1. Project Data

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<tr>
<th>Project ID</th>
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<tr>
<td>P120139</td>
<td>BR Pernambuco - Rural Economic Inclusion</td>
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| Original Commitment | 100,000,000.00 | 0.00 |
| Revised Commitment  | 75,000,000.00  | 0.00 |
| Actual              | 75,000,000.00   | 0.00 |

Prepared by Chikako Miwa
Reviewed by Vibecke Dixon
ICR Review Coordinator Christopher David Nelson
Group IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) was "to promote rural business initiatives and expansion of rural access to water and other complementary infrastructure" by supporting the Borrower’s Results Management Framework (Loan Agreement, Schedule 1, page 5). The formulation of the PDO was identical in the PAD (para 19).

IEG concurs with the ICR (Footnote 5, page 4) that the phrase “…by supporting the Borrower’s Results Management Framework” was not intended to be part of the PDO itself, thus would not be assessed.
The project designed the project activities in line with the “Borrower’s Results Management Framework,” which referred to the State of Pernambuco’s Everyone for Pernambuco (Todos por Pernambuco).

For the purposes of this ICR Review, the following two objectives of the PDO will be assessed:

**Objective 1:** To promote rural business initiatives

**Objective 2:** To promote expansion of rural access to water and other complementary infrastructure

b. Were the project objectives/key associated outcome targets revised during implementation?
   Yes

Did the Board approve the revised objectives/key associated outcome targets?
   Yes

**Date of Board Approval**
   07-Jul-2016

c. Will a split evaluation be undertaken?
   No

d. **Components**

   **Component 1: Investments in Rural Economic Inclusion** *(Estimate: US$109.7 million; Actual: US$12.4 million, 11.3 percent of the estimate)* intended to support: preparation of Business Plans (BPs) with a territorial focus; a communications strategy; training/certification of local technical assistance providers to prepare business profiles/plans; improve Rural Producer Organizations (RPO) management, and develop financing mechanisms; technical studies on competitiveness; and support to RPOs to execute grant-financed productive sub-projects within their BPs. Productive investments included: agricultural and aquacultural structures and equipment for cultivation, storage, processing, and packing.

   **Component 2: Complementary Rural Infrastructure** *(Estimate: US$51.5 million; Actual: US$46.5 million, 90.8 percent of the estimate)* intended to: (i) support RPOs (i.e., community associations) to make complementary rural infrastructure investments by matching grant financing; and (ii) strengthen their capacity to manage infrastructure sub-projects through training. The investments aimed to strengthen: (a) rural water and sanitation, such as wells, simplified systems with household connection, cisterns, and sanitation systems (including septic tanks) to support the State’s water universalization strategy; (b) water for productive uses (e.g., small-scale irrigation, aquaculture, and agro-industry) and new technologies (including water re-use); (c) logistics, such as small bridges, all-weather crossings, and minor road reforms, to reduce or eliminate bottlenecks in the flow of value-added production; and (d) investment management, to manage local water supply and sanitation systems through the decentralized management model, e.g., the Integrated Rural Water Supply and Sanitation System that were piloted in the states of Ceará and Piauí.

   **Component 3: Project Management, Supervision, Monitoring and Evaluation** *(Estimate: US$13.2 million; Actual: US$14.4 million, 109.2 percent of the estimate)* intended to support: (a) technical and administrative management; (b) development, implementation, and supervision of the Environmental and Social Management Framework, the Indigenous Peoples’ Planning Framework, the Resettlement
Policy Framework and a Communication Strategy; (c) updating of the Management Information System; and design, development, and implementation of an impact evaluation module.

**Component 4: Emergency Response to Mitigate the COVID-19 Impact** *(Actual: US$17.68 million)* intended to support: (i) acquiring personal protective equipment; pulmonary ventilators and other critical hospital equipment; (ii) installing four campaign hospitals in the Borrower’s territory; (iii) scaling up the management contracts with the Social Health Organization (Organizações Sociais de Saúde); and (iv) contracting intensive care unit beds in private hospitals. The component was added through the restructuring in June 2020.

e. **Comments on Project Cost, Financing, Borrower Contribution, and Dates**

**Project Cost:** At appraisal, the original cost estimate was US$178.95 million (PAD, page 8). The actual cost was US$101.73 million (ICR, page 66).

**Financing:** At appraisal, IBRD loan financing was estimated at US$100 million. The actual IBRD disbursement was US$75 million, due to two partial cancellation of loan funds in 2018 and 2019 totaling US$25 million (ICR, para 9). The loan cancellation occurred because of: (i) depreciation of the Real to USD; and (ii) prohibition of new sub-project approvals based on findings of Technical Audit in 2018 (ICR, para 14).

**Borrower Contribution:** At appraisal, the Government of Pernambuco and the beneficiaries (i.e., participants in Local Productive Alliances) were expected to provide counterpart financing of US$35.25 million and beneficiaries’ contribution of US$43.70 million, respectively (PAD, page 8). The actual counterpart financing and beneficiaries’ contribution were reduced to US$21.3 million and US$5.3 million, respectively, due to the depreciation of the Real to USD and the downscaling of the sub-project investment activities (ICR, page 67).

**Dates:** The project was approved on March 6, 2012. The project experienced five restructurings since its Mid-Term Review published on October 26, 2015.

There were five restructurings: the first (July 7, 2016), the second (March 4, 2018), the third (January 28, 2019), the fourth (March 31, 2020), and the fifth (June 30, 2020). The key changes made among the first to the third restructurings were to revise the targets of PDO and Intermediate Results indicators and reallocations of funds between disbursement categories from the sub-project investment category to the goods and staff categories, in order to: (i) increase investments to water supply and sanitation infrastructures as per the focus of the government at that time; (ii) to recover infrastructure (mostly bridges) affected by floods in the Mata Sul Region in June 2017; and (iii) to strengthen staff and supervision of water supply and sanitation projects and safeguards compliance under the State Program for Assistance to Small-Scale Producers (ProRural). The third and fourth restructurings extended the loan closing dates for 14 months and 3 months, respectively. The fifth restructuring added Component 4: Emergency Response to support state health system and economic effects of COVID-19 pandemic, as well as reallocated US$25.75 million to cover the emergency response expenditures.

The project closed on June 30, 2020, after two closing date extensions totaling a year and five months of delay from the original closing date of January 31, 2019.
Split evaluation was not deemed necessary. The project's scope and outcome targets shrunk, while project commitments also decreased through cancellation of funds. The lowering of project scope was commensurate with the lower commitment size.

3. Relevance of Objectives

Rationale

Country and Sector Context: Over the past decade before appraisal, Brazil had become a globally competitive agricultural producer and exporter, with a nearly 70 percent increase in the value-added of crop production and a ten-fold increase in beef exports (PAD, para 5). However, aside from strong performance in the horticultural sector around Petrolina (primarily on irrigated parcels), the State of Pernambuco had not participated significantly in this agricultural growth. In the State of Pernambuco, one-third of total state poverty was rural, and 45 percent of rural residents were poor compared to 25 percent of the urban population (PAD, para 1). Though the State hosted 5 percent of the national population and 6 percent of the nation’s agricultural labor force, the State was generating just 2 percent of Agricultural Gross Domestic Product (PAD, para 2). Family farms represented 90 percent of total farm establishments statewide but captured just 52 percent of value-added agricultural production (PAD, para 2). Average family farm income (US$5,100) was about one-tenth of commercial farms, contributing to a rural Gini coefficient exceeding 0.8 (Brazilian Institute for Geography and Statistics 2006, cited in PAD, para 2). The high rates of rural poverty were attributed to: (i) low agricultural productivity, due to low technological innovation, risks associated with climate variability, weak market intelligence, precarious farm management, poor access to capital, inability to build assets; and supply-driven technical assistance; (ii) scarcity of water for irrigation and household sanitation; and (iii) low level of structural investment in transport and logistics (ICR, para 3).

Relevance to Government Strategies: At appraisal, the objectives aligned with the State of Pernambuco’s multiyear investment plan 2012-2015, which focused on: (i) strengthening value chains and forging Local Productive Alliances; (ii) prioritizing expanded access to safe and reliable water for both human consumption and productive use through improved water resources development and constructing stronger water management policies and practices; and (iii) financing structural investments to improve the enabling environment and encourage greater private investment. The objectives were also in line with the State’s Results Management Framework, Everyone for Pernambuco, which implemented the territorial approach to improve agricultural productivity of family farms, transport logistics, and water supply and sanitation. At project closing, the objectives were in line with the Federal Government’s Crop Plan (Plano Safra) 2020/21, which increased budget for small and medium producers. The objectives were also aligned with the State of Pernambuco’s multiyear investment plan 2020-2023, which continued implementing the territorial development approach under the state’s fiscal crisis that was worsened by the COVID-19 pandemic.

Relevance to the World Bank’s Assistance Strategies: At appraisal, the objectives aligned with Results Area 11: “Expanded Sustainable Agriculture” under Strategic Objective 4: “Improve Sustainable Natural Resource Management and Climate Resilience” in the Country Partnership Strategy FY12-15. At project closing, the objectives were in line with Objective 3.3: “Promote socio economic development of small rural producers and protect vulnerable groups” under Focus Area 3: “Inclusive and Sustainable Development” in the Country Partnership Framework FY18-23.
Prior Sector Experience: The World Bank supported a series of Rural Poverty Reduction Projects (PCPR) in Northeast Brazil since their inception in 1995, contributing to increasing rural access to water supply and electricity. The preceding project, PCPR in Pernambuco (P050880, FY97-01), tested innovations in rural development such as market-based land reform, fair trade initiatives, and regional integration. Building upon past experience leading to this project, the World Bank introduced the Local Productive Alliance model, which went beyond the community driven development model that were adopted in the PCPRs, aiming for addressing multi-sectoral development challenges through an integrated Business Plan. Regarding the objective on water supply and sanitation, the World Bank supported the State Plan for Water Resources (Plano Estadual de Recursos Hídricos) to expand rural access to water supply and sanitation through Brazil Pernambuco Sustainable Water (P108654, FY10-20).

While the objective remained relevant throughout the project cycle and was a necessary response to an agricultural development challenge in the State of Pernambuco, a shortcoming here was the lack of clarity in the PDO formulation around what outcomes would be achieved through promoting rural business initiatives and expansion of rural access to water and other complementary infrastructure, i.e. in what ways these were expected to improve peoples’ lives. Focusing on to “promote rural business initiatives” and “promote expansion of rural access to water and other complementary infrastructure” alone were not outcome focused and did not help in understanding what development results were expected as a consequence of the project. Impact on people’s lives (such as reduced rural poverty) may be a longer-term target, but tracking it and identifying it was an important aspect of a successful development operation. Overall, the relevance of objectives is rated substantial.

Rating
Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1
Objective
To promote rural business initiatives

Rationale
Theory of Change (TOC): This objective’s TOC envisioned that project activities such as supporting the Local Productive Alliances (LPAs) to develop Business Plans which integrated logistics and productive water investments based on territorial development strategies and providing financing and training to the Rural Producer Organizations (RPOs) to implement productive sub-projects (e.g., honey and milk production and marketing, small ruminants breeding, and aquaculture) would result in outputs such as the productive sub-projects that were completed and the RPOs that had more organized arrangements for the management, operation, and maintenance of productive investments, contributing to outcomes such as the RPOs that met the required criteria and were inserted to the LPAs, the RPOs that increased real gross sales, and the RPOs that were selling products through a formalized sales contracts or arrangements. In the long-term, these
outcomes were expected to contribute to improving agricultural productivity of family agriculture, leading to impacts such as a reduction in rural poverty.

Critical assumptions included: (i) the fiscal situation remained favorable for project execution; (ii) the Government remained committed to the LPA approach; and (iii) the clients in the private market were willing to engage in formalized sales contracts or arrangements with the RPOs.

**Outputs** (based on the ICR para 16-29 and Annex 1):

- Rural households benefiting directly from project interventions were 3,792, meeting the revised target of 3,552. The ratio of female-headed households was 44 percent, exceeding the target of 30 percent. The ratio of indigenous and Quilombola (i.e., Afro-Brazilian residents of quilombo settlements) households was 1 percent, not meeting the target of 5 percent.
- 75 beneficiary RPOs were financed to implement the productive sub-projects, not meeting the revised target of 85 RPOs. The ratio of RPOs that had women in management positions was 43 percent, exceeding the target of 30 percent.
- 49 RPOs were trained and/or using financial management instruments for their financed productive activities, not meeting the original target of 75 RPOs.
- 65 beneficiary RPOs organized arrangements for the management, operation, and maintenance of financed productive investments, not meeting the revised target of 70 RPOs.
- 90 percent of beneficiaries felt that project investments on production and marketing reflected their needs, exceeding the original target of 70 percent.
- The Management Information System (MIS) was not functional and did not produce all the products, and did not meet the target. Negative factors included: lack of synchronization between sub-project execution and information management in the system; and lack of proper training of the users to exploit the potential of the system.
- All the registered grievances were satisfactorily responded in line with the Grievance Redress Mechanism (GRM), exceeding the original target of 90 percent. Data were collected during focal group meetings with the coordinators of the Territorial Management Units and the staff of the Project Management Unit. The GRM was discussed in the final Safeguards Report (May 2021) and the Borrower’s Completion Report (2021).

**Outcomes** (based on the ICR para 16-29 and Annex 1):

- 29 percent of beneficiary RPOs were successfully inserted into LPAs, not meeting the revised target of 75 percent. Only 10 out of the 34 randomly sampled RPOs achieved at least four of the following six criteria at 12 months after sub-project conclusion, thus considered as successfully inserted into LPAs: (i) Business Plan investments were implemented; (ii) financed investments were operational; (iii) volume of production reached a level of 80 percent of the Business Plan projection; (iv) accounting system was functioning; (v) a reserve fund for the financed investments was maintained; and, (vi) sales were being made to at least one non-institutional client (e.g., sales were being made to a private client under a formal contract).
- 54 percent of beneficiary RPOs increased real gross sales value, exceeding the revised target of 20 percent. This result was obtained directly from Federal University of Pernambuco (UFPE) questionnaires, and projections of receipts and costs to determine the gross sales value, compared to the variation between values realized in the first year of production (post-investment) and
the second year. This results verification protocol did not consider the changes in gross sales values before and after the project and the changes in costs.

- 18 percent of beneficiary RPOs were selling products to institutional or private markets after sub-project conclusion, not meeting the original target of 60 percent. This indicator intended to measure the ratio of RPOs with a formal sales contact or arrangements, in order to assess the extent to which product marketing had become more organized or formalized (ICR, page 33).

Referring to the TOC above, no Business Plan (BP) integrated logistics or productive water investments with productive activities, despite of the original intention that one BP would result in integrating multiple sub-projects for resolving multi-sectoral productive constraints faced by several family farms. On the contrary, in practice, one BP equated to one sub-project (ICR, para 56). This was due to insufficient capacity and commitment of the Project Management Unit to provide adequate support to the LPAs.

Of the three PDO Outcome indicators, one indicator exceeded the target, while the other two indicators fell far behind the targets. No PDO Outcome indicator was set to adequately assess the changes brought by the project on an outcome for the agricultural productivity of family agriculture. Overall, the achievement of Objective 1 is rated modest.

Rating
Modest

OBJECTIVE 2
Objective
To promote expansion of rural access to water and other complementary infrastructure

Rationale
Theory of Change (TOC): This objective’s TOC envisioned that project activities such as providing financing and training to the LPAs to develop and implement BPs that included construction, operation, and management of small-scale rural water supply and sanitation systems, logistics, and productive water facilities would result in outputs such as the rural households’ access to improved water and sanitation services, logistics, and productive water supply, contributing to outcomes such as the enhanced use of improved water and sanitation services, logistics, and productive water supply in the rural areas. This objective’s TOC also envisioned that project activities such as procuring and distributing personal protective equipment, hospital beds, and hospital equipment would result in outputs such as the provision of the essential health equipment in health facilities, contributing to outcomes such as the enhanced use of health services. In the long-term, these outcomes were expected to contribute to improving agricultural productivity of family agriculture and health of rural population, leading to impacts such as a reduction in rural poverty.

Critical assumptions included: (i) the fiscal situation remained favorable for project execution; (ii) the Government remained committed to the LPA approach; and (iii) the adequate human and financial resources existed to operate and manage the water, sanitation and health facilities to fulfill the demand.

Outputs (based on the ICR para 16-29 and Annex 1):
• 55 percent of RPOs were charging user fees for management and maintenance of financed water supply projects, not meeting the revised target of 95 percent. Field evidence indicates that the RPOs which achieved some degree of institutional maturity and participated in the management of their systems were able to achieve a break-through on the issue of user fees. The RPOs who contributed positively to this result also tended to be conducting water treatment and using macro- and micro-meters to determine payment, that is, they were better led, organized and motivated.

• 212 rural water and sanitation sub-projects were concluded, meeting the revised target of 212 sub-projects. The ratio of RPOs with women in specific management positions was 39 percent, exceeding the target of 30 percent. The target was set at the level already achieved in the second revision of the target in 2019 as new investments were frozen as due to the shrank in commitment.

• 27,387 rural households had access to “Improved Water Sources,” exceeding the revised target of 25,430. “Improved Water Sources” referred to the project-financed water supply (e.g., cistern, community water system, and wells) (PAD, page 16). Female-headed rural households consisted 67 percent of the total, exceeding the original target of 30 percent. Rural households belonging to vulnerable groups consisted 5.3 percent of the total, meeting the target of 5 percent. Of the total 27,387 rural households, 18,385 households benefited from cisterns funded under the Federal Government’s Cisterns Program, and 9,002 households benefited from other types of water supply including wells, community water fountains, simple piped systems, and small reservoirs. At the restructuring in 2016, the project funding of US$10 million was reallocated from Component 1 to 2 to increase installation of cisterns through the Federal Government’s Cisterns Program, in order to address the prolonged multi-year drought that severely affected water availability between 2012 and 2017. Although this indicator was set as a PDO Outcome indicator, the actual result mainly measured the increase in water access by the provision of cisterns, which was an output-level result.

• 2,168 rural households had access to “Improved Sanitation Services,” exceeding the revised target of 1,845. “Improved Sanitation Services” referred to the project-financed sanitation services (e.g., septic tanks) (PAD, page 17). Female-headed rural households consisted 61.5 percent of the total, exceeding the original target of 30 percent. Rural households belonging to vulnerable groups consisted 23.2 percent of the total, exceeding the target of 5 percent. Although this indicator was set as a PDO Outcome indicator, the actual result mainly measured the increase in access to sanitation facilities by the provision of septic tanks, which was an output-level result.

• 83 percent of beneficiaries felt that project investments on water, sanitation, and logistics reflected their needs, exceeding the original target of 70 percent.

• Acquisition of 5,593,625 personal protective equipment was completed, exceeding the target of 15,000. The items purchased included disposable and surgical masks, protective clothing, and gloves. The initial estimate was clearly far too low given high demand, and these items were relatively easy to procure in quantity.

• Distribution of 728,000 hospital beds were completed, not meeting the target of 1,700,000. The estimate for beds was high and the prospects for their acquisition were unclear at the time of estimation. Their procurement turned out to be more difficult than the other items due to supply shortages and greater complexity of procurement.

• Distribution of 1,350 critical hospital equipment was completed, exceeding the target of 400. Items acquired and distributed to state health facilities included: radio-diagnostic equipment; pulmonary ventilators; and physiological monitoring equipment.

Outcomes (based on the ICR para 16-29 and Annex 1):
64 percent of beneficiary rural households were using water supply investments for drinking water, not meeting the original target of 90 percent. Although this indicator was set as an Intermediate Results indicator, the use of the project-financed water supply for drinking water showed an outcome-level result. Based on UFPE field questionnaires, the main reason for not achieving the target were technical challenges in drilling wells in crystalline rock and high salinity of water in some wells.

Both of the two PDO Outcome indicators were achieved, but their formulations focused on output-level results. The outcome on the use of water supply investments for drinking water was not achieved, indicating that the water quality was not high enough for drinking. No specification was provided by the PDO nor the indicators regarding what "other complementary infrastructure" would be and how the associated outcomes would be measured. In addition, no PDO Outcome indicators were established to measure the outcomes related to the use of water for production and the Emergency Response Component (e.g., the enhanced use of health services). Overall, the achievement of Objective 2 is rated modest.

Rating
Modest

OVERALL EFFICACY

Rationale
Objective 1 is rated modest, due to low achievements and insufficient evidence on an outcome. Objective 2 is rated modest, due to insufficient evidence on outcomes. Overall, the efficacy is rated modest.

Overall Efficacy Rating
Modest
Primary Reason
Insufficient evidence

5. Efficiency

Economic Analysis: At appraisal, no Internal Rate of Return (IRR) for the whole project was presented in the PAD. The IRRs were calculated for various sub-projects under Component 1: honey production and marketing (51 percent), milk production and marketing (>50 percent), small ruminants breeding (47 percent), and aquaculture (33 percent) with a discount rate of 12 percent (PAD, page 53). The IRRs were also calculated for two basic infrastructure sub-projects under Component 2: water supply with household connection and cisterns (>25 percent) and home sanitation (12 percent) with a discount rate of 10 percent (PAD, page 55). At project closing, the economic IRR for the whole project was 14.74 percent, with an NPV of USD9.12 million. For Component 1, the economic IRR was 12.15 percent with an NPV of USD 0.9 million over 10-year period and a discount rate of 12 percent. For Component 2, the economic IRR was 15.98 percent with an NPV of USD8.99 million over 20-year period and a discount rate of 10 percent. In both calculations for Components 1 and 2, 50 percent of the costs for Components 3 and 4 were included in the economic costs.
IEG concurs with the ICR (page 75) not to include the benefits COVID-19 health sector emergency response to the economic analysis, based on the World Bank’s guideline dated March 26, 2020.

**Aspects of Project Design and Implementation that Affected Efficiency:** For Component 1, the technical assistance provided by the State Program for Assistance to Small-Scale Producers (ProRural) was insufficient, which resulted in the Business Plans that did not meet the minimal satisfactory level and weak procurement and contract management, contributing to a failure rate of the sub-projects to reach almost 33 percent (ICR, para 36). For Component 2, the average sub-project implementation period was prolonged to 51 months, while only 60 percent of the intended beneficiaries were reached (ICR, para 36). Under Component 4, the number of hospital beds acquired was 43 percent of the target, due to mitigating circumstances including the supply of available beds and ease of procurement (ICR, para 36).

**Summary:** The ex-post economic IRR for the project was lower than most of the ex-ante IRRs for the sub-projects. The efficiency was affected by the implementation delays due to the implementing agencies’ capacity gaps in procurement and contract management that were not adequately addressed by technical assistance. Overall, the efficiency is rated modest.

**Efficiency Rating**

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

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<td>ICR Estimate</td>
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* Refers to percent of total project cost for which ERR/FRR was calculated.

**6. Outcome**

The relevance of the objectives is rated substantial, as the objectives aligned with the strategies of the Government and the World Bank’s assistance. The efficacy is rated modest, mainly due to insufficient evidence on outcomes. The efficiency is rated modest, as the project IRR at closing was lower than the most of the sub-project IRRs at appraisal. Overall, the outcome is rated moderately unsatisfactory.

a. **Outcome Rating**
   Moderately Unsatisfactory
7. Risk to Development Outcome

There were the following risks to the sustainability of the achieved results presented in the ICR:

**Environmental Risk:** Climatic risks to the RPOs’ productive activities were severe. Five years of drought within the project period demonstrated the implications of a lack of systematic, actionable policy solutions and attention to the conservation of soils and water in fragile zones of the state. No mention was made by the ICR regarding what mitigation measures were taken to address the risk.

**Financial Risk:** The financial viability of the RPOs to secure credit and technical assistance might not be sufficient. According to the UFPE’s field work, the lack of working capital was affecting sub-project viability. Inadequate technical assistance to the sub-projects could affect the investments’ durability. State extension services were weak, under-funded and not adequately staffed to service more technically sophisticated activities. RPOs signed Sub-project Agreements under which they undertook to maintain their investments, but given the continued scarcity of TA services, agreements could lose relevance to stressed groups. To mitigate the risk, some RPOs found accesses to technical assistance independently, though information was anecdotal. Gross sales revenue results were substantial, increasing the likelihood that new assets and practices could be conserved.

**Economic Risk:** Risks related to changes in market prices, production quality, and delivery timeline could limit RPOs’ profitability. The RPOs with business transactions with public clients faced a risk related to fiscal uncertainty. To mitigate the risks, some RPOs strengthened their preparedness to adapt to changing market conditions by focusing on market demands and integrating production systems.

8. Assessment of Bank Performance

a. **Quality-at-Entry**

The strategic relevance and approach were adequate. The State was ready and willing to test the LPA approach based on its PCPR experience. The innovative measures involved scaled support through the RPOs, competitiveness through production and cost aggregation, productive diversification and non-agricultural ventures, territorial linkages with markets, and pilots for the local management of rural WSS infrastructure. Poverty and social aspects were adequately designed as the participation of vulnerable groups were encouraged. The fiduciary elements were well analyzed and prepared. On the other hand, technical aspects for the RWSS component were not fully adequate due to the lack of focus on agricultural water productivity. The gender aspect was not thoroughly considered. Risk assessments were not fully adequate as some of the identified risks such as institutional risks were under-estimated. The implementation arrangements were inadequate due to the lack of formal assessments of institutional capacity of the State Program to Assist Small Rural Producers (ProRural), which was the Project Management Unit under the Implementing Agency and responsible for day-to-day project implementation. Overall, the quality at entry is rated moderately unsatisfactory.
b. Quality of supervision
There were 20 regular supervision missions and four technical missions over 8 years, which provided detailed technical, operational, and fiduciary guidance and close monitoring of Action Plans. The supervision of compliance for financial management and safeguards was intensive. The timely MTR diagnosed critical issues affecting implementation and led to the first restructuring. The project tried to respond to new state priorities and changing circumstances through the five restructurings including the extensions totaling 17 months. However, these restructurings were not sufficiently intensive and transformative to resolve critical problems such as underperformance of ProRural. Candor and quality of performance reporting were inadequate, as the ratings for Implementation Progress and Development Objectives tended to be overly generous (ICR, para 86). Further, the ISRs rated certain loan covenants in compliance for the duration even when they were not. The World Bank team’s supervision for the project’s fiduciary management during the first three years was inadequate, as during this period, its support to ensure effective internal control of ProRural on financial and procurement management fell behind and was unable to prevent the ineligible expenditures (ICR, para 82), as described in Section 10.b. Overall, the quality of supervision is rated moderately unsatisfactory.

9. M&E Design, Implementation, & Utilization

a. M&E Design
The Theory of Change was not fully comprehensive to show causal links among outputs, outcomes, and impacts. The PDO formulation lacked clarity around what outcomes would be achieved through promoting the rural business initiatives and rural access to water and other complementary infrastructure, as described in Section 3. The phrase “…by supporting the Borrower’s Results Management Framework” in the PDO intended to support the Borrower’s Results Management Framework through activities closely aligned to its focus areas, thus not intended to be measured by the indicators of the project. No indicators were included to measure outcomes related to: (i) agricultural productivity of family agriculture; (ii) the use of water for production; (iii) the “complementary infrastructure” other than sanitation (e.g., bridges) in the PDO, and (iv) the Emergency Response Component (e.g., the enhanced use of health services). Until the restructuring in 2016, the PDO Outcome Indicator measuring RPOs’ “insertion” in LPAs lacked measurement criteria, and gender and vulnerable groups were not disaggregated in indicators. The M&E arrangements at appraisal focused on quantitative data collection with an aim to conduct an impact evaluation at project closing. However, the Project Management Unit showed reluctance to the quantitative measurement of project results and did not prioritize the M&E activities. The PAD did not mention a baseline, fiduciary monitoring, or progress reporting. No baseline study was conducted at
appraisal. The M&E design and arrangements were not well-embedded institutionally, as the Management Information System (MIS) used in the preceding of Rural Poverty Reduction Projects was difficult to be applied under this project, leading to the introduction of the Aroeira software in 2014.

b. M&E Implementation

The Project faced difficulties from the start in establishing an effective MIS. Sub-project field monitoring, data collection, timely upload and consistency, and the data relationship between the Project Management Unit (UGP) and Territorial Management Units (UGTs) were problematic throughout implementation. The adoption of Aroeira system to Pernambuco was delayed, as its operators lacked technical capacity due to inadequate training and high staff turnover, and to the complicated relationship between the UGP and UGTs. Even after its establishment, the Aroeira system faced difficulties on generating accurate information and reports in a timely manner. Baseline and impact evaluation studies were not conducted. Delayed development of an effective M&E system precluded a baseline on which formal impact evaluation could rely. At project closing, UFPE applied the questionnaires and perception surveys that were designed by the World Bank and the Food and Agriculture Organization to beneficiary organizations and individual families to ensure accurate measurement of the Results Framework, establish a database for the Economic and Financial Analysis, and collect beneficiary perceptions of the project.

c. M&E Utilization

Aroeira data supported implementation planning, management decisions, Bank reporting, and project restructuring but its value was marred by the managerial and technical issues discussed above. Lagged updating and other factors meant that in some cases data recorded in the Aroeira was inconsistent with the revealed physical status of sub-projects on the ground. Final, field evaluation-based results were different in some cases from those reported in the Aroeira-based final ISR. ProRural disseminated project results and lessons online but the pandemic constrained more direct dissemination. Though the project aimed to pilot the new approach to extract learnings, the M&E data collection and analysis were not comprehensive to provide robust information to the subsequent projects.

Summary: The weaknesses in the M&E design affected the M&E implementation and utilization. Overall, the M&E quality is rated modest.

M&E Quality Rating
Modest

10. Other Issues

a. Safeguards

**Environmental Safeguards**: The project was a Category B and triggered: OP 4.01 (Environmental Assessment), OP 4.04 (Natural Habitats), OP 4.09 (Pest Management), and OP 4.36 (Forests). An
Environmental and Social Management Framework was prepared, and publicly disclosed on July 14, 2011. Bank environmental oversight was intensive given the lack of environmental specialists in the ProRural team, scarce technical assistance, and training services, and ProRural’s tendency to discount the project’s environmental aspects. The availability of environmental specialists increased over time and compliance with environmental regulations improved, but the many sub-projects without environmental licenses and with other deficiencies at the time of the 2018 Technical Audit indicated unresolved weaknesses. Bank/ProRural monitoring of environmental compliance under the post-Technical Audit Action Plan showed the following actions still pending at ICR finalization: remediation of the Aldeia Velha Dam; environmental regularization of 31 water supply systems; filling and sealing of 52 dry wells; and state provision to the Bank of documentation on the environmental compliance of state health units supported under Component 4, specifically the disposal of medical waste and residues.

Compliance with triggered safeguards: (a) Natural Habitats (OP 4.04): Sub-projects likely to result in significant degradation or conversion of natural habitats were ineligible. The project supported regeneration or reforestation of water-producing systems (riparian vegetation). The project designs addressed required norms. (b) Pest Management (OP 4.09): The Pest Management Plan used the World Health Organization (WHO) Recommended Classification of Pesticides and excluded financing for investments falling into WHO Classes 1A and 1B. The project expanded agro-ecological farming practices, initially focusing on the responsible use of chemical pesticides and fertilizers but moving rapidly to their elimination from productive processes in favor of environmentally acceptable practices. (c) Forests (OP 4.36): Environmental conservation norms were observed in forested areas to reduce interference in eco-systems. Sub-projects likely to result in significant conversion or degradation of forests were ineligible for this project’s financing. Activities requiring commercial forest harvesting, wood extraction, and firewood use, were also ineligible. In all three cases, the exit rating was Moderately Satisfactory due to unresolved aspects of ProRural’s safeguards supervision capacity.

Social Safeguards: The project triggered OP 4.10 (Indigenous People) and OP 4.12 (Involuntary Resettlement). In compliance with OP 4.10, the project: (a) conducted extensive consultations with all 11 ethnic groups from November 2010 through March 2011 informed the development of the Indigenous Peoples Participation Framework, which was publicly disclosed on July 14, 2011; (b) divulged the project in the Municipal Rural Development Councils and in the State Food and Nutrition Security Council; (c) established close institutional relationships with key indigenous organizations, including the National Indian Foundation (FUNAI), to define strategy and priorities and to obtain FUNAI’s authorization for IP sub-projects; and (d) conducted workshops to update the Indigenous Action Plan. In compliance with OP 4.12 (Involuntary Resettlement), a Resettlement Policy Framework (RPF) was prepared and consulted with key stakeholders in March 2011, which was publicly disclosed on July 14, 2011. The Project sought to avoid involuntary resettlement wherever possible, and no sub-projects involved the relocation of people or the acquisition of land. Investments were made in small areas and on land owned legally by the RPOs. All regulations applying to involuntary resettlement were observed and the project closed in full compliance.

Grievance Management: A Grievance Response Mechanism (GRM) was established in 2017, comprising an ombudsman transmitting complaints and comments through the websites of State Secretariat for Agriculture and Agrarian Reform and the State Controller’s Office. Many complaints were received in 2018 when new sub-project approvals were frozen on the advice of the Technical Audit. With the guidance from the World Bank, the GRM was strengthened and started to monitor grievances more systematically in August 2018. All complaints and requests received a response within two weeks and were resolved to beneficiaries’ satisfaction.
b. Fiduciary Compliance

Financial Management: The performance ratings of financial management fluctuated over the implementation period. The project faced challenges in obtaining information necessary for financial management in a timely manner because of the weak monitoring of sub-project funds flow due to issues affecting the Aroeira system and the improper reconciliation of the Designated Account (ICR, para 82). In addition, the tendency of the State Program to Assist Small Rural Producers (ProRural) to approve Component 1 proposals based on equity and without considering their viability, priority, or competitiveness (ICR, para 56) enlarged the fiduciary challenges. In 2018, the technical audit for sub-projects was conducted, which requested: (i) the Borrower to improve accountability and restitute the funds where relevant; (ii) the Project Management Unit and Territorial Management Units to be responsible for remediating all diagnosed and reported problems, as well as other obligations under the Legal Agreement; and (iii) to freeze the financing or acceptance of proposals for all new sub-projects to focus on rectifying those with diagnosed issues (ICR, para 63). The freeze on new investments led to the downscaled targets for water and sanitation at the restructuring in 2019 (ICR, Annex 1, page 35). The Action Plan associated with the technical audit was executed, but the disbursement rate lagged behind during the project’s final years, because of the inadequate budget allocations, as well as of the Federal Government’s fiscal constraints that impacted both the loan and counterpart financing (ICR, para 82). Furthermore, the internal control arrangements could not prevent ineligible expenditures that were resulted from the procurement and bidding errors and the misuse of funds. There was a case uncovered by the auditing process and Procurement Post Review regarding the full payment for incomplete or low-quality deliverables to a consulting firm (based on the World Bank’s project task team’s response to IEG’s questionnaire, hereafter, Bank project team). In November 2019, an auditing exercise involving the CGE (Controladoria Geral do Estado – the state internal control entity) was concluded, identifying the following issues: (i) the amounts being presented for disbursement of project resources represented 100 percent of the amounts transferred and not what was actually documented, as determined by World Bank rules; and (ii) the amounts documented by the subprojects were not being properly uploaded in the project’s financial management and monitoring system (i.e., Aroeira) for the preparation of Interim Financial Reports, and not properly reconciled with the State Finance and Administrative System through which all payments were made (Bank project team). The transferred and undocumented amounts were returned to the Loan Account after the World Bank warned the Borrower and agreed an Action Plan with the Borrower to resolve them (Bank project team). Nevertheless, the residual risk rating for financial management was increased to High in the final year (ICR, para 82) and remained High until project closing (ISR Seq. No. 17 dated June 30, 2020). The ICR (para 82) stated that “there were no pending FM issues at the time of project closing in June 2020.”

Procurement: Weak procurement compliance affected the project’s ability to achieve its objectives. Despite of the World Bank’s increasingly strengthened supervision on procurement, the incompliance with the World Bank Procurement Guidelines was observed from 2014 to project closing both at centralized and decentralized levels. The World Bank’s recommendations were disregarded, and the same problems persisted: collusive, uncompetitive shopping procedures; incomplete procurement and contract management records, preventing confirmation of transparent decision-making and contract fulfillment; selection of consulting services based on quantitative and mechanical criteria; and excessive delays in all stages of procurement, limiting the project’s scale and ability to achieve its objectives (ICR, para 84). Many sub-projects were delayed by deficient contract management. The contractors were fully paid
although the works were not completed within the timeline and with the quality standards that were required. To address the procurement issues, the World Bank intensified efforts over time to influence improvement; however, the open market competition was not realized. In 2019, non-compliance to the World Bank’s procurement procedures were determined for six contracts totaling approximately US$1.1 million (ICR, para 85). Non-compliance in two of those contracts indicated potential governance issues which were reported to the World Bank’s Integrity Vice Presidency (INT), but not further pursued as an INT case due to the contracts’ small sizes and the restitution of the disbursed amounts from the State Government to the project loan account (ICR, para 85).

c. Unintended impacts (Positive or Negative)
No unintended impacts were reported in the ICR.

d. Other
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11. Ratings

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<tr>
<th>Ratings</th>
<th>ICR</th>
<th>IEG</th>
<th>Reason for Disagreements/Comment</th>
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<tr>
<td>Quality of ICR</td>
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12. Lessons

The ICR (para 90-96) provided seven lessons. Some of them are summarized below by integrating the key factors during implementation (ICR, para 47-68) because they may provide lessons of interests for other rural development projects.

The Government’s institutional reform at appraisal can critically affect its commitment and compliance with the World Bank’s procedures. The State Program for Assistance to Small-Scale Producers (ProRural), which included the Project Management Unit (UGP), was transferred from the State Secretariat of Planning to the State Secretariat of Agriculture and Agrarian Reform (SARA) in 2012. SARA was culturally more connected to the State’s rural party-political system within which the Project’s operational agenda and development objectives lost focus. The new ProRural leadership’s low commitment in the project led to lax standards and questionable
governance, which started to influence procurement and financial management decisions and overall progress starting around 2014.

Repeated transitions of project leadership at the central level can critically affect the efficiency in project management. The position of ProRural Director was turned over 12 times from 2012 to 2020. The frequent, high level transitions delayed the procurement and confirmation of managerial and technical staff. The already over-burdened ProRural team lacked leadership and qualified specialists. Excessive delays and bureaucracy in the UGP hindered the Territorial Management Units (UGTs) to receive timely responses from the UGP on regional requests and eroded the autonomy of UGTs. This negatively affected progress monitoring between the RPOs, the UGTs, and the UGP. The Bank’s continuous efforts to exploit leadership transitions to energize progress across multiple fronts saw modest upswings followed by further decline, contributing to the non-approval of further extension of the closing date beyond June 2020.

The lack of support at the central level to strengthen local capacity to utilize Business Plans (BPs) in the Local Productive Alliance model can result in inadequate institutionalization of the function. ProRural under-valued the importance of the BP as a decision-making and market development tool to support small rural enterprises, resulting in the lack of the training and specialists to master and institutionalize this function. As a result, the capacity gap in the local service providers to develop BPs and sub-projects that were linked to territorial strategies was not adequately filled.

If inappropriate approach is used to reach out to Indigenous People (IP), then it may lead to their limited engagements with project activities. Under the project, of the rural households benefiting directly from project interventions, just 1 percent belonged to Indigenous People or Quilombola, not meeting the target of 5 percent (ICR, page 37). This was due to the insufficiency in the qualified technicians to work with IP. Both the National Indian Foundation and the Pernambuco Agronomic Institute fell short in addressing IP demands for multi-disciplinary technical assistance and training to prepare and implement sub-projects. The Borrower’s Completion Report (2021) concludes that the productive inclusion model was unsuitable for IP and Quilombolas in organizational, cultural, and technical terms, i.e., the overall approach to their participation in similar projects needs re-consideration (ICR, para 44).

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provides a detailed overview of the project. The narrative supports the ratings and available evidence. It is candid and well aligned to the project development objective. The report follows the majority of the guidelines. The quality of evidence and analysis is aligned to the messages outlined in the ICR. The ICR’s narrative provided clear lessons and the supporting evidence. On the other hand, the Theory of Change in the ICR (page 3) is developed in line with the formulation of the PDO and the latest versions of the indicators which focused on output-level results. Some issues on financial management were not thoroughly described in
the ICR, but the Bank project team provided more detailed information by responding to IEG’s questionnaire at the ICRR stage. Overall, the quality of the ICR is rated substantial.

a. Quality of ICR Rating
   Substantial