved, even though part of the civil works may not be relevant considering the status of research in the country. One shortcoming worth mentioning regards the logistics in the allocation of the equipment (administrative deficiency). Several researchers complained about the long delay required to receive equipment after it was ordered. The mission was told that some equipment purchased toward the end of the project has yet to be delivered to the researchers and the CERRAs.
- 4.39 The points mentioned above justify a rating of **modest** for the efficacy of PNRA.

#### **EFFICIENCY: WERE THE PROJECTS COST-EFFECTIVE?**

- 4.40 Two studies have estimated the net present value (NPV) and internal rate of return (IRR) of some categories of SROs financed by PPODR. At appraisal, representative farm models were used, while the study by Manikowski et al.<sup>6</sup> (1998) was based on actual economic results from a survey of SROs. The estimates for both measures were similar at appraisal and at project completion and showed significant economic benefits. For example, the average IRR at the end of the project was estimated at 19 percent for investments in bottomland recuperation and at 25 percent for SROs in horticulture. However, those calculations assumed that the SROs would be operational for 25 years. As will be argued in the section on sustainability, this is not likely to be the case. Therefore, the average economic benefits are overestimated.
- 4.41 Considering that the investments in SROs accounted for only 24 percent of total costs, the calculated economic indicators, even if they reflected the actual average returns of the SROs, are not sufficient to assess adequately the efficiency of the project. Financing SROs was only a component of the project and not a primary objective; but as discussed shortly, the other benefits are much more subjective.
- 4.42 A study to measure the economic impact of PRSAA reports NPV and IRR calculated for some technologies promoted by extension agents. Both show positive economic returns.

<sup>5.</sup> ICR for the PNRA, p. 6.

<sup>6.</sup> Stanislaw Manikowski, Venant Barampanze, Ibrahim Boukary Abdou, et Salifou Mahamane. 1998. Projet de petites opérations de développement rural (PPODR): Impact du projet sur oles bénéficiaires. Rapport soumis au Ministère du Plan, République du Niger, et à la Banque Mondiale. Novembre.

<sup>7.</sup> Mohamadou Issaka Magha, Evaluation de l'impact du Projet de Renforcement des Services d'Appui à l'Agriculture (PRSAA), Cabinet Maina, Janvier 1999.

However, as emphasized by several participants at the assessment mission workshop, these economic results have to be qualified because the adoption of new technologies is a long process, especially in a country with a very low rate of literacy (17 percent), and because of technical, physical, and financial constraints that may prevent or delay technology adoption in several cases. Therefore, the economic benefit of some technologies may be overestimated while that of others may be significantly underestimated.

- 4.43 For example, a technology may have been more widely adopted during the implementation of PRSAA, but its adoption may reflect cumulative efforts of the extension service over the previous decade. Therefore, technology adoption may come after project completion, and an early evaluation of the economic impact of the project would not show these benefits. The adoption of urea blocks is a good example. Before project completion, two surveys showed a low adoption rate for urea blocks in the feed ration. However, this "new" technology was the most referred to when the mission visited farmers, and it seems to be widely adopted now. Some farmers have actually started small businesses making and marketing the blocks.
- 4.44 Constraints on technology adoption that affect potential benefits include lack of necessary credit to purchase and maintain the equipment. In some cases, the inputs themselves (fertilizers, equipment parts) may not be available. Therefore, the calculated economic returns are biased and cannot constitute a major criterion in the evaluation of PRSAA.
- 4.45 Other factors affecting the efficiency of the projects are as follows:
  - More decentralized administration of PRSAA could have been more cost-effective.
  - Costs could have been significantly lower if the quantity of civil works in PNRA had been reduced to a more relevant level.
  - The utilization rates of some of the facilities and equipment are very low: several laboratories were found to have only one or two researchers, and machinery and equipment were not used due to the lack of funds to conduct research.
  - Potential economic benefits that could have been earned from research results are diminished due to the exodus of some senior researchers.
  - Delays in the delivery and non-delivery of equipment incurred extra costs to the project.
- 4.46 No adequate measure is available to assess the efficiency of the projects. Depending on how much one values an educated population, or an adequate extension service, or the potential of the infrastructure for a national basis in research, and considering the relevance and the efficacy scores of the projects, the impacts of all three projects could be rated as negligible to high with respect to efficiency. According to our own judgment of the benefits for a country like Niger, and taking into account the assessments of relevance and efficacy, we rate the efficiency of PPODR and PRSAA substantial, and the efficiency of PNRA modest.

# 5. Ratings: Institutional Development Impact and Sustainability

#### INSTITUTIONAL DEVELOPMENT IMPACT

#### **PPODR**

- 5.1 PPODR has fostered a culture of participation and teamwork, both at the government level and at the farmers' level. Moreover, the decentralization of the financial operations at the *arrondissement* level helped to develop discipline and skills at the local level, especially in administrative and financial management. These institutional development impacts are well described in the ICR.<sup>8</sup> A shortcoming of the project is the non-implementation of a legally binding status concerning the CRA and the CDF, as well as the lack of appropriate legally binding means to ensure that farmers comply with their financial obligations, especially after project completion. This would have contributed to more sustainable SROs and reduced rural poverty more significantly.
- 5.2 Farmers' groups have learned to work in an organized fashion within an accepted set of rules that drive their conduct and actions. The groups visited by the mission have a series of internal rules governing, for example, the entry of new members, the use of the collective equipment, and the terms and conditions regarding loans to members and non-members (for groups with an account). The weak point is the lack of vision that would ensure sustainability of the SROs. In most cases, there is no plan nor are actions being taken to replace and maintain the equipment. Farmers seem to believe that when the equipment is depleted, another project will come along and replace it.
- 5.3 Considering the above, the overall impact of PPODR on institutional development is rated **substantial**.

#### **PRSAA**

- 5.4 The multidisciplinary training received by extension agents during PRSAA made the extension system much more effective. This institutional change in the coordination of extension services was highly appreciated by farmers.
- 5.5 The collaboration between researchers and extension agents was institutionalized through memoranda of understanding. This collaboration, however, was closely linked to the life of the project because no perennial sources of funds are available to continue financing these activities.
- 5.6 The collaboration and the coordination among the ministries involved in the project were not institutionalized, and stopped at the end of the project.
- 5.7 Without commitments from stakeholders to cover the recurrent costs associated with offering extension services, the benefits of the project are at risk. This suggests an institutional gap.

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<sup>8.</sup> ICR for the PPODR, pp. 2-3.

- 5.8 Future institutional arrangements of extension services are likely to build on several characteristics of the project design. Also, they will likely try to avoid the shortcomings of the project, such as the overly centralized administration.
- 5.9 Considering the above, the overall impact of PRSAA on institutional development is rated **modest**. During the period of the project, the impact was substantial, but most of the impacts disappeared after completion.

#### **PNRA**

- 5.10 PNRA contributed significantly to changes in the conduct of INRAN, and several institutional changes have been given legal status by the government. Sustainable reforms have been made to the administration of INRAN, and especially to the Scientific Directorate and the Administrative and Financial Affairs Directorate. Research programs have been defined and institutional mechanisms have been successfully implemented to ensure collaboration between research and extension.
- 5.11 However, some institutional arrangements do not seem to be efficient. Since project completion, all the administration has been highly centralized in Niamey. This, according to researchers in the CERRAs, causes extensive delays in the management of research projects and imposes unnecessary administrative burdens at the regional level. During PNRA, all CERRAs had access to decentralized accounts.
- 5.12 Other institutional collaborations planned in PNRA were never realized, such as the collaboration between INRAN and the University of Niamey, for which a collaboration protocol was never signed. Others were linked to the life of the project, such as the regular consultation meetings between research and extension.
- 5.13 As noted in the ICR, several governance bodies did not perform effectively. Similarly noted is that several institutional arrangements made to improve research planning, conduct, and financing never became fully operational.
- 5.14 PNRA contributed to substantial institutional changes. However, several of those changes never became fully operational or did not contribute to improved efficiency in governing research. Hence, the institutional development impact of PNRA is rated **modest**, in accordance with the ratings in the ICR and OED review.

SUSTAINABILITY: ARE THE PROJECTS' RESULTS LIKELY TO LAST

#### **PPODR**

5.15 The local institutional capability to prepare, appraise, execute, and evaluate small rural development operations (SROs) with local participation is still present in Niger. As already mentioned, PPODR fostered a culture of participation and teamwork, both at the government level and at the farmers' level. Farmers' groups have learned to work in an organized fashion within an accepted set of rules that govern their conduct and actions. However, this capability is gradually decreasing because no other projects that require this expertise are currently under the coordination of the government, and no ongoing training is being offered. While several civil servants have changed jobs in recent years, a few are now working for NGOs where they use their

skills. Hence, since this expertise still exists, the sustainability of this objective is rated substantial.

5.16 Regarding the sustainability of the SROs themselves, 77 out of 88 SROs were still in good operating condition at the completion of the project—an 88 percent success rate. At the time of the assessment, the success rate had decreased significantly. The mission was able to collect information about the current state of 46 SROs, only 26 of which are still in reasonable operating condition (57 percent). The others were either abandoned or soon to be abandoned.

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- 5.17 Even on SRO sites that are considered in good operating condition, severe problems can be expected. For example, at an SRO at Kargui Bangou in the *département* of Dosso 83 farmers (26 women and 57 men) shared an irrigation site of 11 hectares. The pipes were rusted and not expected to last many years, and no funds were available to replace them. Farmers are awaiting another project to request new equipment. Another example is the group of women at Togone that owns an SRO for peanut oil extraction. The project financed the purchase of three manually operated huskers. One of them is no longer working and the other two cannot be expected to last much longer: no maintenance is occurring and they are stored outside without protection against bad weather. Again, there are no funds available to repair, maintain, or replace the equipment.
- 5.18 At project completion, the compliance rate of the annual contributions to a CRA and a CDF averaged 89 percent and 20 percent, respectively. The compliance rates seem to have decreased significantly: the majority of the groups visited were no longer complying with the reimbursement requirement, or were making contributions that are not sufficient to ensure replacement of the equipment. When questioned about the reasons for the low compliance rate, the groups usually blamed low revenues due to bad weather. The mission also asked if the payments were increased when the weather was good. The answer was negative. One group visited by the mission had voted to decrease the annual contribution to the account, which was originally calculated to sustain capital replacement. When questioned about it, no reasonable explanations were given and the group seemed well aware that the SRO would terminate when the equipment was depleted. Long-term planning did not seem to be a concern.
- 5.19 Case studies have been conducted for the Ministry of Planning on a sample of 8 SROs to investigate the state of the accounts. In May 2000, an average of 6.6 percent of the funds that were supposed to be in the accounts had effectively been recovered (in a joint CRA and CDF account). Only three groups were contributing to the account with payment rates of 39 percent, 51 percent, and 96 percent. According to the study, an important factor for non-compliance is that farmers think of the money coming from the state as a gift.
- 5.20 The beneficiaries had to agree to make annual contributions to a CRA and a CDF when an SRO was financed, but no legally binding mechanism was put in place to ensure that these obligations would continue to be fulfilled, especially after project completion when civil servants quit monitoring the state of the accounts. The presence of a legal status concerning these funds and the implementation of a monitoring system after project completion could have been much more effective to ensure sustainability and contribute to poverty reduction.
- 5.21 In general, the SROs that show the highest probability to be sustainable and contribute to reduced poverty are those involving soil conservation and bottomland recuperation. For example, the mission visited a bottomland recuperation site at Guidan-Arna where the yields of the farmer

<sup>9.</sup> Fonds de Soutien au Développement du Secteur Agricole. 2000. Rapport de mission de prise de contact avec huit froupements PPODR. Niamey. Mai.

visited had been multiplied by 20 with the SRO. Four farmers (relatives) are now farming the same area that the producer used to farm, and their standard of living has increased significantly. Several sites where land has been recuperated are not fully exploited and revenues could be increased further. However, land tenure problems are acute on some sites and prevent the full exploitation of benefits from the SROs.<sup>10</sup>

- 5.22 Investments that require recurring costs or equipment maintenance are likely to fail. Reasons for this include the absence of adequate access to credit as well as to limited local technical expertise to maintain the equipment.
- 5.23 An overall assessment of the sustainability of the PPODR needs to distinguish the human capital investments in local communities and in provincial and district technical staff from the physical investments in SROs themselves. Since the two primary objectives of the project focused on human capital investments, which have proven more sustainable, rather than on the physical investments in SROs, which have proven less sustainable, the overall sustainability of the project is rated as **likely**.

#### **PRSAA**

- 5.24 The reorganization of extension services that occurred during PRSAA is no longer effective. Occasional collaboration between the civil servants of different ministries occurs, but the activities of the ministries and the team are no longer coordinated. There is ongoing reflection within the government, especially at the Ministry of Planning, on alternatives to reorganize extension services and make more appropriate use of the human capital that was developed during the project.
- 5.25 No significant extension services have been provided since project completion. The local extension agents do not have the physical transportation capacities to visit farmers because the different levels of government cannot afford to (or choose not to?) pay for gasoline or the needed repairs to maintain the vehicles in working condition.
- 5.26 The human capital that was built through extensive training of government agents in multidisciplinary fields and the extensive literacy and numeracy programs that were provided to the rural population are important assets for Niger and can be expected to have lasting effects. Without appropriate transportation facilities, however, the increased human capital of the civil servants will not have much of a rate of return. Also, without continuous efforts and resources invested in literacy and numeracy training programs, which is not currently the case in the villages visited by the mission, some of the gains could disappear. For example, the mission visited a "library" that is located in a private residence and consists of a box containing a few texts in the local language. The records for this library show that no books have been signed out since completion of PRSAA, when the literacy and numeracy program ended.
- 5.27 Some links still exist between extension and research. However, meetings are much less frequent and this structure is not expected to last without supplementary funding.
- 5.28 Studies conducted at project completion showed that the adoption rate for most technologies promoted by the extension agents was low. However, the adoption of new technologies, which often require new skills and new ways of doing things, is a long process.

<sup>10.</sup> On this point, see the ICR for the PPODR, p. 4.

The information gathered during the mission suggests that, at least for some technologies, the adoption rate has increased since the completion of PRSAA.

- 5.29 To increase the probability of the sustainability of a project like PRSAA, ways of ensuring continuous flows of funds could have been incorporated in the project design. For example, long-term commitments from local governments (at the département level) to finance the marginal costs of extension activities, such as transportation costs and the required inputs for field demonstrations, would have increased the sustainability of the outcome of PRSAA. A small contribution from farmers, especially commercial farmers, could also be possible. When asked if they would be willing to pay part of the costs incurred by the agents to deliver extension services, some groups were open to the idea (they would pay for gasoline, for example).
- 5.30 On several occasions, civil servants in the regional offices told the assessment mission that the termination of PRSAA came as a surprise. Several civil servants were aware of some problems in the administration and monitoring of the project, but they did not expect that those problems could cause the project to terminate. In any case, this "surprise" may be one reason why long-term sources of funds were not sought to ensure sustainability, especially at the regional level.
- 5.31 The sustainability of the PRSAA is rated **unlikely**. The human capital that has been built is sustainable, but the contribution of the output of the project to decreased rural poverty in the long run will be marginal without further commitment of funds. To keep offering extension services implies recurrent costs, and ways to secure these funds were not incorporated in the design of the project. Nonetheless, the PRSAA may have indirect long-lasting effects because several characteristics of its design (multidisciplinary approach, for example) are likely to be maintained in future projects and government initiatives.

#### **PNRA**

- 5.32 Since the end of PNRA, INRAN has been in a very precarious financial situation. The government has not kept up with its commitment to finance the institution, and the current subsidy is not sufficient to cover operating costs. PNRA has also significantly contributed to increased recurrent operating cost requirements by building new infrastructure and purchasing new research equipment and vehicles, and the current state of funding is not sufficient to cover these. Consequently, the research environment has greatly deteriorated:
  - Power blackouts for periods up to several weeks occur regularly.
  - The sustainability of the equipment and even of the infrastructure is compromised, and the government does not seem to treat research as a national priority.
  - The director and researchers make significant efforts to attract research funds with limited success—the number of collaborative research projects has increased significantly in recent years, but the number, size, and duration of the projects is not sufficient to ensure sustainability of INRAN.
  - Most researchers in the CERRAs could not count on sufficient funds to conduct field research last year, and the situation has not improved.
  - When researchers return from training, no funds are available to conduct research. This drives them to look elsewhere for better research conditions and contributes to diminish the research potential of INRAN.
  - The non-adoption of statutes for the researchers coupled with non-competitive salaries contributes to increased desertion of researchers that are the most productive.

- 5.33 A sustainable achievement of PNRA consists of improving research programs, budgeting and financial management. The know-how that has been developed with respect to these components in the administration of a research center is likely to last several years. However, some administrative procedures could be improved to facilitate the management of research projects by researchers. Several researchers complained that the highly centralized administration limits the progression of projects.
- 5.34 The most sustainable feature of PNRA for Niger is the buildup of human capital. Several researchers have received training at the masters or Ph.D. level, and if they can find work in Niger, even if it is not at INRAN, this would be a commendable achievement.
- 5.35 Sustainability for PNRA is rated **unlikely** for all of the above reasons, but the major reason is the apparent lack of government commitment to pursue investment in research.

#### 6. Bank and Borrower Performance

#### **PPODR**

Both Bank and Borrower performance during identification and preparation was unsatisfactory due to inadequate technical pre-feasibility work on certain sub-projects and because of politically motivated decisions (by the Borrower) for unplanned expansions on SRO investments. However, both the Bank and the Borrower remarkably improved their performance during supervision and implementation, so that overall performance was **satisfactory**. In comparison with the other two projects, two points should be emphasized. Both the continuity of the staff associated with the project and the decentralized administrative structure of the project greatly contributed to this satisfactory performance overall. This was stressed on several occasions to the OED mission, and both the IDA and the Government of Niger contributed to this positive result.

#### PRSAA'

- 6.2 The design of the project, based on the institutionalization of the T&V approach, has some merit. However, the high recurrent costs involved after project completion cannot be sustained by an extremely poor country such as Niger. The return of such a project cannot be expected to be economically significant within one generation and potential for inefficiencies in the administration of the project is high. Considering these shortcomings were foreseeable, both the Bank and the borrower failed to perform their obligations at entry. Moreover, they did not perform well over the life of the project.
- 6.3 Several people interviewed said that the project stakeholders, especially the different ministries involved in the project, were not appropriately consulted in identifying and preparing the project. Therefore, many categorized PRSAA as "a World Bank project" as opposed to a joint Niger-World Bank project in its conception.
- A severe deficiency in the conduct of PRSAA was the high turnover in management, on both the Bank and the borrower side (4 task managers and 8 project coordinators). Such lack of continuity in high management made it difficult to keep the project targeted toward its objective and to ensure a rigorous and strict line of administrative supervision.

- 6.5 The major shortcomings at entry were (1) the absence of an adequate monitoring and evaluation system, (2) the lack of relevant control and performance indicators, and (3) insufficient consideration of the sustainability of the project. Both the Bank and the borrower share liability for these shortcomings.
- 6.6 At the beginning of the project, no rigorous monitoring and evaluation (M&E) was performed; both the Bank and the government could have been more vigilant on this point. While an M&E system was put in place in the middle of the project, this was implemented without appropriate training of the agents. Training was subsequently provided, but only very late in the project.
- 6.7 Information gathered during the field trips suggests that part of the unsatisfactory performance of the staff at the local level was created by bottlenecks higher in the administrative chain (long delays in payments and in sending gasoline coupons). A rigorous M&E system could have helped minimize these delays.
- 6.8 Adequate control and performance criteria were lacking, and no effort was invested to develop original indicators to evaluate the project. Both parties, and in particular the Bank could have put more effort into doing so.
- 6.9 The sustainability of the project outcomes deserved more attention at appraisal and over the life of the project. For a project like PRSAA to be sustainable, especially given the project's methodology, significant recurrent costs have to be provided for. Therefore, sustainability requires continuous entry of funds and, as suggested previously, sources of long-term commitments should have been explored early on. The government and especially the Bank should have been more farsighted.
- 6.10 Considering the above shortcomings, Bank and borrower performance for PRSAA are rated **unsatisfactory**. While these ratings are similar to those in the ICR, this upgrades the borrower performance in the OED review from highly unsatisfactory to unsatisfactory. A highly unsatisfactory rating would have implied no collaboration of the borrower in the implementation of the project. In fact, the sectoral working conditions of the local staff were significantly improved, at least for the duration of the project.

#### **PNRA**

- 6.11 The overall performance of PNRA has been judged unsatisfactory and the project was terminated. The poor performance of the project is due to (1) the unrealistic performance objectives in research considering the state of the research potential in INRAN at the beginning of the project, as well as (2) the expected implementation of research capacities that far outweighed the human capital available and foreseeable.
- 6.12 The Bank failed to appropriately identify the risks involved in this project and to adequately assess the objectives. For example, considering the high-level training involved, the objective of improving coordination in the formulation and execution of national and international agricultural research programs was almost certainly not going to be achieved within the short period of the project. High-level training requires time, and fresh graduates cannot be expected to develop and conduct national and international research programs without first establishing a solid research network.

- 6.13 The Bank also failed to appropriately evaluate the impacts of building additional facilities and purchasing so many vehicles and equipment. These investments contributed to increased recurrent costs, for which no long-term financing plans were elaborated. Moreover, the research facilities far exceed the needs of the human capital at INRAN.
- 6.14 The monitoring and evaluation component was weak, and no adequate performance indicators were originally designed to evaluate the performance of the project during its implementation. Most of the responsibility for this shortcoming can be attributed to the Bank.
- 6.15 In government failed to comply with its original financial commitments in increasing its annual contribution to the financing of INRAN, which is why INRAN is in such a precarious financial situation today.
- 6.16 Also, the government did not fulfill its obligation to pay about 13 percent of some civil works expenses. Some input suppliers are still awaiting payment.
- 6.17 Finally, the government has not yet adopted appropriates statutes for researchers, which can be interpreted as a lack of commitment to improving the research capacity in the country.
- 6.18 Given these shortcomings, both Bank and borrower performance are rated **unsatisfactory** for PNRA. The Bank poorly appraised and developed the project and provided insufficient supervision, while the borrower did not meet its commitments. The performance of the Bank and the borrower was even more deficient in this project than in PRSAA, almost highly unsatisfactory.

#### 7. Lessons

- 7.1 Experience with these three projects confirms a number of OED lessons:11
- (1) Proactive institutional development is particularly important to achieving successful outcomes of agricultural research and extension projects. This includes national policy reforms, a conducive legal framework, appropriate incentives and career development opportunities, efficient administration and financial management that is appropriately decentralized, and adequate monitoring and evaluation.
- (2) Measures to promote sustainability of the outcome of a project should be well designed at appraisal and incorporated in a project. In the case of PRSSA and PNRA, this would include a long-term financing plan for the recurrent costs associated with research and extension in the cases of PPODR, a legally binding status for both the capital replacement account (CRA) to maintain and replace machinery and equipment and the community development fund (CDF) to finance collective projects for the benefit of the whole community.

<sup>11.</sup> See also Madhur Gautam, Agricultural Extension, the Kenyan Experience: An Impact Evaluation (Washington, D.C., The World Bank, 2000), and Operations Evaluation Department, Burkino Faso – Agricultural Research and Services Projects (Project Performance Audit Report # 19498, June 24, 1999).

(3) When investing in a very expensive long-term project like increasing agricultural R&D capacity, an initial assessment must be made as to the likelihood of the planned outcome being achievable and the benefits being sustained after the donors stop funding the project. This requires both careful planning and systematic implementation of the project. Research systems are very expensive to startup and to maintain. For example, when investing in the long term at the Ph.D. level, funds should be made available to the young researchers for at least three years when they return. These funds would help the researchers to start research programs and develop a research network. In the case of PNRA, when researchers came back with their degrees, the project was terminating and research funds were no longer available. New equipment is constantly required because of the change in technology. All of this increases the costs of the R&D plan and means a rigorous assessment of the realism of the plan must be made before starting the project.

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## Annex A: Basic Data Sheets

## SMALL RURAL DEVELOPMENT OPERATIONS PROJECT (CREDIT 1890-NIR)

Key Project Data (US\$ millions)

1	Appraisal estimate	Actual or current estimate	Actual as % of Appraisal estimate
IDA credit	9.3	9.5	102.2
Swiss Cooperation	7.8	7.5	96.2
Government	0.9	0.5	55.6
Total project costs	18.0	17,5	97.2

Cumulative Estimated and Actual Disbursements (US\$ million)

	FY89	FY90	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Appraisal estimate	2.5	3.4	4.6	6.2	7.7	8.8	9.3	-	•	-	_
Actual	1.4	2.4	4.2	6.0	7.1	7.3	7.7	8.0	8.4	9.4	9.5
Actual as % of estimate	56	72	91	97	92	83	83	86	90	101	102
Date of final disbursement: November 18, 1998											

**Project Timetable** 

	Original	Actual		
Identification	August 1980	August 1980		
Preparation	<del>-</del>	1986		
Appraisal	April 1987	April 1987		
Negotiations	November 1987	November 1987		
Board presentation	January 1988	March 29, 1988		
Signing	·	September 14, 1988		
Effectiveness	July 28, 1988	December 14, 1988		
Mid-term review	December 1990	April 6-30, 1992		
Project completion	December 31, 1995	June 30, 1998		
Credit closing	June 30,1996	June 30, 1998		

Staff Inputs (staff weeks)

	Actual Weeks	Actual US\$000		
Through appraisal	184.2	202.2		
Negotiations to Board	7.5	19.0		
Supervision	258.7	497.6		
Completion	12.0	33.0		
Total	462.4	751.8		

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## **Mission Data**

	D-4-	NC	No. of Staff days Specialization persons in field represented		Performance rating		
	Date (month/year)	persons			Implementation Status	Development objectives	
Identification	August 1980						
Preparation	September 1985						
Appraisal	April 1987	5		EC,OA, AS, TR, OA			
Supervision 1	September 1988	3	8	EC, AS, OA	S	U	
Supervision 2	March 1989	4	27	EC,AS, FA, NRM	S	S	
Supervision 3	November 1989	4	21	EC, FA, NRM, EX	S	S	
Supervision 4	May 1989	5	18	EC, FA, EX, OA, RR	S	S	
Supervision 5	November 1990	3	10	EC, FA, EX	S	S	
Supervision 6	June 1991	3	6	EC, FA, EX	S	S	
Supervision 7	November 1991	3	3	EC, FA, EX	S	S	
Supervision 8 (Mid-term review)	April 1992	5	25	EC, FA, OO, RF, MS	S	S	
Supervision 9	April 1993	4	18	EC, FA, OO, RR	S	S	
Supervision 10	October 1993	2	17	EC, FA	S	S	
Supervision 11	August 1994	1	14	EC	S	S	
Supervision 12	December 1995	3	12	EC, OO, EX	HS	S	
Supervision 13	June 1996	2	6	EC, OO	HS	S	
Supervision 14	October 1996	4	7	EC, OO, EX, NGO	HS	S	
Supervision 15	March 1997	4	6	EC, FA, PS, RR	HS	S	
Supervision 16	June 1997	3	4	EC, OO, EX	HS	S	
Supervision 17	February 1998	4	8	OO, EX, NGO, TR	HS	HS	

Specializations represented: AS: Agricultural Services Specialist; EC: Economist; EX: Extension Specialist; FA: Financial Analyst; MS: Management Specialist; NGO: NGO Specialist; NRM: National Resource Management Specialist; OA: Operations Analyst; OO: Operation Officer; PM: Project Management Specialist; PS: Procurement Specialist; RF: Rural Finance Specialist; RR: Resident Representative; TR: Training Specialist.

Performance ratings: HS: Highly satisfactory; S: Satisfactory; U: Unsatisfactory; N/R: Not Rated.

## AGRICULTURAL SERVICES SUPPORT PROJECT (CREDIT 2355-NIR)

Key Project Data (US\$ millions)

	Appraisal estimate	Actual or current estimate	Actual as % of Appraisal estimate
IDA credit	18.0	18.1	100.5
Government and beneficiaries	1.8	2.5	138.8
Total project costs	19.8	20.6	104.0

## Cumulative Estimated and Actual Disbursements (US\$ millions)

	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Appraisal estimate	4.5	7.5	10.5	14.1	17.3	18.0	
Actual	2.1	4.0	6.5	9.4	12.9	16.1	18.1
Actual as % of estimate	46.7	53.3	62	66.7	74.6	89.4	100.5
Date of final disbursement: October 14, 1998							

## **Project Dates**

ı	Original	Actual
Identification	October 1987	October 1987
Preparation	October 1988	October 1988
Appraisal	May 1991	May1991
Negotiations	January 1992	February 1992
Board presentation	March 1992	April 1992
Signing		June 1992
Effectiveness		January 1993
Mid-term review	July 1994	February 1995
Project completion	December 1997	December 1997
Credit closing	June 1998	June 1998

## Staff Inputs (staff weeks)

	Actual Weeks	Actual US\$000
Through appraisal	147.7	405.3
Negotiations to Board	21.7	68.8
Supervision	275.1	669.7
Completion	12.0	22.5
Total	456.5	1,166.3

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## **Mission Data**

	<b>D</b> .		. C. M.I	Specialization	Performance rating		
	Date (month/year)		Staff days in field	Specialization represented	Implementation Status	Development objectives	
Identification	Oct.1987						
Preparation	Oct. 1988	4	12	AS, AS, AE, TR			
Appraisal	May1991			EX, FA, OA, EX, ME			
Supervision 1	Dec. 1993	2	14	AS,AS	S	S	
Supervision 2	Aug 1994	3	14	AS,AS, AS	S	S	
Supervision 3 (Mid term review)	Feb. 1995	4	15	EC,AS, AS, FA	S	Ū	
Supervision 4	June 1995	2	12	AS, AS	S	U	
Supervision 5	Dec. 1995	4	14	AS,AS,AE,OO	U	U	
Supervision 6	Sept. 1996	4	14	AS, AS, AE, OO	S	U	
Supervision 7	Oct. 1997	4	12	EX, AS, AE, WID	S	U	
Supervision 8	June 1998	2	10	AS, OA	S	U	

Specializations represented: AE: Agricultural Economist; AS: Agricultural Services Specialist; EC: Economist; EX: Extension Specialist; FA: Financial Analyst; ME: Monitoring and Evaluation Specialist; OA: Operations Analyst; OO: Operation Officer; TR: Training Specialist; WID, WUD Specialist.

Performance ratings: HS: Highly satisfactory; S: Satisfactory; U: Unsatisfactory; N/R: Not Rated.

## NATIONAL AGRICULTURAL RESEARCH PROJECT (CREDIT 2122-NIR)

Key Project Data (US\$ millions)

	Appraisal estimate	Actual or current estimate	Actual as % of Appraisal estimate
IDA credit	19.9	20.4	102.5
Bilateral donors	4.6	1.4	30.4
Government	3.5	1.7	48.6
Total project costs	28.0	22.1	78.9

## Cumulative Estimated and Actual Disbursements (US\$ millions)

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Appraisal estimate	5.0	7.9	11.3	15.2	17.4	18.6	19.3	19.7	19.9
Actual (US\$M)	0	1.0	1.8	4.1	5.3	7.9	11.5	16.3	20.4
Actual as % of estimate	0	12.7	15.9	27.0	30.5	42.5	59.6	82.7	102.5
Date of final disbursement	:			June 17,	1999				

**Project Dates** 

;	Original	Actual
Identification	October 1987	October 1987
Preparation	June 1988	June 1988
Appraisal	February 1990	February 1990
Negotiations	February 1990	February 1990
Board presentation	March 1990	March 1990
Signing		July 1990
Effectiveness		July 1991
Mid-term review		March 1996
Project completion		December 1998
Credit closing		December 1998

Staff Inputs (staff weeks)

	Actual Weeks	Actual US\$ 000
Through appraisal	103.7	250.8
Appraisal to Effectiveness	13.3	37.7
Supervision	223.9	588.6
Completion	21.0	42.1
Total	361.9	918.5

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**Mission Data** 

			C1_0(1	0 1	Performance rating	
	Date (month/year)	No. of persons		Specialization represented	Implementation Status	Development objectives
Identification	October 1987	•	-	-	_	-
Preparation	June 1988	-	-	-	-	-
Appraisal	February 1990	3	?	AG, EC, AR	-	-
Supervision 1	March 1991	1	12	AG	U	U
Supervision 2	December 1991	1	12	AG	S	S
Supervision 3	May 1993	2	12	AG, AE	U	U
Supervision 4	October 1995	3	12	AG,AG, OO	S	S
Supervision 5 (Mid-term review)	March 1996	4	12	AG, EC, EX, OO	S	S
Supervision 6	September 1996	3	12	AG, EX, OO	S .	S
Supervision 7	March 1997	2	3	AR, EX	S	S
Supervision 8	October 1997	2	15	AG, OO	S	S
Supervision 9	October 1998	2	15	AG, OO	S	S
ICR mission	April 1999	2	15	AG, OO	U	U

Specializations represented: AE: Agricultural Economist; AG: Agronomist; AR: Agricultural Research Specialist; EC: Economist; EX: Extension Specialist; OO: Operations Officer.

Performance ratings: HS: Highly satisfactory; S: Satisfactory; U: Unsatisfactory; N/R: Not Rated.

#### Annex B: Summary of the Two-Day Closing Workshop

#### ATELIER DE RESTITUTION DE LA MISSION D'EVALUATION EX-POST DE TROIS PROJETS FINANCES PAR LA BANQUE MONDIALE : PPODR. PRSAA. PNRA

#### **NIAMEY LES 24 ET 25 MAI 2001**

#### SYNTHESE DES DISCUSSIONS

MAHAMANE GONI BOULAMA CONSULTANT

#### I. INTRODUCTION

Une mission d'Evaluation Ex-post des Projets PPODR, PRSAA et PNRA diligentée par la Banque Mondiale a séjourné au Niger du 07 au 29 Mai 2001. Elle est conduite par Monsieur Robert ROMAIN Professeur titulaire à l'Université de LAVAL – Canada. Monsieur YAYE SEYDOU, Directeur du Suivi et de l'Evaluation des Programmes et Projets au Ministère du Plan a secondé le Professeur ROMAIN tout le long de la mission.

Au cours de son séjour, elle a rendu des visites de travail à des Autorités Nigériennes et a effectué une tournée sur le terrain pour noter et apprécier les réalisations des dits projets, et recueillir les avis des bénéficiaires, acteurs et autres partenaires. Le calendrier général du déroulement de la mission est ressorti en annexe N°1.

Enfin, la mission a organisé un atelier de restitution les Jeudi 24 et Vendredi 25 Mai 2001. La liste des participants est ressortie en annexe N°2.

A ce stade, la mission a sollicité et obtenu l'assistance de Monsieur Mahamane GONI BOULAMA Ingénieur Agronome, Consultant National qui a servi de Rapporteur.

L'atelier a été ouvert et clôturé par Monsieur YAYE SEYDOU Directeur du Suivi et de l'Evaluation des Programmes et Projets au Ministère du Plan. Les travaux ont été planifiés et conduits suivant un calendrier proposé par la mission et adopté par les participants. (Voir Annexe N°3)

Les travaux se sont déroulés de la façon suivante:

- 1. Le Professeur ROMAIN a présenté ces observations et constats à l'aide de Retro-projecteur. Les éléments en ont été imprimés et distribués par la suite aux participants. Il a été complété par Monsieur YAYE SEYDOU.
- 2. Un débat a été ouvert pour recueillir les observations des participants sur les éléments d'appréciation présentés par la mission.
- 3. Première synthèse des discussions par le Rapporteur de l'atelier suivie d'amendements par les participants.

- 4. Discussions ouvertes sur des thèmes spécifiques portant sur les performances des projets et la pérennisation des acquis.
- 5. Deuxième synthèse par le Rapporteur, suivie d'amendements par les participants.
- 6. C'est la synthèse rapide de tous les points saillants évoqués au cours de l'atelier qui est ressortie dans les pages qui suivent.

## II. LES OBSERVATIONS ET PROBLEMES GENERAUX SOULEVES PAR LES PARTICIPANTS.

- Une évaluation ex-post réalisée par un Bureau Indépendant pour le compte du Département évaluation ne rendant compte qu'au Conseil d'Administration de la Banque Mondiale est une innovation heureuse.
- Mais le temps imparti (3 semaines) pour évaluer 3 projets à couverture nationale semble trop court pour bien cerner les problèmes et tirer toutes les leçons pour l'avenir.
- De l'avis de beaucoup d'intervenants, les rencontres et séances de travail avec les différentes Directions ont été trop brèves.
- Il y a un grave problème de pérennisation des acquis des projets parce que tout semble s'arrêter à la fin des projets par manque de moyens nécessaires pour assurer la continuité des actions.
- Non seulement l'Etat et les collectivités ne prévoient pas de moyens pour ce faire, mais plutôt ils reposent eux-mêmes sur les projets et en ressentent très durement l'arrêt.
- Certains résultats de vulgarisation de technologies souffrent à se pérenniser parce que les mesures d'accompagnement ne suivent pas. C'est le cas du crédit de campagne pour les intrants qui n'existe pas alors que l'adoption des thèmes techniques en dépend.
- Les projets Banque Mondiale sont lourds dans leur gestion.
- Il se pose un problème de faible taux de consommation de crédits et donc de faibles performances.
- Il y a des problèmes fonciers qui, parce que non bien réglés au début, gênent ou compromettent la pérennisation des résultats de certaines opérations. C'est le cas des sites aménagés pour usage collectif. Et quand le Projet a fait signer des contrats en bonne et due forme, ces derniers ne signifient presque rien dès que se retirent le projet et son encadrement rapproché.
- Les responsabilités sont très partagées et parfois diffuses en ce qui concerne les contraintes d'exécution et d'évaluation de certains projets : certaines approches ne sont pas toujours bien adaptées au début. C'est le cas de l'approche training and visite, qui a dû être adaptée au contexte du Niger et qui est actuellement pratiquée même par d'autres Projets.

 Les petits projets ou actions qui marchent bien après l'arrêt des financements sont ceux-là qui ont été réalisés gratuitement pour les populations : cas des aménagements collectifs si toutefois les problèmes fonciers sont bien réglés à l'avance. Ce n'est pas le cas pour les opérations où il y a des apports de capitaux ou de prêts à rembourser et dont la pérennité est souvent compromise par des problèmes de gestion engendrés par les comités mis en place.

- Il y a un grave problème d'interférence des pouvoirs politiques notamment en ce qui concerne les luttes internes pour l'ancrage institutionnel des projets, souvent motivées par de basses intentions de « GERER ».
- Il faut faire attention dans l'évaluation des opérations de développement. Ce n'est pas comme construire une route goudronnée.

#### 1. OBSERVATIONS SPECIFIQUES AU PPODR

- Les compétences formées dans le cadre de l'amélioration des capacités institutionnelles ne sont pas perdues mais s'exercent actuellement dans le cadre d'autres projets.
- Il se pose un problème d'autofinancement de certaines opérations qui marchaient bien du temps du projet, par manque d'approvisionnement suffisant ou de mauvaise gestion des fonds d'investissement.
- Les PODR individuelles réussissent mieux que les collectives parce qu'il y a moins ou pas du tout de problèmes fonciers et les responsabilités sont plus claires.
- Certains petits périmètres irrigués mis en place par le PPODR ne fonctionnent pas actuellement de façon satisfaisante à cause de certaines raisons techniques.

#### 2. OBSERVATIONS SPECIFIQUES AU PRSAA

- Les résultats satisfaisants en matière d'alphabétisation ne sont pas dans tous les cas le fait du PRSAA seul. Il y a l'effet cumulé des interventions de plusieurs Projets et/ou des services classiques.
- Il faut nuancer la mauvaise appréciation de l'adoption des thèmes techniques par les paysans car ils n'ont pas tous le même temps de maturation. Il y a aussi des contraintes économiques, financières et mêmes sociales qui influencent la vitesse de leur adoption.
- Le renforcement des capacités en véhicules, motos, carburant, pièces de rechanges et matériels informatiques s'est effectivement réalisé de façon progressive et à tous les niveaux.
- Les services ont bien appris à travailler ensemble et ceci a survécu à la fin du Projet. Ceci est vrai surtout au niveau des arrondissements.

- Les indicateurs initiaux de performance ont été jugés non pertinents en cours d'exécution. Et au début du projet, il n'y avait pas de service suivi-évaluation, mis en place plus tard et qui a fait son travail comme il pouvait.
- Il faut nuancer dans une certaine mesure, la notion de non-implication des autorités régionales et sous-régionales dans la marche du PRSAA. Elles sont impliquées à travers les Coordonnateurs.
- Il y a unanimité sur la très forte centralisation de la gestion du PRSAA, qui a été toutefois améliorée vers la fin du programme.
- Le gouvernement pouvait refuser certaines réorientations et décisions notamment en ce qui concerne le transfert de la coordination du projet par le Secrétaire Général du MAG/EL.

#### 3. OBSERVATIONS SPECIFIQUES AU PNRA

- If y a une documentation très riche que la mission aurait pu consulter.
- La recherche agronomique coûte cher et, ces dernières années, l'Etat n'y injecte que de maigres moyens financiers. Les conséquences d'une telle situation sont graves dans la mesure où une simple coupure prolongée d'électricité peut compromettre toute une banque de gênes, par exemple. Pourtant dans le passé l'essentiel des résultats a été obtenu grâce aux URANO-Dollars. L'Etat s'est même endetté pour financer la recherche agronomique à travers le PNRA.
- En général, il y a partout un conflit entre les chercheurs et les administrateurs, notamment en ce qui concerne la centralisation des moyens et des décisions.
- Il est vrai que l'INRAN ne fait pas assez d'efforts pour la publication de ses résultats de recherches.
- Les CERRA n'ont pas tous le même âge ce qui explique toutes les différences en termes de ressources humaines et de performances techniques. La spécialisation des CERRA n'a pas été effective à la fin du PNRA.
- Si l'Etat pouvait assurer les salaires, l'eau et l'électricité, les chercheurs pourraient faire rentrer beaucoup de ressources financières à travers les projets collaboratifs et leurs autres activités.
- Il y a eu un problème de synchronisation de la formation des chercheurs et de réalisation des infrastructures. Les chercheurs formés se sont retrouvés avec une institution bien équipée mais sans moyens de travailler, le PNRA s'étant arrêté brusquement.
- Les infrastructures réalisées sont pérennes mais risquent de se dégrader si elles ne sont pas utilisées et entretenues.
- L'équipe de chercheurs en place est bien consciente des enjeux pour l'avenir : il y aura des fonds compétitifs auxquels ne pourront accéder que ceux qui donnent

des résultats. Elle est même prête à régler sur le plan interne certains aspects sans incidences financières du STATUT des chercheurs.

- Les chercheurs étaient presque démotivés dans la négociation des projets collaboratifs car la gestion leur en échappe par la suite. Les choses se sont nettement améliorées maintenant dans ce domaine.
- En matière de recherche agronomique, il est difficile de mesurer des outputs après une période de 5 ans.
- Il y a un problème réel de plan de carrière car ce sont tous des fonctionnaires et non des chercheurs qui travaillent à INRAN.
- On ne peut parler de performance économique du PNRA après seulement 5 ans d'activités et dans la mesure où il n'a été essentiellement financé que la formation et les infrastructures.
- Il y a eu des progrès en matière de recherche/vulgarisation, de création du centre de documentation et même d'organisation de la gestion technique, administrative et financière (création de la DAAF et de la Direction Scientifique).

# III. SYNTHESE DES DISCUSSIONS OUVERTES SUR L'APPRECIATION DES PERFORMANCES DES TROIS PROJETS SUR LES THEMES SUIVANTS :

#### 1. LA FORMATION:

Les participants ont reconnu le rôle capital joué par la formation tant des cadres que des producteurs. Celle-ci a été effective au niveau des trois projets. Elle ne s'est pas limitée à la simple alphabétisation des paysans mais à la transmission à tous les acteurs du savoir et du savoir-faire à travers des approches thématiques, répétitives et progressives. Sous la même rubrique, il faut comptabiliser les journées portes ouvertes annuelles du PNRA ainsi que les nombreux voyages d'études et les visites organisées des sites pertinents par les deux autres projets.

#### 2. <u>LE RENFORCEMENT DES CAPACITES INSTITUTIONNELLES</u>

Les différentes formations dispensées par les trois projets ont contribué de façon positive au renforcement des capacités institutionnelles du pays car les compétences formées continuent à s'exercer dans le cadre d'autres projets et services de l'Etat et même des ONG et Associations.

Les trois projets ont également renforcé les capacités institutionnelles par la fourniture de véhicules, de motos, de pièces de rechange, de carburants. Le PRSAA et PNRA ont en plus renforcé les services en indemnités et de frais de fonctionnement ainsi que par la réalisation de nombreuses infrastructures. Ils ont également contribué à l'organisation des services et des paysans, notamment par la création de groupements opérationnels de ruraux et des conseils (National + Régionaux, Sous-régionaux) de Recherche Agronomique.

Les services du Développement Rural ont appris à communiquer et à travailler ensemble dans le cadre du PRSAA et cela se poursuit après le Projet. Le PNRA a créé une Direction Scientifique et une Direction des Affaires Administratives et Financières qui ont été performantes. La Recherche Agronomique a été organisée en 5 programmes bien distincts.

#### 3. TRANSFERT DE TECHNOLOGIES

Les technologies vulgarisées par les Projets s'adoptent progressivement mais leurs impacts ne sont pas tout de suite mesurables. Dans certains cas les indicateurs n'ont pas été bien définis dans les documents de base des Projets. Au PRSAA, il n'y avait même pas de service Suivi-Evaluation au début du Projet. L'absence d'actions d'accompagnement, notamment le crédit intrants, a ralenti le rythme d'adoption.

#### 4. <u>AMELIORATIONS DES CONDITIONS DE VIE DES FEMMES</u>

Tous les trois projets en évaluation ont beaucoup fait pour l'amélioration des conditions de vie des ruraux indistinctement du genre mais il a manqué de critères spécifiques pour mesurer l'impact direct sur les femmes.

Les participants ont rappelé l'existence de sites aménagés pour les femmes qui en tirent des bénéfices directs.

L'action de ces projets a largement contribué à libérer les capacités communicatives des femmes. Le cas de Boboye où elles expriment directement leurs doléances au Chef de l'Etat est édifiant.

L'alphabétisation dans le cadre du PRSAA a touché les femmes pour 58 % des inscrits.

Une section vulgarisation féminine a même été créée au sein du PRSAA vers la fin du Projet.

Le PNRA a formé 4 femmes sur les 5 chercheuses que compte l'INRAN.

#### 5. PERENNISATION DES ACQUIS

Les participants ont souligné que l'Etat n'a pas toujours pris toutes les mesures devant pérenniser les acquis et certains fonds prévus à cet effet n'ont pu être mobilisés à bonnes fins. Il est fort à craindre que certaines infrastructures ne se détériorent faute de ressources humaines de qualité pour les utiliser et de ressources financières pour les entretenir.

Les mesures en vue de la pérennisation des acquis doivent être identifiées et décidées dès la phase préparatoire des projets. Il revient aux cadres de l'Etat d'y veiller lors des négociations et d'avoir la rigueur d'esprit nécessaire pour faire aboutir leurs idées.

Les programmes a long terme ne doivent pas souffrir des changements itératifs d'options des bailleurs de fonds.

#### IV. CONCLUSIONS DU PROFESSEUR ROBERT ROMAIN

Les trois projets sont terminés. Les discussions ont eu pour but d'en avoir un regard rétrospectif afin de tirer des leçons pour l'avenir.

Les deux jours de discussions lui ont permis de comprendre ce qui s'est passé et ce qu'il en a retenu vont lui permettre de finaliser son rapport

Il remercie tres vivement tous les participants à l'atelier, Monsieur YAYE SEYDOU qui l'a accompagné sur toute la ligne ainsi que le Rapporteur.

#### V. MOTS DE LA FIN

En clôturant les travaux de l'atelier Monsieur YAYE SEYDOU a informé les participants que le rapport final du consultant sera examiné par l'ensemble des intervenants avant d'être transmis au Gouvernement. Il en sera fait un usage pour le futur.

#### LISTE DES PARTICIPANTS

28. BOUREIMA KANFIDENI

DDPF/MDS/P/PF/PE 1. Mme MAINA FADJIMATA 2. LAOUALI ABBA Direction de l'Environnement/ME/MCD 3. MAĞAGI IBRAHIM **Groupement Des Aides Prives** 4. BAGOUDOU MAIDADJI CT/MRA C/GRN 5. IDE TAHIROU 6. HABO WADA DEP/MDR 7. OUSMANE MAITAGOUA DEP/INRAN 8. OUSMANE IBRAHIM ENA

8. OUSMANE IBRAHIM ENA
9. ZAKOU DJIBO DSEP/MP
10. BOUJIMA ACHKOU DEP/MDR
11. HAROUNA KORE FA/UAM
12. SALIFOU MAHAMAN BANQUE MONDIALE
13. TIEMOU S. GAOH UTP/PAC

14. Mme GALBERT ZALIATOU

15. Mme SEYDOU ZIKA

16. Mme DIAOUGA HAOUA

17. LAOUALI MALAM MOUSSA

MINISTERE DU PLAN/DDRL

DPP/MINISTERE DU PLAN

CG/PCLCP/MINISTERE DU PLAN

DAFA/MEN

18. MAHAMANE GONI BOULAMA AGRONOME/CONSULTANT 19. MOHAMADOU ISSAKA MAGHA SDSA

20. SEYDOU YAYE DSEP/MINISTERE DU PLAN

21. AMADOU MOUSTAPHA
22. MAMAN KABIROU M.
23. GUERO YADJI
DG/INRAN

24. SANDA MAMAN SANI Coordination Du Reseau Suivi-Eval. 25. ABDOU HIMA CAB/PM

**CLRV/INRAN** 

26. ELHADJI MAMANE ABDOU Plate Forme Paysanne Du Niger 27. IBRAHIM BOUKARI ABDOU MP/DDRC/PAC

# PROGRAMME DE TRAVAIL DE L'ATELIER DE RESTITUTION DE LA MISSION D'AUDIT DES PERFORMANCES DES EX-PROJETS FINANCES PAR L'IDA

Jeudi 24 Mai 2001	
8 h 30	Ouverture de l'atelier
	Présentation des participants
	Présentation des objectifs de la mission
9 h 00	Présentation et évaluation des objectifs des projets
	- Rappel des objectifs des trois projets
	- Présentation des résultats et évaluation des objectifs du
	PPODR
10 h 00	Pause Café .
10 h 30	Présentation des résultats et évaluation des objectifs du PRSAA et du PNRA
12 h 30	Synthèse et évaluation des objectifs des trois projets
13 h 00	Pause Déjeuner
	Prière
14 h 15	Appréciation de la performance des projets sur les thèmes suivants:
	- Renforcement des capacités institutionnelles
	- Formation des cadres et des producteurs
	- Transfert des technologies
	- Amélioration des conditions de la femme
16 h 15	Fin de la journée
Vendredi 25 Mai 2001	
9 h 00	Discussion libre sur la pérennisation des acquis des trois
	projets
10 h 30	Pause Café
11 h 00	Synthèse de l'atelier

### **IMAGING**

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Report No.: Type: PPAR