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Report No. 16765

IMPLEMENTATION COMPLETION REPORT

BRAZIL

**NORTHEAST RURAL DEVELOPMENT PROGRAM
PARAIBA, MARANHÃO AND ALAGOAS PROJECTS**

(Loans 2860-BR, 2862-BR and 2863-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:	Paraíba (December 1986)	US\$1/Cz\$14.20
	Maranhão (December 1985)	US\$1/Cr\$8.891
	Alagoas (December 1986)	US\$1/Cz\$14.20
Rate at Completion:	Paraíba (December 31, 1996)	US\$1/R\$1.0381
	Maranhão (December 31, 1996)	US\$1/R\$1.0381
	Alagoas (September 30, 1996)	US\$1/R\$ 0.981

WEIGHTS AND MEASURES

Metric System

¹ A new currency, the Cruzado, was introduced in 1986, followed by another new currency, the Real, in 1994

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ABBREVIATIONS AND ACRONYMS

AACC	Association for the Support of Rural Communities
APCR	Support for Small Rural Communities
CPATSA	Center for Agricultural Research on the Semi-Arid Tropics
EMBRAPA	Brazilian Agricultural Research Company
FAO	Food and Agriculture Organization
FINSOCIAL	Social Investment Fund
FUMAC	Pilot Municipal Community Schemes
FUNAI	National Indian Foundation
IERR	Internal Economic Rate of Return
IICA	Inter-American Institute for Agricultural Cooperation
IRD	Integrated Rural Development
MINTER	Ministry of the Interior
NGO	Non-Governmental Organization
NRDP	Northeast Rural Development Program
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
RPAP	Rural Poverty Alleviation Program (successor to NRDP)
SAR	Staff Appraisal Report
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
TOR	Terms of Reference
TU	Technical Unit

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PARAIBA, MARANHÃO AND ALAGOAS PROJECTS

(Loans 2860-BR, 2862-BR and 2863-BR)

PREFACE

1. This is the Implementation Completion Report (ICR) for three projects under the Northeast Rural Development Program (NRDP) in the States of Paraíba (Ln. 2860-BR), Maranhão (2862-BR) and Alagoas (2863-BR). Loans in the amounts of US\$60.0 million, US\$84.0 million and US\$42.0 million, respectively, were approved by the Board on June 30, 1987 for all three states. The projects became effective on October 15, 1987(Paraíba), December 18, 1987 (Maranhão) and October 19, 1987 (Alagoas).
2. The three Loans closed as follows: Paraíba and Maranhão on December 31, 1996 and Alagoas, September 30, 1996. The original Closing Dates were March 31, 1996 for all three states. Final disbursement took place as follows: Paraíba (May 19, 1997 except for an amount of US\$230,000 already in the pipeline), Maranhão (May 13, 1997), and Alagoas (February 4, 1997). Cancellation of Loan balances (Paraíba US\$0.6 million, Maranhão US\$3.8 million and Alagoas US\$19.8 million) was still pending at the time of ICR preparation.
3. This ICR was prepared by Anna Roumani, Consultant, Natural Resources, Environment and Rural Poverty Operations Division, 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 1.
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: the 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 sq. km. 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 Paraíba, Maranhão and Alagoas 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 aggregate, the special programs, sectoral projects and Federal irrigation projects designed to reduce rural poverty, had had a negligible impact.

Project Objectives

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

3. **Project Components.** To meet these objectives, the original projects (except for Maranhão) 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. The NRDp-Maranhão contained an additional component of environmental protection: to protect and manage the Mirador State Park, an area of 500,000 ha covering the watershed of the Itapecuru River

4. Hindsight and current practice tend to color 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 *Projeto Nordeste*). Numerous components and agencies required effective services and coordination. Administrative, financing and implementing arrangements were complex, multilayered and centralized, and left little room for beneficiary involvement. While there were some variations in project design between states, the projects could have gone further 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 apparent uncritical acceptance of the capacities of implementing agencies, although the 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 NRD. 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 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, the elimination of public agencies from 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)**, where 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 and priority-setting, which fosters participation and transparency.

Implementation Experience and Results

10. **Achievement of Objectives Prior to Reformulation.** In common with the other Northeast states, the projects in Paraíba, Maranhão and Alagoas were unable to achieve their original objectives. Public investment and project counterpart funding were severely reduced while public agencies encountered rising fiscal deficits, macro-economic distortions and successive reform programs. The NRD's centralized "machinery" and delivery of services by public agencies ran counter to the new Constitution of 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 here successfully achieved their development objectives following reformulation, albeit experiencing fiscal, institutional and/or political difficulties which affected implementation to varying degrees. First, effective targeting caused these projects to reach their intended beneficiaries, including the landless, in numbers vastly exceeding estimates at either their original appraisal or at reformulation. Investment subprojects -- categorized as productive, infrastructure and social -- are generating employment and economic growth, and improving the incomes and welfare of large numbers of rural poor, including women. Poor communities have demonstrated their willingness to share the cost of investments and maintain them, fostering 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 PAC and FUMAC have been the most important, and often the only, source of funding for basic needs.

12. Second, community empowerment -- specifically through FUMAC which stresses participation, transparency and local decision-making -- prospered under these projects, although FUMAC expansion in Alagoas was minimal due to political circumstances in that state. However, the mobilization of communities for FUMAC incorporation was gaining ground in Alagoas in the final phase, and similar efforts were in progress in Paraíba and Maranhão, where FUMAC expansion was dynamic. 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 had sustainable political effects. The now numerous community associations congregate a large number of voters, and the political community is aware of their influence.

13. Third, the projects have earned strong support from state and municipal governments. They are valued as a critical resource for investment in poor communities; as representing potential, significant cost-savings (on average 30% to 40%) on the provision of infrastructure and water supply by public agencies; and, as generating tax revenue for state and municipal governments from the sale of productive outputs. State project units are providing services more rapidly in response to communities better equipped to demand and choose. Fiscal crises in all three states affected their counterpart funding performance. In Paraíba and Maranhão, an increasing number of municipalities were willing to share the state counterpart funding obligation, seeking greater accountability and cost-effectiveness from state governments in return. In Alagoas, the minimal expansion of FUMAC effectively cut off this avenue for the state, whose acute fiscal crisis meant that about US\$19.8 million, or 47% of the Loan, remained for cancellation.

14. Achievements under the Maranhão environmental protection component, which was carried through into the post-reformulation period, were substantial and included establishing guard posts at strategic locations, education programs for local populations, reforestation of degraded areas, demarcation of an additional 300,000 ha as an environmental preserve, and successful resettlement of affected communities.

15. **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 built 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. Corrective measures to improve sustainability were prioritized in the later stages of these projects, and are stressed in new Rural Poverty Alleviation Projects in six Northeast states.

16. **Project Costs, Financing and Timetables.** Loans totaling US\$186.0 million were made to the States of Paraíba (US\$60.0 million), Maranhão (US\$84.0 million) and Alagoas (US\$42.0 million) to benefit some 143,000 small farm families, about 24% of the NRDp target population. Cancellation of final Loan balances totaling about US\$24.2 million was pending at the time of ICR preparation. Actual project costs were, respectively: US\$96.0 million, US\$149.4 million and US\$42.1 million. The reformulation resulted in a markedly different allocation of project financing relative both to categories and costs estimated at appraisal.

17. **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 for both covenants in the three states. 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 Paraíba and Maranhão but fiscal crisis prevented Alagoas from complying with its counterpart funding obligations.

18. **Bank Performance.** Preparation and appraisal of the original projects showed a thoughtful attempt to innovate and deal with risk in a difficult environment, but 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. Realistically however, the Bank would have been clairvoyant to foresee the full nature and implications of pivotal events which came to affect project execution, especially after 1988.

19. 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 methodology and making it work. Clearly there was no bureaucratic method in the Bank at the time to bring project reformulation to rapid closure.

Constitutional changes were a reality from 1988, counterpart funding shortages were evidently chronic, and project execution was troubled. Yet, reformulation did not occur until seven years after effectiveness, a situation unlikely to occur under the Bank's implementation culture of the 1990s.

20. The Bank, through the PAC/FUMAC model, has made a major technical contribution to Brazil, based on its own and other diverse 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.

21. 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, and also a key characteristic of the new model of participatory, decentralized, demand-driven investments in which 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.

22. The World Bank Recife Office (established in 1974), has been fundamental to the implementation and supervision of the reformulated NRDP. Its three task managers are 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 individual state projects and serves as a monitoring tool for the Bank and the state TUs.

23. **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. The states also delayed the release of resources to the associations even when federal Loan funds were available, whether for fiscal, political or other reasons. The flow of funds improved, especially in 1995/96. The federal, state and municipal governments' willingness to support a radically new approach to rural poverty alleviation was instrumental in the success of these projects.

24. 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.

25. The TUs are crucial for the success of this model. TU performance 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 problems -- overstaffing, centralized project management and inadequate field presence, supervision, and/or monitoring and evaluation -- variously affected each of the TUs. In all three states reviewed, the capacity and calibre of the TU improved greatly in 1995 following elections-based administrative turnover. The excellent performance of the Paraíba TU merits note. In the initial stages after reformulation TUs unfamiliar with and tentative about the new decentralized, participatory lending, tended to assume responsibility for the subproject planning and implementation cycle at the expense of the local context and beneficiary participation. While the outcome of such intervention could prove favorable on occasion, the critical participatory element was missing.

26. **Project Outcome.** Staff Appraisal Reports for the original projects contain an internal economic rate of return (IERR) for all three states of 14%, reflecting in part their lack of resources. It is implicit from the history of these projects and their radical redesign in 1993 that they were unsatisfactory, and their IERRs pre-reformulation 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 would not be determined with any certainty *ex ante* and thus IERRs were not calculated, or accordingly, re-calculated. 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 and productive subprojects in all NRDp states. 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), the results are positive and promising.

28. Evaluations of the two states of Paraíba and Maranhão show that: (i) internal economic rates of return (IERR) for sample productive subprojects (small-scale irrigation, small ruminants production, forage grinders, cereals processing including manioc flour and

rice mills) ranged from 12% to over 50% in financial terms, and 37% to over 50% in economic terms; (ii) in terms of the sensitivity of the IERRs to the distorting effects of publicly-funded grants, stemming 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, exceeding 14% in all cases, except one; and (iii) the initial investment per additional job created was low and benefit/cost ratios were satisfactory. In Alagoas, lack of reliable data did not allow similar analyses.

29. Financial sustainability analysis for various productive subprojects in Paraíba and Maranhão indicated that user fees charged by beneficiary associations adequately covered operation and maintenance (O&M) and the costs of replacing worn equipment. The net income of beneficiary associations was found to be sufficient, after deducting all O&M expenses, to cover replacement of the productive investments analyzed, in periods significantly shorter than their useful life. Supporting documentation/data for the above findings are held by the Bank's Recife Office.

30. Each of the three projects is rated Satisfactory reflecting its achievement of development 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 remained quite traditional. Deteriorating fiscal and macro-economic conditions had a devastating effect on counterpart funding and implementation progress. The centralized project design could not function as envisaged when faced with momentous changes in the political economy which demanded a more decentralized, participatory development process. Thus, while the Bank could not control the larger forces impinging upon the project, the project design itself generated 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. Several of the states, including among the reviewed group Alagoas, must still overcome political and other constraints impeding full acceptance of the participatory model, but commitment is there and progress is being made. Finally, 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 now turning its attention to other major constraints in the sector.

33. Among the project-specific findings were the following. FUMAC proved more effective than PAC 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. While FUMAC has proven capable of eroding the traditional “clientelism” of the Northeast, it cannot alone transform long-standing political, economic and social patterns (especially if its expansion is impeded). 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. The environmental impact of the generally small-scale PAC and FUMAC subprojects was insignificant but certain subprojects are likely to have environmental side-effects needing attention. Finally, 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 none was prepared. The same is true for monitoring of future operations. Nevertheless, prospects for maximizing project benefits appear good. The States, their Governors and the Technical Units 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 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 should promptly undertake the needed changes, including complete reformulation if necessary, which will enable it to succeed in 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.** 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. 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;
- (h) **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 in rural areas needs creativity;
- (i) **Supervision** is indispensable for subproject and overall project success and should be strengthened, involving 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 in a poverty context should not imply “softer” analysis of their feasibility, cost-effectiveness and rates of return. Eligibility should hinge on maximizing their beneficiaries; strict guidelines should govern their operations; and user fees should be charged 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 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 essential planning and management tools;
- (l) **Standardization of documents, designs and unit costs** simplifies subproject preparation and evaluation, facilitates procurement, prevents faulty design and reduces processing bottlenecks;
- (m) **Dissemination of “best practices”** such as the FUMAC councils in Paraíba, the preparation of pilot municipal development plans in Maranhão and successful experiences in other states, through information exchanges

among TUs, at training seminars and workshops, can hasten learning and reward innovation; and

- (n) **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 to find practical, operational ways of identifying and monitoring communities which are close to achieving this status.

IMPLEMENTATION COMPLETION REPORT

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROJECTS

PARAIBA, MARANHÃO AND ALAGOAS PROJECTS (Loans 2860-BR, 2862-BR and 2863-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 Paraíba, Maranhão and Alagoas 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 out-migration 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 **Paraíba** covers some 56,400 km² and is the third smallest state in the Northeast. Annual rainfall ranges from 400-700 mm, irregularly distributed and with prolonged dry periods in the semi-arid areas, to 600-1,000 mm in the transitional zone, to 1,000-1,500 mm in the humid coastal and inland, elevated regions. The state has two major rivers (Piranhas and Paraíba); underground water is plentiful but deep and of poor quality in the interior. At the time of appraisal (1987), about 48% of Paraíba's population of three million was rural, and decreasing due to poverty-induced out-migration. Some 90% of the agricultural workforce earned less than the minimum wage (about US\$657 per year). Agriculture accounted for only 23% of state GDP. Rural living conditions were precarious, with two thirds of the rural population illiterate, high infant mortality, lack of basic services, and extremely skewed

¹

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

access to land. Small producers were growing mostly foodcrops and the production of cotton, sugarcane, pineapple and livestock dominated. Lacking adequate technology and other inputs, yields were low and incapable of generating even minimal working capital.

3. **Maranhão.** With a total area of about 328,700 km², Maranhão is the second largest state in the Northeast and the only one lying mostly outside the "drought polygon." Located in a transition zone between the semi-arid Northeast and the tropical Amazon, average annual rainfall ranges from 2,500 mm in the northwest, to 1,600 in the northeast and center, to 1,200 mm in the south. Vegetation accordingly varies from tropical forest to native palm (*babassu*) to the stunted vegetation of the elevated plains (*cerrado*). At the time of appraisal, some 80% of the state's economically active population was engaged in agriculture, which generated about 32% of state GDP. Average per capita income (1981) was around US\$320 compared to US\$760 for the Northeast and US\$1,700 for the entire country. Rural areas were characterized by extremely limited access to basic services, and high rates of malnutrition, infant mortality and illiteracy. Land ownership was markedly lopsided: 83% of known rural producers were non-owners or lacked secure title; 85% of recorded holdings were less than 10 ha and occupied only 5% of total agricultural land. Small farmers used few modern inputs, practicing shifting subsistence farming, while agriculture was dominated by extensive livestock and traditional food production.

4. **Alagoas.** Occupying an area of only 27,730 km², Alagoas is the second smallest state in the Northeast. Average annual rainfall varies from 1,500 mm in the coastal area (*zona da mata*) to about 700-900 mm in the *agreste* which covers some two-thirds of the state. Soils are fertile near the São Francisco River which borders its southwestern zone, but in the *agreste* have low productivity. Total population at appraisal was 1.9 million, of which 52% was rural, and population density was the highest in the Northeast, at 68 persons/km². Average rural per capita income was below the relative poverty level of about US\$330, and living conditions poor, with high rates of infant mortality and limited access to treated water and sanitation. Land ownership was skewed: 75% of all farms were under 10 ha and occupied only 10% of total agricultural land. Agricultural production was dominated by extensive sugarcane cultivation. Tobacco was also an important crop which, along with basic food crops, was mostly grown by small farmers.

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). 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. It 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 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 fulfilled their poverty reduction objectives.

Project Objectives and Design under the Original NRD^P

6. **Objectives.** The main objectives as stated in the Memorandum of the President (MOP) were to: (i) increase regional agricultural production and productivity; (ii) generate income and employment for low-income farm families; (iii) increase the states' capacity to provide efficient agricultural services to small farmers; (iv) increase community participation in all phases of the development process; and (v) promote water resource development and technology generation and diffusion to reduce small farmers' vulnerability to drought (and pest outbreaks in the case of Paraíba). The NRD^P was also intended to strengthen SUDENE (Superintendency for the Development of the Northeast) to regionally coordinate, monitor and evaluate the NRD^P; and to promote regional agricultural research appropriate for small farmers.

7. **Components.** The ten NRD^P projects were with few exceptions virtually identical in design, the differences between them arising from project management and the objective circumstances in each state. 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. The NRD^P-Maranhão contained an additional component of environmental protection: to protect and manage the Mirador State Park, an area of 500,000 ha covering the watershed of the Itapecuru River. The projects' target population was low income farmers of which about 143,000 were expected to be reached. At least 20,000 additional families would benefit from water supply, community development and other components.

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, and the APCR itself). 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. The pilot APCR component was a synthesis of many small experimental actions worldwide, Bank-financed and other.

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. This cumbersome 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 cost portion of total project costs;² 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 time period.

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). Apart from APCR and water supply activities, however, there was insufficient room or opportunity for beneficiaries to express their needs and influence the shape and outcome of project activities.

11. Despite the risk analysis asserting 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 during negotiations 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). It is also evident that projects and programs under *Projeto Nordeste* were expected to have interactive effects with the NRDp but inadequate attention was given to the implications of their not materializing to provide those effects.

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 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.

13. However, the counterpart funding difficulties which arose revealed several issues: the 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 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.

²

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

14. The macro-economic and policy context, perhaps the dominant factor affecting project implementation in all three states, 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.³

15. As documented in the Mid-Term Review of the NRD (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 defined groups. Such an approach assumed quite 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 federal and regional executing agencies. Project components thus devolved to independent sub-programs of the agencies, which tailored work programs to their own interests, not those of the projects.

16. The NRD 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.⁴

17. The beneficiary population of "small farmers" targeted was quite heterogeneous. 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 beneficiaries and components was unworkable and was ignored.⁵ Differentiation of overall project design between states would have been prudent. The Program adopted a homogeneous approach to the projects, not calibrating

³ Dynamics of Rural Development in Northeast Brazil: New Lessons from Old Projects, OED 1991

⁴ NRD, Mid-Term Review, November 1991

⁵ Ibid

them sufficiently to the institutional, political and agronomic environment in each state, with projects constructed from a menu of activities eligible for financing.⁶

18. The rural credit component also encountered design-related problems: 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 the 30% subsidy. Project personnel appear to have not been aware that the credit terms remained fairly attractive even under the circumstances.⁷

19. **The Loans.** Loans totaling US\$186.0 million (about 22% of the NRD^P total) and financing 50% of project cost net of taxes, were made to the States of Paraíba, Maranhão and Alagoas to directly benefit around 143,000 families, 24% of the total NRD^P target population of about 575,000 small farm families. The combined estimated total project cost for the three projects was US\$382.6 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, in turn, delayed implementation and reduced project purchasing power due to the inflation effects.

Reformulation of the NRD^P

21. Despite successful experiences in different States and activities, the original NRD^P foundered in all ten states and did not achieve its basic objectives. The fundamental problem was the escalating macro-economic and fiscal crisis in Brazil and the incompatibility of the projects' centralized structure and administrative arrangements with the rapidly changing political, economic and social context. This was borne out by a comprehensive Mid-Term Review (1991) and an OED study,⁸ which prompted an agreement between the Bank and Borrower to reformulate the Program, a protracted process which lasted until 1993.

⁶ Dynamics of Rural Development in Northeast Brazil: New Lessons from Old Projects, OED, December 16, 1991

⁷ Ibid

⁸ Ibid

22. The focus 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.⁹

23. **New Objectives.** Project objectives were re-defined 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 heavy 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 from June to November 1992 (e.g., water resource development, agricultural research, seed production, extension, credit and marketing services), the APCR component was transformed, and the role of the executing agencies was either reduced or eliminated. Remaining funds would be allocated to productive¹⁰ 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 components from the earlier phase of the projects and included only subprojects at a relatively advanced stage of preparation or implementation.¹¹

25. From November 1992 onwards, reformulation entered its second phase.¹² The emphasis shifted markedly towards further decentralization (towards the states, municipalities and communities), transparency in funds allocation and greater beneficiary control over project identification and implementation. Drawing upon the successful APCR component and similar schemes elsewhere in Latin America, the NRDP was converted into a community-based development program, dropping all components

⁹ Study of Popular Participation in the Northeast, C Kottak and A Costa, University of Michigan, February 7, 1994

¹⁰ The emphasis was still agricultural production and income generation

¹¹ Kottak and Costa: Ibid

¹² 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.

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).¹³

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.¹⁴ 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. Communities in a FUMAC municipality could not use the PAC mechanism as well, nor was it necessary to have had PAC in order to adopt FUMAC -- in this sense, the system was not graduaive. 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 substantially 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 include 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 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.

¹³ Memorandum June 29, 1994.

¹⁴ Project Municipal Councils are a separate entity from the municipal governments arising out of the normal political process, although the development process naturally involves considerable interaction between the two.

29. These two programs became the core of the reformulated NRD^P. 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 which assisted the TU to mobilize and organize communities and help these to define priorities for investment. This evolved over time to the point where, under the successor projects to the NRD^Ps, the FUMAC Municipal Councils, not the TUs, now have the responsibility of approving subprojects submitted by their communities. With certain modifications (including a new, pilot version of FUMAC further decentralizing resource allocation and control in selected, eligible municipalities), this is the model for projects under the new Rural Poverty Alleviation Program (RPAP) in the Brazilian Northeast.

30. The reformulated Program became effective on September 28, 1993, and became fully operational in all ten Northeast states (Sergipe was reformulated a second time to conform to the new model) 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 Paraíba, Maranhão and Alagoas were, based on the original Loan amounts (and excluding the initial deposit into the Special Account), about 28% disbursed,¹⁵ leaving a balance of US\$131.2 million, about 43% of the combined NRD^P disbursement lag at that time.

Achievement of Project Objectives

31. There is broad agreement that prior to 1993, the projects in Paraíba, Maranhão and Alagoas were not achieving their objectives, in common with the rest of the states under the NRD^P. A major recovery occurred as a result of reformulation and the broad elements of their outcome *vis a vis* their re-defined objectives, are summarized below.¹⁶ Individual states encountered different challenges, constraints and unique experiences, the more important of which are discussed further on in this report.

32. **Socio-Economic Benefits for the Rural Poor.** During its three years of implementation, the reformulated NRD^P reached around 1.8 million families. In the three states reviewed, well over 556,000 targeted families (about 2.8 million people), including landless, benefited from community-based development through the generation of

¹⁵ Paraíba 36%; Maranhão 27%; and Alagoas 25%.

¹⁶ Evaluations of the reformulated NRD^P include the following: World Bank/FAO, "The Reformulated NRD^P: Performance and Evaluation, February 1995; World Bank/FAO, "NRD^P: 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 NRD^P 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 NRD^P, 1996.

economic growth and improved quality of life. Increased income and employment opportunities for various family members including women are emerging, raising in some instances quite remarkably, the living standards of beneficiary families. This trend is expected to gain momentum as productive subprojects, most of which are fairly recently implemented, consolidate and mature.¹⁷

33. 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% before) and subproject benefits, in general, remained with targeted populations. Investments satisfied priority needs 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 there are early signs in many municipalities that out-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.

34. **Support for Community Empowerment.** All three state TUs intensified efforts, especially 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, more profound in Paraíba and Maranhão, than Alagoas. The FUMAC municipal councils are a viable means of empowering the rural poor. The now numerous community associations congregate many voters, as the political community has noted. Further, the State Technical Units have developed standard designs for a broad range of subprojects to simplify preparation; established technical and cost standards to foster quality and sustainability; and sought the services of diverse entities to provide technical assistance and supervision to the communities.

35. **Involvement of State Governments in the Program.** The projects in Paraíba and Maranhão have received strong political support from the states and municipalities; in Alagoas the evolution of that support has been troubled but progress is being made. Their political benefits aside, the projects are valued as a supplementary resource (and possibly the only assured one) for investment in basic community needs; as generating tax revenue for State and Municipal governments from the marketing of productive outputs,¹⁸ and as

¹⁷ Brazil: Northeast Rural Development Program - Performance and Evaluation, World Bank/FAO, March 14, 1996 and May 1997 (Draft).

¹⁸ For instance, in Maranhão, the sales tax (ICMS -- the principal tax applicable to marketed products) on rice and manioc flour produced currently by the 140 rice mill subprojects and the 80 manioc flour mills and remaining for sale after family consumption are estimated to amount to about US\$0.7 million per year.

representing potential, significant cost-savings (on average, 30%-40%) on infrastructure and water supply installed by public agencies.¹⁹ Provision of services by the state project units and participating public enterprises, e.g., electricity and water (services commonly requested by communities) has become more rapid and efficient in response to rural communities prepared to be more demanding. The State Governments, while experiencing diverse and sometimes serious problems, especially fiscal, have responded, increasingly with the aid of municipalities, by supplying counterpart funds more promptly and accelerating disbursements -- a sharp break from past performance. Those municipalities willing to share the counterpart burden have sought from State Governments in return, greater accountability and cost-effectiveness.²⁰

The Implementation Record

36. **State Performance Prior to Reformulation.** Major policy changes and economic uncertainties created a climate in which the original projects could not be implemented as 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/administrative costs.

37. Second, the new Constitution of 1988 shifted power and fiscal resources 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 rooted in 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 of the projects.

38. 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

¹⁹ Data in various states confirm this finding. Thus, in Maranhão, rural water supply systems funded by NRDp cost on average US\$23,000 compared to US\$32,000 when installed by CAEMA, the water parastatal; in the case of rural electrification, NRDp costs, depending on the kind of network, ranged from US\$3,750 and US\$17,100 per km versus the US\$6,300-US\$19,400 per km charged by the electricity company (CEMAR); for rural road rehabilitation, the cost was US\$6,000 under NRDp versus US\$9,700 per km when executed by the state Roads Department.

²⁰ World Bank Policy Research Paper No 1498, August 1995.

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.

39. 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 tended to serve different target groups without being mutually reinforcing, dispersing resources and impact, while measures to foil the access of large farmers to project benefits were ineffective.²¹

40. The Mid-Term Review of 1991 revealed that the implementation performance among specific states 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.²² 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 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.

41. **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 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.

42. 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

²¹ Memorandum, May 28, 1993.

²² 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).

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 a high proportion of loan funds relative to actual investments in poor communities.

43. State Performance Since Reformulation. NRD^P disbursements accelerated following reformulation. The release of Loan funds by the Federal Government was intermittently delayed but the situation improved from mid-1995 after new state governments addressed the administrative and political constraints responsible. State counterpart funding was frequently scarce in all three states, resulting in special efforts to familiarize municipal governments with the program and promote municipal sharing of the state counterpart obligation, with positive results in Maranhão and Paraíba where municipal resources were increasingly leveraged through the FUMAC mechanism (about 5% and 1% of total subproject costs, respectively, in Maranhão and Paraíba). The acute fiscal crisis and institutional problems in Alagoas, as well as minimal expansion of FUMAC, meant that counterpart funding was seriously delayed and final disbursement was only half the original Loan. Notably, beneficiary coverage under the reformulated projects in all three states greatly exceeded targets set at the original appraisal and at reformulation (Table 15).

44. Promotional/information campaigns intended to inform communities about the program were delayed and not sufficiently comprehensive in all three states, which affected the early course of the projects and created some distortions in subproject prioritization and selection, and sustainability. Nevertheless, demand for the program from the communities was strong, presenting a challenge for the limited cohort of technical agents in each state. Once subproject proposals were approved, completion took on average, about four months. Lags between approval and completion derived mainly from TUs lacking funds (loan and counterpart) immediately available to transfer to the communities, and management problems in the TUs.

45. Typically, communities demanded water and electricity investments first, subsequently choosing productive and other investments. This was the case region-wide. The diversity of subprojects demanded -- about 100 different types whose relative importance varied state to state -- illustrates the deprivations of rural poverty. Certain kinds predominated: (i) in infrastructure -- rural water supply and electrification (the latter making up 55% of subprojects in Paraíba, 42% in Alagoas and 21% in Maranhão) and rural road rehabilitation (about 26% in Maranhão); (ii) among productive subprojects -- small-scale irrigation, cereals processing, manioc flour mills, small ruminants production, tractors for communal use, grain threshers and other small agricultural equipment, clothes-making; and (iii) among social subprojects -- multi-purpose community centers, health-related house improvement, sanitation, rural school rehabilitation and day care centers.

46. 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 far less so as the projects evolved, elected state and municipal officials acted as intermediaries between the communities and state projects units. Mayors

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. In general however, and with the exception of Piaui, the incidence of political intermediation (between communities and TUs and Municipal Councils) was not a distinguishing feature of any of the NRDp states.

47. Evaluations suggest that communities' inability to influence the process stemmed from the adequacy or otherwise of information about project rules and mechanisms and about eligible subprojects. On occasion, information campaigns were less effective than direct communication between political leaders and the communities, which tended to skew their choices towards subprojects favored by the state. Nevertheless the participation of state and local leaders can be positive and it should not be assumed that such investments were not also prioritized by the communities themselves. Rural electrification subprojects in all three states were viewed favorably as a critical pre-requisite for economic and social activity.²³

48. The issue boils down to preserving transparency and curbing negative political influence. It is also clear that 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.²⁴ Supervision missions in the three states monitored information availability and dissemination and repeatedly stressed its importance in mission Aides Memoire; it is also a prominent feature of the new Rural Poverty Alleviation Projects in the Northeast.

49. The average cost of subprojects, both PAC and FUMAC in the three states was highly variable due to differences in design and technical specifications. There is no discernible pattern relative to each other or the entire program (see Part II, Table 14). Costs were relatively lower in Paraíba possibly because the communities tended to request financing for lower cost investments in order to maximize the number of subprojects and/or simply because some productive subprojects typically requested (forage grinder and cereal thresher) required very low cost equipment. In general, whether PAC or FUMAC, infrastructure and social subprojects tended to have a lower cost per beneficiary by virtue of their benefiting a larger number of people.

50. In general, infrastructure subprojects implemented by the communities themselves (directly or through small local firms) were markedly less expensive -- some 30% on average -- than those executed by government agencies or contractors. Moreover, the NRDp essentially substituted for costlier state programs in many of the states. Several cases illustrate this. In Maranhão, the costs of rural road rehabilitation were generally

²³ 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 the perceived lack of sustainability of certain subprojects or the belief that certain social subprojects might be better served under alternative targeted programs.

²⁴ Memorandum, April 9, 1996 and MIT evaluation.

70% cheaper than those obtained through public bidding. In Paraíba, construction of small works and irrigation systems managed by the associations was 50% less expensive than those executed by public agencies. In terms of substitution, the rural electrification network installed by the NRD in Paraíba in 1995 alone, was equivalent to that developed by the previous State Government under other programs over a period of four years. In Alagoas, the costs of acquiring equipment for road paving and water storage averaged 30% less than similar purchases by the mayors. Cost consciousness came naturally to associations eager to expand their subprojects, while on the other hand, suppliers tended to boost prices charged to public agencies. A resume of state performance follows.

51. **Paraíba.** In a pattern fairly typical of its peers, the Paraíba project, known locally as *Projeto Cooperar*, was launched in a promising manner, initially encountered certain generic problems stemming from managerial errors and political/financial conditions in that state, rapidly gained momentum as it and the TU evolved, and showed tremendous dynamism in the two final years. Early difficulties sprang from the TU's decision to commit the majority of project funds to productive subprojects, many of which had managerial and operational problems. There were also early misunderstandings about the role of the municipalities in the FUMAC program. The TU released funds to the associations through the mayors, who essentially claimed ownership of items purchased. In some instances, mayors purchased equipment and executed works on behalf of the beneficiaries, reducing beneficiary ownership and hence sustainability. Ineffective information/publicity campaigns were a major factor in these and similar situations. Bank missions worked with the TU to eliminate such occurrences and ensure broad understanding of the mechanism. In general, political intermediation was negligible in Paraíba.

52. Physical and financial evolution of the project was surprisingly good given the fiscal situation in 1995 and resulted from: the State Government's determination to find the counterpart funds and to fully disburse the Loan; participation by the mayors in counterpart funding; and, the speed and efficiency of the TU in approving proposals and liberating funds. Adherence to project guidelines and standards was good.

53. **FUMAC in Paraíba.** The most successful application of FUMAC was seen in Paraíba, where close to 40% of all subprojects approved were delivered under this mechanism (compared to 8% in Alagoas, reflecting the political circumstances in that state). The spread of FUMAC is explained by the long tradition of associative action in the state, backed by a favorable political environment and the TU's sustained efforts to mobilize and train the communities. FUMAC success and the organizational efficiency of the Municipal Councils led to an average of 34 subprojects being processed and approved in each FUMAC municipality, while PAC municipalities received only 9 subprojects.

54. Paraíba, like Maranhão, established FUMAC-type Councils in the municipalities, capable institutions which functioned in a mature and transparent way even when local officials were indifferent. Many had considerable operational and organizational autonomy and were already potential candidates for FUMAC-P under the RPAP. The TU successfully avoided political interference in the Councils by reinforcing authentic

representation of the communities on them; organized seminars for FUMAC Council members, producing a valuable inter-change of experiences and operational plans for the Councils; and re-structured FUMAC Councils found to be ineffective or lacking transparency.

55. At the time of reformulation, Paraíba had disbursed about US\$21.4 million of the original Loan amount of US\$60.0 million. The annual rate of disbursement after 1994 was about US\$12.0 million per year. Final disbursement amounted to US\$59.4 million, and the Loan was all but fully-disbursed. The project financed 2,308 subprojects -- almost 1,400 more than the reformulation target -- of which 1,455 were PAC (63%) and 853 FUMAC (37%), benefiting about 150,000 rural families in 171 municipalities, well over four times the number of beneficiaries anticipated at reformulation. Of these subprojects, some 74% represented small rural infrastructure, 23% were productive ventures and 3% were social investments. Investments totaled US\$47.6 million and averaged about US\$318 per beneficiary family. Beneficiary contributions totaled US\$4.8 million equivalent. The aggregate impact has been a significant, measurable and visible improvement in the quality of life and well-being, and income and employment opportunities, as detailed below.

56. **Subproject Investments.** Eight types of subprojects accounted for almost 80% of all subprojects approved in Paraíba: (i) about 1,263 **rural electrification** subprojects are benefiting well over 64,000 families, not only improving their living conditions but also permitting income-generating productive activities, such as the production of high value crops,²⁵ with visible wellbeing effects on the local communities; (ii) the 264 **rural water supply** subprojects are benefiting some 23,000 rural families, reducing their vulnerability to the cyclical and protracted drought characteristic of Paraíba (where the State and affected municipalities spent over US\$4.0 million -- equivalent to the total cost of all the permanent water supply systems financed in the state under the NRDp -- in just 10 months of 1993/94 to provide trucked water) and saving the time and effort spent in daily water collection, mostly by women; (iii) **small -scale irrigation** is part of a tradition of irrigation in Paraíba: the NRDp financed simple infrastructure and equipment for small communal schemes. Some 4,200 farm families are involved in 79 such subprojects, which have on occasion, experienced technical problems and marketing constraints; (iv) some 54 **small-scale cereals (rice or maize) processing** subprojects benefited about 6,800 families, and 21 new **manioc flour mills** were financed for another 1,200 families; (v) obtaining **small-scale agricultural equipment** for collective use is also a priority in Paraíba as shown by the 55 such subprojects implemented. Of these, forage grinders, a popular, low-cost

²⁵ Bank/FAO: NRDp - Performance and Evaluation (Draft) 1997. An illustrative financial and economic analysis was undertaken for a group of electrification subprojects which have prompted complementary investments, financed through a special credit program of Banco do Nordeste, for maracuja production in a municipality in the northern part of the state. The analysis considered as subproject benefits only the maracuja production, while taking into account the cost of additional credit-based investments in irrigation infrastructure and equipment. This is a good example of a low-cost NRDp infrastructure subproject (about US\$140 per person) which beneficiaries could exploit to increase family income and living standards.

equipment, benefited some 2,000 small livestock producing families; (vi) 44 subprojects promoting **small ruminants production** contributed to better nutrition and increased incomes of some 3,500 rural families; (vii) fishing colonies -- some comprising indigenous groups -- in coastal areas use artisanal methods for subsistence fishing. About 31 **artisanal fisheries** subprojects benefited about 700 poor fishing families and are expected to increase fishermen's production and income. However, external factors such as fish availability, wide swings in market prices and competition from commercial fishermen have affected income potential; and (viii) **multi-purpose community centers** (41 subprojects benefiting 3,700 families) constituted the principal type of social subproject financed in Paraíba.

57. **Maranhão.** The NRDPMaranhão, known locally as *Projeto Comunidade Viva*, was launched vigorously: counterpart funding was timely and adequate; the TU was reorganized; and all 12 planned FUMAC Councils rapidly established. However, difficulties in executing the required information campaign and in accrediting agents to disseminate its essentials meant beneficiaries had faulty understanding of the program and its guidelines, including their cost-sharing obligation. EMATER was unwilling to assume this role because the NRDPM no longer covered the expenses of executing agencies. In addition, excessive documentation requirements and bureaucratic procedures for the formation of associations discouraged the participation of the poorest and delayed subproject approvals, although the State made commendable efforts to maintain good standards.

58. The 1994 election season disrupted the normal flow of funds and project execution temporarily ceased following a change in the State Secretary of Planning. The situation improved in 1995 with State counterpart and Federal Loan funds being provided smoothly. Field supervision picked up following the formation of six ad hoc supervision teams to visit subproject sites upon release of funds to identify and overcome emerging problems, and the hiring by the TU of specialist staff to address technical problems. Training events were conducted for FUMAC Councils and community leaders.

59. In the final year, the State worked actively to ensure adequate counterpart at a time of fiscal crisis, involving the municipalities in providing funds through signed agreements and over time, imposing their contribution as a condition for NRDPM participation. Maranhão was the best example of financially pressed state governments being bailed out by the municipalities, and demonstrated the capacity of the program to leverage financial resources. However, this practice on occasion penalized poorer municipalities; made the NRDPM vulnerable to political haggling; and contributed to the concentration of subprojects in just 14 municipalities (10% of those eligible) which received about 35% of all NRDPM funds in the state.

60. **FUMAC in Maranhão.** The FUMAC mechanism was employed in diverse, innovative and instructive ways in Maranhão as the State Government tried hard to foster growth and employment. Rapidly establishing the required 12 FUMAC Councils and faced with serious counterpart funding shortages, the State promoted municipal participation in both the execution and financing of the program which resulted in the

rapid formation of another 31 Councils. Many of these were hastily established, lacked appropriate training and knowledge and were not genuinely representative. Their performance was deficient, especially in subproject selection and approval, and about 40% of these Councils were shut down in 1996 for evaluation and restructuring. The remaining Councils received training through workshops and exchanges of experiences.

61. A selected group of 14 FUMAC Councils graduated into special "decentralized" FUMACs with legal autonomy, their own bank accounts, the right to release funds directly to the beneficiaries and oversee their use, provide technical assistance and supervision, and authorize payments to contractors. They anticipated, and would be appropriate candidates for, the FUMAC-P pilot being launched under the RPAP. Enthusiasm for FUMAC translated in Maranhão (and Paraíba) into "FUMAC-like" councils in formerly PAC municipalities with local priorities being discussed and joint decisions being made on subprojects for submission to the TUs. Further, Maranhão also pioneered the preparation of municipal development plans in NRDp municipalities, employing TA from IICA and the TU. The output of a collaborative effort involving local government and civil society, the plans represented a major learning opportunity to analyze local potential and constraints, identify priorities and possible sources of funding (including the NRDp).

62. **Amerindian Councils.** A notable achievement was the establishing of an indigenous peoples' FUMAC Council in Barra do Corda comprising representatives of various ethnic groups living in FUNAI-demarcated reserves under conditions of extreme poverty and subject to continuous conflicts over land with squatters, loggers and cattle ranchers. The level of autonomy, organization, discipline and performance was remarkably good. The Council endorsed and submitted to the TU some 35 community subprojects divided about equally between infrastructure and productive investments. Only four of these proposals were approved for financing before Closing due to the slowness of the TU and the logistics of traveling to the Amerindian areas.

63. Also on behalf of indigenous communities, the NRDp financed under PAC, 24 subprojects benefiting about 8,000 people in the poorest villages of the Guajajara nation. Manioc mills, housing improvements and small irrigation subprojects are being implemented and operated under full control of the Amerindian associations who contract their own TA for the irrigation schemes. Concrete steps were also taken to settle conflicts at the Cana Brava-Guajajara Indian Reserve which had caused numerous deaths. The State expropriated an area of 4,000 ha for the settlement of 400 families, former occupants of the reserve, and provided basic services (electricity and water supply). The NRDp financed three complementary subprojects in the settlement area (small roads, housing improvements, and community agricultural equipment) to support the settlement and secure its sustainability.

64. **Environmental Protection.** Achievements under the environmental component, which was carried through into the post-reformulation period, were substantial and included: establishing guard posts at strategic locations; education programs for local populations; reforestation of degraded areas; demarcation of an additional 300,000 ha as an environmental preserve; and the successful resettlement of affected communities.

65. At the time of reformulation, Maranhão had disbursed about US\$22.8 million of the original Loan of US\$84.0 million. The annual rate of disbursement after 1994 showed striking improvement at about US\$28.0 million per year (rising from US\$1.3 million in 1993 to US\$30.0 million in 1996). The strong state commitment, and willingness of many municipalities to share counterpart funding in spite of the chronic fiscal crisis, explains this performance. Final disbursement amounted to US\$80.2 million and cancellation of some US\$3.8 million is pending, the result of poor disbursement performance up to 1993. The project financed some 3,065 community subprojects (also about 1,400 more than the target at reformulation), benefiting about 324,900 rural families including 2,100 Amerindian families in 135 municipalities (the entire state excluding the state capital). Maranhão financed the highest number of subprojects in the entire NRD, while numbers of beneficiary families were four times greater than estimated at appraisal and ten times the estimate at reformulation. Of these subprojects, 65% were for rural infrastructure, 30% were community productive investments, and 5% were subprojects of a social nature.

66. **Subproject Investments.** Ten major types of investments -- in which rural infrastructure dominated -- accounted for over 90% of all subprojects approved in Maranhão: (i) **localized road rehabilitation**, a subproject type not often seen outside the state, accounted for 31% of investments, due to limited state and municipal resources for basic infrastructure and its maintenance and the decrepit condition of rural access roads statewide. Communities gain access to key services and opportunities through such investments, which benefit many families: in this case 790 subprojects benefited some 114,110 families; (ii) **rural electrification**, universally prioritized across the Northeast for its economic and social benefits, reached 95,800 families through 633 subprojects; (iii) while Maranhão is largely untouched by drought, being outside the zone of vulnerability, some parts of the state bordering on Piauí have scarce water resources. These subprojects save labor and time, improve health and sanitation, and facilitate communal food cultivation and better nutrition. Some 421 **water supply investments** benefited about 54,000 families; (iv) Maranhão being a dominant rice producer, **rice mills** using simple, low cost equipment and materials, are in high demand. Some 140 rice mills benefited about 9,800 families who market surplus production in local markets; (v) **manioc mills** reduce processing costs for producing the staple flour and improve its quality. Some 80 mills benefited about 6,000 families and these ventures were successful in increasing local production and incomes; (vi) investments in **agricultural inputs for communal farms**, effectively substituting for formal credit to which small farmers lack access -- these investments stabilized incomes during difficult periods but were not sustainable and became ineligible under the project. In the interim some 142 *campos agrícolas* were implemented; (vii) **clothes-making ventures**, of which a group of 180 subprojects sponsored by the State Government to stem high local unemployment and involving a large number of community associations, constituted about 6% of all subprojects approved in Maranhão. Their replication was stopped by the Bank in agreement with the State because they were not evolving as originally envisaged and they were not adequately participatory; (viii) some 132 farm **tractors** and implements were financed for collective use by a total of 5,600 families; (ix) **health-related house improvement** benefited 4,800

families through 110 subprojects; and (x) some 32 **day care centers** benefited about 3,000 families, releasing mothers *inter alia* for income generation and education.

67. **Alagoas.** The NRDPA-Alagoas encountered a series of fiscal, institutional and political difficulties. General mismanagement and political instability under several project administrations negatively affected the program, causing Alagoas' performance to compare unfavorably with that of the other states, and obscuring its achievements. Counterpart funding shortages reduced momentum and virtually paralyzed project execution in 1995. Project activities were being funded through Federal Treasury advances but these were suspended because of the State's continued failure to meet its counterpart funding obligations. The state unsuccessfully sought external funding to resolve its counterpart funding situation.

68. Despite significant handicaps, the project made tremendous physical and institutional progress in the final year, attributed to: (i) strong support from the new State Government, including through monetary incentives on an exceptional basis to TU staff to compensate for delayed salaries; (ii) the personal commitment of the State Governor who improved facilities, vehicles and equipment; (iii) strenuous though belated efforts by the TU in the final year to straighten the project out, and improve its credibility in the communities and convergence with established project guidelines; and (iv) accreditation of some 62 municipal extension offices (EMATER) and two NGOs to mobilize communities and provide TA. Motivated staff, good facilities and commitment to project objectives boosted project performance. .

69. Community demand for subprojects after reformulation was relatively modest, partly because of poor information dissemination. The state only belatedly organized the required publicity campaign at the Bank's repeated insistence, but its quality was not optimal and political and other factors impeded expansion of FUMAC Councils. At project completion, the absolute number of councils remained low. Even so, despite the state's preference for PAC, more subprojects were financed per FUMAC municipality than PAC. Moreover, there were community associations which managed to surmount the political and managerial constraints, successfully preparing, often with EMATER assistance, subproject proposals, getting them approved and undertaking O&M.

70. **FUMAC in Alagoas.** The initial failure of FUMAC to take hold was the direct result of political interference and the previous TU's aversion to this mechanism. Even the few Councils established related poorly to the TU and to the communities they ostensibly represented, lacked proper information about the program and had little idea about prioritizing community choices. The result was a general disenchantment on the part of the communities and the Councils with FUMAC. A new TU Coordinator was working hard and, it appears, successfully in the final year, to reverse this situation by restructuring or eliminating under-performing FUMAC Councils, and initiating a community training and mobilization campaign to upgrade FUMAC creation in the state.

71. At the time of reformulation, Alagoas had disbursed US\$10.6 million of the original Loan of US\$42.0 million. The fiscal and institutional crises severely limited

counterpart funding and annual disbursement after 1994 was less than US\$4.0 million. Nevertheless, comparing the two periods of project implementation, even in Alagoas, disbursements roughly tripled following reformulation. Final disbursement amounted to US\$22.2 million and cancellation of a Loan balance of US\$19.8 million (some 47% of the Loan) is pending. The Federal Government denied the state's request to extend the project Closing Date to the end of December 1996 because of its non-compliance with the obligation to release some US\$7.0 million in state counterpart funds by September 1996.

72. The project financed 742 subprojects of which PAC were 683 (92%) and FUMAC only 59 (8%), benefiting about 82,000 families in 57 municipalities, well over double the original appraisal estimate and over four times the estimate at reformulation. However, the number of completed subprojects was the lowest absolute amount under the reformulated NRDP and reflected the constraints impeding the project. Of these subprojects, some 62% were investments in small infrastructure, 29% were productive subprojects and the remaining 9% were social subprojects. Investments totaled about US\$22.0 million and averaged US\$267 per beneficiary family. Beneficiary contributions were US\$2.5 million. Even with its limitations, the project improved beneficiary income and family well-being.

73. **Subproject Investments.** Eight subproject types made up nearly 80% of all subprojects approved in Alagoas: (i) accounting for over 42% of subprojects executed in Alagoas, **rural electrification** benefited some 15,800 families through 286 subprojects; (ii) to counteract the drought to which Alagoas is prone, some 96 **water supply projects** (of which 66 were equipped with the desalinator needed to reduce the salt content typical of the state's groundwater), benefited 18,000 families; (iii) project financing set up 48 new **manioc mills** benefiting about 6,100 families; (iv) **grain threshers** are a popular agricultural implement in Alagoas and 38 subprojects benefited about 4,000 families; (v) the project invested in 22 **communal tractors** which benefited 4,300 families; (vi) rural communities in Alagoas are starting to develop irrigation with NRDP-supported infrastructure and equipment (kits) for **small communal irrigation** schemes. About 310 families are receiving benefits from four small-scale irrigation subprojects financed in Alagoas, but technical and marketing problems have affected some of them; (vii) **community centers** represented about 4% of all subprojects executed in Alagoas and benefited 3,000 families through 25 subprojects; and (viii) **ambulances** were in strong demand in Alagoas due to the lack of health services and distance from centers, but because of political abuse of this type of subproject, the Bank and the State jointly suspended their financing. Six ambulance subprojects were implemented.

Use of Consultants

74. 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. Prior to the reformulation, almost all of these consultancies were associated with the Water Resources component where 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.

75. 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 which, while operationally simpler in key respects nevertheless required new skills (and attitudes) geared to beneficiary participation, mobilization and organization. The Maranhão TU made extensive use of IICA consultants to improve its technical capacity and given its small size, this assistance was crucial to ensuring a reasonable standard of project implementation. In Paraíba the umbrella contract with IICA played a limited role: contracting of short-term consultants for special studies, project preparation and other tasks. Alagoas initially had no contract with IICA and its overall use of consultants was negligible, but in the later stages of the project, a small contract was signed with IICA for assistance in preparing a new project, which for fiscal reasons is presently on hold.

Project Sustainability and Future Operations

76. **Sustainability.** Final supervision missions in the three states worked 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, principally in kind, to their cost. Their potential sustainability appears good. In the three states, and in other states under the Program, many water supply subprojects initiated under the APCR are still well-maintained with secure communal arrangements. Beneficiaries readily commit to the operation and maintenance of their investments through up-front signature of legally-binding agreements, while some associations have accumulated substantial reserve funds to cover maintenance costs.²⁶

77. Nevertheless, at the beginning of the process, when the first productive subprojects were implemented, the sustainability of some was uncertain (e.g., clothes-making, bakeries, fruit processing, agricultural inputs). Even today, with the improved knowledge base about individual types of subprojects, a small portion of them will always have

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

uncertain sustainability. Contributing factors include inadequate technical and managerial know-how, competition from large firms, the lack of organizational skills to market production and because some products such as manioc have limited commercial potential. Lack of beneficiary participation, and inadequate supervision and TA are also factors. Corrections were introduced, including technical assistance throughout the subproject cycle, and the new RPAP includes additional remedies for these deficiencies.

78. **Plans for Future Operations.** The three states were not legally required to prepare plans for future operations and no plans were drawn up. 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 project management. Communities are signing O&M agreements and are setting up reserve funds, evidence of intent to honor these arrangements. Ex-post evaluation studies such as those already done in 1995, 1996 and 1997 (draft), are an important tool for monitoring the operational phase of subprojects and for determining whether things were well done. Finally, the RPAP flows straight on from the NRDP in each state and a diverse cohort of stakeholders has a strong interest in ensuring sound operations.

Bank Performance

79. 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 conceptually and operationally 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 usually indicate deficient commitment to project objectives or that the project exceeds fiscal and/or institutional capacity. Realistically, however, the Bank would have been clairvoyant to foresee the nature of certain 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 had considerable technical capacity.

80. 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.

81. Supervision timing up to reformulation was uneven and the supervision record is incomplete, both in the Bank and in Recife. The main reason is that from 1989 onward, 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 Recife Office staff visiting all ten northeast states to devise an acceptable reformulation package, as opposed to carrying out formal supervision. This became a protracted process when a second reformulation phase commenced. Throughout this period, frequent informal contact including meetings, was maintained with the states and their TUs, largely substituting for formal supervision. The quality of supervision after reformulation was very high, marked by proactive engagement between the Recife Task Managers, the Bank and the TUs to resolve financial, technical and managerial problems.

82. 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 has made (and continues to make) a major technical contribution to Brazil based on its own and the Borrower's experience; launched a more democratic process of rural poverty alleviation; but perhaps more important, as stated in 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.

83. 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, and the dramatic shift to 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 new 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, separate projects were addressing institutional development in agricultural research and extension.

84. The World Bank Recife Office has been fundamental to the implementation and supervision of the reformulated NRDp projects. Established in 1974, the Recife Office 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.

Borrower Performance

85. Economic, fiscal and political factors which came to a head 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 corrosive 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 but more often to promote financial discipline in state performance. The states also periodically delayed the release of resources to the associations even when federal Loan funds were available, whether for fiscal, political or other reasons. Overall however, the Federal, State and increasingly the Municipal Governments' willingness to support a radically new approach to rural poverty alleviation was instrumental in the success of the reformulated projects.

86. 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.

87. **Technical Units.** The role of the Technical Units was crucial to the success of these projects, and more so post-reformulation when the participation of line agencies was reduced and/or eliminated. 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.

88. Under the original NRD, while legally, technically and administratively quite strong, the TUs 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 devolved to drafting annual operating plans, channeling funds to the agencies, and tracking expenditures and physical implementation. They tended to be over-staffed, employing a large number of technical

specialists in keeping with the multi-sectoral nature of the projects pre-reformulation (irrigation, credit, extension).

89. In the post-reformulation phase, staffing of TUs was reduced convergent with the reduced role of public agencies in the program and the simplification of the mechanism, which now needed technicians with social and generalist skills. Specialist technical expertise was contracted from various providers when needed (not always easy in rural areas). In general, technical and managerial capacity improved after reformulation due to the operational simplicity of the program, continuous training in community mobilization skills and steadily accumulating experience.

90. Principal constraints on TU effectiveness after reformulation were their inadequate field presence and tendency to be concentrated in the state capital, and inadequate subproject processing, supervision and monitoring capacity, particularly given the scale of community demand. In the initial period following reformulation, TUs also tended to assume responsibility for important steps of the subproject planning and implementation cycle which sometimes inhibited community participation. While operationally much simpler, these projects demanded new attitudes: decentralization, participation and beneficiary empowerment were not easy concepts for many TUs to espouse and practice. But, in this early transition period, their intervention could also facilitate the subproject identification, selection and approval process in the absence of community leaders or NGOs,²⁷ enhancing work content, substituting for non-performing agencies and improving outcome. An assessment of the Technical Unit in each state, follows.

91. **Paraíba.** The Paraíba TU proved itself technically and managerially competent, and was relatively autonomous from the state planning secretariat. Genuinely committed to decentralization and participation, the unit is headed by a dynamic Coordinator who has worked closely with rural communities since NRDp inception and has spent most of her career in the social sectors. Political interference -- except by the Governor in order to head off such intervention in the TU -- was minimal. A large part of the technical team (84 in total, distributed between the center and field offices) comprises women agronomists, rural sociologists, engineers and other professionals. In addition to its efficiency this TU has had good results mobilizing and organizing communities (reflected in the exceptionally good performance of FUMAC Councils in Paraíba) and a high proportion of the better-organized associations are headed by women. Owing to the comparative inefficiency of the state EMATER and the lack of local NGOs operating in rural areas, the TU had difficulty finding collaborative partnerships with other entities to mobilize communities and train FUMAC Municipal Councils (MC) but was, over time, able to involve municipal extension agents and some NGOs as technical assistance providers. It nevertheless achieved good results, and many Municipal Councils in Paraíba

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

are increasingly capable of assuming the functions of the TU in subproject supervision and monitoring.²⁸

92. **Maranhão.** While most state TUs have established field offices (albeit under-staffed), Maranhão was a notable exception with a TU of 36 technicians (of which only 13 carry out field visits) and 22 administrative staff operating exclusively out of the state capital. Given the large size of the state (333,000 km²) and its agro-ecological diversity, the TU was clearly too small. Staffing limitations and its deficient vehicles, equipment and resource base impeded the TU from operationalizing its own rules for conducting field investigations of potential subprojects before approving them, and for closely supervising their implementation. Further, the formal structure of the TU inherited from the previous administration was inadequate in terms of the working and operational relationships between various sub-units and departments. Political interference in the subproject approval process was fairly common throughout the election period of 1994/95, but declined following changes in the unit. The performance of the TU improved over time, particularly in: monitoring and supervision; provision of technical assistance to upgrade productive subprojects; leveraging counterpart funding from the municipalities; in focusing subproject investments in settlement areas using counterpart funding from the Land Reform Institute (INCRA); and in fostering the participation of indigenous peoples. The Maranhão TU had a strong record in establishing FUMAC Councils and in piloting progressive measures.

93. **Alagoas.** In the period immediately following reformulation, the Alagoas TU was exceptionally weak: its performance was characterized by poor management, nepotism and political interference, and lack of transparency in operating procedures and the use of project funds. Its field operations suffered as a result of extremely low salaries for TU professionals, lack of vehicles and little support from the state Government. Following the elections of 1994 and a new state administration, the TU was re-structured and linked to SEPLAN where it enjoyed significant autonomy. Staff were reduced from 110 to 50, complemented by professionals seconded from other public agencies. Financial rewards on an exceptional basis were offered to staff to promote adherence to project rules and good performance, an incentive highly-valued as the state's fiscal crisis deepened in 1996 and the payment of staff salaries (and those of technicians collaborating with the TU, including the very capable and successful state EMATER) became intermittent at best. Working processes were re-defined; field visits to verify community proposals became obligatory; costs were reduced by more careful scrutiny of subproject technical and financial aspects; TU/beneficiary agreements were made public; and supervision and monitoring were stepped up. Unprecedented efforts were made by the TU to mobilize and train communities and disseminate information about the program, in the final year. These efforts had begun to bear fruit when the project closed in September 1996.

94. 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,

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Bank/FAO Evaluation (Draft), 1997

research, marketing services and irrigation agencies, but this disappeared in 1993. The redesigned 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.

95. **Procurement.** Prior to reformulation, no major problems were encountered with procurement in these states. The major part of project resources, including counterpart funds, was applied in small operational expenses by personnel of the executing agencies, with no need for bidding procedures. In the case of irrigation works, bidding processes were undertaken in Paraíba and Maranhão, monitored by Bank and FAO specialist staff. Project reports refer only to interruptions in the works due to lack of resources.

96. Post-reformulation procurement, in which small-scale contracts predominated, was satisfactory all three states. Community associations proved adept, with little or no assistance, at obtaining the best deal for project funds, following acceptable practices (i.e., local price quotation and minimum of three suppliers). 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 both monitorable and efficient: associations obtained their needs more cheaply for the same quality, than those procured by public entities (federal, state and municipal).

97. In general, acquisitions were 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, however, of tripartite agreements between the TU, association and municipal government. Approval of a community subproject was followed by signature of a tripartite agreement under which the association asked the municipal government 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. By doing this, the associations 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. Among the three states, only Paraíba used the tripartite option and only in FUMAC municipalities. Its use is being discouraged under the new RPAP projects.

98. **Audits.** Auditing of project accounts was carried out by the Federal Government, which tended to be late in submitting audits while the states tended to be good audit performers. The quality of project auditing improved steadily over time, reflected, ironically, in the number of qualified statements. Paraíba and Maranhão had a generally good record of satisfactorily resolving problems raised in audit reports. Alagoas however, perhaps because of the serious nature of the breaches detected, had a more

difficult task resolving them. Several instances of irregular application of Loan funds came to light through STN's 1994 audit: subprojects with funds released but not implemented; subprojects for the benefit of individuals; and subprojects for the acquisition of trucks and ambulances which had not been devolved to the communities as their property. These occurrences were infrequent, and the misuse of project funds by the previous administration detected in that audit, resulted in judicial action in 1996.

99. **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. Performance was superior to the pre-reformulation phase and generally satisfactory overall in Paraíba and Maranhão, but erratic and inadequate in Alagoas. The credit component was discontinued.

Assessment of Outcome

100. SARs for the original projects contain internal economic rates of return (IERR) for the three states of 14%. It is implicit from the complete re-design of the projects 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 devise a methodology for evaluation studies. 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 up to reformulation.

101. The reformulated projects fell under the rubric of targeted interventions based on a demand-driven mechanism of 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 the three major Bank/FAO evaluations of the Program are relevant and interesting.²⁹ These evaluations calculated the socio-economic benefits and cost effectiveness of PAC/FUMAC subprojects based on a range of the more commonly

²⁹ 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 short time between reformulation and evaluation. The sampling methodology used for the 1996 and 1997 evaluation can be found in Brazil: Northeast Rural Development Program-Performance and Evaluation, World Bank/FAO, March 14, 1996.

demanded infrastructure, productive and social investments.³⁰ They are seen as primarily illustrative given the relatively short time between reformulation and evaluation.

102. In general, the analysis of sample subprojects surveyed in Paraíba and Maranhão indicates that the NRDp has had positive effects on quality of life and in the case of productive subprojects, on employment and incomes. Evaluations for these states show that: (i) IRRs for productive subprojects (small-scale irrigation, small ruminants production, forage grinders, rice and manioc flour mills) in most cases ranged from 12% to over 50% in financial terms, and in economic terms from 37% to over 50%; (ii) in terms of the sensitivity of the IRRs to the distorting effects of publicly-funded grants, stemming from the 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 14% in all cases, except one; and (iii) the initial investment per additional job created was low and benefit/cost ratios were satisfactory (ranging between 1.3 and 5.0). The analyses assumed constant benefits over an eight- to ten-year project life. While the economic cost of labor -- the most important input into 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, were virtually the same as their financial prices.

103. The 1996 and 1997 analyses of financial sustainability indicated that user fees from beneficiary associations generally covered O&M and replacement of worn equipment. Findings have been fairly uniform across the entire program, that the net income of beneficiary associations is sufficient, after deducting all O&M expenses, to cover replacement of the investment in a shorter period of time than its useful economic life.³¹

104. Both the original and reformulated projects were problematic, to varying degrees and for different reasons, when it came 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 (which remains a weakness of Bank-financed projects) throughout the project cycle, should be high on the checklist for project supervision.

³⁰ The 1995 analysis (as agreed with Government) looked at all ten NRDp projects; the 1996 evaluation focused on the states of Rio Grande do Norte, Pernambuco and Piauí; and the latest study (still in draft at this time) looked at experiences in Paraíba, Maranhão, Alagoas and Minas Gerais.

³¹ 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 transportation of production and people.

105. Each of the three reformulated projects is rated Satisfactory, reflecting its achievement of objectives, project sustainability and exit ratings in final supervision Forms 590.³²

Main Findings and Lessons Learned

106. **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 changed national political economy after 1988, which demanded a more decentralized, participatory project design. Thus, while the Bank could not control the larger forces at play in Brazil, project design generated its own problems.

107. The reformulated projects in the 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, and the municipalities, 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.

108. 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 now turning its attention to other major constraints in the sector. But beneficiaries themselves feel that the projects are generally delivering the benefits they promised, unlike earlier efforts, and demand for such subproject investments 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.

109. **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 under the RPAP contain design improvements to rationalize the use of grants, including additional eligibility criteria and requirements for *regulamentos de*

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The Alagoas project received an Unsatisfactory rating for Implementation Progress but was assessed Satisfactory on Development Objectives owing to its having vastly exceeded targeted beneficiaries even though the Loan under-disbursed, and the project’s positive impact on those beneficiaries.

uso for productive subprojects, that would help the FUMAC and FUMAC-P Municipal Councils and the TUs in their appraisal of these subprojects.

110. **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. They are a vehicle which adapts well to increasingly decentralized development, including outside the parameters of a Bank-financed project. While it would be an exaggeration to claim that the FUMAC Municipal Councils have changed the balance of power in the Northeast, they have already contributed to effecting such change in the longer-term.

111. **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 close to 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; and 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.

112. **Environment.** The environmental impact of the generally small-scale PAC and FUMAC subprojects was insignificant, 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.

113. **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 are working closely with the Councils 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.

114. **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 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 commercial business activities requiring purchasing, processing and marketing skills, and an understanding of management and profitability. 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.

115. **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. 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. This activity was stressed by the states in the final year, especially to prepare 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 RPAP.

116. **Organization.** Well-organized rural communities can influence the allocation and use of municipal funds. Experience in many NRDp 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. 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.

117. **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 have they sought integration with

other Northeast rural poverty programs. 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.³³ 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 cases of major transformation of formerly subsistence crops or a low income activity into an item with strong commercial potential. Nevertheless, the provision of start-up capital, water, electricity and other inputs including TA, has opened the door to future economic integration.

118. 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 should be willing to undertake promptly the needed changes** including complete reformulation if necessary, enabling it to succeed in the new circumstances;
- (c) **The willingness to experiment benefits projects Bank-wide.** The reformulated projects were scaled up from a **successful pilot experience** (APCR), and have continued to pilot more progressive variants of the core model, including under the follow-up RPAP;
- (d) **Grant-based investment is a legitimate and effective tool** for jump-starting capital accumulation by the rural poor, and the matching grant approach can contribute to sustainable local development;
- (e) **Decentralization** of fiscal and investment decision-making from Federal 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. A major component of decentralization, **beneficiary participation** in subproject selection, implementation, financing and supervision generates "ownership" and promotes 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

³³. They did, however, assume quite dramatic production increases in some crops on the basis of pasture conversion and greater area, combined with project inputs.

selection; ensure that project resources reach the poorest communities. Timely, well-designed **information campaigns** which ensure transparency and a proper knowledge among stakeholders of program objectives, rules and access, can bolster the targeting process and prevent political or commercial manipulation;

- (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 throughout the subproject cycle including the operational phase;
- (h) **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 equally valuable but not risk-free. Finding TA in rural areas requires 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 in a poverty context should not imply “softer” analysis of their rates of return, cost-effectiveness and feasibility. Eligible productive investments should maximise beneficiary coverage, 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; and
- (m) **Dissemination of “best practices”**, such as the FUMAC councils in Paraíba, the preparation of municipal development plans in Maranhão, collaboration with the state EMATER in Minas Gerais and Alagoas and

with NGOs in Rio Grande do Norte³⁴, through exchanges of information among Technical Units, at training seminars and workshops, can hasten learning and reward innovation; and

- (n) **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 to find practical, operational ways of identifying and monitoring communities which are close to achieving this status.

³⁴. For a description of these and other experiences, see ICR No. 16191 of December 20, 1996 on NRDp projects in Sergipe, Rio Grande do Norte, Bahia and Ceara; and ICR (forthcoming) on the Pernambuco, Piaui and Minas Gerais projects.

IMPLEMENTATION COMPLETION REPORT

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROGRAM

PART II: STATISTICAL INFORMATION

TABLE 1. SUMMARY OF ASSESSMENTS

PARAIBA PROJECT (Ln. 2860-BR)

A. Achievement of Objectives	Pre-Reformulation				Post-Reformulation and Summary Assessment¹			
	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 checked="" type="checkbox"/>	<input 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
PARAIBA PROJECT (Ln. 2860-BR) - Continued

	Pre-Reformulation			Post-Reformulation and Summary Assessments ¹				
	Likely (✓)	Unlikely (✓)	Uncertain (✓)	Likely (✓)	Unlikely (✓)	Uncertain (✓)		
B. Project Sustainability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C. Bank Performance	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. Borrower Performance	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. Assessment of Outcome	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
MARANHÃO (Ln. 2862-BR)

A. Achievement of Objectives	Pre-Reformulation				Post-Reformulation and Summary Assessments¹			
	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
MARANHÃO (Ln. 2862-BR) - Continued

	Pre-Reformulation			Post-Reformulation and Summary Assessments ¹				
	Likely (✓)	Unlikely (✓)	Uncertain (✓)	Likely (✓)	Unlikely (✓)	Uncertain (✓)		
B. Project Sustainability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C. Bank Performance	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. Borrower Performance	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. Assessment of Outcome	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
ALAGOAS PROJECT (Ln. 2863-BR)**

A. Achievement of Objectives	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
ALAGOAS PROJECT (Ln. 2863-BR) - Continued

	Pre-Reformulation			Post-Reformulation and Summary Assessments ¹				
	Likely (✓)	Unlikely (✓)	Uncertain (✓)	Likely (✓)	Unlikely (✓)	Uncertain (✓)		
B. Project Sustainability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C. Bank Performance	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. Borrower Performance	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 type="checkbox"/>	<input checked="" type="checkbox"/>		
E. Assessment of Outcome	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

PARAIBA PROJECT (Ln. 2860-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. Paraíba Rural Development Project (Ln. 1537-BR)	To improve the incomes and living standards of small farm families.	1978	Closed 1986

MARANHÃO PROJECT (Ln. 2862-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. Maranhão Rural Development Project (Ln. 2177-BR)	To increase income and agricultural production of about 39,000 small farmers in the central and northwestern parts of the State.	1982	Closed 1988

ALAGOAS PROJECT (Ln. 2863-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.

TABLE 3. PROJECT TIMETABLE

PARAIBA PROJECT (Ln. 2860-BR)

Steps in Project Cycle	Date Planned	Date Actual/ Latest Estimate
Identification	--	1984
Preparation	--	1984-1986
Appraisal	--	December 1986
Negotiations	--	May 13, 1987
Board Presentation	--	June 30, 1987
Loan Signing	--	July 20, 1987
Loan Effectiveness	November 1987	October 15, 1987
Loan Closing	March 31, 1996	December 31, 1996
Project Completion	September 30, 1995	December 31, 1996

MARANHÃO PROJECT (Ln. 2862-BR)

Steps in Project Cycle	Date Planned	Date Actual/ Latest Estimate
Identification	--	1984
Preparation	--	1984-1985
Appraisal	--	November 1985
Negotiations	--	May 13, 1987
Board Presentation	--	June 30, 1987
Loan Signing	--	July 20, 1987
Loan Effectiveness	November 1987	December 18, 1987
Loan Closing	March 31, 1996	December 31, 1996
Project Completion	September 30, 1995	December 31, 1996

TABLE 3. PROJECT TIMETABLE

ALAGOAS PROJECT (Ln. 2863-BR)

Steps in Project Cycle	Date Planned	Date Actual/ Latest Estimate
Identification	--	1984
Preparation	--	1984-1986
Appraisal	--	December 1986
Negotiations	--	May 13, 1987
Board Presentation	--	June 30, 1987
Loan Signing	--	July 20, 1987
Loan Effectiveness	November 1987	October 19, 1987
Loan Closing	March 31, 1996	September 30, 1996
Project Completion	September 30, 1995	September 30, 1996

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

PARAIBA PROJECT (Ln. 2860-BR)

Fiscal Year	Appraisal Estimate	Actual	Actual as % of Estimate
1988	4.8	5.2	108
1989	9.6	7.1	74
1990	18.0	10.9	60
1991	27.0	18.7	69
1992	37.2	20.3	54
1993	46.8	23.9	51
1994	52.8	26.6	50
1995	57.6	29.8	52
1996	60.0	42.9	72
1997	60.0	59.4 ¹	99

Final Disbursement: May 19, 1997

¹ An estimated balance of US\$0.6 million will be canceled.

MARANHÃO PROJECT (Ln. 2862-BR)

Fiscal Year	Appraisal Estimate	Actual	Actual as % of Estimate
1988	6.3	5.2	83
1989	14.0	6.4	46
1990	24.5	11.6	47
1991	36.7	21.5	59
1992	50.7	22.4	44
1993	64.2	24.9	39
1994	74.2	25.9	35
1995	81.2	32.4	40
1996	84.0	44.6	53
1997	84.0	80.2 ¹	95

Final Disbursement: May 13, 1997

¹ An estimated balance of US\$3.8 million will be canceled.

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

ALAGOAS PROJECT (Ln. 2863-BR)

Fiscal Year	Appraisal Estimate	Actual	Actual as % of Estimate
1988	3.4	3.5	104
1989	6.7	6.4	96
1990	12.6	7.7	61
1991	18.9	10.1	53
1992	26.0	10.7	41
1993	32.8	12.5	38
1994	37.0	13.0	35
1995	40.4	15.5	38
1996	42.0	15.8	38
1997	42.0	22.2 ¹	53

Final Disbursement: February 4, 1997

¹ An estimated balance of US\$19.8 million will be canceled.

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

PARAIBA PROJECT (Ln. 2860-BR)

A. Pre-Reformulation¹

Disbursements at reformulation were about 36% of the loan.² The unsatisfactory project funding situation remained the principle obstacle hindering implementation. Achievements under the main components were (with percentage of appraisal target shown in parentheses): (i) Water Resources: feasibility studies and engineering designs on the irrigation potential of areas covering 7,500 ha (100%); construction of 6 public irrigation schemes providing 421 ha with irrigation (15%); construction and rehabilitation of 100 simple water supply systems (91%) in communities with less than 500 inhabitants; improvement of an existing fish hatchery to reach a total annual production of 93,000 fingerlings (2%); and provision of technical assistance on fishery operation to about 2,100 fishermen and farmers (280%); (ii) Agricultural Research and Basic Seed Production: completion of 5 agro-ecological and natural resource studies (167%); 52 short- and medium-term applied research trials (29%) to improve crop production technology; establishment and monitoring of one observation farm (3%) to test and adapt integrated production systems; and the production of 150 tons of seeds per year (300%), including maize, castor beans, cotton, sorghum and rice; (iii) Rural Extension Services: technical assistance was delivered to 33,600 project beneficiaries (89%); 50 demonstration plots per year were established (33%); and 16,500 tree seedlings were produced (3%) to implement a small-scale forestry project; (iv) Agricultural Credit: a program of medium- and long-term credit was established for beneficiaries to finance on-farm investments; 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

PARAIBA PROJECT (Ln. 2860-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.	Partially 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.	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

PARAIBA PROJECT (Ln. 2860-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; 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 100 of such subproject proposals approved by Dec. 31, 1993; and cumulatively 250 by June 30, 1994; 500 by June 30, 1995 and 920 by project completion.	Done as scheduled.
	PAC/FUMAC	Number of families directly benefited.	At least 2,500 families benefited with approved projects by Dec. 31, 1993; 6,200 by June 30, 1994; 12,500 by June 30, 1995 and 23,000 by project completion.	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.	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

PARAIBA PROJECT (Ln. 2860-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.	Done.
	PAC/FUMAC	Projected employment generated (productive subprojects only)	Employment targets in 80% of sample productive subprojects have been reached one year after establishment.	Partially 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.	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.	Done.
	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.	Complied with.

TABLE 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

MARANHÃO PROJECT (Ln. 2862-BR)

A. Pre-Reformulation¹

Disbursements at reformulation were about 27% 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 1,000 ha (51%); construction of one public irrigation scheme providing 200 ha with irrigation (26%); construction of 100 simple water supply systems (39%) in communities with less than 500 inhabitants; and provision of technical assistance to reach 6,400 inland fishermen (100%); (ii) Agricultural Research and Basic Seed Production: 80 short- and medium-term applied research trials (93%) to improve crop production technology; establishment of 150 simple farm-level observation units (50%) and 34 observation farms (283%) to test and adapt integrated production systems; and the production of seeds on 40 ha per year (29%), including maize, castor beans, cotton and rice; (iii) Rural Extension Services: technical assistance was delivered to 15,200 project beneficiaries (23%); 100 demonstration plots were established (25%); and 8 million tree seedlings were produced (100%) to implement a small-scale forestry program; (iv) Agricultural Credit: medium- and long-term subloans were granted for 200 project beneficiaries to finance on-farm investments (1%); and (v) Marketing Services: establishment of 3 regional marketing services (100%) to strengthen input supply capabilities; and establishment of a food wholesale service for private retailers, including the expansion of 3 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

MARANHÃO PROJECT (Ln. 2862-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	Done
	PAC/FUMAC	Community counterpart funds or resources for approved projects	Signed agreements with executing community association explicitly 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

MARANHÃO PROJECT (Ln. 2862-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	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 500 by June 30, 1994; 900 by June 30, 1995 and 1,600 by project completion	Done
	PAC/FUMAC	Number of families directly benefited	At least 3,700 families benefited with approved projects by Dec. 31, 1993; 10,000 by June 30, 1994; 18,000 by June 30, 1995 and 32,000 by project completion	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	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

MARANHÃO PROJECT (Ln. 2862-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 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
	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
	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 5. KEY INDICATORS FOR PROJECT IMPLEMENTATION

ALAGOAS PROJECT (Ln. 2863-BR)

A. Pre-Reformulation¹

Some 25% 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: construction of 180 simple water supply systems (108%) and rehabilitation of 20 such systems in communities with less than 500 inhabitants; (ii) Agricultural Research and Basic Seed Production: completion of 3 agro-ecological and natural resource studies (100%); 80 short- and medium-term applied research trials (44%) to improve crop production technology; establishment of 16 farm-level observation units (133%) to test and adapt integrated production systems; and the production of seeds on 25 ha per year (25%), including maize, castor beans, cotton and rice; (iii) Rural Extension Services: technical assistance was delivered to 16,000 project beneficiaries (49%); 200 demonstration plots were established (133%); and 21,900 tree seedlings were produced (1%) to implement a small-scale forestry program; (iv) Agricultural Credit: medium- and long-term subloans were granted for 200 project beneficiaries to finance on-farm investments (2%); and (v) Marketing Services: installation of mobile units for grading and classification of 2 rural service centers (50%).

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

ALAGOAS PROJECT (Ln. 2863-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.	Partially done. The initial campaign was limited. The State has taken measures to expand publicity coverage.
	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.	In progress
	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	Three Municipal Councils have been established to date.
	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.	Partially complied with. State has provided limited counterpart funds.

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

ALAGOAS PROJECT (Ln. 2863-BR)

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

		INDICATOR	OPERATIONAL CRITERIA	COMMENTS
INPUTS (Continued)	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
	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; 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.	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.	Partially complied with. Meetings were held in the three municipalities where Councils exist.
	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.	Partially complied with. 60% of FUMAC municipalities have complied.
	PAC ONLY	Subproject proposals are received and approved based on community requests.	At least 100 of such subproject proposals approved by Dec. 31, 1993; and cumulatively 250 by June 30, 1994; 450 by June 30, 1995 and 750 by project completion.	742 subprojects approved and financed.
	PAC/FUMAC	Number of families directly benefited.	At least 2,500 families benefited with approved projects by Dec. 31, 1993; 6,200 by June 30, 1994; 11,200 by June 30, 1995 and 18,700 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

ALAGOAS PROJECT (Ln. 2863-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.	Done
	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.	Complied with
	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.	Complied with
	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.	Complied with
	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.	Complied with

TABLE 6. STUDIES INCLUDED IN PROJECT

PARAIBA PROJECT (Ln. 2860-BR)

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

MARANHÃO PROJECT (Ln. 2862-BR)

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

ALAGOAS PROJECT (Ln. 2863-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

PARAIBA PROJECT (Ln. 2860-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	15.1	4.0	19.1	10.0	2.6	12.6
B. Agricultural Research and Basic Seed Production	7.1	0.8	7.9	1.2	0.1	1.3
C. Agricultural Extension	24.3	0.9	25.2	5.3	0.2	5.5
D. Rural Investment Credit	32.1	5.6	37.7	0.2	0.0	0.2
E. Marketing Services	2.0	0.4	2.4	2.3	0.4	2.7
F. Support to Small Rural Communities						
(i) APCR	12.5	1.9	14.4	9.6	1.5	11.1
(ii) PAC	--	--	--	24.1	6.3	30.4
(iii) FUMAC	--	--	--	13.2	3.6	16.8
G. Project Administration and Training	8.4	0.4	8.8	10.6	4.7	15.3
Total Baseline Cost	101.5	14.0	115.5	76.5	19.5	96.0
Physical Contingencies	2.1	0.7	2.8	--	--	--
Price Contingencies	5.2	0.4	5.6	--	--	--
Total Project Cost	108.8	15.1	123.9	76.5	19.5	96.0

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	44.9	15.1	60.0	39.9	19.5	59.4 ³
Federal Government	63.9	--	63.9	10.1	--	10.1
State Government of Paraiba	--	--	--	21.8	--	21.8
Beneficiaries	--	--	--	4.7	--	4.7
Total	108.8	15.1	123.9	76.5	19.5	96.0

1. Federal Government, pre-reformulation.

2. State Government, post-reformulation.

3. An estimated balance of US\$0.6 million will be canceled.

TABLE 7. PROJECT COSTS AND FINANCING

MARANHÃO PROJECT (Ln. 2862-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	11.3	3.9	15.2	6.3	2.4	8.7
B. Agricultural Research and Basic Seed Production	8.7	0.9	9.6	2.3	0.2	2.5
C. Rural Extension	28.6	2.2	30.8	4.7	0.3	5.0
D. Rural Investment Credit	42.8	7.6	50.4	0.2	0.0	0.2
E. Marketing Services	2.0	0.6	2.6	0.5	0.2	0.7
F. Support to Small Rural Communities						
(i) APCR	22.3	3.6	25.9	69.2	11.2	80.4
(ii) PAC	--	--	--	13.7	3.6	17.3
(iii) FUMAC	--	--	--	9.8	2.6	12.4
G. Environmental Protection	1.6	0.1	1.7	5.1	0.3	5.4
H. Project Administration and Training	13.3	0.7	14.0	16.0	0.8	16.8
Total Baseline Cost	130.6	19.6	150.2	127.8	21.6	149.4
Physical Contingencies	2.3	0.8	3.1	--	--	--
Price Contingencies	16.9	2.1	19.0	--	--	--
Total Project Cost	149.8	22.5	172.3	127.8	21.6	149.4

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	61.5	22.5	84.0	58.6	21.6	80.2 ³
Federal Government	88.3	--	88.3	22.2	--	22.2
State Government of Maranhão ⁴	--	--	--	38.0	--	38.0
Beneficiaries	--	--	--	9.0	--	9.0
Total	149.8	22.5	172.3	127.8	21.6	149.4

1. Federal Government, pre-reformulation.

2. State Government, post-reformulation.

3. An estimated balance of US\$3.8 million will be canceled.

4. Part of counterpart fund provided by INCRA.

TABLE 7. PROJECT COSTS AND FINANCING

ALAGOAS PROJECT (Ln. 2863-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	1.2	0.3	1.5	1.2	0.3	1.5
B. Agricultural Research and Basic Seed Production	4.2	0.5	4.7	1.2	0.1	1.3
C. Agricultural Extension	19.7	0.6	20.3	5.3	0.1	5.4
D. Rural Investment Credit	29.2	5.2	34.4	0.6	0.1	0.7
E. Marketing Services	0.3	--	0.3	0.5	0.0	0.5
F. Support to Small Rural Communities						
(i) APCR	10.6	1.5	12.1	4.6	0.7	5.3
(ii) PAC	--	--	--	11.1	2.9	14.0
(iii) FUMAC	--	--	--	1.0	0.2	1.2
G. Project Administration and Training	8.2	0.7	8.9	8.5	3.7	12.2
Total Baseline Cost	73.4	8.8	82.2	34.0	8.1	42.1
Physical Contingencies	0.7	0.2	0.9	--	--	--
Price Contingencies	3.1	0.2	3.3	--	--	--
Total Project Cost	77.2	9.2	86.4	34.0	8.1	42.1

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	32.8	9.2	42.0	14.1	8.1	22.2 ³
Federal Government	44.4	--	44.4	10.5	--	10.5
State Government of Alagoas	--	--	--	7.9	--	7.9
Beneficiaries	--	--	--	1.5	--	1.5
Total	77.2	9.2	86.4	34.0	8.1	42.1

1. Federal Government, pre-reformulation.

2. State Government, post-reformulation.

3. An estimated balance of US\$19.8 million will be canceled.

BRAZIL

PARAIBA RURAL DEVELOPMENT PROJECT
(Loan 2860-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 funding has been provided by the State instead of the Federal Government with Project reformulation. Sufficient state counterpart funds have been released in a timely manner.

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

PARAIBA RURAL DEVELOPMENT PROJECT
(Loan 2860-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 (e)	3	C			Efficient Federal mechanisms for passing funds to states	Federal (loan) funds transferred expeditiously by STN.
	3.01 (f)	5	C			Federal commitment on mechanism to carry out rural credit component	Rural credit component discontinued after Project reformulation.
	3.02	3	C			SUDENE's obligation to provide the Bank with advance annual plan, final budgets and changes in planning procedures, all in a timely fashion, for comment	With project reformulation, it became State's responsibility to prepare and present to the Bank a proposal for the Annual Plan. POA for 1996 presented and approved by the Bank.
	4.01	1	C			Audit of Special Accounts	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.
	2.01 (c)	5	C			Mutual obligations of State and executing agency, defined by contract	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

PARAIBA RURAL DEVELOPMENT PROJECT
(Loan 2860-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)	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	Complied with.
	2.01 (f)	5	C			TU obligation for annual plan	Complied with.
	2.02	3	C			State to respect procurement regulations	Complied with.
	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.
	3.01 (a)	1	C			Executing agencies to maintain separate accounts	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

MARANHÃO RURAL DEVELOPMENT PROJECT
(Loan 2862-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 project objectives and to carry out rural credit component	Rural credit component discontinued with Project reformulation. Amendment Letter became effective September 28, 1993.
	3.01 (b)	10	C			Federal commitment to cause State to perform according to Project Agreement	With Project reformulation, the Federal Government transferred to the State the implementation of the Project.
	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 funding was provided by the State instead of the Federal Government with Project reformulation.
	3.01 (e)	3	C			Efficient Federal mechanisms for passing funds to states	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

MARANHÃO RURAL DEVELOPMENT PROJECT
(Loan 2862-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			Federal commitment on mechanism to carry out 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-e)	5	C			Participating bank obligation to provide monthly information.	Since rural credit was discontinued, there was no need for participating banks.
	3.01 (g)	5	C			Borrower commitment to cause each of the Federal executing entities to enter into agreements with the State	Complied with.
	3.01 (h)	8	C			Federal and State obligation to carry out the action plan for Amerindian areas	The State settled major issues related to the Canabrava-Guajajara Reserve. Project supported several indigenous communities.

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

MARANHÃO RURAL DEVELOPMENT PROJECT
(Loan 2862-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)	3.02	3	C			SUDENE's obligation to provide the Bank with advance annual plans, budgets and proposed changes in planning procedures, all in timely fashion, for comment.	SUDENE complied up to reformulation. Since reformulation, this responsibility has belonged to the individual States. Maranhão has complied.
	4.01	1	C			Audit of Special Account	1995 audit was received by the Bank. Pending issues were resolved by the State.
	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.
	2.01 (c)	5	C			Mutual obligations of State and executing agency, defined by contract	Complied with.
	2.01 (d)	5	C			Quarterly reporting by TU	Complied with.
	2.01 (e)	5	C			Reorganize TU, provide qualified staff	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
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BRAZIL

MARANHÃO RURAL DEVELOPMENT PROJECT
(Loan 2862-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 (f) (g)	5	C			TU obligation to prepare annual plan and to cause the executing agencies to purchase vehicles and computers	Complied with.
	2.02	3	C			State to respect procurement regulations	Complied with.
	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	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

ALAGOAS RURAL DEVELOPMENT PROJECT
(Loan 2863-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 (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	CP			Federal counterpart funding	Counterpart funding was provided by the State instead of the Federal Government with Project reformulation. However, the State has not been providing sufficient counterpart funding.
	3.01 (e)	3	C			Efficient Federal mechanisms for passing funds to states	Federal (loan) funds transferred expeditiously by STN.
	3.01 (f) (i) (a)	10	C			Federal commitment to mechanism to carry out rural credit component	Rural credit component discontinued with Project reformulation. Amendment Letter became effective September 28, 1993.

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

ALAGOAS RURAL DEVELOPMENT PROJECT
(Loan 2863-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) (b)	3	C			Participating bank obligation to provide adequate working capital	Since rural credit was discontinued, there was no need for participating banks.
	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 proposals for the Annual Plan.
	4.01	1	C			Audit of Special Account	Complied with.
	4.02 and 4.03	1	C			Account and audit of Central Bank.	Complied with.
	5.01 (b)	10	C			Remedy for rural credit non-performance	Rural credit component discontinued with Project reformulation.
	Project	2.06	5	C		Carrying out of Part F of the reformulated Project in accordance with the Operational Manual	Complied with.
	2.08	10	CD			Carrying out of a publicity campaign	Measures were taken to comply with requirement.

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
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NC = not complied with
 NYD = not yet due
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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 reasons stated in Part 1, para. 99. 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 NRD, see Part 1, paras. 100-103 and Tables 9A-9I below. Tables 9A and 9B are based on sample data from all ten states in the NRD (from the 1995 analysis); Tables 9C-9I are based on state-specific data for Paraíba, Maranhão and Alagoas (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 Subprojects being Implemented and/or Completed	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										
- House improvement	116	8,236	461	--	--	--	--	--	--	--
- Child 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 NDRP 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

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROJECT - PARAÍBA
(Loan 2860-BR)

TABLE 9C. SELECTED DATA ON MAJOR TYPES OF SUBPROJECTS^{1/}

Subproject Type	Total No. of Subprojects Implemented	Total No. of Beneficiaries (Families)	Cost per Beneficiary Family (US\$)
<u>Infrastructure</u>			
Rural electrification (55%) ^{2/}	1,263	64,275	490
Rural water supply (11%) ^{2/}	264	22,974	190
<u>Productive</u>			
Minor irrigation schemes (3%) ^{2/}	79	4,194	256
Cereals Processing (3%) ^{2/}	75	7,993	142
Small agricultural equipment (2%) ^{2/}	55	4,776	150
Small ruminants production (2%) ^{2/}	44	3,552	157
Artisanal fisheries (1%) ^{2/}	31	684	799
<u>Social</u>			
Multi-purpose community centers (2%) ^{2/}	41	3,746	259

^{1/} Data obtained from State database.

^{2/} Percentage of all subprojects implemented in the State.

Source: Bank/FAO Evaluation (Draft), 1997

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROJECT - PARAÍBA
(Loan 2860-BR)

TABLE 9D. SOCIO-ECONOMIC BENEFITS OF SELECTED PRODUCTIVE SUBPROJECTS ^{1/}

Subproject Type	Nº of Jobs Created ^{2/}	Total Net Incremental Income per Year	Net Incremental Income per Beneficiary Family per Year	Total Incremental Crop Area	Internal Rate of Return		Cost Effectiveness	Benefit-Cost Ratio ^{3/}
					Financial	Economic		
Productive Irrigation	18	36,969	1,680	24	>50	>50 ^{4/}	1,921	1.7
Small Ruminants Development	15	5,575	279	--	12	38 ^{4/}	1,370	1.8
Cereals Processing ^{5/}	3	4,540	35	60	15	>50 ^{4/}	5,819	2.4
Forage grinder	n/a	65,300	480	n/a	>50	>50 ^{4/}	n/a	> 5.0

^{1/} Based on sample subprojects surveyed in that category.

^{2/} In sample subprojects surveyed.

^{3/} Real discount rate is 10%.

^{4/} 30% , 20%, 40% and >50%, respectively, when shadowing public funds.

^{5/} Cereals processings includes bean and corn processing subprojects.

Source: Bank/FAO Evaluation (Draft), 1997

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROJECT - PARAIBA
(Loan 2860-BR)

TABLE 9E. FINANCIAL SUSTAINABILITY ANALYSIS OF SELECTED PRODUCTIVE SUBPROJECTS

Item/Subproject Type	Cereals Processing	Forage Grinders
Number of associations	54	22
Average net income per association (US\$) ^{1/}	7,482	9,500
Average cost of subproject (US\$)	8,721	5,600
Average number of years:		
Of useful economic life (years)	5	5
To build replacement fund (years) ^{2/}	2	1

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, based on sample subprojects surveyed. The real interest rate is assumed to be 10%.

Source: Bank/FAO Evaluation (Draft), 1997

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROJECT - MARANHÃO
(Loan 2862-BR)

TABLE 9F. SELECTED DATA ON MAJOR TYPES OF SUBPROJECTS ^{1/}

Subproject Type	Total No. of Subprojects Implemented	Total No. of Beneficiaries (Families)	Cost per Beneficiary Family (US\$)
<u>Infrastructure</u>			
Localized road rehabilitation (26%) ^{2/}	790	114,111	203
Rural electrification (21%) ^{2/}	633	95,777	189
Rural water supply (14%) ^{2/}	421	53,607	169
<u>Productive</u>			
Clothes-making (8%) ^{2/}	254	10,922	509
Agricultural inputs (5%) ^{2/}	142	6,584	447
Rice mills (5%) ^{2/}	140	9,837	151
Communal tractors (4%) ^{2/}	132	5,646	587
Manioc mills (3%) ^{2/}	80	6,000	112
<u>Social</u>			
Health-related house improvement (4%) ^{2/}	110	4,766	706
Day care centers (1%) ^{2/}	32	3,104	178

1/ Data obtained from State database.

2/ Percentage of all subprojects implemented in the State.

Source: Bank/FAO Evaluation (Draft), 1997

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROJECT - MARANHÃO
(Loan 2862-BR)

TABLE 9G. SOCIO-ECONOMIC BENEFITS OF SELECTED PRODUCTIVE SUBPROJECTS ^{1/}

Subproject Type	No. of Jobs Created ^{2/}	Total Net Incremental Income per Year (US\$)	Net Incremental Income per Beneficiary Family 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 ^{3/}
Rice mills	n/a	8,277	243	17	>50	42 ^{4/}	n/a	1.5
Manioc mills	n/a	4,931	197	8	>50	>50 ^{4/}	n/a	1.8
Tractors	23	31,512	1,370	38	>50	37 ^{4/}	2,182	1.3

^{1/} Based on sample subprojects surveyed in that category.

^{2/} In sample subprojects surveyed.

^{3/} Real discount rate is 10%.

^{4/} 14%, 30% and 5%, respectively, when shadowing public funds.

Source: Bank/FAO Evaluation (Draft), 1997

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROJECT - MARANHÃO
(Loan 2862-BR)

TABLE 9H. FINANCIAL SUSTAINABILITY ANALYSIS OF SELECTED PRODUCTIVE SUBPROJECTS

Item/Subproject Type	Rice Mills	Manioc Mills
Number of associations	140	80
Average net income per association (US\$) ^{1/}	8,278	4,931
Average cost of subproject (US\$)	12,365	6,827
Average number of years:		
Of useful economic life (years)	12	12
To build replacement fund (years) ^{2/}	2	2

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, based on sample subprojects surveyed. The real interest rate is assumed to be 10%.

Source: Bank/FAO Evaluation (Draft), 1997

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROJECT - ALAGOAS
(Loan 2863-BR)

TABLE 9I. SELECTED DATA ON MAJOR TYPES OF SUBPROJECTS ^{1/}

Subproject Type	Total No. of Subprojects Implemented	Total No. of Beneficiaries (Families)	Cost per Beneficiary Family (US\$)
<u>Infrastructure</u>			
Rural electrification (42%) ^{2/}	286	15,814	488
Rural water supply (14%) ^{2/}	96	17,909	93
<u>Productive</u>			
Manioc mills (7%) ^{2/}	48	6,111	101
Grain threshers (6%) ^{2/}	38	3,960	74
Communal farm tractors (3%) ^{2/}	22	4,264	103
Small-scale irrigation (1%) ^{2/}	4	309	258
<u>Social</u>			
Community centers (4%) ^{2/}	25	2,967	101
Ambulances (1%) ^{2/}	6	3,743	29

1/ Data obtained from State database.

2/ Percentage of all subprojects implemented in the State.

Source: Bank/FAO Evaluation (Draft), 1997

TABLE 10. BANK RESOURCES: STAFF INPUTS¹

PARAIBA PROJECT (Ln. 2860-BR)

FISCAL YEAR	STAGE OF PROJECT CYCLE					TOTAL	
	Preparation	Appraisal	Negotiations through Board		Completion		
			Approval	Supervision			
STAFF WEEKS							
1987	32.4	17.4	9.0			58.8	
1988				10.4		10.4	
1989				7.8		7.8	
1990				13.7		13.7	
1991				10.1		10.1	
1992				8.0		8.0	
1993				10.5		10.5	
1994				9.3		9.3	
1995				5.2		5.2	
1996				4.1		4.1	
1997				6.6	3.5	10.1	
Total	32.4	17.4	9.0	85.7	3.5	148.0	
US\$'000							
1987	49.6	34.1	18.8			102.5	
1988				22.0		22.0	
1989				17.0		17.0	
1990				32.0		32.0	
1991				21.3		21.3	
1992				14.7		14.7	
1993				19.3		19.3	
1994				16.6		16.6	
1995				7.1		7.1	
1996				6.3		6.3	
1997				9.4	6.6	16.0	
Total	49.6	34.1	18.8	165.7	6.6	274.8	

1. Total costs (labor only) for period 1987 to 1997.

Source: COS

TABLE 10. BANK RESOURCES: STAFF INPUTS¹

MARANHÃO PROJECT (Ln. 2862-BR)

FISCAL YEAR	STAGE OF PROJECT CYCLE					TOTAL	
	Preparation	Appraisal	Negotiations through Board Approval		Supervision		
			Completion	STAFF WEEKS			
STAFF WEEKS							
1986	13.5	32.3				45.8	
1987		10.1	6.5			16.6	
1988				15.4		15.4	
1989				7.6		7.6	
1990				12.6		12.6	
1991				12.9		12.9	
1992				9.9		9.9	
1993				13.1		13.1	
1994				7.9		7.9	
1995				10.5		10.5	
1996				6.9		6.9	
1997				5.8	3.4	9.2	
Total	13.5	42.4	6.5	102.6	3.4	168.4	
US\$'000							
1986	27.0	56.0				83.0	
1987		16.3	13.7			30.0	
1988				26.3		26.3	
1989				9.2		9.2	
1990				23.3		23.3	
1991				19.2		19.2	
1992				15.3		15.3	
1993				23.3		23.3	
1994				11.9		11.9	
1995				14.9		14.9	
1996				10.5		10.5	
1997				8.9	7.1	16.0	
Total	27.0	72.3	13.7	162.8	7.1	282.9	

1. Total costs (labor only) for period 1986 to 1997.

Source: COS

TABLE 10. BANK RESOURCES: STAFF INPUTS¹

ALAGOAS PROJECT (Ln. 2863-BR)

FISCAL YEAR	STAGE OF PROJECT CYCLE					TOTAL	
	Preparation	Appraisal	Negotiations through Board Approval		Supervision		
			Completion	STAFF WEEKS			
STAFF WEEKS							
1986	15.3					15.3	
1987	16.7	12.4	7.9			37.0	
1988				11.7		11.7	
1989				0.8		0.8	
1990				13.4		13.4	
1991				10.1		10.1	
1992				9.5		9.5	
1993				13.1		13.1	
1994				10.6		10.6	
1995				7.1		7.1	
1996				4.5		4.5	
1997				3.2	3.5	6.7	
Total	32.0	12.4	7.9	84.0	3.5	139.8	
US\$'000							
1986	15.9					15.9	
1987	34.6	25.7	16.5			76.8	
1988				21.2		21.2	
1989				1.9		1.9	
1990				25.6		25.6	
1991				14.8		14.8	
1992				17.0		17.0	
1993				25.2		25.2	
1994				17.0		17.0	
1995				9.9		9.9	
1996				6.4		6.4	
1997				4.6	6.6	11.2	
Total	50.5	25.7	16.5	143.6	6.6	242.9	

1. Total costs (labor only) for period 1986 to 1997.

Source: COS

TABLE 11. BANK RESOURCES: MISSIONS

PARAIBA PROJECT (Ln. 2860-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	5/86	3	8	Ag, IrrEng	n/a	n/a	n/a
Appraisal through Board Approval	12/86	1	10	FinAnal	n/a	n/a	n/a
Board Approval through Effectiveness	9/87	1	9	FinAnal	2	2	Inst, Man
Supervision	3/88	1	10	FinAnal	2	2	Man
	2/89	1	3	Ec	2	2	Fin
	5/89	1	21	FinAnal	2	2	Fin, Pol
	12/89	2	11	FinAnal	2	2	Fin
	6/90	2	12	FinAnal, IrrEng	3	2	Fin, Man
	5/91 ^{a/}	1		FinAnal	3	2	Fin, Man
	6/92		Updated 590		2	1	Fin
	6/93		Updated 590		2	2	Fin
	11/93	1	4	AgEc	2	1	Fin
	5/94	1	5	AgEc	S	S	n/a
	5/95		Updated 590		S	S	n/a
	9/95	1	3	Ag	S	S	n/a
	6/96		Updated 590		S	S	n/a
	8/96	1	4	Ag	S	S	n/a

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

TABLE 11. BANK RESOURCES: MISSIONS

MARANHÃO PROJECT (Ln. 2862-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	
Appraisal through Board Approval	12/85	7	33	Ag, AgEc, Ec, FinAnal	n/a	n/a	n/a
	8/86 ^{a/}	1	19	Anth	n/a	n/a	n/a
Supervision	4/88	5	17	Ag, AgEc, Eng, IrrEng	2	3	Fin, Inst
	9/88 ^{a/}	1	5	Anth	n/a	n/a	n/a
	1/89	1	2	Ag	2	2	Fin, Inst
	5/89	3	12	Ag, AgEc, IrrEng	2	2	Fin, Inst
	12/89	1	6	Ag	2	2	Fin
	6/90	1	11	Ag	2	2	Fin
	10/90	1	10	IrrEng	2	2	Fin
	6/91		Updated 590		3	3	Fin
	6/92		Updated 590		2	1	Fin
	6/93		Updated 590		2	2	Fin
	11/93	1	5	Ag	2	2	Man
	6/94	1	4	Ag	S	S	n/a
	5/95		Updated 590		S	S	n/a
	7/95	1	19	Ag	S	S	n/a
	4/96	1	2	Ag	S	S	n/a
Completion	11/96	1	3	Ag	S	S	n/a

a/ Mission dealing with outstanding land conflicts involving Amerindian populations.

TABLE 11. BANK RESOURCES: MISSIONS

ALAGOAS PROJECT (Ln. 2863-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	10/86	3	11	Ag, FinAnal	n/a	n/a	n/a
Appraisal through Board Approval	6/87	1	3	Ag	n/a	n/a	n/a
Supervision	12/87	3	12	Ag, AgEc, Ec	2	2	Adm
	7/88	1	12	AgEc	2	2	Fin
	7/89	1	12	AgEc	2	2	Fin, Inst
	12/89	1	4	AgEc	2	2	Fin
	5/90	2	8	AgEc, IrrEng	3	3	Fin, Inst, Man
	10/90	1	5	AgEc	3	3	Inst
	6/91		Updated 590		3	3	Fin
	6/92		Updated 590		3	2	Man
	9/92	1	5	Ag	2	2	Fin
	6/93		Updated 590		3	2	Man
	11/93	1	4	Ag	3	2	Fin, Inst, Man
	4/94	1	9	Ag	S	S	n/a
	7/94		Updated 590		S	S	n/a
	5/95		Updated 590		U	S	Fin
	10/95	1	3	Ag	U	S	Adm, Fin
	6/96		Updated 590		S	S	n/a
Completion	10/96	1	3	Ag	U	S	Fin
	2/97		Updated 590		U	S	Fin

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

State	Original Loan Amount	Disbursement at Reformulation ^{1/}	Actual Disbursement after Reformulation	Outstanding Balance
Paraíba	60.0	21.4	38.0	0.6
Maranhão	84.0	22.8	57.4	3.8
Alagoas	42.0	10.6	11.6	19.8
Total	186.0	54.8	107.0	24.2

1/ Reformulation became effective on September 28, 1993.

Source: Bank/FAO Evaluation (Draft), 1997

TABLE 13. NUMBER OF MUNICIPALITIES REACHED BY NRD^P
(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			
Paraíba	171	171	180	155	25	12.8	9.4	34.1
Maranhão	136	135	148	122	26	20.7	17.3	36.7
Alagoas	97	57	58	55	3	12.8	12.4	19.7
Total	404	301	364	312	52	15.4	13.0	30.2

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.

Source: Bank/FAO Evaluation (Draft), 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 electrification	Rice processing	House improvement	Small-scale irrigation	Bridge	Clothes making
Paraíba	15,015	38,439	18,288	16,844	19,139	24,957	7,693	--	13,572	--	13,172
Maranhão	8,364	25,117	21,358	24,305	15,859	28,539	10,618	30,593	24,316	21,264	21,964
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
Minas Gerais	26,591	31,998	28,517	27,400	24,157	31,911	--	32,745	18,351	31,444	19,839
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
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
Paraíba	37,800	920	23,000	2,201	149,633
Maranhão	73,000	1,600	32,000	3,065	324,890
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
Minas Gerais	38,000	1,100	27,500	1,871	114,225
Pernambuco	73,000	700	17,500	1,237	136,855
Piauí	65,000	1,200	30,000	1,569	187,390
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	17,780	1,779,353

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

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

IMPLEMENTATION COMPLETION REPORT

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROGRAM

PARAIBA, MARANHÃO AND ALAGOAS PROJECTS
(Loans 2860-BR, 2862-BR and 2863-BR)

BORROWER CONTRIBUTION

GOVERNMENT OF THE STATE OF PARAÍBA
SECRETARIAT OF PLANNING
NORTHEAST PROJECT/COOPERAR

Official letter n° 126/97

João Pessoa, June 9, 1997

Dr. Túlio Barbosa
Head, World Bank Office
Brasília, DF

Dear Sir:

We herewith send you our comments on the "Implementation Completion Report - Brazil - Northeast Rural Development Program."

1. In item 50 (page 15, lines 06 to 07), we suggest removing the expressing dealing with the high costs of FUMAC projects ("and incurring higher than necessary costs"). This occurred in the component of large-scale productive subprojects until the program was reformulated, with which we agree.

However, we did not observe occurrences of this type in the FUMAC component. As stated in the Bank's aide-mémoire of 11-29-96, the average cost of community subprojects in Paraíba is the lowest of all 10 states.

2. We also suggest excluding, in the same item, on the last line ("except for election period in 1994"). Even because the projects slated for release during this period were not made effective. They were technically evaluated and released only at the end of the first half of 1995.

3. In item 51 (line 05), we suggest excluding the second-last sentence ("In Paraíba, four year period"), since, in the years prior to 1995, electrification efforts were executed under other programs, which makes a comparative time analysis difficult.

These are the corrections suggested based upon our analysis of the above-mentioned document. We are in agreement with the remaining body of the document.

Sincerely,

(signed)
Sonia Maria Germano de Figueiredo
General Coordinator

**GOVERNO DO ESTADO DO MARANHÃO
SECRETARIA DE ESTADO DO PLANEJAMENTO - SEPLAN
NÚCLEO ESTADUAL DE PROGRAMAS ESPECIAIS - NEPE**

São Luis, June 2, 1997

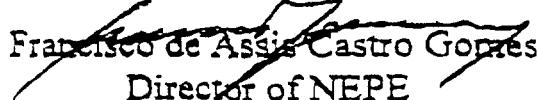
**Subject: Comments on the Implementation Completion Report
Loans 2860-BR, 2862-BR and 2863-BR**

Dear Mr. Barbosa,

At your request, we have reviewed the above-mentioned report, particularly on references to the State of Maranhao.

We would like to express our agreement, in general terms, with the impressions given by the document, which appropriately reflects the assessment of project performance.

Sincerely,


Francisco de Assis Castro Góes
Director of NEPE

Mr. Túlio Barbosa
Head, World Bank Office in Recife
Recife - PE/BRAZIL

**GOVERNMENT OF THE STATE OF ALAGOAS
SECRETARIAT OF PLANNING - SEPLAN/AL
PAPP TECHNICAL UNIT/AL**

Maceió, June 4, 1997

Dr. Túlio Barbosa
Head of World Bank Office, Recife
Recife - Pernambuco

Dear Dr. Barbosa:

I refer to the receipt of the Draft Completion Report for the Northeast Rural Development Program -PAPP executed by the State under Loan 2862-BR. The following are the comments requested on said document.

With respect to paragraph 71, we would like to inform you that, of the 96 water supply systems that were implemented, only 66 were equipped with desalinization equipment.

Finally, once this small correction is made, we wish to express our agreement with the general content of the Report which, in our opinion, correctly reflects the Program's actual performance in the State.

Sincerely,

(signed)
Erival Gonçalves de Albuquerque
General Coordinator, PAPP/AL

cc: Dr. Marcelo Vieira - SEAIN/MPO

BRAZIL
NORTHEAST RURAL DEVELOPMENT PROGRAM
NORTHEAST RURAL DEVELOPMENT PROJECT - PARÁIBA
AGRICULTURAL POTENTIAL DEFINED BY DEPENDABLE RAINFALL

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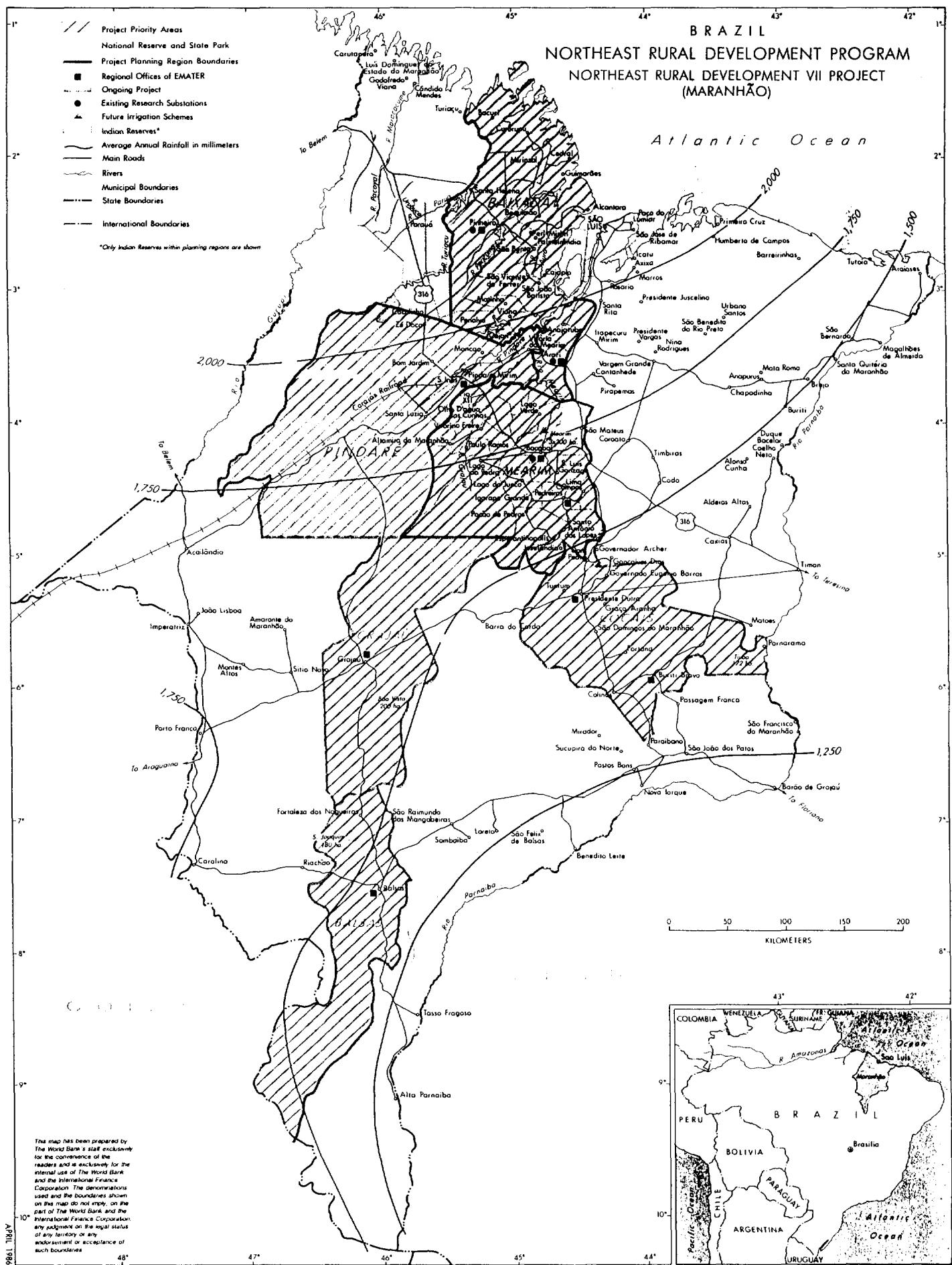
RIO GRANDE DO NORTE

This historical map of Minas Gerais, Brazil, illustrates the locations of various quilombos (African resistance communities) during the colonial period. The map shows the state's borders and major urban centers, with numerous quilombos marked by 'O' symbols and labeled with their names. The 'Corda' quilombos are primarily found in the central and southern parts of the state, while the 'Corda e Pernas' quilombos are concentrated in the southern and southeastern regions. The map also includes state borders, major cities, and other geographical features.

PERNAMBUCO

A map of South America with a dashed line highlighting the Northeast Region of Brazil. The region includes the states of Pernambuco, Bahia, and Alagoas. The map also shows the following countries and their capital cities: Colombia (Bogotá), Venezuela (Caracas), Suriname (Paramaribo), Guyana (Georgetown), Brazil (Brasília), Bolivia (La Paz), Paraguay (Asunción), Argentina (Buenos Aires), Uruguay (Montevideo), and Chile (Santiago). The Amazon River is shown flowing through the center of the continent.

The swap had been structured by The World Bank's staff exclusively for the convenience of the members and it succeeded for the intended use of The World Bank and the International Finance Corporation. The arrangements could not be faulted on this basis and it did not make on the part of The World Bank and the International Finance Corporation, any adjustment on the legal status of any territory or any arrangement in acceptance of any claim.



This map has been prepared by The World Bank's staff exclusively for the convenience of the readers and is exclusively for the internal use of The World Bank and the International Finance Corporation. The denominations used and the boundaries shown on this map do not imply, on the part of The World Bank and the International Finance Corporation, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.

APRIL 1986

IBRD 19517

IMAGING

Report No.: 16765
Type: ICR