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IMPLEMENTATION COMPLETION REPORT

BRAZIL

**NORTHEAST RURAL DEVELOPMENT PROGRAM
PERNAMBUCO, PIAUI AND MINAS GERAIS PROJECTS**

(Loans 2718-BR, 2762-BR and 2861-BR)

June 24, 1997

**Natural Resources, Environment and Rural Poverty Division
Country Department I
Latin America and the Caribbean Region**

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CURRENCY EQUIVALENTS

Local Currency Unit: ¹Cruzeiro (Cr\$)

Rate at Appraisal:	Pernambuco (November 1985)	US\$1/Cr\$8,891
	Piauí (November 1985)	US\$1/Cr\$8,891
	Minas Gerais (December 1986)	US\$1/Cz\$14.20
Rate at Completion:	Pernambuco (June 30, 1996)	US\$1/R\$1.0021
	Piauí (June 30, 1996)	US\$1/R\$1.0021
	Minas Gerais (December 31, 1996)	US\$1/R\$1.0381

WEIGHTS AND MEASURES

Metric System

¹ A new currency, the Cruzado (Cz\$), was introduced in 1986, followed by another new currency, the Real (R\$), in 1994.

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ABBREVIATIONS AND ACRONYMS

APCR	Support for Small Rural Communities
CPATSA	Center for Agricultural Research on the Semi-Arid Tropics
EMATER	Technical Assistance and Rural Extension Agency
EMBRAPA	Brazilian Agricultural Research Company
FAO	Food and Agriculture Organization
FINSOCIAL	Social Investment Fund
FUMAC	Pilot Municipal Community Schemes
GDP	Gross Domestic Product
IERR	Internal Economic Rate of Return
IICA	Inter-American Institute for Agricultural Cooperation
IRD	Integrated Rural Development
MC	Municipal Council
MINTER	Ministry of the Interior
NGO	Non-Governmental Organization
NRDP	Northeast Rural Development Program
O&M	Operation and Maintenance
OED	Operations Evaluation Department
PAC	State Community Schemes
PAPP	Program of Support for the Small Producer
PCU	Project Coordination Unit
POLONORDESTE	Program for the Development of the Integrated Northeast
PRORURAL	Project Coordinating Unit for State of Pernambuco
RPAP	Rural Poverty Alleviation Program (successor to NRDP)
SAR	Staff Appraisal Report
SEAIN	Federal Secretariat of International Affairs of the Ministry of Planning
SEPLAN	State Planning Secretariat
SETAS	State Secretariat of Labor and Social Action
SSMP	Simplified Project Monitoring System
SUDENE	Superintendency for the Development of the Northeast
SUDENOR	State of Minas Gerais Technical Unit
TA	Technical Assistance
TOR	Terms of Reference
TU	Technical Unit
UNDP	United Nations Development Program
UT-PAPP	State of Piaui Technical Unit

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PREFACE

1. This is the Implementation Completion Report (ICR) for three projects under the Northeast Rural Development Program (NRDP) in the States of Pernambuco (2718-BR), Piauí (Ln. 2762-BR) and Minas Gerais (2861-BR). Loans in the amounts of US\$92.0 million, US\$78.0 million and US\$55.0 million, respectively, were approved by the Board on June 12, 1986 (Pernambuco), October 21, 1986 (Piauí) and June 30, 1987 (Minas Gerais). The Loans became effective on November 14, 1986 (Pernambuco), November 20, 1987 (Piauí) and October 20, 1987 (Minas Gerais).
2. The three Loans closed on June 30, 1996 (Pernambuco and Piauí) and December 31, 1996 (Minas Gerais). The original Closing Dates were respectively December 31, 1994, March 31, 1995 and March 31, 1996. Final disbursement took place as follows: Pernambuco (October 30, 1996), Piauí (January 22, 1997) and Minas Gerais (May 14, 1997). The Pernambuco and Piauí Loans were fully disbursed. Cancellation of an outstanding Loan balance for Minas Gerais of US\$4.7 million was pending at the time of ICR preparation.
3. This ICR was prepared by Anna Roumani, Consultant, Natural Resources, Environment and Rural Poverty Operations Division, Country Department I of the Latin America and Caribbean Region (LAC). The ICR was reviewed by Constance Bernard, Chief, LA1ER; Luis Coirolo, Brazil Portfolio Manager, LA1ER; Tulio Barbosa, Acting Head, Bank Recife Office; and Orville Grimes, Projects Adviser, Country Department I.
4. The ICR is based on material in the project file and discussions with Bank staff and consultants who were involved in the projects. It draws on the Mid-Term evaluation of the NRDP, including a study by the Operations Evaluation Department of the Bank, and other recent evaluations by: Food and Agriculture Organization (FAO/UN), jointly with the World Bank; the Massachusetts Institute of Technology (MIT); the University of Michigan; the Federal Secretariat of International Affairs (SEAIN) of the Ministry of Planning; and the Superintendency for the Development of the Northeast (SUDENE) as the representative of the Federal Government. These, and other internal Bank reports on rural poverty programs in the Northeast, are on file in the LAC Information Services Center.

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EVALUATION SUMMARY

Introduction

1. The Northeastern region of Brazil comprises nine states and the northern, semi-arid zone of the central state of Minas Gerais, totaling about 1.7 million km². The Region's immense concentration of rural poor and persistent under-development result from geographic, economic and political factors evidenced in the harsh climate and poor natural resource base, inequitable land tenure and distribution, a traditional and clientilistic culture, illiteracy and lack of basic infrastructure and services. The Bank has financed rural development in the Brazilian Northeast since the 1970s. The Northeast Rural Development Program (NRDP) -- of which projects in the States of Pernambuco, Piauí and Minas Gerais are reviewed in this report -- sought to alleviate rural poverty by improving the productivity and incomes of small farmers. The Program was a component of a larger package of Federally-funded sectoral programs to improve regional socio-economic conditions, and was consistent with government's new rural development strategy for the Northeast initiated in 1982. The NRDP acknowledged that in the aggregate, the special programs, sectoral projects and Federal irrigation projects in the Northeast up to that time had reduced rural poverty only minimally.

Project Objectives

2. **Original Objectives.** The initial objectives of the NRDP through its component state projects, as outlined in the Memorandum of the President (MOP), were to: (i) increase regional agricultural production and productivity; (ii) generate income and employment opportunities for low-income farm families; (iii) increase the states' capacity to provide efficient agricultural services to small farmers; and (iv) promote water resource development and technology generation and diffusion to reduce small farmers' vulnerability to recurring drought. The Minas Gerais MOP included an additional objective: to increase community participation in all phases of the development process.

3. **Project Components.** To meet these objectives, the original projects had seven components: (i) water resources development, including irrigation and feasibility studies; (ii) agricultural research and basic seed production; (iii) agricultural extension for basic food and commercial crops, small livestock and social forestry; (iv) agricultural credit, for

investments in crop and livestock production and on-farm water resource development; (v) marketing services, including training; (vi) support to small rural communities (known by its Portuguese acronym as APCR), to promote the mobilization and participation of small farmers, to finance small rural investments in production, processing and rural infrastructure, and to create employment; and (vii) project administration.

4. Hindsight and current practice tend to affect assessments of the NRDP projects at entry. It should be noted that the Program was developed and its component projects appraised under a centralized military government in which public agencies controlled most development activity. Concepts like participation, organization and decentralization entailed political difficulties in Brazil, had yet to enter the Bank's lexicon, and were largely experimental in project design (e.g., the Latin American social funds, and the APCR itself). Nevertheless, there was a conscious attempt to innovate. Greater flexibility, accountability from below, more narrowly-focused activities, and improved planning and coordination were ingredients believed likely to improve the outcome of the Program.

5. On the other hand, project objectives still depended on the synergy between many complementary activities both within each project and in other Federal Government programs meant to interact with the NRDP (known collectively as the *Projeto Nordeste*). Numerous components and agencies required effective services and coordination. Administrative, financing and implementing arrangements were complex, multi-layered and centralized, and left little room for beneficiary involvement. While there were variations in project design between states, the projects could have done more to calibrate design to the institutional, political and agronomic environment of each state. Land tenure improvement depended on progress under a separate operation (the Northeast Region Land Tenure Improvement Project, Ln. 2593-BR). The focus was on small farmers, excluding other segments of the rural poor. Measures to address potential counterpart funding delays and shortfalls were unlikely to be effective, and indeed, certain aspects of project design had the potential to aggravate those delays. On balance however, appraisal of the projects was satisfactory given existing constraints, and subject to two caveats: evident pressures to lend to Brazil in the mid-1980s; and an apparently uncritical acceptance of the capacities of implementing agencies, although some federal agencies did have considerable technical strength.

6. As with earlier operations, the loans were made to the Federal Government which coordinated the Program, approved its annual operating plans and budgets, and provided counterpart funds, monitoring and evaluation. While it is technically true that most project activities were implemented by state, not federal agencies, the Federal Government exercised dominant control over these projects both from Brasilia and through the Superintendency for the Development of the Northeast (SUDENE).

7. **Post-Reformulation Objectives.** Delayed, uneven project implementation and the results of a Mid-Term Review (1991) launched a process culminating in reformulation of all ten NRDP projects in 1993. The focus changed from rural/agricultural development emphasizing small farmers and agricultural production, to rural poverty alleviation emphasizing poor rural communities and investments in their productive, infrastructural and social priorities. The comparatively successful APCR component, which stressed community planning and organization, acknowledged community needs and contracted

out for technical expertise, essentially became the leading edge of the NRDP. While still evolving and not without problems, its poverty alleviation impact was positive, the cost per family relatively low, and disbursement and commitment rates far exceeded those of other components. In contrast, the other components relying mostly on public sector implementation -- extension, credit, research, water supply and irrigation -- showed serious delays. A high proportion of their resources financed recurrent costs -- less than one-third of project funds reached the beneficiaries -- and their poverty impact was slight.

8. Project objectives were re-framed to: (i) provide basic social and economic infrastructure, and employment and income-generating opportunities for the rural poor (not only small farmers); (ii) support rural community groups in identifying, planning and implementing their own subprojects; and (iii) involve state governments more directly in decision-making and in financing the Program. Both the Federal Government and the States agreed with the Bank that a more cost-effective, participatory method for poverty alleviation was needed, and that the features of the proposed model matched a growing sentiment in Brazil for decentralization, a rethinking of the role of public agencies in the development process, transparency, accountability and local empowerment.

9. **The New Mechanism.** The new scheme incorporated the following features, replicated in all ten states: (i) state, as opposed to federal, responsibility for counterpart funding; (ii) more streamlined flow of funds to the states, eliminating SUDENE from the chain and reducing its role overall; and (iii) two new programs: **State Community Schemes (PAC)**, in which rural community associations submitted subproject investment proposals directly to State Project Technical Units (TUs) which screened, approved and released funds for subprojects, interacting directly with the beneficiaries; and **Pilot Municipal Community Schemes (FUMAC)**, in which subprojects identified and prepared by rural communities were reviewed by specially-created project Municipal Councils (MC), with members drawn from the community, local government and civil society. MCs promoted local consensus-building on priority needs through open "town meetings", screening and submitting subprojects to the State (TU) for approval and financing. FUMAC's basic difference from and advantage over PAC is its provision for direct municipal involvement in community mobilization, organization, priority-setting and decision-making, which fosters participation and transparency.

Implementation Experience and Results

10. **Achievement of Objectives Prior to Reformulation.** The three projects in Pernambuco, Piauí and Minas Gerais, in common with the other Northeast states, were unable to achieve their original objectives. Public investment and project counterpart funding were choked off and public agencies severely affected by rising fiscal deficits, macro-economic distortions and successive reform programs. The NRDP's centralized "machinery" and delivery of services by public agencies ran counter to the new Constitution (1988) which decentralized government and foresaw a greater role for the private sector. Inter-agency coordination was exceptionally difficult, agencies' implementing skills were limited and excessive loan funds went for their operating costs. Beneficiary participation was lacking, and thus project "ownership" and maintenance of investments were negligible. Project benefits (especially research and extension) were frequently appropriated by larger farmers, while multiple components served different

target groups without being mutually reinforcing, scattering resources and impact. Other issues included institutional, policy and functional problems affecting extension, credit and the land tenure project, and performance problems with the choice and sustainability of investments .

11. The Post-Reformulation Experience. In marked contrast to the initial phase, all three states reviewed successfully achieved their objectives following reformulation. First, effective targeting ensured that the projects reached their intended beneficiaries, including the landless in much greater numbers than estimated at appraisal or reformulation -- some 440,000 poor rural families in the three states and a total of about 1.8 million families overall. Investment subprojects -- categorized as productive, infrastructure and social -- are generating employment and economic growth, and improving the incomes and welfare of significant numbers of rural poor, including women. Poor communities are demonstrating their willingness to share the cost of investments and to maintain them, promoting sustainability. Benefits are largely concentrated in the poor communities, with multiplier effects on local economies and early signs of stemming out-migration. Project-funded investments hastened communities' recovery from the 1993 drought and promoted more intensive use of land. In the poorest municipalities and communities, PAC and FUMAC have been the principal, and often the only, source of funding for basic needs.

12. Second, these projects fostered community empowerment and specifically through FUMAC which stresses participation, transparency, and local decision-making. The FUMAC Municipal Councils are a viable means of giving the rural poor greater control over planning and investments affecting their well-being, and participation has had sustainable political effects. The now numerous community associations congregate a large number of voters, and the political community is aware of their influence. All three states intensified efforts in the final year to train and mobilize municipalities and associations, specifically to incorporate them into FUMAC. Evaluations indicate that FUMAC Municipal Councils are a viable means of giving the rural poor greater control over planning and investments affecting their well-being and participation has led to sustainable development.

13. Third, the projects have earned strong support from state and municipal governments: as a critical resource for investment in poor communities; as representing potential, significant cost-savings -- averaging at least 30% -- on the provision of infrastructure and water supply by public agencies; as generating tax revenue for state and municipal governments from the sale of productive outputs, and, as having a high constituent potential. State project units are providing services more rapidly in response to communities better equipped to demand and choose. State counterpart funding performance improved greatly over time and disbursements accelerated -- a dramatic break from past experience. Finally, an increasing number of municipalities are willing to share the counterpart funding burden, seeking greater accountability and cost-effectiveness from state governments in return.

14. Sustainability. Cost-sharing and better choice and prioritization of subprojects have promoted the sense of ownership and control which builds sustainability. Commitment to the operation and maintenance of investments is shown by associations

signing legally-binding agreements, and in the many associations which have accumulated substantial reserve funds to cover maintenance. Subproject investments have been of good or satisfactory quality, favoring sustainability. However, some earlier productive subprojects may not be sustainable, due to a variety of factors. Corrective measures to counter such risks were prioritized in the later stages of these projects, and are stressed in the new Rural Poverty Alleviation Projects in six Northeast states and under preparation in three more.

15. **Project Costs, Financing and Timetables.** Loans totaling US\$225.0 million were made to the States of Pernambuco (US\$92.0 million), Piauí (US\$78.0 million) and Minas Gerais (US\$55.0 million) to benefit about 176,000 small farm families, about 31% of the NRDP target population. Partial cancellations of two of the Loans occurred on December 21, 1994 as follows: US\$20.0 million (Pernambuco) and US\$25.0 million (Piauí). Actual project costs were: Pernambuco US\$123.7 million, Piauí US\$89.7 million, and Minas Gerais US\$82.9 million. The reformulation resulted in a markedly different allocation of project financing relative both to categories and costs than was estimated at appraisal.

16. **Loan Covenants.** The key legal covenants in the pre-reformulation phase concerned the Borrower's obligation to provide counterpart funds, and to ensure proper functioning of the rural credit component. Compliance was deficient in both areas, in the three states reviewed. Post-reformulation, the states assumed legal responsibility for counterpart funds (through Letters of Amendment) and the credit component was discontinued. Covenant compliance post-reformulation was satisfactory in the three states reviewed.

17. **Bank Performance.** Preparation and appraisal of the original projects showed a thoughtful attempt to innovate and counter risk in a difficult environment. However, the framework, concept and mechanisms retained many of the characteristics which had prejudiced the outcome of earlier projects in the region, the fiscal and macro-economic environment merited greater attention, and institutional capacity, especially state, was over-estimated -- although key federal agencies did have considerable technical capacity. Realistically, the Bank would have been clairvoyant to foresee the full nature and implications of the events which came to affect project execution, especially after 1988.

18. The Bank's choice was essentially to cancel these projects or try to improve their impact and cost-effectiveness, a protracted design and dialogue process which culminated in dropping all the traditional integrated rural development (IRD) components focusing fully on a new mechanism and making it work. Clearly there was no mechanism in the Bank at the time for coming to quick closure on project reformulation: constitutional changes were a reality from 1988, counterpart funding shortages were chronic, and project execution was troubled. Yet, reformulation did not occur until seven years after effectiveness, a situation which would be unlikely to occur under the Bank's implementation culture of the 1990s.

19. The Bank has, through the PAC/FUMAC model, made a major technical contribution to Brazil, based on its own regional and wider experiences; launched a more democratic and effective process of rural poverty alleviation; and perhaps more

importantly, supported the decentralized allocation of resources and the creation of social capital in the rural Northeast. Obviously, the dramatic shift did not imply that the rural poor no longer needed credit, extension and other services or that smallholder agricultural production had lost currency. Indeed, having gained confidence in the capacity of the community-based investment mechanism to satisfy a range of basic needs, the Bank is now addressing several critically important subsectors in the Northeast: market-based land reform, integrated water management, and rural financial market development.

20. The removal of public institutions from the development process at reformulation was undoubtedly a reaction to the high proportion of Loan funds absorbed by administrative costs pre-1993, in addition to being a central element of the new model of participatory, decentralized, demand-driven investments where the communities themselves directly contract service providers from the public or private sector. However, it did not signal abandonment by the Bank of its traditional commitment to institution-building, which in this model of rural development occurs at the local level and covers a more diverse clientele, including the Municipal Councils, community associations and NGOs. Moreover, at the time of reformulation, other Bank projects were already financing institutional development of agencies responsible for agricultural research and extension.

21. The World Bank Recife Office (established in 1974), has been fundamental to the implementation and supervision of the reformulated NRDP. Three resident task managers are dedicated exclusively to working with the Northeastern states, handling all supervision activities including procurement reviews and field visits and managing and updating a global database on individual state projects as a monitoring tool for the Bank and the state TUs. In this manner, Bank support has been better tailored to the decentralized structure of the reformulated program.

22. **Borrower Performance.** Macro-economic, fiscal and political crises rapidly eroded the Federal Government's (FG) support for these projects in the first phase of the NRDP. Post-reformulation, with counterpart funding responsibilities transferred to the states, the FG periodically delayed the release of loan funds and/or advances of Federal (Treasury) funds to them, whether for political reasons or to promote financial discipline. In some instances the states delayed counterpart funding or released funds to the associations in installments, even though federal Loan funds were available, whether for political, fiscal or bureaucratic reasons. The overall flow of funds improved, especially in 1995/96. The willingness of Federal and State Governments and increasingly over time, municipal administrations, to support a radically new approach to rural poverty alleviation was instrumental in the success of these projects.

23. SUDENE's performance prior to the reformulation was mixed. Its control over the use of Federal funds, maintaining a certain equilibrium in the Program, and provision of TA for training and monitoring, were satisfactory. However, its guidance and supervision were weak, its operational rigidity curbed the intended flexibility of the Program, and it lacked sufficient trained staff for its role even though it was grossly over-staffed. Project-funded TA had little institutional impact on SUDENE. Its role was reduced to ex-post evaluation following reformulation. Performance improved and it provided an insightful, timely Completion Report on behalf of the Federal Government.

24. The performance of the state Technical Units was central to the success of these projects and depended on the availability of qualified staff, good leadership, the equipment and budget to operate as planned, and the degree of administrative and financial independence from parent State Secretariats. Pre-reformulation, the TUs, while administratively and legally strong, lacked the political and fiscal power to influence the powerful state implementing agencies, and their role was diminished as a result. Post-reformulation, generic and specific problems variously affected each of the three TUs. These included overstaffing, political interference, inadequate field presence, supervision, monitoring and evaluation, and a tendency for TUs to assume responsibility for the subproject planning and implementation cycle at the expense of the local context and beneficiary participation. However, the outcome of the latter was at times quite favorable, depending on the circumstances.

25. The TUs in Pernambuco and Minas Gerais enjoyed a measure of real autonomy, while the Piauí TU was hampered by its links to both SEPLAN and the State Governor. The Minas Gerais unit was generally successful in avoiding political intervention, unlike its two peers; in Piauí, political manipulation reached a crisis in 1995 requiring decisive Bank action to stabilize the unit and inject discipline into its management of the project. The Pernambuco unit had problems in the early period post-reformulation with excessive concentration of lending on a few types of subprojects, attributed to delayed launching of a publicity campaign and resulting lack of knowledge of the program on the part of the communities, leaving them open to manipulation. All three units were decentralized but the field offices in Piauí were largely inactive, adversely affecting its ability to monitor and supervise the project. Minas Gerais is notable for its successful collaboration with the state EMATER for provision of technical assistance to the communities. Technical assistance provision was problematic in both Piauí and Pernambuco. In all three cases, performance improved sharply in the final year of the project following reorganization and restructuring of the units, improved technical and managerial capacity and revitalized commitment to the projects by new state administrations.

26. **Project Outcome.** Staff Appraisal Reports for the original projects contain internal economic rates of return (IERR) for the three states of 13% (Pernambuco and Minas Gerais) and 18% (Piauí). It is implicit from the history of these projects and their radical re-design in 1993 that they were unsatisfactory and their IERRs for the pre-reformulation period have not been re-calculated. The Mid-Term Review of the original projects (1991) noted that the impact of the Program on production, income and employment was difficult to assess due to the lack of concrete information and data, in spite of considerable effort to institute good monitoring and evaluation.

27. The reformulated projects fell under the rubric of targeted interventions based on a demand-driven mechanism for which the costs, benefits and rates of return could not be determined with any certainty *ex ante*, and thus IERRs were not calculated, or accordingly, re-calculated for this report. However, recent evaluations (Bank/FAO 1995, 1996 and 1997) have addressed the poverty alleviation impact, cost-effectiveness and sustainability of a range of commonly-demanded infrastructure, productive and social subprojects. The 1995 evaluation examined all ten state projects under the NRDP; in 1996, the main focus was on the States of Rio Grande do Norte, Pernambuco and Piauí; and the most recent evaluation analyzed Minas Gerais, Paraíba, Maranhão and Alagoas.

While primarily illustrative, given the newness of most of these subprojects -- and in the case of the 1995 evaluation, the quest for a satisfactory evaluation methodology for the new development model -- the results are nevertheless highly promising.

28. Evaluations of typical productive subprojects in the three states show that: (i) internal rates of return (IRR) in financial terms ranged from 33-37% (clothes-making ventures in Piauí and communal tractors in Minas Gerais) to over 50% (including manioc mills and small-scale irrigation subprojects in Minas Gerais and Pernambuco), and in economic terms most exceeded 50%; (ii) in terms of the sensitivity of the IERRs to the distorting effects of publicly-funded grants, which stem from costs associated with raising these funds (i.e., taxation), using the shadow price of public funds reduced the respective IERRs, but they remained significantly positive and exceeded 17% in all cases; and (iii) in all cases, the initial investment per additional job created was low and benefit/cost ratios were satisfactory (ranging between 1.3 and 2.3).

29. Analysis of financial sustainability indicated that user fees from beneficiary associations adequately covered operation and maintenance (O&M) and the costs of replacing worn equipment. Findings were fairly uniform in Pernambuco and Minas Gerais (lack of data precluded this exercise for Piauí), in that the net income of beneficiary associations is sufficient, after deducting all O&M expenses, to cover replacement of the investments for which calculations were made (communal tractors and manioc mills) in 3-7 years, compared to their economic useful lives of 10-12 years.

30. Each of the three projects is rated Satisfactory, reflecting its achievement of objectives, sustainability and exit ratings in final supervision Forms 590.

Summary of Findings, Future Operations and Lessons Learned

31. **Main Findings.** Despite the effort to innovate and to head off counterpart funding and other potential problems, the original NRDP projects as designed in the mid-1980s remained conceptually and operationally traditional. Deteriorating fiscal and macro-economic conditions had a devastating effect on counterpart funding and the ability of these projects to make headway. The centralized project design could not function as envisaged in face of momentous changes in the political economy which demanded a more decentralized, participatory rural development model. Thus, while the Bank could not control the larger forces at play in Brazil, project design created its own set of problems.

32. The reformulated projects successfully reached their objectives because their design and implementation strategy fit the evolving political, economic and social context. This legacy resulted from "revolutionary" decisions: (i) by the Bank, to take a poverty alleviation approach, with all its implications of decentralization, grants, ownership and participation, instead of a rural/agricultural development approach; and (ii) by the Federal and State Governments, to relinquish a significant measure of political control by empowering rural communities and, more importantly, by acknowledging the ability of the rural poor to establish their own priorities and make decisions. Nevertheless, community-based development is not a "magic bullet" for poverty reduction in the Northeast, which is why the Bank, having launched a significant process with measurable impact on

beneficiaries, is also now turning its attention to other major constraints in the sector, in addition to seeking ways of refining that methodology,

33. Among the project-specific findings were the following. First, FUMAC proved more effective than PAC. This was demonstrated in greater participation and transparency; larger numbers of subprojects per municipality; more beneficiaries overall; and generally lower cost both per subproject and per beneficiary. However, while FUMAC has proven capable of eroding the traditional “clientelism” of the Northeast, it cannot alone transform long-standing political, economic and social patterns. Second, organized communities can influence the allocation and use of municipal financial resources, and NGOs can provide vital project services and help organized communities to maximize project benefits. Third, the environmental impact of the generally small-scale PAC and FUMAC subprojects was insignificant but certain subprojects, e.g., manioc mills, are likely to have environmental impact needing attention. Modifications designed to address identified shortcomings have been incorporated into the new RPAP. States and municipalities have proven willing to make needed corrections.

34. **Future Operations.** There was no legal requirement for the three states to prepare a plan for future operations, and no plans were prepared. The same is true for the formal monitoring of future operations. Nevertheless, prospects for consolidating and building on project benefits appear to be good. The States and their Governors are supporting policies and actions which promote decentralized decision-making and management. Communities have demonstrated their willingness to operate and maintain their investments responsibly. Further, given the radical change in approach to rural poverty alleviation, there is considerable interest in the Bank, in Brazil and elsewhere, to track the evolution and impact of these projects.

35. **Lessons Learned.** The lessons, substantiating Bank-wide experience, are as follows:

- (a) Most rural development projects will falter under severe **macro-economic and fiscal pressures**, and a **policy environment unfavorable to agriculture**;
- (b) When a program strategy and project design is overtaken by events which make it redundant, **the Bank should promptly undertake the needed changes**, including complete reformulation if necessary, which will enable it to succeed in the new circumstances;
- (c) **The willingness to experiment benefits projects Bank-wide.** The reformulated projects emerged from a successful pilot experience (APCR), enriched by drawing on wider experiences, and their successors, the RPAPs, have continued to pilot increasingly progressive variants of the core model;
- (d) **Grant-based investment is a legitimate and effective tool for jump-starting capital accumulation by the rural poor, and the matching grant**

approach has contributed to sustainable local development in the three states;

- (e) **Decentralization** of fiscal and investment decision-making to state and local government and beneficiaries improves project administration and subproject quality. This process needs clearly-defined operational incentives and penalties to counter departures from project guidelines;
- (f) **Beneficiary participation** in subproject selection, implementation, financing and supervision generates ownership and builds sustainability. Vigilance and appropriate controls are needed to prevent political interference in the participatory process;
- (g) **Poverty targeting mechanisms** should be simple, explicit and monitorable; be based on objective criteria; foster transparency and minimize political interference in project resource allocation and subproject selection. Timely, well-designed **information campaigns** support targeting by ensuring transparency and a community knowledge of program objectives, guidelines and access;
- (h) **Sustainability** of project investments is enhanced by municipal and community cost-sharing, beneficiary involvement in local public investment allocations, and the provision of TA is provided at all key stages of the subproject cycle;
- (i) **Successful community-based investment requires quality technical assistance throughout the subproject cycle** for: improving the genesis and outcome of productive subprojects; community mobilization, organization and skills development; and institutional development of the TU. “On-the-job” training for communities is essential but not risk-free. Finding TA providers in rural areas needs creativity;
- (j) **Supervision** is indispensable for subproject and overall project success and should be strengthened, and involve local entities closest to the communities, particularly Municipal Councils and NGOs;
- (k) **Productive subprojects need rigorous selection, preparation, TA and supervision** to maximize their commercial potential and sustainability. Their inherent social objectives in a poverty context should not imply “softer” analysis of their feasibility, cost-effectiveness and rates of return. Eligibility should hinge on their maximising beneficiaries; strict guidelines should govern their operations; and user fees should be charged for O&M;
- (l) Related to the above, project design should **pay careful attention to baseline studies** as the springboard for well-designed monitoring and evaluation and for assessments of the **economic and financial rates of return** on a range of productive subprojects. Accessible, comprehensive

monitoring and evaluation systems improve subproject assessment, targeting and efficiency and are an essential planning and management tool;

- (m) **Standardization of documents, designs and unit costs** simplifies subproject preparation and evaluation, facilitates procurement, prevents faulty design and reduces processing bottlenecks;
- (n) **Dissemination of “best practices”**-- such as the FUMAC Councils in Paraíba, the municipal development plans and indigenous peoples’ councils in Maranhao, the alliance forged with EMATER in Minas Gerais and Alagoas, and with NGOs in Rio Grande do Norte, as well as experiences in other states -- through information exchanges among TUs, at training seminars and workshops -- can hasten learning and reward innovation; and
- (o) **Graduation of some communities may be necessary** as the aggregate benefits of several subprojects equip them to leverage funds from other sources. The pervasiveness of rural poverty in the Northeast indicates the need for a strategy based on defining monitorable, operational ways of pinpointing communities on the verge of achieving this status.

IMPLEMENTATION COMPLETION REPORT

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROJECTS

PERNAMBUCO, PIAUI and MINAS GERAIS

(Loans 2718-BR, 2762-BR and 2861-BR)

PART I: PROJECT IMPLEMENTATION ASSESSMENT

Background

1. The Northeastern region of Brazil comprises nine states¹ and the northern, semi-arid zone of the central State of Minas Gerais, totaling about 1.7 million km². The Northeast has long been the single largest regional concentration of rural poverty in Latin America. In the mid-1980s when the ten projects under the Northeast Rural Development Program were appraised -- projects in the States of Pernambuco, Piauí and Minas Gerais are assessed in this report -- more than one-third of all Brazilians living in poverty, and almost two-thirds of the rural poor, were living in the Northeast. The region has absorbed an immense amount of budget resources over several decades in the quest for solutions to its persistent poverty and under-development. A combination of geographic, economic and political factors, reflected in the harsh climate and poor natural resource base, inequitable land tenure and distribution, a traditional, paternalistic culture, illiteracy, and the lack of basic infrastructure and services, explains the predicament of the rural poor. Rural incomes are generally low and highly variable. Periodic or permanent outmigration of large numbers of the rural poor to bigger centers in the Northeast or the South, is common.

2. **Profile of the States Reviewed.** The State of **Pernambuco** covers a territory of 98,300 km² whose long east/west and narrow north/south configuration incorporates a range of agro-climatic regions and micro-regions which have molded its socio-economic and productive patterns of development. Some 70% of the state is within the Northeast semi-arid drought polygon. The population at appraisal (1986) was 6.1 million, of which well over half lived in rural areas. At the time of appraisal agriculture generated only 12% of state GDP and some 85% of the agricultural labor force was earning less than the minimum wage. Living conditions in rural areas were poor, judging by high rates of infant mortality and poor access to basic services. About three-quarters of all farms were under

¹. The States of Bahia, Ceará, Rio Grande do Norte, Sergipe, Maranhão, Piauí, Paraíba, Pernambuco and Alagoas

100 ha and occupied only 11% of the state's area; over half of all small farms were located in areas with rainfall of only 600-900 mm per year, and prone to frequent drought.

3. Occupying about 252,000 km² in the Northeast region of Brazil, the State of **Piauí** is the third largest in the region. It has an abundant aquifer but soils are of poor quality outside the river valleys. The climate varies from semi-humid to semi-arid with irregular annual rainfall ranging from 1600 mm on the coast to 600 mm in the southeast. Piauí was, and remains, one of the poorest states in Brazil and the poorest in the Northeast. Prior to appraisal (1986), about 80% of its 2.3 million inhabitants earned less than one-tenth of the average per capita GDP in Brazil and 60% of the population living in rural areas generated only 22% of state GDP. Indices of infant mortality, life expectancy, malnutrition and access to basic services testified to the precariousness of rural life. Some 90% of farms were less than 100 ha and accounted for only 20% of state territory. Few small farmers were landowners. Yields of basic small farm crops -- rice, beans, cassava and maize -- were up to 40% lower than averages for the Northeast.

4. With a total area of about 587,000 km², **Minas Gerais** is the sixth largest state in Brazil. At the time of appraisal (1987), its northeastern region, the least developed part of the state and the focus of the project, covered 42 municipalities and about 21% of total state area. Some 88% of the rural families in the region earned their living directly from agriculture. High rates of malnutrition, infant mortality and illiteracy, and per capita incomes among the lowest in the Northeast, characterized this zone. Poverty-induced rural outmigration had witnessed an annual 5% growth in the state's urban areas, swelling the urban poor and creating an insupportable financial obligation to provide social services, and a 2% per year decline in the rural population over the previous two decades. Tax and credit incentives had concentrated landholdings under livestock and reforestation enterprises, increasing the numbers of landless seasonal wage workers, and increasing social tension.

5. **Bank Support to the Northeast.** Rural development of the Brazilian Northeast, focusing on poor farm families, has been assisted through Bank projects since the mid-1970s. The strategy and design of these projects have changed over time, building on the lessons of experience. The Northeast Rural Development Program (NRDP), launched in the mid-1980s, had a 15-year horizon and sought to alleviate poverty among the rural poor (mainly small farmers).² It was one important element in a larger package of Federally-funded sectoral programs known as *Projeto Nordeste*, designed to improve regional socio-economic conditions through interactive, complementary effects across sectors.³ The Program was based on a broad regional policy framework, a set of sub-sectoral guidelines, and multi-year state rural investment plans. It was consistent with the

² The NRDP and its successor the Rural Poverty Alleviation Program (RPAP) came to be widely and generically referred to as the PAPP (*Programa de Apoio aos Pequenos Produtores*).

³ *Projeto Nordeste* was never intended to be limited to the agricultural sector or to alleviating rural poverty. As it turned out however, NRDP was one of the very few programs in *Projeto Nordeste* to actually be implemented

new rural development strategy for the Northeast initiated in 1982, and acknowledged that in aggregate, the special programs, sectoral projects and federal irrigation projects up till that time, had not significantly reduced rural poverty.

Project Objectives and Design under the Original NRDP

6. **Objectives.** Project objectives as stated in the Memorandum of the President (MOP) were to: (i) increase the states' agricultural production and productivity; (ii) generate employment opportunities⁴ for low-income farm families; (iii) increase the states' capacity to provide efficient agricultural services to small farmers; and (iv) promote water resource development and technology generation and diffusion to reduce small farmers' vulnerability to recurring drought. The Minas Gerais project included an additional objective: to increase community participation in all phases of the development process. The NRDP also sought to strengthen SUDENE (Superintendency for the Development of the Northeast) to regionally coordinate, monitor and evaluate the NRDP, and to promote regional agricultural research appropriate for small farmers (see para. 7).

7. **Components.** All ten projects of the NRDP were virtually identical (except for Sergipe and Bahia). Project objectives would be achieved through seven components: (i) water resources development, including irrigation and studies; (ii) agricultural research and basic seed production; (iii) agricultural extension for basic food and commercial crops, small livestock and social forestry; (iv) agricultural credit, for investments in crop and livestock production and on-farm water resource development; (v) marketing services, including training; (vi) support to small rural communities (*apoio as pequenas comunidades rurais* - APCR), to promote small farmer mobilization and participation, finance small rural investments by farmer groups for production, processing and rural infrastructure, create employment and foster accountability of public agencies; and (vii) project administration and training. In addition to state-specific components, the Sergipe project included regional coordination and administration and regional research components, the former implemented by SUDENE and the latter by the regional Agricultural Research Center for the Semi-Arid Tropics (CPATSA); and the Bahia project included a regional research component under the Brazilian Agricultural Research Company (EMBRAPA).

8. **Design and Strategy.** Hindsight and current practice tend to color assessments of these projects at entry. They were developed and appraised under a centralized military government in which public agencies controlled most development activity. Concepts like participation, organization and decentralization entailed political difficulties in the Brazil of this period, had yet to enter the Bank's lexicon and were largely experimental in project design, e.g., the Latin American social funds. Even so, there was a conscious attempt to innovate in order to improve project outcome, through greater flexibility, accountability from below, more narrowly-focused activities, and improved planning and coordination.

⁴. The Minas Gerais MOP includes "income" as well as employment as an objective in (ii).

The pilot APCR component (para. 7) was the practical application of a concept with its roots in many, often small, experimental actions worldwide.

9. Achieving project objectives however, still depended on the synergy between many complementary activities, dependent in turn on efficient systems of service delivery and effective coordination between numerous agencies and several layers of the Brazilian government. The weaknesses of such a framework had undermined previous programs. The preparation file record indicates that concerns were expressed about: the capacity of state and regional agencies to cope financially and institutionally with ten new integrated rural development (IRD) projects; the poor record of credit lines under previous projects; the size of the recurrent costs portion of total project costs;⁵ agricultural area and production assumptions which implied substantial changes in small farmers' behavior without discussion of how this would occur; and whether the beneficiaries could realize economic benefits within a reasonable timeframe.

10. The overall design was not sufficiently participatory even though the NRDP was considered groundbreaking at inception because of features permitting and requiring beneficiary participation (e.g., APCR, and state-level regional committees with rural union and NGO participation). In fact, apart from APCR and water supply activities, there was insufficient room or opportunity for beneficiaries to express their needs and influence the shape and outcome of project activities.

11. Despite assertions that NRDP project execution and expected benefits were not directly dependent on other sub-sectoral projects in the short-term, the SARs are clear that increased access to land was essential for sustained rural development in the Northeast and would increase the expected impact and benefits of the three projects. Assurances were obtained from the states that specified amounts of land would be available for distribution to project beneficiaries, by target dates, via the complementary Northeast Region Land Tenure Improvement Project (Loan 2593-BR). Further, the implications of the other projects and programs under *Projeto Nordeste* not materializing to provide the desired interactive effects with the NRDP, was not given adequate attention.

12. The Bank was satisfied that potential counterpart funding delays and shortfalls would be reduced through provisions for new channels and procedures, the merging of special rural programs and the addition of FINSOCIAL (Social Investment Fund) resources. Further, the Federal government in 1986 had, *inter alia*, established an ad-hoc inter-departmental working group in Brasilia to resolve the delays in the flow of Federal funds to the Northeast project coordination units. The focus on a few key production constraints to concentrate funds on activities which provided direct benefits, the regional scope of the NRDP, and broad support for the program among senior government officials and local leaders, were also expected to reduce the risk.

⁵ Memorandum, October 26, 1986. Recurrent costs would be "amply covered by increased tax revenues arising from the projects' incremental agricultural production."

13. However, the erratic counterpart funding situation which emerged revealed several problems: states' total dependence on the effective and timely release by the Federal Government of both counterpart and loan funds (a design feature for which there was no alternative at the time of appraisal); the complexity of the bureaucratic machinery for release of funds; annual budget allocations below appraisal estimates, vulnerable to inflation and to over-control by SUDENE; and cumbersome accounting systems and procedures.

14. The macro-economic and policy context, perhaps the dominant factor affecting project implementation in all three states (and the entire program), was mentioned only obliquely in the SARs. The Northeast's abundant supply of cheap labor made it vulnerable to an over-valued exchange rate, while the inflationary environment was bound to affect the credit component. Planned increases in agricultural production and productivity were foiled by policies which penalized agriculture -- exchange rate over-valuation reduced returns to agricultural exports, tariff protection increased the cost of inputs, and administered prices for farm produce, below market levels, depressed returns to farmers.⁶

15. As documented in the Mid-Term Review of the NRDP (1991), the concept envisaged various components being implemented simultaneously through different state agencies, with their impact being the increased production and income of beneficiaries in a particular area. Not all components would benefit all small farmers; rather, a package of tailored, complementary actions was targeted at identified groups. Such an approach assumed relatively sophisticated joint planning and design of "instruments" for a given group and strong coordination during implementation. However, the state Technical Units (TU) lacked the political strength to control the often quite powerful executing agencies, and thus project components devolved to independent sub-programs of the agencies, which tailored work programs to their own interests, not those of the projects.

16. The NRDP recognized from the outset that detailed operational planning including monitorable goals was needed, to prevent dispersion and ensure coordination of activities. However, while promising results were obtained in some states with a "programming by objectives" approach, in general, objectives were not translated into specific area and group targets for desired outputs. While this was intended to provide flexibility over time, there was no concrete and meaningful way of measuring progress or impact. The executing agencies and SUDENE clung to the traditional component approach, and resisted detailed planning and programming for sub-areas and sub-groups.⁷

17. The beneficiary population of small farmers targeted was quite heterogeneous in terms of land size, aspirations, needs and capacities. Program design admitted that different components would apply to different groups of small farmers. In practice, and in the absence of detailed operational planning, the concept of differentiated targeting of

⁶ Dynamics of Rural Development in Northeast Brazil: New Lessons from Old Projects, OED 1991

⁷ NRDP, Mid-Term Review, November 1991

beneficiaries and components was unworkable and was ignored.⁸ Differentiation of overall project design between states would have been prudent. The Program adopted a homogeneous approach to the projects, not calibrating them sufficiently to the institutional, political and agronomic environment in each state, with projects constructed from a menu of financeable activities.⁹

18. The rural credit component encountered difficulties which were to a significant degree design-based: state government banks could not participate because budget regulations prevented them from handling non-repayable (subsidy) funds; the credit component was relatively isolated from the other components and there was little collaboration between the banks and the TUs on credit activities; and farmers were, not surprisingly, unwilling to incur debt without knowing what their repayments would be, since outstanding balances would be adjusted for inflation and they feared the adjustments would exceed their product price increases in spite of a 30% subsidy. Project personnel appear not to have understood, and did not tell farmers, that the credit terms remained fairly attractive even under the circumstances.¹⁰

19. **The Loans.** Loans totaling US\$225 million (about 27% of the NRDP total) and financing 50% of project cost net of taxes, were made to the States of Pernambuco, Piauí and Minas Gerais to benefit some 176,000 small farm families, about 31% of the NRDP target population (some 575,000 small farm families). The combined estimated total project cost for the three projects was US\$462.2 million. Projects were to be implemented over a period of about eight years.

20. While it is technically true that most project activities were implemented by state agencies, not federal, the Federal Government, both in Brasilia and through its regional agency SUDENE, exercised dominant control over these projects, coordinating the program, approving annual operating plans and budgets, providing counterpart funds and monitoring and evaluation services. Delayed approval of budgets and release of funds by the Federal Government, in turn, delayed project implementation and reduced project purchasing power due to the inflation effects.

Reformulation of the NRDP

21. Despite successful experiences in different States and activities, the original NRDP encountered many difficulties in all ten states and was unable to achieve its basic objectives. The fundamental problem was the escalating macro-economic and fiscal crisis in Brazil and the mismatch between the projects' centralized structure and administrative arrangements, and the rapidly changing political, economic and social context. This was

⁸ Ibid

⁹ Dynamics of Rural Development in Northeast Brazil: New Lessons from Old Projects, OED, December 16, 1991

¹⁰ Ibid

borne out by a comprehensive Mid-Term Review (1991) and an OED study,¹¹ which prompted an agreement between the Bank and Borrower to reformulate the Program, a drawn-out process which lasted until 1993.

22. The focus of the NRDP changed from rural/agricultural development, with the emphasis on small farmers and agricultural production, to rural poverty alleviation, emphasizing poor rural communities and varied productive, infrastructure and social investments. The comparatively successful APCR community-based investment component was the starting point for the complete re-design of the Program to reflect the growing sentiment in Brazil for decentralization, transparency, accountability and local empowerment.¹²

23. **New Objectives.** Project objectives were redefined to: (i) provide basic social and economic infrastructure, and employment and income-generating opportunities for the rural poor (not only small farmers); (ii) support rural community groups in identifying, planning and implementing their own subprojects; and (iii) involve state governments more directly in decision-making and in financing the Program. While maintaining the fundamental program objectives, albeit in different form, both Bank and Borrower saw the reformulated NRDP as part of a policy of compensatory actions responding to an emergency, i.e., the devastating impact on the rural poor of economic and climatic crises and macro-economic and fiscal adjustment (SUDENE 1996).

24. The reformulation process had two distinct phases. The first, protracted and “painful” phase started in June 1990 and culminated in the formal re-design of the Sergipe project (Ln. 2523-BR) effective in early 1992. Expecting replication of the Sergipe model in all other nine states, most of the original state-executed project components were discontinued between June and November 1992 (e.g., water resource development, agricultural research, seed production, extension, credit, marketing services and the APCR component). Remaining funds would be allocated to productive¹³ investment subprojects to be executed by beneficiary communities. These were larger-scale investments involving small farmers from several communities and managed by “apex” beneficiary organizations. They were largely residual components¹⁴ from the earlier phase of the projects, and included only subprojects at a relatively advanced stage of preparation or implementation.

25. From November 1992 onwards, reformulation entered its second phase. The emphasis shifted markedly towards further decentralization (towards the states, municipalities and communities), transparency in funds allocation and greater beneficiary

11. Ibid

12. Study of Popular Participation in the Northeast, C Kottak and A Costa, University of Michigan, February 7, 1994

13. The emphasis was still agricultural production and income generation

14. The Solidaridad program in Mexico was an important influence. A study tour to Mexico, sponsored by the Bank, was a critical step in gaining acceptance for the new approach and fostering Brazilian ownership of the reformulation.

control over project identification and implementation. Drawing upon the successful APCR component and similar schemes elsewhere in Latin America,¹⁵ the NRDP was converted into a community-based development program, dropping all components targeting agricultural production, and incorporating new features: (i) State as opposed to Federal, responsibility for providing counterpart funds; (ii) streamlined flow of funds to the States by the National Treasury, through the Ministry of Rural Integration, without having to go through SUDENE, whose role was reduced; and (iii) two new programs: State Community Schemes (PAC) and Pilot Municipal Community Schemes (FUMAC).¹⁶

26. **The Mechanism.** The re-designed projects provided matching grants to rural community associations to finance small-scale subprojects identified by those groups as priority investments for community well-being. Grants (with a community contribution of 10-20% depending on the type of subproject, to enhance ownership) were justified as permitting access of the poorest to resources for needed facilities and services without their having to repay at high nominal interest rates.

27. Community subprojects would be screened, approved and implemented through two different mechanisms: (i) **State Community Schemes (PAC)** in which rural communities submitted their subproject investment proposals directly to the State Project Technical Unit (TU) which, screened, approved and released funds for subprojects, interacting directly with the beneficiaries; and (ii) **Pilot Municipal Community Schemes (FUMAC)**, in which subprojects identified and prepared by rural communities were presented to project Municipal Councils for review.¹⁷ The Councils, composed of community members, local government representatives and members of civil society, promoted local consensus-building on priority needs through open "town meetings", and screened and submitted subprojects to the State (TU) for approval and financing. A municipality participating in FUMAC could not have PAC, nor was it necessary to have had PAC in order to adopt FUMAC -- in this sense, the system was not graduable. FUMAC is a more progressive model than PAC and the Bank has always encouraged its expansion.

28. Decision-making and implementation devolved to the municipalities and communities, the state governments were more directly involved in financing and administration, and the responsibilities of public agencies were reduced. An action plan, translated into a set of monitorable indicators, was agreed with each state. Eligibility for project benefits included community associations and cooperatives which might comprise small farmers, artisans and fishermen, living in communities or district centers with less than 7,500 persons. Subproject cost could not exceed US\$40,000 equivalent, including community contributions. Beneficiaries had (under Brazilian law) to legally register as associations in order to receive public funds, had to accept full liability through an

¹⁵ Kottak and Costa., *Ibid*

¹⁶ Memorandum June 29, 1994.

¹⁷ Project Municipal Councils are a separate entity from the municipal governments arising out of the regular political process.

agreement with the TU for O&M of the investment, and had to make cash or kind contributions of at least 10% of subproject cost.

29. These two programs became the core of the reformulated NRDP. All PAC and FUMAC subprojects were ultimately approved by the State TU and operated under the same ground rules. The basic difference was that FUMAC directly involved the municipality whose role it was to mobilize and organize communities and help them to define priorities. This evolved over time to the point where the FUMAC Municipal Councils, not the TUs, approved community subprojects. With certain modifications (including a new, pilot version of FUMAC further decentralizing resource allocation and control), this remains the model for projects under the new Rural Poverty Alleviation Program (RPAP) in the Brazilian Northeast.

30. The reformulation of all ten NRDP projects was approved by the Board on a no-objection basis on June 17, 1993,¹⁸ became effective on September 28, 1993, and was fully operational in all ten Northeast states by January 1994. Due to the increased focus on poverty alleviation (and conforming to a previous amendment to the Sergipe project), overall funding was increased from 50% to 60% of project cost, net of taxes. At the time the reformulation became effective, the aggregate loans for Pernambuco, Piauí and Minas Gerais were, based on the original Loan amounts (and excluding the initial deposit into the Special Account) about 24% disbursed,¹⁹ leaving a balance of US\$136.2 million.

Achievement of Project Objectives

31. There is broad agreement that prior to 1993, the projects in Pernambuco, Piauí and Minas Gerais were not achieving their objectives, in common with the rest of the states under the NRDP. A major recovery has occurred since the projects were reformulated and the broad elements of their outcome *vis a vis* their re-defined objectives, are summarized below.²⁰

32. **Socio-Economic Benefits for the Rural Poor.** During its three years of implementation, the reformulated NRDP reached around 1.8 million families. In the three

18. See "Amendment of Loan and Project Agreements", R93-115 of June 7, 1993; and letter of June 18, 1993 signed by Bank and Borrower, setting out amendments to Loan and Project Agreements.

19. Pernambuco (51%); Piauí (39%); and Minas Gerais (20%).

20. Evaluations of the reformulated NRDP include the following: World Bank/FAO, "The Reformulated NRDP: Performance and Evaluation, February 1995; World Bank/FAO, "NRDP: Performance and Evaluation", March 1996; University of Michigan, "Baseline and Popular Participation Study" initiated in 1993 by Kottak and Costa, followed by a community impact evaluation in July-October 1994; studies under the "ARIDAS Project on Regional/Municipal Development in Semi-Arid Areas of the Northeast"; an evaluation of NRDP commissioned in 1994 by the Federal Secretariat of International Affairs (SEAIN), Ministry of Planning; MIT working draft for the World Bank Brazil Implementation Commission, February 1996; and Superintendency for the Northeast (SUDENE) Borrower Completion Report on the NRDP, 1996.

states reviewed, community-based development reached its intended beneficiaries including the landless, generating economic growth and better quality of life for about 440,000 poor rural families, vastly exceeding estimates at appraisal or reformulation. Increased income and employment opportunities for various family members including women are emerging, raising at times sharply, their living standards. This trend is gaining momentum as productive subprojects, most of which are fairly recently implemented, consolidate and mature.²¹ Capital accumulation has started at both the local and household levels, fostering, *inter alia*, the sustainability not provided by previous development efforts in the Northeast. Beneficiaries saw a high proportion of project funds (about 93%, compared to about 35% previously) and subproject benefits, in general, remained with targeted populations. Investments have satisfied community priorities and are of good or satisfactory quality. Consequently, poor communities are willing to share the costs of investments, and to operate and maintain them. Multiplier effects on local economies are evident and early signs indicate that migration has slowed. Communities with project-funded investments recovered faster from the 1993 drought and used their land more intensively. In the poorest municipalities in all three states, PAC and FUMAC were the main, and often the only source of funding for rural infrastructure, productive and social investments.

33. **Support for Community Empowerment.** The three states intensified efforts in the final year to train and mobilize municipalities and community associations, specifically to incorporate them into the FUMAC program which stresses participation, transparency, and local control over decision-making and subproject implementation. Without doubt, participation in the reformulated projects has had sustainable political effects. The FUMAC municipal councils are a viable means of empowering the rural poor. The now numerous community associations congregate many voters – a fact not lost on the political community. Further, the State Technical Units have developed standard designs for a broad range of subprojects to simplify preparation, and established technical and cost standards to foster quality and sustainability.

34. **Involvement of State Governments in the Program.** The projects have attracted strong political support from the States and municipalities. They are valued as a supplementary resource (and possibly the only assured one) for investment in basic community needs; as representing potential, significant cost-savings (on average, 30%-40%) on infrastructure and water supply normally installed exclusively by public agencies; and, as generating tax revenue for State and Municipal governments from the marketing of productive outputs.²² Further, they have prompted more rapid and efficient provision of services by the state project units and participating public enterprises, e.g., electricity and

²¹ Brazil: Northeast Rural Development Program - Performance and Evaluation, World Bank/FAO, March 14, 1996 and April 1997 (Draft).

²² For example, the 47 manioc mill subprojects financed in Pernambuco as of mid-1996 are estimated to generate about US\$63,000 in tax revenues per year. Similarly, the 282 communal tractor subprojects financed in Minas Gerais by end-1997 are estimated to generate, through sales of surplus agricultural product, about US\$1.2 million per year.

water (services commonly requested by communities), in response to newly-demanding and cost-conscious communities. State governments have generally provided counterpart funds more promptly, accelerating disbursements -- a dramatic break from past performance -- and municipalities have been willing (and urged) to share the counterpart funding burden with the States, seeking in return greater accountability and cost-effectiveness from state governments.²³

The Implementation Record

35. **State Performance Prior to Reformulation.** Major policy changes and economic uncertainties prior to 1993 created a climate in which these projects could not be implemented as originally planned. Several critical factors had an adverse impact on the projects in all three states. First, rising fiscal deficits and macro-economic distortions severely limited Federal capacity to invest and to provide counterpart funding for the projects, and caused the deterioration of public agencies responsible for project investment and services delivery. Meanwhile, coordination between the numerous public agencies responsible for implementation, especially with irregular funding, was (as always) difficult to achieve, and too high a proportion of project funds supported recurrent expenditures.

36. Second, significant changes in the political economy of Brazil embodied in the new Federal Constitution of 1988 saw power and fiscal resources shift from the Federal level to the states and localities, which further impaired the Federal Government's ability (and willingness) to fund many existing programs. However, the design of project decision-making, administrative and financing arrangements, which largely pre-dated these changes, remained centralized at the Federal level, and the provision of services continued to rest with public agencies when support was shifting towards a greater role for the private sector. As part of the overall process of change, successive reforms abolished key Federal agencies, contributing to the uncertainties delaying implementation.

37. Third, liberalization of agricultural marketing and trade policies resulted in record harvests and the perception that agriculture was resilient to the unfavorable macro-economic context, causing longer-term sectoral programs such as land reform and rural development to lose priority in funding decisions. However, policy-makers were forced to re-examine this stance when continued instability caused a marked decline in the sector from 1990. Further, the failure of most component programs of *Projeto Nordeste* to materialize focused attention on the NRDP as the pivotal poverty alleviation strategy, creating unrealistic expectations and criticism of its design and implementation.

38. Beneficiary participation, an innovative feature of NRDP project design and philosophy, was steadily eroded as executing agencies, confronting increasingly erratic funding for these projects, were reluctant to engage in participatory planning. Investments frequently deviated from beneficiary priorities, and thus neither the beneficiaries nor the states felt much sense of ownership or obligation to maintain them. Multiple components

²³ World Bank Policy Research Paper No 1498, August 1995

tended to serve different target groups without being mutually reinforcing, scattering resources and impact, while measures to foil the access of large farmers to project benefits were ineffective.²⁴

39. The Mid-Term Review of 1991 revealed that the implementation performance among projects varied less than among project components, i.e., in addition to major themes affecting all the projects, component-specific problems were important contributing factors in the delays experienced Program-wide.²⁵ These included: the states' limited capacity to plan and implement irrigation development ventures; institutional problems in agricultural extension; and virtual paralysis of the agricultural credit program in each state. Performance problems relating to the choice of investments and their sustainability were also experienced in irrigation, water supply and in the APCR component. Finally, the complementary land tenure improvement program fell short of its targets in most states, including the three states reviewed because of continuing institutional and policy struggles, and this hindered rational planning and implementation under the NRDP projects. Results of individual state project implementation up to reformulation are contained in Table 5A.

40. **The APCR Component.** The APCR component (and its related water supply component) supporting small community investments based on community planning, organization and out-sourcing of needed technical expertise, became the leading edge of the NRDP in each state. Still evolving -- including through the piloting of more progressive measures -- and by no means trouble-free, the APCR acknowledged the expressed needs of the communities, its poverty alleviation impact was positive, the cost per family relatively low, and disbursement and commitment rates far exceeded those of other components. The project record conveys the relative dynamism of this component from Program start-up.

41. Such was not the case with components which relied heavily on public sector implementation -- extension, credit, research and irrigation schemes. These showed the worst delays, notwithstanding considerable variation state to state based on local circumstances. A high proportion of their resources financed recurrent costs, and their poverty impact was slight. Project administration by the Federal Government and the states continued, as in previous programs, to absorb about 70% of loan funds relative to actual investments.

42. **State Performance Since Reformulation.** NRDP disbursements accelerated following reformulation. The release of Loan funds by the Federal Government was intermittently delayed, but the situation improved markedly from mid-1995 after new state

²⁴ Memorandum, May 28, 1993.

²⁵ Regional activities were controlled by Federal agencies as follows: production-oriented research (EMBRAPA and CPATSA); overall policy and planning responsibility and regional coordination of the NRDP (SUDENE); and land-related actions, under a separate, complementary project (INCRA).

governments addressed the administrative and political constraints responsible. Of the total municipalities slated for inclusion in each state, Minas Gerais reached 100% (61), Pernambuco reached 96% (167) and Piauí reached 100% (123). As stated, beneficiary coverage under the reformulated projects in all three states vastly exceeded targets.

43. Initial promotional campaigns by the TUs, which varied from state to state in content and coverage, generated a tremendous response by the communities, presenting a challenge for the limited cohort of technical agents in each state. Once subproject proposals were approved, completion averaged about four months. Lags in all three states between approval and completion derived mainly from TUs not having loan and counterpart funds immediately available to transfer to the communities, although political and other considerations in individual states did contribute.

44. Typically, communities demanded water and electricity investments first, subsequently choosing productive and other investments (which surged in 1995). The diversity of subprojects demanded -- about 120 different types whose relative importance varied state to state -- is a graphic reminder of rural deprivation. Certain kinds predominated: (i) in infrastructure -- rural water supply and electrification (the latter comprising 48% of all subprojects in Minas Gerais, 40% in Pernambuco, and 18% in Piauí); (ii) in productive -- tractors for communal use, manioc flour mills, small-scale irrigation and clothes-making; and (iii) among social subprojects -- health-related house improvement (quite significant at 9% in Piauí and 8% in Pernambuco), sanitation (4% in Pernambuco) and local road rehabilitation (a significant type in Piauí, accounting for 11%).

45. Community demand for specific types of subprojects was influenced in several ways, depending on the state and the period. In the period immediately following reformulation and less so as the projects evolved, elected state and municipal officials acted as intermediaries between the communities and state project units. Many mayors for example, promoted the creation of associations to present proposals which were essentially municipal initiatives. In some cases, the resulting subprojects did not reflect true community priorities and certainly the participatory, organizational element was weak in these cases. Clearly the acceptance of both the concept and practice of community-based development is an evolutionary process, not a *fait accompli* from the moment of its introduction.

46. Evaluations suggest that communities' inability to influence the process stemmed from having inadequate information about the process itself and eligible subprojects. Information campaigns were sometimes less effective than direct communication between political leaders (who tended to hear about the projects first), and the communities. In Pernambuco, demand was initially heavily slanted towards a narrow range of subprojects, -- mainly tractors and housing improvements -- due to inadequate information campaigns and the intervention of local politicians and commercial intermediaries offering services for subproject identification and preparation without adequate beneficiary participation. Piauí encountered similar problems. Bank intervention sought to promote information

campaigns, upgrade TU supervision capacity, and introduce greater rigor into subproject technical, economic and financial standards, and community cost-sharing and maintenance.

47. Alternatively, the choice of subprojects might be skewed by state policies favoring certain investments, e.g., rural electrification subprojects in all three states, as a critical pre-requisite for economic and social activity and/or because state counterpart funding for these investments was readily available from the local public supplier. Even in cases where the influence was clearly political, the participation of mayors and elected officials could be a positive development and important for the sustainability of decentralized implementation. The main issue boils down to the need to curb breakdowns in transparency which can lead to negative political influence.²⁶ Measures were taken during project implementation to improve information availability and dissemination, and this is being stressed in the new Rural Poverty Alleviation Projects.²⁷

48. The average cost of subprojects, both PAC and FUMAC, significantly exceeded the ten-state average in most commonly-requested subproject types in Pernambuco and Minas Gerais, and was considerably lower than or matched the regional average in over half of the types, in Piauí (see Part II, Table 14). There were sharp variations between the three states in the cost of some similar investments due to differences in design and technical specifications. In Piauí, a manioc flour mill cost around US\$6,000, and in Pernambuco and Minas Gerais, US\$24,000 and US\$28,000 respectively; similarly, a simplified water supply system cost US\$17,000 in Piauí, US\$29,000 in Pernambuco and about US\$28,000 in Minas Gerais. Costs were about the same in all three states for tractors (about US\$31,000), while costs for house improvement in Piauí (US\$31,000) exceeded Pernambuco and were somewhat lower than Minas Gerais. Individual state performance is discussed below.

49. **Pernambuco.** The performance of Pernambuco improved substantially after reformulation despite initial difficulties related to the provision of state counterpart and federal loan funds, political interference in project implementation, and deficiencies in the TU's ability to monitor, supervise and control the project in the field. Delayed dissemination of information about the program through publicity campaigns provided the opportunity for political and commercial manipulation of community choices, skewing choice towards certain kinds of investments, e.g. housing improvements and tractors. Bank missions assisted the project to establish strict technical, economic and financial parameters for the analysis of community proposals especially for tractors, whose sustainability had not been attended to in the early rush to acquire them. A new State administration in 1995, with assistance from the Bank, was able to surmount these

^{26.} Memorandum, April 9, 1996 and MIT evaluation.

^{27.} Other influences on communities' selections included observing which subprojects in neighboring communities tended to get approval; and the apparent biases of technicians in the TU. Such biases might result from perceived lack of sustainability, e.g. earlier tractor subprojects, or the belief that certain social subprojects might be better served under alternative, targeted programs, thus conserving opportunities for investments directly related to income generation.

problems and the project achieved its development objectives. At the time of reformulation, Pernambuco had disbursed about US\$47.0 million of the original loan amount of US\$92.0 million. The Federal Government requested a partial cancellation of US\$20.0 million in December 1994. The annual rate of disbursement after 1994 exceeded US\$9.0 million. Final disbursement amounted to US\$72.0 million, and (net of the cancellation) the Loan was fully-disbursed.

50. The project financed about 1,240 subprojects of which 1,073 were PAC (86%) and 164 were FUMAC (14%), benefiting some 135,860 poor rural families (about 24% of poor rural families state-wide) in 161 municipalities (96% of the total). Beneficiaries greatly exceeded estimates at both appraisal and reformulation. Of the subprojects implemented, 55% represented small rural infrastructure, 37% were productive ventures and social investments accounted for 8%. Investments totaled US\$30.0 million and averaged about US\$220.0 per beneficiary family. Beneficiary contributions totaled US\$3.0 million. The combined impact has been a significant, measurable and visible improvement in quality of life and well-being, income and employment opportunities, as detailed below.

51. **Subproject Investments.** Six types of subprojects accounted for about 70% of all subprojects chosen by community associations in Pernambuco and delivered important benefits to a large number of families: (i) the 120 **rural water supply** investments are saving time, effort and cost for about 23,000 families, and improving family health by reducing the incidence of the serious, waterborne diseases endemic to the Northeast; (ii) **rural electrification** is seen by both state and local governments and beneficiaries as the route to economic and social betterment and Pernambuco was no exception; well over 30,000 families benefited from about 480 subprojects; (iii) **communal tractors** have many benefits: creating jobs, increasing area cultivated, production and yields, improving farm income and providing transport. Some 9,400 families benefited from 150 tractor subprojects which *inter alia*, created about 3,400 jobs, increased incomes by about US\$320 per family/year and increased farm area cropped by an average of about 3.5 ha per beneficiary family; (iv) some 47 **manioc flour mills** (*casas de farinha*) benefited about 2,400 families, generated incremental incomes of around US\$270 per family/year, additional jobs and increased the farm area cultivated by almost one hectare per family; (v) demand is rising in Pernambuco and other states for small, **communal irrigation schemes** to produce high value fruit and vegetable crops. Income is expected to rise some US\$1,300 per year for the 2,500 families who benefited from the 30 such subprojects implemented in Pernambuco; and (vi) the health of some 8,800 rural families living in precarious, unhygienic dwellings is improving as a result of the 85 **house improvement** subprojects implemented under NRDP.²⁸

52. **Minas Gerais.** The Minas Gerais project, concentrated in the Northern part of the state, was successfully implemented and achieved its development objectives. Factors contributing to this outcome included: (i) continuous supervision and monitoring by the

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Performance Evaluation of the NRDP - Pernambuco (World Bank/FAO, 1996)

project TU, SUDENOR; the provision of organizational and technical assistance to the project by the exceptionally competent EMATER-MG which has been more supportive and successful than in most other states (with some exceptions including Alagoas) in contributing to income-generating productive subprojects; (ii) widespread, favorable community and municipal acceptance of the project; and (iii) State commitment and adherence to project objectives, guidelines and procedures. Community associations in Minas Gerais are generally well organized with many dating back to the mid-1980s, and support for subproject O&M is strong. In the final year, SUDENOR, collaborating with IICA Technical Assistance, carried out training, administrative organization and implementation of 110 pilot projects in areas of extreme rural poverty in the Northeastern part of the state. These regions -- the Jequitinhonha, Mucuri and Rio Doce valleys --, not included at the time of reformulation, were incorporated into the project area in the final year. The state is proposing their inclusion as well in new lending under the RPAP.

53. **FUMAC in Minas Gerais.** The state's experience with FUMAC was unremarkable. Some 18 FUMAC Councils were established, most of which functioned normally. The only deficits related to councils not providing adequate technical assistance to the associations for subproject monitoring and execution, and the need for greater information dissemination in the municipalities on the FUMAC strategy. These issues were resolved satisfactorily.

54. At reformulation, the project had disbursed only US\$11.2 million of the original NRDP loan amount of US\$55.0 million, (Part II, Table 12). Starting tentatively in 1994 (in part due to the disruptive effects of elections and their aftermath), disbursements increased sharply in 1995 and 1996, with final disbursement amounting to US\$50.3 million. Cancellation of US\$4.7 million was pending at the time of ICR preparation.

55. The project financed 1,840 subprojects -- about 740 above the reformulation target -- of which some 1,220 were PAC and the balance FUMAC (34% of all approvals), benefiting 114,225 poor rural families in 79 municipalities (about 40% of poor rural families in the north of the state) and greatly exceeding targets established at appraisal and reformulation. Of these subprojects, 68% were for infrastructure, 24% for productive investments and 8% for social priorities. Investments totaled US\$56.6 million, or around US\$496 per beneficiary family. Beneficiary contributions in labor, cash or materials amounted to almost US\$6.0 million. Family income, employment and general well-being improved significantly.

56. **Subproject Investments.** Seven types of investments accounted for over 80% of subprojects selected by communities and financed, in Minas Gerais: (i) given the high proportion of families in the Northern region not connected to main power lines, and the availability of counterpart funding from CEMIG, the state electricity company, the demand for and approval of **rural electrification** investments was tremendous.²⁹ Some 878 subprojects benefited houses, schools, commercial activity and the continuous

²⁹ But, due to the geographical dispersion of rural communities in the project area, the cost of this type of investment, averaging US\$32,000 per subproject, was higher than in other states.

pumping of water for over 27,000 families, which are charged a minimum fee averaging US\$3.50 per month; (ii) the 12,500 beneficiary families in Minas Gerais view their 225 **rural water supply** investments as reducing outmigration and improving rural health, in addition to saving the time and labor expended, usually by women, on carrying water over considerable distances; (iii) the 282 **communal tractor** investments have boosted annual family incomes by an estimated US\$340 by creating some 5,500 jobs (including increased farm labor) and augmenting the cultivated area by almost 30,000 ha (averaging 1.6 ha per family); (iv) some 29 new **manioc mills** (additional to the many financed under the APCR) are benefiting 1,440 families with incremental income of US\$350 per year, about 860 new jobs including on-farm, and total incremental crop area of 345 ha.; (v) some 45 **small-scale irrigation** subprojects for subsistence and high-value cropping are benefiting about 1,300 farm families; evidence suggests that greater technical input and marketing intelligence would permit small farmers to maximize benefits from these investments; (vi) improved living conditions and family health have resulted from the 70 **house improvement** subprojects, benefiting over 2,400 families; and (vii) **rural school rehabilitation** (basic infrastructure, school materials and a one-time contribution to teachers' salaries) is an especially successful investment in Minas Gerais, resulting in sharply increased attainment, reduced drop-out rates and school transfers. About 2,500 families benefited from 17 subprojects at the low cost of about US\$160 per family.

57. **Piauí.** The second phase of project implementation showed major improvement over the initial pre-1993 phase which encountered most of the same problems affecting the entire NRDP. However, following reformulation, the project suffered up to its final year from inadequate beneficiary participation and lack of transparency, much of which stemmed from the performance of the TU, including faulty information dissemination about program content and guidelines. Serious flaws in NRDP performance were detected by the Bank and FAO during its evaluation of state performance in late 1995: (i) institutional problems, compounded by personal conflicts between the TU and SEPLAN-PI; (ii) local political interference and poor beneficiary participation -- (although ironically, political abuses tended to stem from municipalities which contributed heavily to counterpart funds in the absence of state resources); (iii) insufficient technical assistance and lack of field supervision -- problems quite common to all ten state projects; and (iv) instances of subproject over-design and mistargeting. The Bank responded by recommending to the State Government an Emergency Work Plan, which was successfully undertaken and demonstrated significant impact within several months through better technical assistance, rigorous subproject appraisal and monitoring, and judicial action in the cases of abuse. The state is currently finalizing requirements for the effectiveness of a new project under the RPAP, approved by the Board in December 1996. To increase transparency in the implementation of the new RPAP, all subproject proposals are ultimately approved by a State Council.

58. At the time of reformulation, Piauí had disbursed US\$30.5 million of its original Loan of US\$78.0 million. The Federal Government requested a partial cancellation of US\$25.0 million in December 1994. The annual rate of disbursement thereafter exceeded US\$10.0 million. Final disbursement amounted to US\$53.0 million and (net of

cancellation) the Loan was fully-disbursed.

59. About 1,650 subprojects were financed by the project (450 above the reformulation target) of which 1,480 were PAC (90%) and 170 (10%) were FUMAC, benefiting some 196,000 families in 1,233 communities (about half of all poor rural families in the state). Of the investments executed, infrastructure absorbed 68%, productive were 20% and social priorities took up 12%, the highest share for social subprojects in the NRDP. Investments totaled US\$27.4 million or US\$146 per beneficiary family.

60. **Subproject Investments.** Three main types of infrastructure subprojects (water supply, rural electrification and local road rehabilitation) accounted for two-thirds of subprojects executed in Piauí. Productive subprojects were relatively few and at the time of their evaluation by the Bank/FAO team, had been operational for too little time to produce measurable impact. Based on available information, impact was assessed as follows: (i) **water supply** subprojects mostly involved the digging of wells to take advantage of Piauí's extensive, good quality groundwater reserves. An estimated 34,700 families benefited from the 509 subprojects of this type; (ii) some 24,700 families improved living standards and economic opportunities through 343 **rural electrification** investments; (iii) shortage of public funds for infrastructure works in Piauí including **rural road rehabilitation** accounted for the strong demand for this type of investment. Communities contributed with labor, usually complemented by some financial contribution from the mayors. About 30,000 rural families benefited from 164 road subprojects; (iv) **clothes-making** ventures with mostly female participation, benefited about 780 families through the creation of 750 jobs which are estimated to generate additional annual income of US\$100 per beneficiary; (v) improved living conditions and health status for 5,600 families have resulted from the 70 **house improvement** subprojects. Some abuses of these investments (unjustified inclusion of certain houses in the rehabilitation group) came to light but appropriate measures were taken; and (vi) while relatively unusual among other states, **rural health posts** were frequently requested in Piauí. Financing of the civil works by the NRDP was complemented by the municipalities providing for medicines, supplies and health post operations. An estimated 940 families benefited from eight such investments.

Use of Consultants

61. All three states depended at different times and for varying purposes, on consultant services. In the initial years, UNDP was contracted by SUDENE to provide TA to the states for training and planning, through a core group of consultants stationed within that agency. These contracts ended in 1990 and were not renewed. While the quality of service provided was satisfactory, it did not equip SUDENE institutionally to deliver the same services without UNDP assistance. Although contracted personnel were capable, they did not leave behind a body of trained permanent staff. The follow-up contract with

IICA, again signed with SUDENE, stationed the consultants in each participating state.³⁰ Prior to the reformulation, almost all of these consultancies were associated with the Water Resources component in which consultant expertise was a key factor; few, if any, worked on community organization, mobilization or other activities. The quality of consultant services in this second phase was good or satisfactory.

62. At reformulation, the umbrella IICA contract was replaced by individual IICA/state contracts. The new project design required a dramatic change in the content of technical assistance, away from water resources toward demand-driven, highly-decentralized projects. This transition occurred in all three states with some variations in pace and in the sourcing of expertise. Among the three states, SUDENOR (the Minas Gerais TU) made little use of IICA until the final year, contracting almost exclusively with EMATER-MG. Piauí employed their services intensively. Foreign-sourced IICA consultants were highly effective in training personnel including community leaders, in mobilizing and training community associations, carrying out studies, establishing information systems and bolstering the TU. In Pernambuco, the TU maintained a quasi-permanent IICA advisor, as well as nationally-sourced consultants.

Project Sustainability and Future Operations

63. **Sustainability.** Final supervision missions worked with each state to ensure that decentralization and participation were deepened and expanded. State campaigns sought to mobilize communities, disseminate information on the program, promote the formation of project Municipal Councils and expand FUMAC (including paving the way for the FUMAC-P approach) and to prepare standard subproject designs. Bank/FAO evaluations found that beneficiary communities had a strong proprietary interest in their investments from having selected and implemented them, and contributed to their cost. Their potential sustainability appears good. In the three states reviewed, and in other states under the Program, many water supply subprojects initiated under the APCR are still well-maintained with secure communal arrangements for cost-recovery. Beneficiaries readily commit to the operation and maintenance of their investments through up-front signature of legally-binding agreements, while many associations have accumulated substantial reserve funds to cover maintenance costs.³¹

64. Nevertheless, the sustainability of some productive subprojects executed immediately following reformulation is uncertain (e.g., clothes-making, bakeries, fruit processing). Contributing factors included inadequate technical and managerial know-how, competition from large firms, the lack of organizational skills to market production and the limited commercial potential of some products such as manioc. Lack of beneficiary participation and inadequate supervision and TA were also factors.

³⁰ Sergipe was the exception among the 10 states, contracting with FAO.

³¹ Brazil: Northeast Rural Development Program - Performance and Evaluation, World Bank/FAO, March 14, 1996 and April 1997 (Draft).

Corrections were introduced including technical assistance throughout the subproject cycle, and the new RPAP includes specific remedies for these deficiencies.

65. **Plans for Future Operations.** The three states were not legally required to prepare plans for future operations and no formal plans were prepared. The same is true for monitoring future operations of the projects. Nevertheless, prospects for maximizing project benefits appear good. The States and their Governors are supporting policies and actions which stress decentralized decision-making and management. Communities are signing O&M agreements and are setting up reserve funds, evidence of intent to honor these arrangements. Further, ex-post evaluation studies such as those already done in 1995, 1996 and 1997 are an important tool for monitoring the operational phase of subprojects and for determining whether things were done well.

Bank Performance

66. The Bank has sought for several decades to improve the outcome and impact of rural poverty programs in the Northeast. Until 1993 however, many design and administrative problems and the macro-economic and fiscal context limited their potential. Preparation and appraisal of the original projects showed a thoughtful attempt to innovate and counter risk, but the framework, concept and mechanisms remained fairly traditional, the macro-economic and policy context was not given enough attention, and undue faith was placed in the Federal Government's commitment to the Program and willingness to find the funds, regardless of the economic circumstances. Chronic shortages of counterpart funds are usually indicative of deficient commitment to project objectives or that the project exceeds fiscal capacity. Realistically, however, the Bank would have been clairvoyant to foresee the nature of certain pivotal events which had such a powerful impact on these projects, especially after 1988. Appraisal, on balance, was satisfactory, subject to certain caveats: lending pressures in the mid-1980s played a role; and evidence suggests the Bank accepted somewhat uncritically the capacities of institutions to carry out the projects, although it is also true that key federal agencies possessed considerable technical capacity.

67. The Bank's choice following the Mid-Term assessment was essentially to cancel these projects or try to improve their impact and cost-effectiveness, a protracted dialogue and design process which culminated in stripping away the IRD components, to focus fully on a new mechanism and make it work. The period which elapsed prior to definitive reformulation – seven years from effectiveness, is problematic. There was no mechanism in the Bank for coming to quick closure on reformulation and no indications that either the Bank or Borrower sensed any great urgency or had established a time frame for action. This would be unlikely to occur in the "implementation culture" of today's Bank.

68. There are indications that supervision timing was irregular, and the supervision record itself, both in the Bank and in Recife, is inconsistent. The main reason is that from 1989 onwards, these projects entered their period of poorest performance marked by an acute lack of counterpart funds and institutional disarray. Increasing amounts of time were spent by Bank and especially the Recife Office staff visiting all ten northeast states to

devise an acceptable reformulation package, as opposed to carrying out formal supervision. This process was attenuated by the undertaking of a second phase of reformulation. Throughout this period, frequent informal contact was maintained with all ten states and particularly their TUs, largely substituting for formal supervision.

69. There is no doubt that timeliness -- the meshing of project design with the changing political economy and national sentiment-- was a central factor in the successful outcome of the reformulated projects, and this is a key lesson. Through the community-based development model, the Bank made a major technical contribution to Brazil based on its own experience; launched a more democratic process of rural poverty alleviation. Perhaps more important, however, as stated in the Bank/FAO evaluations, the main achievement of the reformulated projects has been to support the decentralized allocation of resources and the creation of social capital in the rural Northeast. Obviously, the dramatic shift did not imply that the rural poor no longer needed credit, extension and other services or that smallholder agricultural production had lost currency. Indeed, having gained confidence in the capacity of the community-based investment mechanism to satisfy a range of basic needs, the Bank is now addressing several critically important subsectors in the Northeast: market-based land reform, integrated water management, and rural financial market development.

70. Nor did the shift away from the traditional multi-component project implemented by different public institutions mean that the Bank was *inter alia*, abandoning its traditional commitment to upgrade those agencies. While an objective of the new model certainly was to ensure that the bulk of project funds reached beneficiaries instead of being absorbed by institutional overheads, as occurred pre-reformulation, separate projects were already addressing the institutional needs of the state extension agencies (EMATER) and the federal research agency EMBRAPA.³² Of central importance, decentralization of development activity to the local level and the direct involvement of beneficiaries has changed the traditional order -- it is now the municipalities and associations themselves who contract suppliers of services, which might be public or private entities depending on cost and other considerations, to assist them throughout the subproject cycle.

71. The World Bank Recife Office has been fundamental to the implementation and supervision of the reformulated NRDP projects. The Recife Office, established in 1974, has three task managers dedicated exclusively to working with the Northeastern states, handling all supervision activities including procurement reviews and field visits. In this manner, Bank support has been better tailored to the decentralized structure of the reformulated Program. The Recife Office also updates and manages a global database, the Simplified Project Monitoring System (SSMP), which provides detailed information on these projects and serves as a monitoring tool both for the Bank and for the individual state TUs.

³²

Agricultural Extension II Project and the Third Agricultural Research Project.

Borrower Performance

72. Economic, fiscal and political factors which boiled over in the latter part of the 1980s steadily sapped the commitment of the Federal Government (as Borrower) to these projects, reflected in the erratic and disruptive counterpart funding situation. In the post-reformulation phase, with counterpart funding responsibilities transferred to the states, the Federal government periodically delayed the release of loan funds and/or advances of Federal (Treasury) funds to them, sometimes for political reasons, more often to promote financial discipline in state performance including submission by the states of adequate financial and technical documentation to support federal releases. In some instances and especially in the period after reformulation when political interference associated with general elections played a role, the states delayed counterpart funding or released funds in installments even though federal Loan funds were available, e.g., in Minas Gerais and Pernambuco. Bureaucratic hurdles and the weakening fiscal situation of the states were also factors. Increased municipal and/or parastatal involvement in sharing counterpart funding responsibility (especially the state electricity companies -- CEMIG in Minas Gerais and CELPE in Pernambuco) resolved or improved this situation. Overall and especially after 1994, the willingness of Federal, State and Municipal Governments to support a radically new approach to rural poverty alleviation was instrumental in the success of the reformulated projects.

73. SUDENE performed well in several key areas: control over the use of Federal funds; maintaining steadiness and regional uniformity in program strategy and objectives; technical assistance (TA) for training; the provision of specialist consultants; and continuous state and regional monitoring. However, SUDENE's overall ability to guide and supervise was weak and its operational rigidity, stemming from excessively bureaucratic systems and regulations, curbed the intended flexibility of the Program. While TA had some successes in individual states, SUDENE itself absorbed little benefit institutionally. SUDENE was overstaffed, but lacked sufficient trained personnel for its role, which was sharply reduced under the reformulation as many of its responsibilities devolved to the states. SUDENE's performance post-reformulation was satisfactory, and it produced an insightful, timely Completion Report on behalf of the Federal Government.

74. **Technical Units.** The role of the Technical Units was central to the success of these projects. Pre-reformulation, in line with the large number of project components and executing agencies, the TUs retained on average about 60-90 professionals and a large contingent of support staff. The relative efficiency of the TUs depended on the availability of qualified people, the material and financial deficiencies affecting their operations, and the degree of administrative and financial independence from their parent State Secretariats. All three TUs received TA for institutional development, contracted mostly from international organizations. While legally and administratively strong, the units lacked the political and fiscal power to influence the state implementing agencies, particularly when fiscal circumstances prevented them from honoring their funding commitments to these agencies. Their role often devolved to drafting annual operating plans, channeling funds to the agencies, and tracking expenditures and physical implementation.

75. In the immediate post-reformulation phase, while their numbers were reduced to average about 40-50 experienced professionals, their inadequate field presence and tendency (with some exceptions) to be concentrated in the state capital taxed their ability to process a large number of subproject proposals, and provide TA and supervision. The role of the state EMATERs in bolstering the technical capacity of the TUs was, with the exception of Minas Gerais, quite weak and often limited to individual extensionists willing to assist associations at the local level. EMATER involvement evaporated in most states after reformulation, in part because the project no longer funded salaries and expenses related to extension services and the EMATERs felt little obligation to continue supporting the projects. However, in the final year, the EMATERs in Pernambuco and Piauí established firmer contacts with the TUs in order to boost assistance.

76. In the immediate post-reformulation period, there was a tendency for TUs to assume responsibility for important steps of the subproject planning and implementation cycle. This tended to inhibit community participation, but it could also be a valuable means of launching the subproject identification, selection and approval process in the absence of community leaders or NGOs,³³ of enhancing work content; and of substituting for non-performing agencies. The results of this intervention were in some instances, quite successful. An assessment of the Technical Unit in each state, follows.

77. **Pernambuco.** The project TU (PRORURAL) was attached to SEPLAN-PE and had four regional, relatively efficient field offices. However, in the early period following reformulation some 60% of the TU's portfolio of subprojects was found to comprise only 3 types of subprojects (housing improvement, farm tractors and electricity), a fact attributed to the TU's delayed execution of the required publicity campaign which limited or skewed communities' understanding of the project and permitted the intermediation of private firms in community decision-making. Deficient field supervision and control capacity also contributed. The TU also tended to release funds to the associations for approved subprojects in installments, in part because the State's release of resources to the TU itself was erratic. The TU was not entirely successful in avoiding political interference in the project during the election season of 1994 and its relationship with its parent SEPLAN-PE was unsatisfactory. The new TU which assumed office in 1995 was hampered by auditing, administrative and technical problems left over by the outgoing unit, but succeeded in greatly improving the pace of subproject approval and implementation and in overcoming field supervision and technical assistance problems to achieve a satisfactory outcome for the project.

78. **Piauí.** The Piauí TU was quite small, with only 56 technicians and support staff working at headquarters and in the field. Its close links to both the Secretary of Planning and the Governor hampered its operations, unlike its two counterparts which reported only to SEPLAN and had a measure of real autonomy. The unit was physically decentralized but in practice its regional offices were largely inactive, which affected its ability to monitor and supervise the project. The provision of TA and training to

³³ Comments on draft ICR by Sergipe State Technical Unit, PRONESE, October 2, 1996.

beneficiary communities was deficient in many respects because its field presence was minimal and it had not accredited other TA providers. Performance by the state EMATER in supplementing the TU's efforts was poor because of inadequate understanding of the project mechanism, or of the unit's own technical responsibilities in the field, and lack of funding by the state. The TU encountered serious institutional problems and excessive political interference between mid-1995 and -1996, which required decisive Bank intervention to stabilize and improve its management of the project, adherence to project guidelines and control over field activities, including through restructuring of the TU and replacement of its Coordinator. The technical and managerial standard of the TU was raised substantially, performance improved and the Loan disbursed fully.

79. **Minas Gerais.** Project coordination by the TU (SUDENOR) was initially constrained by the distance between its headquarters in the capital (Belo Horizonte) and the project area in the northern zone where it now maintains a regional office (Montes Claros) and three small field offices. Nevertheless, the project was able to maintain a vigorous pace of subproject processing and execution. The unit also established monetary incentives for TU teams to promote quality and quantity in subproject proposals prepared and implemented. Political interference in SUDENOR was negligible. Politicians sought contact with the TU in order to assist their communities, gathering information on their behalf or trying to speed up subproject processing, but virtually always adhering to project guidelines and principles. The TU professionals displayed a good knowledge of local communities, complemented by a highly effective contractual arrangement with the state EMATER for the provision of technical assistance (unremunerated) to those communities. Municipal contributions of budget resources to maintain EMATER offices in their localities made this possible. Further, EMATER management understood that the project emanated from the State Government and that it was their obligation to participate. SUDENOR also collaborated effectively with other state agencies involved in subproject execution: CEMIG (electricity); COPASA (water); INCRA (agrarian reform settlements in the project area); and COHAB (housing). Only in the final year did SUDENOR turn to other sources of TA, especially IICA. Experiencing problems in the field as a result of inadequate salaries, per diems and vehicles, SUDENOR successfully secured greater support from the State Government. It also effectively restructured its operations, trained its personnel and established several more field offices in new areas incorporated in the project area in the final year of the NRDP and proposed for inclusion in a follow-on project. However, the TU might have done more to reduce the costs of frequently-demanded subprojects -- costs were higher for many types of subprojects in Minas Gerais, relative to other states.

80. State Secretariats of Agriculture (SSA) controlled the NRDP up to reformulation. The original NRDP was a secure and timely source of funding for their extension, research, marketing services and irrigation agencies, but this disappeared in 1993. The re-designed NRDP left no room for their direct participation, and in any case assisted poor rural communities, not only small farmers. It also transferred to communities the choice and implementation of their own subprojects, including contracting TA, which in the case of several states is provided by EMATER -- an agency of SSA -- but contracted locally by

the communities. There was (and remains) no objective reason for SSA involvement in the program.

81. **Procurement.** Pre-reformulation procurement progressed smoothly in Minas Gerais and Pernambuco. Activities requiring bidding were largely restricted to studies for and implementation of irrigation subprojects, which were fairly minimal in both states. In Piauí, bidding was required for construction of the Piracuruca dam. The process was straightforward, but during implementation costs escalated, requiring additions to the original contract but final construction, supervised by group of consultants, was trouble-free, including the resettlement of families moved due to inundation of lands. Also in Piauí, seven small irrigation subprojects encountered bidding problems and one contract was canceled at the request of the Bank.

82. Post-reformulation procurement, in which small-scale contracts predominated, progressed smoothly in all three states. Community associations proved adept, with little or no assistance, at obtaining the best deal for project funds. Supervision missions did not encounter any significant problems or anomalous situations involving procurement. Neither the Technical Units nor the beneficiary associations had significant problems interpreting Bank procurement guidelines. Small-scale, direct shopping and contracting for goods and services by beneficiaries proved to be efficient - because associations obtained their needs more cheaply for the same quality, than those procured by public entities (federal, state and municipal) - and monitorable.

83. Acquisitions were generally made directly by the associations. An agreement was signed between the state (TU) and the association through which funds were transferred to the association, which proceeded to acquire needed goods and services. The option existed in a few cases, however, of tripartite agreements between the TU, association and municipal government (MG): approval of a community subproject was followed by signature of a tripartite agreement under which the association asked the MG to acquire goods and services on its behalf; the TU released the funds to the municipality, which purchased the goods and/or services and transferred them to the association. Associations using this method -- mostly in Minas Gerais and Piauí, and only when the Mayors shared the state counterpart obligation (excluding the association contribution) -- lost the opportunity to be more deeply involved in their own subprojects, to learn how to handle procurement themselves, and to capture the cost savings from purchasing on their own account at lower prices.

84. **Audits.** In the cases of Pernambuco, Piauí and Minas Gerais, auditing of project accounts was carried out by the Federal Government (*Secretaria Federal de Controle*) for the greater part of the project. The Federal Government and the states tended to be late in submitting audits prior to reformulation. Thereafter, the states became relatively good audit performers, being criticized mainly for lack of precision in certain aspects of financial reporting. The quality of project auditing improved steadily over time, reflected, ironically, in the number of qualified statements. All three states had a good record of satisfactorily resolving problems raised in audit reports.

85. **Covenant Compliance.** The key legal covenants pre-reformulation concerned the Borrower's obligation to provide counterpart funds, and to ensure proper functioning of the rural credit component. The Borrower's performance was deficient in both cases. A joint Aide Memoire of March 8, 1993 transferred counterpart funding responsibility to the States, whose performance in all three cases has since been both superior to the pre-reformulation phase and generally satisfactory.³⁴ The credit component was discontinued.

Assessment of Outcome

86. Staff Appraisal Reports for the original projects contain internal economic rates of return (IERR) for the three states of 13% (Pernambuco and Minas Gerais) and 18% (Piauí). It is implicit from the history of these projects pre-reformulation and their complete re-design in 1993 that they were unsatisfactory, and their IERRs have not been re-calculated. The Mid-Term Review (1991) of the original projects noted that their impact on production, income and employment was difficult to assess due to the lack of concrete evaluation results, in spite of considerable effort to institute good monitoring and evaluation. Statistical data on inputs and beneficiaries in each state were considered unreliable due to double-counting and overlap among years and components, but tended to confirm the general shortfall in achievements. Information recently provided by the States shows that this situation persisted up to the effective reformulation in September 1993, with variations between states.

87. The reformulated projects fell under the rubric of targeted interventions based on a demand-driven mechanism for which the costs, benefits and rates of return could not be determined with any certainty *ex ante*, and thus no IERRs were calculated (or accordingly, re-calculated). While this report is technically exempt from re-estimating an IERR, the results of three Bank/FAO evaluations of the Program are relevant and interesting.³⁵ These evaluations calculated the socio-economic benefits and cost effectiveness of PAC/FUMAC subprojects based on a range of the more commonly demanded infrastructure, productive and social investments. As agreed with Government prior to preparation of the initial package of new loans, the 1995 analysis examined all ten state NRDP projects; the 1995/96 evaluation focused on the States of Rio Grande do Norte, Pernambuco and Piauí, while the most recent study undertaken in early 1997 looked at the

³⁴ The Aide Memoire was jointly signed by all state governors, representatives of the Federal Government and the Bank, during negotiations of the reformulation, and before the Amendment letters were approved by the Bank (June 1993).

³⁵ All three evaluations were undertaken as part of project preparation for new loan packages under the Rural Poverty Alleviation Program. The ranges provided are indicative only, given the sampling nature of the analysis, the variations which exist between subprojects in terms of cost and performance and, in the case of the 1995 evaluation, the relatively short time between reformulation and evaluation. The sampling methodology used for the 1996 and 1997 evaluations can be found in Brazil: Northeast Rural Development Program-Performance and Evaluation, World Bank/FAO, March 14, 1996.

experiences of Paraíba, Maranhão, Alagoas and Minas Gerais.³⁶ While primarily illustrative given the newness of most of these subprojects – and in the case of the 1995 evaluation, the quest for a satisfactory methodology for evaluating this new development model – the results are nevertheless promising.

88. In general, the analysis of sample subprojects surveyed indicates that the NRDP has had positive effects on the quality of life and in the case of productive subprojects, on employment and incomes. Evaluations for the three states reviewed in this report show that: (a) IRRs in financial terms for productive subprojects ranged from 33-37% (clothes-making ventures in Piauí and communal tractors in Minas Gerais) to over 50% (manioc mills and small-scale irrigation subprojects in Minas Gerais and in Pernambuco), and in economic terms most exceeded 50%; (ii) in terms of the sensitivity of the IERRs to the distorting effects of publicly-funded grants, which stem from costs associated with raising these funds (i.e., taxation), using the shadow price of public funds reduced the respective IERRs but they remained significantly positive and exceeded 17% in all cases;³⁷ and (iii) the initial investment per additional job created was low and benefit/cost ratios were satisfactory (ranging between 1.3 and 2.3).³⁸ All three evaluations assumed constant benefits over an eight-year project life. While the economic cost of labor -- the most important input in smallholder agriculture -- was very low due to severe unemployment, economic prices of outputs which are produced in small quantities and with some exceptions, all traded internally, are virtually the same as their financial prices.³⁹

89. The 1996 and 1997 analyses of financial sustainability indicated that user fees from beneficiary associations adequately covered O&M and replacement of worn equipment. Findings have been fairly uniform across states, in that the net income of beneficiary associations is sufficient, after deducting all O&M expenses, to cover replacement of a

³⁶ The analyses for Pernambuco and Minas Gerais reviewed under infrastructure, rural water supply and electrification; under productive, communal tractors, manioc flour mills and small-scale irrigation; and under social, house improvement and rural school rehabilitation. For Piauí, the analysis also covered rural road rehabilitation, clothes-making subprojects and rural health posts.

³⁷ This exercise was not done for Piauí owing to lack of data.

³⁸ The methodology for determining cost-effectiveness involved estimating, where appropriate, the total investment cost per additional job created by the various types of subprojects, and social benefit/ cost ratios.

³⁹ The IERRs were calculated not for all subprojects among the selected productive types, but for sample subprojects visited either by State Technical Units or Bank/FAO researchers, during which beneficiaries and other local stakeholders were interviewed. There was no systematic recording of poorly-performing subprojects in each state and thus the relative percentages of such are guesses at best. Productive subprojects which performed well in one state might have a poor record in another. The IERR of one subproject versus another may not be the best indicator of performance, especially if subproject size differs. Similarly, subprojects showing very high IERRs may have only a small impact on family net income.

tractor in 3-5 years, compared to its economic useful life of 10 years.⁴⁰ Manioc mills were similarly found to be sustainable, with associations retaining sufficient funds to amortize the mill complex in 4-7 years compared to its useful life of 12 years.⁴¹

90. Both the original and reformulated projects were problematic, to varying degrees and for different reasons, in regard to economic assessment, highlighting the need for greater attention during project design, to baseline studies, and to monitoring and evaluation methodologies. In particular, Borrowers' commitment and capacity to undertake evaluation (a continuing weakness of many Bank-financed projects) throughout the project cycle, should be high on the checklist for project supervision.

91. Each of the three reformulated projects reviewed is rated Satisfactory, reflecting their achievement of objectives as redefined at reformulation, project sustainability and exit ratings in final supervision Forms 590.

Main Findings and Lessons Learned

92. **Main Findings.** This was a longer-term program, planned and implemented in a complex and dynamic environment. Despite the effort to innovate and to head off counterpart funding and other problems, the original projects were too cumbersome and complex for the deteriorating fiscal, macro-economic and institutional conditions and were not compatible with the momentous changes after 1988 in the national political economy, which demanded a more decentralized, participatory project design. Thus, while the Bank could not control the larger forces at play in Brazil, the design of the original projects also created its own set of problems.

93. The reformulated projects in these three states successfully achieved their objectives because their design and implementation strategy fit the evolving political, economic and social context. This legacy resulted from "revolutionary" decisions: (i) by the Bank, to take a poverty alleviation approach, with all its implications of decentralization, grants, ownership and participation, instead of a rural/agricultural development approach; and (ii) by the Federal and State Governments, to relinquish a significant measure of political control by empowering rural communities and, more importantly, by acknowledging the right and ability of the rural poor to establish their own priorities and make decisions.

94. Community-based development is not a "magic bullet" for poverty reduction in the Northeast, which is why the Bank, having launched a significant process with measurable

⁴⁰ Insufficient data prevented this exercise for Piauí. However, O&M of subprojects visited was satisfactory with user fees being collected and reserve funds being started.

⁴¹ The SUDENE report steers away from estimating income, production and job generation, citing methodological difficulties and relies on interviews with association/community members concerning subproject benefits: of the most-frequently-cited, employment and income generation is ranked first, followed by better family nutrition, increased family production and the transportation of production and people (prominently-ranked as a benefit of communal tractors).

impact on beneficiaries, is now turning its attention to other major constraints in the sector. But the beneficiaries themselves feel that the projects are generally delivering the benefits they promised, unlike earlier efforts, and community demand to participate in the program is strong. Modifications designed to address identified shortcomings have been incorporated in the new generation of Rural Poverty Alleviation Projects. States and municipalities have proven willing to make needed corrections. Selected, more specific findings are set out below.

95. **Grants.** Grant-based investment in productive subprojects is a legitimate mechanism for jump-starting capital accumulation by the rural poor, a process usually limited by their inability to generate savings and gain access to the formal credit system. Grants have made an important contribution to sustainable local development in the states reviewed. Concerns about potentially inefficient investments and producers, are being addressed. New projects in six states (Bahia, Sergipe, Ceará, Pernambuco, Rio Grande do Norte and Piauí) contain design improvements to rationalize the use of grants, including additional eligibility criteria and *regulamentos de uso* for different types of productive subprojects, that would assist the Municipal Councils (FUMAC and FUMAC-P) and the TUs in their appraisal of such subprojects.

96. **PAC and FUMAC.** FUMAC is more effective than PAC in important ways, demonstrating a larger number of subprojects per municipality and beneficiaries per subproject; greater community participation and transparency; improved community capacity to identify, select and implement priority investments; and lower cost per beneficiary. The stronger institutional element, the Municipal Councils, has fostered community organization and ensured a more rigorous subproject selection process and thus better-quality investments overall. It would be an exaggeration to claim that the FUMAC Municipal Councils have changed the balance of power in the Northeast, but they have already contributed in significant ways to effecting such change over the longer-term.

97. **Graduation.** It may be necessary to progressively graduate some communities and municipalities as the aggregate benefits of several subprojects (and benefits from other programs) equip them to leverage funds from other sources. However, the pervasiveness of rural poverty in the Northeast indicates the need for a strategy based on practical, operational ways of identifying communities which are on the verge of achieving this status. Monitorable indicators might track: communities' access to credit and capacity to save; adequacy of social and economic infrastructure; access to social and other services; community organization and local capacity to manage funds; incomes and nutritional/health status. Communities with superior ratings might progressively contribute a higher percentage to, and eventually cease to be eligible for, project matching grants.

98. **Environment.** The environmental impact of the generally small-scale PAC and FUMAC subprojects was small, but certain kinds of subprojects are more likely to have environmental side-effects, e.g., the sludge from manioc processing, a situation which is

well-known and for which counter-measures have been in place, even since the APCR component.

99. **Participation.** While providing a forum for local decision-making, the FUMAC municipal councils remain sensitive to political interference from local power groups, especially the mayors, (but the PACs are even more vulnerable). While vigilance is needed to combat such political tampering, many mayors in the three states are working closely with MCs for legitimate community ends. There are benefits from local political involvement, including sustaining the projects' decentralized implementation (MIT 1996). Local governments are committing financial and institutional resources to approved community subprojects, even though neither PAC nor FUMAC legally requires this, and even adopting the FUMAC approach to decision-making for other municipal investments. PAC's primary justification at this point is to allow associations in communities where the political leadership opposes FUMAC, to bypass the municipal authorities and work directly with the state TUs, but there are limitations on its use, which is seen as residual.

100. **Technical Assistance.** Project funding for TA does not ensure its availability in rural areas. Resourcefulness is needed to obtain TA for the many aspects of the subproject cycle which require it. Making greater use of state extension agencies (EMATER) as was successfully tested in Minas Gerais and Alagoas is one solution;⁴² replication of the successful alliances between the TU and NGOs in Rio Grande do Norte is another; and subcontracting to private providers as was done successfully in Bahia, is a further option.⁴³ The over-design of subprojects and insufficient TA have led to marked divergence in the size, cost, quality and sustainability of similar investments. Over-design and poor quality design can be mitigated by developing standard designs and technical standards. The TUs stressed this activity in the three states in the final year, in preparation for new projects under the RPAP. Finally, under the reformulated projects, TA funding was tied to subproject approval. Non-approval meant associations still had to pay out of their own pockets for the TA used in preparation of the proposal, a potent source of frustration for poor communities, and one which has been resolved under the new RPAP.

101. **Productive Subprojects.** Productive subprojects destined for communal use, such as manioc mills, corn processing and rice crushing facilities, demonstrate good sustainability perhaps because they provide a service to subproject beneficiaries themselves and do not get involved in formal "production" *per se*. Their maintenance through the payment of modest dues, is quite straightforward. However, other types, such as community bakeries, clothes-making enterprises and poultry-raising, have experienced sustainability problems after a certain period of operation, apparently related to the inherent difficulties for rural community associations in managing investments requiring

⁴² The EMATERs in Minas Gerais and Alagoas provided high quality TA to communities but across the Northeast, service quality has many problems.

⁴³ See Implementation Completion Report No. 16191 of December 20, 1996. Further, other innovative practices meriting replication where appropriate were developed under the Maranhão and Paraíba projects.

more “formal” entrepreneurial skills, not commonly found among such groups. In general, association leaders are more adept at social activities which foster solidarity, rather than at commercial business activities requiring purchasing, processing and marketing skills, and an understanding of management, profitability and market conditions. Approval of such subprojects – which often benefit a small group within the community -- requires considerable caution and should entail a measure of cost recovery for the sponsoring association.

102. **Organization.** Well-organized rural communities can influence the allocation and use of municipal funds. Experience in Pernambuco, Piauí, Minas Gerais and other states shows that about 10% of all associations, especially those with an organizational history and well-established distribution of responsibilities and benefits, fared better in getting first access to subprojects and obtaining more than one subproject (SUDENE 1996). The cumulative benefits (and multiplier effects) have accelerated local development and raised the issue of graduation from the program. Concentration of investments or logistical limitations of the TUs meant many communities were not reached. Conversely, many associations were rapidly and legally/bureaucratically organized in 1993/94 to access project funds, but lacked the “glue” of having evolved consensually over time. But it is not clear that permanence should be a paradigm. The demands of subproject identification, execution and maintenance are considerable and risks are attached to the on-the-job stage, i.e., when “organized” communities must operate and maintain an investment on their own and it is shared objectives which bind them together. Sequential mobilization, organization and training of communities as a prerequisite for receiving project funds cannot guarantee that an association will perform well and/or stay together.

103. **Integration.** These projects did not attempt to integrate small farmers (pre-reformulation) and the rural poor (post-reformulation) into the more dynamic economy of the region, or to restructure semi-arid agriculture, nor did they seek integration with other Northeast rural poverty programs.⁴⁴ Raising small farmers’ productivity by financing inputs including water was an initial, basic step, but the projects did not target specific crops, and anticipated fairly traditional cropping patterns.⁴⁵ In any case, many small farmers chose to stay with their subsistence crops rather than access project-financed credit lines in an inflationary economy. The reformulated projects funded collective investments in agro-processing rather than production, and there are few cases of major transformation of formerly subsistence crops into something with strong commercial potential (e.g., cashew nut in Rio Grande do Norte). Nevertheless, the provision of start-up capital, water, electricity and other inputs including TA, has opened the door to future economic integration.

⁴⁴ A recent, highly promising linkage is through the pilot market-based Land Reform Project in the State of Ceará (approved by the Board in May 1997), which uses RPAP-Ceará investment funds to support infrastructure development on newly-acquired lands.

⁴⁵ They did, however, assume quite dramatic production increases in some crops on the basis of pasture conversion and greater area, combined with project inputs.

104. **Lessons Learned.** The lessons, substantiating Bank-wide experience in many cases, are as follows:

- (a) Most RD projects will falter under severe **macro-economic and fiscal pressures**, and a **policy environment unfavorable to agriculture**;
- (b) When a program strategy and project design is overtaken by events which make it redundant, **the Bank must promptly undertake the needed changes**, including complete reformulation if necessary, which will enable it to succeed in the new circumstances;
- (c) **The willingness to experiment benefits projects Bank-wide.** The reformulated projects emerged from a **successful pilot experience (APCR)**, enriched by drawing on wider experiences, and their successor the RPAP has continued to pilot increasingly progressive variants of the core model;
- (d) **Grant-based investment is a legitimate and effective tool** for jump-starting capital accumulation by the rural poor, and the matching grant approach contributed to sustainable local development in the three states;
- (e) **Decentralization** of fiscal and investment decision-making from Federal to state and local government and beneficiaries improves project administration and subproject quality. Clearly-defined operational incentives and penalties are needed to counter departures from project guidelines. A key component of decentralization, **beneficiary participation** in subproject selection, implementation, financing and supervision generates ownership and builds sustainability. Vigilance and appropriate controls are needed to prevent political interference in the participatory process;
- (f) **Poverty targeting mechanisms** should be simple, explicit and monitorable; be based on objective criteria; foster transparency and minimize political interference in project resource allocation and subproject selection; and ensure that project resources reach the poorest communities. Timely, well-designed **information campaigns** support targeting by ensuring transparency and community knowledge of program objectives, guidelines and access;
- (g) **Sustainability** of project investments is enhanced by municipal and community cost-sharing, beneficiary involvement in local public investment allocations, and when TA is provided at all key stages of the subproject cycle including the operational phase;
- (h) **Successful community-based development requires quality technical assistance** throughout the subproject cycle for: improving the design and

outcome of productive subprojects; community mobilization, organization and skills development; and institutional development of the TU. “On the job” training for communities is essential but not risk-free. Finding TA in rural areas needs creativity;

- (i) **Supervision** is indispensable for subproject and overall project success and should be strengthened, and involve local entities closest to the communities, particularly Municipal Councils and NGOs;
- (j) **Productive subprojects need rigorous selection, preparation, TA and supervision** to maximize their commercial potential and sustainability. Their inherent social objectives and communal O&M in a poverty context should not imply “softer” analysis of their rates of return, cost-effectiveness and feasibility. Eligible productive investments should provide services for the many (not the few), be subject to strict operational guidelines, and ensure the collection of user fees for O&M;
- (k) Related to the above, project design should pay **careful attention to baseline studies** as the springboard for well-designed monitoring and evaluation and for *ex post* assessments of the **economic and financial rates of return** of a range of productive subprojects. Accessible, comprehensive **monitoring and evaluation** improves subproject assessment, targeting and efficiency and is an essential planning and management tool;
- (l) **Standardization of documents, designs and unit costs** simplifies subproject preparation and evaluation, facilitates procurement, encourages community participation, prevents faulty design and reduces processing bottlenecks;
- (m) **Dissemination of “best practices”**, such as the collaboration with EMATERs in Minas Gerais and Alagoas,⁴⁶ and with NGOs in Rio Grande do Norte, through exchanges of information among Technical Units, at training seminars and workshops, can hasten learning and reward innovation; and

⁴⁶ Other examples of successful actions include: the State/TU collaboration with NGOs in Rio Grande do Norte; FUMAC councils in Paraíba; and the successful indigenous peoples’ FUMAC in Maranhão. Other states have adopted technical parameters or developed training materials which have had positive results meriting dissemination.

- (n) **Graduation** of some communities might be necessary as the aggregate benefits of several subprojects equip them to leverage funds from other sources. The pervasiveness of rural poverty in the Northeast indicates the need to find practical, operational ways of identifying and monitoring communities which are close to achieving this status.

IMPLEMENTATION COMPLETION REPORT

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROGRAM

PART II: STATISTICAL INFORMATION

**TABLE 1. SUMMARY OF ASSESSMENTS
PERNAMBUCO PROJECT (Ln. 2718-BR)**

A. <u>Achievement of Objectives</u>	Pre-Reformulation				Post-Reformulation and Summary Assessment ¹			
	Substantial (✓)	Partial (✓)	Negligible (✓)	Not applicable (✓)	Substantial (✓)	Partial (✓)	Negligible (✓)	Not applicable (✓)
Macro Policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sector Policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Financial Objectives ²	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional Development ³	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Objectives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poverty Reduction ⁴	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gender Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Social Objectives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental Objectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public Sector Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Private Sector Development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Post-reformulation ratings equate to summary assessments.

² Credit Component

³ Strengthening of technical unit.

⁴ Mainly through the APCR component, up to 1993.

**TABLE 1. SUMMARY OF ASSESSMENTS
PERNAMBUCO PROJECT (Ln. 2718-BR) - Continued**

	Pre-Reformulation			Post-Reformulation and Summary Assessments ¹				
B. <u>Project Sustainability</u>	Likely (✓)	Unlikely (✓)	Uncertain (✓)	Likely (✓)	Unlikely (✓)	Uncertain (✓)		
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C. <u>Bank Performance</u>	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)		
Appraisal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Supervision	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Implementation (NA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
D. <u>Borrower Performance</u>	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)		
Preparation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Implementation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Covenant Compliance	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
E. <u>Assessment of Outcome</u>	Highly Satisfactory (✓)	Satisfactory (✓)	Unsatisfactory (✓)	Highly Unsatisfactory (✓)	Highly Satisfactory (✓)	Satisfactory (✓)	Unsatisfactory (✓)	Highly Unsatisfactory (✓)
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Post-reformulation ratings equate to summary assessments of the entire project.

**TABLE 1. SUMMARY OF ASSESSMENTS
PIAUI PROJECT (Ln. 2762-BR)**

A. <u>Achievement of Objectives</u>	Pre-Reformulation				Post-Reformulation and Summary Assessments ¹			
	Substantial (✓)	Partial (✓)	Negligible (✓)	Not applicable (✓)	Substantial (✓)	Partial (✓)	Negligible (✓)	Not applicable (✓)
Macro Policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sector Policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Financial Objectives ²	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional Development ³	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Objectives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poverty Reduction ⁴	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gender Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Social Objectives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental Objectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public Sector Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Private Sector Development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Post-reformulation ratings equate to summary assessments.

² Credit Component

³ Strengthening of technical unit.

⁴ Mainly through the APCR component, up to 1993.

TABLE 1. SUMMARY OF ASSESSMENTS
PIAUI PROJECT (Ln. 2762-BR) - Continued

	Pre-Reformulation			Post-Reformulation and Summary Assessments ¹				
B. <u>Project Sustainability</u>	Likely (✓)	Unlikely (✓)	Uncertain (✓)	Likely (✓)	Unlikely (✓)	Uncertain (✓)		
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C. <u>Bank Performance</u>	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)		
Appraisal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Supervision	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Implementation (NA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
D. <u>Borrower Performance</u>	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)		
Preparation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Implementation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Covenant Compliance	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
E. <u>Assessment of Outcome</u>	Highly Satisfactory (✓)	Satisfactory (✓)	Unsatisfactory (✓)	Highly Unsatisfactory (✓)	Highly Satisfactory (✓)	Satisfactory (✓)	Unsatisfactory (✓)	Highly Unsatisfactory (✓)
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Post-reformulation ratings equate to summary assessments of the entire project.

**TABLE 1. SUMMARY OF ASSESSMENTS
MINAS GERAIS PROJECT (Ln. 2861-BR)**

A. <u>Achievement of Objectives</u>	Pre-Reformulation				Post-Reformulation and Summary Assessments ¹			
	Substantial (✓)	Partial (✓)	Negligible (✓)	Not applicable (✓)	Substantial (✓)	Partial (✓)	Negligible (✓)	Not applicable (✓)
Macro Policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sector Policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Financial Objectives ²	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional Development ³	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Objectives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poverty Reduction ⁴	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gender Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Social Objectives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental Objectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public Sector Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Private Sector Development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Post-reformulation ratings equate to summary assessments.

² Credit Component

³ Regional Agricultural Research component to strengthen production oriented research in the Northeast, including inter-agency coordination; and institutional development of the Brazilian Food Company (COBAL) and State Food Company (EBAL).

⁴ Mainly through the APCR component, up to 1993.

TABLE 1. SUMMARY OF ASSESSMENTS
MINAS GERAIS PROJECT (Ln. 2861-BR) - Continued

	Pre-Reformulation			Post-Reformulation and Summary Assessments ¹				
B. <u>Project Sustainability</u>	Likely (✓)	Unlikely (✓)	Uncertain (✓)	Likely (✓)	Unlikely (✓)	Uncertain (✓)		
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C. <u>Bank Performance</u>	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)		
Appraisal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Supervision	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Implementation (NA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
D. <u>Borrower Performance</u>	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)	Highly Satisfactory (✓)	Satisfactory (✓)	Deficient (✓)		
Preparation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Implementation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Covenant Compliance	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
E. <u>Assessment of Outcome</u>	Highly Satisfactory (✓)	Satisfactory (✓)	Unsatisfactory (✓)	Highly Unsatisfactory (✓)	Highly Satisfactory (✓)	Satisfactory (✓)	Unsatisfactory (✓)	Highly Unsatisfactory (✓)
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Post-reformulation ratings equate to summary assessments of the entire project.

TABLE 2. RELATED BANK LOANS

PERNAMBUCO PROJECT (Ln. 2718-BR)

Project Title/ Loan No.	Purpose	Year Approved	Status
1. Northeast Region Land Tenure Improvement Project (Ln. 2593-BR)	To improve land tenure and the legal and institutional basis of land markets in the Northeast.	1986	Cancelled due to institutional and policy obstacles.
2. Pernambuco Rural Development Project (Ln. 1728-BR)	To increase production and productivity of 15,540 small farms and 2,700 small non-farm enterprises, to increase rural employment opportunities, and to improve social and physical infrastructure in the poorest rural areas of the State.	1979	Closed 1986

PIAUI PROJECT (Ln. 2762-BR)

Project Title/ Loan No.	Purpose	Year Approved	Status
1. Northeast Region Land Tenure Improvement Project (Ln. 2593-BR)	To improve land tenure and the legal and institutional basis of land markets in the Northeast.	1986	Cancelled due to institutional and policy obstacles.
2. Piauí Rural Development Project (Ln. 2015-BR)	To expand farm and fishery production and increase incomes and employment opportunities of about 11,300 poor families in rural and coastal areas of the State.	1981	Closed 1986

TABLE 2. RELATED BANK LOANS

MINAS GERAIS PROJECT (Ln. 2861-BR)

Project Title/ Loan No.	Purpose	Year Approved	Status
1. Northeast Region Land Tenure Improvement Project (Ln. 2593-BR)	To improve land tenure and the legal and institutional basis of land markets in the Northeast.	1986	Cancelled due to institutional and policy obstacles.
2. Second Minas Gerais Rural Development Project (Ln. 1877-BR)	To increase the production and productivity of 30,000 small farms and 1,100 non-farm enterprises, to increase rural employment opportunities and to improve social and physical infrastructure for the poorest rural areas of the State.	1980	Closed 1987
3. Minas Gerais Integrated Rural Development Project (Ln. 1362-BR)	To improve living standards and incomes of small farmers in the poorest rural areas of the State by expanding farm productivity and expanding and improving social services to farmers and to the general rural population.	1977	Closed 1984

TABLE 3. PROJECT TIMETABLE

PERNAMBUCO PROJECT (Ln. 2718-BR)

Steps in Project Cycle	Date Planned	Date Actual/ Latest Estimate
Identification (Executive Project Summary)	--	1982
Preparation	--	1982-1985
Appraisal	--	November 1985
Negotiations	--	May 9, 1986
Board Presentation	--	June 12, 1986
Loan Signing	--	July 15, 1986
Loan Effectiveness	September 1986	November 14, 1986
Loan Closing	December 31, 1994	June 30, 1996
Project Completion	July 31, 1994	June 30, 1996

PIAUI PROJECT (Ln. 2762-BR)

Steps in Project Cycle	Date Planned	Date Actual/ Latest Estimate
Identification	--	1982
Preparation	--	1982-1985
Appraisal	--	October 1985
Negotiations	--	May 9, 1986
Board Presentation	--	October 21, 1986
Loan Signing	--	July 20, 1987
Loan Effectiveness	September 1986	November 20, 1987
Loan Closing	March 31, 1995	June 30, 1996
Project Completion	September 30, 1994	June 30, 1996

TABLE 3. PROJECT TIMETABLE

MINAS GERAIS PROJECT (Ln. 2861-BR)

Steps in Project Cycle	Date Planned	Date Actual/ Latest Estimate
Identification (Executive Project Summary)	--	1983
Preparation	--	1983-1986
Appraisal	--	December 1986
Negotiations	--	May 13, 1987
Board Presentation	--	June 30, 1987
Loan Signing	--	July 20, 1987
Loan Effectiveness	October 1987	October 20, 1987
Loan Closing	March 31, 1996	December 31, 1996
Project Completion	September 30, 1995	December 31, 1996

TABLE 4. LOAN DISBURSEMENTS: CUMULATIVE ESTIMATED AND ACTUAL
(US\$ Million)

PERNAMBUCO PROJECT (Ln. 2718-BR)

Fiscal Year	Appraisal Estimate	Actual	Actual as % of Estimate
1987	9.00	5.52	61
1988	21.00	14.27	68
1989	35.80	21.03	59
1990	52.20	37.42	72
1991	68.40	47.13	69
1992	80.80	48.53	60
1993	88.60	51.69	58
1994	91.10	55.52	61
1995	92.00	55.96	61
1996	--	71.25	77
1997	--	72.00 ¹	78

Final Disbursement: October 30, 1996

¹ US\$20 million cancelled, December 1994

PIAUI PROJECT (Ln. 2762-BR)

Fiscal Year	Appraisal Estimate	Actual	Actual as % of Estimate
1987	7.10	0.00	0
1988	17.70	8.05	45
1989	28.60	10.88	38
1990	40.30	15.26	38
1991	52.70	20.64	39
1992	64.20	29.44	46
1993	71.80	33.82	47
1994	76.30	38.76	51
1995	78.00	42.56	55
1996	--	51.71	66
1997	--	53.00 ¹	68

Final Disbursement: January 22, 1997

¹ US\$25 million cancelled, December 1994

TABLE 4. LOAN DISBURSEMENTS: CUMULATIVE ESTIMATED AND ACTUAL
(US\$ Million)

MINAS GERAIS PROJECT (Ln. 2861-BR)

Fiscal Year	Appraisal Estimate	Actual	Actual as % of Estimate
1988	4.00	3.86	97
1989	8.80	6.37	72
1990	16.50	9.71	59
1991	24.50	13.08	53
1992	34.00	13.29	39
1993	42.40	13.99	33
1994	48.00	14.88	31
1995	52.80	19.09	36
1996	55.00	29.68	54
1997	--	43.92 ¹	80
Final Disbursement:	May 14, 1997		

¹ US\$6.8 million committed; cancellation of US\$4.3 million still pending.

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

PERNAMBUCO PROJECT (Ln. 2718-BR)

A. Pre-Reformulation ¹

Disbursements at reformulation were about 58% of the loan, the best performance of the three states.² Achievements under the main components were (with percentage of appraisal target shown in parentheses): (i) Water Resources: feasibility studies on the irrigation potential of areas covering 1,340 ha (134%); construction of 3 small irrigation schemes providing 156 ha with irrigation (10%); construction of 382 simple water supply systems (273%) and the rehabilitation of 254 such systems (348%) in communities with less than 500 inhabitants; and the stocking of 275 state lakes (1,964%) with local fish species; (ii) Agricultural Research and Basic Seed Production: completion of 5 agro-ecological and natural resource studies (125%); 250 short- and medium-term applied research trials (34%) to improve crop production technology; establishment of 440 farm-level observation units (3,667%) to test and adapt integrated production systems; the production of seeds on 247 ha per year (247%), including maize, castor beans, cotton, sorghum and rice; and the production and distribution of about 178 improved dairy cattle (148%); (iii) Agricultural Extension: technical assistance was delivered to 40,000 project beneficiaries (55%); 987 demonstration plots were established (210%); and 1.2 million tree seedlings were produced (12%) to implement a small-scale forestry project; (iv) Rural Credit: medium- and long-term subloans were granted for 1,004 project beneficiaries to finance on-farm investments (4%); and (v) Marketing Services: establishment of a food wholesale service for private retailers, including the expansion of 15 rural services centers (500%) and construction of 2 warehouses for storage of agricultural products (67%).

¹ State provided pre-reformulation data/achievements in the form shown, which was not directly comparable with original indicator list.

² Effective date of the reformulation was September 28, 1993.

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

PERNAMBUCO PROJECT (Ln. 2718-BR)

B. Post-Reformulation

		INDICATOR	OPERATIONAL CRITERIA	COMMENTS
INPUTS	PAC/FUMAC ^{1/}	State Technical Units (TUs) and Non-Governmental Organizations (NGOs) trained in rules and procedures.	Training seminars for TUs and for NGOs have been held in the state by July 31, 1993, and updating workshops held by each July 31 thereafter, under TOR agreed with the Bank.	Done.
	PAC/FUMAC	Technical Implementation Manual.	Prepared by June 30, 1993 in agreement with the Bank on the basis of the March 12, 1993 "Diretrizes e Critérios Básicos para a Implementação do Programa Reformulado de Apoio ao Pequeno Produtor Rural (PAPP)".	Done.
	PAC/FUMAC	Publicity.	Publicity campaign proposal submitted to Bank by June 30, 1993, and campaign initiated in the state by Sept. 1, 1993 and thereafter implemented as agreed with the Bank.	Done.
	PAC/FUMAC	Current situation of target communities and pilot municipalities.	Baseline study of sample communities regionally distributed in the state and pilot municipalities completed by Sept. 30, 1993.	Done.
	PAC/FUMAC	Mobilizations assistance.	List of NGOs and other agencies to assist communities in mobilization and organization is available in the state by June 15, 1993 and updated annually thereafter.	Done.
	PAC/FUMAC	Technical assistance.	List of suitable individuals, firms, agencies and NGOs to assist communities in technical aspects is available in the state by June 15, 1993 and updated annually thereafter.	Done.
	FUMAC ONLY	A municipal council with appropriate representation has been established and is functioning each pilot municipality.	Documentation certifying existence and functioning of municipal council available from each pilot municipality is available and verified by TUs, by Sept. 30, 1993.	Done.
	PAC/FUMAC	State and Loan Funds for approved projects are available in a timely manner to communities.	At beginning of each month, sufficient funds from state budget and from Loan state project account to cover new approved subprojects, and available to communities in a timely manner, as reported monthly to the Bank and SUDENE.	Partially done.
	PAC/FUMAC	Community counterpart funds or resources for approved projects.	Signed agreements with executing community/association explicit including community's contribution to subproject cost.	Done.

^{1/} PAC: Programa de Apoio Comunitário (Support to Small Rural Communities Program)

FUMAC: Fundo Municipal de Apoio Comunitário (Pilot Municipal Fund Program for Support to Small Rural Communities).

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

PERNAMBUCO PROJECT (Ln. 2718-BR)

**B. Post-Reformulation
(Continued)**

		INDICATOR	OPERATIONAL CRITERIA	COMMENTS
INPUTS (Continued)	PAC/FUMAC	Supervision.	At least 10% of approved subprojects have been inspected in the field by TU at any point in time.	Partially.
	PAC/FUMAC	Administration.	TUs are adequately staffed, both at state headquarters and in field offices, with capacity to receive, appraise, approve and supervise subprojects, and to facilitate private and public assistance to communities, by July 31; staffing increased as necessary to expanding work requirements.	Done.
RESULTS	PAC/FUMAC	Communities aware of and informed about program, rules and procedures.	Subproject proposals are being presented by communities in at least 70% of eligible municipalities (PAC and FUMAC) by Dec. 31, 1993, and 90% by Dec. 31, 1994.	Done.
	FUMAC ONLY	Open municipal council meetings to discuss and agree on municipal list of priority subprojects have been held.	TUs and/or supervision missions witness or are reliably informed about such meetings being held, in all pilot municipalities.	Done.
	FUMAC ONLY	Municipal investment proposals are received, based on community priorities and approved by municipal councils.	At least 90% of pilot municipalities have submitted such proposals by Dec. 31, 1993.	Done.
	PAC ONLY	Subproject proposals are received and approved based on community requests.	At least 150 of such subproject proposals approved by Dec. 31, 1993; and cumulatively 300 by June 30, 1994; and 700 by June 30, 1995	Done.
	PAC/FUMAC	Number of families directly benefited.	At least 3,700 families benefited with approved projects by Dec. 31, 1993; 7,500 by June 30, 1994; and 17,500 by June 30, 1995.	Done.
	PAC/FUMAC	Subprojects approved by TU are eligible, technically and economically sound, and from eligible communities.	At least 85% of subprojects visited by Bank and SUDENE of those listed in monthly reports comply with criteria.	Partially done.
	PAC/FUMAC	Subprojects are implemented as approved, with cost and time.	Adherence to specifications, cost and time in 85% of cases in a random sample of 50 subprojects in the state to be completed by June 30 of each year starting in 1994.	Done.

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

PERNAMBUCO PROJECT (Ln. 2718-BR)

**B. Post-Reformulation
(Continued)**

		INDICATOR	OPERATIONAL CRITERIA	COMMENTS
RESULTS (Continued)	PAC/FUMAC	Funds used only for approved subprojects.	No evidence of misuse of funds in at least 95% of cases, in a random sample of 50 subprojects, subjected to audit by June 30 of each year starting in 1994.	Done.
IMPACT (Objectives)	PAC/FUMAC	Expressed community need are satisfied.	Two-thirds of beneficiaries in sample communities are satisfied with the subproject implemented, its design and their own role (identification, design, implementation, control) in the process.	Partially done.
	PAC/FUMAC	Projected employment generated (productive subprojects only)	Employment targets in 80% of sample productive subprojects have been reached one year after establishment.	Done.
	PAC/FUMAC	Projected incremental income realized by beneficiaries.	In 80% of sample productive subprojects the projected incremental income has been realized, or an absolute income level of at least 2.5 minimum salaries has been reached, one and a half years after establishment.	Partially done.
	PAC/FUMAC	Subprojects sustained by community and/or municipality over time.	80% of subprojects are being operated and/or maintained, one and a half year after establishment.	At least 60% of subprojects have complied with.
	FUMAC ONLY	Transparent and participatory municipal decision-making process for investments is adopted.	A majority a random sample of the target population in participating municipalities expresses to be satisfied with the municipal decision-making process, in at least 75% of those municipalities.	Done.
	PAC/FUMAC	Organized community pursuing further communal development interests.	At least 50% of the participating communities in pilot municipalities remain organized and are engaged in further communal pursuits, of any kind.	Done.

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

PIAUI PROJECT (Ln. 2762-BR)

A. Pre-Reformulation ¹

Disbursements at reformulation were about 47% of the loan.² Delays resulted mainly from shortfalls and irregularities in the provision of counterpart funds. Achievements under the main components were (with percentage of appraisal target shown in parentheses): (i) Water Resources: feasibility studies on the irrigation potential of areas covering 2,935 ha (294%); construction of 2 public irrigation schemes and consolidation of 7 small contiguous irrigation schemes providing 998 ha with irrigation (28%); construction of 426 simple water supply systems (142%) and repairs of 105 such systems (11%) in communities with less than 500 inhabitants; and construction of fish hatcheries yielding an annual production of 5.0 million fingerlings (56%); (ii) Agricultural Research and Basic Seed Production: completion of 4 agro-ecological and natural resource studies (100%); 111 short- and medium-term applied research trials (32%) to improve crop production technology; establishment of 188 farm-level observation units (448%) to test and adapt integrated production systems; the production of seeds on 75 ha per year (100%), including maize, castor beans, cotton, sorghum and rice; and the production and distribution of about 294 improved breeding goats (37%); (iii) Agricultural Extension: technical assistance was delivered to 20,000 project beneficiaries (31%); and 540 demonstration plots were established (30%); (iv) Rural Credit: medium- and long-term subloans were granted for 810 project beneficiaries to finance on-farm investments (4%); and (v) Marketing Services: establishment of a food wholesale service for private retailers, including the expansion of 2 rural services centers (100%).

¹ State provided pre-reformulation data/achievements in the form shown, which was not directly comparable with original indicator list.

² Effective date of the reformulation was September 28, 1993.

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

PIAUI PROJECT (Ln. 2762-BR)

B. Post-Reformulation

		INDICATOR	OPERATIONAL CRITERIA	COMMENTS
INPUTS	PAC/FUMAC ^{1/}	State Technical Unit (TUs) and Non-Governmental Organizations (NGOs) trained in rules and procedures	Training seminars for TUs and for NGOs to be held in the state by July 31, 1993, and updating workshops held by each July 31 thereafter, under TOR agreed with the Bank	Done
	PAC/FUMAC	Technical Implementation Manual	Prepared by June 30, 1993 in agreement with the Bank on the basis of the March 12, 1993 "Diretrizes e Critérios Básicos para a Implementação do Programa Reformulado de Apoio ao Pequeno Produtor Rural (PAPP)"	Done
	PAC/FUMAC	Publicity	Publicity campaign proposal submitted to Bank by June 30, 1993, and campaign initiated in the state by Sept. 1, 1993 and thereafter implemented as agreed with the Bank	Done
	PAC/FUMAC	Current situation of target communities and pilot municipalities	Baseline study of sample communities regionally distributed in the state and pilot municipalities completed by Sept. 30, 1993	Done
	PAC/FUMAC	Mobilizations assistance	List of NGOs and other agencies to assist communities in mobilization and organization is available in the state by June 15, 1993 and updated annually thereafter	Done
	PAC/FUMAC	Technical assistance	List of suitable individuals, firms, agencies and NGOs to assist communities in technical aspects is available in the state by June 15, 1993 and updated annually thereafter	Done
	FUMAC ONLY	A municipal council with appropriate representation has been established and is functioning each pilot municipality	Documentation certifying existence and functioning of municipal council available from each pilot municipality is available and verified by TUs, by Sept. 30, 1993	Done
	PAC/FUMAC	State and Loan Funds for approved projects are available in a timely manner to communities	At beginning of each month, sufficient funds from state budget and from Loan state project account to cover new approved subprojects, and available to communities in a timely manner, as reported monthly to the Bank and SUDENE	Complied with. Municipalities providing part of State counterpart funds.
	PAC/FUMAC	Community counterpart funds or resources for approved projects	Signed agreements with executing community association explicitly including community's contribution to subproject cost	Complied with

^{1/} PAC: Programa de Apoio Comunitário (Support to Small Rural Communities Program)

FUMAC: Fundo Municipal de Apoio Comunitário (Pilot Municipal Fund Program for Support to Small Rural Communities).

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

PIAUI PROJECT (Ln. 2762-BR)

**B. Post-Reformulation
(Continued)**

		INDICATOR	OPERATIONAL CRITERIA	COMMENTS
INPUTS (Continued)	PAC/FUMAC	Supervision	At least 10% of approved subprojects have been inspected in the field by TU at any point in time	Done
	PAC/FUMAC	Administration	TUs are adequately staffed, both at state headquarters and in field offices, with capacity to receive, appraise, approve and supervise subprojects, and to facilitate private and public assistance to communities, by July 31, 1993; staffing increased as necessary to expanding work requirements	Improvement has been noted under the new administration.
RESULTS	PAC/FUMAC	Communities aware of and informed about program, rules and procedures	Subproject proposals are being presented by communities in at least 70% of eligible municipalities (PAC and FUMAC by Dec. 31, 1993, and 90% by Dec. 31, 1994	Complied with
	FUMAC ONLY	Open municipal council meetings to discuss and agree on municipal list of priority subprojects have been held	TUs and/or supervision missions witness or are reliably informed about such meetings being held, in all pilot municipalities	Done
	FUMAC ONLY	Municipal investment proposals are received, based on community priorities and approved by municipal councils	At least 90% of pilot municipalities have submitted such proposals by Dec. 31, 1993	Complied with
	PAC ONLY	Subproject proposals are received and approved based on community requests	At least 200 of such subproject proposals approved by Dec. 31, 1993; and cumulatively 600 by June 30, 1994; and 1,200 by June 30, 1995	Complied with
	PAC/FUMAC	Number of families directly benefited	At least 5,000 families benefited with approved projects by Dec. 31, 1993; 15,000 by June 30, 1994; and 30,000 by June 30, 1995	Complied with
	PAC/FUMAC	Subprojects approved by TU are eligible, technically and economically sound, and from eligible communities	At least 85% of subprojects visited by Bank and SUDENE, of those listed in monthly reports, comply with criteria	Complied with
	PAC/FUMAC	Subprojects are implemented as approved, with cost and time	Adherence to specifications, cost and time in 85% of cases in a random sample of 50 subprojects in the state to be completed by June 30 of each year starting in 1994	Complied with

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

PIAUI PROJECT (Ln. 2762-BR)

**B. Post-Reformulation
(Continued)**

		INDICATOR	OPERATIONAL CRITERIA	COMMENTS
RESULTS (Continued)	PAC/FUMAC	Funds used only for approved subprojects	No evidence of misuse of funds in at least 95% of cases, in a random sample of 50 subprojects, subjected to audit by June 30 of each year starting in 1994	Complied with
IMPACT (Objectives)	PAC/FUMAC	Expressed community needs are satisfied.	Two-thirds of beneficiaries in sample communities are satisfied with the subproject implemented, its design and their own role (identification, design, implementation, control) in the process.	Complied with
	PAC/FUMAC	Projected employment generated (productive subprojects only)	Employment targets in 80% of sample productive subprojects have been reached one year after establishment.	Partially complied with. At least 60%.
	PAC/FUMAC	Projected incremental income realized by beneficiaries.	In 80% of sample productive subprojects the projected incremental income has been realized, or an absolute income level of at least 2.5 minimum salaries has been reached, one and a half years after establishment.	Partially complied with. At least 60%.
	PAC/FUMAC	Subprojects sustained by community and/or municipality over time.	80% of subprojects are being operated and/or maintained, one and a half years after establishment.	Partially done.
	FUMAC ONLY	Transparent and participatory municipal decision-making process for investments is adopted.	A majority of a random sample of the target population in participating municipalities expresses satisfaction with the municipal decision-making process, in at least 75% of those municipalities.	Complied with.
	PAC/FUMAC	Organized community pursuing further communal development interests.	At least 50% of the participating communities in pilot municipalities remain organized and are engaged in further communal pursuits, of any kind.	Done.

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

MINAS GERAIS PROJECT (Ln. 2861-BR)

A. Pre-Reformulation ¹

Some 33% of estimated expenditures had been made prior to reformulation, due to the same factors experienced in the other states.² Achievements under the main components were (with percentage of appraisal target shown in parentheses): (i) Water Resources: feasibility studies on the irrigation potential of areas covering 2,300 ha (26%) and detailed engineering designs covering 970 ha (32%); construction of 2 public irrigation schemes providing 130 ha with irrigation (4%); and construction of 277 simple water supply systems (308%) and repairs of 92 such systems (115%) in communities with less than 500 inhabitants; (ii) Agricultural Research and Basic Seed Production: completion of 13 agro-ecological and natural resource studies (100%); 120 short- and medium-term applied research trials (75%) to improve crop production technology; establishment of 142 farm-level observation units (89%) and monitoring of 16 observation farms (100%) to test and adapt integrated production systems; and the production of 60 tons of basic seeds for multiplication (133%), including maize, castor beans, cotton, sorghum and rice; (iii) Agricultural Extension: technical assistance was delivered to 35,000 project beneficiaries (92%); 340 demonstration plots were established (100%); and 4,000 tree seedlings were produced (1%) to implement a small-scale forestry program; (iv) Rural Credit: medium- and long-term subloans were granted for 80 project beneficiaries to finance on-farm investments (1%); and (v) Marketing Services: market information and commercial orientation services were established but the record does not report on their quality or sustainability.

¹ State provided pre-reformulation data/achievements in the form shown, which was not directly comparable with original indicator list.

² Effective date of the reformulation was September 28, 1993.

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

MINAS GERAIS PROJECT (Ln. 2861-BR)

B. Post-Reformulation

		INDICATOR	OPERATIONAL CRITERIA	COMMENTS
INPUTS	PAC/FUMAC ^{1/}	State Technical Unit (TUs) and Non-Governmental Organizations (NGOs) trained in rules and procedures.	Training seminars for TUs and for NGOs have been held in the state by July 31, 1993, and updating workshops held by each July 31 thereafter, under TOR agreed with the Bank.	Done.
	PAC/FUMAC	Technical Implementation Manual.	Prepared by June 30, 1993 in agreement with the Bank on the basis of the March 12, 1993 "Diretrizes e Critérios Básicos para a Implementação do Programa Reformulado de Apoio ao Pequeno Produtor Rural (PAPP)".	Done.
	PAC/FUMAC	Publicity.	Publicity campaign proposal submitted to Bank by June 30, 1993, and campaign initiated in the state by Sept. 1, 1993 and thereafter implemented as agreed with the Bank.	Done.
	PAC/FUMAC	Current situation of target communities and pilot municipalities.	Baseline study of sample communities regionally distributed in the state and pilot municipalities completed by Sept. 30, 1993.	Complied with.
	PAC/FUMAC	Mobilization assistance.	List of NGOs and other agencies to assist communities in mobilization and organization is available in the state by June 15, 1993 and updated annually thereafter.	Done.
	PAC/FUMAC	Technical assistance.	List of suitable individuals, firms, agencies and NGOs to assist communities in technical aspects is available in the state by June 15, 1993 and updated annually thereafter.	Done.
	FUMAC ONLY	A municipal council with appropriate representation has been established and is functioning in each pilot municipality	Documentation certifying existence and functioning of municipal council available from each pilot municipality is available and verified by TUs, by Sept. 30, 1993	Done
	PAC/FUMAC	State and Loan Funds for approved subprojects are available in a timely manner to communities.	At beginning of each month, sufficient funds from state budget and from Loan state project account to cover new approved subprojects, and available to communities in a timely manner, as reported monthly to the Bank and SUDENE.	Complied with. Loan funds were delayed until May 1995 and have since normalized.
	PAC/FUMAC	Community counterpart funds or resources for approved projects.	Signed agreements with executing community/association with explicit information including community's contribution to subproject cost.	Done.

^{1/} PAC: Programa de Apoio Comunitário (Support to Small Rural Communities Program)

FUMAC: Fundo Municipal de Apoio Comunitário (Pilot Municipal Fund Program for Support to Small Rural Communities).

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

MINAS GERAIS PROJECT (Ln. 2861-BR)

**B. Post-Reformulation
(Continued)**

		INDICATOR	OPERATIONAL CRITERIA	COMMENTS
INPUTS (Continued)	PAC/FUMAC	Supervision.	At least 10% of approved subprojects have been inspected in the field by TU at any point in time.	Complied with.
	PAC/FUMAC	Administration.	TUs are adequately staffed, both at state headquarters and in field offices, with capacity to receive, appraise, approve and supervise subprojects, and to facilitate private and public assistance to communities, by July 31; staffing increased as necessary to expanding work requirements.	Complied with.
RESULTS	PAC/FUMAC	Communities aware of and informed about program, rules and procedures.	Subproject proposals are being presented by communities in at least 70% of eligible municipalities (PAC and FUMAC) by Dec. 31, 1993, and 90% by Dec. 31, 1994.	Complied with.
	FUMAC ONLY	Open municipal council meetings to discuss and agree on municipal list of priority subprojects, have been held.	TUs and/or supervision missions witness or are reliably informed about such meetings being held, in all pilot municipalities.	Done.
	FUMAC ONLY	Municipal investment proposals are received, based on community priorities and approved by municipal councils.	At least 90% of pilot municipalities have submitted such proposals by Dec. 31, 1993.	Complied with.
	PAC ONLY	Subproject proposals are received and approved based on community requests.	At least 200 of such subproject proposals approved by Dec. 31, 1993; and cumulatively 500 by June 30, 1994; 900 by June 30, 1995 and 1,100 by project completion.	Complied with.
	PAC/FUMAC	Number of families directly benefitted.	At least 5,000 families benefitted with approved projects by Dec. 31, 1993; 12,500 by June 30, 1994; 22,500 by June 30, 1995 and 27,500 by project completion.	Complied with.
	PAC/FUMAC	Subprojects approved by TU are eligible, technically and economically sound, and from eligible communities.	At least 85% of subprojects visited by Bank and SUDENE, of those listed in monthly reports, comply with criteria.	Complied with.

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

MINAS GERAIS PROJECT (Ln. 2861-BR)

**B. Post-Reformulation
(Continued)**

		INDICATOR	OPERATIONAL CRITERIA	COMMENTS
RESULTS (Continued)	PAC/FUMAC	Subprojects are implemented as approved, with cost and time specifications.	Adherence to specifications, cost and time in 85% of cases in a random sample of 50 subprojects in the state, to be completed by June 30 of each year starting in 1994.	Complied with.
	PAC/FUMAC	Funds used only for approved subprojects.	No evidence of misuse of funds in at least 95% of cases, in a random sample of 50 subprojects, subjected to audit by June 30 of each year starting in 1994.	Complied with.
IMPACT (Objectives)	PAC/FUMAC	Expressed community needs are satisfied.	Two-thirds of beneficiaries in sample communities are satisfied with the subproject implemented, its design and their own role (identification, design, implementation, control) in the process.	Done.
	PAC/FUMAC	Projected employment generated (productive subprojects only)	Employment targets in 80% of sample productive subprojects have been reached one year after establishment.	Done.
	PAC/FUMAC	Projected incremental income realized by beneficiaries.	In 80% of sample productive subprojects the projected incremental income has been realized, or an absolute income level of at least 2.5 minimum salaries has been reached, one and a half years after establishment.	Partially done. At least 1.5 minimum salaries.
	PAC/FUMAC	Subprojects sustained by community and/or municipality over time.	80% of subprojects are being operated and/or maintained, one and a half years after establishment.	Done
	FUMAC ONLY	Transparent and participatory municipal decision-making process for investments is adopted.	A majority of a random sample of the target population in participating municipalities expresses satisfaction with the municipal decision-making process, in at least 75% of those municipalities.	Done
	PAC/FUMAC	Organized community pursuing further communal development interests.	At least 50% of the participating communities in pilot municipalities remain organized and are engaged in further communal pursuits, of any kind.	Done

TABLE 6. STUDIES INCLUDED IN PROJECT

PERNAMBUCO PROJECT (Ln. 2718-BR)

Study	Purpose as Defined at Appraisal/Redefined	Status	Impact of Study
Feasibility studies	To determine areas with irrigation potential	Done	Various schemes implemented.

PIAUI PROJECT (Ln. 2762-BR)

Study	Purpose as Defined at Appraisal/Redefined	Status	Impact of Study
Feasibility Studies	To determine areas with irrigation potential	Done	Various schemes implemented.

MINAS GERAIS PROJECT (Ln. 2861-BR)

Study	Purpose as Defined at Appraisal/Redefined	Status	Impact of Study
Feasibility studies	To determine areas with irrigation potential	Done	Various schemes implemented.

TABLE 7. PROJECT COSTS AND FINANCING

PERNAMBUCO PROJECT (Ln. 2718-BR)

A. Project Costs

(US\$ million)

Item	Appraisal Estimate ¹			Actual/Latest Estimate ²		
	Local Costs	Foreign Costs	Total	Local Costs	Foreign Costs	Total
A. Water Resource Development	14.7	3.0	17.7	13.0	2.6	15.6
B. Agricultural Research and Basic Seed Production	7.2	0.1	7.3	3.3	0.1	3.4
C. Rural Extension Services	36.5	0.9	37.4	15.3	0.4	15.7
D. Agricultural Credit	42.2	7.4	49.6	2.8	0.5	3.3
E. Marketing Services	4.4	0.8	5.2	1.4	0.3	1.7
F. Support to Small Rural Communities						
(i) APCR	23.3	3.3	26.6	29.6	4.2	33.8
(ii) PAC	--	--	--	19.7	6.3	26.0
(iii) FUMAC	--	--	--	2.8	0.9	3.7
G. Project Management and Institutional Strengthening	16.1	0.8	16.9	19.4	1.0	20.4
Total Baseline Cost	144.4	16.3	160.7	107.4	16.3	123.7
Physical Contingencies	1.3	0.4	1.7	--	--	--
Price Contingencies	25.0	1.0	26.0	--	--	--
Total Project Cost	170.7	17.7	188.4	107.4	16.3	123.7

1. Original project, pre-reformulaiton.
2. Post-reformulation project.

B. Project Financing

(US\$ million)

Source	Appraisal Estimate ¹			Actual/Latest Estimate ²		
	Local Costs	Foreign Costs	Total	Local Costs	Foreign Costs	Total
IBRD	74.3	17.7	92.0	55.7	16.3	72.0 ³
Federal Government	96.4	--	96.4	30.0	--	30.0
State Government of Pernambuco	--	--	--	18.7	--	18.7
Beneficiaries	--	--	--	3.0	--	3.0
Total	170.7	17.7	188.4	107.4	16.3	123.7

1. Federal Government, pre-reformulation.
2. State Government, post-reformulation.
3. US\$20 million cancelled, December 1994.

TABLE 7. PROJECT COSTS AND FINANCING

PIAUI PROJECT (Ln. 2762-BR)

A. Project Costs

(US\$ million)

Item	Appraisal Estimate ¹			Actual/Latest Estimate ²		
	Local Costs	Foreign Costs	Total	Local Costs	Foreign Costs	Total
A. Water Resource Development	15.8	2.8	18.6	20.6	3.6	24.2
B. Agricultural Research and Basic Seed Production	7.4	0.3	7.7	1.0	0.0	1.0
C. Rural Extension Services	34.0	1.2	35.2	9.4	0.3	9.7
D. Agricultural Credit	35.0	6.2	41.2	0.6	0.1	0.7
E. Marketing Services	1.5	0.1	1.6	1.5	0.1	1.6
F. Support to Small Rural Communities						
(i) APCR	18.8	3.0	21.8	5.0	0.8	5.8
(ii) PAC	--	--	--	20.2	6.6	26.8
(iii) FUMAC	--	--	--	2.0	0.6	2.6
G. Project Management and Institutional Strengthening	9.7	0.2	9.9	16.9	0.4	17.3
Total Baseline Cost	122.2	13.8	136.0	77.2	12.5	89.7
Physical Contingencies	1.5	0.5	2.0	--	--	--
Price Contingencies	21.3	0.5	22.3	--	--	--
Total Project Cost	145.0	15.3	160.3	77.2	12.5	89.7

1. Original project, pre-reformulaiton.

2. Post-reformulation project.

B. Project Financing

(US\$ million)

Source	Appraisal Estimate ¹			Actual/Latest Estimate ²		
	Local Costs	Foreign Costs	Total	Local Costs	Foreign Costs	Total
IBRD	62.7	15.3	78.0	40.5	12.5	53.0 ³
Federal Government	82.3	--	82.3	28.4	--	28.4
State Government of Piauí	--	--	--	6.3	--	6.3
Beneficiaries	--	--	--	2.0	--	2.0
Total	145.0	15.3	160.3	77.2	12.5	89.7

1. Federal Government, pre-reformulation.

2. State Government, post-reformulation.

3. US\$25 million cancelled, December 1994.

TABLE 7. PROJECT COSTS AND FINANCING

MINAS GERAIS PROJECT (Ln. 2861-BR)

A. Project Costs

(US\$ million)

Item	Appraisal Estimate ¹			Actual/Latest Estimate ²		
	Local Costs	Foreign Costs	Total	Local Costs	Foreign Costs	Total
A. Water Resource Development	14.9	5.0	19.9	2.5	0.8	3.3
B. Agricultural Research and Basic Seed Production	4.6	0.6	5.2	1.1	0.1	1.2
C. Rural Extension Services	22.3	1.6	23.9	4.2	0.3	4.5
D. Agricultural Credit	28.0	4.9	32.9	0.1	0.0	0.1
E. Marketing Services	0.7	0.3	1.0	--	--	--
F. Support to Small Rural Communities						
(i) APCR	15.7	2.4	18.1	5.5	0.8	6.3
(ii) PAC	--	--	--	36.8	5.7	42.5
(iii) FUMAC	--	--	--	14.6	4.8	19.4
G. Project Management and Institutional Strengthening	5.3	0.4	5.7	5.2	0.4	5.6
Total Baseline Cost	91.5	15.2	106.7	70.0	12.9	82.9
Physical Contingencies	1.3	0.5	1.8	--	--	--
Price Contingencies	4.5	0.5	5.0	--	--	--
Total Project Cost	97.3	16.2	113.5	70.0	12.9	82.9

1. Original project, pre-reformulation.

2. Post-reformulation project.

B. Project Financing

(US\$ million)

Source	Appraisal Estimate ¹			Actual/Latest Estimate ²		
	Local Costs	Foreign Costs	Total	Local Costs	Foreign Costs	Total
IBRD	38.8	16.2	55.0	37.4	12.9	50.3 ³
Federal Government	58.5	--	58.5	9.8	--	9.8
State Government of Minas Gerais	--	--	--	16.7	--	16.7
Beneficiaries	--	--	--	6.1	--	6.1
Total	97.3	16.2	113.5	70.0	12.9	82.9

1. Federal Government, pre-reformulation.

2. State Government, post-reformulation.

3. Pending cancellation of US\$4.7 million.

BRAZIL

PERNAMBUCO RURAL DEVELOPMENT PROJECT
(Loan 2718-BR)

TABLE 8. STATUS OF LEGAL COVENANTS

Agreement	Section	Covenant Type	Present Status	Original Fulfillment Date	Revised Fulfillment Date	Description of Covenant	Comments
Loan	2.08	5	C			Secretary of Treasury designated as Borrower's representative	Complied with.
	3.01 (a)	5	C			Federal commitment to carry out rural credit component	Rural credit component discontinued with Project reformulation. Amendment Letter became effective September 27, 1993.
	3.01 (c)	10	C			Refers to settlement targets as defined in Project Agreement (Sec. 3.03)	Settlement component discontinued with Project reformulation.
	3.01 (d)	4	C			Federal counterpart funding	Counterpart funds have been provided by the State instead of the Federal Government with Project reformulation.
	3.01 (e)	3	C			Efficient Federal mechanism for passing funds to states	Regular flow of funds resumed.
	3.01 (f)	5	C			Federal commitment on mechanism to carry out rural credit component	Rural credit component discontinued after Project reformulation.

Covenant Type: 1 Accounts/audit; 2 Financial performance/generate revenue from beneficiaries; 3 Flow and utilization of Project funds; 4 Counterpart funding; 5 Management aspects of the Project or of its executing agency; 6 Environmental covenants; 7 Involuntary resettlement; 8 Indigenous people; 9 Monitoring, review and reporting; 10 Implementation; 11 Sectoral or cross-sectoral budgetary or other resource allocation; 12 Sectoral or cross-sectoral regulatory/institutional action; 13 Other

Status:
 C = covenant complied with
 CD = complied with after delay
 CP = complied with partially
 NC = not complied with
 NYD = not yet due
 SOON = compliance expected in reasonably short time

BRAZIL

PERNAMBUCO RURAL DEVELOPMENT PROJECT
(Loan 2718-BR)

TABLE 8. STATUS OF LEGAL COVENANTS (CONTINUED)

Agreement	Section	Covenant Type	Present Status	Original Fulfillment Date	Revised Fulfillment Date	Description of Covenant	Comments
Loan (Continued)	3.01 (g) (h)	3	C			Participating bank obligation to provide adequate working capital.	Since rural credit was discontinued, there was no need for participating banks.
	3.01 (i)	5	C			Participating bank obligation to provide monthly information.	Same as 3.10 (g) (h)
	4.01	1	C			Audit of Special Accounts	Complied with.
	4.02 and 4.03	1	C			Accounts and audit of Central Bank.	Complied with.
Project	2.01 (a) (b)	10	C			State commitment to execute Project with due diligence and in accordance with Plan of Action.	Complied with.
	2.01 (c)	10	C			Quarterly reporting by TU	With Project reformulation, State has submitted to the Bank and to SUDENE reports based on the newly created SSMP.

Covenant Type: 1 Accounts/audit; 2 Financial performance/generate revenue from beneficiaries; 3 Flow and utilization of Project funds; 4 Counterpart funding; 5 Management aspects of the Project or of its executing agency; 6 Environmental covenants; 7 Involuntary resettlement; 8 Indigenous people; 9 Monitoring, review and reporting; 10 Implementation; 11 Sectoral or cross-sectoral budgetary or other resource allocation; 12 Sectoral or cross-sectoral regulatory/institutional action; 13 Other

Status:

C	= covenant complied with	NC	= not complied with
CD	= complied with after delay	NYD	= not yet due
CP	= complied with partially	SOON	= compliance expected in reasonably short time

BRAZIL

PERNAMBUCO RURAL DEVELOPMENT PROJECT

(Loan 2718-BR)

TABLE 8. STATUS OF LEGAL COVENANTS (CONTINUED)

Agreement	Section	Covenant Type	Present Status	Original Fulfillment Date	Revised Fulfillment Date	Description of Covenant	Comments
Project (Continued)	2.01 (d)	3	C			Mutual obligations of State and SUDENE in preparation of the Annual Plan and budget	With Project reformulation, it became the State's responsibility to prepare and present to the Bank a proposal for the Annual Plan. In compliance.
	2.02	3	C			State to respect procurement regulations	Complied with.
	2.06	10	C			Carrying out Part F of the reformulated Project in accordance with the Operational Manual	In general terms, the State carried out Part F in a satisfactory manner. Some operational corrections were required by the last supervision mission and registered in the Aide Memoire.
	2.08	10	C			Carrying out of a publicity campaign	Complied with.

Covenant Type: 1 Accounts/audit; 2 Financial performance/generate revenue from beneficiaries; 3 Flow and utilization of Project funds; 4 Counterpart funding; 5 Management aspects of the Project or of its executing agency; 6 Environmental covenants; 7 Involuntary resettlement; 8 Indigenous people; 9 Monitoring, review and reporting; 10 Implementation; 11 Sectoral or cross-sectoral budgetary or other resource allocation; 12 Sectoral or cross-sectoral regulatory/institutional action; 13 Other

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 NYD = not yet due
 SOON = compliance expected in reasonably short time

BRAZIL

PIAUI RURAL DEVELOPMENT PROJECT
(Loan 2762-BR)

TABLE 8. STATUS OF LEGAL COVENANTS

Agreement	Section	Covenant Type	Present Status	Original Fulfillment Date	Revised Fulfillment Date	Description of Covenant	Comments
Loan	2.08	5	C			Secretary of Treasury designated as Borrower's representative	Complied with.
	3.01 (a)	5	C			Federal commitment to carry out rural credit component	Rural credit component discontinued with Project reformulation. Amendment Letter became effective September 27, 1993.
	3.01 (b)	10	C			Federal commitment to cause state to perform according to Project Agreement	Complied with.
	3.01 (c)	10	C			Refers to settlement targets as defined in Project Agreement (Section 3.03, see below)	Settlement component discontinued with Project reformulation.
	3.01 (d)	4	C			Federal counterpart funding	Counterpart funds have been provided by the State instead of the Federal Government with Project reformulation.
	3.01 (e)	3	C			Efficient Federal mechanism for passing funds to states	Regular flow of funds resumed.

Covenant Type: 1 Accounts/audit; 2 Financial performance/generate revenue from beneficiaries; 3 Flow and utilization of Project funds; 4 Counterpart funding; 5 Management aspects of the Project or of its executing agency; 6 Environmental covenants; 7 Involuntary resettlement; 8 Indigenous people; 9 Monitoring, review and reporting; 10 Implementation; 11 Sectoral or cross-sectoral budgetary or other resource allocation; 12 Sectoral or cross-sectoral regulatory/institutional action; 13 Other

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 CD = complied with after delay
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BRAZIL

PIAUI RURAL DEVELOPMENT PROJECT
(Loan 2762-BR)

TABLE 8. STATUS OF LEGAL COVENANTS (CONTINUED)

Agreement	Section	Covenant Type	Present Status	Original Fulfillment Date	Revised Fulfillment Date	Description of Covenant	Comments
Loan (Continued)	3.01 (f) (i) (a)	10	C			On lending terms and conditions for rural credit component	Rural credit component discontinued with Project reformulation.
	3.01 (f) (i) (b)	3	C			Participating bank obligation to provide adequate working capital.	Since rural credit was discontinued, there was no need for participating banks.
	3.01 (f) (i) (c)	5	C			Participating bank obligation to provide monthly information.	Same as 3.01 (f) (i) (b)
	3.02	3	C			SUDENE's obligation to provide the Bank with advance Annual Plan, final budgets and changes in planning procedures, all in timely fashion for comment.	Complied with. With Project reformulation, it became the State's responsibility to prepare and present to the Bank a proposal for the Annual Plan.
	4.01	1	C			Audit of Special Accounts	Complied with.
	4.02 and 4.03	1	C			Accounts and audit of Central Bank.	Complied with.
Project	2.01 (a) (b)	5	C			State commitment to execute Project with due diligence and in accordance with Plan of Action.	Complied with.

Covenant Type: 1 Accounts/audit; 2 Financial performance/generate revenue from beneficiaries; 3 Flow and utilization of Project funds; 4 Counterpart funding; 5 Management aspects of the Project or of its executing agency; 6 Environmental covenants; 7 Involuntary resettlement; 8 Indigenous people; 9 Monitoring, review and reporting; 10 Implementation; 11 Sectoral or cross-sectoral budgetary or other resource allocation; 12 Sectoral or cross-sectoral regulatory/institutional action; 13 Other

Status:
 C = covenant complied with
 CD = complied with after delay
 CP = complied with partially
 NC = not complied with
 NYD = not yet due
 SOON = compliance expected in reasonably short time

BRAZIL

PIAUI RURAL DEVELOPMENT PROJECT
(Loan 2762-BR)

TABLE 8. STATUS OF LEGAL COVENANTS (CONTINUED)

Agreement	Section	Covenant Type	Present Status	Original Fulfillment Date	Revised Fulfillment Date	Description of Covenant	Comments
Project (Continued)	2.01 (c)	5	C			Mutual obligations of State and executing agency, defined by contract	With Project reformulation, State line agencies were no longer expected to participate in the Project, except on a voluntary basis (accredited agents).
	2.01 (d)	5	C			Quarterly reporting by TU	With Project reformulation, State has submitted to the Bank and to SUDENE reports based on the newly created SSMP.
	2.01 (e)	5	C			Reorganize TU, provide qualified staff	Done.
	2.01 (f)	5	C			TU obligation for Annual Plan	Done.
	2.02	3	C			State to respect procurement regulations	Recife Office kept procurement process under control and Executing Agency complied with all requests.
	2.06	5	C			Carrying out of Part F of the reformulated Project in accordance with the Operational Manual	Complied with.
	2.08	10	C			Carrying out of a publicity campaign	Complied with.

Covenant Type: 1 Accounts/audit; 2 Financial performance/generate revenue from beneficiaries; 3 Flow and utilization of Project funds; 4 Counterpart funding; 5 Management aspects of the Project or of its executing agency; 6 Environmental covenants; 7 Involuntary resettlement; 8 Indigenous people; 9 Monitoring, review and reporting; 10 Implementation; 11 Sectoral or cross-sectoral budgetary or other resource allocation; 12 Sectoral or cross-sectoral regulatory/institutional action; 13 Other

Status:
 C = covenant complied with
 CD = complied with after delay
 CP = complied with partially
 NC = not complied with
 NYD = not yet due
 SOON = compliance expected in reasonably short time

BRAZIL

MINAS GERAIS RURAL DEVELOPMENT PROJECT
(Loan 2861-BR)

TABLE 8. STATUS OF LEGAL COVENANTS

Agreement	Section	Covenant Type	Present Status	Original Fulfillment Date	Revised Fulfillment Date	Description of Covenant	Comments
Loan	2.08	5	C			Secretary of Treasury designated as Borrower's representative	Complied with.
	3.01 (a)	5	C			Federal commitment to carry out rural credit component	Rural credit component discontinued with Project reformulation. Amendment Letter became effective September 28, 1993.
	3.01 (c)	10	C			Refers to settlement targets as defined in Project Agreement (Section 3.03, see below)	Settlement component discontinued with Project reformulation.
	3.01 (d)	4	C			Federal counterpart funding	Counterpart funds have been provided by the State instead of the Federal Government with Project reformulation.
	3.01 (e)	3	C			Efficient Federal mechanism for passing funds to states	Federal (loan) funds transferred expeditiously by STN to MIR. MIR, however, delayed release of loan funds to the State after change in Ministry's administration.
	3.01 (f) (i) (a)	10	C			Federal commitment to mechanism to carry out rural credit component	Rural credit component discontinued with Project reformulation.

Covenant Type: 1 Accounts/audit; 2 Financial performance/generate revenue from beneficiaries; 3 Flow and utilization of Project funds; 4 Counterpart funding; 5 Management aspects of the Project or of its executing agency; 6 Environmental covenants; 7 Involuntary resettlement; 8 Indigenous people; 9 Monitoring, review and reporting; 10 Implementation; 11 Sectoral or cross-sectoral budgetary or other resource allocation; 12 Sectoral or cross-sectoral regulatory/institutional action; 13 Other

Status:
 C = covenant complied with
 CD = complied with after delay
 CP = complied with partially
 NC = not complied with
 NYD = not yet due
 SOON = compliance expected in reasonably short time

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TABLE 8. STATUS OF LEGAL COVENANTS (CONTINUED)

Agreement	Section	Covenant Type	Present Status	Original Fulfillment Date	Revised Fulfillment Date	Description of Covenant	Comments
Loan (Continued)	3.01 (f) (i) (b)	3	C			Participating bank obligation to provide adequate working capital	Since rural credit was discontinued, there was no need for participating banks.
	3.01 (f) (i) (c)	5	C			Participating bank obligation to provide monthly information	Same as 3.01 (f) (i) (b)
	3.01 (h)	8	C			Ensure action on Amerindian problem	See comments on Project Agreement, 2.01 (h)
	3.02	3	C			SUDENE's obligation to provide the Bank with advance Annual Plan, final budgets and changes in planning procedures, all in timely fashion, for comment.	Complied with. With Project reformulation, it became the State's responsibility to prepare and present to the Bank a proposal for the Annual Plan.
	4.01	1	C			Audit of Special Accounts	Complied with.
	4.02 and 4.03	1	C			Accounts and audit of Central Bank.	Complied with.
Project	2.01 (a) (b)	5	C			State commitment to execute Project with due diligence and in accordance with Plan of Action.	Complied with.

Covenant Type: 1 Accounts/audit; 2 Financial performance/generate revenue from beneficiaries; 3 Flow and utilization of Project funds; 4 Counterpart funding; 5 Management aspects of the Project or of its executing agency; 6 Environmental covenants; 7 Involuntary resettlement; 8 Indigenous people; 9 Monitoring, review and reporting; 10 Implementation; 11 Sectoral or cross-sectoral budgetary or other resource allocation; 12 Sectoral or cross-sectoral regulatory/institutional action; 13 Other

Status:
C = covenant complied with
CD = complied with after delay
CP = complied with partially
NC = not complied with
NYD = not yet due
SOON = compliance expected in reasonably short time

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TABLE 8. STATUS OF LEGAL COVENANTS (CONTINUED)

Agreement	Section	Covenant Type	Present Status	Original Fulfillment Date	Revised Fulfillment Date	Description of Covenant	Comments
Project (Continued)	2.01 (c)	5	C			Mutual obligations of State and executing agency, defined by contract	With Project reformulation, State line agencies were no longer expected to participate in the Project, except on a voluntary basis (accredited agents).
	2.01 (d)	5	C			Quarterly reporting by TU	With Project reformulation, State has submitted to the Bank and to SUDENE reports based on the newly created SSMP.
	2.01 (e)	5	NYD			Reorganize reporting by TU	Same as above.
	2.01 (g)	5	C			TU obligation for Annual Plan	Done for FY94.
	2.01 (h)	8	C			Resettlement of non-Amerindians	The problem of Xahriabo was reasonably well-handled.
	2.02	3	C			State to respect procurement regulations	Reasonable response.
	2.06	5	C			Carrying out of Part F of the reformulated Project in accordance with the Operational Manual	Complied with.
	2.08	10	C			Carrying out of a publicity campaign	Reinforcement in some areas still required.

Covenant Type: 1 Accounts/audit; 2 Financial performance/generate revenue from beneficiaries; 3 Flow and utilization of Project funds; 4 Counterpart funding; 5 Management aspects of the Project or of its executing agency; 6 Environmental covenants; 7 Involuntary resettlement; 8 Indigenous people; 9 Monitoring, review and reporting; 10 Implementation; 11 Sectoral or cross-sectoral budgetary or other resource allocation; 12 Sectoral or cross-sectoral regulatory/institutional action; 13 Other

Status:
C = covenant complied with
CD = complied with after delay
CP = complied with partially
NC = not complied with
NYD = not yet due
SOON = compliance expected in reasonably short time

TABLE 9. ECONOMIC COSTS AND BENEFITS

Introduction:

1. The Internal Economic Rate of Return (IERR) was not re-calculated for the original projects (pre-reformulation) for the reasons stated in Part 1, para. 86. The reformulated projects were part of a program of targeted interventions based on a demand-driven mechanism of which the costs, benefits and rates of return could not be determined *ex ante*. IERRs were not calculated for the reformulated projects and thus there is no "re-calculation" of the IERRs for this ICR. For a discussion of the results of recent FAO/World Bank analyses (1995, 1996 and 1997) of socio-economic benefits and cost-effectiveness of sample productive subprojects under the NRDP, see Part 1, paras. 86-89 and Tables 9A-9G below. Tables 9A and 9B are based on sample data from all ten states in the NRDP (the 1995 analysis); Tables 9C-9G are based on state-specific data for Pernambuco and Piauí from the 1996 analysis; and Minas Gerais is derived from the 1997 analysis.

TABLE 9A. SOCIO-ECONOMIC BENEFITS OF PAC/FUMAC SUBPROJECTS BY MAIN SUBPROJECT TYPE^{1/}
(All Northeast States, 1995)

Subproject Type	Total No. of Approved Subprojects	Total No. of Beneficiaries	Cost per Beneficiary (US\$)	Total No. of Jobs Created	Total Net Incremental Income per Year (US\$ '000)	Total Net Incremental Income per Beneficiary per Year (US\$)	Total Incremental Crop Area (ha)	Internal Econ. Rate of Return (%)	Cost Effectiveness	
									Total Investment per Job Created (US\$)	Social Benefit-Cost Ratio ^{2/}
Infrastructure										
- Rural water supply	976	138,592	142	--	--	--	--	--	--	--
- Rural electrification	758	36,384	400	--	--	--	--	--	--	--
Productive										
- Manioc mills	380	39,520	297	11,460	14,890	377	7,900	> 50	1,273	> 3.0
- Tractors for communal use	198	15,048	438	9,900	11,587	770	36,080	> 50	816	> 3.0
- Rice mills	62	2,932	234	398	968	330	1,220	> 50	2,895	> 3.0
- Clothes making	88	7,360	109	1,583	1,400	190	--	> 50	925	> 3.0
Social										
- Health-related house improvement	116	8,236	461				--	--	--	--
- Day care centers	29	2,639	290		605	229	--	> 50	--	> 3.0

^{1/} Based on data from **sample subprojects** in all ten NDRP states.

^{2/} Real discount rate is 10%.

Source: Bank/FAO Evaluation, 1995

TABLE 9B. FINANCIAL SUSTAINABILITY ANALYSIS OF PRODUCTIVE SUBPROJECTS^{1/}
(All Northeast States, 1995)

Item/Subproject	Manioc Mills	Rice Mills	Farm Tractors
Number of associations	380	62	198
Average net income per association (US\$) ^{2/}	3,737	2,131	6,631
Average cost of subproject (US\$)	20,000	11,000	33,300
<u>Average number of years:</u>			
Of useful economic life (years)	12	12	10
To build replacement fund (years) ^{3/}	5	5	5

^{1/} Based on data from **sample subprojects** in all ten NRDP states.

^{2/} Total income from association fees and cost recovery net of all O&M and other recurrent costs.

^{3/} Number of years after which the association has accumulated enough funds to replace the original investment, which is considerably less than the useful economic life of the investment. The real interest rate is assumed to be 10%.

Source: Bank/FAO Evaluation, 1995

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TABLE 9C. SOCIO-ECONOMIC BENEFITS OF PAC/FUMAC SUBPROJECTS BY MAIN SUBPROJECT TYPE ^{1/}

Subproject Type	Total No. of Approved Subprojects	Total No. of Beneficiaries (Families)	Cost per Beneficiary Family (US\$)	Total No. of Jobs Created	Total Net Incremental Income per Year (US\$ '000)	Total Net Incremental Income per Beneficiary per Year (US\$)	Total Incremental Crop Area (ha)	Internal Rate of Return		Cost Effectiveness		
								Financial (%)	Economic (%)	Total Investment per Job Created (US\$)	Social Benefit-Cost Ratio ^{2/}	
<u>Infrastructure</u>												
- Rural electrification (39%) ^{3/}	482	30,107	445	--	--	--	--	--	--	--	--	--
- Rural water supply (10%) ^{3/}	121	22,806	159	--	--	--	--	--	--	--	--	--
<u>Productive</u>												
- Tractors for communal use (12%) ^{3/}	151	9,362	409	3,443	2,979	318	32,918	>50	>50	1,095	1.3	
- Manioc mills (4%) ^{3/}	47	2,350	168	483	634	270	1,786	>50	>50	1,535	1.3	
- Small-scale irrigation (2%) ^{3/ 4/}	30	2,457	362	1,145	3,290	1,339	840	>50	>50	457	2.3	
<u>Social</u>												
- Health-related house improvements (7%) ^{3/}	85	8,840	228	--	--	--	--	--	--	--	--	--

^{1/} Total no. of subprojects implemented, total no. of beneficiaries and cost per beneficiary obtained from State database (SSMP). Jobs created, net incremental income, incremental crop area, IRRs and cost-effectiveness estimated based on sample subprojects surveyed in that category.

^{2/} Real discount rate is 10%.

^{3/} Percentage of all subprojects approved in the State.

^{4/} Only one subproject could be surveyed in this category.

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NORTHEAST RURAL DEVELOPMENT PROJECT - PERNAMBUCO
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TABLE 9D. FINANCIAL SUSTAINABILITY ANALYSIS OF PRODUCTIVE SUBPROJECTS

Item/Project	Manioc Mill	Farm Tractor
Number of associations	47	151
Average net income per association (US\$) ^{1/}	2,227	4,685
Average cost of subproject (US\$)	21,195	31,124
<u>Average number of years:</u>		
Of useful economic life (years)	12	10
To build replacement fund (years) ^{2/}	7	5

1/ Total income from association fees and cost recovery net of all O&M and other recurrent costs.

2/ Number of years after which the association has accumulated enough funds to replace the original investment, which is considerably less than the useful economic life of the investment. The real interest rate is assumed to be 10%.

Source: Bank/FAO Evaluation, 1996

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NORTHEAST RURAL DEVELOPMENT PROJECT - PIAUI
(Loan 2762-BR)

TABLE 9E. SOCIO-ECONOMIC BENEFITS OF PAC/FUMAC SUBPROJECTS BY MAIN SUBPROJECT TYPE ^{1/}

Subproject Type	Total No. of Approved Subprojects	Total No. of Beneficiaries (Families)	Cost per Beneficiary Family (US\$)	Total No. of Jobs Created	Total Net Incremental Income per Year (US\$ '000)	Total Net Incremental Income per Beneficiary per Year (US\$)	Total Incremental Crop Area (ha)	Internal Rate of Return		Cost Effectiveness		
								Financial (%)	Economic (%)	Total Investment per Job Created (US\$)	Social Benefit-Cost Ratio ^{2/}	
<u>Infrastructure</u>												
- Rural water supply (32%) ^{3/}	509	34,701	163	--	--	--	--	--	--	--	--	--
- Rural electrification (22%) ^{3/}	343	24,696	396	--	--	--	--	--	--	--	--	--
- Rural road rehabilitation (11%) ^{3/}	164	29,848	166	--	--	--	--	--	--	--	--	--
<u>Productive</u>												
- Clothes making (2%) ^{3/}	26	780	551	754	456	100	n/a	33	n/a	570	1.4	
<u>Social</u>												
- Health-related house improvement (5%) ^{3/}	70	5,600	412	--	--	--	--	--	--	--	--	--
- Rehabilitation of rural health posts (1%) ^{3/}	8	936	257	--	--	--	--	--	--	--	--	--

^{1/} Total no. of subprojects implemented, total no. of beneficiaries and cost per beneficiary obtained from State database (SSMP). Jobs created, net incremental income, incremental crop area, IRRs and cost-effectiveness estimated based on sample subprojects surveyed in that category.

^{2/} Real discount rate is 10%.

^{3/} Percentage of all subprojects approved in the State.

Note: There was insufficient data to perform a financial sustainability analysis for Piaui.

Source: Bank/FAO Evaluation, 1996

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NORTHEAST RURAL DEVELOPMENT PROJECT - MINAS GERAIS
(Loan 2861-BR)

TABLE 9F. SOCIO-ECONOMIC BENEFITS OF PAC/FUMAC SUBPROJECTS BY MAIN SUBPROJECT TYPE ^{1/}

Subproject Type	Total No. of Approved Subprojects	Total No. of Beneficiaries (Families)	Cost per Beneficiary (US\$)	Total No. of Jobs Created	Total Net Incremental Income per Year (US\$ '000)	Total Net Incremental Income per Beneficiary per Year (US\$)	Total Incremental Crop Area (ha)	Internal Rate of Return		Cost Effectiveness		
								Finan. (%)	Economic (%)	Total Investment per Job Created (US\$)	Social Benefit-Cost Ratio ^{2/}	
<u>Infrastructure</u>												
- Rural electrification (48%) ^{3/}	878	27,189	1,030									
- Rural water supply (12%) ^{3/}	225	12,540	512	--	--	--	--	--	--	--	--	--
<u>Productive</u>												
- Tractors for communal use (15%) ^{3/}	282	20,634	437	6,000	3,646	177	35,250	37	>50 ^{4/}	1,539	1.2	
- Manioc mills (2%) ^{3/}	29	1,443	534	863	374	259	435	>50	>50 ^{4/}	766	1.8	
<u>Social</u>												
- Health-related house improvement (4%) ^{3/}	70	2,442	939	--	--	--	--	--	--	--	--	--
- Community schools rehabilitation (1%) ^{3/}	17	2,501	158	--	--	--	--	--	--	--	--	--

^{1/} Total no. of subprojects implemented, total no. of beneficiaries and cost per beneficiary obtained from State database (SSMP). Jobs created, net incremental income, incremental crop area, IRRs and cost-effectiveness estimated based on sample subprojects surveyed in that category.

^{2/} Real discount rate is 10%.

^{3/} Percentage of all subprojects approved in the State.

^{4/} 28% and 33%, respectively, when shadowing public funds.

Source: Bank/FAO Evaluation (draft), 1997

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NORTHEAST RURAL DEVELOPMENT PROJECT - MINAS GERAIS
(Loan 2861-BR)

TABLE 9G. FINANCIAL SUSTAINABILITY ANALYSIS OF PRODUCTIVE SUBPROJECTS

Item/Project	Manioc Mill	Farm Tractor
Number of associations	29	282
Average net income per association (US\$) ^{1/}	23,181	17,994
Average cost of subproject (US\$)	22,800	32,753
<u>Average number of years:</u>		
Of useful economic life (years)	12	10
To build replacement fund (years) ^{2/}	4	3

^{1/} Total income from association fees and cost recovery net of all O&M and other recurrent costs.

^{2/} Number of years after which the association has accumulated enough funds to replace the original investment, which is considerably less than the useful economic life of the investment. The real interest rate is assumed to be 10%.

Source: Bank/FAO Evaluation (Draft), 1997

TABLE 10. BANK RESOURCES: STAFF INPUTS ¹

PERNAMBUCO PROJECT (Ln. 2718-BR)

FISCAL YEAR	STAGE OF PROJECT CYCLE					TOTAL
	Preparation	Appraisal	Negotiations through Board Approval	Supervision	Completion	
STAFF WEEKS						
1986		34.3	3.4	0.1		37.8
1987				32.1		32.1
1988				34.8		34.8
1989				9.3		9.3
1990				7.3		7.3
1991				17.3		17.3
1992				7.6		7.6
1993				11.3		11.3
1994				8.4		8.4
1995				6.8		6.8
1996				3.3		3.3
1997				2.0	3.5	5.5
Total	--	34.3	3.4	140.3	3.5	181.5
US\$'000						
1986		52.1	6.6	0.1		58.8
1987				18.3		18.3
1988				28.2		28.2
1989				16.6		16.6
1990				17.4		17.4
1991				28.7		28.7
1992				17.3		17.3
1993				24.0		24.0
1994				15.2		15.2
1995				8.2		8.2
1996				5.3		5.3
1997				3.2	7.2	10.4
Total	--	52.1	6.6	182.5	7.2	248.4

1. Total costs (labor only) for period 1986 to 1997. Information prior to FY1986 is not available.

Source: COS

TABLE 10. BANK RESOURCES: STAFF INPUTS ¹

PIAUI PROJECT (Ln. 2762-BR)

FISCAL YEAR	STAGE OF PROJECT CYCLE					TOTAL
	Preparation	Appraisal	Negotiations through Board Approval	Supervision	Completion	
STAFF WEEKS						
1985	7.2					7.2
1986	26.2	48.4	5.5			80.1
1987			6.7	7.9		14.6
1988				17.4		17.4
1989				13.5		13.5
1990				14.1		14.1
1991				11.8		11.8
1992				15.1		15.1
1993				15.7		15.7
1994				12.2		12.2
1995				9.4		9.4
1996				16.4		16.4
1997				6.2	3.3	9.5
Total	33.4	48.4	12.2	139.7	3.3	237.0
US\$'000						
1985	13.9					13.9
1986	52.3	74.4	11.0			137.7
1987			12.5	14.2		26.7
1988				35.4		35.4
1989				29.4		29.4
1990				32.6		32.6
1991				21.0		21.0
1992				24.1		24.1
1993				29.7		29.7
1994				21.1		21.1
1995				13.7		13.7
1996				23.2		23.2
1997				8.6	6.0	14.6
Total	66.2	74.4	23.5	253.0	6.0	423.1

1. Total costs (labor only) for period 1985 to 1997. Information prior to FY1985 is not available.

Source: COS

TABLE 10. BANK RESOURCES: STAFF INPUTS ¹

MINAS GERAIS PROJECT (Ln. 2861-BR)

FISCAL YEAR	STAGE OF PROJECT CYCLE					TOTAL
	Preparation	Appraisal	Negotiations through Board Approval	Supervision	Completion	
STAFF WEEKS						
1986	16.3					16.3
1987	32.2	13.9	1.6			47.7
1988				8.4		8.4
1989				6.3		6.3
1990				10.3		10.3
1991				9.6		9.6
1992				10.7		10.7
1993				14.1		14.1
1994				9.4		9.4
1995				6.1		6.1
1996				8.2		8.2
1997				3.2	2.3	5.5
Total	48.5	13.9	1.6	86.3	2.3	152.6
US\$'000						
1986	32.6					32.6
1987	56.8	24.4	3.5			84.7
1988				17.5		17.5
1989				13.6		13.6
1990				21.7		21.7
1991				13.8		13.8
1992				18.5		18.5
1993				22.5		22.5
1994				16.5		16.5
1995				11.7		11.7
1996				11.8		11.8
1997				4.7	4.7	9.4
Total	89.4	24.4	3.5	152.3	4.7	274.3

1. Total costs (labor only) for period 1986 to 1997. Information prior to FY1986 is not available.

Source: COS

TABLE 11. BANK RESOURCES: MISSIONS

PERNAMBUCO PROJECT (Ln. 2718-BR)

Stage of Project Cycle	Month/Year	No. of persons	Days in field	Specialized staff skills represented	Performance Rating		Types of problems
					Impl. Status	Develop. Objectives	
Through Appraisal	7/85	2	20	Ag, AgEc	n/a	n/a	n/a
Appraisal through Board Approval	11/85	6	30	Ag, AgEc, Ec, IrrEng	n/a	n/a	n/a
Supervision	11/86	3	10	Ag, AgEc	2	2	Fin, Man
	7/87	2	9	AgEc	2	2	Fin, Inst
	3/88	5	11	Ag, AgEc, Ec, Eng, IrrEng	2	2	Fin, Man
	5/89	1	11	Ec	2	2	Fin, Man
	11/89	1	19	Ec	2	2	Man
	5/90	2	11	Ec, IrrEng	2	2	Fin
	10/90	2	3	AgEc, IrrEng	2	2	Man
	6/91			Updated 590	3	2	Fin, Man
	6/92			Updated 590	2	1	Fin, Man
	6/93			Updated 590	2	2	Fin, Man
	5/94	1	5	AgEc	S	S	Fin, Man
9/95	1	4	Ag	S	S	Tech	

TABLE 11. BANK RESOURCES: MISSIONS

PIAUI PROJECT (Ln. 2762-BR)

Stage of Project Cycle	Month/ Year	No. of persons	Days in field	Specialized staff skills represented	Performance Rating		Types of problems
					Impl. Status	Develop. Objectives	
Through Appraisal	7/85	2	21	Ag, AgEc	n/a	n/a	n/a
Appraisal through Board Approval	11/85	6	31	Ag, AgEc, Ec	n/a	n/a	n/a
Board Approval through Effectiveness	4/87	2	5	Ag, AgEc	n/a	n/a	n/a
Supervision	6/87	1	12	Ag	4	4	Fin, Inst, Man
	5/88	1	3	FinAn	2	2	Fin
	9/88	4	12	Ag, AgEc, Ec	2	2	Fin, Tech
	4/89	1	12	Ec	3	2	Fin, Man
	10/89	1	2	Ec	3	3	Fin, Inst, Man
	12/89	2	2	Ag, Ec	3	2	Fin, Man
	6/90	3	13	Ag, Ec, IrrEng	3	3	Fin, Inst, Man
	9/90	1	5	AgEc	3	3	Fin, Inst, Man, Tech
	7/91	1	n/a	AgEc	3	2	Fin, Man
	10/91 ^{a/}	1	4	IrrEng	n/a	n/a	n/a
	6/92 ^{a/}	1	3	IrrEng	n/a	n/a	n/a
	6/92			Updated 590	2	1	Man
	4/93	1	n/a	AgEc	2	1	Man
	10/93	1	6	AgEc	2	1	Man
	3/94	1	10	AgEc	S	S	n/a
5/95			Updated 590	S	S	n/a	
10/95	7	4	Ag, AgEc, Anth, Ec, RurDev	U	U	Fin, Inst, Man, Tech	
Completion	6/96		Updated 590		S	S	n/a
	12/96	1	4	AgEc	S	S	n/a

a/ Mission to supervise irrigation component.

TABLE 11. BANK RESOURCES: MISSIONS

MINAS GERAIS PROJECT (Ln. 2861-BR)

Stage of Project Cycle	Month/Year	No. of persons	Days in field	Specialized staff skills represented	Performance Rating		Types of problems
					Impl. Status	Develop. Objectives	
Through Appraisal	3/86	1	3	AgEc	n/a	n/a	n/a
	5/86	3	9	Ag, IrrEng	n/a	n/a	n/a
Appraisal through Board Approval	12/86	5	10	Ec, InstDev, IrrEng	n/a	n/a	n/a
Supervision	12/87	1	11	FinAn	2	2	Fin, Inst, Man
	5/88	1	9	FinAn	2	2	Fin, Inst, Man
	5/89	2	22	Ec, IrrEng	2	2	Fin, Inst, Man
	12/89	1	3	Ec	2	2	Fin, Inst
	5/90	2	10	Ec, IrrEng	3	3	Fin, Man
	10/90	2	5	AgEc, IrrEng	3	2	Fin, Man
	5/91 ^{a/}	1	n/a	AgEc	3	2	n/a
	3/92 ^{b/}	1	19	IrrEng	n/a	n/a	n/a
	9/92	1	9	AgEc	2	1	Man
	6/93 ^{a/}	1	n/a	AgEc	2	1	n/a
	12/93	1	5	AgEc	2	2	Fin
	5/94	1	8	AgEc	U	S	Fin
	5/95			Updated 590	S	S	n/a
	8/95	1	6	AgEc	S	S	n/a
	6/96			Updated 590	S	S	n/a
11/96	1	5	AgEc	S	S	n/a	
Completion	2/97		Updated 590	S	S	n/a	

^{a/} No Aide Memoire or Back-to-Office Report on file.

^{b/} Mission to supervise irrigation component and reformulate project.

TABLE 12. DISBURSEMENT PERFORMANCE OF THE NRDP BY STATE
(US\$ million)

State	Original Loan Amount	Disbursement at Reformulation ^{1/}	Cancellations ^{2/}	Actual Disbursement after Reformulation	Outstanding Balance
Pernambuco	92.0	47.1	20.0	24.9	0.0
Piauí	78.0	30.5	25.0	22.5	0.0
Minas Gerais	55.0	11.2	0.0	39.1	4.7
Total	225.0	88.8	45.0	86.5	4.7

^{1/} Reformulation became effective on September 28, 1993.

^{2/} Cancellation became effective on December 21, 1994.

Source: Bank/FAO Evaluation, 1997

**TABLE 13. NUMBER OF MUNICIPALITIES REACHED BY NRDP
(as of December 31, 1996) ^{1/}**

State	Number of Municipalities ^{2/}					Implemented/completed projects per municipality		
	In the State	In the Project Area	With implemented/completed projects			Total	PAC	FUMAC
			Total	PAC	FUMAC			
Pernambuco	174	167	161	145	16	7.7	7.4	10.3
Piauí	148	123	117	107	10	13.4	13.2	15.2
Minas Gerais	79 ^{3/}	79 ^{3/}	79	61	18	22.5	21.2	26.4
Total	401	369	357	313	44	13.0	12.1	18.7

^{1/} Does not include municipalities reached in final stage of projects.

^{2/} The sum of the PAC and FUMAC municipalities may exceed the total number of municipalities in the project area because some original PAC municipalities later became FUMAC.

^{3/} Including 29 municipalities of Jequitinhonha Valley that were incorporated into the Project in 1996.

Source: Bank/FAO Evaluation, 1997

TABLE 14. AVERAGE COST OF PAC/FUMAC SUBPROJECTS, BY TYPE AND BY STATE

STATE	Average Cost by Type ^{1/2/} (US\$)										
	Manioc flour mill	Farm tractor	Water supply (simplified system) ^{3/}	Water supply (all types)	Small dam	Rural electrifi- cation	Rice processing	House improvement	Small- scale irrigation	Bridge	Clothes making
Pernambuco	24,000	31,000	29,000	30,000	29,000	28,000	30,000	28,000	29,000	28,000	25,000
Piauí	5,843	30,825	16,800	8,722	22,343	26,383	8,859	30,897	17,701	27,969	18,428
Minas Gerais	26,591	31,998	28,517	27,400	24,157	31,911	--	32,745	18,351	31,444	19,839
Alagoas	12,425	18,735	16,050	23,625	9,615	27,202	--	--	27,970	28,850	--
Bahia	7,416	19,918	14,544	14,500	13,154	20,514	10,897	18,870	18,970	20,391	22,727
Ceará	18,526	37,676	--	21,840	27,324	22,650	24,273	25,298	29,616	28,114	26,910
Maranhão	8,364	25,117	21,358	24,305	15,859	28,539	10,618	30,593	24,316	21,264	21,964
Paraíba	15,015	38,439	18,288	16,844	19,139	24,957	7,693	--	13,572	--	13,172
Rio Grande do Norte	18,692	33,700	17,200	22,172	28,603	19,407	--	--	25,020	18,337	20,796
Sergipe	11,300	29,035	30,500	29,601	--	23,692	--	24,437	--	25,935	--
Total	14,817	29,644	21,362	21,901	21,022	25,326	15,390	27,263	22,724	25,589	21,105

1/ Costs include beneficiary contributions.

2/ Nature and technical specification for the same type of project vary within and among states.

3/ *Sistema simplificado de abastecimento de água*: water supply system usually comprising a high tank used to store water originating from different sources (surface or pumped groundwater) and a simple gravity distribution network.

Source: Bank/FAO Evaluation (Draft), 1997

TABLE 15. NUMBER OF SUBPROJECTS IMPLEMENTED AND BENEFICIARIES REACHED

State	Original Target	Target at Reformulation		Achievement after Reformulation	
	Beneficiaries ¹	Subprojects Implemented	Beneficiaries ²	Subprojects Implemented	Beneficiaries ²
Pernambuco	73,000	700	17,500	1,237	136,855
Piauí	65,000	1,200	30,000	1,569	187,390
Minas Gerais	38,000	1,100	27,500	1,844	114,225
Alagoas	32,400	750	18,700	742	81,873
Bahia	80,000	3,000	75,000	2,701	418,175
Ceará	122,800	2,000	50,000	3,025	208,830
Maranhão	73,000	1,600	32,000	3,065	324,890
Paraíba	37,800	920	23,000	2,308	149,633
Rio Grande do Norte	35,000	700	17,500	769	71,300
Sergipe	17,500	650	16,200	600	86,182
Total	574,500	12,620	307,400	17,753	1,779,320

¹ Number of families benefiting from the project at full development.

² Number of families benefitting from PAC/FUMAC subprojects implemented.

IMPLEMENTATION COMPLETION REPORT

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROGRAM

PERNAMBUCO, PIAUI AND MINAS GERAIS PROJECTS

(Loans 2718-BR, 2762-BR and 2861-BR)

BORROWER CONTRIBUTION

PRORURAL

**Government of the State of Pernambuco
Secretariat of Planning
Rua Benfica, 1006 Madalena
Recife-PE - CEP 60720-001
Telephone: (081) 445-1566
Fax: (081) 445-2885 Telex: (081) 2108)**

GAB.SUP. N° 93/97

Recife, June 6, 1997

Dr. Gustavo Rodrigues
Secretariat of International Affairs
Ministry of Planning and Budget
Brasília, DF

Dear Sir:

We wish to acknowledge receipt of the draft "Implementation Completion Report" regarding the Northeast Rural Development Program for the States of Pernambuco, Piauí and Minas Gerais, Loans 2718-BR, 2762-BR and 2861-BR, respectively, signed by the Federative Republic of Brazil and the International Bank for Reconstruction and Development -IBRD.

We have finished reading the report, particularly with respect to the State of Pernambuco, and its content unmistakably expresses the reality of the facts that occurred during the implementation of the Program, and faithfully depicts the difficulties, lessons and progress that were provided by this important initiative.

Thus, we have no objection to the content of this report, and wish to add that the lessons learned in its implementation were very important for an entire generation of technicians, producers and institutions and especially for the generation of subsidies for a new generation of development projects in the Northeast.

Sincerely,

(signed)
WALMAR ISACKSSON JUCÁ
Superintendent

cc: Dr. Túlio Barbosa, World Bank

GOVERNMENT OF THE STATE OF PIAUÍ
SECRETARIAT OF PLANNING
PCPR TECHNICAL UNIT

Dr. Túlio Barbosa
Head, Recife Office - IBRD
Recife, PE

Dear Sir:

I refer to the document titled "Implementation Completion Report - Brazil - Northeast Rural Development Program - Pernambuco, Piauí, and Minas Gerais (May 22, 1997)" to express the State's complete agreement with the terms of the report whose description and evaluation duly reflect the process developed in the Piauí PAPP, and serve as an instrument of reference and support for the future activities of the new Rural Poverty Alleviation Project to be implemented in this State with the IBRD's support.

Sincerely,

(signed)

Gil Borges dos Santos
Executive Director of the TU-PCPR

cc: Dr. Marcelo Vieira Siqueira - SEAIN

FACSIMILE TRANSMISSION

State Secretariat of Planning and General Coordination

Rua Bernardo Guimarães, 2371 Tel.: (031) 339-3333

Telex: 318211

3014-082 Belo Horizonte/MG-BRAZIL

CGC 18.787.903/0001-20 State Registration Exempt

Our Ref. N° Date: 06/06/97 Origin Fax: (031) 226-9007

To: WORLD BANK

Attn: DR. TÚLIO BARBOSA

City: BRASÍLIA, DF Country: BRAZIL Fax: (061) 329-1010

From: RÚBIO DE ANDRADE/DIRECTOR OF SUDENOR/MG

Total number of pages, including this cover sheet:

Authorization: Operator initials/time:

Notes:

Dear Sir:

I refer to the document entitled IMPLEMENTATION COMPLETION REPORT - BRAZIL - NORTHEAST RURAL DEVELOPMENT PROGRAM - PERNAMBUCO, PIAUÍ AND MINAS GERAIS PROJECTS (May 22, 1997) to express total agreement with its content. The State of Minas Gerais is not in disagreement with the description and evaluation of the Northeast Rural Development Program in the State, contained therein.

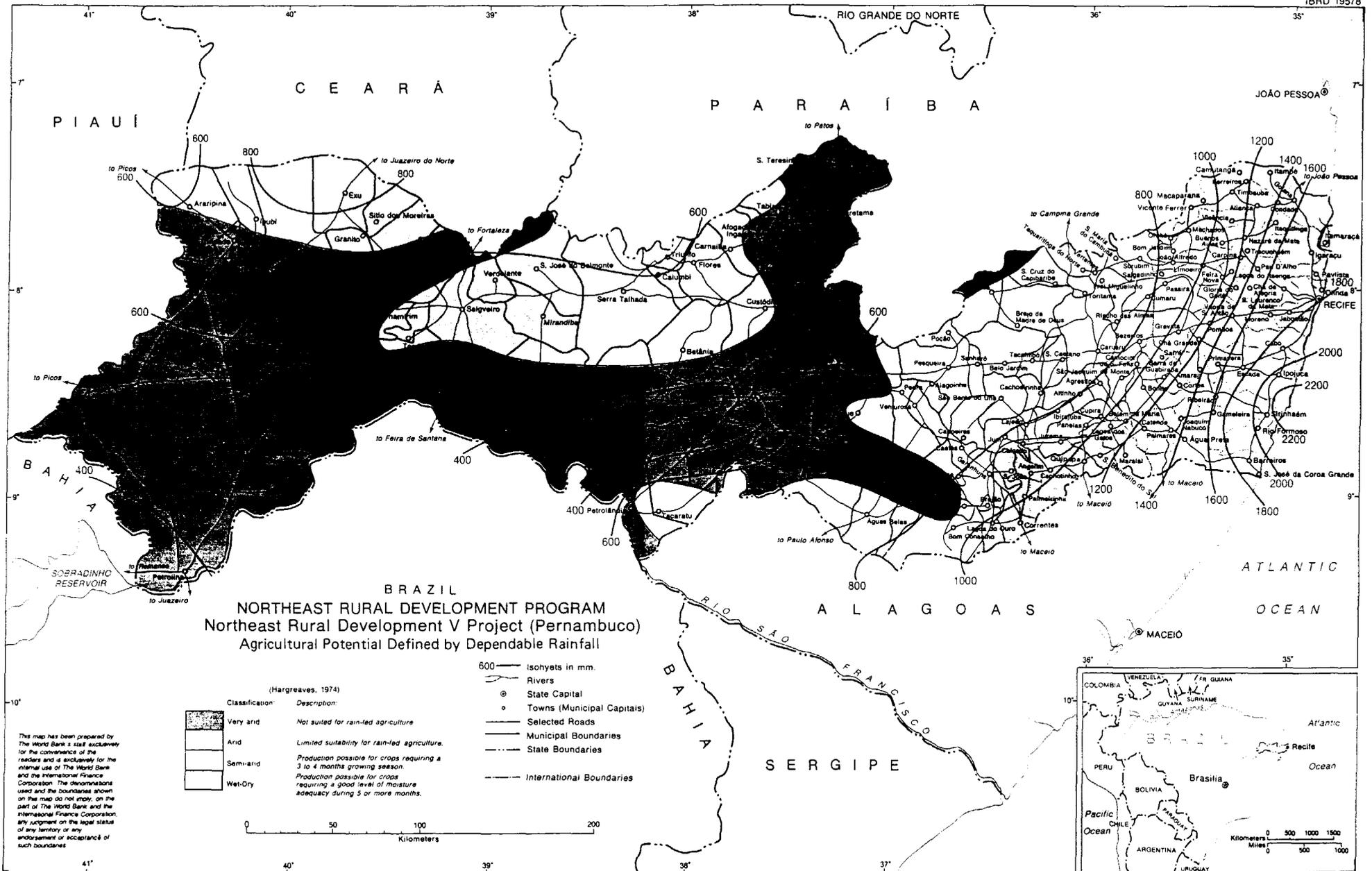
Sincerely,

(signed)

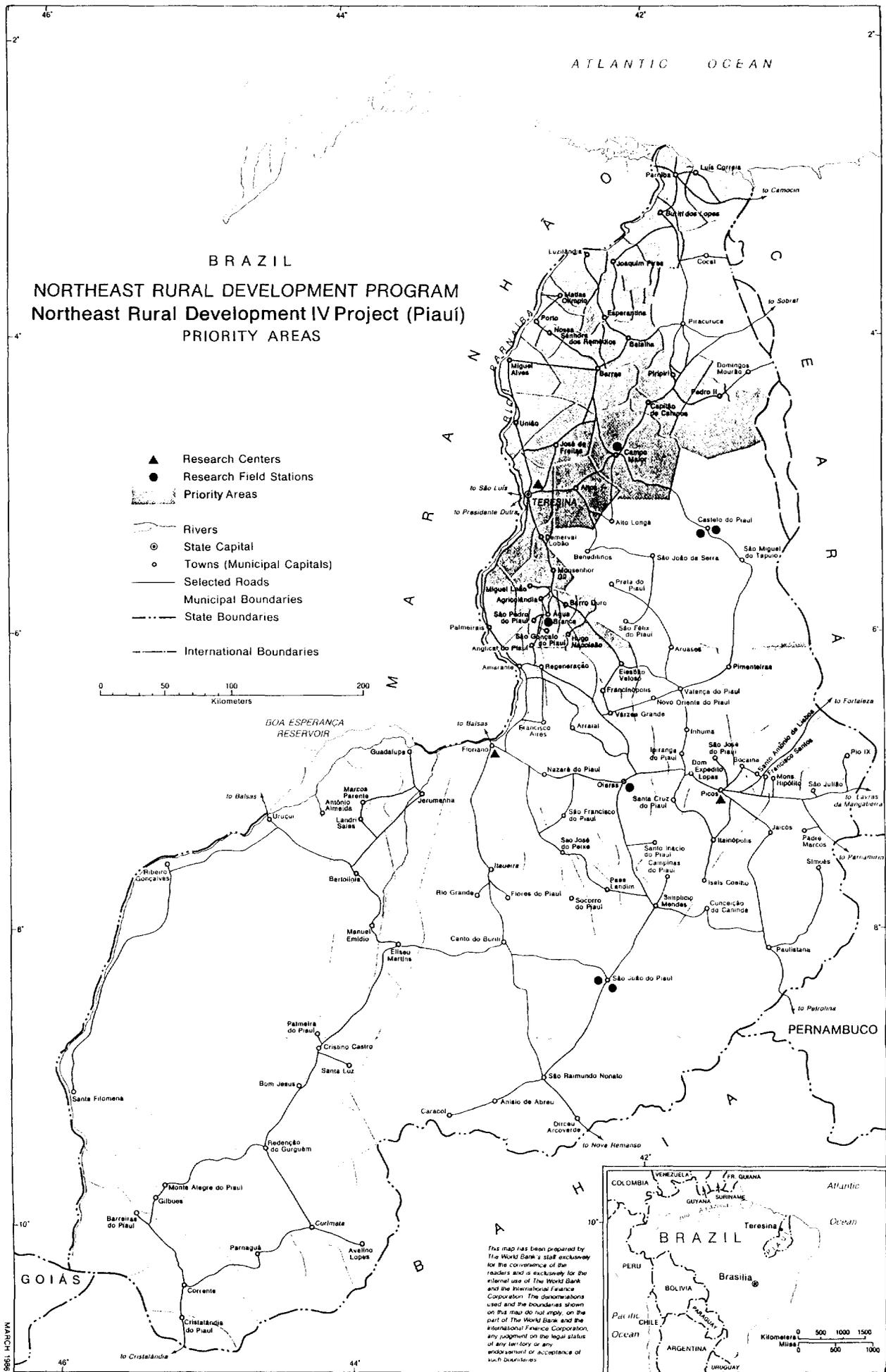
RUBIO DE ANDRADE

Director of the Development Bureau for Northern Minas Gerais (SUDENOR)

cc: Dr. Marcelo Vieira Siqueira - SEAIN

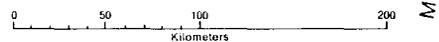


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BRAZIL
 NORTHEAST RURAL DEVELOPMENT PROGRAM
 Northeast Rural Development IV Project (Piauí)
 PRIORITY AREAS

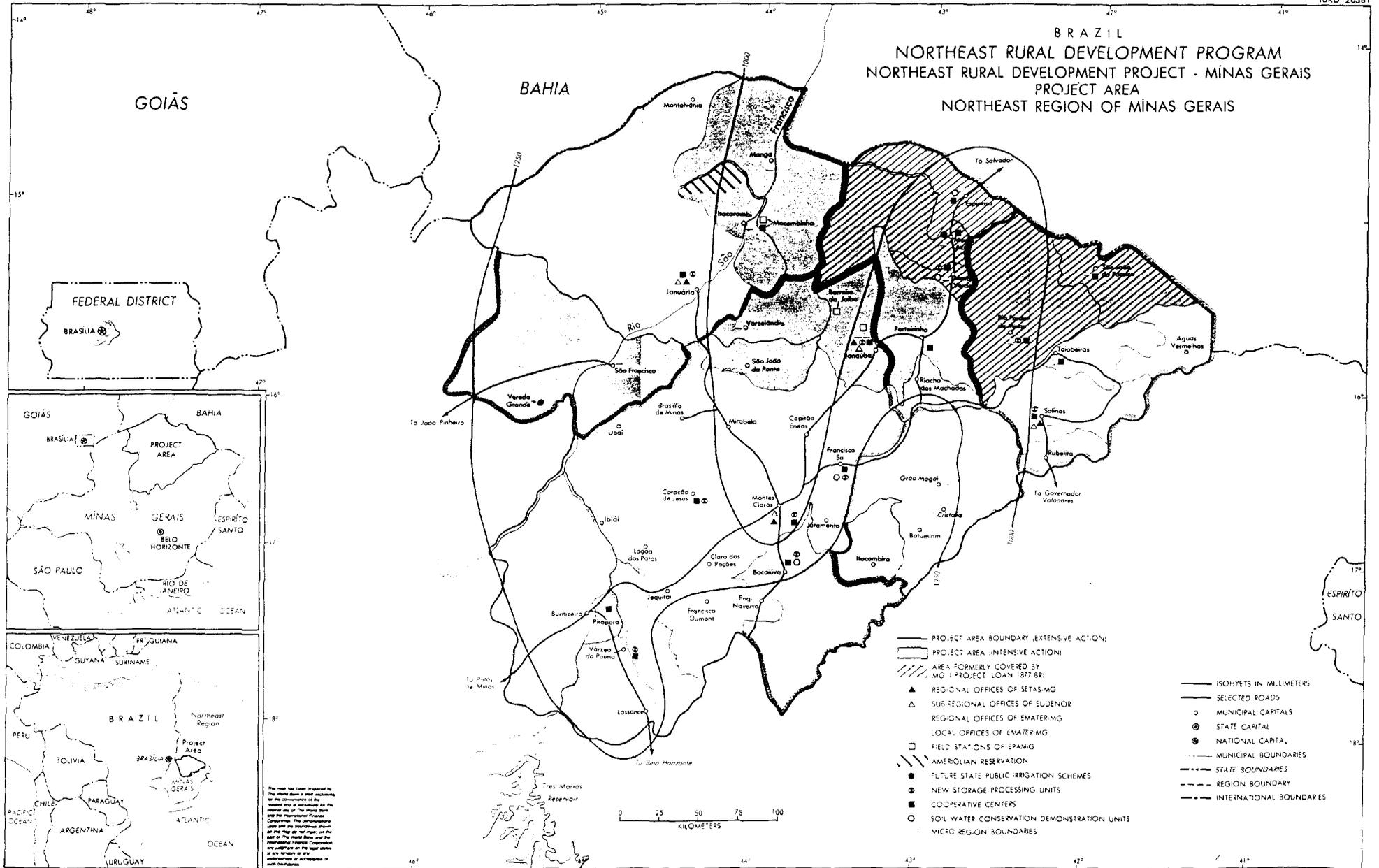
- ▲ Research Centers
- Research Field Stations
- ▨ Priority Areas
- Rivers
- ⊙ State Capital
- Towns (Municipal Capitals)
- Selected Roads
- Municipal Boundaries
- State Boundaries
- International Boundaries



BOA ESPERANÇA RESERVOIR



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