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PERFORMANCE AUDIT REPORT

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROGRAM
CEARA AND PARAIBA PROJECTS
(LOAN 2763 and 2860-BR)

June 29, 2000

Sector and Thematic Evaluation Group
Operations Evaluation Department

Currency Equivalents (annual averages)

Local Currency Unit	Cruzeiro (Cr$)
Exchange Rate at Project Appraisal Ceará (November 1985):	US$1—Cr$8,891
Rate at Completion	US$1—R0.968
Exchange Rate at Project Appraisal Paraiba (December 1986):	US$1—Cr$14.20
Rate at Completion (December 31, 1996)	US$1—R1.0381

Abbreviations and Acronyms

APCR	Program of Support to Small Rural Communities under the Original Northeast Rural Development Program) Apoio às Pequenas Comunidades Rurais
FAO/CP	World Bank/FAO Cooperative Program
FUMAC	Municipal Community Schemes Conselho Municipal de Apoio Comunitário
NGO	Non-Governmental Organization Organização Não-Governamental

FISCAL YEAR

January 1 – December 31

Director-General, Operations Evaluation	:	Mr. Robert Picciotto
Director, Operations Evaluation Department	:	Mr. Gregory K. Ingram
Manager, Sector and Thematic Evaluation	:	Mr. Ridley Nelson (Acting)
Task Manager	:	Mr. John Heath

The World Bank
Washington, D.C. 20433
U.S.A.

Office of the Director-General
Operations Evaluation

June 29, 2000

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Performance Audit Report on Brazil
Northeast Rural Development Program
Ceará Project (Loan No. 2763-BR)
Paraíba Project (Loan No. 2860-BR)

Attached is the Performance Audit Report prepared by the Operations Evaluation Department (OED) on the above two projects which both formed part of Brazil's Northeast Rural Development Program. The Ceará project (Loan No. 2763-BR) was approved on April 30, 1985 and closed on December 31, 1995, nine months behind schedule; an undisbursed balance of US$7.1 million was canceled. The Paraíba project (Loan No. 2860) was approved on June 30, 1987 and closed on December 31, 1996, nine months behind schedule; US$0.6 million was canceled at closing.

The audit focuses exclusively on the performance of these two projects from 1993 to their respective closing dates. The projects are evaluated against the revised objectives that were approved by the Bank's Board and became effective on September 28, 1993. When the revised objectives were approved, of the original loan amounts there was 63 percent left to disburse in Ceará and 64 percent in Paraíba.

The audit sought to determine whether the results of these two projects were consistent with expectations when they were reformulated, and to derive lessons that may be applicable to the next cycle of community-driven development projects, in Brazil and elsewhere.

The revised design entailed shifting the focus from small farmers and agricultural production to rural poverty alleviation emphasizing poor rural communities and investments in productive, infrastructure and social subprojects identified, designed and implemented by the beneficiaries. In line with decentralization trends in Brazil, responsibility for counterpart funding was moved from the federal government to state governments.

The two projects shared the same (revised) objectives: (i) provide basic social and economic infrastructure 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.

Project funds were channeled to beneficiaries by one of two mechanisms: PAC (community associations submit subproject proposals directly to a state technical unit) and FUMAC (subprojects prepared by associations are first screened by a municipal council, with members drawn from the community, local government and civil society, following which the highest priority proposals are

forwarded to the state technical unit). The Bank considered FUMAC—a small pilot exercise during the life-span of these projects—to hold greater potential for fostering transparency and ownership because it invited communities to participate in a municipality-wide process of priority setting.

The results of the reformulated project were very positive. The number of beneficiary families served by subprojects in the two states was more than three times higher than expected when the projects were redesigned. The projects clearly targeted the rural poor (although not necessarily the poorest of the poor). The participatory FUMAC process helped to make targeting more precise, encouraging participants to put the interests of the neediest communities first. The revealed preference of beneficiaries was for infrastructure projects (mainly rural electrification) which accounted for 56 percent of subprojects in Ceará and 74 percent in Paraíba; productive projects (e.g., agro-processing) accounted for one-quarter to one-third of all subprojects; and social projects (e.g., day-care centers) for five percent or less.

Resources were used efficiently, 93 percent of project funds financing subprojects directly. The cost of infrastructure subprojects averaged 30 percent lower when implemented by communities, compared to government agencies or contractors. Economic rates of return on productive subprojects were typically 20 percent or more.

The audit surveyed a total of 77 subprojects across the two states, 55 percent corresponding to PAC and 45 percent to FUMAC. The survey found that:

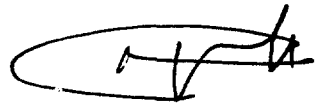
- According to 83 percent of respondents, subprojects were well-designed and had improved their quality of life
- All electrification subprojects were still operational; but 45 of the other subprojects were not, with productive subprojects most vulnerable.
- There were no statistically significant differences between PAC and FUMAC concerning the amount of technical assistance received, and the technical viability of subprojects.
- About one-quarter of beneficiary associations in the two states have funded subprojects from sources other than project funds.
- Almost one-quarter of associations have received bank credit.

On project outcome, OED concurs with the implementation completion report, rating Ceará satisfactory and Paraíba highly satisfactory. The audit survey showed that Paraíba counted the number of beneficiaries more accurately, served a larger percentage of associations with technical assistance, had more NGO participation, had a higher proportion of technically sustainable projects, and a greater number of associations reporting satisfaction with subprojects. Paraíba's superior performance partly reflects the preponderance of electrification—the least problematic of all subprojects.

OED rates sustainability as likely, based primarily on the proven technical viability of subprojects. Institutional development is rated as substantial, based on the evidence that subprojects contribute to social capital formation, and because one-quarter of the associations had diversified their source of funding for subproject investments.

OED upgrades the rating of Bank and Borrower performance from satisfactory to highly satisfactory, reflecting the progress in decentralizing project administration and empowering beneficiaries, the continuing refinement of project design, the high quality of supervision, the exemplary implementation completion reporting, and the commitment by all parties to achieving the projects' development objectives.

There are three main lessons. First, the decentralized and participatory approach to project administration exemplified by these projects has greatly enhanced client responsiveness, increased the scope for iterative design improvements (Box 1) and has generated positive externalities for Brazil and for the Bank by advancing community-based procurement. Resident missions with dedicated supervision teams can play a critical role in improving decentralized and participatory approaches. Second, as demonstrated in other countries (e.g., Mexico), productive projects financed by matching grants are less likely to be sustainable than small-scale infrastructure projects. Third, the discontinuities associated with the electoral cycle require continuous advocacy by the Bank staff and frequent information campaigns to ensure that project development objectives are kept alive from one administration to the next.



Attachment

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Tables

Annexes

MAPS

This report was prepared by John Heath, Task Manager, who audited the project in December 1999. William Hurlbut edited the report, and Pilar Barquero provided administrative support.

Principal Ratings

	Loan No. 2763 (Ceará)		Loan No. 2860 (Paraíba)	
	Audit	*ICR*	*Audit*	*ICR*
Outcome	Satisfactory	Satisfactory	Highly satisfactory	Highly Satisfactory
Sustainability	Likely	Likely	Likely	Likely
Institutional Development	Substantial	Substantial	Substantial	Substantial
Borrower Performance	Highly satisfactory	Satisfactory	Highly satisfactory	Satisfactory
Bank Performance	Highly satisfactory	Satisfactory	Highly satisfactory	Satisfactory

Audit ratings

Outcome[a]	Highly satisfactory, Satisfactory, Marginally satisfactory, Marginally unsatisfactory, Unsatisfactory, Highly unsatisfactory.
Sustainability	Likely, Uncertain, Unlikely.
Institutional Development	Substantial, Modest, Negligible.
Borrower Performance	Highly satisfactory, Satisfactory, Marginally satisfactory, Marginally unsatisfactory, Unsatisfactory, Highly unsatisfactory.
Bank Performance	Highly satisfactory, Satisfactory, Marginally satisfactory, Marginally unsatisfactory, Unsatisfactory, Highly unsatisfactory.

a. A composite rating, based on relevance, efficacy and efficiency (see main text).

Key Staff Responsible

	At appraisal	*At midterm*	*At project completion*
Loan No. 2763 (Ceará)			
Task Manager	Alain Berthier	Raimundo Caminha	Joao Barbosa-de Lucena
Division Chief	Jan Wijnand	Tia Duer[a]	Constance Bernarda
Department Director	Robert Picciotto	Armeane Choksi	Gobind T. Nankani
Loan No. 2860 (Paraíba)			
Task Manager	J.P. Delsalle	Tulio Barbosa	Raimundo Caminha
Division Chief	D. Martinussen	Tia Duer[a]	Constance Bernard[a]
Department Director	Cornelis Van Der Meer	Armeane Choksi	Gobind T. Nankani

a. Luis Coirolo played a critical supporting role as portfolio manager for the Northeast program.
Note. The Implementation Completion Reports were prepared by Anna Roumani who also participated extensively in the supervision of these projects.

Preface

This is a Performance Audit Report (PAR) of two projects in Brazil's Northeast Rural Development Program.

i. The Ceará Project, for which Loan 2763-BR, in the amount of US$122.0 million, was approved on April 30, 1985. The closing date was December 31, 1995, nine months behind schedule. The final disbursement from the loan was made on May 21, 1996, and the balance of US$7.1 million was canceled.

ii. The Paraíba Project, for which Loan 2860-BR, in the amount of US$60.0 million, was approved on June 30, 1987. The closing date was December 31, 1996, nine months later than originally planned. The final disbursement from the loan was made on May 19, 1997, and US$0.6 million was canceled.

The PAR focuses exclusively on the performance of these two projects from 1993 to their respective closing dates—after their reformulation. The projects are evaluated against the revised objectives that were approved by the Bank's Board and became effective on September 28, 1993.

The PAR presents the findings of a mission by the Operations Evaluation Department that visited Brazil in December 1999. The findings are primarily based on the results of a survey of subprojects conducted during the mission, as well as interviews with beneficiaries, project staff, officials of the Government of Brazil and the Bank team. The collaboration of these persons is gratefully acknowledged. In addition, the PAR draws on the staff appraisal reports, implementation completion reports and other evaluation studies.

Following customary procedures, copies of the draft audit report were sent to the relevant government agencies for their review and comments. Comments received have been translated and attached as Annex C.

1. Background and Methodology

1.1 The Brazil Northeast Rural Development Program (NRDP) was supported by 10 Bank-assisted projects, including the two—in the states of Ceará and Paraíba—that form the subject of this audit.[1] The Paraíba project was selected for audit because it was the only one of the 10 with an outcome rated "highly satisfactory" by the implementation completion report (all other states were "satisfactory"). Ceará was chosen for this audit because there is a rich evaluative record to draw on.[2]

1.2 The loans were signed in FY87 (Ceará) and FY88 (Paraíba) and closed, respectively, in FY96 and FY97. As initially planned, the NRDP focused on small farmers and provided a mix of agricultural services and infrastructure. It foundered in all 10 states, for reasons typical of integrated rural development projects of the time:[3] difficulty in coordinating the various centralized service providers; and weak sustainability because beneficiaries had little say over the selection, design and implementation of subprojects. The adverse macroeconomic environment and the collapse of counterpart funding aggravated these problems. Following an OED study[4] and a protracted midterm review (1991/93), the program was reformulated. **This audit focuses exclusively on the record of these two NRDP projects from 1993 to their closing in 1995/96.**

1.3 The audited projects are evaluated against the revised objectives that were approved by the Bank's Board (and became effective on September 28, 1993): "(i) provide basic social and economic infrastructure 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." [5] The implementation completion report notes that "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."[6]

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1. Annex B, Table B5 shows where the two audited projects fit in the sequence of projects.

2. Including, Judith Tendler, Good Government in the Tropics, Baltimore: Johns Hopkins University Press, 1997 and "The rise of social funds: What are they a model of?" draft, January 15, 1999. Professor Tendler's students at the Massachusetts Institute of Technology have greatly contributed to the work on Ceará: see, for example, Rodrigo Serrano's 1992 Master's thesis, "Who knows what's best for the poor? Demand-driven policies and rural poverty in Northeast Brazil". Other important studies are: Johan van Zyl, Tulio Barbosa, Andrew N. Parker and Loretta Son, Decentralized Rural Development and Enhanced Community Participation: A Case Study from Northeast Brazil, World Bank Policy Research Working Paper No. 1498, August 1995; and Thomas Wiens and Maurizio Guadagni, Designing Rules for Demand-Driven Rural Investment Funds: The Latin American Experience, World Bank Technical Paper No. 407, 1998.

3. OED, "Area Development Projects", Lessons and Practices, No. 3, September 1993.

4. Judith Tendler, New Lessons from Old Projects: The Workings of Rural Development in Northeast Brazil, Washington, DC: World Bank, Operations Evaluation Department, 1993.

5. Implementation Completion Report, Northeast Rural Development Program: Paraíba, Maranhão and Alagoas Projects, (Report No. 16765), June 24, 1997, p. 7.

6. *Ibid*, p.7.

1.4 Thus, the NRDP was converted into a community-based development program, dropping all components targeting agricultural production. The redesigned projects provided matching grants to rural community associations to finance small-scale subprojects identified by those groups as priority investments for community well-being. The subproject cost could not exceed US$40,000 equivalent, including a community contribution that ranged from 10 to 20 percent depending on the type of subproject. Subprojects were classed as infrastructure (mainly electrification and water supply), social (such as day care centers) and productive (mostly small-scale agro-processing and communal tractors).

1.5 Responsibility for providing counterpart funds was shifted from the federal government to state governments. The flow of funds from the national treasury to the states was streamlined. Two alternative mechanisms were developed—state community schemes (PAC) and pilot municipal community schemes (FUMAC)—the aim being to test which was more effective in processing subprojects. The FUMAC pilot processed 11 percent of subprojects in Ceará and 37 percent in Paraíba.

1.6 To facilitate comparison of the two mechanisms some communities were assigned to PAC and others to FUMAC. In the case of PAC, rural communities submitted their subproject investment proposals directly to a state project technical unit which screened, approved and released funds for subprojects directly to beneficiaries. By contrast, FUMAC invited rural communities to submit subproject proposals to a municipal council—an NRDP entity formed explicitly for reviewing such proposals. The councils composed of community members, local government representatives and members of civil society, promoted local consensus building on priority needs through open meetings, and screened and submitted subprojects to the state technical unit for approval and financing. The completion report notes that "FUMAC is a more progressive model than PAC, and the Bank has always encouraged its expansion."[7]

Methodology

1.7 OED compared the performance of subprojects and their respective beneficiary associations in four zones (11 municipalities) (Table 1).[8]

Table 1: Areas covered by audit survey

Total N of cases=77	*STATE*	
MICROREGION	***Ceará (N=31)***	***Paraíba (N=46)***
***Brejo* (N=39)**	Ibiapina/a	Alagoa Nova/a
(Annual rainfall: 1,000-1,250 mm)	Ibiapina/a	Bananeiras/a
		Bororema/a
		Esperanca/a
***Sertaõ* (N=38)**		
(Annual rainfall: 750-1,000 mm)	Erere[a]	Agua Branca[a]
	Iracema[a]	Patos[a]
	Jaguaribe[a]	

a. Municipality. See Table B1 for poverty ranking of these municipalities.

1.8 OED made a purposive, not a random sample, for this audit. The *brejo* microregions were included in the sample because, on the face of it, they are better endowed for rural development: they have more rainfall and higher population density than the Northeast average; and a legacy of

7. *Ibid*, p. 8.

8. See Table B1 for poverty indicators referring to these municipalities.

(Bank-assisted) integrated rural development initiatives dating back to the late 1970s.[9] The *sertão* microregions were chosen because they are exactly the opposite: semi-arid, sparsely populated and with less history of project intervention. From a list of all the subprojects financed in these four zones since 1993, OED selected 90 for inspection (Annex B, Figure B1). The selection was not random because the aim was to ensure that the full range of subproject types was represented, with roughly equal shares of PAC and FUMAC channels. (FUMAC subprojects were deliberately over represented because they carry more weight in the follow-on project and are considered to be best practice: they represent 45 percent of the sample but accounted for only 11 percent of all subprojects in Ceará and 37 percent in Paraíba). For each subproject, the leader of the beneficiary association was interviewed on site using a short questionnaire (Figure B2). Questionnaires were completed for 77 of the 90 subprojects selected (the shortfall corresponding to subprojects whose identifiers on the printout were too imprecise for them to be traced).

1.9 The survey's explanatory power is limited not just by the small number of cases studied (N=77), but also by the absence of any comparison with groups outside the project: the only way to rigorously study impact on poverty, incomes and employment is to conduct a panel study, comparing communities with and without subproject investments, both during the project and some time after it is completed.[10] Also, because the survey interviewed association leaders rather than a representative sample of beneficiaries the results do not indicate to what extent the choice of subprojects was demand-driven.

1.10 The audit survey posed 10 questions:

(a) Was the reformulated project well targeted?

(b) How many families benefited?

(c) Does coverage vary substantially between regions?

(d) How do subproject unit costs compare with the cost of providing similar benefits outside the project?

(e) What proportion of project spending finances subprojects?

(f) Are subprojects still in working order?

(g) Do beneficiaries cover maintenance costs?

(h) Does sustainability vary according to (a) type of subproject and (b) the processing channel?

(i) Were the beneficiary associations in existence before the subproject was conceived—or are they project-specific creations?

(j) Have beneficiary associations been able to finance new investments with funds from *outside* the project?

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9. In each state, these microregions were included in the first-cycle of integrated rural development projects (known as POLONORDESTE): Loan number 1488 (Ceara, Serra de Ibiapaba) was approved in April 1977; Loan number 1537 (Paraiba, Brejo) was approved in March 1979 Both projects were audited by OED (see Report No. 7910, June 28, 1989).

10. Because these projects cover all municipalities outside the metropolitan area it will be difficult to isolate communities that have been untouched by the program, making problematic the panel analysis of communities "with" and "without" subproject investments (Comment by Johan van Zyl, April 11, 2000).

2. Relevance: Were Project Objectives Right?[11]

2.1 The heavy expenditure on the first and second generation of Northeast rural development projects—US$3.3 billion committed by Brazil between 1975 and 1987—was, in principle, relevant. About 60 percent of poor persons in the Northeast live in rural areas, accounting for about one-third of all Brazil's poor.[12]

2.2 As originally conceived, the NRDP projects were developed and appraised under a centralized military government in which public agencies controlled most development activity. Concepts like participation and decentralization were politically problematic in the Brazil of the period and not yet regular part of the Bank's lexicon. These circumstances changed in the course of the project. By the mid-1980s Brazil had returned to democratic rule, and adopted a new constitution in 1988 that promoted decentralization. In Mexico, the Solidarity program was launched—a Bank-supported experiment in community-driven development that would inspire imitators in other countries.[13]

2.3 The original NRDP projects were blighted by (a) poor targeting, (b) substantial counterpart funding delays, (c) erosion of project funds by high inflation, (d) sector policy distortions that harmed agriculture (e) difficulties in coordinating rural credit and subsidy components, (f) inefficient project administration by state agencies; and (f) sluggish disbursement. The redesigned project addressed each of these problems and was fully consistent with changing priorities in Brazil and in the Bank's strategy.

2.4 Disbursement was speeded-up by taking project administration away from federal agencies and giving it to the states. The state agency monopoly over project administration and service delivery was broken. The introduction of matching grants provided resources to the non-bankable poor while building community ownership. One of the more promising components of the original project—support to small rural communities (APCR)—was expanded, with the target group shifting from small farmers to poor rural communities. Infrastructure subprojects were reinstated—these had been excluded when the project was appraised on the grounds that infrastructure benefited local elites more than proportionately, while roads and electrification were already well-funded.[14]

2.5 The reformulated projects revealed that beneficiaries had a strong preference for infrastructure (which accounted for half to three-quarters of all subprojects)[15]. The participatory design of the reformulated project suggests that these investments corresponded to what communities wanted. However, the influence of municipal mayors should not be discounted. The audit survey found that electrification subprojects were much more likely to be supported by mayors than other subprojects (Table B2), possibly explaining the preponderance of this type of investment.

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11. The relevance, efficacy and efficiency ratings are not published by OED (see page 2): but the "Outcome" rating is a composite of these three implicit ratings.

12. Brazil: Poverty Assessment, World Bank, June 27, 1995, pp. 49-50.

13. See OED Performance Audit (Report No. 17975), Mexico: Decentralization and Regional Development Project (Loan 3310), July 9, 1998.

14. Tendler, 1993, op.cit., p. 12.

15. See Table B6.

3. Efficacy: Did the Project Achieve its Stated Objectives?

3.1 Table B6 summarizes project results for the two states, as recorded in the implementation completion report.

3.2 *Was the project well targeted?* Targeting took place at two levels. The first was area-based, drawing on a survey of the incidence of rural poverty in the Northeast.[16] Because poverty was so widespread in the Northeast the project was not geographically selective, including all municipalities other than metropolitan areas. The second—more important—level of targeting was community-based: beneficiaries themselves determined where project resources would be best applied based on their first-hand knowledge of community socioeconomic conditions and local investment needs. This process was more rigorous under FUMAC than PAC because the municipal councils broadened the framework within which priority setting took place—the municipality as a whole became the frame of reference, not just the horizon of a single beneficiary association.

3.3 *How many families benefited?* Because the reformulated projects were demand-driven there are no *ex-ante* targets for the number of subprojects to be financed in each category (infrastructure, productive and social). The original appraisal set a target for the total number of subprojects, revised when the project was reformulated. According to the implementation completion report,[17] coverage amply exceeded both the earlier and the later target (Table 2). Paraíba exceeded the average for all 10 states in the program. Ceará did not match this average—but still served four times more beneficiaries than estimated at reformulation.

Table 2: Number of beneficiaries served

	(1) Original Target	*(2) Target at Reformulation*	*(3) Achievement after Reformulation*	*(4) (3)/(2) (%)*
Paraíba	37,800	23,000	149,633	651%
Ceará	122,800	50,000	208,830	418%
Total (10 states)	574,500	307,400	1,779,353	579%

Source: Report No. 16765 (Paraíba), 1997, p. 92.

3.4 *Does coverage vary substantially by region?* According to the project database, in the 11 municipalities included in the audit survey, the density of coverage—in terms both of the number of subprojects and the number of families served—was higher for municipalities located in Ceará and the *sertão* microregion than it was for municipalities in Paraíba and the *brejo* microregion (Table 3). For the 11 municipalities in question, there are actually more poor families in Paraíba than in Ceará,[18] illustrating the imprecision of targeting. In Ceará the number of beneficiaries outnumbered the number of poor families by a factor of three: which may mean that each poor family was served by three separate projects—or that the number of beneficiaries was substantially inflated. Comparing results from the audit survey with the project database (see the highlighted row in Table 3) suggests that, in the case of Ceará, the database overestimates the number of beneficiaries; for Paraíba, on the other hand, the two sources closely agree.

16. O Mapa de Fome, Volume III (Documento de Política No. 17), Brasilia: IPEA, August 1993.

17. Report No. 16765 (Paraíba), June 24, 1997, Table 15, p. 92.

18. Poverty figures taken from O Mapa de Fome, 1993, *op. cit.*

Table 3: Coverage in the eleven audit municipalities[a]

	Paraíba	*Ceará*	*Brejo*	*Sertão*
N of poor families in 1993[b]	20,891	13,774	16,142	18,523
N. of subprojects financed[c]	87	146	74	159
N. of families served by subprojects[c]	6,108	47,499	20,437	33,170
Mean N of families per subproject[d]	**70 (71)**	**329 (52)**	**276 (58)**	**209 (71)**
Subprojects per poor family	.004	.011	.005	.009
Families served/Poor families (%)	29%	344%	127%	179%

a. See Figure 1 for list of municipalities.
b. Source: *O Mapa de Fome*, Volume III (Documento de Política No. 17), Brasilia: IPEA, August 1993 (see Table B1).
c. Source: Project database.
d. Source: Project database and (for bracketed number) OED Audit Survey.

4. Efficiency: Was the Project Cost Effective?

4.1 *How do subproject unit costs compare with similar investments outside the project?* For the Northeast program as a whole it is estimated that the cost of infrastructure projects is on average 30 percent lower when they are implemented by the communities themselves (directly or through small local firms) than by government agencies or contractors.[19] This audit found that, in the case of rural electrification—the predominant investment, accounting for 46 percent of cases surveyed—costs per kilometer are lower in the projects than outside (Table 4), particularly for the low-tension lines linking individual houses to the grid. Building costs (e.g., community centers, substations) average 50 percent higher outside the project.

4.2 Constrained by the budget ceiling (US$40,000 per subproject),[20] much of the investment in rural electrification was for "mono phase" equipment. Mono phase costs half as much as triple phase—but this may be a false economy because while it is adequate for domestic needs it is not powerful enough to support irrigation pumps or factory machinery, limiting the scope for development of productive projects.

Table 4: Unit costs, inside and outside the project

1999 prices[a]	*Project (Paraíba)*	*Project (Ceará)*	*Non-project (Paraíba)*[b]
Rural electrification US$/km			
High tension line (*trifasica*, 13,800 volts)	3,364	3,751*	3,792
Low tension line (*trifasica*, 220 volts)	3,231	3,751*	5,043
Built space US$/m2	105	NA	152

Source: Data supplied to audit mission by state technical units in Paraiba and Ceara, December 1999.
a. US$1.00=R$1.87
b. Data from SAELPA, Paraiba's privatized electricity utility
* Mean for high and low tension lines. NA Not available.

4.3 *What proportion of project spending finances subprojects?* Bank task managers estimate that before the project was restructured in 1993 only 40 percent of project funds financed subprojects directly,[21] compared to 93 percent currently (leaving 7 percent to cover operating and

19. Staff Appraisal Report, (RPAP, Paraíba), No. 16757, October 1997, p.50.

20. This ceiling was raised to US$50,000 in the follow-on projects.

21. In the first cycle of projects (POLONORDESTE, 1975-85) only 20 percent of projects funds were actually available for physical investments.

technical assistance costs—excluding salaries). This reflects the substantial reduction in agency fees associated with the shift towards more decentralized project administration. Calculations for similar projects in Africa—supported by the International Fund for Agricultural Development—found that operating and technical assistance costs (without salaries) can amount to as much as 140 percent of all other costs entailed by a subproject.[22]

4.4 *In addition,* the implementation completion report (Paraíba) calculated high economic rates of return for selected productive projects: irrigation (30 percent); small ruminant development (20 percent); cereals processing (40 percent); and over 50 percent for installing a forage grinder.[23]

5. Sustainability: Are the Project's Results Likely to Last?

5.1 *Are subprojects still in working order?* Not surprisingly, beneficiaries were more likely to rate the subproject's impact on their lives as positive if the subproject was still in working order when the questionnaire was applied.[24] The audit survey found that, overall, three-quarters of subprojects were still operational. There were highly significant differences between the two states and between types of subproject. Only 59 percent of Ceará subprojects were still working, compared to 85 percent in Paraíba. This reflects the higher mean age of subprojects in Ceará (more time to break down) and the lower share of electrification in total investments (19 percent in Ceará compared to 54 percent in Paraíba). *All* the electrification projects were still operational.

5.2 Subprojects supported by mayors were more likely to be still operational (Table B4): this is probably an artifact of mayors' keen support for electrification investments (which were always sustainable). Subprojects were more likely to be still operational if technical assistance had been specifically earmarked for the maintenance phase; technical assistance received during preparation and implementation did not have any significant impact on sustainability.[25] NGO participation had no impact on the technical viability of subprojects. Also, sustainability was not influenced by whether or not beneficiaries kept a maintenance fund: this squares with the frequent assertion by beneficiaries (picked up in group meetings during the audit mission) that they would club together whenever infrastructure actually broke down—rather than pledge money in advance. Nor was sustainability more likely when beneficiaries had made a cash contribution to subproject costs (rather than, or in addition to, putting in their labor).

5.3 *Do beneficiaries cover maintenance costs?* In the case of electrification maintenance is unproblematic because it is financed by consumer tariffs and is not the direct responsibility of the user. In other cases, there was little evidence of any payment of user fees, or contribution to a contingency fund. In only 20 percent of cases had a fund been established to cover maintenance costs. However, there was a highly significant difference between the *sertão* (where 35 percent of subprojects have a maintenance fund) and the *brejo* (5 percent), perhaps indicating that people hardened by drought are more likely to take the forward-looking measures needed to protect their investment.

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22. Information supplied by Jean Delion, April 4, 2000.

23. Report No. 16765 (Paraiba), June 24, 1997, Table 9D, p. 77.

24. For analysis of significant correlation between questionnaire responses, see Table B4.

25. See Table B4.

5.4 *Does sustainability vary according to the type of project?* The audit survey found that electrification subprojects—which accounted for 41 percent of the total—were all in working order; of the other subprojects (59 percent of the total), just over half were still in working order. Productive projects—which accounted for 23 percent of total investment in Paraíba and 39 percent in Ceará—had the poorest record. A prolonged drought—which started in 1996—reduced the sustainability of productive projects, affecting even the *brejo*, a region which traditionally has an adequate water supply.

5.5 Also, the project selection process did not screen adequately for the business skills that make for viable enterprises.

5.6 It could be argued that the nature of the funding (grants, not loans) is not consistent with a class of subprojects that, ideally, should generate a return large enough to cover the cost of funds. The Bank team argues that the poor beneficiaries targeted by these projects are non-bankable and that enterprise start up would be impossible without some element of grant funding; given the beneficiary contribution, the grant is less than 100 percent of project cost.

5.7 Based on the subprojects visited in the eleven municipalities during the audit mission, OED agrees with the verdict of an earlier review of the Northeast program:

> "Many productive subprojects showed low prospects for sustainability and...low potential for having a significant impact on economic development...Many subprojects often suffered market problems because they focused on products (e.g. garment-making, fruit processing) whose market was dominated by large firms and for which marketing required organizational skills rarely available in rural communities. Other subprojects were linked to crops (e.g., manioc) consumed directly or processed mainly at the farm level, or whose prices have been declining or stagnant, so they were unlikely to have a significant impact in the economic transformation of the region. Most of the agro-processing subprojects (e.g., manioc mills and fruit processing) were working far below full capacity. In addition, the collective nature of productive subprojects frequently led to problems of collective management (e.g., of irrigation kits)...Cases of successful productive subprojects revealed the potential for program interventions to link farmers to dynamic, export-oriented activities (e.g., cashew nuts and irrigated fruits), but they were unfortunately too few in number."[26]

5.8 *Does sustainability vary according to the processing channel?* In terms of the technical viability of subprojects, there was no statistically significant difference between the PAC and FUMAC channels. 71 percent of PAC subprojects were still operational, compared to 77 percent of FUMAC subprojects. The level of technical assistance received did not vary significantly by processing channel (Table 4).

Table 5: Intensity of technical assistance

% of subprojects that received technical assistance for...	*PAC (N=42)*	*FUMAC (N=35)*	*Significance test[a]*
Preparation	88.1	85.7	P=.75 (NS)
Implementation	85.7	85.7	P=1.00
Maintenance	54.7	57.1	P=.83 (NS)

Source: OED Audit Survey, 1999.
a. Chi-square. NS= Not significant.

26. Damiani, 1996, *op. cit.*, p. 11.

5.9 Sustainability depends not just on the technical viability of the original project but also on the social capital (trust, solidarity) created during preparation and implementation—capital that may help to increase commitment to sound operation and maintenance of the investment. A substantial body of work by consultants who surveyed the level of community participation in 1993, 1994 and in 1998/2000[27] indicates that the FUMAC process is better at building social capital. The data collected by this audit are not strong enough to either support or reject these earlier findings. However, some evidence was uncovered that the effectiveness of the FUMAC process can be reduced in the short-term by state government rotation. In Paraíba, a change of administration led to a temporary deactivation of the municipal councils. There was a considerable drop in the share of subprojects processed through the FUMAC channel—down from 37 percent when the audited project closed (1996) to 6 percent almost midway in the follow-on (1999).[28] The lack of continuity between administrations—at state and municipal level—demonstrates the need for Bank staff to make a continuous commitment to promoting the principles of the project.

6. Institutional Development: Has The Project Led to Better Management of Human and Financial Resources?

6.1 *Did the beneficiary associations substantially predate the subprojects?* One hypothesis is that associations that were created around a specific subproject may have shallower roots and therefore be less likely to survive than associations that have a longer record—and possibly a momentum independent of the program. The audit survey found that 47 percent of the associations had existed more than three years before the subproject agreement was signed. While the technical viability of subprojects is not higher for longer-lived associations, longevity may help build social capital.

6.2 Have beneficiary associations been able to finance new investments with funds from **outside** the project? One hypothesis is that beneficiaries will be empowered by the project process leading to increased self-reliance and the ability to take on new projects. This is a key question. Will the momentum built by the project be sustained after loan closing? The survey found that 23 percent of beneficiary associations in Ceará and 26 percent in Paraíba have funded subprojects from other sources.[29] Almost one-quarter of associations have received bank credit (Table 6). There are significant differences by microregion and by processing channel. Associations in the brejo have funded more projects from outside sources than those in the sertão (perhaps reflecting the latter's more risky environment). PAC associations have funded more projects from outside than FUMAC. The same pattern holds for access to bank credit. Associations in the brejo (or in PAC) have a higher frequency of loans from banks than those in the sertão (or in FUMAC). There is a significant positive correlation between access to bank credit and the number of investments financed outside the project.[30] On the other hand, there is no

27. C. Kottak, "A Study of Popular Participation in the Brazil Northeast Rural Development Program", University of Michigan, unpublished paper, February 7, 1994; C. Kottak and A. Costas, "1994 Follow-up Study", University of Michigan, unpublished paper, December 2, 1995; A. Costas, "Community Participation and Social Capital in the RPAPs", preliminary draft, April 2000.

28. Office Memo, "Pre-Supervision Summary: Paraíba Rural Poverty Project (Loan No. 4251)", September 28, 1999.

29. This tallies with the estimate from the current project cycle that one-quarter of associations have raised funds outside the project (comment by Tulio Barbosa, April 4, 2000).

30. See correlation between items Q26 and Q27, Table B4.

correlation between the number of subprojects financed with project funds and the number financed from outside sources.

Table 6: Sources of funding for subprojects

N=77 Associations	*Mean or percentage*	*Test of significant difference*
Mean number of subprojects per Association funded by PAPP/PCPR project	**1.4**	
States: Paraiba/Ceara	1.5/1.2	NS
Microregions: Brejo/Sertao	1.4/1.4	NS
Subproject type: Electrification/Other	1.2/1.4	NS
Process: PAC/FUMAC	1.5/1.2	NS
Mean number of subprojects per Association funded from *outside* the PAPP/PCPR project	**0.5**	
States: Paraiba/Ceara	0.5/0.6	NS
Microregions: Brejo/Sertao	0.9/0.1	P=.002 (HS)
Subproject type: Electrification/Other	0.2/0.7	P=.047 (S)
Process: PAC/FUMAC	0.7/0.2	P=.040 (S)
Percentage of Associations that have received bank credit	**23.3%**	
States: Paraiba/Ceara	28.2%/16.1%	NS
Microregions: Brejo/Sertao	35.9%/10.5%	P=.009 (HS)
Subproject type: Electrification/Other	22.5%/24.4%	NS
Process: PAC/FUMAC	40.4%/2.8%	P=.001 (HS)

Source: OED Audit Survey, 1999.
NS Not significant (p=>.05); HS Highly significant (p=<.01); S Significant (p=.01 to .05). Student t test applied to difference between means. Chi-square applied to difference between percentages.

7. Bank Performance

7.1 In 1991/92, there was pressure from Bank senior management and the Brazilian government to cancel the 10 NRDP projects: a record of weak administration and sluggish disbursement was compounded by a fiscal crisis, undermining the credibility of the projects. But instead of being cancelled the projects were successfully restructured. This would not have been possible without a concerted effort by the division chief and her portfolio adviser,[31] including a lightning promotional tour of the state governments. Governors were invited to visit the Bank-supported Solidarity project in Mexico—the first of the community-based, demand-driven operations—and it was this first-hand encounter which persuaded them that the Northeast projects were worth salvaging.[32]

7.2 The successful outcome of the restructured projects depended on flexible and responsive supervision. Yet supervision intensity for the two audited projects was very low: Paraíba averaged 7.1 staff weeks per year in FY93/97, and Ceará 10.1 staff weeks—compared to a mean of 23.6 staff weeks for agriculture projects in the Latin America region. This may reflect the economies derived from having task managers dedicated entirely to supervising this type of project, covering projects in a number of states from a local base.

7.3 It has been noted that, "the presence of a resident mission in Recife has often been an effective instrument...as task managers were able to respond promptly to problems and take advantage of their connections at the state level."[33] Established in 1974, the Recife Office had three task managers dedicated exclusively to working with the Northeastern states following the

31. Tia Duer and Luis Coirolo, respectively.

32. The Mexico project (Loan 3310) was audited by OED (see Report No. 17975, July 9, 1998).

33. Damiani, 1996, *op. cit.* p. 24.

reformulation. This team handled all supervision activities including procurement reviews and field visits. The Recife Office also updated and managed a global database providing detailed information on the subprojects and serving as a monitoring tool both for the Bank and for individual state technical units. In this respect, Bank support was well tailored to the decentralized structure of the reformulated Program.

7.4 The Northeast projects have had a Bank-wide demonstration effect and have played a particularly important role in facilitating the spread of more flexible, community-based procurement procedures.

7.5 Finally, the implementation completion reports[34] for these projects were of a very high standard, providing a clear and comprehensive evaluation of the period before and after restructuring and providing an essential input to the well-presented staff appraisal reports for the follow-on projects.

8. Borrower Performance

8.1 In general, Borrower performance and commitment improved substantially following the reformulation of the projects and was a critical ingredient of the satisfactory outcome.

8.2 The completion report makes the following measured assessment:

> "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."

8.3 The audit found that staff in the technical units were well organized, had a strong field presence, and were highly committed to the program. There was good coordination between technical units and the state agriculture extension agency: beneficiaries reported that extension agents were one of the prime sources of information about the project; and the extension agency provided technical assistance for subproject preparation and implementation. Coordination with state education and health authorities—whose data could have been used to improve targeting—was much weaker. In Ceará, irrigation expertise was insufficient—both in the state extension agency and in private firms—with the result that many subproject designs had to be reworked.

34. Prepared by Anna. F. Roumani.

9. Findings, Ratings, Lessons

9.1 In general, the audit's findings bear out an earlier review of the NRDP:

> "The small size and nature of the subprojects and decentralized implementation substantially improved the disbursement of project funds, reduced administrative expenditures...and better targeted the poor"[35]

9.2 The audit survey of 11 municipalities found that:

- According to 83 percent of respondents, subprojects were well-designed and had improved their quality of life
- All electrification subprojects were still operational; but 45 of the other subprojects were not, with productive subprojects most vulnerable.
- There were no statistically significant differences between PAC and FUMAC concerning the amount of technical assistance received, and the technical viability of subprojects.
- About one-quarter of beneficiary associations in the two states have funded subprojects from sources other than project funds.
- Almost one-quarter of associations have received bank credit.

9.3 On project outcome, OED concurs with the implementation completion report, rating Ceará satisfactory and Paraíba highly satisfactory. The audit survey showed that Paraíba counted the number of beneficiaries more accurately, served a larger percentage of associations with technical assistance, had more NGO participation, had a higher proportion of technically sustainable projects, and a greater number of associations reporting satisfaction with subprojects (Table B2). Paraíba's superior performance partly reflects the preponderance of electrification—the least problematic of all subprojects.

9.4 OED rates sustainability as likely, based primarily on the proven technical viabilility of subprojects and the reliability of cost recovery from the predominant rural electrification component. Institutional development is rated as substantial, based on the evidence that subprojects contribute to social capital formation, and because one-quarter of the associations had diversified their source of funding for subproject investments.

9.5 OED upgrades the rating of Bank and Borrower performance from satisfactory to highly satisfactory, reflecting the progress in decentralizing project administration and empowering beneficiaries, the continuing refinement of project design, the high quality of supervision, the exemplary implementation completion reporting, and the commitment by all parties to achieving the projects' development objectives.

9.6 Now that project design has matured, a closer impact evaluation is a high priority, based on a representative sample of subproject investments, and paying close attention to sustainability (particularly of productive projects) and employment generation.

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35. Octavio Damiani, "Report for the Government of Brazil-World Bank Commission: Rural Poverty," February 1996, p. 23.

Box 1: Project Refinements—The Team's Assessment

At the end of the audit mission, Bank task managers and the heads of the state technical units were each invited to list (independently) what, in their view, are the main *improvements* since the projects were restructured in 1993.[36]

- Smoother project operation and disbursement resulting from shifting counterpart funding from the federal to state governments.
- Greater empowerment of beneficiaries, owing to the formation of more (and more representative) municipal councils, and the suppression of "umbrella" associations that pose as intermediaries between diverse communities and the project administration.
- More rigorous selection of subprojects, including expansion of the negative list to exclude some social and productive investments that have performed poorly (e.g. ambulances, cattle raising).
- Improved quality of subprojects, reflecting better training of project staff, increased competition between public and private service agencies, and the provision that up to 8 percent of the subproject budget may be used to fund technical assistance.[37]
- Increased proportion of project funds reaching the final beneficiary.
- Cost ceiling per subproject raised from US$40,000 to US$50,000.
- More flexible procurement and disbursement procedures, including increased incentives to beneficiaries to minimize subproject costs: when actual costs are lower than the approved budget the savings may be retained by the association to finance other (approved) projects.
- Strengthening of the project's management information system.
- Progress on community procurement, generating positive externalities for projects throughout the Bank.
- Introduction of a complementary agrarian reform project that addresses one of the primary constraints on poverty reduction—lack of productive assets; the agrarian reform project was piloted in Ceará and then expanded to cover, in addition to Ceará, the states of Bahia, Maranhão, Minas Gerais and Pernambuco.

9.7 There are three main lessons. First, the decentralized and participatory approach to project administration exemplified by these projects has greatly enhanced client responsiveness, increased the scope for iterative design improvements (Box 1) and has generated positive externalities for Brazil and for the Bank by advancing community-based procurement. Resident missions with dedicated supervision teams can play a critical role in improving decentralized and participatory approaches. Second, as demonstrated in other countries (e.g., Mexico), productive projects financed by matching grants are less likely to be sustainable than small-scale infrastructure projects. Third, the discontinuities associated with the electoral cycle require continuous advocacy by the Bank staff and frequent information campaigns to ensure that project development objectives are kept alive from one administration to the next.

36. Some of these improvements were made in the course of the audited projects, others in the follow-on.

37. But, in Paraíba, the 8 percent option is not being exploited because it was poorly advertised and local staff are unaware of the arrangement.

Basic Data Sheet

BRAZIL: NORTHEAST RURAL DEVELOPMENT PROGRAM. CEARA PROJECT (LOAN 2763–BR)

Key Project Data

	Appraisal Estimate	*Actual or Latast estimate*	*Actual as % of appraisal estimate*
Total project costs (US$)	254.3	156.5	61.54
Loan amount (USM$)		122.0	

Cumulative Estimated and Actual Disbursements *(US$ million)*

	FY87	*FY88*	*FY89*	*FY90*	*FY91*	*FY92*	*FY93*	*FY94*	*FY95*	*FY96*
Appraisal estimate	9.80	20.10	36.60	55.00	75.80	95.20	107.50	117.40	122.00	122.00
Actual[a]	–	8.80	18.96	28.28	36.74	38.18	43.85	47.68	55.18	84.86[b]
Actual as % of estimate	–	44	52	51	48	40	41	41	45	70
Date of final disbursement: May 21, 1996										

a. US$30.0 million cancelled December 1994.
b. Loan balance of US$7.14 million cancelled November 12, 1996.

Project Dates

Steps in project cycle	*Original*	*Actual*
Identification	–	1982
Preparation	–	1983
Appraisal	–	November 1985
Negotiations	–	July 7, 1986
Board presentation	–	October 21, 1986
Signing	–	July 20, 1987
Effectiveness	–	October 19, 1987
Closing	March 31, 1995	December 31, 1995
Project Completion	September 30, 1994	December 31, 1995

Staff Inputs (staff weeks)

Stage of Project Cycle	*Planned*		*Revised*		*Actual*	
	Staff Weeks[a]	*US$*[a]	*Staff Weeks*[a]	*US$*[a]	*Staff Weeks*	*US$000*
Through appraisal	–	–	–	–	65.2	–
Appraisal—Board	–	–	–	–	5.6	–
Board—Effectiveness	–	–	–	–		–
Supervision	–	–	–	–	90.5	–
Completion	–	–	–	–	4.0	–
Total	–	–	–	–	165.3	–

Mission Data

Stage of project cycle	Date (month/year)	No. of staff in field	Duration of mission (# of days)	Specializations represented	Performance ratings		Types of problems[c]
					Implement. Status	Develop. Objectives	
Through Appraisal	2/85	n/a	n/a	Ec, Eng	n/a	n/a	n/a
	7/85	3	6	Ec, Eng	n/a	n/a	n/a
Appraisal through Board Approval	11/85	2	11	Ec	n/a	n/a	n/a
Supervision	11/86	1	6	n/a	n/a	n/a	n/a
	5/87	2	n/a	Ec, Eng	n/a	n/a	n/a
	6/87	1	n/a	Fin Ec	2	2	Fin
	5/88	1	n/a	n/a	1	2	Fin
	2/89	1	n/a	n/a	2	2	Fin, Eco, Pol
	5/89	1	n/a	n/a	2	2	Fin, Eco, Pol
	12/89	2	9	Ec, Fin	2	2	Fin
	2/90	1	n/a	Fin	2	2	Fin, Inst
	6/90	2	9	Fin, Eng	3	3	Fin, Man, Leg
	7/90	1	n/a	FinEc	3	3	Fin, Inst, Tech, Pol
	7/91		Updated 590		2	2	Fin
	5/92		Updated 590		1	2	Fin
	11/93	1	4	AgEc	2	2	Fin
	2/94	1	n/a	AgEc	2	2	Fin, Man
	4/94	1	8	AgEc	S	S	Fin, Man
	9/95	1	4	AgEc	S	S	Man

Other Project Data

Borrower/Executing Agency:

Related Bank Loans

Loan title	Loan	Purpose	Year of approval	Status	Closing date
Northeast Region Land Tenure Improvement Project	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.	
Ibiapaba Rural Development Project	1488-BR	To improve the incomes and living standards of small farm families.			1985
Second Ceará Rural Development Project	1924-BR	To improve the incomes and living standards of small farm families.			1986

BASIC DATA SHEET

BRAZIL: NORTHEAST RURAL DEVELOPMENT PROGRAM. PARAIIBA PROJECT (LOAN 2860–BR)

Key Project Data

	Appraisal estimate	*Actual or Latest estimate*	*Actual as % of appraisal estimate*
Total project costs (US$)	123.9	96.0	77.48
Loan amount (USM$)		60.0	
Cancellation (US$)			

Cumulative Estimated and Actual Disbursements *(US$ million)*

	FY88	*FY89*	*FY90*	*FY91*	*FY92*	*FY93*	*FY94*	*FY95*	*FY96*	*FY97*
Appraisal estimate	4.8	9.6	18.0	27.0	37.2	46.8	52.8	57.6	60.0	60.0
Actual	5.2	7.1	10.9	18.7	20.3	23.9	26.6	29.8	42.9	59.4[a]
Actual as % of estimate	108	74	60	69	54	51	50	52	72	99
Date of final disbursement: May 19, 1997										

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

Project Dates

Steps in project cycle	*Original*	*Actual*
Identification	--	1984
Preparation	--	1984/86
Appraisal	--	December 1986
Negotiations	--	May 13, 1987
Board presentation	--	June 30, 1987
Signing	--	July 20, 1987
Effectiveness	November 1987	October 15, 1987
Closing	March 31, 1996	December 31, 1996
Project Completion	September 30, 1995	December 31, 1996

Staff Inputs (staff weeks)

Stage of project cycle	*FY87*	*FY88*	*FY89*	*FY90*	*FY91*	*FY92*	*FY93*	*FY94*	*FY95*	*FY96*	*FY97*	*Total*
Preparation	32.4											32.4
Appraisal	17.4											17.4
Negotiations through Board Approval	9.0											9.0
Supervision		10.4	7.8	13.7	10.1	8.0	10.5	9.3	5.2	4.1	6.6	85.7
Completion											3.5	3.5
Total	58.8	10.4	7.8	13.7	10.1	8.0	10.5	9.3	5.2	4.1	10.1	148.0

Mission Data

Stage of project cycle	Date (month/year)	No. of staff in field	Duration of mission (# of days)	Specializations represented	Performance ratings		Types of problems[c]
					Implement. Status	Develop. Objectives	
Through Appraisal	5/86	3	8	Af. 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 IngEng	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.

Other Project Data

Related Bank Loans

Loan title	Loan	Purpose	Year of approval	Status	Closing date
Northeast Region Land Tenure Improvement Project	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.	
Paraiba Rural Development Project	1537-BR	To improve the incomes and living standards of small farm families	1978		1986

Studies included in the Project

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

Figure B1. Sampling Frame for OED Audit Survey (N=90 subprojects)

Region: Areia, Paraíba

PAC	FUMAC
01 Bananeiras Type: Eletr rural (N=1), Date: 22/10/93	**17-24** Bananeiras Type: Eletr. rural (N=8), Date: 20/06/94
02 Bananeiras Type: Avicultura (N=1), Date 26/12/93	**25** Alagoa Nova Type: Fab doces (N=1), Date: 05/10/93
03-14 Bananeiras Type: ? (N=11), date 12/31/98	**26-28** Alagoa Nova Type: ? (N=3), Date: 12/31/98
15 Esperanca Type: Olaria (N=1), Date 25/03/94	
16 Esperanca Type: Banco seme (N=1), Date 16/12/93	

Region: Patos, Paraíba

PAC	FUMAC
29-32 Patos Type: Poco arte (N=4), Dates: 10/93	**38-47** Agua Branca Type: Various (N=10), Dates: 1993-94
33 Patos Type: Irrigacao (Trincheiras 1) (N=1), Date: 11/23/95	**48** Agua Branca Type: Irrigacao (Mereco) (N=1), Date 03/11/96
34 Patos Type: Irrigacao (Barragem da Farinha) (N=1) Date: 11/23/95	**49** Agua Branca Type: Irrigacao (Veado) (N=1), Date 12/20/96
35 Patos Type: Eletr (Trincheiras 1) (N=1) Date: 12/20/96	**50** Agua Branca Type: ? (Sitio Cara) (N=1), Date: 1998
36 Patos Type: Eletr (Barragem da Farinha) (N=1) Date: 07/26/95	
37 Patos Type: ? (Sitio San), (N=1) Date: 12/31/98	

Region: Ubajara, Ceará

PAC	FUMAC
51-53 Ubajara Type: Irrigacao (Tucuns) (N=3) Date: 01/06/94	**61** Ibiapina Type: Irrigacao (Sta Tereza) (N=1) Date: 29/12/95
54 Ubajara Type: Trator (Tucuns) (N=1) Date: 27/06/95	**62** Ibiapina Type: Eletr. (Sao Francisco) (N=1) Date: 18/12/95
55-57 Ubajara Type: Irrigacao (Nova Veneza) (N=3) Date 09/06/94	**63** Ibiapina Type Eletr. (Alto do Major) (N=1) Date: 18/12/95
58 biapina Type: Trator (Sao Joao) (N=1) Date: 21/06/94	**64** Ibiapina Type: Eletr. (Lagoinha) (N=1) Date: 18/12/95
59 Ibiapina Type: Apetr. Agricola (Angelim) (N=1) Date: 01/10/95	
60 Ibiapina Type: Eletr. (Laranjeiras) (N=1) Date: 22/12/95	

Region: Jaguaribe, Ceará

PAC	FUMAC
65-67 Jaguaribe Type: Artesanato (N=3) Date: 13/12/94	**77** Erere Type: Acude (Varjota) (N=1) Date: 21/01/94
68 Jaguaribe Type: Irrigacao (Curral Velho) (N=1) Date: 19/12/94	**78** Erere Type: Barragem (Sitio Milagres) (N=1) Date: 21/01/94
69 Jaguaribe Type: Padaria (Mapua) (N=1) Date: 30/08/94	**79** Erere Type: Cen. Ativ. Mul (Sede Distrital) (N=1) Date: 21/01/94
70 Jaguaribe Type: Bovinocultura (Ilha Grande) (N=1) Date: 15/07/94	**80** Erere Type: Passg. Molhada (Remedio) (N=1) Date: 22/12/95
71 Jaguaribe Type: Irrigacao (Ilha Grande) (N=1) Date: 13/04/94	
72 Jaguaribe Type: Bovinocultura (Pedra Branca) (N=1) Date: 04/01/95	**81-83** Erere Type: Trator (Tome Vieira) (N=3) Date: 21/01/94
73 Jaguaribe Type: Bovinocultura (Genipapeiro) (N=1) Date: 16/06/95	**84** Erere Type: Eletr (Rajada) (N=1) Date: 20/12/95
74 Jaguaribe Type: Eletr.(Bom Sossego) (N=1) Date: 28/11/95	**85** Iracema Type: Fab. Doce (Bastioes) (N=1) Date: 18/12/94
75 Jaguaribe Type: Trator (Sossego) (N=1) Date: 20/12/95	**86-87** Iracema Type: Cen. Ativ. Mul (Sede) (N=2) Date: 05/04/94
76 Iracema Type: Casa de farinha (Varzea Alegre) (N=1) Date: 21/11/95	**88** Iracema Type: Trator (Pitombeira) (N=1) Date: 23/05/94
	89-90 Iracema Type: Apetr.Agricola (Varzea Alegre) (N=2) Date: 29/07/94

Source: Project database.

Figure B2. Questionnaire Used in OED Audit Survey, December 1999

Dados de orientacao	
Estado y microregiao	Municipio
Categoria de subprojeto (I/P)	Tipo de subprojeto:
Valor do subprojeto (US$)	Data de convenio [Q05]
Comunidade beneficiada	Numero de beneficiarios [Q06]
Em relacao ao subprojeto	
Como foi que os membros da Asociacao receberam noticias/informacao do programa PAPP/NRDP?	
O municipio/prefeito deu apoyo a Asociacao durante o processo? (Sim/Nao)	[Q08]
Tem participacao dos ONGs? (Sim/Nao)	[Q09]
A Asociacao recebeu assistencia tecnica...	
...na preparacao do subprojeto? (Sim/Nao)]	[Q10
...na execucao do subprojeto? (Sim/Nao)	[Q11]
...Para manutencao? (Sim/Nao)	[Q12]
O disenho do subprojeto foi bom? (Sim/Nao)	[Q13]
Quem fiz o disenho? (Unidade Tecnica, consultor)	
Os membros da Asociacao participaram...	
...com dinheiro? (Sim/Nao)	[Q15]
...com mao de obra? (Sim/Nao)	[Q16]
...com materiais? (Sim/Nao)	[Q17]
O subprojeto ainda esta funcionando? (Sim/Nao)	[Q18]
Quem e responsavel para a manutencao? (concessionario, membros da Asociacao)	
Os membros tem uma reserva de fondos para a manutencao? (Sim/Nao)	[Q20]
Os membros pagan para o uso do...trator, casa da farinha, etc (Sim/Nao)	
Em relacao a Asociacao:	
Nome da Asociacao	PAC o FUMAC? Si FUMAC, a Asociacao tem membros no Conselho? [Q22]
Data de sua organizacao.	Quantas pessoas sao inscritas atualmente na Asociacao? [Q24]
Quantos subprojetos foram financiados ate agora...	
...via PAPP/NRDP?	[Q25]
...via outra fonte de fondos?	[Q26]
A Asociacao recebeu credito do banco? (Sim/Nao)	[Q27]
A vida das familias esta melhorando pelo resulto dos subprojetos? (Sim/Nao)	[Q28]
Comentarios Adicionais	

Numbers in square brackets refer to questionnaire items with results reported in Tables B1 and B2.

Table B1. Poverty ranking of municipalities

Municipalities, State	Number of poor families/1	Percent of families that are poor/1	Percent of children in households where head earns less than 1 minimum salary/2	Percent of children in households with a male head who has less than 1 year of schooling/2	Percent of children in households with inadequate water supply/2
Jaguaribe, CE	4,681	64.4	72.3	60.5	61.3
Ibiapina, CE	2,690	63.7	83.9	57.5	86.1
Ubajara, CE	3,231	63.5	68.6	55.2	85.7
Agua Branca, PB	1,160	62.0	90.5	61.2	85.5
Bananeiras, PB	3,238	60.0	75.2	74.5	75.3
Alagoa Nova, PB	3,089	58.4	71.7	58.0	67.9
Esperanca, PB	3,894	56.9	67.9	54.2	48.2
Iracema, CE	2,362	56.5	67.5	65.4	66.4
Erere, CE	810	55.5	85.9	73.3	99.4
Patos, PB	9,510	47.2	47.7	40.4	20.3

/1 Source: *O Mapa da Fome*, Volume III (Documento de Política No. 17), Brasilia: IPEA, August 1993.
/2 Refers to children aged 0-6 years. Source: *Municipios brasileiros: Criancas e Suas Condicoes de Sobrevivencia* (Censo Demográfico de 1991), Brasilia: UNICEF/IBGE, 1994.
CE Ceará, PB Paraíba.

Table B2. Survey results

	TOTAL	STATE		MICROREGION		PROJECT TYPE		PROCESSING CHANNEL	
[Questionnaire item number]	(N=77)	Paraiba (N=46)	Ceara (N=31)	Brejo (N=39)	Sertao (N=38)	Electrification (N=31)	Other project (N=45)	PAC (N=42)	FUMAC (N=35)
(a) With respect to focus project									
Project agreements signed before 01/01/96 (%) [Q05]	77	61	100	75	92	39	93	68	89
Number of beneficiaries (mean) [Q06]	64	71	52	58	71	42	82	46	85
Projects supported by mayor (%) [Q08]	71.4	84.7	51.6	79.4	63.1	93.5	55.5	50.0	97.1
Projects with NGO participation (%) [Q09]	18.1	28.2	3.2	23.8	13.1	29.3	11.1	11.9	25.7
Beneficiaries who received technical assistance...									
...for project preparation (%) [Q10]	87.1	95.6	74.1	92.3	81.5	96.7	80.0	88.1	85.7
...for project implementation (%) [Q11]	85.7	95.6	70.9	92.3	78.9	93.5	80.0	85.7	85.7
...for maintenance (%) [Q12]	55.8	80.4	19.3	82.5	28.9	77.4	40.0	54.7	57.1
Project design rated "good" by beneficiaries (%) [Q13]	89.6	86.9	93.5	92.3	86.8	93.5	86.6	95.2	82.8
Beneficiaries who put in cash (%) [Q15]	7.7	2.1	16.1	2.5	13.1	3.2	11.1	9.5	5.7
Beneficiaries who put in labor (%) [Q16]	87.1	89.1	83.8	92.3	81.5	96.7	80.0	90.4	82.8
Beneficiaries who put in materials (%) [Q17]	16.8	17.3	16.1	12.8	21.5	3.2	26.6	14.2	20.0
Projects that are still operational (%) [Q18]	74.3	84.7	58.6	79.4	68.4	100.0	55.5	71.4	77.1
Beneficiaries who keep a maintenance fund (%) [Q20]	19.7	26.6	9.6	5.1	35.1	9.6	27.2	14.2	26.4
(b) With respect to associations									
Association has members on municipal council (FUMAC only) (%) [Q22]	NA	NA	NA	NA	NA	NA	NA	NA	42.3
Association organized more than three years before project agreement was signed (%) [Q23, Q05]	47	43	55	48	40	39	48	52	38
Persons now registered with Association (mean) [Q24]	57	47	74	57	56	49	61	69	39
Subprojects financed with project funds (mean) [Q25]	1.4	1.5	1.2	1.4	1.4	1.2	1.4	1.5	1.2
Subprojects financed with other funds (mean) [Q26]	0.5	0.5	0.6	0.9	0.1	0.2	0.7	0.7	0.2
Associations that have received bank credit (%) [Q27]	23.3	28.2	16.1	35.9	10.5	22.5	24.4	40.4	2.8
Associations reporting that "life has improved" as a result of project intervention (%) [Q28]	83.1	93.4	67.7	94.8	71.5	93.5	75.5	88.1	77.1

NA=Not applicable

Table B3. Test of significant difference

Questionnaire items (p values)	Difference between Paraíba and Ceará	Difference between *brejo* and *sertao* microregions	Difference between electrification and other projects	Difference between PAC and FUMAC financing channels
(a) With respect to focus project				
Number of beneficiaries (mean) [Q06]	0.505 (NS)	0.673 (NS)	0.149 (NS)	0.238 (NS)
Projects supported by mayor (%) [Q08]	**0.002 (HS)**	0.113 (NS)	**0.001 (HS)**	**0.001 (HS)**
Projects with NGO participation (%) [Q09]	**0.005 (HS)**	0.259 (NS)	0.048 (S)	0.118 (NS)
Beneficiaries who received technical assistance...				
...for project preparation (%) [Q10]	**0.006 (HS)**	0.161 (NS)	0.034 (S)	0.757 (NS)
...for project implementation (%) [Q11]	**0.002 (HS)**	0.094 (NS)	0.099 (NS)	1.000 (NS)
...for maintenance (%) [Q12]	**0.001 (HS)**	**0.001 (HS)**	**0.001 (HS)**	0.834 (NS)
Project design rated "good" by beneficiaries (%) [Q13]	0.353 (NS)	0.432 (NS)	0.337 (NS)	0.076 (NS)
Beneficiaries who put in cash (%) [Q15]	0.025 (S)	0.083 (NS)	0.210 (NS)	0.535 (NS)
Beneficiaries who put in labor (%) [Q16]	0.501 (NS)	0.161 (NS)	0.034 (S)	0.322 (NS)
Beneficiaries who put in materials (%) [Q17]	0.885 (NS)	0.335 (NS)	**0.008 (HS)**	0.505 (NS)
Projects that are still operational (%) [Q18]	**0.009 (HS)**	0.268 (NS)	**0.001 (HS)**	0.569 (NS)
Beneficiaries who keep a maintenance fund (%) [Q20]	0.067 (NS)	**0.001 (HS)**	0.061 (NS)	0.184 (NS)
(b) With respect to associations				
Persons now registered with Association (mean) [Q24]	0.099 (NS)	0.949 (NS)	0.216 (NS)	**0.006 (HS)**
Projects financed via PAPP/PCPR (mean) [Q25]	0.1481 (NS)	0.813 (NS)	0.243 (NS)	0.088 (NS)
Projects financed with other funds (mean) [Q26]	0.5892 (NS)	**0.002 (HS)**	0.047 (S)	0.040 (S)
Associations who have received bank credit (%) [Q27]	0.217 (NS)	**0.009 (HS)**	0.851 (NS)	**0.001 (HS)**
Associations reporting that "life has improved" as a result of project intervention (%) [Q28]	**0.003 (HS)**	**0.005 (HS)**	0.041 (S)	0.201 (NS)

S= Significant difference (p=<0.05). HS= Highly significant difference (p=<0.01). NS= No significant difference.
Comparison of percentages uses Chi-Square test. Comparison of means uses Student T test.

Table B4. Test for significant correlation between variables

Correlation between responses to questionnaire items (N=77)	Hypothesized direction of correlation	Result
Q18 vs. Q05	Negative	Not significant
Q18 vs. Q08	**Positive**	**Phi coeff. =0.288 (p=0.02)**
Q18 vs. Q09	Positive	Not significant
Q18 vs. Q10	Positive	Not significant
Q18 vs. Q11	Positive	Not significant
Q18 vs. Q12	**Positive**	**Phi coeff. =0.248 (p=0.02)**
Q18 vs. Q15	Positive	Not significant
Q18 vs. Q20	Positive	Not significant
Q18 vs. Q28	**Positive**	**Phi coeff. =0.455 (p=<0.01)**
Q24 vs. Q25	Positive	Not significant
Q25 vs. Q26	Positive	Not significant
Q26 vs. Q27	**Positive**	**Pearson =0.406 (p=<0.01)**

See Table B2 for explanation of questionnaire items.
Note. Correlation of yes-no items was estimated using Phi coefficient, with Fisher Exact test of significance. Correlation between a quantitative item and a yes-no item used Pearson coefficient, and T-test of significance.

Table B5. Project sequence and coverage

	World Bank loan		Coverage/d	
	Approval to closing dates	Value (US$ million, current)/% of total project cost	Direct beneficiaries ('000 families)	Project area ('000 km2)
Ceará				
First cycle/a (L1488)	04/77 to 12/85	17.0 (34.2)	5.8	4.8
First cycle/b (L1924)	12/80 to --/86	56.0 (34.3)	60.0	146.8
Second cycle (L2763)	**10/86 to 12/95**	**122.0 (48.0)**	**122.8**	**144.3**
Third cycle (L3918)	06/95 to 12/00			
Paraíba				
First cycle/c (L1537)	03/79 to 09/86	24.0 (35.7)	7.4	1.6
Second cycle (L2860)	**06/87 to 12/96**	**60.0 (48.4)**	**37.8**	**25.6**
Third cycle (L4251)	11/97 to 06/03			
Northeast				
First cycle	12/75 to	456.5 (35.0)	279.8	499.4
Second cycle	04/85 to	826.7 (48.0)	572.5	925.6
Third cycle	06/95 to			

Source: Tendler, 1993, *op. cit.*
First cycle: POLONORDESTE (Program of Integrated Development for the Northeast) ; Second cycle: PAPP (Program of Assistance to the Small Farmer); Third cycle: NRDP (Northeast Rural Development Program)
/a Ibiapaba
/b Follow on to /a
/c Brejo
/d Appraisal estimate

Table B6. Project results (post-1993 reformulation)

	Ceará (L2763)		*Paraíba* (L2860)	
	Expected	***Actual***	***Expected***	***Actual***
Project cost	US$254.3m/a	US$156.5m	US$123.9m/a	US$96.0m
N of subprojects implemented	2,000	3,025	920	2,308
N of beneficiary families	50,000	208,830/b	23,000	112,194
Spending per subproject	Not specified	US$51,736	Not specified	US$41,594
Spending per beneficiary family	Not specified	US$749	Not specified	US$856
FUMAC projects/All projects	Not specified	11%	Not specified	37%
N of municipalities covered	176	176	171	171
Distribution of subprojects by type:				
Small rural infrastructure	Not applicable	56%	Not applicable	74%
Productive	Not applicable	39%	Not applicable	23%
Social	Not applicable	5%	Not applicable	3%
Beneficiary contribution	10-20%	Not specified/c	10-20%	5%/d

Source: Implementation completion reports.
/a Original appraisal estimate (before reformulation)
/b From Table 15 in Paraiba ICR. Number of beneficiaries is given as 178,800 on p. 15 of Ceara ICR (which was written one year earlier, possibly before full results were in)
/c Subsumed under state contribution (US$46.2m)
/d Table 7, p. 61, Paraiba ICR.

Subproject cost ceiling supposed to be US$40,000 which does not tally with above table—maybe because of exchange rate fluctuations.

Comments from the Government

Translation from the original in Portuguese

STATE OF CEARÁ
SECRETARIAT OF PLANNING AND COORDINATION

Our ref: *Oficio GS. No. 438/00* Fortaleza
June 14, 2000

Mr. Ridley Nelson
Principal Evaluation Officer
Sector and Thematic Evaluation Group
Operations Evaluation Department
World Bank
Washington, D.C.

Dear Sir:

We acknowledge receipt of your communication of May 15 last accompanying a draft version of the Performance Audit Report on Brazil's Northeast Rural Development Program, one component of which was the Small Farmer Support Program, the subject of Loan Agreement No. 2763-BR between the Government of Brazil and the World Bank.

Despite the fact that the sample investigated by the performance evaluation mission was not as representative as it might have been, the relevance of its findings is unquestionable. However, we believe there are a number of points worth clarifying and explaining, in the interests of ensuring that the evaluator's final conclusions have the greatest possible credibility.

Our main interest was in the analysis of the issues of efficacy and sustainability: Did the project achieve its stated objectives, and are the results of the subprojects financed likely to last? We regard these as two difficult questions, and would like to make the following observations:

1. **Efficacy (paragraphs 3.3 and 3.4 of the PAR):** On the question whether the stated objectives were achieved, the evaluator takes the position that Ceará did not meet the original target, to provide assistance for 122,800 families, although he makes clear that the reformulated target was exceeded more than fourfold (para. 3.3). On the question whether coverage varied by region (para. 3.4), doubt is cast on the reliability of the physical and financial performance data stored in the project database.

Our comments: In the first case, we believe there has been some confusion in the interpretation of project figures: Table 2 of the Report shows the final number of beneficiary families as 208,830, which is more than twice the original target.

In the second case, there appears to have been an exchange of data: the information in Table 3 of the Report does not coincide at all with what is in the project database. Our analysis of project

execution data for 1994 and 1995 shows the average number of beneficiaries per project to be very close to what the Report gives for Paraíba.

2. Sustainability (paragraphs 5.1, 5.4, 5.5): The conclusion reached was that only 59% of subprojects were still working in Ceará. The reasons given were the higher mean age of subprojects there and the lower share of electrification (19%) in total investments (para. 5.1). On the other hand, on the question whether sustainability varied according to type of subproject (para. 5.4), the performance audit survey found that all electrification projects were in working order, while productive subprojects, accounting for 39% of the total in Ceará, had a poor record, with just over half in working order, a consequence of the prolonged drought that started in 1996.

Our comments: According to the Small Farmer Support Program database, after reformulation of the project in September 1993, a total of 3,025 subprojects were carried out. These included 1,678 electrification subprojects (or 55.5% of the total), which were approved and launched in 1995, the last year of the project. This percentage, added to half the percentage of productive subprojects (19.5%) in working order and to the group of social subprojects, justify an inference that approximately 80% of all subprojects were operating satisfactorily, despite the longer period of exposure to mishaps and to the effects of persistent drought.

Correction of these figures in the body of the Report will necessitate corresponding changes in paragraph 9.3.

Yours truly,

/s/ (illegible)
Mónica Clark Nunes Cavalcante
Secretary of Planning and Coordination

/s/ (illegible)
Pedro Sisnando Leite
Secretary of Rural Development

GOVERNMENT OF THE STATE OF PARAÍBA
SECRETARIAT OF PLANNING
Office of the Secretary

Our ref: *Oficio GS/SEPLAN/N*

João Pessoa

June 15, 2000

Mr. Ridley Nelson
Sector and Thematic Evaluations Group
Operations Evaluation Department
World Bank
Washington, D.C.

Dear Sir:

In response to your communication of May 15, 2000, we attach herewith comments on the Project Performance Audit Report prepared by Task Manager John Heath and team after their mission to the State of Paraíba in December 1999.

We are honored to see Paraíba selected as a subject of study in connection with the Rural Poverty Reduction Program. We would like to take advantage of the opportunity to mark our successes in connection with the project audited. At the same time, we believe that if we focus on the weak points in our performance we will be in a better position to make the necessary rectifications and thus equip ourselves better to achieve our shared goal of reducing the chronic, grim poverty affecting the Brazilian Northeast.

The accompanying pages summarize our conclusions, which take into account the recent information provided by the World Bank, and indicate our interest and satisfaction in being able to participate in the ongoing discussion on this broad and complex topic.

We are copying these comments to the Secretariat of International Affairs (SEAIN), Ministry of Planning, to enable it to take part in any ensuing discussions and decisions.

Yours truly,

/s/ Mario Silveira
Secretary

GOVERNMENT OF THE STATE OF PARAÍBA
SECRETARIAT OF PLANNING
Office of the Secretary

As a party to Loan Agreement No. 4251-BR signed on February 16, 1998 between the International Bank for Reconstruction and Development and the State of Paraíba, and mindful of its responsibility to be pro-active and transparent in its management of public affairs, the Government of the State, through its Secretariat of Planning (SEPLAN-PB), is intent on maintaining a system of planning that will provide an institutionally and technically strong organization for combating poverty in the State through community-based instruments and mechanisms of communication and collaboration. The following short-term, specific objectives will be of assistance in achieving that longer-term, general goal:

Objective 1: To structure and organize the technical and administrative management system supporting Project Cooperate. The aim will be to increase its effectiveness and efficiency as regards formulation, execution, and evaluation of the components of the Rural Poverty Reduction Project (Paraíba State).

Objective 2: To design and put into effect a training program that will improve the organizational and management capabilities of rural communities targeted by the Rural Poverty Reduction Project.

Objective 3: To support public sector institutional development, by fostering and promoting organizational changes by public sector planning entities with responsibilities for activities associated with development and the mitigation of rural poverty.

Objective 4: To ensure that governmental activities aimed at combating rural poverty and social exclusion are consistent at all times with the guidelines set out in the Sustainable Development Plan of the State of Paraíba and its Goals Program.

Objective 5: To carry out assessment studies on the results and impacts of institutional development programs in districts covered by the governmental rural action program.

Objective 6: To reduce present inequities and maintain a consistent process of poverty reduction in the State.

DEVELOPMENT STRATEGY: This strategy will incorporate: implementation of the Rural Poverty Reduction Project; upgrading of the State's institutional capabilities; and identification and formulation of new sustainable development programs, improvement of public sector management systems, and decentralization of the decision-making process as it affects identification and design of new projects conducive to the promotion of sustainable development.

In 1996, the State of Paraíba drew up a Sustainable Development Plan based on government, private sector, and civil society action up to the year 2010. This Plan enunciated the development strategies to be followed during that period, and indicated the principles that were to guide both the government sector and society as a whole and were to be translated into priority programs and projects.

Rural Poverty Reduction Project components need to be inter-related and to complement one another if their outcome is to make a positive contribution to sustainable municipal, regional, and state development in a nationwide and global context.

At the municipal level, Project activities planning should be focused on the whole complex of local communities, with a view to fostering a habit of consultation and cooperation among them, as a basis for future experimentation with a process of harmonious, integrated development. In addition to providing community members with a broader vision of the problems of their own municipal district or region, this strategy will give them opportunities to interact with other localities, enhancing inter-group knowledge, familiarity with the collective learning process, and exchanges of experience.

Activities planning for the Project should generate technical recommendations on methods of eliciting social participation in needs assessment, and on methods of formulating and then managing subprojects. The general aim here should be to use technical, physical, and financial resources more rationally, and the specific aim to improve the efficiency and effectiveness of this Project. This should involve the development of simple participatory planning processes that will result in substantive subprojects tailored to local potentialities and able to attract local communities and institutions into taking part in their implementation and permanent upkeep.

Essential in this effort will be strategic support in the form of partnerships with the various institutions, both governmental and non-governmental, active in the typical municipal district: religious associations, organizations that provide services for their members, labor unions, the executive, legislative, and judicial powers, banking institutions, etc. Equally important will be the participation of representatives of civil society; this is essential to a clear and broad-based vision of local realities and of the roads that must be followed to achieve sustainable development and create conditions conducive to successful implementation of plans.

The Program in Paraíba State

During the previous and current periods of office, the State Government has taken major steps to ensure Project quality levels. For instance:

1. Emphasis on development with a more emphatic rural focus, strengthening and assigning priority to activities focused on those living from rural pursuits. Encouragement of more and better organization in public sector management, and a more concerted effort on the part of municipal governments, small farmers, and rural communities to find solutions to current problems.

2. With World Bank approval, the Small Farmers Support Program was expanded to cover 109 of the State's then 171 municipal districts.

3. Incentives in the form of investments and technical support for all municipalities wishing to strengthen both community and municipal government capabilities.

4. Investment in and upgrading of the administrative and managerial structure of the Project Technical Unit, in view of its direct and vitally important links to small farmers.

5. Support for the municipal governments participating in the Project, to improve their performance and effectiveness.

6. Assignment of investment priority to infrastructure projects, since they are essential to satisfaction of the basic requirements that facilitate the inter-community contacts without which subsequent social and productive projects cannot be successfully executed and then maintained.

7. Encouragement of broader-based participation by communities in identifying the benefits they consider to have the highest priority in their districts.

8. Encouragement of municipal government backing and support for subprojects before, during, and after their implementation.

9. Investment in supporting, appraising, supervising, and evaluating subprojects, with a view to obtaining more benefits with less investment while still ensuring subproject sustainability.

10. Cost-benefit analysis of subprojects.

11. Re-thinking of the current approach to the role and operations of municipal councils.

It is worthwhile noting that the organizational advantage suggested by the formation of municipal councils might be compromised by unforeseeable factors with a possible impact on the quality of results. The involvement of municipal officials can be either a stimulus or hindrance in the access channels available to communities for expression of their demands. They are able to do this by submitting subproject proposals, which are analyzed, when the channel is FUMAC, by a municipal council, and either selected or not for presentation to Project Cooperate. In our opinion, the FUMAC solution needs a longer period of study; it requires an advanced community management structure which should be tested more thoroughly.

Given the success Paraíba has achieved in implementing development activities through use of the procedures indicated above, and its interest in successes and quality results that will prove replicable and capable of ensuring the future viability of the whole investment process, we suggest more emphasis on the following:

- Encouragement of training for cooperative entities and of continuation of collective activities in existing associations.
- Characterization of human and social capital as the true foundation of all action to combat poverty.
- Technical, administrative, and financial management, monitoring, and operation of the State's Rural Poverty Reduction Project.
- Effectiveness and efficiency of community subprojects in cost-benefit terms.
- Involving rural communities in all stages of the Project: selection, preparation, execution, operation, and subsequent refining of community subprojects, with a focus on ensuring their sustainability.

- Encouraging rural communities to become independent managers of the benefits they achieve and upgrade their social and economic performance, so that they can add value to those achievements, increase their income streams, and improve their standard of living.
- Efficiency in the coordination and integration of government action in pursuit of the central objective of combating rural poverty.
- Encouragement of partnerships in the management of public interests.
- Strengthening of local development through actions linked to state, regional, national, and international aims and priorities.
- Periodic re-evaluation of the status and relevance of activities introduced.
- Motivation of communities to participate and accept social responsibility, as an extension of the individual's duties and obligations arising out of the daily realities of democratic life.
- Development of indicators to provide a basis for the qualitative evaluation of results achieved.
- Formulation of technical training proposals and development of alternative training methods.
- Coordination of the formulation, negotiation, and implementation of sustainable regional development projects to combat rural poverty.
- Proposals for alternatives to be considered as State counterpart contributions.
- Awareness of the need to plan next steps in the light of changing situations and priorities. For example: Subproject categories: water infrastructure (watershed protection, treatment, supply, distribution, etc.); social and productive (irrigation, goat farming, etc.).
- Introduction and enforcement of regulations governing time limits for rendering of accounts following assignment of land plots.
- Use of different teams for different phases of activity: community sensitization, subproject implementation, and monitoring and evaluation.

Prompted by the Project Performance Audit Report, which we regard as a solidly argued and impartial document that is valuable for planning purposes, we would like to suggest an early round of meetings between the financing institutions and the Government to discuss the agreement now in force in the State of Paraíba. We believe this offers the best prospects for ensuring optimum resource allocation.

GOVERNMENT OF THE STATE OF PARAÍBA
SECRETARIAT OF PLANNING
PROJECT COOPERATE

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FAX MESSAGE

June 14, 2000

Antonio Gustavo Rodrigues	SEAIN
61.225.4022	Brasilia/DF
José Williams F. Gouveia	Coordinator-General

In response to your fax message 967 of June 8, 2000, kindly allow me to note that: With less than two years at the head of PROJECT COOPERATE, we did not take part in the execution of Loan Agreement 2860-BR or in negotiation of the Agreement now in progress (4251-BR). However, against a background of past experience, and drawing on the institutional memory of the Technical Unit as well as the personal memory of Dr. Raimundo Caminha, the World Bank Representative in Recife, we are in a position to comment on some of the points raised in the Performance Audit Report on the Northeast Rural Development Program (Paraíba Project), a document dated May 15, 2000.

- The change of direction, following reformulation of the program in 1993, by introducing a method of proceeding that called for every community to become involved in solving its own problems, saved this project from failure and converted it into a successful operation.

  The demand from communities for infrastructure works rectified an earlier mistake, namely an emphasis on implementing productive subprojects that were intended to create jobs and sources of income but failed to give due importance to the question of subproject sustainability. Families in communities that possessed energy, water, telephone, good access, properly designed latrines, a school, etc. did manage, however, on their own initiative, to develop ways of producing that enabled them to obtain production loans from local banks and in the process to become the best re-payers of such obligations. In our view, since there has been considerable progress with infrastructure projects, the time has come to make greater and more concerted efforts to engage in productive subprojects, but without relaxing the sustainability requirement and focusing on the family as the production unit.

- The execution of subprojects in partnership with community entities not only reduced the cost of works significantly and guaranteed their quality through efficient monitoring by the Supervision Committee, but also fostered a feeling of ownership among the members of each community, thereby helping to build social capital.

- We believe that the choice of mono-phase electrification equipment was appropriate for the target population groups. It allowed installation of 15 kVA per family, more than sufficient to run a productive project (e.g. small irrigation system, commodity processing plant, small factory).

  Instead of proving a false economy, this choice actually led to significant savings. Choice of the triple-phase system, favored in the past, in addition to wasting power, produced technical situations with damaging consequences for the system. Capacity can be increased over time, in step with the growth of the family/community, allowing the system to accommodate increased demand.

- Mistakes made in implementation of the reformulated program doubtless laid the foundations for the more successful execution of the second Loan Agreement. Community counterpart contributions, for example, take the form of community work efforts, which, in addition to moving the implementation process forward, reduce subproject costs, and increase the stock of social capital.

- The 8% of loan proceeds allocated to coverage of expenditure on technical projects should be used cautiously. When these resources are made available to the community, an opportunity is lost for it to mobilize equivalent resources itself and to participate actively in defining and planning the particular project and its components. (The raffle of a goat, a bingo game, organization of the type of small cooperative group known as a *vaquinha* all add to the sense of solidarity within a community.) Those who see a benefit in the availability of these resources claim that it removes the community from the reach of "political figures." While this is certainly a matter that needs to be confronted, in the case of a program such as this it is impossible to ignore the political agent. Ultimately, every member of the management organ of a community entity is a political agent, and appointment of its chairman a "project" to be negotiated. What does need to be eradicated is unscrupulous politicking. If that problem were eliminated, the allocation of these resources could be justified, provided they are used sparingly. The more of these funds that can be saved, the more beneficiary families there will be.

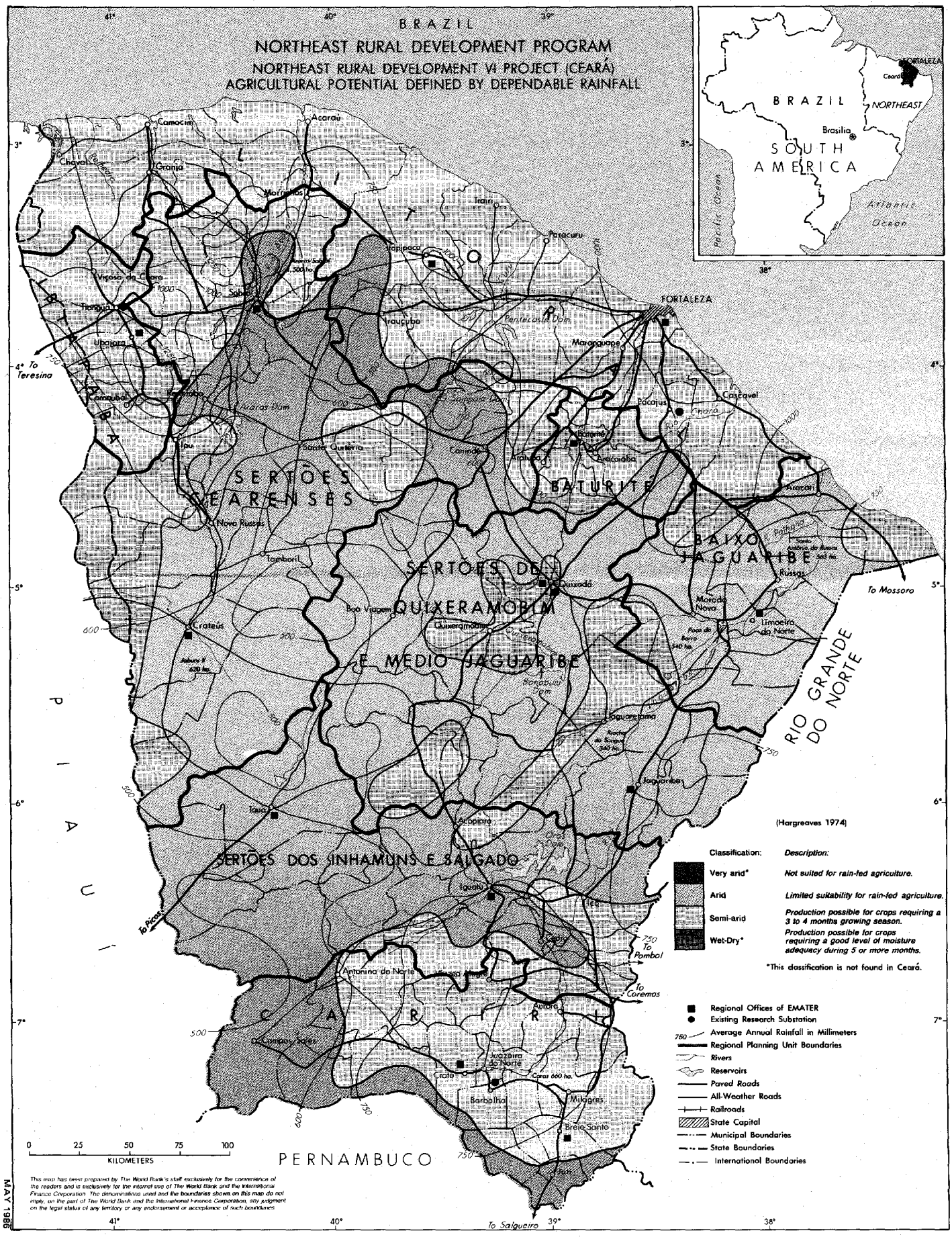
- Other resources that should also be carefully managed are those earmarked for consulting services and training. Training should be objective and its subject-matter clearly necessary. Consultants should be used only to cover any gaps in Technical Unit capabilities. The work done by competent internal technical staff is better; it is also cheaper, which, here too, means more beneficiary poor families.

- Decentralization, based on partnerships with well-organized community entities that operate through PAC, FUMAC, and FUMA-P channels, is so advantageous that hasty, careless introduction of it must be avoided at all costs. This could well be the secret behind the building up of significant social capital by communities in the State of Paraíba.

- The re-establishment of full democracy, Brazil's current economic stability, the financial equilibrium the State of Paraíba is now enjoying, the policy agenda renewal that has accompanied the arrival in office of José Maranhão, the innovations introduced by the World Bank to speed up disbursements, and the competence of our own technical personnel are factors that have coalesced into the scenario which has made Project Cooperate highly satisfactory to the World Bank, and which encourages us to work even harder.

/s/ (illegible)
José Williams de Freitas Gouveia
Coordinator-General

MAP SECTION


BRAZIL
NORTHEAST RURAL DEVELOPMENT PROGRAM
NORTHEAST RURAL DEVELOPMENT VI PROJECT (CEARÁ)
AGRICULTURAL POTENTIAL DEFINED BY DEPENDABLE RAINFALL
BRAZIL
NORTHEAST
Brasilia
SOUTH AMERICA
Pacific Ocean
Atlantic Ocean
FORTALEZA
Ceará
SERTÕES CEARENSES
BATURITÉ
BAIXO JAGUARIBE
SERTÕES DE QUIXERAMOBIM
E MEDIO JAGUARIBE
SERTÕES DOS INHAMUNS E SALGADO
CARIRI
RIO GRANDE DO NORTE
PIAUI
PERNAMBUCO
Camocim
Acaraú
Chaval
Granja
Morrinhos
Tianguá
Ubajara
Viçosa do Ceará
Sobral
Tapipoca
Paracuru
Trairi
Pentecoste Dam
Maracanaú
Caucaia
Pacajus
Cascavel
Aracati
Russas
Morada Nova
Limoeiro do Norte
Quixeramobim
Boa Viagem
Tamboril
Nova Russas
Santa Quitéria
Canindé
Itapajé
Umirim
Crateús
Tauá
Acopiara
Iguatu
Jaguaribe
Jaguaretama
Orós
Icó
Cedro
Antonina do Norte
Assaré
Aurora
Juazeiro do Norte
Crato
Barbalha
Milagres
Brejo Santo
Jati
To Teresina
To Picos
To Pombal
To Coremas
To Mossoro
To Salgueiro
(Hargreaves 1974)
Classification:
Description:
Very arid*
Not suited for rain-fed agriculture.
Arid
Limited suitability for rain-fed agriculture.
Semi-arid
Production possible for crops requiring a 3 to 4 months growing season.
Wet-Dry*
Production possible for crops requiring a good level of moisture adequacy during 5 or more months.
*This classification is not found in Ceará.
Regional Offices of EMATER
Existing Research Substation
Average Annual Rainfall in Millimeters
Regional Planning Unit Boundaries
Rivers
Reservoirs
Paved Roads
All-Weather Roads
Railroads
State Capital
Municipal Boundaries
State Boundaries
International Boundaries
0 25 50 75 100
KILOMETERS
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.
MAY 1988
IBRD 19653

IBRD 20398

BRAZIL

NORTHEAST RURAL DEVELOPMENT PROGRAM

NORTHEAST RURAL DEVELOPMENT PROJECT - PARAÍBA

AGRICULTURAL POTENTIAL DEFINED BY DEPENDABLE RAINFALL

CLASSIFICATION:	DESCRIPTION:
VERY ARID	NOT SUITED FOR RAIN-FED AGRICULTURE
ARID	LIMITED SUITABILITY FOR RAIN-FED AGRICULTURE
SEMI-ARID	PRODUCTION POSSIBLE FOR CROPS REQUIRING A 3 TO 4 MONTHS GROWING SEASON
WET-DRY	PRODUCTION POSSIBLE FOR CROPS REQUIRING A GOOD LEVEL OF MOISTURE ADEQUACY DURING 5 OR MORE MONTHS

(HARGREAVES, 1974)

ISOHYETS IN MILLIMETERS
SELECTED ROADS
MUNICIPAL CAPITALS
STATE CAPITAL
NATIONAL CAPITAL
MUNICIPAL BOUNDARIES
STATE BOUNDARIES
REGION BOUNDARY
INTERNATIONAL BOUNDARIES

CEARÁ

RIO GRANDE DO NORTE

PERNAMBUCO

ATLANTIC OCEAN

To Natal

To Jaguaribe

To Solgueiro

To Currais Novos

To Serra Negra do Norte

To Caruaru

To Cruzeiro do Nordeste

To Recife

JOÃO PESSOA

0 25 50 75 100
KILOMETERS

MARCH 1987