

THE INSPECTION PANEL

**REPORT AND RECOMMENDATION
ON
Request for Inspection
BRAZIL: ITAPARICA RESETTLEMENT AND
IRRIGATION PROJECT
(Loan 2883-1 BR)**

June 24, 1997

Abbreviations Used in this Document

CHESF	-	São Francisco Hydroelectric Power Company
CODEVASF	-	São Francisco Valley Development Commission
ELETRONBRAS	-	Brazilian Electrical Power Holding Corporation
FUNAI	-	National Indian Foundation
GOB	-	Joaquim Nabuco Foundation
MME	-	Ministry of Mines and Energy
O&M	-	Operation and Maintenance
OD	-	Operational Directive
OMS	-	Operational Manual Statement
SAR	-	Staff Appraisal Report
VMT	-	Maintenance Payment
WUA	-	Water Users Association

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REPORT AND RECOMMENDATION OF THE INSPECTION PANEL

Request for Inspection BRAZIL: ITAPARICA RESETTLEMENT AND IRRIGATION PROJECT (Loan 2883-1 BR)

Below is (A) Background information, (B) Discussion, and (C) Recommendation of the Inspection Panel ("Panel") on whether or not there should be an investigation ("Recommendation") into allegations made in the above-referenced Request for Inspection ("Request"). Annex 1 contains the Request (An English translation of the Request is attached to the Response). Management Response to the Request is provided in Annex 2.

A. Background

1. On March 12, 1997 the Panel received a Request which alleged violations by Management of policies and procedures of the International Bank for Reconstruction and Development ("Bank") in relation to the Itaparica Resettlement and Irrigation Project. ("Itaparica" or "Project"). On March 19, 1997 the Panel notified the Executive Directors and Bank President of receipt of the Request (meaning "Registration" under the Panel's Operating Procedures).¹ On April 28, 1997 the

Panel received Bank Management response ("Response") to the Request.²

2. Itaparica is the first Bank-financed stand-alone resettlement project. It was designed specifically to benefit the population affected by construction, beginning in 1979, of the Itaparica dam and reservoir. Construction of the dam was not financed by the Bank. Seven years later and two years before flooding of the reservoir was scheduled (1986) the

¹ See The Inspection Panel, *Operating Procedures* (August 1994) at para. 17.

² At this point the Panel initiated its review of both documents. On May 28, 1997 the Panel informed the Bank's Board of Executive Directors that it would deliver its report and recommendation to them by June 24, 1997.

Government of Brazil ("GOB") requested Bank financing to take care of affected people. The Itaparica loan was approved by the Bank's Board of Executive Directors in 1987 for an amount of US \$132 million equivalent. Under an amending agreement in 1990 a supplemental loan of US \$100 million equivalent was approved mainly to cover cost over-runs. The Bank has been involved in the design of the Project since the early 1980s and in its implementation since 1987. In 1996 the GOB requested a fourth extension of the loan's closing date--until the end of 1997--and has also requested the Bank to continue supervision through December 1999. The Response notes that approximately US \$100 million additional financing will be required to satisfactorily complete the Project.

The Request for Inspection

3. The Request was filed by a group of about 121 individuals and a local organization called Pólo Sindical do Submédio São Francisco representing people who live in the Project area (the "Requesters"). The Request claims that the standards of living, health and economic-well being of people living in the Project area have been directly and adversely affected as a result of construction of the Itaparica Hydroelectric dam—located on the São Francisco River, at the border of the Bahia and Pernambuco states—the faulty execution of the above-referenced Project, and the Bank's omissions and failures in the preparation and implementation of the Project. In general, it is alleged that a significant proportion of the about 40,000 beneficiaries (six thousand families) of

the resettlement Project are in worse social and economic conditions than before the construction of the Itaparica dam.

4. Specifically they claim, inter alia, that after ten years of involuntary resettlement of the Project area population:

- only 35% of the Project's six irrigation systems have been completed (6,800 hectares), 34% are under construction (6,000 hectares) and 31% (6,000 hectares) are still in the design phase;
- the Tuxá indigenous community has been resettled in the Municipality of Rodelas but are unable to grow crops, since the irrigation system promised is still under design;
- several of the irrigation systems already constructed have serious operational and maintenance problems which owners cannot afford to repair;
- serious ecological problems have emerged during project implementation, including soil erosion and salinization;
- there is an evident deterioration—because of the poor quality of the materials utilized in construction—of some of the Project's 110 agricultural settlements (Agrovilas) which include health and education infrastructure and less than half of them have been repaired;

5. Alleged adverse effects resulting from the delays in the installation and commissioning of the irrigation projects include a lack of sustainable sources of income and a related increase of violence

in the resettled communities, alcoholism and family breakdown.

6. The Requesters claim that harm suffered is a result of violations of various provisions of Bank policies and procedures set forth, inter alia, in the following:

- Environmental Policy for Dam and Reservoir Projects (OD 4.00 - Annex B)
- Environmental Assessment (OD 4.01)
- Involuntary Resettlement (OD 4.30)
- Indigenous Peoples (OD 4.20)
- Supervision (OD 13.05)

Management Response

7. The Response admits that the “current situation is far from ideal” but claims that the “shortcomings to which the Request points do not arise from the Bank’s failures to follow its policies”.

8. The Response cites as the “main problem” the completion of irrigation infrastructure for the “5,800 families affected by the dam” and notes that the “scope of the agreed project to be financed by the Bank is limited to rural housing, urban infrastructure and five major irrigation subprojects encompassing about 4,500 irrigated plots. The Bank’s accountability should not be extended to non-Bank financed irrigation subproject encompassing some 1,300 plots.”

Additional Information

9. The Panel continued to receive additional information from both the Requesters and the Management after the Response was received. As provided

in the 1996 review of the Resolution, the Panel indicated to the Board that it would evaluate the additional information and would then submit its recommendation as to the need, if any, for an investigation.³

10. In addition, the Panel considered information obtained during Mr. Richard Bissell’s (“Inspector”) later review conducted in the Project area from June 16-20, 1997.⁴ Prior to this visit the Inspector consulted with the Executive Director representing Brazil. In the field the Inspector consulted with the GOB—including officials of SEAIN, FUNAI, CHESF, CODEVASF and ELETROBRAS, and the Chairman of the Interministerial Committee in the Ministry of Mines and Energy—people in the Project area and their representatives from Pólo Sindical do Submédio São Francisco. After his visit the Inspector consulted again with the Bank Executive Director representing Brazil.

B. Discussion

11. The discussion below is based on the Panel’s preliminary review of the Request, Response, and the additional information either delivered or provided

³ INSP/R97-4, May 29, 1997.

⁴ The Panel wishes to thank SEAIN and the office of the Bank Executive Director for Brazil for comments and guidance and the members of Pólo Sindical do Submédio São Francisco and the Bank department responsible for Brazil (LA1) for arranging Mr. Bissell’s interviews and particularly the management and staff of CHESF for providing information, some exchange of views, and logistical support in the project area.

through subsequent interviews in the field and in Washington, D.C. Consultations with Brazilian authorities were conducted in Washington, D.C. through the Executive Director for Brazil, in Brasilia, in Recife, and in the Project area.

Eligibility of the Request

12. Pursuant to paragraph 19 of the Resolution it is the responsibility of the Panel to "determine whether the request meets the eligibility criteria set out in paragraphs 12 to 14" after it has received the Response, and the Executive Directors have expressed the hope that the Panel process will not focus on "narrow technical grounds" with regard to eligibility.

13. The Request was filed with the Panel on the basis of the one undisbursed loan in this Project, 2883-1-BR, and in subsequent discussions, the Requesters insisted that their Request relates only to the one loan.

14. Management's Response states that "[u]nder the Board Resolution establishing the Inspection Panel (Resolution 93-10, 9/22/93) this Request is ineligible for consideration because more than 95% of the Loan Proceeds had been disbursed as of the date the Request was received. However, in the interest of transparency, the following detailed response has been prepared."

15. Since the Resolution that established the Panel does not refer specifically to the cases where the Bank has provided an original and one or more supplemental loans for the same project and given the fact that the requesters

claim that their Request refers exclusively to Loan 2883-1-BR, the Panel requested Management to further elaborate on its claim that the Request was ineligible.

16. On May 22, 1997, Management sent a Memorandum to the Panel which stated the following in relation to this matter:

"The Requesters' claim that their Request "refers exclusively to Loan 2883-1-BR" is based on a misunderstanding of the nature of the additional financing made available to the Borrower. The original loan amount of \$132.0 million was increased, under an amending agreement in 1991, by the amount of \$100.0 million, to cover part of a cost overrun. From the legal and operational standpoints, the original and supplemental loans constitute one single loan. There is one amortization schedule with two tranches (payments ending in 2003), and the project objectives, project description, and the list of disbursement categories were not altered by the amendment. The Closing Date was extended through the amending agreement, as it has been successively extended since then. The fact that the additional financing received an additional suffix-number (2883-1) reflects a practice of the Loan Department and it serves for housekeeping purposes only. According to the Loan Department, \$5,857,453.09 remained undisbursed as of the Request date. Since this amount represents approximately 2.5% of the total amount of the loan (\$232.0 million) the request in question does not meet the eligibility

criteria set forth in paragraph 14(c) of the Board Resolution."⁵

95% Limitation

17. In view of the stated position of the Requesters, the Panel believes that the above-mentioned 95% limitation is not as clearly applicable to this case as Management claims, for the following reasons.

18. First, the mere fact that there is a single project, with the same objectives and features, does not necessarily mean that separate financing provided in successive stages -- years apart -- constitute legally or practically a single loan.

19. Second, the records indicate that the Executive Directors intended the 95% disbursement figure to be an indicator of completion of the *project* financed by the loan.⁶ In this case all

⁵ Paragraph 14(c) of the Resolution states the following: "In considering requests under paragraph 12 above, the following requests shall not be heard by the Panel: (...) (c) Requests filed after the Closing Date of the loan financing the project with respect to which the request is filed or after the loan financing the project has been substantially disbursed." A footnote to this provision clarifies that "it will be deemed to be the case when at least ninety five percent of the loan proceeds have been disbursed."

⁶ The Executive Directors' had varying views on how long a *project* (as opposed to a loan) should remain open to inspection. The records show that some Executive Directors agreed with the concept of excluding projects that were "substantially" completed. One Executive Director felt that this should be applied to projects 80-90 percent completed. However, others felt that 95% disbursed was a reasonable benchmark for substantially completed.

parties agree that the Project is far from completion. Indeed, less than 50% of the irrigation works are completed, and it is clear that the Bank intends to retain at least a supervisory role in the Project possibly until December 1999 in order to ensure full compliance with the policies and procedures on involuntary resettlement.

Number of Loans

20. As far as the discussion on whether there were one or two loans for this project, the record appears rather confusing.

21. Firstly, it is not quite clear that loans 2338 and 2338-1 BR constitute a *single loan*, as stated by Management: the amortization schedule provided in the amending agreement that granted the supplemental loan clearly shows two different amortization tables for each of the so-called "tranches," with different grace periods and amounts of principal payments. Furthermore, the customary sixty-day grace period for commitment charges was granted for the second loan as of the date of the amending agreement. Finally, the Loan Department's records show Loan 2883 BR as closed on December 31, 1994. (See Attachment)

22. In addition, the reference to loan 2338-1 seems to reflect more than a mere "practice of the Loan Department[that] ... serves for housekeeping purposes only" since the amending agreement of November 1, 1991, which provided for the supplemental loan, is identified as "Loan Number 2883-1 BR" and an amendment to the Loan Agreement entered into between the Federative Republic of Brazil, ELETROBRAS and CHESF and the

Bank on July 20, 1992, refers to "Loans 2883 and 2883-1 BR." Other documents signed by the Bank relating to this Project, however, refer either to Loan 2883 or Loan 2883-1 BR. It is difficult to imagine that this distinction between both loans in many Bank official documents would exist if they were a single loan.

23. The records of the borrower and guarantor are also inconsistent. The authorizations for borrowing and guaranteeing the supplemental loan issued by the Federal Senate, the Ministry of Economy, Finance and Planning and the Central Bank referred to a separate loan of U.S. \$100 million equivalent that would supplement the original loan for this Project. The legal opinions issued on behalf of the borrower (ELETROBRAS) and the guarantor (the Federative Republic of Brazil) are consistent with this description of the transaction. However, the Central Bank subsequently amended the Certificate of Registry of both loans to refer to a single amount equivalent to U.S. \$232 million, and so does an amendment to the Subsidiary Loan Agreement between ELETROBRAS and CHESF, the executing entity.

24. As stated above, the 95% limitation seems to have been intended to exclude projects which are substantially completed. There are two issues which were not clarified during discussions on creation of the Panel: whether the limitation of paragraph 14(c) of the Resolution refers only to the percentage of disbursement of the loan proceeds regardless of the status of execution of the project, and the issue of how to calculate the 95% when there are

two or more loans financing one project. The Panel requests the guidance of the Executive Directors on this aspect of the eligibility of this Request.⁷ The Panel is satisfied that all other eligibility requirements established by the Resolution have been met by the Requesters and the Request.

25. Given the fact that the Executive Directors have instructed the Panel to "focus less on technical eligibility criteria and more on actual or potential damage...", and in fairness to the Requesters, who seem genuinely affected by the current project status, and Management, which has provided a detailed Response, the Panel has

⁷ Another issue that could not have been anticipated by the Board was how to deal with deposits into special accounts. Although these deposits are regarded technically as disbursements, in fact a) they have no relation to actual project execution since they constitute a mechanism to facilitate and speed payments or reimbursement of eligible project expenditures as they are incurred. Given the new trends on disbursement recently announced by Management, the 95% limit could be reached quite early in project execution; and b) the Borrower must refund to the Bank all amounts that the Bank determines will not be necessary to cover further payments for eligible expenditures. Such refunds are credited to the Loan Account. In other words, because of this feature, if the amounts on deposit in special accounts or similar mechanisms are counted against the 95% limitation, a peculiar situation could develop where a project which is not eligible for Panel review because of this limitation may become subsequently eligible because of the refund of loan amounts to the Bank. Of course, it would be very difficult for potential Requesters to learn about this refund.

proceeded as though the Request were eligible in order to be able to present the substantive issues to the Executive Directors.

Preliminary Evidence of Material Harm

26. The harm alleged by the Requesters originates in the involuntary resettlement associated with the construction of the Itaparica hydroelectric project in the São Francisco valley. The Requesters argue that the Bank has been involved in the entire power sector development in northeastern Brazil through a variety of loans, and that this particular project, the Itaparica Resettlement and Irrigation Project, has resulted in substantial damage of an economic, environmental, and social nature. The principal problems raised, and confirmed by Management as well as the Panel, include:

(1) Almost ten years after the compulsory removal and relocation of the population, less than half of the irrigation projects have been installed, with the remainder either under construction or still in the design stage.

(2) Among the installed irrigation systems, many suffer from technical problems in operation and maintenance (O&M). There are several views as to the source of these O&M problems. One allegation from Pólo Sindical, as related to the Inspector, is that the design was mistaken from the beginning, with the irrigation systems too expensive as capital investments and in consuming electricity for operation; from that point of view, the Bank's

effort to ensure "state of the art irrigation systems" has been a costly misadventure. This view seems to have some implicit support from the implementing agencies. CHESF management informed the Inspector that it expects to have to provide subsidized power to the farmers for at least 20 years, and others say indefinitely.

Management portrays the problems differently but very concretely: "occasional vandalism resulting in damage to irrigation equipment," and a "reluctance on the part of the farmers to assume responsibility for the operation and maintenance." Management is working hard to assist in the establishment of various institutional arrangements -- particularly water users' associations -- to solve these problems for the farmers on a sustainable basis. Management has argued that this is not a design problem, since the identical agricultural techniques have been used in similar irrigation projects in Brazil with great success. If that is true, and it appears to be so, and the soils are suitable for farming, then there is a major implementation problem.

Indeed, other issues appear to have made it difficult to make the irrigation systems operational. The availability of counterpart funding on the part of the borrower has been one limiting factor. A second and perhaps more important issue has been the lack of extension services to convince the farmers that there will be viable income flows once the land is irrigated and producing crops. In this regard, the technical assistance provided with Bank funding, was criticized, in conversations with the Inspector, as either too little, too

late, or wrong. Only now, after a number of years, are the Bank and CHESF considering a radical restructuring of the system of providing technical assistance in order to make the farms viable in a manner that would give confidence to the farmers. This entails a substantial departure from the crop patterns and commercialization strategies envisaged in the SAR.

It is now also understood that the original design concept of resettling families that had been subsistence farmers with traditional, river-bottom farming methods on new dryland areas with intensive irrigation and artificial input needs might have been mistaken. Crop yields of annual vegetables are declining substantially year to year, even on the better soils. Many of the families will simply not adapt to the very different agricultural requirements, and that explains why many of the farmers are unwilling to take on the responsibilities associated with self-management of the irrigation systems. The chairman of the one of the farmers' associations explained to the Inspector that some of the farmers were never suited for the complexity of irrigation agricultural, despite the optimism of the original design, and that they should be allowed to leave the settlements with compensation, a move that seems not currently permitted. The Brazilian experts consulted by the Inspector conveyed a clear understanding of the issues, and a rather different approach to these situations. They argue for mixed settlements (with large, medium, and small-scale farms) so that the larger farms ensure adequate marketing systems from which the small farmers can draw confidence. The various

Brazilian agencies involved with the Project are considering the restructuring of individual resettlement areas in that direction.

(3) the Tuxá indigenous community (in the municipality of Rodelas) has been resettled, but is unable to grow commercial crops, since the irrigation system promised has still not left the drawing board. Management is clearly frustrated with this situation as well, with an alleged degree of bureaucratic gridlock in the borrowing government that has defied solution to date. The latest formal proposal from FUNAI, on behalf of the Tuxá, was for an irrigation project that would have cost US\$ 37.5 million, or about US \$272,000 per family. This was clearly unacceptable to CHESF, which would have to finance whatever solution is negotiated. The Response portrays the supervisory role of the Bank in this issue as a "mediator," but evidently with limited success. In interviews with CHESF and FUNAI, the Inspector was informed that an offer is on the table for coverage of Tuxá needs for US \$12 million, and with senior level government support, it may be possible to reach closure on this long-standing issue shortly.

27. With regard to four other problem areas, there are disagreements about the facts between the Requesters and Management. The Panel has explored these issues on a preliminary basis, but would be unable to clearly reconcile these disagreements without a full investigation:

(1) Serious ecological problems have been cited during project implementation: (a) soil erosion; (b) soil quality; and (c) salinization and drainage.

Soil erosion is an obvious problem in some of the areas. In a number of cases, the land was cleared of vegetation in the first year, expecting all of the irrigation systems to be operational within twelve months. Now, in Barreiras, Block 2, with 600 lots, CHESF is preparing to abandon much of the proposed settlement even though people have been living in the nearby agrovilas since 1987. The damage in Block 2 is sufficiently severe that many of the residents may have to be resettled elsewhere once again.

The soil quality issue is such that, even with irrigation, the productivity of the soils in many settlements will depend upon large and regular doses of artificial inputs. At the time of project design, there appears to have been inadequate analysis of the soils, or, according to another explanation, it is said that some resettled families insisted on having their agrovilas and farms located along the lake, even though it was known that the soil was not good. One of the reasons for the constantly rising total cost of the Project is that new investments have to be made to compensate for the weak soils. At this point, the most popular solution is to abandon the horticultural approach that has prevailed for the last eight years as was envisaged in the SAR, and instead convert generally to fruit farms. Such a shift will require provision of credit, new farming techniques, a big effort in packaging,

storage and commercialization in domestic markets and abroad, and at least another five years before farmers can hope to be self-sufficient.

Examples of poor drainage and possible associated salinization were shown to the Inspector in the field. From Management's point of view, if such problems exist, they are rare and isolated examples. In any case, from the viewpoint of Management and CHESF, any known salinization is in agricultural areas not part of the Bank-financed resettlement areas. (Several of the Itaparica resettlement areas were excluded from Bank financing.) The issue is a sensitive one for the Project, since the risk was recognized in the design of the Project, and CHESF agreed during negotiations that "should problems of salinity occur within five years of settlement which are not a result of farmer negligence, CHESF would provide the affected farmers with a new plot of irrigated land."⁸ Two points of ambiguity could be a source of future disagreement in terms of timing and responsibility: (a) What is the starting point for five years: from resettlement or from operation of the irrigation system? (b) What comprises "farmer negligence?" Neither issue has been fully tested yet, even though the SAR foresaw all work being completed in 1988.

(2) In terms of the houses provided by the resettlement authority in the agrovilas, 1,200 houses have already shown structural problems, and some of them have not been repaired. The

⁸ SAR, p. 24.

Requesters cite problems in about 1200 houses, and indeed, Management uses the number 1200 in a supervision mission aide-memoire dated February 16, 1994, which also mentioned repair of 500 houses by CHESF. In addition, according to the aide-memoire, the entire agrovila R1 of Borda do Lago was so deteriorated in 1994 that all the residents of the village were going to have to be moved. The Inspector visited agrovila R1, where people still live, and the houses were not only cracked in many places, but also quite a few had collapsed into rubble. Management appears to believe that all of the complaints have been addressed, all attributed to the houses being built on expansible soils that were not detected prior to construction. The supervision mission's aide-memoire signed since 1994 do not discuss repair of housing, and so the problem does not appear to have been addressed further by the Bank supervision teams. Discussions with people in the resettlements with damaged housing revealed strong sentiments on the part of many not to be resettled again. While the people are disappointed and angry about receiving houses as compensation that do not remain standing, many are reluctant to be uprooted again and sent to another new settlement. CHESF is currently negotiating a resolution to this problem with the Pólo Sindical as the intermediary.

(3) The delay in the installation and commissioning of the irrigation projects has contributed to an increase of violence in the communities, to alcoholism and family breakdown. In short, the fact that the families are living on welfare instead of being employed is

unleashing severe social tensions. Management indicates that it is aware of reports of these social problems, but argues in the Response that "such occurrences also occur in many populations in this region including those unaffected by Itaparica." It believes that it would need baseline data to determine the effect of the lack of jobs in causing these social crises. Since that baseline data was never collected, it is now too late to obtain it. Management does not appear to see the present project structure as a mechanism that could address such issues. In fact, the observation by the Inspector was that social problems are grave throughout the region, with a degree of lawlessness that would undermine community cohesion in any case. Nevertheless, the fact that many families are not yet engaging in productive activities does nothing to dispel the social ills of the area, and successful projects -- of which there are a number in both Bank-financed resettlements as well as non-Bank-financed resettlement areas -- have shown a reduction in the incidence of violence and other social pathologies. The Inspector visited several agrovilas where virtually all of the families had been without work, and living mostly on safety net payments, for nearly a decade.

(4) The results of the resettlement project, from the Requesters' point of view, have been that a significant proportion of the beneficiary population is in worse conditions of production and social reproduction than before the construction of the Itaparica Hydroelectric Scheme. Management takes exception to this argument, since the maintenance payments to resettled

farmers (VMT) were not included as a measure of welfare of the population. Management believes that "the maintenance payments, while palliative, have been sufficient to maintain a level of living substantially higher than previous levels for a large majority of cases." Purely in terms of household income, Management is undoubtedly correct. But temporary income is not the test of the Bank's resettlement policy. The test is the sustainable income being greater than, or at least equal to, the family's income before resettlement, and on that score, welfare payments do not count, and the variability of income from highly perishable crops such as tomatoes should be understood. The general experience has been that income is only temporarily higher for a number of reasons. In surveys of resettlement areas currently irrigated, crop yields have fallen substantially year to year, normally by 10-20% each year. Indeed, the long-term impact of VMT can be damaging for the work ethic where people are given a choice. The impact of such welfare payments over so many years on the issues raised in (3) would then need to be considered.

Another way to approach the issue of standard of living is to examine the question of public services in the new agrovilas. The Requesters did not make a major complaint about the issue of health and education services, but Management was concerned about their availability in several aide-memoire. There appears to have been problems recruiting teachers for the local schools, and it was hard to attract health professionals to health posts. According to residents interviewed by the Inspector, schoolchildren are now being bused by

CHESF as far as 25 kilometers daily to school owing to a shortage of teachers. The state governments appear reluctant to pick up their responsibility for staffing, and nothing seems to have been included in project design to ensure such actions by the state governments. This is not an unusual problem in Brazil, but nevertheless, the improvement in the standard of living of the resettled families should eventually take this into account, as was expected in the SAR. The Project was intended to finance construction and equipping of 59 schools and 8 health posts, training of teachers and health professionals, and the cost of salaries for those personnel during the Project period. Many of these posts and schools were built, but remain idle for lack of staffing.

28. During his field visit, the Inspector visited numerous sites and interviewed various settlers. He was able to determine that, on those four issues where the Requesters and Management largely agreed, there was indeed substantial evidence of material harm. On the remaining four issues, the Inspector witnessed some actual evidence of the harm alleged in the Request. The question of how pervasive such harm is throughout the Project areas would have to be investigated at length in an investigation.

Alleged Acts or Omissions

29. The Requesters claim that the Bank failed to provide adequate supervision of the Project, and thus the principal omission relates to carrying out the terms of the resettlement plan envisioned in the Project. The

Requesters also suggest that basic flaws must have existed in the design of the Project, given the enormous delays and cost overruns in the budgeted funds for the Project, resulting in the Bank providing US \$100 million additional in 1990 (over the original US \$132 million), and now reaching project completion date with only 35-44% of the irrigation systems in operation. The Requesters are particularly concerned, now that the Project is nearing closing date, that the Bank may cease supervision of the Project with less than half of the irrigation systems completed and financed.

30. Management disagrees, stating that they "have provided ordinary and, in many cases, extraordinary levels of supervision due to the complexity of the Project." The Response cites 21 supervision missions between 1988 and 1997. As additional evidence, Management states that it suspended disbursements in 1990 in dissatisfaction over progress in the Project, and extended the closing date of the loan four times. The Bank also attempted to achieve compliance by providing 100% of the costs of the Project in 1992, in an attempt to speed up implementation. At the same time, Management acknowledges that the completion of the Project is likely to cost another US \$100 million, and in its Response, Management does not identify a possible source of this financing.

31. The Panel is *prima facie* concerned about a project that was originally projected to cost US \$304 million, and is now estimated to cost at least US \$774 million, after ten years

effort. The Inspector consulted with Government authorities about the future funding for this Project. It is a matter taken up by the Inter-Ministerial Committee⁹ as part of the future strategy for the larger Itaparica project. It should be noted that the Federal Government of Brazil includes the settlements financed by the Bank as well as those not financed by the Bank in the overall project, and for the Government, it is necessary to find about \$300 million to close out the resettlement issues. In the draft report of the Inter-Ministerial Committee, the Government makes clear its commitment to find the funds for the entire project, and it is expected that a large share will be provided by ELETROBRAS. The Panel is reassured by the seriousness of the Government's commitment, but would expect that the Bank would be confident of project completion only with formal adoption of the report of the Inter-Ministerial Committee.

32. At a more human level, even if there were another commitment made to complete the Project, one can understand the skepticism and concern on the part of beneficiaries who have not yet seen successful resettlement as promised ten years ago in a formal agreement. They could easily expect the pattern of omissions of the last ten years to continue into the indefinite future,

⁹ Given the many problems affecting the Itaparica Resettlement and Irrigation program the Federal Government established an Interministerial Committee in January 1997 with the objective of reviewing the program and making recommendations to ensure its prompt and satisfactory completion.

especially if the Bank were to close out its presence in the Project.

Alleged Policy Violations

33. The Requesters believe that Management has violated OMS 2.33, relating to Involuntary Resettlement; OMS 2.34, relating to Indigenous Peoples; OD 4.01, relating to Environmental Assessment; and OD 13.05, relating to Project Supervision.

34. Management disputes the application of OD 4.01, since it was not in force until October 1991, and otherwise maintains that it has complied with all relevant policies in the design and implementation of the Itaparica Resettlement Project. Management goes on to say that "the current situation is far from ideal, but the shortcomings to which the Request points did not arise from the Bank's failure to follow its policies."

35. The Panel is not convinced that Management has complied with all the relevant policies and procedures. The Panel acknowledges that the antecedents of OD 4.01 would have limited application. The issues of soil fertility and potential soil salinity are much more relevant to questions of productivity and the related economic assessments of likely returns to the investment. In that context, there are serious questions to be raised about the quality of design and project preparation with regard to the soils where settlements have been placed.

36. The more important potential policy lapses, however, deal with implementation of OMS 2.33,

Involuntary Resettlement and OD 13.05, Project Supervision. Management has clearly attempted to comply with these policies. Nevertheless, the tests posed in OMS 2.33, *Social Issues Associated with Involuntary Resettlement in Bank-Financed Projects*, are useful to assess in this regard: "that, after a reasonable transition period, the displaced people regain at least their previous standard of living and that, so far as possible, they be economically and socially integrated into the host communities." (para 2) The policy also raises issues especially pertinent for this Project, such as with regard to the welfare payments: "People subjected to relocation are prone to develop the syndrome of settler dependency if paternalistic help policies are applied." "Action should be taken from the outset to prepare the transfer of the responsibilities of management to the resettled." (paras 8 and 16) Finally, "during implementation, Bank supervision missions should pay careful attention to the sociological and technical aspects of resettlement as a whole. Project management should monitor, with Bank assistance if required, the timely completion of resettlement activities, and the general social and economic condition of the resettled people." (para 27) On the face of it, the Project has not met such policy tests, especially on timeliness, and the details of compliance with other aspects would have to be assessed in the context of an investigation.

Supervision

37. The Request states recurring concern about the nature of Bank supervision of project implementation. It is also concerned about the prospects of future supervision in light of the

impending closing date for the latest loan in this Project.

38. Management attempts to rebut all accusations of faulty supervision. The Response cites the number of supervision missions (21) since 1988, yet among those many missions, only five had a resettlement specialist included. Management also cites the fact that disbursements were suspended for a period of time in 1990, and that in 1992, the Bank agreed to cover 100% of project costs in order to get it back on track.

39. The Panel is impressed by the variety of efforts undertaken in supervision to get the Project on track, but in many measures they still seem to have failed. By any ordinary test of OD 13.05 -- the accomplishments of the Project in meeting targets -- supervision was inadequate. With hindsight, it appears that Management viewed this primarily as an irrigation project, and broader issues raised in OMS 2.33 with regard to resettlement compliance appear to have taken the back seat. The Panel is skeptical that Management could have maintained compliance with all covenants and aspects of resettlement policies without the addition of a resettlement specialist in missions since 1993. Lately, supervision of the irrigation work has been impressive, and against extraordinary odds, nearly half of the works have been put into operation. Nevertheless, the original impetus for the Project was to be successful resettlement.

40. The many complaints about the inadequacy of the technical assistance (fully financed by the Bank) on matters

of irrigation, soil management, crop selection, and commercialization received by the Inspector from the settlers seem to indicate a failure to supervise the consultants providing those services.

41. The focus of Bank supervision was not consistent through the life of the Project. It began in Brazil (1987-1990), was then shifted to Washington (1990-1996), and as of August 1996, supervision appears to have been moved *de facto* back to Brazil. A project with implementation now over ten years suffers from changing personnel and institutions weary of the tasks.

Remedial Actions

42. The Management Response includes as Section V an "Action Plan" to deal with the many unfinished aspects of the Project. The Plan is divided into two parts. The first part elaborates benchmarks established for an agreement between the Bank and the Government of Brazil to extend the closing date to the end of 1997 (Response, page 21). Among the benchmarks to meet concerns of the Requesters most clearly is the agreement on the Tuxá program and stepped-up issuance of land titles. Interviews by the Inspector revealed substantial progress. The most important change in emphasis that could impact some issues of the Requesters would be to transfer resources and effort from welfare payments to water users' associations. This remedy makes the Requesters very nervous, since the bottom line of water users' associations is cost recovery. With many of the Requesters not yet showing sustainable levels in agricultural income, it seems a recipe for

disaster from their point of view to increase their costs before their income is assured. Some have been reassured by the decision of project managers in many settlements to begin shifting from annual crops (vegetables) to fruit trees, now that the weakness of the soils has become evident. In other words, this remedy to focus on water users' association may be unacceptable to many farmers until comparable effort is expended on production and marketing.

43. The second part of the Action Plan relates to a proposal from the borrower that the Bank remain in a supervision mode for two years after loan closing, that is, until December 1999. That Plan essentially restates the goals of the Project, so that the original design would be completed by the end of 1999.

44. The Panel has now reviewed the draft report of the Inter-Ministerial Committee. It calls for an institutional transformation of the Project that, with adequate high-level support, could achieve the accelerated completion of the Project. The report calls for a new agency to be created by the Government to take over the resettlement and agricultural responsibilities of CHESF in the Itaparica area. The new agency would be created to work closely with Pólo Sindical and farmers' associations in the area that would gradually take on greater operational, civic and economic responsibilities. This proposal should not be seen as a rejection of the work of CHESF. Indeed, in recent years, CHESF has shown remarkable adaptability and commitment in pursuing the original goals of the Project. Rather, the Government and others recognize

that it is time for the devolution of authority in the valley, and that CHESF should get back to the business of generating and distributing electricity. The Requesters seem to be in general agreement with the thrust of the report, even though detailed consultations are still to be held, but the long-term viability of the solution will depend upon fostering an atmosphere of trust between the new agency and the farmers (and their representatives) in the Itaparica area.

45. The Panel concludes that the success of the Action Plan depends upon the willingness of the Government to coordinate all agencies involved. The Inter-Ministerial Committee created by the Government in January 1997 is valuable in its own right, but it must agree upon and put support behind the benchmarks of December 1997 for the Plan to be in compliance with loan covenants. Secondly, adequate financing will be essential to Management's expectations. Management refers generally to the need for an additional US \$100 million to complete the Project. The Government is seeking US \$300 million to finish the broader Itaparica project. That funding has not yet been guaranteed.

C. Recommendation

46. Paragraph 19 of the Resolution requires the Panel to "make a recommendation to the Executive Directors as to whether the matter should be investigated." In this context, and subject to the guidance on eligibility requested from the Executive Directors

in paragraph 24 above, the Panel recommends that the Executive Directors authorize an investigation of the Itaparica project. In the Panel's opinion, there have clearly been direct adverse effects upon the Requesters. It is entirely possible that serious violations of Bank policies have occurred, particularly OMS 2.33, OMS 2.34, and OD 13.05. And the remedial actions proposed by Management, while promising in character, have not yet been formalized in discussions of the Bank with the Government and executing agencies. In the absence of formal commitments, concrete measures and funding to carry out the promises to those involuntarily resettled, the Panel does not believe that the concerns of the Requesters will be met.



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Project: BRAZIL -- ITAPARICA

Project ID: 6442

Loan Number: 28830

Loan Number Status as of 22-JUN-97

Disb Officer:	VAN PRAAG	Disb Analyst:	ONESTY
Task Manager:	AZEVEDO, LUIZ GABRIEL	Division:	LA1ER
Sector:	AGRICULTURE		
Currency:	USD	Restrictions:	
Amounts in USD		Date	
Original Principal	132,000,000.00	Approval	17-NOV-1987
Disbursed	132,000,000.00	Signing	07-DEC-1987
% Disbursed	100.00	Effective	08-DEC-1987
Cancelled	0.00	Closing	31-DEC-1994
Undisbursed	0.00	Latest Disb/Refund/Recov	14-SEP-1992
Committed	0.00	Last Cancellation	
Free	0.00		
Disb Pipeline	0.00		

Other Loans in project	
Fin Id	Loan Num
IBRD	28831

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ANNEX 1

PÓLO SINDICAL DOS TRAB.RURAIS DO SUBMÉDIO SÃO FRANCISCO

Rua Dantas Barreto, 139 - Caixa Postal 02 - Telefax (081)851-1160

CEP:56.460-000 - Petrolândia - PE.

C.G.C.nº 35.677.707/0001-11

**SOLICITAÇÃO DE PAINEL DE INSPEÇÃO DO BANCO
MUNDIAL, PARA O PROJETO DE REASSENTAMENTO DOS
ATINGIDOS PELA BARRAGEM DE ITAPARICA**

Petrolândia, 12 de março de 1997

**SOLICITAÇÃO DE PAINEL DE INSPEÇÃO DO BANCO
INTERNACIONAL PARA RECONSTRUÇÃO E
DESENVOLVIMENTO - BANCO MUNDIAL, PARA O PROJETO
DE REASSENTAMENTO DOS ATINGIDOS PELA
HIDRELÉTRICA DE ITAPARICA (BIRD 2883-1)**

Ao Painel de Inspeção do Banco Mundial

Banco Internacional pela Reconstrução e Desenvolvimento - Banco Mundial,

Nós, camponeses compulsoriamente deslocados pela construção da barragem de Itaparica representados pelo Pólo Sindical do Submédio São Francisco, vimos requerer ao Painel de Inspeção do Banco Mundial que recomende aos Diretores Executivos uma investigação sobre a execução do Projeto de Reassentamento para as famílias atingidas. O referido Projeto é financiado pelo BIRD, tendo como mutuário a ELETROBRÁS, empresa estatal brasileira, e como executora a Companhia Hidrelétrica do São Francisco - CHESF, responsável pelas obras da barragem e pelo reassentamento da população.

O Projeto de Reassentamento, fruto de uma intensa luta empreendida pelos atingidos, pretendia compensar as irreversíveis perdas culturais, econômicas, sociais e ambientais que essa população camponesa sofreu com o deslocamento compulsório. Pretendia portanto elevar a qualidade de vida dessas pessoas proporcionando moradia, educação, saúde e meios para a produção. Constava da implantação de 110 Agrovilas, com infraestrutura de saúde e educação, e seis projetos de irrigação, totalizando 19.512,5 hectares. Um projeto que deveria deixar a população em melhores condições de vida do que antes da construção da barragem.

Atendia, portanto, as preocupações expressas pelo Banco Mundial que afirma: *"se o reassentamento compulsório é inevitável, a política do Banco exige formulação e o financiamento de um plano de reassentamento, para assegurar que as pessoas*

reassentadas tenham oportunidades de desenvolvimento que melhorem, ou pelo menos restaurem, os níveis de vida que tiveram antes do projeto" (OD 4.30/1990). Por outro lado, a experiência acumulada acerca dos impactos adversos irreversíveis provocados pela construção de barragens já é de amplo conhecimento do Banco que os analisa e normatiza no "Environmental assessment sourcebook", Vol 1, Cap. 3 (Problemas sociais e culturais na análise ambiental) e no Vol. 3, Cap. 10 (Projetos Hidrelétricos), bem como na Operational Directive-OD 4.01/1991, que incorporou as orientações contidas na OD 4.00/1989 (Anexo B-Environmental Policy for Dam and Reservoir Projects) estabelecendo a obrigatoriedade de estudos ambientais e a elaboração de programas de supervisão, de monitoramento e de mitigação dos impactos para a construção e operação de barragens.

Porém o Projeto de Reassentamento de Itaparica não tem atendido ao objetivo de promover a melhoria das condições de vida dos atingidos, desconsiderando as políticas e normas do agente financiador, o BIRD. Os dados a seguir comprovam o exposto.

Quase dez anos depois do deslocamento compulsório da população, apenas 35 % dos projetos de irrigação (6.800 ha) estão implantados, 34% estão em construção (6.600 ha) e 31% (6.000 ha) encontram-se ainda em fase de estudos (Anexo A);

Dos 35% dos sistemas de irrigação em funcionamento, grande parte apresenta problemas técnicos de operação e manutenção;

A comunidade indígena Tuxá (município de Rodelas) encontra-se reassentada, mas sem condições de produção, já que o sistema de irrigação prometido continua em fase de estudos;

O atraso na implantação e operação dos projetos de irrigação tem contribuído para o aumento da violência dentro das comunidades, ao alcoolismo e a desintegração familiar (como já era assinalado em 1991 pelo The World Bank and the Environment in Brazil: a Review of Selected Projects, May 3, 1991, Operations Evaluation Department).

Assim, quase dez anos depois do deslocamento compulsório, os resultados do Projeto de Reassentamento tem levado a que significativa parcela da população beneficiária encontre-se em condições de produção e reprodução social inferiores às anteriores à construção da Hidrelétrica de Itaparica.

O Pólo Sindical do Submédio São Francisco e a Hidrelétrica de Itaparica

O Pólo Sindical do Submédio São Francisco foi criado em 1979, constituindo-se como uma organização de trabalhadores rurais para defesa dos direitos dos camponeses perante a CHESF.

A proposta inovadora de articulação de um pólo de sindicatos de trabalhadores rurais, que passava a atuar para além das fronteiras municipais, teve grande expressão no Submédio São Francisco, pois ali, a luta contra os efeitos negativos da construção da Hidrelétrica de Itaparica unificou posseiros, arrendatários, pequenos agricultores e sem-terra da região.

Assim, o Pólo Sindical foi-se configurando como uma articulação diante da questão da barragem de Itaparica, consolidando-se como mediador dos atingidos frente à CHESF, ao Banco Mundial e ao poder local. Ao longo dos anos organizou centenas de manifestações, algumas reunindo mais de cinco mil pessoas, petições, seminários, enfrentamentos e lutas relacionadas aos efeitos sociais e ambientais da barragem.

A CHESF construiu a Barragem de Itaparica no rio São Francisco, na fronteira dos estados da Bahia e de Pernambuco. A barragem inundou cerca de 834,0 Km² e deslocou compulsoriamente mais de 40.000 pessoas. No entanto, a empresa não planejou previamente o que fazer com esta população, apesar das experiências dramáticas dos casos das barragens de Sobradinho e Moxotó, ambas na mesma bacia hidrográfica (Anexo B).

O Pólo Sindical passou a pressionar a empresa no sentido da obtenção de reassentamento com irrigação para a população deslocada, o que foi conseguido com a assinatura do Acordo entre o Pólo Sindical e a CHESF em 1986 (Anexo C), que

obrigava a empresa a reassentar a população camponesa em agrovilas e terrenos com irrigação.

Quando do início da operação de Itaparica em 1988, a CHESF ainda dava seus primeiros passos em direção ao atendimento das demandas acordadas com os atingidos. Somente depois do financiamento do Projeto de Reassentamento e Irrigação encaminhado pela Eletrobrás - CHESF ao Banco Mundial, a problemática começou a ser efetivamente encaminhada.

Assim, o Banco Mundial teve significativa importância no atendimento às demandas da população compulsoriamente deslocada, não somente como financiador das obras mas como co-idealizador dos projetos de reassentamento e irrigação.

Os Projetos do Banco Mundial no Vale do Rio São Francisco, o financiamento para a Barragem e para o Reassentamento de Itaparica

O Banco Internacional pela Reconstrução e Desenvolvimento (BIRD) - Banco Mundial vem apoiando projetos no Vale do rio São Francisco, nordeste do Brasil. Segundo relatório do Departamento de Avaliação de Operações (OED) do BIRD, esses projetos beneficiaram milhões de nordestinos com o aumento da oferta de energia elétrica, mas, por outro lado, deslocaram compulsoriamente cerca de 170.000 pessoas, que requereram soluções de reassentamento que foram encaminhadas de forma diferenciada (The World Bank and the Environment in Brazil: a Review of Selected Projects, May 3, 1991, Operations Evaluation Department).

Assim, se por um lado alguns desses projetos visavam a produção de energia hidrelétrica a partir de grandes barragens (Anexo D), outros buscavam mitigar os "impactos negativos" do deslocamento populacional e mesmo, promover social e economicamente uma população rural empobrecida.

Com efeito, o Banco Mundial proveu fundos para o Setor Elétrico brasileiro por meio de empréstimo a Eletrobrás, aprovado em 1986, quando a construção da barragem de Itaparica era uma das maiores prioridades do Setor, o que indubitavelmente assinala a

responsabilidade do Banco com os efeitos socioambientais causados pelo projeto (The World Bank and the Environment in Brazil: a Review of Selected Projects, May 3, 1991, Operations Evaluation Department).

Mas não somente, representantes da CHESF afirmaram em um seminário de avaliação conjunta com o Banco Mundial que *O Plano de desocupação da área do reservatório (de Itaparica), submetido ao Banco Mundial e iniciado em 1986, gerou tensões sociais de tal ordem que o Banco, para conceder um importante empréstimo setorial à Eletrobrás, exigiu a formulação de uma política para o reassentamento provocado de populações* (Aspectos Ambientais de Projetos Co-financiados pelo Banco Mundial: Lições para o futuro, org. Alencar Soares de Freitas e Pedro Ribeiro Soares, IPEA/146, Brasília, 1994, a partir das conclusões dos estudos feitos pelo OED do Banco Mundial) (Anexo E).

Assim, as responsabilidades do Banco Mundial em relação ao Projeto de Reassentamento de Itaparica vem a partir de dois fatores: a barragem foi parcialmente financiada por um empréstimo setorial ao Setor Elétrico e o reassentamento, seguindo as recomendações da avaliação do Banco, foi também financiado (The World Bank and the Environment in Brazil: a Review of Selected Projects, May 3, 1991, Operations Evaluation Department).

O Banco Internacional pela Reconstrução e Desenvolvimento (BIRD) - Banco Mundial mais recentemente financiou a conclusão do Projeto de Reassentamento de Itaparica em um montante de US\$ 100.000.000,00 (cem milhões de dólares), de um total de US\$ 271.700.000,00 (duzentos e setenta e um milhões e setecentos mil dólares), tendo desembolsado US\$ 93.500.000,00 (noventa e três milhões e quinhentos mil dólares) até o presente momento (Anexo F).

O Projeto de Reassentamento de Itaparica é, na verdade, um projeto de reassentamento e irrigação para cerca de 6 mil famílias de camponeses, a população rural deslocada compulsoriamente com a construção da hidrelétrica e com o enchimento de seu reservatório.

A área e a população diretamente afetadas pela Barragem de Itaparica

Os municípios baianos de Glória e Chorrochó tiveram áreas agricultáveis inundadas, povoados realocados e populações reassentadas. Em Rodelas (estado da Bahia), 71 % da população do município foi atingida, além de sofrer a inundação da sede municipal, de povoados e áreas agricultáveis. Curaçá e Paulo Afonso (Bahia) não tiveram áreas inundadas; contudo, Curaçá abrigou um grande projeto de reassentamento, recebendo atingidos de Chorrochó, Rodelas e Belém do São Francisco.

A margem pernambucana foi mais atingida pela inundação de suas terras, representando mais que o dobro da área inundada na margem baiana. Itacuruba, Petrolândia, Belém do São Francisco e Floresta tiveram parte de suas terras inundadas. Em Itacuruba a perda de terras significou 27% da área do município e, em consequência, 65% da população foi prejudicada. Petrolândia, o segundo mais atingido, teve 9% de sua área e 27% de sua população deslocada. Orocó e Santa Maria da Boa Vista, apesar de não sofrerem inundação, receberam considerável número de atingidos, reassentados em projetos de irrigação (Anexo G).

Os projetos de irrigação

Os projetos de irrigação localizam-se nos municípios de Glória, Rodelas e Curaçá - no estado da Bahia, e Petrolândia, Orocó e Santa Maria da Boa Vista - no estado de Pernambuco. O tamanho dos lotes é de 1,5 a 8 hectares, conforme descrição sumária a seguir.

Borda do Lago de Itaparica - Bahia: engloba os municípios de Glória e Rodelas, com área total de 1.747,5 hectares e 547 lotes de 1,5 a 6 hectares; está dividido em três sub-áreas: Glória, Rodelas e Itaquiara.

Borda do Lago de Itaparica - Pernambuco: no município de Petrolândia, com área total de 5.712 hectares e 1.723 lotes de 1,5 a 6 hectares, é composto de duas sub-áreas: Barreiras e Icó-Mandantes.

Brígida - Projeto Especial: no município de Orocó, com área total de 1.501,5 hectares, 429 lotes de 1,5 a 6 hectares e dez agrovilas.

Pedra Branca - Projeto Especial: no município de Curaçá, com área total de 2.466 hectares, 706 lotes de 1,5 a 6 hectares e 19 agrovilas.

Caraíbas - Projeto Especial: no município de Santa Maria da Boa Vista, com área total de 5.605,5 hectares, 1.603 lotes de 1,5 a 6 hectares e 47 agrovilas.

Apolônio Salles - Projeto Especial: no município de Petrolândia, com área total de 880 hectares, e 101 lotes de 8 hectares. É o único projeto que os reassentados residem no próprio lote e não em agrovilas.

Reassentamento dos índios Tuxá foi efetivado, com a divisão da comunidade em dois grupos, um realocado no município de Ibotirama (94 famílias) e outro de Rodelas (96 famílias).

Há ainda o Projeto Jusante em fase de elaboração. Localizado no município de Glória, abrange uma área de 1.600 hectares, parcelada em 580 lotes (Anexo H).

Os problemas com o reassentamento e com os projetos de irrigação

O Projeto de Reassentamento de Itaparica não tem atendido aos objetivos mais gerais de promover a melhoria das condições de vida da totalidade dos atingidos e nem vem acompanhando as políticas e normas do agente financiador, o BIRD - Banco Mundial.

O descompasso entre o andamento do plano de reassentamento e a implantação da infra-estrutura produtiva tem gerado altos custos sociais, como o aumento da criminalidade, ociosidade da população e o excessivo consumo de álcool nas agrovilas (Aspectos Ambientais de Projetos Co-financiados pelo Banco Mundial: Lições para o futuro, org. Alencar Soares de Freitas e Pedro Ribeiro Soares, IPEA/146, Brasília, 1994, a partir das conclusões dos estudos feitos pelo OED do Banco Mundial), o que também ocorre com parte da comunidade indígena Tuxá.

Os resultados da produção nos projetos em funcionamento indicam as dificuldades de obtenção de renda pelos produtores para a sustentação econômica e financeira dos projetos de irrigação.

Dados recentes da CODEVASF (dezembro de 1995 e agosto de 1996) mostram que as produtividades alcançadas *foram muito baixas nas diversas culturas, ficando muito abaixo das programadas* e da média de outros perímetros de irrigação da região (RELATÓRIO DE AVALIAÇÃO DOS SERVIÇOS DE ASSISTÊNCIA TÉCNICA NOS PROJETOS DE IRRIGAÇÃO DO SISTEMA ITAPARICA - JAN. - JUN./96 - CODEVASF/GEEP) (Anexo I).

Os dados desse quadro revelam a existência de limitações naturais quanto a formação dos solos escolhidos para parte significativa dos projetos de irrigação, mostrando que os reassentamentos somente serão viáveis com a geração de um padrão tecnológico condizente que potencialize os fatores de produção, ou então, em algumas áreas, com a mudança do local escolhido para a irrigação.

Mas, além das limitações naturais, há também problemas de ordem técnica e operacional.

Algumas das agrovilas construídas encontram-se em plena deterioração, em virtude da não utilização de materiais apropriados, com é o caso de Itaquiara (município de Rodelas), Borda do Lago - Bahia.

Os projetos de irrigação em funcionamento apresentam importantes problemas nos sistemas de irrigação instalados, tais como: a excessiva demanda de energia elétrica para a operação, o que pode tornar inviáveis a produção de diversas culturas tradicionais da região; falhas no processo de instalação dos sistemas que tem causado a rápida deterioração dos equipamentos; equívocos nas análises técnicas preliminares que vêm provocando dificuldades na irrigação de toda a área preparada; sinais de erosão dos solos e salinização que mostram a insustentabilidade do sistema do ponto

de vista ambiental; material de baixa qualidade utilizado nos sistemas de irrigação, o que resulta em perdas significativas de sua vida útil.

Há importantes sinais da ocorrência de má utilização dos recursos, ou mesmo da existência de desvio de verbas para outras obras, o que explica os custos “excessivos” por família assentada: 63 mil dólares, reconhecido pela CHESF e questionado por técnicos do Banco Mundial (Aspectos Ambientais de Projetos Co-financiados pelo Banco Mundial: Lições para o futuro, org. Alencar Soares de Freitas e Pedro Ribeiro Soares, IPEA/146, Brasília, 1994, a partir das conclusões dos estudos feitos pelo OED do Banco Mundial) (Anexos E e J).

Assim, o reassentamento e os projetos de irrigação não tem conseguido recompor as condições sociais e econômicas de produção e reprodução de parte significativa da população que compulsoriamente deixou as terras mais férteis do Vale do São Francisco. Parte da população continua sem as mínimas condições de produção agrícola, depois de quase dez anos do deslocamento compulsório. E parte dos que já estão produzindo, começam a verificar que os projetos de irrigação foram mal planejados e executados, fazendo com que não tenham sustentabilidade econômica e ambiental. A execução do projeto não atendeu às suas especificações técnicas, o material utilizado nos sistemas de irrigação é muitas vezes de baixa qualidade e parte deles já necessita de reparo imediato.

Em virtude do exposto, acreditamos que o BIRD - Banco Mundial, como instituição financiadora, tem responsabilidade pelo atual estado do projeto por omissão, por não supervisionar e monitorar a contento o andamento da implantação dos reassentamentos e dos sistemas de irrigação. Obviamente o Banco Mundial não é o único responsável, já que o governo brasileiro, a Eletrobrás e a CHESF são mutuários e executores da obra. Mas, o BIRD tem sua importante parcela de responsabilidade por ter financiado a obra sem fazer com que os organismos mutuários e executores atendessem às suas políticas de reassentamento e de trato com populações compulsoriamente deslocadas por barragens.

As denúncias ao Banco Mundial

As preocupações da população compulsoriamente deslocada foram apresentadas ao Banco Mundial - assim como a organismos do governo brasileiro - em diversas ocasiões. Os dirigentes do Pólo Sindical de diferentes períodos, lembram da realização de, no mínimo, uma média três reuniões anuais com representantes do Banco Mundial em Petrolândia e outras áreas atingidas, sobre os problemas dos reassentamentos e dos sistemas de irrigação.

Destas reuniões e contatos, apenas alguns poucos foram registrados por meio de documentos, como por exemplo:

Reunião com representantes do BIRD em 1991, em Petrolândia, sobre a necessidade de mais recursos e denunciando o desvio de material das obras dos reassentamentos (Anexo K).

Em fevereiro de 1992, representantes do Pólo Sindical reuniram-se com dirigentes do Banco Mundial em Washington, para discutir meios de apoio do Banco à conclusão da implantação dos sistemas de irrigação (Anexo L).

O Ofício 136/93, de 18 de novembro de 1993, do Pólo Sindical para o Banco Mundial, inicia com a seguinte afirmação: *Com o presente queremos informar-lhes sobre a situação atual dos Reassentamentos de Itaparica, que nos parece altamente preocupante. Gostaríamos, ainda, de chamar atenção para a responsabilidade que o Banco Internacional de Reconstrução e Desenvolvimento tem para com os reassentados atingidos pela barragem.* O documento continua narrando o processo de Reassentamento de Itaparica e as dificuldades encontradas naquele momento em sua implantação, como por exemplo: os problemas com os atrasos na entrega das obras, a questão do alto custo da energia, e defeitos técnicos na implantação. O BIRD respondeu dia 15 de dezembro do mesmo ano, por meio de uma carta do Chefe da Divisão de Operações Ambientais e Agrícolas Departamento I, afirmando que os *problemas específicos indicados na (...) carta tem sido matéria de ampla discussão com a CHESF e a CODEVASF durante a nossa última missão de supervisão. O*

Banco está programando uma missão para o próximo mês de março de 1994, para dar seguimento às ações acordadas. Apesar da esperança causada pela carta do BIRD, efetivamente nada foi resolvido (Anexo M).

Em 1994, o Coordenador do Pólo Sindical remeteu carta ao Sr. Lewis Preston, então Presidente do Banco Mundial, em que afirmou: *Em carta enviada recentemente ao Banco Mundial por fax, alertamos que a sua entidade está correndo o risco de apoiar uma política, que o próprio Sr. está criticando. Por negligência técnica ou outros motivos, os sistemas de irrigação implantados ou planejados não correspondem, de maneira alguma, com as necessidades mínimas: os sistemas apresentam sérias falhas e defeitos técnicos que, em pouco tempo, podem inviabilizar a produção; A eficiência do sistema está muito abaixo do nível aceitável econômico... ; (...); A CHESF não resolveu ainda o pré-requisito fundamental para o funcionamento de um sistema de irrigação, principalmente no semi-árido: a drenagem. No Projeto Nilo Coelho (Petrolina, CODEVASF), tem muitas terras já salinizadas, por falta de drenagem ou drenagem deficiente; Custos muito altos... segundo laudo técnico evidencia: "claramente que o agricultor reassentado não terá suficiente capacidade de pagamento através dos ingressos gerados pela produção agrícola em seu lote" (Consórcio Itaparica, Junho 1993, pp. 4-03).; Nos projetos do Borda do Lago estão sendo implantados sistemas com espaçamento dos aspersores de 15 em 15 metros, o que é válido em condições de laboratório, mas não com velocidades de vento de 10 metros por segundo ou mais. Conseqüência é que até 50% da área não se irriga devidamente. O coordenador conclui a carta exortando o Banco Mundial a agir em favor do projeto: Chamamos, mais uma vez a atenção do Sr. para este descaso cínico, para que o Banco Mundial realmente assuma sua responsabilidade para com as famílias atingidas pela barragem, e para que nós não passemos fome, no futuro, vítimas de uma política equivocada, política que o próprio BIRD condena publicamente. (Anexo N).*

O Ofício 13/95, de 24 de janeiro de 1995, do Pólo Sindical para o Banco Mundial, envia cópias de documentos que tratam de solicitações do Pólo Sindical feitas à CHESF e à CODEVASF no sentido de apressar a conclusão dos sistemas hidráulicos e

dos projetos de Reassentamento, buscando assim não repetir os erros de outros momentos. (Anexo O).

No dia 24 de setembro de 1996 aconteceu uma reunião do Pólo Sindical com dois representantes do Banco Mundial, que acompanham o projeto. Na reunião foram discutidos os problemas com os reassentamentos e os projetos de irrigação e, principalmente, as pendências existentes nos projetos que inviabilizam o processo produtivo dos mesmos. A posição dos representantes do Banco, apesar de simpáticas ao Pólo Sindical, demonstraram que a instituição financeira não pretende um maior envolvimento com a continuidade do projeto (anexo Memória Reunião com o Banco Mundial, 24/09/96). (Anexo P).

Ofício 133/96 do Pólo Sindical para ao Banco Mundial, solicitando apoio do BIRD para um programa de pesquisa que busque encontrar soluções para os problemas tecnológicos em relação aos assentamentos e projetos de irrigação (Anexo Q).

Como foi visto anteriormente, em resposta às solicitações e denúncias, o Banco Mundial, apesar da disponibilidade de muitos de seus dirigentes e técnicos, não logrou fazer com que a CHESF executasse suas diretrizes de reassentamento, nem tampouco conseguiu supervisionar e monitorar a contento a implantação e operação dos projetos de irrigação, o que levou a que até o presente momento o projeto esteja inconcluso e com sérios problemas de funcionamento, caracterizando-se a omissão.

As demandas ao Painel de Inspeção do Banco Mundial

Assim, diante da situação e da omissão acima descritas, que afetam materialmente nossos interesses, requeremos ao Painel de Inspeção que recomende aos Diretores Executivos do Banco Mundial uma investigação sobre o assunto, para que medidas cabíveis sejam tomadas com vistas à solução dos problemas. Adiantamos que pretendemos que medidas sejam tomadas pelo Banco, como agente financiador, no sentido de corrigir os erros já cometidos que fazem com que grande parte da população reassentada ainda esteja sem condições efetivas de produção.

Além da intervenção do Banco Mundial frente ao governo brasileiro, solicitamos um novo financiamento do BIRD para assegurar a implementação das medidas a seguir listadas.

Implantação de estruturas de drenagem (macro e localizada), recuperação de solos, ajuste do sistema hidro-mecânico e instalação de campos de pesquisa agropecuária em todos os projetos de irrigação, para viabilizar a produção.

Definição de formas alternativas de subsídios para a energia elétrica utilizada nos projetos de irrigação.

Construção das obras físicas e instalação de equipamentos (Centro de Armazenamento, mini-hospitais, etc.) nos núcleos principais de todos os projetos.

Criação de linhas de crédito especiais para custeio, investimentos e capital de giro.

Instalação de Estações Meteorológicas para o controle de dados climatológicos, necessários ao manejo eficiente da irrigação.

Projeto Borda do Lago - Pernambuco (Bloco 2): reformulação total do projeto, incluindo, dentre outras, a transferência de agrovilas, redefinição e recuperação de lotes agrícolas, revisão do sistema de irrigação.

Projeto Icó-Mandantes, Borda do Lago - Pernambuco (Bloco 3): garantia de conclusão das obras hidráulicas e resolução dos problemas fundiários.

Projeto Itacuruba - Pernambuco, Projeto Jusante (Glória - Bahia), Projeto Barra do Tarrachil (Chorrochó) e Projeto Itaquiara (Rodelas): implantação total dos projetos de irrigação que sequer foram iniciados, prejudicando uma população de cerca de 6.000 pessoas.

Projeto Caraíbas (Santa Maria da Boa Vista - Pernambuco): 80 % do projeto está concluído, porém impedido de funcionamento por conta da não conclusão dos 20% restantes, prejudicando uma população de aproximadamente 11.000 pessoas, solicitamos a conclusão total do projeto.

Projeto Pedra Branca (Curaçá - Bahia): o projeto está funcionando integralmente, porém sem condições de escoamento da produção. Solicitamos a conclusão da BR 116, trecho Euclides da Cunha - trevo do Ibó e construção do trecho Curaçá - Barra do Tarrachil da BR - 110.

Projetos experimentais (Manga de Baixo, Glória 01 e Rodelas 02): recuperação econômica dos projetos.

Adiantamos que consideramos ser necessária uma Auditoria Internacional financeira e técnica do Projeto de Reassentamento e Irrigação de Itaparica. Auditoria financeira porque suspeita-se que houve desvio de recursos do projeto para outras obras. Auditoria técnica porque os sistemas de irrigação estão comprometendo a viabilidade da produção.

Tal como solicitado nas Normas Operacionais (Operational Procedures) do Banco Mundial, o pedido de Painel de Inspeção que encaminhamos é breve, mas nos colocamos à sua inteira disposição para quaisquer outros esclarecimentos necessários.

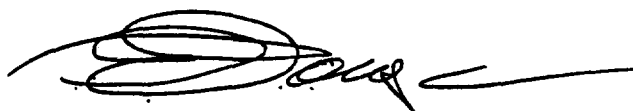
Como somos uma organização da sociedade civil brasileira, autorizamos e solicitamos que este pedido, com seus anexos, seja tornado público. Aproveitamos a oportunidade para informar que enviamos uma cópia ao Escritório da Missão do Banco Mundial no Brasil, à Secretaria de Assuntos Internacionais do Ministério do Planejamento e Orçamento do governo brasileiro, à CHESF, à Eletrobrás, Câmara Federal e ainda, ao Senado Federal.

Nosso endereço para contato é o seguinte:

Pólo Sindical do Submédio São Francisco
Rua Dantas Barreto, 139
Petrolândia, Pernambuco.
Brasil.
tel/fax: (081) 851 11 60

Bahia e Pernambuco (Brasil),

Área do Projeto de Reassentamento e Irrigação de Itaparica, 12 de março de 1997



Eraldo José de Souza, Coordenador Geral

Área do Projeto de Reassentamento e Irrigação de Itaparica, 12 de março de 1997

NOME	PROJETO
1- Humberto de Barros	AG-09 BLOCO 03 São Mandante
2- Ivonete da Silva Farias	Jusante
3- Osmário Adriano de Azevedo	- SUSAKITE
4- Yussara dos Silva Souza	Ag. 05 BLOCO 04 São-Mandante
5- Maria Regina de Carvalho	Ag. 05 BLOCO 04 São-Mandante
6- José Carlos dos Santos Alves	Ag. 05 BLOCO 04 São-Mandante
7- Cristiano José dos Santos	AG-06 BLOCO 03
8- Rita de Lúcia dos Santos	Rodelas
9- Marta Isabel do Nascimento	São-Mandante
10- Bartolomeu Manoel Santos Filho	Rodelas
11- Maria do Rosário da C. Silva	Rodelas
12- Amarelido Gomes Puggioni	Rodelas - BA
13- Silvano Almeida Alves	Rodelas - BA
14- Valdir dos Santos	Rodelas - BA
15- Ana Cláudia dos Santos	Praticum AR-08 Rodelas
16- Adriano Manoel Gomes da Cruz	AG. 10 BLOCO 03 SÃO-MANDANTE
17- Evandro Cruz Santos	P. Praticum AR-08 Rodelas
18- Osmário José da Silva	AG. 05 BLOCO 04 SÃO-MANDANTE
19- José Wilson B. Santos	AG. 05 BLOCO 03 SÃO-MANDANTE
20- Valdemir Gomes de Azevedo	Projeto São-Mandante BLOCO 04
21- JOSÉ EDILSON NASCIMENTO	Projeto São-Mandante BLOCO 03
22- Marcos Sidney Santos de Azevedo	Projeto Praticum Agrícola 07
23- Amarelido Alves dos Santos	Rodelas - BA
24- Daychisson Nery de Souza	

NOME

- 25- Aluísio Selvino da S.
26- Edinara Maria da Silveira
27- Lúcia Regina de Souza Oliveira
28- João Luís Balbino
29- Maria Elita Ramalho Leal
30- João Paulo Paulo Melo. Projeção
31- Vinícius José Xavier (Proj. Barreiras)
32- João José de Oliveira (Gloria)
33- Cinécia Maria de S. (P. Gloria)
34- Genivaldo Gomes de S. (Gloria)
35- Gelma Floris Lima - Rodelas.
36- Edvaldo Sales Melo (Gloria)
37- EDILSON ENOQUE DO NASCIMENTO (Ico-Mandante)
38- Cleto da Silva Melo (Gloria - 37)
39- Sílvia Ribeiro de Oliveira (Barreiras)
40- Edilaine de Lima Xavier (Pr. Barreiras)
41- Maria de Lourdes dos Santos (Ico-Mandantes)
42- Eli Marques de Souza (Proj. Barreiras)
43- Janaina da Silva Lima (Proj. Barreiras)
44- Maria de Lourdes Barbosa (Ico-Mandantes)
45- Lucileide Maria Rodrigues (Ico-Mandantes)
46- Mariadela Almira Barbosa (Ico-Mandantes)
47- Ozeri Maria da Silva (Ico-Mandantes)
48- Maria do Socorro do Nascimento (Ico-Mandantes)
49- José José do Nascimento (Proj. Gloria)
50- Antonio Cecilio de S. (Proj. Gloria)

STR 172

STR 172

NOME *durele*

PROJETO

- 51 Durelina Maria da Silva Pequeno p. caraiibas STR *STE 172*
- 52 Maria Alves de ~~Guine~~ *Py* - caraiibas STR *STE 170*
- 53 Fátima Maria da Silva - Caraiibas.
- 54 Brivanio Ferreira Ramos - Caraiibas.
- 55 Edmilson Silvano Pereira - Caraiibas
- 56 ~~Elton~~ *João de Araújo* - Caraiibas.
- 57 ANTONIO FERNANDO DA C. SILVA - P. CARAIBAS
- 58 Maria Odine de Araújo Lisboa - Caraiibas.
- 59 JOÃO LEONÉRIO DA SILVA - P.J. CARAIBAS.
- 60 Joo Paulo João da Silva - P.J. CARAIBAS
- 61 Atonalito Vieira - P.J. CARAIBAS
- 62 Josenícia de Souza Sá - P.J. Caraiibas.
- 63 ~~Donilo~~ *Télio Bezerra* - Caraiibas
- 64 ~~Yozefa~~ *Yvelina Santos* - Caraiibas - STR *STE 171*
- 65 ~~Paulo~~ *Aluano do Amaral* - Proj. Caraiibas
- 66 Maria Laura do ~~Santo~~ *P.J.* Caraiibas
- 67 Maria Lídia de Souza - Proj. Caraiibas
- 68 ~~Glauco~~ *Marcel de Souza* - P. Caraiibas
- 69 Maria Adelina filha da Silva - Caraiibas
- 70 Jorge João da Silva - Caraiibas
- 71 Lucicleide Maria dos Santos - Caraiibas
- 72 ~~Yozilda~~ *Embarinha da Silva* - CARAIBAS
- 73 ~~João~~ *Pedro da Silva* - CARAIBAS
- 74 Antonio Marco da Silva - CARAIBAS
- 75 Maricélia de Araújo - Caraiibas.

NOME

PROJETO

76. Pedro Basso de Melo - Caraiibas
77. José Dias do Nascimento - Caraiibas
78. Inaldo Antonio do Nascimento - Caraiibas
79. ALDENIR-GONCALVES TORRES - CARAIBAS
80. Suzmeide maria Novoes Oliveira caraiibas
81. Rosilma Alves de Carvalho - Caraiibas
82. FRANCISCO DIASSILVA SILVA Filho - Caraiibas
83. Igor Roberto da Silva Ribeiro - caraiibas
84. MARCOS DE SA SOUZA - Caraiibas
85. Agnaldo José de Souza - Caraiibas
86. Manoel Ribeiro da Silva - Caraiibas
87. Dionisio Silveira da Silva, Caraiibas
88. Antonio Carlos dos Santos - Caraiibas
89. Ozael Ferreira dos Santos - Caraiibas
90. João Lucas dos Santos - caraiibas
91. Washington Manoel da Silva - BRIGIDA
92. José Fernandes Ribeiro da Silva - P.B
93. RINALDO DE SOUZA - PROJETO BRIGIDA
94. Alair José dos Santos Silva - Projeto Pedra Branca.
95. ANTONIO FERNANDO CAMPOS - PROJETO BRIGIDA
96. JOSÉ CARLOS DOS SANTOS SIMÃO - PROJETO BRIGIDA
97. Elzer Venicy Remy Fume - PROG. BRIGIDA
98. Carlos Silva Pereira - PROJ. PEDRA BRANCA.

Área do Projeto de Reassentamento e Irrigação de Itaparica, 12 de março de 1997

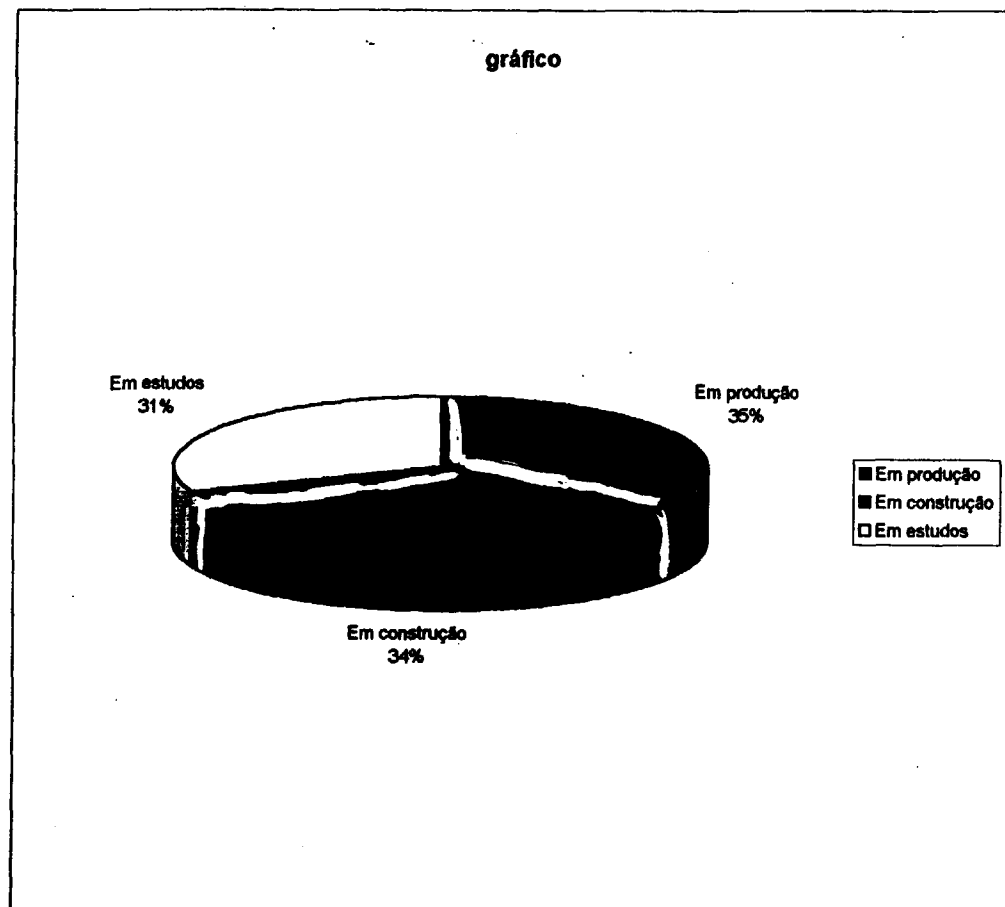
NOME

PROJETO

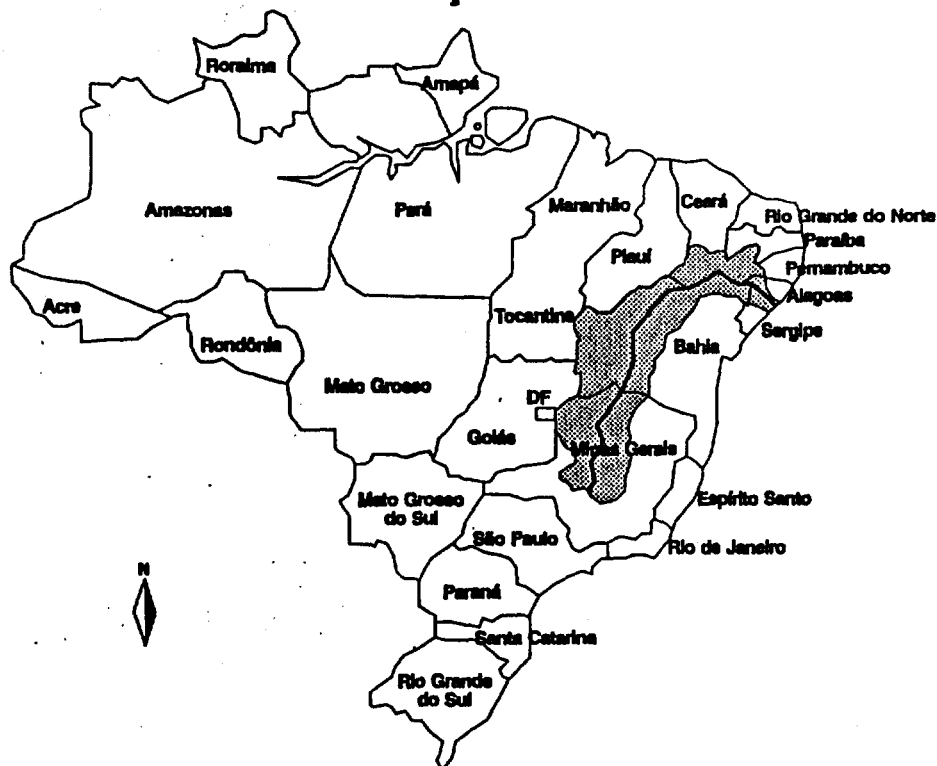
- 99- João Alexandre Araújo BRIGIDA
- 100- Welma Dixey Nascimento P. P. Branca.
- 101- Eliânira Ribeiro Barbosa P. P. Branca
- 102- Josimar dos Santos P. P. Branca
- 103- Filmon Ribeiro dos Santos P. P. Branca
- 104- Josete dos Santos Silva P. P. Branca
- 105- Maria Silvana Damascena - P. P. Branca Agxo: 08 n: 20
- 106- Baya do Socorro Gomes dos Santos Projeto Pedra Branca
- 107- João Carlos da Silva Projeto Brigida. n: 02
- 108- Edivânia Maria de Sá Gonçalves. Projeto Brigida
- 109- JOSELÂNIO BERNARDINO FILHO P. BRIGIDA
- 110- Liliâne Soares Silva P. Brigida
- 111- Edvânia Campos Matias Cabral P. Brigida
- 112- M^{re} Senira dos Santos Projeto Brigida
- 113- Wanderleya Máira Freire da Silva - Projeto Brigida
- 114- Leonilda Rêgo Ferreira da Silva P. Brigida
- 115- Josete dos Santos
- 116- Giseanilda José dos Santos P. Brigida
- 117- Jovianira Regina Rêgo P. Brigida
- 118- Gasinaldo Barbosa do Nascimento P. Branca
- 119- Rosineide dos Santos Silva P. Brigida
- 120- Magiel Silva Ribeiro - Projeto Pedra Branca
- 121- Elzabela José dos Santos P. Brigida

FASES DE IMPLANTAÇÃO DO PROJETO ITAPARICA

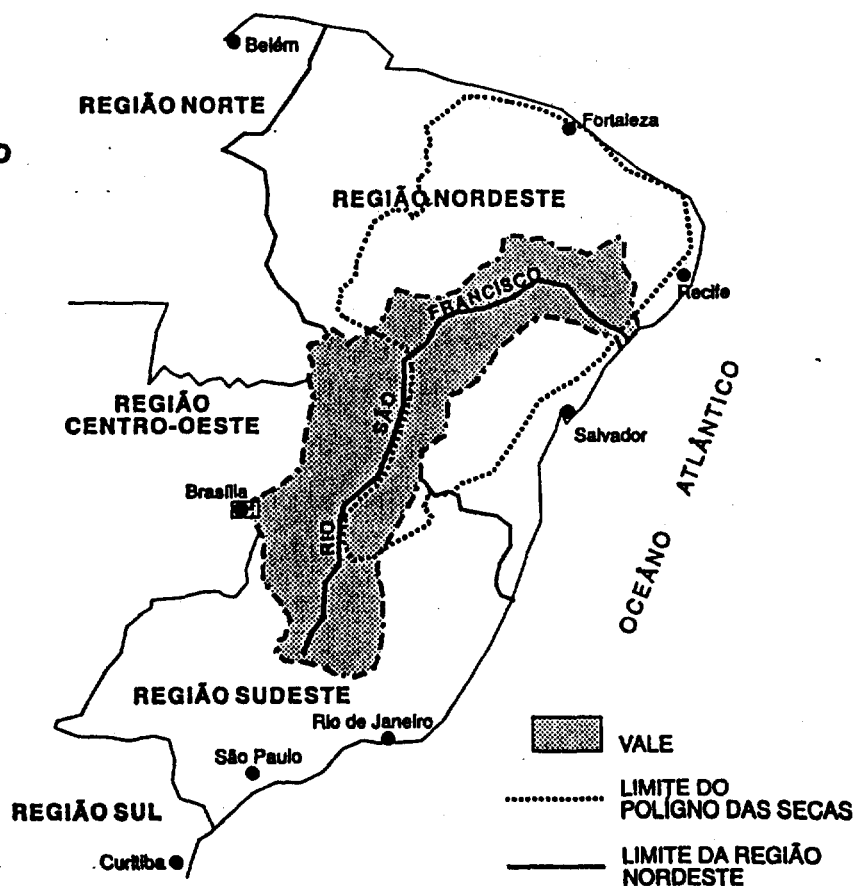
	Ha.
Em produção	6.800
Em construção	6.600
Em estudos	6.000

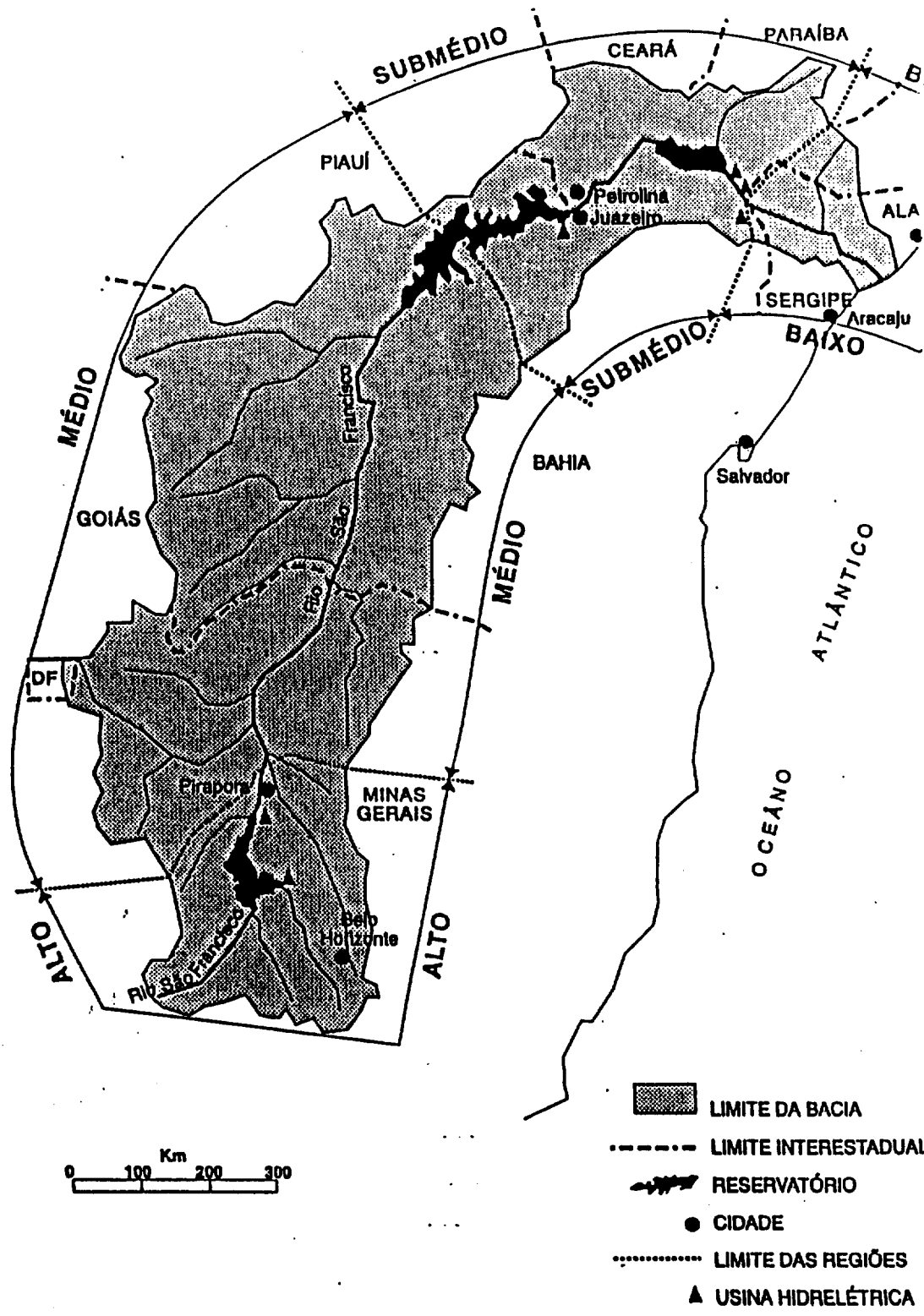


O Vale do São Francisco em relação ao território nacional



O Vale do São Francisco em relação à Região Nordeste e ao Polígono das Secas





ACORDO ENTRE A CHESF E TRABALHADORES RURAIS ATINGIDO
PELO RESERVATÓRIO DA USINA HIDRELÉTRICA DE ITAPARICA
COM A PRESENÇA DO MINISTÉRIO DAS MINAS E ENERGIA.

O presente Acordo celebrado após negociações ocorrida nos dias 05 e 06/12/86 no Canteiro de Obras de Itaparica, a parti das reivindicações contidas no documento intitulado "MANIFESTO DO TRABALHADORES RURAIS ATINGIDOS PELA BARRAGEM DE ITAPARICA A ONZ MESES DA INUNDAÇÃO", datado de 01/12/86, estabelece os seguintes compromissos:

I - CRONOGRAMA DE REASSENTAMENTO

- 15/12/86 - deverá estar assinado o decreto de desapropriação da borda do Lago;
- 30/12/86 - data limite para início do processo desapropriatório da área da Fazenda Pastos Bons, no Município de Petrolina;
- 15/01/87 - entrega do Estudo de Viabilidade econômica do Projeto Jusante, pela CHESF;
- 30/03/87 - data limite para a CHESF estar imitida na posse de todas as áreas necessárias ao reassentamento;
- ABRIL/87 - início das construções das casas nas áreas dos Projetos Especiais de Irrigação;
- AGOSTO/87 - início do reassentamento;
- JULHO/88 - conclusão da implantação dos sistemas de irrigação.

II - CRITÉRIOS GERAIS PARA DISTRIBUIÇÃO DE LOTE RURAL

- a) Os trabalhadores rurais solteiros, maiores de 18 anos são considerados parte integrante do conjunto familiar.

- b) As famílias cadastradas como proprietárias, posseiras ou arrandatárias e que irrigam 6 ha ou mais, receberão um lote com parcela irrigada de 6 ha.
- c) Os trabalhadores rurais solteiros, maiores de 18 anos e que foram cadastrados até dezembro/85 como família unitária por ~~residirem sozinho, e que não se enquadrem~~ no item anterior, receberão um lote com parcela irrigada de 3,00 ha.
- d) Para as famílias que irrigam área inferior a 6,00ha, aplicar-se-ão as tabelas abaixo:

1 - Critério para determinação da força de trabalho familiar.

Tabela 1

S E X O	FAIXA ETÁRIA				OBSERVAÇÕES
	0-6	7-14	15-64	>65	
Masculino	-	0,20	1,0	0,5	Os inválidos não serão incorporados à força de trabalho
Feminino	-	0,15	0,6	0,3	

2 - Critérios para definição da área irrigada do Lote.

- Função da capacidade empreendedora:

Quadro 2.a

Área cultivada (ha) *	Equivalente Homem
0 - 3,00	-
3,00 - 5,99	1,0

* Área cultivada por proprietário, posseiro, ou arrendatário.

- Função da força de trabalho familiar.

Quadro 2.b

Força de trabalho Familiar (equiv. homem)	Área do lote (ha)
0 - 3,00	3,00
3,01 - 4,50	4,50
> 4,50	6,00

A definição da área irrigada do lote a ser entregue a cada família será obtida da seguinte forma:

- Proprietário, posseiro ou arrendatário: através da soma da força de trabalho familiar obtido com base na tabela 1 e quadro 2.a. O total encontrado aplica-se no quadro 2.b, chegando-se assim ao tamanho da área irrigada do lote.

- Meeiros e demais trabalhadores rurais sem terra: através da tabela 1, onde obtém-se a força de trabalho familiar, aplicando-se a seguir esse resultado no quadro 2.b, obtendo-se a área irrigada do lote.

e) Aos aposentados Ativos, será garantido lote com parcela irrigada de, no mínimo, 1,5 ha. Essa parcela aumentará em função da força de trabalho a ser definida através da tabela específica do item anterior.

III - Nos assentamentos da borda do Lago fica assegurada fração ideal variável de 19,00 a 23,50 ha de área coletiva situada nas imediações do projeto.

IV - Nos assentamentos em Projetos Especiais fica assegurada fração ideal de 10 ha de área coletiva para agricultura de sequeiro e citatório, o mais próximo possível dos projetos.

V - A CHESF garantirá a partir da transferência da família, a remuneração de 2,5 salários mínimos através de empresas construtoras a um membro do grupo familiar, na localidade onde será implantado o Projeto, até a comercialização da primeira colheita.

VI - A CHESF fará reajuste nos preços da tabela de indenização, sempre que se fizer necessário, com a participação do Polo Sindical do Sub-Médio São Francisco.

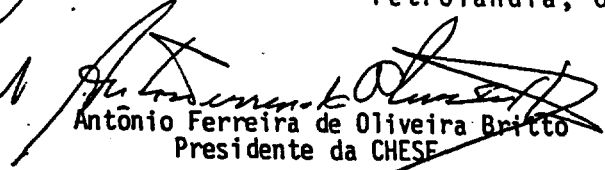
VII - A CHESF e o Ministério das Minas e Energia, comprometem-se a atuar junto aos órgãos competentes no sentido de conseguir uma linha de crédito especial aos reassentados.

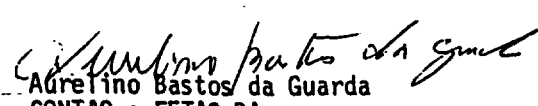
VIII - Será garantido ao desapropriado, optante pelo reassentamento o usufruto da terra e benfeitorias, até o dia da mudança para o novo lote, através de contrato de concessão de uso, que integrará o processo de apropriação de benfeitorias.

- IX - A CHESF assegurará por um prazo de 5 anos, a contar do início da irrigação, um novo reassentamento para a família que estiver reassentada em projetos, quadras de projetos ou mini-projetos de irrigação, cujo lote vier a apresentar salinização que o inviabilize, após laudo expedido por perícia técnica, que ~~comprova que a salinização não decorreu~~ de imperícia ou negligência na aplicação da irrigação.
- X - A CHESF garantirá assistência técnica, extensão rural e apoio à comercialização para todos os reassentados por um prazo de cinco anos.
- XI - A CHESF garantirá a continuidade da participação ativa das comunidades e das Entidades Sindicais em todas as fases do processo de reassentamento.
- XII - Fica assegurado que o enchimento do reservatório somente será iniciado quando equacionado o reassentamento dos trabalhadores rurais, entendendo-se que essa condição estará atendida com a entrega da casa ao reassentado no local onde ele desenvolverá as suas atividades.
- XIII - Os trabalhadores rurais sob a coordenação das Entidades Sindicais, comprometem-se a desocupar nesta data o Canteiro de Obras da U.H.E. de Itaparica, o que permitirá o reinício imediato das Obras.

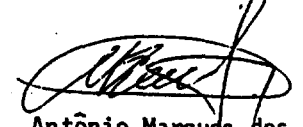
Subscrevem este documento, os representantes do Ministro Aureliano Chaves, da CHESF e das Entidades Sindicais representativas dos Trabalhadores Rurais da área do Reservatório da UHE ITAPARICA.

Petrolândia, 06 de dezembro de 1.986.

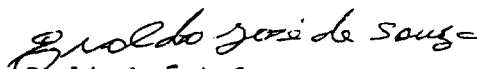

Antônio Ferreira de Oliveira Britto
Presidente da CHESF

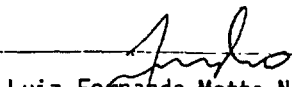

Aureliano Bastos da Guarda
CONTAG e FETAG-BA

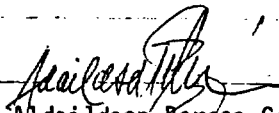

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Diretor de Engenharia da CHESF

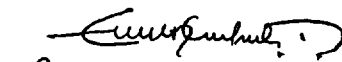

Antônio Marques dos Santos
FETAPE



 Genildo Gomes de Souza
 Diretor Econômico-Financeiro da CHESF



 Eraldo José de Souza
 Polo Sindical Submédio São Francis

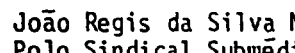

 Luiz Fernando Motta Nascimento
 Diretor de Suprimento da CHESF

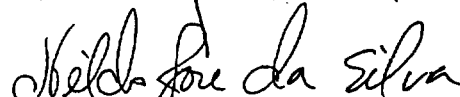

 Aldailson Borges Gonçalves Veras
 Polo Sindical Submédio São Francis

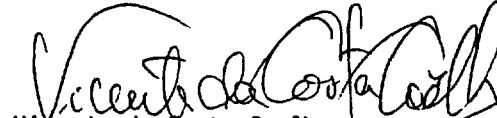

 Evaristo José Braga Cavalcanti
 Departamento de Implantação de Reservatórios

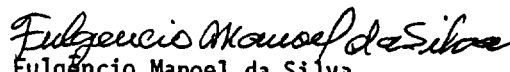

 Luis Anselmo Pereira de Souza
 Polo Sindical Submédio São Francisco


 Ronaldo Alves da Silva
 Departamento de Obras de Itaparica


 João Regis da Silva Neto
 Polo Sindical Submédio São Francisco



 Nildo José da Silva
 Sind.Trab.Rurais de Glória



 Vicente da Costa Coelho
 Sind.Trab.Rurais de Petrolândia

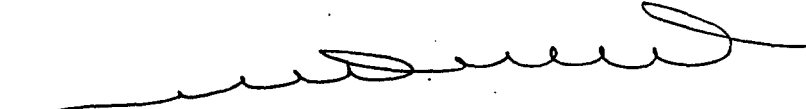

 Fulgêncio Manoel da Silva
 Sind.Trab.Rurais de Floresta


 João Batista dos Santos
 Sind.Trab.Rurais de Rodelas


 Teodorico Francisco dos Santos
 Sind.Trab.Rurais de Chorrochô


 José Soares Novais
 Sind.Trab.Rurais de Itacuruba


 Deusdedit Silvano Pereira
 Sind.Trab.Rurais de Belém do São Francisco


 Getúlio Lamartine de Paula Fonseca
 Diretor Geral do DNAEE
 Representante do MME



Efeitos das Hidrelétricas da Chesf no Vale do São Francisco

UHE-Estado	Área inundada (km ²)	Potência instalada (Mw)	Número de atingidos	Ano de operação	Efeitos
Paulo Afonso I, II e III BA/AL	4,8	1.524	—	1955/1961/1971	Diminuição do fluxo da cachoeira de Paulo Afonso e alterações sócioeconômicas
Moxotó/AL-BA-PE	89,2	2.440	1.007	1977	Inundação de áreas agricultáveis dos municípios de Glória, Petrolândia, Delmiro Gouveia e Paulo Afonso
Sobradinho/BA-PE	4.225,9	1.050	70.000	1979	Inundação das cidades de Casa Nova, Remanso, Pilão Arcado, Sento Sé; inundação de áreas rurais nas várzeas; desaparecimento das ilhas
Paulo Afonso IV/AL-BA-PE	14,6	2.460	—	1979	Modificação nas atividades sócioeconômicas
Itaparica/BA-PE	834,0	2.500	40.000	1988	Inundação das cidades de Petrolândia, Itacuruba (PE), Rodelas, povoado de Barra do Tarrachil em Chorocho, Glória – parcial (BA), 23 núcleos rurais, áreas agricultáveis e ilhas
Xingó/AL-SE	60,0	5.000	Não estimado	1994 (*)	Transferência de população, modificação nas atividades sócioeconômicas, perda de patrimônio histórico, cultural e paisagístico

Fonte: Pólo Sindical/CEDI – 1993

* (Previsto)

— dado não disponível

Total de área inundada	5.228,5 km ²
Total de potência instalada	14.974 Mw
Total de atingidos	111.007 pessoas

Aspectos Ambientais de Projetos Co-Financiados Pelo Banco Mundial

ANEXO E

Lições para o Futuro

Alencar Soares de Freitas
Pedro Ribeiro Soares
(Organizadores)

Série IPEA 146
Brasília, 1994

ipea 14

ANEXO E

Freitas, Alencar Soares de

Aspectos ambientais de projetos co-financiados pelo Banco Mundial; lições para o futuro/Alencar Soares de Freitas e Pedro Ribeiro Soares, organizadores. — Brasília: IPEA, 1994.

156 p. — (Série IPEA; n. 146)

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Projetos do Vale do São Francisco

2.1 - Descrição dos Projetos e Financiamento do Banco Mundial

- a) Projeto Paulo Afonso IV/Sobradinho: custo de 692,6 milhões de dólares, sendo de 81,0 milhões o financiamento do Banco, assinado em 1974. O projeto avaliado diz respeito ao reassentamento das populações desalojadas pela inundação provocada pelo reservatório de Sobradinho. Órgão executor: Chesf.
- b) Projeto dos Pântanos do Baixo São Francisco: custo de 56,5 milhões de dólares, sendo de 23 milhões o financiamento do Banco assinado em 1975. Órgão executor: Codevasf.
- c) Projeto de Irrigação do São Francisco II: custo de 74,6 milhões de dólares, sendo de 7,7 milhões o financiamento do Banco assinado em 1979. Órgão executor: Codevasf.
- d) Projetos de Reassentamento da População de Itaparica e de Irrigação: custo de 303,7 milhões de dólares, sendo de 132,0 milhões o financiamento do Banco assinado em 1987. Órgão executor: Chesf (a Codevasf teve a seu cargo a coordenação de operação e manutenção, assistência técnica e extensão rural para os projetos de irrigação).

2.2 - Resumo da Avaliação do OED

Os quatro projetos financiados, ligados à produção de energia, assentamentos humanos e agricultura irrigada, em consequência da implantação dos reservatórios de Sobradinho e Itaparica e do aproveitamento das várzeas do curso inferior, tiveram impactos

profundos no Vale, tanto no ambiente físico quanto no socioeconômico. Basta lembrar que cerca de 170 mil pessoas foram deslocadas do seu *habitat* original e que o crescimento econômico direto ou indiretamente induzido provocou uma expansão urbana intensa.

Em Sobradinho, os reassentamentos urbanos foram relativamente bem-sucedidos. Em contrapartida, os assentamentos rurais programados fracassaram, principalmente por decisões tomadas sem a participação das comunidades envolvidas, com soluções impostas em vez de propostas pela Chesf. Assim, a área prevista para a maior parte do assentamento rural foi locada a cerca de 800 km a montante, perto de Bom Jesus da Lapa. Conseqüentemente, e também devido ao insuficiente planejamento e à falta de apoio à sua implantação, o projeto foi praticamente abandonado, preferindo os realocados estabelecer-se na periferia do lago formado.

Nestes assentamentos, previstos para a maior parte da população, faltou infra-estrutura nas agrovilas, além das dificuldades para os agricultores causadas por solos muito pobres, falta de dispositivos para irrigação, falta de crédito e grande distância dos mercados consumidores.

Em conseqüência, houve muito abandono dos lotes ou venda para agricultores de maior porte, de outras regiões e capitalizados, com concentração de propriedade, o que resultou no inchamento das cidades que receberam as populações desamparadas. Muitos dos ex-proprietários transformaram-se em assalariados rurais nos projetos de irrigação privados que conseguiram se desenvolver no Vale. Como impactos físicos de maior relevância, além da inundação de terras fertilizadas naturalmente pelo próprio lago e pelo aumento do nível permanente a jusante da barragem, houve a inundação, também permanente, de várzeas que anteriormente eram de cultivo temporâneo, no Baixo Vale.

Foi o aproveitamento destas várzeas com o sistema de pôlderes que deu origem aos dois projetos financiados pelo Banco, os quais tinham também finalidades sociais; desapropriaram-se terras cuja propriedade esta-

va muito concentrada. No entanto, com o deslocamento de cerca de 50 mil habitantes rurais, frente à capacidade dos projetos de absorção máxima de 20 mil pessoas, houve a expulsão de mais da metade da população, neste caso sem destinação pré-programada, com pressão adicional sobre a urbanização do Vale.

Além desta característica, a implantação dos projetos — que absorviam pouca mão-de-obra graças à sua alta tecnicidade — foi feita com todo tipo de deficiências, tais como o atraso de anos entre a desapropriação e o funcionamento dos projetos, a baixa compensação pela desapropriação, feita de forma coercitiva, e os métodos de reassentamento utilizados pela Codevasf.

Para o não atendimento das metas iniciais contribuiu também o incentivo ao cultivo da cana, que provocou maior concentração da propriedade, já iniciada com a venda de lotes. Aqui também os movimentos de organização comunitária, estimulados pela Igreja, não foram suficientemente estruturados de modo a contribuir para um redirecionamento do planejamento.

Como impacto físico principal na água do rio temos o resultado do uso de fertilizantes, necessário para compensar a perda de fertilidade, antes naturalmente restabelecida pelas enchentes periódicas, e a ocorrência de salinização dos solos devido à drenagem inadequada. Graças a esses fatores, a taxa de retorno, antes estimada em 22%, baixou para 7%.

Já o reassentamento de Itaparica teve o seu planejamento largamente influenciado pela pressão feita, na Chesf, pela organização dos sindicatos rurais, o Polosindical. As agrovilas acolheram cerca de 3/4 do total realocado (40 mil pessoas), enquanto as restantes estavam destinadas a ocupar lotes irrigados, com projetos sofisticados.

No entanto, o atraso de mais de dois anos para o início destes projetos, a cargo da Chesf e da Codevasf, fez com que as populações ficassem morando nas agrovilas, sem ocupação e recebendo subsídios da Chesf para

sua sustentação. Esta situação de inatividade forçada acarretou problemas sociais de toda ordem.

O custo final de US\$ 63 mil por família realocada, considerado alto se comparado a outras realocações, é considerado justificável pelo Banco, visto que atende à totalidade da população realmente deslocada, ao contrário dos outros projetos anteriores no Vale.

Os impactos físicos foram mais modestos que os dos outros projetos e estão sendo monitorados de forma satisfatória. Prevê-se, no entanto, a médio prazo, a ocorrência dos mesmos problemas, devido ao uso de agrotóxicos e à salinização de solos.

Em geral, as consequências diretas e indiretas destes projetos — embora tenham contribuído para o aumento da produção agrícola e de atividades econômicas a ela ligadas, sobretudo nas médias e grandes propriedades irrigadas voltadas à exportação — provocaram concentração da propriedade e o conseqüente desaparecimento do tradicional pequeno produtor do Vale, inviabilizado pelo aumento do valor da terra. Enquanto isso, os centros urbanos da área de influência cresceram quatro vezes no período iniciado com a implantação de Sobradinho.

A principal conclusão é a predominância do impacto no ambiente antrópico, no conjunto das ações executadas no Vale, no âmbito dos quatro projetos. As instituições envolvidas tiveram enfoques iniciais inadequados e incompletos acerca da problemática do Vale, além de comando insuficiente do processo por insuficiências técnicas e financeiras, estas transcendentais às organizações.

Se os projetos tivessem sido enquadrados num planejamento integrado do Vale, grande parte dos problemas teria sido, ao menos, conhecida *a priori*, viabilizando-se, assim, a inserção regional desses projetos, inicialmente enfocados apenas como setoriais.

O Banco Mundial, ao avaliar previamente Sobradinho, não possuía políticas definidas de reassentamentos impositivos de populações. Foram

criadas normas de atuação nesta área análogas às aplicadas em outros países e regiões, inclusive no caso de Itaparica.

O desejável, precavidas as atenções ambientais, é que os novos assentamentos se enquadrem no âmbito de um futuro pólo de desenvolvimento regional abrangente, com um grau de crescimento sustentável. Para projetos semelhantes, no futuro, o Banco Mundial recomenda que, além de uma avaliação *ex-ante* das suas dimensões ambientais, físicas e sociais, os custos da proteção ambiental e dos reassentamentos devam ser bem investigados e considerados na avaliação econômica das infra-estruturas e/ou projetos produtivos que os provocaram.

Muito importante, nessa avaliação com enfoque socioeconômico, é a opção do nível tecnológico dos projetos a implantar, que deve ser tomada sempre de comum acordo com os usuários. Estes devem decidir, em última instância, o grau do componente de mão-de-obra envolvido.

2.3 - Resumo da Avaliação dos Consultores Brasileiros¹

2.3.1 - Projetos do Médio São Francisco

a) Paulo Afonso IV/Sobradinho (1975-1983)

Os impactos socioeconômicos previstos e suas medidas mitigadoras eram os seguintes:

- manter, ao menos, as condições de vida preexistentes das 70 mil pessoas removidas da área do reservatório;
- construir infra-estrutura física, econômica e social para 3.700 famílias na borda do lago, alocadas ao Projeto Especial de Colonização (PEC), na Serra do Ramalho, e indenizar as 1.400 famílias que se decidiram pelo abandono da área;

¹ Relatório elaborado por Sueli Corrêa de Faria e Bruno Pagnoccheschi.

- a população e o setor agrícola do Baixo São Francisco sofreriam efeitos adversos provocados pelo incremento da vazão mínima do rio, perdendo-se nove mil hectares de terras antes utilizadas para o plantio de arroz;
- haveria redução do número de habitantes que viviam às margens da água, com alívio da pressão sobre a pesca; e
- possibilidade de disseminação e exacerbação da peste bubônica, esquistossomose e malária na área do reservatório.

Os impactos socioeconômicos ocorridos foram:

- as novas cidades contam hoje com população cinco vezes superior à inicial. Os reassentados em áreas rurais sofreram enorme queda no padrão de vida; o PEC-Serra do Ramalho transformou-se em foco de pobreza, se comparado aos perímetros irrigados que foram implantados pela Codevasf na área. Na realidade resultaram em:
 - 6.200 famílias optando por permanecer nas bordas do lago;
 - 1.300 famílias concordando em ocupar o PEC (com grande evasão posterior);
 - 2.022 famílias emigrando para área rural próxima, nas margens do rio São Francisco ou outros estados; e
 - 1.777 famílias de catingueiros instalando-se no interior dos municípios da área.
- o impacto do incremento da vazão de estiagem foi mínimo no Médio São Francisco, mas gerou a necessidade de implementação, a juzante, de dois outros projetos, pela Codevasf (Pôlderes e São Francisco II), também co-financiados pelo Bird;
- não há dados sobre a redução do número de moradores ribeirinhos; e

- não há dados de acompanhamento das doenças endêmicas, mas os planos de controle foram considerados altamente satisfatórios pelo Bird.

Os efeitos físico-ambientais previstos eram:

- possibilidade de alterações nas propriedades bioquímicas do reservatório, por decomposição da vegetação, com efeitos sobre a preservação e produção de peixes.

Os efeitos físico-ambientais ocorridos foram:

- a Chesf optou por não desmatar a área do lago, dadas as suas proporções, o que dificultou a pesca nos primeiros anos e deixou dúvidas quanto ao futuro econômico daqueles que optaram por permanecer nas suas bordas. Como a Chesf, na realidade, não atuava como agente de desenvolvimento da região, o reassentamento representou um esforço emergencial para chegar ao seu objetivo prioritário de produzir energia elétrica. Deste modo, seus planos não contaram com a urgência e excelência técnica dos planos geológicos e de engenharia, por exemplo. Além de terem sido insignificantes os recursos para o reassentamento, também foi deficitária a assistência técnica oferecida às famílias na área rural próxima ao lago.

b) Itaparica

Os impactos socioeconômicos previstos eram:

- os problemas maiores eram o reassentamento de 2.400 famílias (inclusive a comunidade indígena Tuxá) na área em torno do reservatório e 2.900 famílias em três novos projetos de irrigação (Brigida, Pedra Branca e Caraibas), bem como a criação de quatro núcleos urbanos. Seus riscos seriam reduzidos pelo envolvimento dos agricultores na concepção e implementação do processo; pelo pagamento de um salário por um período de até nove meses após a ligação de água aos lotes rurais; e pelo trei-

namento dos agricultores em técnicas modernas de irrigação e agricultura;

- o reassentamento da comunidade dos "índios camponeses" Tuxá (190 famílias), sob responsabilidade da Funai, seria concluído até julho/88. As famílias receberiam serviços de extensão social e agrícola, sendo as terras por elas ocupadas transferidas à Funai até 1/1/1990; e
- o reservatório não poderia ser enchido até que o reassentamento estivesse concluído (ponto do acordo entre a Chesf e o Polosindical e objeto de recomendações dos governos de Pernambuco e Bahia).

Os impactos socioeconômicos ocorridos foram:

- quando se iniciou a implantação da represa (1976), eclodiram ações de resistência dos lavradores, em Pernambuco e na Bahia, e desencadeou-se um processo de organização que teve como frentes de luta o reassentamento das famílias desalojadas, a grilagem, os conflitos de terra entre índios e posseiros e os problemas causados pelas secas de 1979 e 1984. Por meio do então constituído Polosindical, os lavradores fizeram um acordo com a Chesf e estabeleceram condições para a sua transferência da área. O descompasso entre o andamento do plano de reassentamento e a implantação da infra-estrutura produtiva deixou os reassentados na dependência dos salários pagos pela Chesf e gerou custos sociais muito altos, como aumento da criminalidade, ociosidade e o excessivo consumo de álcool nas agrovilas. Os custos do projeto ficaram muito além do previsto devido à paralisação das obras e à necessidade de novos recursos do Bird. Só em novembro/90 foi assinado convênio com a Codevasf para a implantação dos projetos de irrigação;
- o processo de negociação com os índios Tuxá resultou no fracionamento do grupo em duas partes, levando-o a alto grau de desgaste emocional. No município de Ibotirama, às margens do São Francisco, localizaram-se 94 famílias; as outras 96 famílias

decidiram instalar-se em Nova Rodelas, às margens do reservatório. Os sistemas de irrigação prometidos ainda não haviam sido construídos. Assim, os Tuxás sobreviviam com os salários pagos pela Chesf, enfrentando os mesmos problemas de degradação social dos demais reassentados em áreas rurais; e

- a Chesf iniciou o enchimento em janeiro/88, atropelando muitas famílias não reassentadas. Em março, houve surto de gastroenterite na área, provavelmente causado pela proliferação excessiva de algas azuis, que atingiu mais de duas mil pessoas e provocou mais de cem mortes.

Os efeitos físico-ambientais previstos eram apenas os relativos à fauna terrestre.

Os efeitos físico-ambientais ocorridos foram:

- implementação da Operação Saci, de resgate dos animais em risco de afogamento, mas sem um esforço direcionado para as espécies mais vulneráveis. Visto que a água do reservatório elevava-se até mais de 1 m/dia, alcançou-se a irrisória eficiência de captura de 0,8 animais por ha.

Os efeitos institucionais previstos eram aqueles relativos ao reassentamento rural, considerado pelo Bird como a parte mais complexa do projeto, que requeria uma cooperação efetiva entre os vários órgãos envolvidos no processo.

Os efeitos institucionais ocorridos foram:

- apesar das inúmeras dificuldades, a experiência de Itaparica contribuiu para mostrar a importância das negociações entre o executor do projeto e a população afetada como elemento de solução de conflitos. A não ser pelo não-cumprimento de um convênio para fiscalização da pesca predatória no lago, por parte do Ibama, os documentos consultados não se referem a problemas de cunho institucional no processo de implementação do projeto;

- na avaliação dos reassentamentos de Itaparica, deve-se assinalar, em comparação aos realizados em decorrência de Sobradinho, um nítido avanço no enfoque e alcance social, provocado pela pressão da população organizada e assimilado pelo Bird e pelo governo brasileiro, o que os levou a assumir novas posturas de negociação com as populações a serem deslocadas;
- na organização da produção, dada a escassez de terras produtivas em Itaparica, houve tentativas de introdução de formas alternativas de produção, com pouco sucesso. A falha principal se deu nas atividades de comercialização;
- atrasos na contrapartida em moeda nacional e a prioridade habitual para os componentes de infra-estrutura física também comprometeram e aumentaram os custos financeiros e, sobretudo, os sociais dos projetos;
- a vontade política da Codevasf não foi suficiente para contrabalançar o despreparo técnico e a falta de articulação entre a agência executora e os órgãos co-partícipes, e a pouca aptidão técnica dos reassentados; e
- mais uma vez, a carência de planejamento regional prévio, ao menos para o uso dos recursos naturais, foi um fator decisivo para a dificuldade de se enquadrar um projeto de desenvolvimento, com uma escala relativamente importante, no âmbito regional.

2.3.2 - Projetos de Irrigação das Várzeas — São Francisco I e II

a) São Francisco I

Aspectos Socioeconômicos

Implantado em área de grande concentração fundiária, o projeto visou à redistribuição da propriedade rural; houve grandes conflitos sociais durante a fase de desapropriação, que durou mais de cinco anos. Na data

prevista para o término da implantação, apenas 44% da área estava irrigada.

A manutenção das redes de irrigação e de drenagem foi deficiente, o que prejudicou a produtividade e sustentabilidade dos solos. Os custos de ocupação e manutenção, embora previstos no contrato, não foram facilmente cobráveis dos usuários.

Também as atividades de processamento e comercialização da produção, cujas dificuldades tinham sido apontadas na fase de concepção do projeto, não foram suficientemente estruturadas no São Francisco I, tendo sido completadas apenas no contrato posterior, referente ao projeto São Francisco II.

As infra-estruturas de transportes, energia e saneamento foram reforçadas em tempo hábil, tendo as respectivas metas sido superadas. Embora com falhas e atrasos, conseguiu-se implementar de forma satisfatória o programa educacional. Também as metas do setor de saúde pública foram atingidas. O programa de piscicultura ficou muito aquém do previsto, por problemas técnicos na produção de alevinos. A suíno-rizi-piscicultura apresentou boas perspectivas de desenvolvimento.

O custo do projeto excedeu em 12,2% o previsto no orçamento, havendo porém redução de custos dos componentes sociais em contraposição às metas de construção civil, cujo aumento chegou a mais de 100% em alguns componentes físicos do projeto.

Aspectos Institucionais

A Codevasf cometeu erros na coordenação do projeto, seja na fase de estudos, seja na de implantação. Embora tenha havido ocorrência de fatores acidentais (chuvas extemporâneas), os problemas de implantação foram sobretudo de natureza gerencial e política, aliados a uma preparação inadequada, o que acarretou um atraso de cerca de dois anos na implementação do projeto.

Ao adaptar a gestão do projeto às exigências sociais, abriu-se caminho para melhores critérios de seleção de colonos na abertura de frentes para desocupados e de pagamento das compensações financeiras.

Ficou claro que as medidas visando à organização e treinamento dos agricultores deveriam ter sido tomadas com maior antecedência e independentemente das prioridades das obras de engenharia.

O desempenho de empresas privadas participantes pode ser considerado razoavelmente bom, ao passo que a atuação dos órgãos governamentais variou de boa e razoável até níveis de ineficiência que responderam pelo não-atingimento de certas metas do projeto.

b) São Francisco II

Aspectos Socioeconômicos

Cortes no orçamento da Codevasf e, conseqüentemente, dos aportes de contrapartida chegaram a provocar a interrupção do contrato com o Banco; posteriormente, foi assinado um novo contrato que garantiu o prosseguimento do projeto.

Neste projeto foi mais bem-sucedida a implantação de associações de pequenos produtores e cooperativas, que deveriam ganhar completa autonomia no futuro. Igualmente positiva foi a disseminação de projetos de suíno-rizi-piscicultura, garantindo suprimento adicional de proteínas na alimentação humana.

Os projetos foram atrasados e seus custos, aumentados em virtude da necessidade de corrigir falhas técnicas detectadas no projeto de agroengenharia. A defasagem entre a implantação bem-sucedida das obras de engenharia e o fraco desenvolvimento da produção agrícola deveu-se à dificuldade de concessão de crédito, deficiência de extensão rural e falta de experiência dos colonos em irrigação.

O projeto propiciou um aumento considerável da renda dos agricultores beneficiados, tornando a sua atividade menos exposta a imprevistos causados por irregularidades climáticas (secas e enchentes). Embora haja um desbalanceamento acentuado entre as produtividades dos diferentes

subprojetos, a taxa interna de retorno média permaneceu na casa dos 7%. Devido aos altos custos de operação e manutenção, há, porém, dúvidas quanto à sustentabilidade, a longo prazo, da rentabilidade do projeto.

Aspectos Físico-Ambientais

Não foi causada qualquer poluição de aquíferos; o uso de fertilizantes e pesticidas foi controlado. Não houve desmatamentos nem foi detectada erosão dos solos.

Aspectos Institucionais

Os arranjos institucionais para a execução do projeto, após o aprendizado com o projeto São Francisco-I, revelaram-se adequados, seja na atuação da Codevasf, com maior presença no campo, seja dos organismos estaduais envolvidos. O maior envolvimento gerencial e empresarial das associações e cooperativas de agricultores permitiu maior grau de "distanciamento" em relação à Codevasf.

A Codevasf demonstrou possuir flexibilidade e capacidade de adaptação ao longo da implantação do projeto, suprimindo as deficiências ocasionadas pela falta de pessoal especializado em supervisão e desenvolvimento agrícola e as ocorrentes nas atividades de operação e manutenção, nos primeiros anos do projeto. O órgão teve ainda de vivenciar uma relação inicial tensa com os agricultores, conhecedores das deficiências técnicas e operacionais do projeto São Francisco-I.

2.4 - Sinopse dos Comentários das Agências Executoras à Avaliação do OED

2.4.1 - Resumo dos Comentários Encaminhados em 1990, Apresentados por Origem, Conteúdo e Reação do OED

Codevasf

- Os comentários da Codevasf foram relativos às realocações provocadas por Sobradinho, consideradas de caráter emergencial. A recomendação foi de que, futuramente, as análises de custo/benefício de projetos semelhantes sejam feitas no âmbito intersetorial e regional,

e incluíam também os custos de proteção ambiental na avaliação econômica dos projetos de infra-estrutura. Estes comentários foram incluídos, pelo OED, em notas de rodapé (NR's) do relatório final.

Funai

- A concordância do órgão com os comentários do OED com relação aos problemas ligados à remoção dos índios do grupo Tuxá e a retificação das afirmações do Banco relativas à reserva Pankararu foram reproduzidas em NR's.

Minfra

- A reafirmação do poder de estruturação do espaço regional das hidrelétricas de grande porte e dos problemas criados pela falta de estudos de impacto ambiental, oportunamente levados a cabo, são incluídas em NR's.
- A afirmação de que houve omissão do Banco na avaliação dos altos custos de realocação não é correta, já que este assunto foi abordado pelo OED.
- Não houve menção explícita, no relatório OED, à causa principal do esvaziamento do reservatório de Sobradinho durante longo período, que se deveu ao atraso considerável na implantação de Itaparica, com necessidades adicionais de geração no complexo de Paulo Afonso.

Chesf

- Não foi mencionada na edição final do relatório, ao menos de forma destacada, a reação da empresa à afirmação feita pelo Banco de que a sua atuação tinha se caracterizado pelo uso de *heavy-handed eviction methods*. Em compensação, foram incluídas em NR's todas as observações e comentários seguintes:
 - o pioneirismo da Chesf em empreender uma realocação populacional nestas escalas;

- apesar de ter-se tido, em Itaparica, uma atuação muito mais orientada para atender às necessidades das populações, em grande parte devido às pressões oriundas das associações de remanejados, ainda ocorreram, para boa parte desses contingentes, situações indesejáveis;
- a fase de ajuste das populações deslocadas compulsoriamente às novas condições de uma realidade mais ou menos imposta tornar-se-ia fácil, se apoiada em consenso negociado com essas populações;
- no caso de Sobradinho, a intervenção do Incra não logrou os resultados previstos, apesar das tentativas de adaptação da legislação vigente;
- a não-referência, pelo Banco, de ações de órgãos do governo do estado da Bahia para corrigir desvios da ocupação da borda do lago de Sobradinho;
- as reivindicações das populações diziam respeito à necessidade de se dispor de água para explorar as terras que iriam receber; posteriormente, orientou-se o planejamento para projetos integrados de irrigação, com inúmeras dificuldades de atendimento aos interesses dos agricultores;
- a constatação do "isolamento institucional" que atingia a Chesf ao empreender um projeto de impacto social tão acentuado; por esta razão, a empresa não poderia ter tido um posicionamento e uma forma de atuação muito diferentes;
- o acesso ao reassentamento de famílias que se deslocaram para a área do reservatório durante a fase de implantação e início de operação;
- o tamanho final dos lotes, negociado com os pólos sindicais, foi de 1,5 ha a 6 ha, o que não ficou longe da proposta inicial da Chesf;

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- a questão de compatibilizar a organização social e fundiária dos projetos com o nível e tipo de tecnologia a ser adotado e, portanto, com o grau de capitalização viável;
- o início efetivo do gerenciamento dos projetos de Itaparica pela Codevasf.

Em março/92, a Chesf publicou dois relatórios detalhados sobre os aspectos ambientais dos projetos de Sobradinho e Itaparica que expõem todas as fases e interfaces da sua atuação e confirmam as limitações de atuação de uma empresa setorial no âmbito do desenvolvimento regional.

2.4.2 - Comentários Adicionais de 1993

Em complementação às manifestações anteriores (todas incluídas em notas de rodapé, na edição final do relatório do OED), a Codevasf enviou comentários ao Relatório para Discussão preparado para o seminário.

Os comentários resumidos a seguir dizem respeito ao "relatório brasileiro", apresentado no item 2.3:

- a Codevasf, na fase inicial, tinha por obrigação conveniada apenas dar orientação técnica à Chesf, única responsável pelas situações de atraso ou outros desvios da programação;
- o convênio firmado entre Chesf e Codevasf, em 1990, ainda não está operacionalizado, estando ainda em fase de discussão o programa de trabalho e a definição de co-responsabilidades;
- a Codevasf diz que a afirmativa do consultor brasileiro de que houve "despreparo técnico" do órgão não é verdadeira; entre outros argumentos, menciona os problemas estruturais e institucionais de ordem geral;
- a Codevasf enfatiza que não era a redistribuição da propriedade efetivada o objetivo principal dos empreendimentos nas várzeas,

mas sim a redução dos impactos resultantes do novo regime hidrológico imposto pelo reservatório de Sobradinho.

Durante o seminário, o representante da Codevasf afirmou que as obras tiveram um efeito redistributivo, fato inédito em empreendimentos deste tipo.

Os comentários da Chesf relativos ao Relatório para Discussão complementam os que haviam sido formulados em relação ao documento do OED, o único anteriormente analisado pelas agências.² Além de alguns erros de revisão final detectados e já corrigidos, as observações feitas foram as seguintes:

- a Chesf considera que não houve "erro" na definição da área de influência, alegadamente prejudicada pelo pouco conhecimento destas questões, na época;
- o reassentamento rural, inicialmente dimensionado para a totalidade das 6.623 famílias cadastradas, foi reajustado pelo fato de uma parte ter optado por "solução própria" e outra, por morar nas sedes municipais; ao final, o reassentamento rural foi feito em 20 mil ha sob irrigação;
- a Chesf atribui o aumento do custo, considerado como final, por família assentada (63 mil dólares), a duas causas: a primeira, resultante de coordenação e gerenciamento deficientes (paralisações de obras e seus custos decorrentes, assim como atraso na instalação das famílias nos lotes, também com custos de manutenção imprevistos), e a segunda, de alocação imprevista de custos (manutenção de infra-estruturas sociais);

² Embora no preâmbulo a Chesf refira que fará apenas considerações ao "relatório brasileiro", apresenta também correções e observações ao relatório do OED.

- haverá esforço para minimizar o impacto do uso de agrotóxicos e da salinização dos solos, por ações extensionistas adequadas;
- a Chesf atualiza o balanço dos destinos finais das famílias realocadas de Sobradinho para os seguintes valores:
 - estava previsto até 1.500 famílias na borda do lago e quatro mil famílias (até oito mil) no PEC-Serra do Ramalho;
 - ocorreu o assentamento de 5.378 famílias na borda do lago, com 1.013 ocupando o PEC (com grande evasão posterior), 2.047 com solução de sua iniciativa e 181 de falecidos ou de destino ignorado.
- a Chesf discorda da afirmação presente no "relatório brasileiro" de que a vegetação submersa em Sobradinho prejudicou a pesca nos primeiros anos do enchimento (o que, aliás, foi o caso em Tucuruí);
- a Chesf registra que a epidemia de gastroenterite em Itaparica não se deveu à proliferação de algas azuis, e não concorda que a operação Saci tenha sido pouco satisfatória.³

2.5 - Síntese das Apresentações e Debates da Sessão Técnica do Seminário

2.5.1 - Apresentação do Projeto

Antônio Pereira Gomes, assessor do Departamento do Meio Ambiente da Chesf, fez a apresentação dos projetos Sobradinho e Itaparica e prestou algumas informações iniciais sobre a Companhia Hidrelétrica do São Francisco (Chesf); a empresa, uma das quatro controladas pela Eletrobrás, atende a uma população de 37 milhões de habitantes.

Do projeto de Sobradinho destacou-se a idéia inicial da então Suvalde (hoje Codevasf) de retirar 100m³/s para uso em irrigação, tendo-se en-

³ Ver item 2.5.3.

tretanto optado por uma dotação de apenas 25 m³/s (projeto Massangano, na margem esquerda). Desde 1977, com o primeiro enchimento parcial, o reservatório de Sobradinho iniciou a sua ação regularizadora do rio São Francisco, tanto para estiagens quanto para a contenção de enchentes, como ocorreu na cheia de 1989. Um dos primeiros problemas ambientais com o reservatório foi a depleção mínima necessária para fazer face ao período seco de 1984-87, com recuo das margens e queda no estoque pesqueiro.

O número de famílias atingidas chegou a 11.853, 27% das quais em áreas urbanas e o restante nas zonas rurais. As opções propostas foram indenização, permuta de casa, assentamento na margem do lago ou no projeto Serra do Ramalho (bem a montante de Sobradinho), ou solução própria, para as populações urbanas; e indenização, nova cidade, borda do lago ou núcleos rurais, para as de origem rural.

A destinação finalmente estabilizou-se, com 70% das famílias ficando na borda do lago, 20% repartindo-se entre novas cidades, núcleos rurais e solução própria, e apenas cerca de 10% no Projeto Serra do Ramalho.

Quanto a Itaparica, 10.623 famílias foram atingidas, repartidas quase igualmente entre núcleos rurais e urbanos. As opções foram indenização, permuta de casa, solução própria, mutirão ou projetos de irrigação, para as famílias urbanas; e indenização, projetos de irrigação ou borda do lago, para as populações rurais.

O plano de desocupação da área do reservatório, submetido ao Banco Mundial e iniciado em 1986, gerou tensões sociais de tal ordem que o Banco, para conceder um importante empréstimo setorial à Eletrobrás, exigiu a formulação de uma política para o reassentamento provocado de populações. Muito em função do atraso que a crise financeira provocou na obra de Itaparica, com a paralisação de 1990 a 1992, os projetos de irrigação, iniciados em 1987, ficaram em sua maioria prorrogados para 1993.

Considerações e Recomendações Finais

Inicialmente, relembramos a terceira finalidade da realização do seminário (ver cap. 1): promover o fortalecimento institucional de um sistema de avaliação *ex-post*, de impacto e desempenho de projetos financiados com recursos externos.

As considerações que julgamos oportuno tecer, neste contexto, mostram como a utilização do conceito "alargado" de gerenciamento, o *project management*, permite compreensão abrangente da maior parte das falhas identificadas nos projetos avaliados e a justificativa do processo da avaliação *ex-post* como instrumento indispensável à eficiência gerencial.¹

Nas suas intervenções no seminário, o diretor do OED, Hans E. Köpp, ressaltou a importância atual do gerenciamento efetivo do setor público da economia, acompanhado de avaliação que se caracterize pela sua execução autônoma e estrutura operacional adequada, e que seja participativa e promotora da disseminação dos seus resultados.

Por outro lado, no relatório-síntese da avaliação feita pelos técnicos brasileiros, recomenda-se que "as avaliações *ex-post* de projetos concluídos deveriam ser parte integrante das atividades das empresas contratantes e também dos ministérios direta ou indiretamente ligados a estes projetos de investimento, envolvendo ou não financiamentos externos".

¹ O OED, no relatório do Polonoroeste, reforça este enfoque ao afirmar que *monitoring, on-going and ex-post evaluation are essential parts of project-management*.

7.1 - Gerenciamento e Avaliação

O gerenciamento, no seu sentido mais genérico, não é mais do que o conjunto de decisões e ações que um indivíduo ou organização terá de assumir para realizar uma atividade, simples ou complexa.

Esse conjunto de decisões e ações verifica-se para todos os tipos de atividades, desde as mais simples, como as da rotina diária de um indivíduo, até as mais complexas, ligadas à atuação de entidades de grande porte, numa seqüência que pode ser dividida em três fases: 1) concepção e medidas para execução; 2) execução e seu monitoramento; e 3) avaliação (em maior ou menor grau) dos resultados. A compreensão dessa realidade e a complexidade crescente das atividades ligadas aos empreendimentos, aliados à necessidade da garantia de efetividade, levaram ao desenvolvimento das técnicas modernas de gerenciamento de empreendimentos (*project management*).

Quando se trata de empreendimentos para o desenvolvimento econômico, em nível setorial ou central, o gerenciamento será iniciado pela fase de planejamento e/ou programação de implantação de programas e projetos; segue-se o acompanhamento de sua implantação e, finalmente, a avaliação do desempenho do empreendimento implantado.

Esta avaliação final, *ex-post*, tem por finalidade principal verificar o grau de acerto do empreendimento, correspondendo às expectativas da sua formulação, ou de constatar desvios, cujas causas devem ser então identificadas. Em qualquer dos casos, as "lições" positivas ou negativas identificadas deverão ser transmitidas, de forma sistemática, aos centros de decisão, para o planejamento subsequente: a realimentação do processo decisório.

Seja para que a avaliação *ex-post* possa ser prevista desde o início dos empreendimentos e se garanta a sua execução correta com o menor custo, seja pela própria eficiência do gerenciamento, a avaliação é, em realidade, uma atividade contínua e inerente ao ciclo completo do empreendimento. Compreende uma fase *ex-ante*, durante a concepção e formu-

lação, e uma outra, durante a execução; a avaliação *pari passu* ou de acompanhamento, que contém na sua sistemática as funções do monitoramento; e, finalmente, a avaliação *ex-post* do desempenho e dos impactos dos projetos.

Assim, a identificação de um elenco de deficiências, comuns a quase todos os projetos e a todas as suas fases, leva à constatação da falta de gerenciamento, uma vez que grande parte dessas falhas não são mais do que a ausência dos componentes básicos dessa metodologia de conduzir projetos.

Com exceção das ineficiências diretamente motivadas pela ação política nos diferentes níveis, é possível agregar cada uma das falhas observadas na avaliação *ex-post* à falta de um dos tipos de atividades que caracterizam as fases de avaliação *ex-ante* ou *pari passu*. E, como a função principal desta última é acompanhar e monitorar a execução, para detectar prontamente qualquer desvio ou imprevisto — a ser comunicado ao centro gerencial para a tomada de medidas corretivas em tempo compatível —, é evidente que a maioria das falhas ocorrentes durante a execução dos projetos teriam grande probabilidade de ser eliminadas ou corrigidas, antes de se tornarem irreversíveis, se tal sistemática fosse adotada.

As deficiências mais freqüentes, comuns aos projetos aqui apresentados (até na primeira fase do Procop), foram falta de entrosamento entre as empresas e órgãos envolvidos, ou entre os setores que as continham; ineficiência do controle, que aumentava com o número de agências ligadas aos projetos; despreparo técnico-gerencial; e, no caso da CVRD em Carajás, o fato de o centro de comando não abarcar todos os componentes do projeto. Estas deficiências, embora surjam com vários aspectos, não são mais do que o resultado da ausência de um centro gerencial único, com poder delegado pelos setores que abrigam o projeto para formular, planejar e efetivar todas as ações e atividades-meio necessárias à implantação e início da operação desse projeto. Embora um órgão gerencial deva existir, para a fase de operação, não será o mesmo das fases anteriores, ainda que possa ter uma estrutura derivada do primeiro.

É evidente que o apoio político é condição *sine qua non* para poder-se exercer gerenciamento efetivo. E esse apoio se traduz na delegação dos poderes, necessários à unidade gerenciadora, que antes eram prerrogativas dos vários setores envolvidos, o que dará cunho empresarial à gestão.²

Outra característica fundamental deste método é a de o órgão gerenciador, na fase de implantação, dispor de instrumentos ágeis de monitoramento e poder decisório para corrigir, prontamente, concepções defeituosas ou fatores externos imprevistos, tão logo sejam detectados. Foi, aliás, o que ocorreu, como vimos, na primeira fase do programa Procop, que sofreu alterações e adaptações que corrigiram, a curto prazo, as ineficiências detectadas na sua implantação.

Deve-se deixar bem claro que a organização de um centro único de gerenciamento que atinja todos os níveis dos empreendimentos não é uma tarefa de fácil concretização. Exigirá decisão política efetiva que imprima a esse centro grande autonomia para assumir as responsabilidades técnico-administrativas antes inerentes às agências envolvidas no projeto (que, para o Polonoroeste, ultrapassavam uma dezena).

No caso do Programa Polonoroeste, praticamente todos os problemas já haviam sido detectados na ocupação provocada pela Transamazônica. No entanto, embora existissem estudos e análises sobre estes problemas, o fato de não ter sido realizada avaliação profunda e abrangente de todos os impactos diretos e indiretos provocados pela Transamazônica deixou de propiciar instrumentos de análise suficientemente conclusivos para o seu uso na concepção do Polonoroeste.

7.2 - Tipos de Avaliação e Sistema Proposto

Resume-se adiante o conceito e as diversas características de um sistema de avaliação proposto pela Seain/Seplan. Em seguida, propõe-se a tomada de medidas para implantar o que seria primeira fase desse sistema.

² Deve ser mencionado que a Embrapa/Petrolina recomendou a implantação de um organismo central gerenciador do uso dos recursos hídricos.

ANEXO

Valores em USMiliões

Número e Nome do Projeto	Data de Efetividade	Data de Fechamento	Valor atual			% não desembolsado	Agência Executora	Estados Beneficiados	Tomador Federal ou Estadual
			Banco	Contrapartida *	Total				
Saúde									
2699 Projeto Nordeste I	7/29/87	12/31/95	59.50	70.20	129.70	11%	MIN SAUDE&STATES	BA, MG, RN, PI	F
2931 Controle de Endemias do NE	12/14/88	6/30/96	82.00	109.00	191.00	5%	SUCAM (PNUD)	AL, BA, CE, MA, PB, PE, PI, RN, SE, MG, GO, PR, RS, NA	F
3072 Controle Malária B. Amazônica	9/20/89	6/30/96	72.90	99.00	171.90	1%	MIN. SAUDE/SUCAM	AC, AM, AP, MA, MT, PA, RO, RR, TO, NA	F
3135 Nordeste II	12/26/90	6/30/96	217.00	343.60	560.60	45%	MIN SAUDE&ST. HEATH SEC. (PNUD)	AL, BA, CE, MA, PE, PB, SE	F
3659 Controle de DST - AIDS	6/1/94	6/30/98	180.00	90.00	250.00	45%	MIN SAUDE	Toda a Federação	F
TOTAL Saúde			591.40	711.80	1303.20	31%			
Educação									
3269 PADCT II	5/15/91	12/31/96	140.00	150.00	290.00	30%	MIN. CIENCIA E TEC	Não Disponível	F
2810 PRODEMO	12/15/87	6/30/97	15.80	91.90	107.50	8%	MIN. TRABALHO	Não Disponível	F
3375 Inovacões no Ensino Básico	1/7/92	6/30/98	245.00	355.00	600.00	79%	STATE SP	SP	S
3604 Educação Nordeste II	2/8/94	12/31/98	212.00	186.60	378.60	77%	MIN. EDUCAÇÃO	CE, MA, SE, PE, NA	F
3663 Educação Nordeste III	5/27/94	6/30/99	208.60	160.30	368.90	78%	MIN. EDUCAÇÃO	AL, BA, PB, PI, RN	F
3766 Qualidade Ensino Publico -PR	1/26/95	12/31/99	98.00	109.00	205.00	92%	Sec. Educacao (SSED/PR)	PR	S
3733 MG PROQualidade	6/5/95	6/30/00	150.00	152.00	302.00	86%	Sec. Educacao (SSE/ MG)	MG	S
TOTAL EDUCAÇÃO			1065.20	1184.80	2250.00	73%			
Meio Ambiente									
2831 PRONACOP	7/11/88	6/30/96	47.60	50.00	97.60	15%	IBAMA/BANESPA(PNUD)	SP	F
3444 Prog Manejo Recurso Nat-RO	1/15/93	12/31/96	167.00	61.90	228.90	49%	SEPLAN - RO(PNUD)	RO	F
3018 Microbacias - Paraná	6/6/89	3/31/97	63.00	75.30	138.30	11%	STATE PR-SEAB	PR	S
3173 Prog. Nac Meio Amb.-PNMA	12/5/90	6/30/97	117.00	49.40	166.40	51%	IBAMA (PNUD)	Não Disponível	F
3480 Proj. Controle Poluição Indust.	3/9/93	6/30/97	50.00	100.20	150.20	76%	BNDES	BA, SP, RJ, ES, MG, RS, SC, PR	F
3180 Microbacias - Santa Catarina	10/18/91	9/30/97	33.00	38.60	71.60	46%	STATE SC	SC	S
3492 Prog Manejo Recurso Nat-MT	1/15/93	12/31/97	205.00	80.70	285.70	70%	SEPLAN - MT (PNUD)	MT	F
3924 Reabilitação e Conservação Ambien	3/4/96	6/30/00	50.00	59.90	109.90	100%	CVRD	MG, ES, PA, MA	F
TOTAL MEIO AMBIENTE			732.60	516.00	1248.60	55%			
Energia									
3043 Distribuição de Gás Natural	8/12/90	12/31/98	94.00	181.00	285.00	38%	COMGAS	SP	S
3376 Transp. Proc. Hidrocarbonetos	1/22/93	12/31/97	260.00	363.10	623.10	68%	PETROBRAS	BA, SC, SP, PA	F
TOTAL ENERGIA			354.00	544.10	908.10	63%			

* CONTRAPARTIDA: Os valores são os originais, indicados no Contrato de empréstimo.

Valores em US\$ Milhões

Número e Nome do Projeto	Data de Efetividade	Data de Fechamento	Valor atual			% não desembolsado	Agência Executora	Estados Beneficiados	Tomador Federal ou Estadual
			Banco	Contrapartida *	Total				
Pobreza Rural									
2718 NRDP - Pernambuco	11/14/86	12/31/95	72.00	96.40	168.40	15%	SEPLAN - PE	PE	F
2761 NRDP - B	10/19/87	12/31/95	111.00	185.20	296.20	12%	STATE - BA	BA,CE,PB,PE,PI,SE	F
2763 NRDP - Ceará	10/19/87	12/31/95	92.00	132.30	224.30	34%	SEPLAN - CE	CE	F
2762 NRDP - Piauí	11/20/87	12/31/95	53.00	82.30	135.30	13%	SEPLAN - PI	PI	F
2523 NRDP - S	12/12/85	12/31/95	60.30	69.00	129.30	4%	SCU - SE	SE, BA, CE, PI, PE, PB,NA	F
2524 NRDP - Rio Grande do Norte	5/7/86	12/31/95	51.40	74.80	126.20	15%	CEPA - RN	RN	F
2860 NRDP - Paraíba	10/15/87	3/31/96	60.00	63.90	123.90	42%	SEPLAN - PB	PB	F
2861 NRDP - Minas Gerais	10/20/87	3/31/96	55.00	58.50	113.50	57%	STATE MG	MG	F
2862 NRDP - Maranhão	12/18/87	3/31/96	84.00	88.30	172.30	55%	SEPLAN -MA	MA	F
2863 NRDP - Alagoas	10/19/87	3/31/96	42.00	44.40	86.40	62%	SEPLAN - AL	AL	F
3917 NERPA - BA	11/13/95	12/31/00	105.00	70.00	175.00	97%	CAR/ SEPLANTEC - BA	BA	S
3918 NERPA - CE		12/31/00	70.00	46.70	116.70	100%	DEPES / SEPLAN - CE	CE	S
3919 NERPA - SE		12/31/00	36.00	24.00	60.00	100%	PRONESES / SEPLAN - SE	SE	S
TOTAL POBREZA RURAL			891.70	1035.80	1927.50	46%			
Irrigação									
2883-1 Itaparica Irrigação	1/24/92	12/31/95	100.00	171.70	271.70	11%	ELETOBRAS/CHEFS	BA,PE	F
2950 Subsetorial de Irrigação	5/31/89	6/30/96	169.00	240.00	409.00	12%	MIN. INTEGRAÇÃO REGIONAL	MS,MT,GO,DF,MG,ES,RJ,SP,PR,SC,RS,TO	F
3170 Irrigação I	9/20/91	6/30/97	141.00	255.00	396.00	82%	CODEVASF&DNOCS	BA,CE	F
3013 Jafba Irrigação	8/26/89	6/30/97	71.00	87.00	158.00	40%	CODEVASF(PNUD)	MG	F
TOTAL IRRIGAÇÃO			481.00	753.70	1234.70	36%			
Pesquisa e Extensão									
2679 Extensão Rural II	10/8/86	12/31/95	100.00	194.10	294.10	15%	Toda a Federação	Toda a Federação	F
2864 Controle de Doenças Animais	10/27/87	3/31/96	41.00	57.40	98.40	31%	MIN. AGRIC.	RS,SC,PR,SP,MG,RJ,ES,MT,MS,GO,TO,PE,CE,BA	F
3130 Pesquisa Agropecuária III	4/27/90	6/30/96	42.00	50.80	92.80	7%	EMBRAPA	AC, AP,AM,BA,CE,PA,PR,PE,PI,RO,RR,SE	F
2895 Florestal Minas Gerais	6/19/89	12/31/96	40.50	51.50	92.00	7%	BDMG&STATE MG	MG	S
TOTAL PESQUISA E EXTENSÃO			223.50	353.80	577.30	15%			

* CONTRAPARTIDA: Os valores são os originais, indicados no Contrato de Impréstimo.

492227

Carteira Atual de Projetos

Valores em USMilhões

Número e Nome do Projeto	Data de Efetividade	Data de Fechamento	Valor atual			% não desembolsado	Agência Executora	Estados Beneficiados	Tomador Federal ou Estadual
			Banco	Contrapartida *	Total				

Rodovias

3169 Sist. Gerenciamento Rodoviário	7/30/91	12/31/95	270.00	449.00	719.00	12%	DNER	MA,CE,PB,TO,AL,BA,MG,MS,SP,SC	F
2830 Gerenciamento de Pavimentos	6/16/88	12/31/95	142.25	231.65	373.90	8%	DER-SP	SP	S
3547 Gerenciam. Rodoviário-SC	4/22/93	12/31/98	50.00	85.80	135.80	51%	DERs - SC	SC	S
3548 Gerenciam. Rodoviário-AL	4/25/94	12/31/98	38.00	50.50	88.50	87%	DER - AL	AL	S
3713 Gerenciam. Rodoviário-PI	5/17/94	12/31/99	36.00	86.90	122.90	89%	DER - PI	PI	S
3715 Gerenciam. Rodoviário-MA	5/5/94	12/31/99	61.00	130.50	191.50	92%	DER - MA	MA	S
3714 Gerenciam. Rodoviário-TO	8/2/94	12/31/99	87.00	165.40	252.40	69%	DER - TO	TO	S
TOTAL RODOVIAS			684.25	1199.75	1884.00	37%			

Transportes Urbanos

3457 CBTU São Paulo	2/3/93	6/30/96	128.00	155.00	281.00	43%	CBTU&STATE-SP	SP	F
3633 CBTU Rio	3/14/94	12/31/97	128.50	143.50	272.00	69%	CBTU	RJ	F
3915 CBTU - Recife		12/31/01	102.00	101.80	203.80	100%	CBTU - PE	PE	F
3916 CBTU - Belo Horizonte		12/31/01	99.00	98.30	197.30	100%	CBTU - MG	MG	F
TOTAL TRANSPORTES URBANOS			455.50	498.60	954.10	76%			

Ferrovias

2857 Recup. e Modern. da FEPASA	12/1/87	12/31/95	100.00	171.50	271.50	0%	FEPASA	SP	S
TOTAL FERROVIAS			100.00	171.50	271.50	0%			

Urbano

Closed Reconstrução Rio	12/29/88	9/30/95	168.20	218.80	386.80	1%	CEF	RJ	F
3100 PEDU	1/19/90	12/31/95	100.00	126.90	226.90	4%	FAMEPAR	PR	S
3129 PIMES	6/25/90	12/31/95	80.00	127.00	207.00	0%	BADESUL/BANRISUL	RS	S
2681 Salvador Metropolitano	5/18/87	12/31/96	36.61	96.00	132.61	21%	CONDER	BA	S
3639 SOMMA	1/19/94	12/31/98	150.00	183.10	333.10	94%	BDMG&STATE MG	MG	S
3789 Proub/CE	5/15/95	3/31/00	140.00	100.00	240.00	93%	SDU - State Environment Sec.	CE	S
TOTAL URBANO			674.81	851.80	1526.41	42%			

Saneamento

2983 PROSANEAR	2/23/89	6/30/96	80.00	110.74	190.74	13%	CEF	AM, CE, PE, RJ, MS, MG, PA, SC	F
3102 Abastecimento Águas Sabesp	7/6/90	6/30/96	280.00	320.00	600.00	39%	SABESP	SP	S
3503 Prog.Saneamento Ambiental	9/28/94	6/30/97	9.00	162.60	171.60	93%	sec.saneamento	Não Disponível	F
3504 Prog. Saneamento Amb.-SP	5/17/93	9/30/97	119.00	142.90	261.90	82%	SEPLAN- SP	SP	S
3505 Prog. Saneamento Amb.-PR	5/17/93	9/30/97	117.00	106.10	223.10	82%	SEPLAN-PR	PR	S
3554 Conserv Arrudas e Onça-MG	9/8/93	9/30/97	145.00	162.60	307.60	89%	STATE MG/PDMG	MG	S
3442 Moderniz.Sector Saneamento	6/8/93	12/31/97	250.00	250.00	500.00	81%	STATES(PNUD)/IPEA	BA,MS,SC,NA	F
3767 Saneamento - ES	12/19/94	12/31/99	154.00	154.00	308.00	95%	CESAN e SEAMA-ES	ES	S
TOTAL SANEAMENTO			1154.00	1408.94	2562.94	69%			

TOTAL DA CARTEIRA DE PROJETOS			7408.0	9240.4	16648.4	52%			
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* CONTRAPARTIDA: Os valores são os originais, indicados no Contrato de Impréstimo.

Fonte: MIS/BM

ANEXO I

EVOLUÇÃO DA POPULAÇÃO DOS MUNICÍPIOS DA ÁREA 1980-1991

MUNICÍPIOS	1980	1991	CRESCIMENTO 80/91 (%)
B. S. FRANCISCO	24154	22982	- 0,43
ITACURUBA	4410	3238	- 2,17
OROCÓ	7081	10769	3,88
PETROLÂNDIA	23709	32934	3,03
S. M. DA BOA VISTA	23883	42027	5,27
TOTAL DE PE	82237	111950	2,73
CHORROCHÓ	10256	9601	- 0,56
CURAÇA	20637	25035	1,77
GLÓRIA	9871	12818	2,40
RODELAS	4486	4292	- 0,39
TOTAL DA BA	45250	51746	1,23
TOTAL DOS DOIS ESTADOS	128847	163696	2,23

FONTE: IBGE. Censos Demográficos.

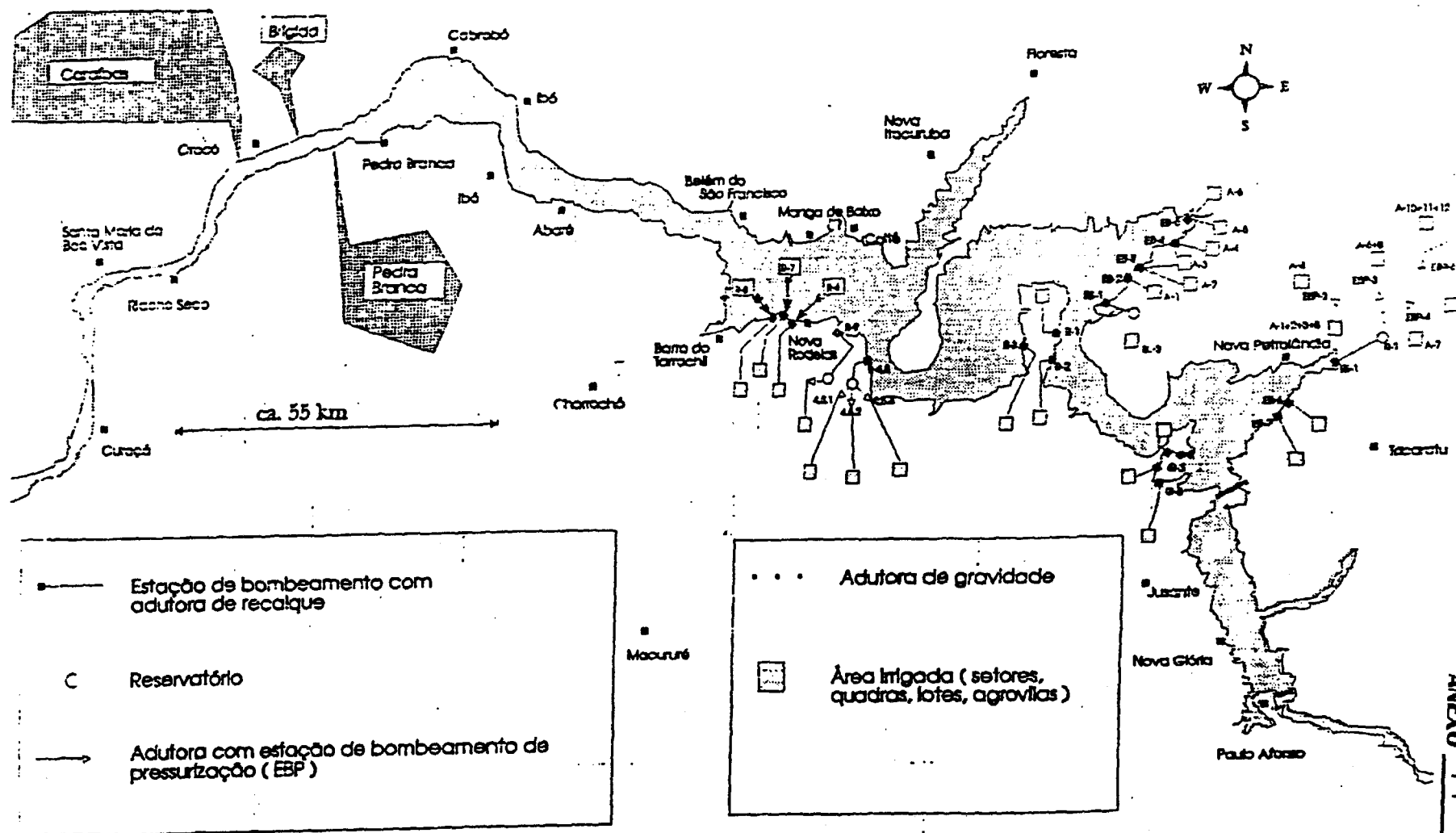
Projetos de Irrigação nos municípios atingidos pela barragem de Itaparica

Municípios	Área inundada (ha)	% da área do município inundada	População atingida	% da população rural atingida	% da população total atingida
Glória	10.150	5,4	1.975	22,5	20,0
Rodelas	14.990	5,3	3.180	71,0	
Chorrochó	630	0,2	565	6,2	5,7
Curaçá	0	0	0	0	0
Paulo Afonso	0	0	0	0	0
Petrolândia	14.310	8,9	6.400	46,0	27,0
Floresta	16.270	3,4	3.675	12,1	9,0
Itacuruba	10.640	27,2	3.503	104,1	65,0
Belém de São Francisco	4.640	2,6	3.540	21,9	13,8
Orocó	0	0	0	0	0
Santa Maria	0	0	0	0	0
Total	57.320		16.438		

Projetos de irrigação	Área (ha)	Número de lotes	Agrovilas
Borda do Lago Glória Jusante	409,5 1.600,0	139 —	3 —
Borda do Lago Rodelas	1.012,5	323	2
Borda do Lago Itaquatiara	325,5	112	3
0	0	0	0
Pedra Branca	2.466,0	706	19
0	0	0	0
Borda do Lago Barreiras	2.682,0	809	10
Borda do Lago Icó-Mandantes	3.030,0	914	16
Apolônio Salles	880,0	101	0
0	0	0	0
0	0	0	0
0	0	0	0
Brigida	1.501,5	429	10
Caraibas	5.605,5	1.603	47
	19.512,5	5.136	110

Fonte: Pólo Sindical/CEDI - 1993

Obs. dados população total e rural do município 1980



Companhia de Desenvolvimento do Vale do São Francisco
CODEVASF
Grupo Executivo Especial do Projeto Itaparica - GEEPI

CDDH8F
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02 volumes

**RELATÓRIO DE AVALIAÇÃO
DOS SERVIÇOS DE ASSISTÊNCIA
TÉCNICA E EXTENSÃO RURAL
NOS PROJETOS DE IRRIGAÇÃO
DO SISTEMA ITAPARICA**

JANEIRO A JUNHO DE 1996

PETROLINA-PE

AGOSTO DE 1996

COORDENAÇÃO

Supervisão Especial do GEEPI

JOSÉ NOVAES DINIZ CARVALHO

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BAIRTON TEIXEIRA

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MARCELO CARLOS RAMOS MERGULHÃO

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COLABORAÇÃO

PROATIVA Consultoria S/C

ARMANDO JOSÉ MUNGUBA CARDOSO

- A cultura do tomate, no período dessa avaliação, foi explorada, apenas no Projeto Brígida, principalmente, através de contratos com agro-indústrias processadoras.
 - As áreas colhidas e a produção de tomate, após acentuado crescimento do primeiro para o segundo semestre/95, sofreram grandes reduções. Além disso, as produtividades médias nos semestres avaliados reduziram-se, expressivamente, de um patamar de 43 para 11 t/ha.
 - Na cultura da cebola, no Projeto Brígida, também ocorreram reduções de áreas colhidas, produção e produtividades nos três semestres em avaliação, sendo que as produtividades médias despencaram de 11,5 para 7 t/ha.
 - Já no Projeto Pedra Branca, que iniciou a produção no primeiro semestre/96, a produtividade média para a cultura da cebola foi de 11,2 t/ha.
 - De forma semelhante à da cultura da cebola, a cultura da melancia apresentou, no Projeto Brígida, decréscimos tanto nas áreas plantadas e colhidas como na produção e produtividade. O mesmo ocorrendo com a cultura do feijão phaseolus.
- { Como podem ser observadas no Anexo, as produtividades alcançadas foram muito baixas nas diversas culturas, ficando muito abaixo das programadas, assim como das médias regionais e das obtidas em outros perímetros irrigados da CODEVASF.

7.2. PROJETOS DA BORDA DO LAGO

a) Meta Focal de Renda

Foram programados alguns eventos em todos os projetos, para discussão/afirmação da meta focal de renda, com base na pesquisa realizada no Projeto Barreiras em fevereiro/março de 1995, quando foi definido o valor de renda para aquele Projeto. As ações desenvolvidas, no período, estão voltadas para discussão com grupos estratégicos de agricultores, sem contudo avançar nas discussões com todos, no sentido de definir a meta focal nos projetos.

b) Modelo de Exploração

Em todos os projetos, houve programação e desenvolvimento de ações no sentido de apresentar e discutir com grupos estratégicos de agricultores o Modelo de Exploração Agropecuário Integrado. Em alguns deles, esta etapa foi avaliada com vistas a apresentação do modelo aos demais grupos de agricultores, destacando-se que no Projeto Barreiras, além da avaliação houve também programação de discussão com todos os agricultores.

Estas apresentações, no entanto, foram suspensas, face à necessidade de maior aprofundamento das discussões - Consórcio/Instituições.

c) Plano Agrícola

As atividades programadas e as realizadas, referem-se a eventos voltados para o entendimento dos agricultores sobre planejamento agrícola. No entanto, não se constata, pelos registros, que as atividades ocorram de maneira

Itaparica, projeto polêmico

Reassentamento da Chesf arrasta-se há quase 10 anos
e já levou US\$ 1,25 bilhão

por Eugênio Melloni
de Petrolândia

O agricultor Cícero Ar-
gemiro Torres, de Petrolân-
dia (PE), passou os últimos
nove anos esperando água.
Torres é dono de um lote
de 3 hectares de terras res-
sequidas, onde só vingam a
caatinga e a algaroba — um
arbusto nativo muito apre-
ciado pelas cabras e que
proporciona o único tom
verde na cinzenta paisagem
da região, na fronteira entre
os estados da Bahia, Per-
nambuco e Alagoas.

Ao contrário dos serto-
nejos de outras áreas do
Nordeste, Torres não se
volta para o céu, à espera
da água que vem das nu-
vens, que eventualmente
— o que pode significar
uma única vez por ano, ou
nem isso — descarregam

seu conteúdo no solo
estéril de Petrolândia.

"Quando chove aqui,
corremos para plantar
em cima. Muitas ve-
zes a gente não colhe
nada, só prejuízo",
diz, desanimado.

A água que fertilizará
suas terras deverá vir do
rio São Francisco, dentro
de um projeto de irrigação
planejado pela Companhia
Hidro-Elétrica do São
Francisco (Chesf), a gera-
dora de energia elétrica do
grupo Eletrobrás que aten-
de o Nordeste, com o apoio
da Companhia para o De-
senvolvimento do Vale do
São Francisco (Codevasf).

A "irrigação", como
Torres trata os projetos de
irrigação, foi prometida
pelos técnicos da Chesf
desde que a sua casa e a



área que cultivava como
mêiço no município de
Barreiras (PE) foram sub-
mersas com o enchimento
do reservatório da hidrelé-
trica de Itaparica, em
1987. Na época, também
foi prometido que Torres,
sua esposa e os cinco fi-
lhos permaneceriam ape-
nas seis meses na pequena
casa de quatro cômodos
de uma das agrovilas
construídas pela Chesf pa-
ra o reassentamento. A ca-
sa já cresceu, com a cons-
trução de mais dois cômo-
dos. "A última previsão

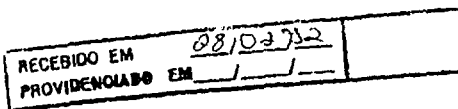
que a gente tem é que
vamos estar 'rigrando'
em 1998. Mas eu só
acredito vendo", afir-
ma o agricultor, com a
desconfiança de quem
presenciou quase uma
década de sucessivos
adiamentos no cronogra-
ma da Chesf.

O destino de Torres e
das cerca de 6 mil famílias
da zona rural das 10,1
mil famílias que foram
deslocadas pelas águas do
São Francisco, que ne-
cessitarão da irrigação pa-
ra viabilizar a atividade
agrícola nesta parte do se-
mi-árido nordestino, de-
penderá das decisões a se-
rem tomadas por um gru-
po executivo do governo
federal, instalado na últi-
ma quinta-feira, em Brasí-
lia. Participarão do grupo

representantes dos minis-
térios das Minas e Ener-
gia, Planejamento, Agri-
cultura, Meio Ambiente,
além da Casa Civil. Os
técnicos do governo vão
se debruçar sobre os pro-
jetos de reassentamento e
de irrigação apresentados
pela Chesf, que reivindica
uma verba suplementar de
US\$ 300 milhões para
concluir todas as obras de
canais para a irrigação.

Os projetos são polêmi-
cos e estão sendo vistos
com desconfiança dentro
do próprio Executivo. Os
trabalhos de reassentamen-
to e as obras dos projetos
de irrigação concluídas ou
em andamento, cujo orça-
mento inicial era de US\$
450 milhões, já absorve-
ram investimentos de US\$
1,250 bilhão. (Cont. C-3)

LOCAL	PARTICIPANTES	ATIVIDADES/OBJETIVOS
PNUD/SUDENE Recife-PE	Diretores e Assessor do Pólo	Reunião com o BANCO MUNDIAL para discutir recursos e desvio de material do Reassentamento.
Recife-PE	Diretores do Pólo	Reunião com a Procuradoria Geral da República, Procuradora Drª Socorro, para entrega de documentação' (Dossiê) índios e posseiros.
Centro Trabalhadores Petrolândia-PE	Diretores e Assessores do Pólo	Reunião do Pólo para avaliar cancelamento reunião ' com CHESF.
Rodelas-BA	Diretores e Assessores do Pólo	Articulação para o Encontro de Representantes de Agrovilas nos dias 04,05 e 06/03/91, em Glória-BA.
Recife-PE	Diretores do Pólo	Reunião com a OXFAM para discutir situação PÓLO / OXFAM.
Escritório CHESF Rodelas-BA	Assessores do Pólo e Diretor STR-Rodelas-BA.	Reunião para discutir Regulamento dos Lotes de Treinamento; Sorteio dos Treinandos.
Rio Grande do Norte-RN	Diretor do Pólo	Encontro do CDDH-Centro de Defesa dos Direitos Humanos de Natal-RN.
Projeto Brígida Orocó-PE	Assessor do Pólo	Reunião com representantes de agrovilas para apresentar resultado da pesquisa e apresentar propostas (Plano Produção).
Paulo Afonso-BA	Diretores STRs - BA	2º Seminário PRO-CUT/Regional para discutir Estrutura Sindical.
Aracaju-SE	Diretores do Pólo	Reunião para articulação do Encontro PLANVASF, dias 17,18 e 19/05/91.



Bird ajuda famílias de colonos pernambucanos

Teodomiro Braga
Correspondente

WASHINGTON — Respaldados por importantes entidades ambientalistas americanas, representantes das famílias desabrigadas pela construção da usina hidrelétrica de Itaparica, em Pernambuco, conseguiram o apoio do Banco Mundial (BIRD) à sua luta pela conclusão do projeto governamental de irrigação nas novas terras que receberam em 1987. Após reuniões realizadas nos últimos dois dias com os líderes sindicalistas Vicente da Costa Coelho, de Petrolândia (PE), e Maria Edileide Rodrigues Pereira, de Rodela (BA), dirigentes do Banco Mundial se comprometeram a pressionar o governo brasileiro a liberar a contrapartida nacional dos financiamentos para a conclusão do projeto de irrigação, que já recebeu US\$ 132 milhões do BIRD.

O plano de reassentamento das famílias desabrigadas pela construção da barragem de Itaparica foi o primeiro do tipo no mundo a contar com financiamento do Banco Mundial, o que explica o interesse das entidades ambientalistas e de defesa dos direitos humanos no seu destino. A viagem à capital americana dos dois sindicalistas nordestinos foi patrocinada pela Oxfam, organização inglesa de combate à fome. Ontem à tarde houve uma solenidade de apoio aos desabrigados de Itaparica na sede do Fundo de Defesa do Meio Ambiente, com a participação de diversos representantes de organizações ecológicas americanas.

A representante da Oxfam, Patricia Fenney, admitiu ao JORNAL DO BRASIL que a mobilização a favor dos desabrigados de Itaparica quis aproveitar a proximidade da realização da Rio-92, "que obriga o governo brasileiro a se preocupar mais com sua imagem externa". Nas reuniões no Banco Mundial, Vicente Coelho propôs que o banco suspendesse a concessão de novos financiamentos a projetos no setor elé-

trico no Brasil enquanto o governo não liberasse os seus recursos para a conclusão do projeto de irrigação, no valor de US\$ 62 milhões. Essa quantia refere-se à contrapartida nacional a um novo empréstimo de US\$ 100 milhões aprovado pelo BIRD para o programa, cujo desembolso foi suspenso por causa da pendência em relação aos recursos nacionais.

O diretor do Banco Mundial para o Brasil, Armeane Choksi, rejeitou a ideia de suspensão de novos financiamentos, alegando que seria mais produtivo recorrer a outros meios para pressionar o governo brasileiro. Ele prometeu que o Banco Mundial fará "tudo que estiver a seu alcance" para ajudar os desabrigados de Itaparica, inclusive estudar a possibilidade de iniciar o desembolso do empréstimo de US\$ 100 milhões, independentemente da solução do problema da contrapartida. "Eles demonstraram boa vontade", admitiu Vicente Coelho.

As 7 mil famílias desabrigadas pela barragem de Itaparica foram reassentadas em 122 agrovilas, construídas às margens do rio São Francisco numa área total de 19 mil no Sul de Pernambuco e Norte da Bahia. Até hoje, no entanto, as famílias não puderam cultivar as terras porque não foi concluído o projeto de irrigação previsto no plano de reassentamento acertado com o Banco Mundial. Equipamentos de irrigação no valor de milhões de dólares estão há mais de dois anos estocados em depósitos nas agrovilas, por causa da falta de dinheiro para compra das peças restantes e montagem dos equipamentos. Na reunião com os ambientalistas americanos Vicente Coelho denunciou que numerosos tubos de plástico vem se deteriorando porque estão expostos aos efeitos do sol, quando deveriam estar enterrados debaixo da terra. O órgão governamental brasileiro responsável pela execução do projeto é a Chesf (Centrais Hidrelétricas do São Francisco).

Pólo Sindical do Sudoeste São Francisco

ANEXO M

Sindicato dos Trabalhadores Rurais BA/PE

Rua Denton Barreto, 139. Tel.: (081) 851 - 1160

PETROLÂNDIA PE. BRASIL

Petrolândia(PE), 18 de Novembro de 1993

Ofício PS 136/93

Ao
Banco Mundial
Sr. DANIEL R. GROSS
Washington - U.S.A.

Prezados Senhores,


Com o presente queremos informar-lhes sobre a situação atual dos reassentamentos de ITAPARICA, que nos parece altamente preocupante. Gostaríamos, ainda, de chamar atenção para a responsabilidade que o Banco Internacional de Reconstrução e Desenvolvimento tem para com os reassentados atingidos pela barragem.

RELEMBRANDO NOSSA HISTÓRIA

O Pólo Sindical formou-se em 1979, para articular a luta contra a expulsão arbitrária dos atingidos pela construção da Usina Hidrelétrica de Itaparica-UNI. Era preciso dar um basta, nos saldos deixados pela CHESF, com sua política de construção de barragens. Violência, péssimas indenizações, desorganização de produção, falta de perspectivas para os trabalhadores rurais.

A luta organizada pelo Pólo Sindical, trouxe à tona todas as contradições envolvendo a política energética brasileira, de custos sociais e ambientais abstraídos.

Com a conquista do reassentamento, os trabalhadores rurais foram transferidos para as Agrovilas no começo de 1988. O início da irrigação foi previsto para julho de 1988. Entretanto, somente em Abril de 1993, foi iniciado o treinamento de 26 reassentados no Subprojeto G.2 - Bahia. A CHESF "promete" que até 1994 todos os Projetos estarão funcionando. Em todo este período, a CHESF mostrou-se intransigente e os Sindicatos de Trabalhadores Rurais tiveram que travar uma luta constante e desgastante para obrigá-la a cumprir o Acordo.



Sindicato dos Trabalhadores Rurais BA/PE

Rua Dantas Barreto, 139. Tel.: (081) 851 - 1160

PETROLÂNDIA

PE.

BRASIL

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Hoje, a luta está entrando numa nova fase. Até agora conseguimos conquistar o reassentamento, uma série de melhorias, na área saúde e educação, embora com as mesmas deficiências existentes nível nacional, transporte, infra-estrutura, a Verba de Manutenção Temporária-VMT, e principalmente, o andamento das obras de irrigação.

As imponentes estações de bombeamento, os Kilômetros de canais, adutoras, já viabilizam a plantação em 112 lotes. Ao todo 217, hectares, produzindo milho, feijão, tomate, cebola, amendoim, melancia. Dentro da área toda do Projeto a ser irrigado, isso representa apenas 1,8%. Entretanto, essa pequena área plantada tem valor inestimável no processo de luta dos reassentados.

Esses equipamentos todos, e o verde das plantações contrastam com a caatinga queimada pela seca, ao mesmo tempo que enche de orgulho o coração e os olhos da maioria dos reassentados, também produz um outro sentimento que é a insegurança e a incerteza diante do novo.

O desafio agora, é administrar o Projeto, a produção, a comercialização, mostrar que os trabalhadores rurais não somente conseguem lutar pelos seus direitos à Reforma Agrária, e garantir sua consolidação, ao se juntarem para resolverem os problemas de mercado coletivamente, e procurar formas de uso da terra que garanta um equilíbrio ecológico, que minimize o uso dos agrotóxicos, que integre a adubação orgânica e verde, que obedeça a rotação de culturas entre outros, para evitar a salinização das terras e dar um exemplo de convivência pacífica com o "Velho Chico" vítima, hoje, das mais variadas agressões, colocando em risco a sobrevivência de todos que dependem do Vale.

Porém, este modelo que provaria que os trabalhadores são capazes de trabalharem as terras conquistadas competindo no mercado e obedecendo as leis da natureza, e que mostraria que a reforma agrária permanece na pauta política está em perigo novamente pela intransigência da CHESF.



Sindicato dos Trabalhadores Rurais BA/PE

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-03-

OS REASSENTAMENTOS VÃO À FALÊNCIA JÁ ANTES DE COMEÇAREM?

A CHESF, responsável pelo reassentamento, tanto como a CODEVASF, responsável, no início, pela operação e manutenção dos sistemas de irrigação, já mostraram suficientemente que não têm interesse nenhum de garantir as condições mínimas para o funcionamento razoável da irrigação nas mãos dos próprios trabalhadores:

- Os sistemas apresentam sérias falhas e defeitos técnicos que, em pouco tempo, podem inviabilizar a produção;
- A eficiência do sistema está muito abaixo do nível aceitável. Os primeiros testes mostraram taxas de eficiência em torno de 30% em vez de 70%, que é o valor normal para um sistema de aspersão. Isto traz maiores gastos de energia, agrava o perigo de uma rápida salinização e significa uma queda de produtividade, comprometendo assim, a viabilidade econômica do Projeto;
- Um manejo de 12 horas por dia, não permite aproveitar um lote de 3,0 ha por completo. De acordo com a variação de insolação ao longo do ano permanece uma boa parte do lote sem poder irrigar;
- A CODEVASF retém ou demora entregar até muitos meses documentos elaborados por ela ou pelos Consórcios (ITAPARICA e HIDRO SERVICE/GERSAR) que são necessários para nós podermos avaliar o funcionamento dos sistemas hidráulicos, os custos/tarifas de água etc.;
- A CODEVASF intervém na atuação dos Consórcios de uma forma que nos leva a pensar que quer mais atrapalhar do que apoiar;
- A CODEVASF não assume as obrigações contraídas com a CHESF de se responsabilizar pela operação e manutenção dos Projetos em funcionamento ou treinamento. Ela só veio contratar em Novembro deste ano uma empresa de operação e manutenção para G.2 que entrou em treinamento em Abril, e que apresenta já um desgaste acelerado de materiais; para Rodelas on-



Sindicato dos Trabalhadores Rurais BA/PE

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de se molha já as terras, e com problemas graves com as bombas, a operação e manutenção está prevista para Janeiro/94;

-A CHESF não resolveu ainda o pré-requisito fundamental para o funcionamento de um sistema de irrigação, principalmente no semi-árido: a drenagem. No Projeto Senador Nilo Coelho (Petrolina, CODEVASF), tem até 20% das terras já salinizadas, por falta de drenagem ou drenagem deficiente;

-Custos muito altos. A tarifa de água varia entre 50 e 60 US\$ por ha/mês, enquanto os colonos do Nilo Coelho estavam pagando em torno de 20 US\$. Isto, segundo laudo técnico, evidencia;

"claramente que o agricultor reassentado não terá suficiente capacidade de pagamento através dos ingressos gerados pela produção agrícola de seu lote".

(Consórcio ITAPARICA, Junho 1993, pág. 03 e 04)

O CONTRATO É A PEÇA FUNDAMENTAL

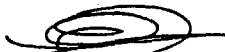
Todos os reassentados vão ter que assinar um "Contrato de Concessão de Uso e Desoneração de Obrigações" com a CHESF, em que se estabelece as normas, responsabilidades e distribuição de obrigações financeiras. O Contrato modelo que a CHESF pensa utilizar, confere a falta de responsabilidade para com os trabalhadores:

-O reassentado deve pagar a taxa de operação já a partir do 7º mês após o funcionamento;

-O reassentado deve pagar 20% da energia a partir do 2º ano, 40% no 3º etc., isto sem levar em consideração a tarifa absurda de água (=energia) e, ainda a previsão de as concessionárias aumentarem em até duas vezes a tarifa de água;

-A CHESF não prevê recursos para o sistema de drenagem;

-A CHESF não prevê uma capacitação para que os trabalhadores, possam, realmente, assumir a administração, operação e manutenção dos sistemas enormes de irrigação;



Pólo Sindical do Submédio São Francisco

ANEXOM

Sindicato dos Trabalhadores Rurais BAIPE

Rua Dantes Barreto, 139. Tel.: (081) 851 - 1160

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PETROLÂNDIA

PE.

BRASIL

-A CHESF não inclui formas (serviços topográficos) de viabilização da área de sequeiro, fundamental para uma integração de agricultura e pecuária, que é preciso para uma atividade econômica sustentável nestas condições sociais e climáticas;

-A CHESF não prevê a possibilidade de uma indenização ou novo reassentamento caso salinização ou baixa fertilidade inviabilize a produção em determinados lotes (o que parece bem possível de acordo com as primeiras experiências).

A nossa contra-proposta do Contrato inclui todos estes pontos, visando uma verdadeira emancipação econômica, social e cultural dos reassentados e não a continuação do já conhecido paternalismo, frequente nos Projetos da CODEVASF.

Diante dessa situação preocupante e de fundamental importância para o futuro dos reassentados, e diante do sofrimento econômico, social e psicológico aos quais foram expostos nos últimos seis anos, por se verem privados dos meios que dispunham para a sustentação de suas famílias, gostaríamos de solicitar o apoio desse Banco, que contribuiu financeiramente com a construção da Usina Hidrelétrica de Itaparica-UHI, e que portanto, tem também, o compromisso de saldar a dívida social gerada nesse processo, para que possamos chegar a um acordo com a CHESF, que vise condições dignas de produção. É fundamental, reconhecer que os reassentados necessitam de um período de adaptação, tanto às características técnicas de operação, quanto às condições econômicas financeiras e sócio culturais. O descumprimento ou desconhecimento de tais condições podem comprometer a viabilidade econômica e tecnológica dos Projetos de reassentamento, prolongando assim, a agonia de centenas de famílias.

Atenciosamente,


ERALDO JOSÉ DE SOUZA

Coordenador Geral

FROM : POLO SINDICAL

PHONE NO. : 8511160

Fe ANEXO

M

The World Bank
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

1818 H Street, N.W.
Washington, D.C. 20433
U.S.A.

(202) 473-9307
Cable Address: INTBAFRAD
FAX: (202) 676-0326

15 de dezembro de 1993

Dr. Eraldo José de Souza
Polo Sindical do Submédio São Francisco
Rua Dantas Barreto 139
Petrópolis
Pernambuco (PE), Brazil

Prezado Dr. Eraldo:

Como é do seu conhecimento, uma missão do Banco Mundial, composta pelo Dr. Carlos Emanuel e a Dra. Maria Teresa Serra, visitou recentemente o Projeto Itaparica, e teve a oportunidade de discutir, não só com os funcionários da CHESF mas também com representantes do Polo Sindical, os problemas decorrentes da demora na implantação das áreas irrigadas. As conclusões e recomendações da missão, refletem as mesmas preocupações apresentadas em sua carta do 18 de novembro de 1993.

Em primeiro lugar, gostaríamos de ressaltar que, ao contrário do que foi expresso na sua carta, a nossa instituição não participou do financiamento da construção de usina Itaparica. O nosso envolvimento está ligado exclusivamente à implantação do Projeto de reassentamento. Ao longo do desenvolvimento deste Projeto, o Banco Mundial tem insistido reiteradamente diante as autoridades do Governo, que o reassentamento dos afetados pelo enchimento do reservatório de Itaparica, tenha como único propósito assegurar condições de vida satisfatórias para as populações afetadas. Neste sentido, no passado temos incrementado a nossa participação financeira de US\$132 milhões para US\$232 milhões e mais recentemente o Banco tem desembolsado 100% do custo das obras, em vez de 30% como foi acordado originalmente. Como uma consequência, registrou-se um progresso significativo na construção dos sistemas de irrigação, e a ELETROBRAS assumiu o compromisso de terminar estes sistemas dentro dos prazos conveniados em março de 1993.

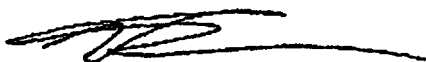
Concordamos plenamente com vocês que a fase agora iniciada pelo Projeto, ou seja aquela relacionada com o apoio as atividades produtivas, irá requerer um manejo extremamente cuidadoso e terá que ser implementada de comum acordo com os produtores assentados em cada perímetro irrigado. Esses produtores deverão ser treinados não só nas práticas produtivas mas também nas técnicas de gerenciamento dos sistemas irrigados que serão operados pelos distritos de irrigação formados pelos próprios produtores. A CHESF e a CODEVASF têm-se comprometido com o Banco para desenvolver um programa muito mais enérgico e efetivo em termos de participação dos assentados, começando pelo estabelecimento dos distritos de irrigação antes do início da operação normal das áreas irrigadas.

ANEXOM

Page 2

Finalmente, gostaríamos de assinalar que muitos dos problemas específicos indicados na sua carta têm sido matéria de ampla discussão com a CHESF e a CODEVASF durante a nossa última missão de supervisão. O Banco está programando uma missão para o próximo mês de março de 1994, para dar seguimento à implementação das ações acordadas. Naquela oportunidade, esperamos contar com a presença do Polo, com o propósito de continuar o nosso diálogo e poder recomendar, conjuntamente, uma série de medidas que teriam que ser executadas pelas Agências do Governo responsáveis pelo Projeto.

Atenciosamente,



Kreszentia M. Duer
Chefe

Divisão de Operações Ambientais e Agrícolas
Departamento I
Região da América Latina e do Caribe

PÓLO SINDICAL DOS TRAB. RURAIS DO SUBMÉDIO SÃO FRANCISCO
Rua Dantas Barreto, 139 - Caixa Postal 02 - Telefax (081)851-1160
CEP-56.460-000 - Petrolândia - PE.
C.G.C. nº 35.677.707/0001-11

Ao Ilmo.

Lewis Preston

Presidente do Banco Mundial

Prezado Sr.

Por ocasião da Conferência Internacional da Fome em Novembro do ano passado, o Sr. ressaltou que, na maioria dos casos, a fome e a miséria não é resultado de estiagens ou guerras, mas sim de uma política equivocada, voltada para os interesses de uma pequena minoria.

Concordamos plenamente com a sua posição. Nós conhecemos a miséria por perto. Aqui, no Sertão nordestino do Brasil, tem secas sim, mas é a política, a chamada "indústria da seca" que faz o homem sofrer com ela, apesar de existirem tecnologias simples,, adaptadas e ecológicas para conviver com a seca.

Outro exemplo é o reassentamento dos atingidos pela barragem ITAPARICA, representados por este Pólo Sindical e os projetos de irrigação, que estão começando a funcionar - mal. Em carta enviada recentemente ao Banco Mundial por Fax, alertamos que a sua entidade está correndo o risco de apoiar uma política, que o próprio Sr. está criticando: Por negligência técnica ou outros motivos, os sistemas de irrigação implantados ou planejados não correspondem, de maneira alguma, com as necessidades mínimas:

- Os sistemas apresentam sérias falhas e defeitos técnicos que, em pouco tempo, podem inviabilizar a produção;
- A eficiência do sistema está muito embaixo do nível aceitável e econômico. Os primeiros testes mostraram taxas de eficiência em torno de 40% em vez de 75%, que é o valor recomendado para um sistema de aspersão. Isto traz



maiores gastos de energia, agrava o perigo de uma rápida salinização e significa uma queda de produtividade;

- Um manejo de 12 horas por dia não permite aproveitar um lote de 03 ha por completo. De acordo com a variação de insolação ao longo do ano permanece uma boa parte do lote sem poder irrigar;
- A CHESF não resolveu ainda o pre-requisito fundamental para o funcionamento de um sistema de irrigação, principalmente no semi-árido: a drenagem. No projeto Senador Nilo Coelho (Petrolina, CODEVASF), tem muitas terras já salinizadas, por falta de drenagem ou drenagem deficiente;
 - Custos muito altos. Como é sabido, não pode instalar um sistema de irrigação superando uma altura de mais de 80 metros. Nos chamados **Projetos Especiais** oscila entre 130 e 150 metros, o que faz estourar os custos de energia. A tarifa de água varia entre 40 e 60 US-\$ por mês e ha enquanto os colonos do Nilo Coelho estavam pagando em torno de 20 US-\$. Isto, segundo laudo técnico, evidencia

"claramente que o agricultor reassentado não terá suficiente capacidade de pagamento através dos ingressos gerados pela produção agrícola de seu lote". (Consórcio ITAPARICA, Junho 1993, pag. 4-03)

- Nos projetos do Borda do Lago estão sendo implantados sistemas com espaçamento dos aspersores de 15 por 15 metros, o que é válido em condições de laboratório, mas não com velocidades de vento de 10 metros por segundo ou mais. Consequência é que até 50% da área não se irriga devidamente.

O contrato é a peça fundamental

Todos os reassentados vão ter que assinar um "contrato de concessão de uso e desoneração de obrigações" com a CHESF, em que se estabelece as normas, responsabilidades e distribuição de obrigações financeiras. O contrato modelo que a CHESF pensa utilizar, confere a falta de responsabilidade para com os trabalhadores:

- o reassentado deve pagar a taxa de operação e manutenção já a partir do 7o mês após o funcionamento;
- o reassentado deve pagar 20% da energia a partir do 2o ano, 40% no 3o etc, isto sem levar em consideração a tarifa absurda de água e, ainda a previsão de as concessionárias aumentarem em até duas vezes a tarifa de água;
- A CHESF não prevê recursos para o sistema de drenagem;



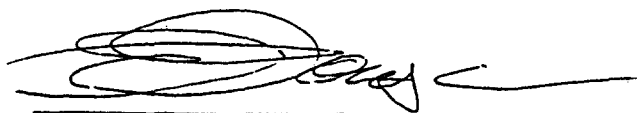
- A CHESF nao prevê uma capacitação para os trabalhadores possam, realmente, assumir a administração, operação e manutenção dos sistemas enormes de irrigação;
- A CHESF nao inclui formas (servicos topográficos) de viabilização da área de sequeiro, fundamental para uma integração de agricultura e pecuária;
- A CHESF nao prevê a possibilidade de uma indenização ou novo reassentamento caso salinização ou baixa fertilidade inviabilize uma produção em determinados lotes (o que é bem possível de acordo com as primeiras experiências)

A nossa contra-proposta do contrato inclui todos estes pontos, visando uma verdadeira emancipação econômica, social e cultural dos reassentados e não a continuação do já conhecido paternalismo. Nós entregamos a nossa versão do contrato no começo de dezembro de 1993 à CHESF. Porém, a CHESF adiou já duas vezes uma reunião com o Pólo Sindical, tática conhecida para ganhar tempo, enquanto continua mandando ofícios para nós, repetindo que as condições da concessão de uso serão as da CHESF mesmo.

Chamamos, mais uma vez a atenção do Sr. para este descaso cínico, para que o Banco Mundial realmente assuma sua responsabilidade para com as famílias atingidas pela barragem, e para que nós não passemos fome, no futuro, vítimas de uma política equivocada e necessária, política, que o próprio BIRD condena publicamente.

Sem mais por agora subscrevê-me-nos

Atenciosamente



Eraldo José de Souza
Coordenador do Pólo Sindical

PÓLO SINDICAL DOS TRAB.RURAIS DO SUBMÉDIO SÃO FRANCISCO

Rua Dantas Barreto, 139 - Caixa Postal 02 - Telefax (081)851-1160

CEP: 56.460-000 - Petrolândia - PE.

C.G.C nº 35.667.707/0001-11

Ofício 13/95

Petrolândia(PE), 24 de janeiro de 1995.

Ilmo. Sr.

Dr. LUIZ GABRIEL

M.D. Representante do Banco Mundial

Washington - E.U.A.

Prezado Senhor,

Estamos enviando-lhe, em anexo, para conhecimento de Vossa Senhoria, cópias de documentos com decisões tomadas na reunião do dia 23/11, no DOI, bem como solicitações em tramitação junto à CHESF e CODEVASF para conhecimento de Vossa Senhoria (anexo 02).

O que nos motiva a buscar melhorar a relação entre CHESF/CODEVASF/Pólo Sindical é o montante de recursos em pendências atualmente existentes nos sistemas hidráulicos e a morosidade para concluir o reassentamento, especialmente para evitar repetir os mesmos desvios e erros, sobretudo valorizando a força da organização autônoma na gestão dos Projetos.

Sendo só o que se apresenta no momento, subscrevemo-nos

Atenciosamente,


ERALDO JOSÉ DE SOUZA

Coordenador geral

**POLO SINDICAL DOS TRABALHADORES
RURAIS DO SUBMEDIO SAO FRANCISCO****COMISSAO ESPECIAL****MEMORIA
REUNIAO COM O BANCO MUNDIAL**

DIA: 24.09.96
HORA: 15h.
LOCAL: GEI/Itaparica

QUEM : BANCO MUNDIAL: Gabriel e Regina.
POLO SINDICAL: Ademar, coordenador, mais representantes
dos STRs de Glória, Rodelas, Petrolândia
e Curaça(Proj.P.Branca).
Assessor: Orlando
Comissão Especial de Consultoria.

ASSUNTOS:

1. BANCO MUNDIAL faz mais uma visita de inspeção/fiscalização. Coloca que a PRIVATIZAÇÃO DA CHESF já é uma decisão de governo e o reassentamento de Itaparica é que mais atrapalha a privatização.
2. POLO colocou que sem renda não existe AUTOGESTÃO. Foi feita demonstração da baixa produtividade dos projetos. Denunciou-se a incompetência dos consórcios na ATER, especialmente nos treinamentos. Necessária PESQUISA que garanta uma produção com renda, tanto nas culturas de ciclo curto, como na fruticultura. Polo ficou de passar para Banco Mundial até o dia 26/09 a proposta de pesquisa, como se realizaria. Sobre a VMT o Polo se posicionou que sua diminuição e substituição estaria vinculada à renda.
3. BANCO MUNDIAL informa que a questão da VMT já é decisão de governo sua diminuição/corte/substituição e que no começo os reassentados vão sentir muito o problema com a redução de seu ganho mensal.
4. O BANCO MUNDIAL informou que o contrato do banco com o setor elétrico/Eletrobrás/CHESF termina em Dezembro de 1.996. Até 31 de dezembro ainda podem ser feitos contratos. Os pagamentos poderão ser feitos até 30 de junho de 1.997. O banco ainda tem recursos alocados para Itaparica, mas que até maio/junho/97 o dinheiro acaba. Acha uma hipótese muito difícil poder estender o contrato por mais algum tempo e ao nível de decisão de Gabriel e seu Diretor a decisão já foi tomada. Só poderia ser revertida por decisão da Diretoria/Presidência do Banco Mundial. Terminado o contrato, existe nele uma cláusula que obriga a CHESF a cumprir os compromissos assumidos e que o banco vai exigir da CHESF um plano de trabalho para a continuidade do reassentamento. Mas não terá poder econômico para exigir o cumprimento.

ANEXO P

**POLO SINDICAL DOS TRABALHADORES
RURAIS DO SUBMEDIO SAO FRANCISCO****COMISSAO ESPECIAL****5. Situações existentes e pendentes:**

1. Os consórcios continuarão até o fim do contrato (setembro/97) ou do dinheiro (abril/maio de 1.997).
2. Banco Mundial vai tentar junto a CHESF, via IICA, medidas que possibilitem a realização da pesquisa com EMBRAPA/IPA/etc..
3. VMT é decisão do governo o seu fim e é preciso negociar.
4. O contrato CHESF/Banco Mundial termina definitivamente.
5. O setor elétrico/Eletróbrás/Chesf tem interesse na continuidade do financiamento do Banco Mundial para Itaparica, mas a decisão está no MINISTÉRIO DO PLANEJAMENTO que, diante da política global brasileira não estaria sensível para pleitear a prorrogação do contrato, mesmo que se convencesse o Banco Mundial para isso.
6. O Banco sugere que CHESF e POLO estudem medidas que impliquem em redução dos 33% dos projetos que não começaram a ser feitos.

OBSERVAÇÃO DA COMISSÃO ESPECIAL DE CONSULTORIA.


1. Parece que os projetos que foram feitos e estão na fase final de implantação são irreversíveis. Os que não começaram correm sérios riscos.

2. Torna-se urgente uma reunião ampliada, talvez um seminário, com participação de CUT, FETAPE, CONTAG, AATR, CPT, IGREJAS, UNIVERSIDADE (área comprometida) e PARLAMENTARES ESTADUAIS E FEDERAIS comprometidos para uma análise, avaliação da situação e o estabelecimento de um plano de ação imediato para o envolvimento de todos os reassentados e pressão articulada e progressiva sobre os responsáveis pelo reassentamento e os financiadores, pois não seria a hora de se retirar, quando a renda não está garantida.

3. E preciso agir e URGENTEMENTE.

Responsável pela memória: Celso.

Em 25/09/96.



PÓLO SINDICAL DOS TRAB.RURAIS DO SUBMÉDIO SÃO FRANCISCO

Rua Dantas Barreto, 139 - Caixa Postal 02 - Telefax (081)851-1160

CEP: 56.460-000 - Petrolândia - PE.

C.G.C n° 35.667.707/0001-11

Ofício 133/96

Petrolândia(PE), 26 setembro de 1996.

Ilmo. Sr.

Dr. LUIZ GABRIEL

Banco Mundial

Washington - E.U.A.

O Reassentamento de Itaparica possui atualmente 8.000 ha em operação, estando previsto, brevemente, a incorporação de mais de 6.500 ha totalizando, em 1997, aproximadamente 14 500 ha, irrigados por aspersão convencional com sistema fixo (Borda do Lago) e móvel (Projetos Especiais).

O processo de negociação para a autogestão está em andamento, através da parceria PÓLO SINDICAL/CHESF, com a consultoria do IICA, recentemente contratado pela CHESF, constatando-se avanços nos aspectos organizativos (constituição de EAG's, metodologia participativa de capacitação, treinamentos e estudos técnicos...etc.) e jurídicos (condições para titulação e formas de transferência dos bens), tendo como referência uma proposta global de transição para a autogestão apresentada pelo Pólo Sindical e consensada com a CHESF, CODEVASF e BANCO MUNDIAL em seminários realizados em Caraiíba-BA (1994) e Paulo Afonso-BA (1995).

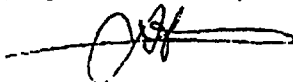
Entretanto, a questão da produção agrícola dos projetos vem dificultando um maior avanço nas negociações, tendo em vista que os dados físicos dessa produção não indicam uma tendência de obtenção de renda pelos produtores que dê sustentação econômica e financeira à autogestão do reassentamento, nos aspectos de manutenção da família, pagamento do custo de água (operação e manutenção), reprodução do processo produtivo (inclusive a manutenção e reposição do sistema parcelar) e capitalização dos produtores.

Dados recolhidos dos Relatórios Mensais de Monitoria (dez/95 e ago/96) da CODEVASF/GEEPI mostram o seguinte quadro da situação física da produção (ver quadros 01 e 02, anexo).

A análise dessas informações mostram que as produtividades alcançadas "foram muito baixas nas diversas culturas, ficando muito abaixo das programadas, assim como das médias regionais e das médias obtidas em outros perímetros da CODEVASF" (RELATÓRIO DE AVALIAÇÃO DOS SERVIÇOS DE ATER NOS PROJETOS DE IRRIGAÇÃO DO SISTEMA ITAPARICA - JAN - JUNHO/96 - CODEVASF/GEEPI).

Acrescente-se a isso a tendência decrescente das produtividades e áreas médias colhidas, o índice médio de frustração considerados significativos e o elevado custo relativo de produção, dada a natureza da tecnologia empregada, e de um modo geral, a baixa qualidade dos produtos.

Estudos pedológicos de classificação dos solos do reassentamento de Itaparica mostram que, do total da área, 0,94% são solos de regular adaptabilidade à irrigação, 5,55% de adaptabilidade restrita, 31,09% recomendado após prévio estudo e 26,83% com viabilidade de uso dependendo



ANEXO Q

de estudos técnicos. Análises de solo realizadas recentemente pela ATER da Borda do Lago, onde 70% dos solos são formados por areias quartzosas, mostram teores de 0,2% de matéria orgânica e 98% de areia, quando esses valores para um solo considerado muito bom são de 4% e 35%, respectivamente.

Esse quadro revela a existência de limitações naturais quanto a formação dos solos, que exigem um tratamento tecnológico mais apurado e específico no uso agroeconômico desses solos. No entanto, o pacote tecnológico recomendado pelas Empresas de ATER tem origem em experiências e informações de outros perímetros da região com algumas adaptações bibliográficas e de experiências locais, cujos resultados da produção agrícola atestam a sua ineficácia para a obtenção de produtividades economicamente competitivas. Não poderia ser diferente porque não existem pesquisas em bases científicas para o uso agroeconômico (solo/água/planta dos lotes irrigados nas condições pedológicas e edafológicas da área do reassentamento).

Essas informações, ao mesmo tempo em que apontam para causas técnicas das baixas produtividades e custos elevados de produção, mostram que o reassentamento é viável do ponto de vista agroeconômico, que será alcançado mediante a geração de um padrão tecnológico que potencialize os fatores de produção.

Diante dessas constatações entendemos que é necessário e urgente a implementação de um programa de pesquisa oficial e permanente, através da EMBRAPA, abrangendo a relação solo-água-planta nos aspectos de melhoramento genético para a obtenção de variedades adaptadas à região e competitivas no mercado, manejo de solo (conservação e melhoramento), manejo de água, balanceamento de adubação, condução cultural, controle integrado de pragas e doenças (solo e planta), pós-colheita (embalagens, acondicionamento, classificação), composição física de modelos de exploração em lotes de 1,5 ha, 3,0 ha, 4,5 ha e 6,0 ha...etc., para a definição de um padrão tecnológico que permita a obtenção de produtividades competitivas que dêem sustentação econômica e financeira ao processo autogestionário. O programa deverá envolver, também, a área de sequeiro nos aspectos de manejo pecuário, manejo da caatinga, etc.

Dada a magnitude dos desafios, o volume de recursos já investidos e a importância da autogestão do reassentamento, propomos a formação de um grupo permanente de pesquisadores da EMBRAPA, nas seguintes condições:

- Envolvimento do CPATSA(Petrolina-PE), CNPMF(Cruz das Almas-BA), CNPTC(Aracaju-SE), CNPA(Campina Grande-PB) e CNPC (Sobral-CE).
- Negociação com a Direção Central da EMBRAPA, em Brasília, com a participação do Pólo Sindical, CHESF/IICA e Banco Mundial.
- Instalação de um escritório permanente na área, com todas as condições de trabalho.

Finalmente, esse é o nosso entendimento sobre os problemas que envolvem a produção agrícola e sobre as soluções que irão impulsionar a viabilidade econômica do reassentamento e a conseqüente autogestão do reassentamento pelos produtores rurais.

Atenciosamente,


ADEMAR FAGUNDES VIEIRA
Coordenador do Pólo Sindical

ANNEX 2

OFFICE MEMORANDUM

DATE: April 24, 1997

TO: Mr. Richard E. Bissell, Chairman, Inspection Panel

FROM: James D. Wolfensohn, President, EXC 

EXTENSION: 81384

SUBJECT: **Brazil: Itaparica Resettlement and Irrigation Project (Loan 2883-BR)
Management Response to the Request for Inspection**

1. On March 12, 1997, the Inspection Panel registered a Request for Inspection concerning the above-referenced project, the implementation of which is currently supported by a World Bank Loan. The attached response has been prepared by Bank staff and addresses all the issues raised in the Request. It is due on April 24, 1997, as agreed between Regional Management and the Inspection Panel, to allow the Region time to complete a translation of the Request done at your request. We also attach a copy of the completed translation.

2. We recognize and are sympathetic with the frustration of the people who were dislocated by the Itaparica dam and whose dreams of working their own irrigated farms have been delayed. In our response, we provide evidence and details to demonstrate that the Bank complied with its own policies and guidelines pertinent to this operation.

3. A number of factors beyond the Bank's control delayed implementation and pushed up the costs of the resettlement project. We are working closely with the Government of Brazil on the matter and will use whatever influence we have to help bring this project to completion, including the programs that were not financed by the Bank.

Attachments:

Management Response to the Inspection Panel
Translation of Request for Inspection

cc: Messrs./Mmes.: Kaji (EXC); Shihata, Rigo (LEGVP); Alexander (OPRDR); Burki, Hughart, Ody (LACVP); Ecevit (LATSO); Aiyer (LATDR); Nankani, Grimes (LA1DR); Mahar (LA1BR); Kharas, Parel, Furtado (LA1C1); Faiz (LA1IU); Bernard, Coirolo, Azevedo, Gross, Oliver, Simpson, Wittenberg (LA1ER); Collell, Carvalho, Ninio o/r (LEGLA)

**MANAGEMENT RESPONSE TO
REQUEST FOR INSPECTION PANEL REVIEW OF
ITAPARICA RESETTLEMENT AND IRRIGATION PROJECT
LOAN 2883-BR**

The Management and Staff of the responsible Department have reviewed the Request for Inspection Panel Review of the Itaparica Resettlement and Irrigation Project ("the Request") filed by the Pólo Sindical dos Trabalhadores Rurais do Submédio São Francisco on March 19, 1997. Under the Board Resolution establishing the Inspection Panel (Resolution 93-10, 9/22/93) this Request is ineligible for consideration because more than 95% of the Loan Proceeds had been disbursed as of the date the Request was received. However, in the interest of transparency, the following detailed response has been prepared.

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Abbreviations Used in this Document

CHESF	-	São Francisco Hydroelectric Power Company
CODEVASF	-	São Francisco Valley Development Commission
ELETRONBRAS	-	Brazilian Electrical Power Holding Corporation
FUNAI	-	National Indian Foundation
FUNDAJ	-	Joaquim Nabuco Foundation
GOB	-	Government of Brazil
IICA	-	Interamerican Institute for Agricultural Cooperation
IP	-	Inspection Panel
MME	-	Ministry of Mines and Energy
O&M	-	Operation and Maintenance
OD	-	Operational Directive
OMS	-	Operational Manual Statement
SAR	-	Staff Appraisal Report
VMT	-	Maintenance Payment
WUA	-	Water Users Association

Executive Summary

The Itaparica Resettlement and Irrigation Project is a stand-alone resettlement project designed entirely for the benefit of the population affected by the construction of the Itaparica dam and reservoir. Construction of the dam, which was not financed by the Bank, began in 1979. It was needed to provide an additional source of power for the rapidly growing Northeast region of Brazil. Completion of the dam to bring additional power on line was considered a top priority by the Government and regional leaders. A plan for resettling the 8,100 families to be dislocated by the reservoir had not been considered in depth during the design and construction of the dam. As a consequence, Bank staff, in the mid 1980s, in the context of a dialogue with the power sector, strongly advised that adequate provision be made for the affected people. In response to this dialogue, the Government of Brazil requested financing for the Itaparica Resettlement Project in 1986, some seven years after the construction had begun and barely two years before flooding of the reservoir was to take place.

The urban and rural housing and other infrastructure was completed in a timely fashion and the affected population was successfully resettled. The main problem in the Project has been the completion of irrigation infrastructure for the 5,800 farming families affected by the dam. The scope of the agreed project financed by the Bank is limited to rural housing, urban infrastructure and five major irrigation subprojects encompassing about 4,500 irrigated plots. The Bank's accountability should not be extended to non-Bank-financed irrigation subprojects encompassing some 1,300 plots. As was recognized at appraisal, the project involved high risk, given the relatively scanty information available on soil conditions in the region, the technological challenges imposed by terrain and soils, and the social problems involved in dislocating people from their homes. The Borrower's commitment to the project was not strong at the outset and fluctuated throughout implementation. The project was executed during a tumultuous period of Brazil's recent history, when galloping inflation, political change and shifting priorities took their toll on execution. Lack of cooperation among different agencies and the politicization of resettlement caused additional problems.

As a consequence of these factors, long delays and cost overruns affected implementation. Current program costs are estimated at more than double the original estimates and approximately 3,560 of the 5,800 farming families affected by the dam are still awaiting completion of irrigation on their lots. Nevertheless, during the time that these families have been waiting, they have been adequately housed and have received regular maintenance payments. Also, many impoverished and landless farmers, accounting for 60% of the rural families, acquired major assets (housing and irrigated land) through the project.

Throughout the life of the project, the record shows that Bank staff have sought to identify problems as they arose and have taken many extraordinary measures to resolve them. There were regular supervision missions conducted by qualified Bank staff and consultants. These include serving as mediator between agencies and groups, suspending disbursements because of inadequate provision of counterpart funds, approving \$100 million in supplemental funds for the loan, and temporarily raising the disbursement rate from 28% to 100% during most of 1992. The Bank has maintained close contact with representatives of the affected population during project supervision, and many of its actions were taken out of concern for the population and were supported by their representatives. In fact, the NGO that presented the Request has informed Bank staff that its main motivation is to maintain the Bank's involvement in the Project. While the

current situation is far from ideal, the shortcomings to which the Request points do not arise from the Bank's failures to follow its policies.

The Government of Brazil has indicated its commitment to meet the project objectives, and, in November 1996, requested a fourth extension of the project through the end of 1997. Since funds under the loan for irrigation infrastructure are now exhausted, the purpose of the extension was to permit the disbursement of less than US\$6 million, primarily for training directed at supporting the establishment of water user associations (WUAs) to operate and maintain the completed irrigation systems. The Bank and the Borrower have agreed on a set of benchmarks for 1997 that include major advances in the completion of civil works, completion of revised engineering designs where necessary, land titling, and formation of WUAs. In addition, the Government established an Interministerial Committee in January 1997 with the objective of reviewing the program and making recommendations for accelerating its completion. The recommendations are expected in the near future. In the meanwhile, the Government has requested that the Bank continue supervision of the project through December 1999, two years after the present loan closing date. In the judgment of Bank staff, given the government's continued commitment to the overall Itaparica Program in general and the Bank-financed project in particular and the provision of additional financing amounting to about US\$100 million, satisfactory solutions can be found for the remaining rural families by mid-1999.

I. INTRODUCTION

Background

1. The Itaparica Resettlement and Irrigation Project was approved in 1987 for a loan amount of US\$132 million equivalent. A supplemental amount of US\$100 million equivalent was approved in 1990. Of the aggregate loan of US\$232 million equivalent, \$226.143 million, or 97.5%, had been disbursed as of March 12, 1997, the registration date of the Request.¹ The main objective of the project is stated as follows:

The project aims at the resettlement of some 2,800 urban and 5,300 rural families (including the Tuxá Amerindian communities) displaced by the Itaparica reservoir on the São Francisco River. In particular, the project seeks to restore, and if possible, improve the incomes and living standards of the involuntarily resettled rural population.

2. The resettlement project is linked to the Itaparica dam which began construction in 1979 and which went into operation in 1988. The dam was financed and built by the Brazilian Electrical Power Sector Holding Company, ELETROBRAS without World Bank involvement in the design and construction phases. During 1986, the Government of Brazil (GOB) requested financing to support the rehabilitation and financial restructuring of the power sector in Brazil. Preparation of this loan revealed a need to strengthen the sector's capacity to identify and mitigate potential environmental problems. Among the specific needs identified was the need for a comprehensive resettlement plan for the people affected by the then nearly complete Itaparica dam.²

3. In June 1986, the Bank approved a US\$500 million loan to the Government of Brazil (GOB) (Loan No. 2720-BR). Although this loan did not contribute to the financing of the Itaparica dam³, the Bank and the Borrower agreed that greater attention should be paid to the resettlement needs of the population affected by the Itaparica Dam. Accordingly, a clause in the Power Sector Project Agreement (Sec.2.03) stipulates that

(a) . . . ELETROBRAS shall prepare and furnish to the Bank an action plan, satisfactory to the Bank (the Itaparica Resettlement Plan) containing specific measures to resettle the human communities to be affected by the Itaparica Hydroelectric Project; (b) ELETROBRAS shall cause CHESF to carry out the Itaparica Resettlement Plan . . . in a manner satisfactory to the Bank . . . "

4. Subsequently, ELETROBRAS requested separate Bank financing for the Itaparica Resettlement Plan. Under the Itaparica Loan Agreement, the Borrower, ELETROBRAS, onlent

¹ The original loan amount of US\$132 million equivalent was increased in 1990 by US\$100 million equivalent, to cover cost overruns under an amending agreement. From the legal and operational standpoints, the original and supplemental loans constitute one single loan. There is one amortization schedule with two tranches; the project financed by the two tranches is the same. There is a single closing date.

² ELETROBRAS and CHESF adopted a comprehensive Program to meet the needs of all 8,100 families affected by the Dam. The Project appraised by the Bank and described in the Loan Agreement is narrower in scope as explained below. This paper will maintain a distinction between the comprehensive Program and the Bank-financed Project which is narrower in scope.

³ As in other sector loans, this loan did not disburse against specific expenditures but rather against general imports. No equipment, works or services directly used in the construction of Itaparica was procured with the proceeds of this loan.

the proceeds of the Loan to its subsidiary, CHESF, the regional power authority, which implemented the project. It was further agreed that

whenever there is reasonable cause to believe that the funds available to CHESF will be inadequate to meet the estimated expenditures required for carrying out the Project, [the Borrower will] make arrangements promptly to provide or cause CHESF to be provided with such funds as are needed to meet such expenditures.

5. The Itaparica dam affected altogether about 8,100 families, or about 40,000 people. Of these, about 2,800 families were resettled in urban areas that were rebuilt under the Program. The remaining 5,300 families were resettled in about 110 agrovilas, or rural villages, built close to agricultural subprojects with irrigation facilities. An additional 500 farming families requested relocation to an urban area but wished to continue farming, creating a total demand for 5,800 irrigated plots. The irrigation works were built under two different financial arrangements: five irrigation subprojects encompassing some 4,500 irrigated plots were cofinanced by the Bank and ELETROBRAS; and about 1,300 more irrigated plots were designed and developed without Bank financing.

6. The overall Itaparica Resettlement Program designed by CHESF with assistance from the World Bank is broader in scope than the Itaparica Resettlement Project financed by the Bank. The Bank-financed Project consists of three components, namely,

- (a) Rural Resettlement, consisting of (1) five major irrigation subprojects consisting of some 4,500 plots⁴; (2) agricultural production and social support; (3) rural housing (5,300 houses); (4) water supply; (5) a road system; (6) a primary power supply system to serve the agricultural and domestic requirements; and (7) education, health and social services;
- (b) Urban Resettlement, consisting of relocation of four towns including (1) construction of urban infrastructure; (2) provision of serviced residential plots, building materials and construction of new housing; (3) public buildings for health, education, post offices and telecommunications, police services, cemeteries, etc.; (4) provision of serviced plots for commercial use; (5) provision of community infrastructure such as replacement churches, public squares, etc. (6) a road system; (7) an electric power system for urban settlements; and (8) water supply and sewerage;
- (c) Fisheries Research.

7. During preparation, CHESF presented detailed plans accommodating the 1,300 families mentioned above.⁵ The Bank did not agree to finance these subprojects because, in most cases,

⁴ The 4,500 plots were accommodated in two "Lakeside Subprojects" -- Borda de Lago, Bahia; Borda de Lago, Pernambuco -- ; and three "Special Projects" -- Brígida; Carafbas, and Pedra Branca -- (see Annexes A and B).

⁵ Those not financed by the Bank include the Apolônio Sales, Manga de Baixo, Brejinho, Jeremoabo, Remanso, Canafistula, Itacuruba, Inajá (Tuxá), Jusante, Rodelas (Tuxá), Ibotirama (Tuxá), and Barra do Tarrachil subprojects (see Annex B). In most cases, these subprojects involved technical approaches that Bank experts regarded as experimental and untried. For example, the Itacuruba subproject was an integrated hog-fish-duck production scheme that was technologically quite challenging and seemed more complex and excessively needful of management attention. The Borrower exercised its right not to accept the Bank's advice in these cases. These subprojects were designed for a total of some 1,268 families, leaving a total of some 4,541 families in subprojects

they did not meet feasibility criteria, either because of soil conditions in the sites identified or because of the untried nature of the technology involved. These 1,300 families include the Tuxá indigenous group which was not included in the Bank-financed package for another reason: GOB policies at the time would not allow the Bank to provide direct financing for indigenous groups. The Borrower decided to implement these subprojects using its own funds. The relevant policy in effect at the time (OMS 2.34 of February 1982) stipulates that the Bank will assist projects "only when satisfied that the Borrower or relevant government agency supports and can implement measures that will effectively safeguard the integrity and well-being of tribal people" (para 5). Therefore the Bank included language in the SAR and Project Agreement, under which CHESF agreed to formulate and implement a special plan to assist the Tuxá.⁶

8. The Itaparica Resettlement Project was the Bank's first stand-alone resettlement project. Launching the hydropower dam was a high priority since rapid urban and industrial growth in the Northeastern region had created high demand for electricity with resulting power rationing and consequent economic losses estimated at US\$2 billion in 1987 alone. The high priority placed by the Borrower on flooding the reservoir so that power generation could begin created a tradeoff in the resettlement project between high quality planning and speed of execution. In the final analysis, the Bank decided it could better help provide assistance to the resettler population if it became a partner along with ELETROBRAS and the GOB. The project as a whole was conceived as a rural development project designed not only to restore the livelihood of families dislocated by the inundation of Itaparica, but to raise the standards of living of a substantial segment of the resettled population.

MAJOR EVENTS ASSOCIATED WITH ITAPARICA	
1979 - Beginning of work on Itaparica Hydroelectric Dam	
1986 - Agreement signed among MME/CHESF/Pólo Sindical to begin resettlement	
1987 - Started implementation of the agricultural settlements (agrovilas)	
1987 - US\$132 million loan approved by Bank (September)	
1988 - Filling of reservoir and start up of hydropower plant operation	
1989 - Construction of irrigation works halted due to lack of counterpart funds	
1990 - Bank agrees to US\$100 million supplemental loan	
1990 - Bank suspends disbursement of Loan	
1991 - Resumption of irrigation works	
1992 - Bank agrees to temporarily finance 100% of works	
1993 - Operation of first irrigated plots begun	

9. There was a risk in the Bank's entering at this stage in the resettlement project that was recognized in the Staff Appraisal Report (SAR) as follows:

Resettlement as a result of manmade changes in the environment is always a difficult task. Risks are increased due to the tight timeframe in which the resettlement must be carried out because of Northeast power shortages, the need for effective cooperation among a number of public agencies, and complex social and technical issues involved in the establishment of newly irrigated agricultural areas...

cofinanced by the Bank and ELETROBRAS. The Bank cannot legally be held accountable for the implementation of these subprojects.

⁶ Such planning, under the name "Indigenous Peoples Development Plan," would be required under OD 4.20 "Indigenous Peoples" adopted in 1990.

10. Due to the timing of the Bank's entry into the project, it was not possible to plan the resettlement simultaneously with the hydropower dam as Bank policy prescribes. This was acknowledged at the time of appraisal, but the Bank recognized that the human need was great, especially in view of the relative lack of resettlement planning done up to that date. Nevertheless, virtually all the principles found in OMS 2.33 were present in the design of the Itaparica Resettlement Project including participation in the design and willing consent by the resettlers, determination of the needs of the resettlers, provision of necessary services such as training and health, compensation for lost assets, etc.

Participation by Beneficiaries

11. Shortly after construction began on the Itaparica Dam, a confederation of rural labor unions in the municipalities to be affected was formed under the name Pólo Sindical dos Trabalhadores Rurais do Submédio São Francisco. This group sought to represent the interests of the rural population in the region affected by the Dam and Reservoir and it held a number of meetings with CHESF management and organized demonstrations. The most dramatic of these occurred in December 1986 when 2,000 potential resettlers occupied the Itaparica construction site. After the World Bank entered the discussion in 1986 Pólo Sindical looked to the Bank as a sometime ally, sometime mediator in its disagreements with the government. In an agreement signed on December 6, 1986, ELETROBRAS, CHESF, the Ministry of Mines and Energy and representatives of Pólo Sindical agreed on a series of parameters concerning resettlement of rural families, including the following:

- definition of rural producers eligible for resettlement benefits;
- determination of the size of the irrigated plot from 1.5 to 6 ha per family to be provided to rural producers, considering their landowning status, amount of land owned and the family workforce available;
- provision of one salary per family equal to at least 2.5 minimum salaries payable by one of the construction firms through the first harvest.⁷

12. Agreement was also reached on the size and type of housing provided in some 110 agricultural hamlets (or agrovilas).

13. Shortly after the agreement was reached, contractors began building the agrovilas, each of which typically consisted of some 40-60 individual homes of 45-65m², each with electrical power, running water, water closet and septic tank. Later, after negotiation with CHESF, each home was also equipped with a 500 liter water storage tank. In addition to some 5,322 homes⁸, the contractors also built 74 schools and 16 health posts. In brief, the new housing for the resettlers was ready very quickly and the population was successfully relocated as the reservoir began to be flooded in March 1988. In the original project design, the productive infrastructure was expected to be completed by the end of 1988. It was recognized that there would be a hiatus between relocation of the rural families and completion of the irrigation works, the reason for which the CHESF/Pólo Sindical agreement included a maintenance payment (VMT) equivalent to 2.5 minimum salaries per month. However, there were major delays in completion of the productive infrastructure in the five major resettlement areas, each linked to one irrigation subproject

⁷ This compensation would later be transformed into an entitlement, payable by CHESF, with no work requirement at the insistence of the Pólo Sindical and the basis for calculating the size of the benefit would change several times over the life of the project.

⁸ The number of homes in *agrovilas* for rural dwellers is smaller than the number of agricultural lots because some of the farm families settled in urban areas.

mentioned above, with the result that a substantial segment of the resettled population has not had access to cultivable land and has been obliged to subsist on the VMT for as much as eight years after the move.

14. With hindsight, it is possible to discern that some of the problems arose from the terms of the agreement with the affected rural dwellers, terms that some observers regard as excessively costly. Even using the initial cost estimate for the project, the cost per relocated family was unusually high for projects of this sort (nearly US\$60,000). The high cost of the project exacerbated the shortage of counterpart funding that was to plague the project throughout its life. It is possible that in a different political environment, without the time pressure, a solution could have been found that would have been technologically simpler, lower in cost and more satisfactory to the displaced population.

Current Situation of the Resettled Families

15. The resettlement of 2,800 urban families was carried out smoothly and without major difficulties. The housing and associated infrastructure constructed by CHESF are of considerably higher quality than the urban settlements they replaced and the quality of life of the resettled families seems to have improved significantly. Economic and social life in these settlements has been fully restored to pre-relocation levels by any reasonable measure.

16. The picture in the rural settlements (*agrovilas*) built to accommodate some 5,300 agricultural families is mixed. While good quality housing and infrastructure are in place, the productive infrastructure needed to allow the families to restore their agricultural production is not complete in many communities. At present, about 2,239 families have plots with working irrigation systems.

II. PROJECT IMPLEMENTATION AND BANK SUPERVISION

Implementation Problems

17. Throughout implementation, the project has been affected by three main sources of difficulties: financial, technical and social/institutional. On the financial side, considered to be the major element hindering project implementation, the project has suffered from insufficient timely allocation of counterpart funding by the Borrower and from cost overruns. On the technical side, there have been difficulties related to the technical design of some of the irrigation perimeters, and unforeseen engineering problems with the main conveyance systems of water to the irrigation sites. There have also been social and institutional problems. While the rural families were resettled on the best available patches of land in the vicinity of the reservoir, the entire area is within the drought polygon of Northeastern Brazil within which rainfed agriculture has always been extremely risky. Except where these sites were close to the reservoir or river, until the irrigation systems were completed, there was a general lack of employment, especially in the three western subprojects (Caraibas, Pedra Branca and Brigida, See Map, Annex A). There were additional problems with adjustment to the new location, problems with the delivery of social services, transport, etc.

18. The Itaparica Resettlement Project was implemented during a tumultuous period of Brazil's recent economic and political history. While planning and construction of the dam took place mainly during the period of military rule, the resettlement Program was planned and implemented after the restoration of democratic presidential elections. In the period following military government, there was a substantial resurgence of popular movements and greatly raised expectations. Public officials felt that demands from parties affected by public works had to be given greater weight in decision-making. There was great public sympathy for the plight of the families who would be resettled, but after the crisis passed, and the floodgates of the Itaparica dam were closed, the political pressure favoring the resettlement Program decreased considerably and other concerns took precedence.

Financial Problems

19. The macroeconomic situation was also unstable. During the late 80s and early 90s, Brazil underwent some of the highest levels of inflation in its history. In addition, the budget allocation process was in turmoil. Budgets were drawn up and approved early in the fiscal year, but funds were actually only released for capital projects late in the year, once as late as November. The Itaparica Resettlement Project competed for funds with the Xingó Hydropower project, another high priority power project on the São Francisco River, downstream from Itaparica. In addition to competition from Xingó, foreign debt service and other obligations, ELETROBRAS experienced fluctuations in its income from its subsidiary power companies which, on several occasions, failed to make remittances to their parent company. As a consequence, ELETROBRAS was chronically delayed in its funding of the project (Table 1) a situation that eventually led to a temporary suspension of disbursements on the project.

Table 1

Itaparica: Annual Disbursement Totals	
YEAR	US\$
1987	40,125,588.69
1988	13,301,596.63
1989	14,334,897.47
1990	33,623,405.69
1991	22,176,126.91
1992	71,845,125.07
1993	19,916,135.05
1994	4,473,517.43
1995	1,281,848.13
1996	3,789,083.86
1997	1,275,221.98
Total	226,142,546.91

20. Project costs have been much higher than anticipated at appraisal. The increases have been due to various factors. Total project costs were estimated at appraisal at US\$304 million. By June 1989, the estimated cost had risen to an estimated US\$614 million. As of April 1997, the total estimated cost of the Itaparica Resettlement Project had risen to about US\$774 million. The factors contributing to this cost increase are complex and it is difficult to weigh the importance of each. The first factor contributing to the cost overrun seems to be an error that occurred at appraisal when the cruzado/US\$ exchange rate (Brazilian cruzados into US dollars) was not updated resulting in the underestimation of the dollar costs. The second major factor was the shortage of counterpart funds, especially during 1989 and 1991 which resulted in reduction in the rate of work and, in some cases, the demobilization of contractors. Technical factors also led to cost increases, mainly the need to revise construction designs as more detailed topographical and soil data became available during project implementation.⁹ Finally, wavering Borrower commitment and conflict among different governmental agencies also contributed to costly delays.

Technical Problems

21. Discussions between CHESF and rural resettlers took place during 1984 and 1985 and some 12 different sites were discussed in terms of their proximity to the resettlers' homes, transport and other characteristics. Most of these sites were close to the future reservoir. However, when the Bank and CHESF began discussions of site selection in 1987, more stringent soil requirements were set in view of the Bank's feasibility criteria¹⁰. The Bank brought to the project area a number of widely respected experts, recruited in Brazil and internationally, in an attempt to find the best sites to locate the irrigation areas. As a result, three of the five major irrigation schemes were located in an upstream area, the largest of which is actually well beyond the reservoir's westernmost tip (see Map, Annex A), and therefore several hundred km from the original riverside locations. These sites were identified on the basis of soil surveys conducted prior to project preparation and with the assistance of experts from the US Bureau of Reclamation and from the

⁹ At project startup, there were aerial photos, satellite images and topographical maps at 1:25,000 scale, inadequate for the engineering design of the conveyance canals and irrigated plots. The notes to the Table in Annex B also provide some indications of how the cost of the project escalated during implementation.

Extension Service of Israel.¹¹ They required substantial lifting of water and water transport over long distances. The selection of sprinkler technology with its requirement of pressurized pipes, also raised the cost and complexity of implementation.

22. During project implementation, as sampling gaps were filled in, some of the planned irrigation perimeters required adjustment, leading to additional delays and higher costs. As work progressed, engineers developed a new solution for carrying water to the Caraibas site, largest of the western sites, providing irrigation plots for some 1,400 families. The fluctuation in project finances referred to above also led to partial demobilization or slowdowns by the contractors carrying out design and construction work in several locations.

Social/Institutional Problems

23. Some of the problems encountered by the Itaparica Resettlement Project have been institutional in nature. Among these can be cited occasional poor communication between ELETROBRAS and its subsidiary CHESF, responsible for executing the irrigation works. This situation reached a head in 1990 when ELETROBRAS established a special oversight group that subjected CHESF's operations to closer physical and financial scrutiny. Another institutional difficulty arose in the relationship between the Ministry of Finance and ELETROBRAS. Although the Government of Brazil (GOB) is the guarantor of the Loan and of the performance of ELETROBRAS, during the early years of the project, the Ministry of Finance was extremely reluctant to release budgetary funds for the implementation of the project to make up for shortfalls in ELETROBRAS' allocations. CHESF has also had strained relations with FUNAI, the National Indigenous Foundation. In CHESF's view, FUNAI's stance has made reaching a satisfactory plan for the Tuxá more difficult. Under FUNAI's tutelage, the Tuxá have been suspicious of CHESF's proposed solutions, demanding the right to contract their own expert consultants, and rejecting several proposed solutions. FUNAI itself made a proposal for the Ibotirama Tuxá with a cost out of proportion to the irrigation systems provided for the other resettlers in the system, which has not been accepted by CHESF.

24. There have also been occasional breakdowns in communication between CHESF and Pólo Sindical. While Pólo Sindical can claim to be the legitimate voice of most of the resettlers, its leadership shifted with some frequency and sometimes resorted to public confrontation when negotiation might have achieved its goals. CHESF, on its side, has frequently postponed meetings with the Pólo Sindical leadership and has not always disclosed information fully. Finally, there were problems between CHESF and the Fundação Joaquim Nabuco (FUNDAJ), a research institution contracted to carry out project monitoring, which often adopted an adversarial approach to CHESF. CHESF, on its side, suspended payments to FUNDAJ for a long period. In nearly all these instances, the Bank has taken on the role of mediator between institutions, a role it has carried out with mixed success.

¹⁰ Some of the areas initially selected by CHESF for resettlement had soils which were inadequate to support irrigated agriculture. In fact, most of area immediately around the reservoir -- which would have been the first choice on the criterion of proximity -- is made up of poor, shallow, mainly sandy soils, unsuitable for irrigation.

¹¹ While areas with irrigable soils were identified from existing survey data and spot checks, the actual dimensions of these areas had to be revised with more sampling as project implementation proceeded.

25. From appraisal in 1987 through 1990, the task manager for the project was resident in Recife, where meetings, site visits and discussions with CHESF took place on a weekly or even daily basis. From 1990 onward, the project was supervised from headquarters. From August 1996 to date, a member of the Bank's Brazil water team has been stationed in Brasilia allowing frequent opportunities for contact with CHESF and CODEVASF, the agency responsible for overseeing operation and maintenance of the irrigation schemes as well as training of the farmers. Throughout the period of implementation there was a normal number of supervision missions in addition to the frequent informal contacts between the task manager, CHESF and ELETROBRAS. Official correspondence with the Borrower during the entire period shows that the Bank took a very strong position on the delays in implementation and the lack of counterpart funds. Although the Brazilian portfolio was experiencing problems across the board, the Bank frequently stressed the human factor in the Itaparica situation.¹²

26. Over the life of the project, the Bank, in addition to normal supervision, also took a number of extraordinary measures to improve project performance (see Box). During 1989, the Borrower, recognizing the difference between estimated and actual project costs, requested a supplemental loan of US\$100 million. Cost overruns are usually considered to be the responsibility of the Borrower, but, in view of the situation of the resettled population, management felt that this was an exceptional case. The supplemental loan was approved by the Board in February 1990, signed in November 1991, became effective in May 1992, and began to disburse in January 1993 after the entire original loan amount had been disbursed.

Exceptional Actions Taken by Bank during Itaparica Project

Supplemental loan of US\$100 million in 1990
Suspension of Disbursements in 1990
Raised financing percentage to 100% of Works for 12 months in 1992/93
Closing Date of Loan Extended 4 Times

27. The financing of a cost-overrun is unusual but was agreed to in view of the fact that errors had been made in the use of exchange rates and in view of the extreme need of the resettled families.¹³ An independent report filed on October 3, 1989 concluded that,

a redesign of the project is neither feasible nor desirable, since almost all works are under construction or have been bid, and a redesign at this stage would not only likely

¹² For example, in November 1988, the Portfolio Manager of the managing division wrote to the Borrower stating, "... the problem of preserving an adequate level of resettler satisfaction during the transition period has been discussed at length in the past. ... we are aware that the primary social problem lies in the lack of useful work to do." In December 1993, the Division Chief wrote to the President of ELETROBRAS, stating, "We were sorry to find that no progress was made with respect to the solution of current problems and more significantly finding a permanent solution to the delivery of health and education [services] to the resettled population."

¹³ It should be noted that the approval of the supplemental loan by the Bank complied with its policy on the financing of cost overruns (Operations Policy Note 3.12 of February 8, 1984) because the Government was unable to finance the additional costs, the project could not be reduced in scope, and it was still economically viable.

raise costs, but further delay completion of the project and increase the hardships of rural families.

28. Later in 1990, when counterpart funding had slowed to a trickle, the Bank issued several warnings to the Borrower after which it exercised its legal remedy under the Loan Agreement by suspending disbursements as of October 5, 1990. After discussions with the Borrower and presentation of a financing plan, disbursements were resumed on January 3, 1991. Project implementation improved marginally, but many of the technical, financial and general macroeconomic problems referred to above persisted. In March 1992, in view of ELETROBRAS' difficulties in providing counterpart funds, the Bank agreed to increase its financing of civil works from 28% to 100% which was done through January 1993. As a result, 1992 was the year of greatest amount of disbursement over the life of the project (Table 1). This made significant advances in project works possible so that in 1993, the first irrigation schemes (Borda de Lago Bahia and Borda de Lago Pernambuco with a total of 790 plots) became operational. Subsequently, in February 1994 the irrigation schemes in Brigida (431 plots), and Pedra Branca (709 plots) also became operational. Finally, at the request of the Borrower and with the support of Pólo Sindical, the closing date of the loan has been extended four times. The most recent extension was granted for one year (through December 31, 1997) even though more than 97% of the loan has been disbursed. This is unusual, but the request largely reflects the concerns of the affected population who have stated several times in meetings that the Bank's participation is highly positive from their perspective.¹⁴

29. In summary, Bank supervision of the Itaparica Project was intense throughout the life of the project. There have been innumerable missions, informal and formal discussions with CHESF and ELETROBRAS management, and special measures taken aimed at assisting the Borrower to complete the project as adequately and quickly as possible. Since the inception of its involvement, the Bank's uppermost concern was for the welfare of the resettlers who were obliged to move because of the inundation of the Itaparica Reservoir. It is possible that had the Bank been involved in the financing of the hydropower project, timely application of the resettlement policy then in place (OMS 2.33, 1980) would have led to better planning. However, successive reviews of the project by different parties¹⁵ have concluded that there were no significant lapses in the Bank's supervision and oversight of the project under its guidelines and procedures as summarized.

¹⁴ Given the strong support by Pólo Sindical for the Bank's role in the project, the Request by Pólo Sindical to the Inspection Panel might seem paradoxical. In fact it is consistent with the goal of attempting to induce the Borrower to request continued Bank involvement.

¹⁵ Perhaps the most comprehensive of these was "Itaparica Resettlement Review" by Syed S. Kirmani, October, 1989.

III. MANAGEMENT RESPONSES TO INSPECTION REQUEST

30. First, it is important to recognize that Bank Management is fully aware of the issues raised in the Request to the Inspection Panel and of the circumstances that led to its having been filed. The Bank entered the project with the intention of assisting the Brazilian authorities in to develop and implement a sound resettlement plan thereby mitigating potential hardship. Bank staff and management have met on many occasions with representatives of the affected population and have visited the resettlement sites and understand the frustration and disappointment of the farmers who are living on the VMT and unable to return to a fully productive life. The Bank's goals have been and still are to achieve the original goals of the project of helping to restore the affected population to full productivity. It is in this spirit that management responds to the Request.

31. The following section reviews the principal issues raised by the Request and presents a response by Bank Management.

Complaint: Irrigation Works are Incomplete

32. The statement is factually correct, in that many resettled farm families still do not have operating irrigation systems at their disposal. However, the information in the Request is not fully accurate. First, it should be pointed out that the Request omits mention of the VMT which has been paid faithfully since the inception of the resettlement and mitigates serious material hardship to the resettlers (see below for a detailed discussion).

33. With regard to construction itself, Table 2 shows the current (March 1997) data on operating irrigation systems and those under construction. Part of the discrepancy between the Request and CHESF's data lies in the use of the term "design phase." In some subprojects, construction and equipment acquisition is well advanced, but work had to be suspended when unexpected soil problems were encountered requiring supplemental pedological studies. These studies are time consuming and a source of frustration to all concerned, but failure to carry them out could result in waste of resources and even greater frustration in the future. A second discrepancy arises from the fact that Bank financing covered only 5 irrigation subprojects (see paragraph 6(a), footnote 4 and Annex B).¹⁶ The remaining subprojects mentioned in the report and in Annex B, covering some 1,300 families, were not included in the project because they did not meet the Bank's feasibility criteria. Given the Bank's late entry into the project, it was not possible to demand that all resettlement subprojects meet the basic feasibility criteria laid down by the Bank's experts.

¹⁶ Considering all subprojects, including those not financed by the Bank, the summary breaks down as follows: In Operation - 39%; Under Construction - 41%; Design Phase - 20%. Contributing to this situation is the fact that some of the schemes financed without Bank support have failed for technical reasons and entirely new schemes had to be designed (see Annex B). Another contributing factor are the difficulties in negotiations between FUNAI and CHESF which delayed implementing a solution for the Tuxá Indigenous Group.

Table 2: Status of Irrigation Works

Status of Irrigation Works¹⁷	Pólo Sindical (Request) (March 1997)	Bank-Financed Subprojects (March 1997)
In Operation	35%	44%
Under Construction ¹⁸	34%	53%
Design Phase ¹⁹	31%	3%

34. CHESF and the Bank continue to finance the construction of three important subprojects (in Borda de Lago, Pernambuco and Caraíbas). Borda de Lago Pernambuco subproject is scheduled for June 1997, and about 40% of the Caraíbas subproject is scheduled to begin operation before the end of 1997. All Bank-financed subprojects will be complete by the end of 1998 although Bank financing will only be available through December 31, 1997. In addition, CHESF continues to finance studies with the objective of defining solutions for the implementation of the remaining subprojects (see Annex B).

Complaint: Bank Resettlement Guidelines were not Followed

35. As indicated above, Bank policy in place at the time of appraisal, and those adopted in 1990 have been followed in all major aspects, except for the timely preparation of the resettlement plan together with the underlying dam construction that caused the resettlement.

Complaint: The Tuxá Indigenous Community was Resettled but is Unable to Resume Production Because the Irrigation System is Still Under Design.

36. The Tuxá Amerindian population consisted of about 211 families in 1987, living in the City of Rodelas and cultivating land with ditch irrigation on Viúva Island in the São Francisco River that was inundated by the reservoir. As mentioned above, the GOB did not allow Bank financing for the Tuxá irrigation schemes. However, there are several clauses in the Loan and Project agreements stipulating specific actions aimed at providing support for this population. The SAR states that "Resettlement of the Tuxá Amerindian community would be treated as a separate operation." Although the Bank did not finance the Tuxá resettlement plan, the Bank closely supervised the development of plans to deal with this group and there were frequent meetings between the Bank, CHESF and FUNAI, with the Bank frequently playing mediator between the

¹⁷ This data refers to the proportion of lots with fully operational irrigation systems out of a total of 5,809 irrigated lots of which 4541 lots received financing from the Bank. "Fully operational" refers to lots with irrigation infrastructure installed and tested.

¹⁸ Construction has resumed on the large Caraíbas subproject with 1406 lots; full operation is scheduled for 1998. In Barreiras, Bloco 2, designed for 600 families already relocated in the area, significant progress has already been made in the implementation of the irrigation infrastructure including the reservoir, pipeline, water intake and power sub-station all of which are concluded; all the necessary hydro-mechanical equipment has been purchased and delivered to CHESF. However, the implementation of the on-farm system was suspended because unexpected soil problems were encountered. Soil experts were brought in to help reformulate the design of the on-farm system to accommodate permanent crops. Construction is scheduled to resume shortly and conclusion of the works is expected by the end of 1998.

¹⁹ The detailed engineering design for these works is undergoing adjustments and the works will be put up for bids during 1997.

other two agencies. More than half the correspondence between the Bank and the Borrower raises this issue and it is mentioned in virtually every supervision and back-to-office report.

37. Under Brazilian law, the Tuxá are under the legal tutelage of the National Indian Foundation (FUNAI) and cannot act independently without FUNAI's consent. Because of its special legal status, the Tuxá were the object of a special resettlement plan that was prepared with the participation of the community and under the supervision of FUNAI. Two operating agreements were signed between CHESF and FUNAI in 1986 and 1987 laying out the fundamentals of what amounts to an Indigenous Peoples Development Plan²⁰ including housing, infrastructure, production systems, and social support. Housing and community infrastructure have been fully implemented, but productive infrastructure has still not been completed. The Tuxá were included in the support payments made by CHESF to rural resettlers while they awaited restoration of productive infrastructure. The main reason for the delay is the inability of CHESF and FUNAI to reach agreement on the location and specifications of irrigation systems for the Tuxá.

38. About the time of these operating agreements, the Tuxá community split: one faction was resettled in a separate subdivision of the rebuilt city of Nova Rodelas, while another faction of some 100 families requested and was granted resettlement in the Municipality of Ibotirama, some 800 km upstream on the São Francisco River. In Ibotirama, CHESF secured an area of 2,082 ha for the Tuxá and constructed housing for all the resettled families, completed in 1986 in Ibotirama and 1987 in Rodelas. It also installed a ditch irrigation system (comparable to the system previously in use on the Viúva Island) covering 100 ha. An additional area of 100 ha is under construction that will utilize sprinklers. The total irrigated area planned by CHESF would reach a total of 380 ha including the areas already installed and under construction. In May 1996, FUNAI presented a proposal to CHESF entitled "Tuxá Land Management" requiring investments totaling about US \$37.5 million, or about \$272,000 per family including the new families formed since the Tuxá moved to Ibotirama. In September 1996, considering that the proposal presented by FUNAI was unreasonably costly in light of the average cost of the resettlement to date, CHESF made a counter-proposal of a subproject costing about US\$7 million, and is awaiting a response from FUNAI. In the meantime, the Tuxá families in Ibotirama are receiving the VMT in addition to the income they derive from the land they have under irrigation.

39. In Nova Rodelas, the Tuxá were re-settled in a separate section of the town and a parcel of land of some 4,000 ha about 15 km away from the town was selected by the community and acquired. However, there was a protracted dispute between FUNAI and CHESF concerning the soil quality of the land selected. A new parcel of the same size has now been identified less than 1km from the town, with an estimated 690 ha of irrigable land. The parcel would be acquired by CHESF after an expropriation decree is obtained by FUNAI. CHESF has proposed to install a sprinkler irrigation system covering some 380 ha at this site. During the first semester of 1997, a plan entitled "Tuxá Land Management - Rodelas" will be drawn up and presented to CHESF for financing. In the meanwhile, the Tuxá families in Rodelas are receiving the VMT in addition to the income they derive from rainfed agriculture.

40. Unfortunately, the resettlement and rehabilitation of the Tuxá has been hampered by institutional difficulties and distrust on the part of the indigenous population. The Bank is continuing to make efforts to reach a satisfactory conclusion. In the meantime, the Tuxá population, while unable to resume irrigated farming, is not undergoing financial hardship.

²⁰ An Indigenous Peoples Development Plan was not required in OMS 2.34 in effect at the time of project appraisal.

Complaint: Irrigation Systems in Operation Suffer From Serious Operational and Maintenance Problems:

41. The Request does not specify the extent or nature of the alleged operational problems. This issue has not been raised at any of the numerous meetings between Bank Staff and Pólo Sindical during supervision missions. As expected in any systems of this size and complexity, there have been startup problems in several of the operating irrigation perimeters including equipment malfunctions, leaks, etc. In general, such problems have been detected and corrected during the testing phase before being handed over by the contractors. The Bank has closely supervised the procurement of goods and services and has evidence that the equipment procured and installed is of the highest quality available in the world. Spot checks by Bank staff and other experts have not revealed any systematic pattern of defects or serious operational problems arising out of the design, equipment quality or installation of the irrigation systems.

42. The most serious operational problems of which the Bank and CHESF are aware are (a) occasional vandalism resulting in damage to irrigation equipment, and (b) reluctance on the part of the farmers to assume responsibility for the operation and maintenance. The Request alleges that the irrigation systems in operation are running at low levels of efficiency and consume excessive amounts of energy, although the benchmark levels mentioned in the statement do not correspond to known international standards.

43. There is, however, virtually universal recognition that a well organized Water User Association (WUA) is the most effective and lowest-cost way of managing demand and allocating water resources. Some of the problems referred to in the Request could be resolved by better management of the installed systems. For example, the systems have been designed to operate "on demand" requiring continuous operation of pumps and high energy cost. A properly organized Water Users Association could agree on timing of system use to minimize energy costs and increase efficiency. CHESF, CODEVASF and the Bank have placed a great deal of emphasis on assumption of Operation and Maintenance (O&M) of the operating systems by WUAs. Although Pólo Sindical has agreed in principle to encourage WUAs, not a single WUA has yet assumed responsibility for O&M.

Complaint: A Significant Portion of the Affected Families are in Worse Social and Economic Condition than Before the Construction of the Itaparica Dam.

44. Until the productive capacity of the displaced rural families is fully restored, the project will not have fulfilled its goals. A situation in which families without employment are living on the VMT is inherently undesirable. Nevertheless, the following considerations are also relevant to the assessment of the change in social and economic conditions since resettlement took place.

- Families that lost assets in excess of the value of the replacement housing and land were compensated in cash for their loss; also families preferring not to move to agrovilas and irrigated plots were fully compensated in cash;
- The 3,486 landless farming families (60% of total) living in the area gained access to a new house of 45m² with running water and electricity, and an irrigated plot of at least 1.5 hectares, assets that most of them probably could not have imagined owning without this project. Baseline data collected before resettlement indicate that the mean constructed area of rural dwellings was 50 m² of *taipa* (wattle and daub). Those families that had homes larger than 45 m² were compensated in cash for the difference in area although the quality of the new houses was superior;

- Social services including schools, health posts, and school buses, are available to the resettled rural families;
- A maintenance payment originally equal to about 2.5 times the prevailing official minimum salary²¹ has been paid by CHESF to all 5,800 farming families affected by the resettlement since the inception of the resettlement. Baseline data collected before the project began showed that 55% of the affected rural families had incomes below one minimum salary, and 39.5% between one and two minimum salaries per month, while only 5.5% had incomes higher than 2 minimum salaries. Therefore, the VMT paid by CHESF since 1988 is higher than the baseline income of 94.5% of the population. Agricultural incomes fluctuated widely during the year, while the VMT was paid reliably throughout the year;
- Many resettlers have been able to restore their income based on alternative activities including livestock raising, rainfed agriculture, wage labor, and microenterprise activities. The Joaquim Nabuco Foundation collected data showing that the percentage of resettled rural families with incomes greater than the VMT increased from 51% in 1989 to 66% in 1994.²² It should be recognized, however, that families resettled in the western areas, farther from urban centers, have probably had fewer opportunities for alternative employment and business opportunities.

45. In summary, while the VMT is a palliative, it is adequate to maintain a level of living significantly higher than previous levels in a large majority of cases.

Complaint: Delays in Completing Productive Infrastructure led to an Increase in Violence, Alcoholism and Family Breakdown

46. There have been many expressions of frustration by the resettled population over the lack of work opportunities. Management is also aware of accounts of increased incidence of violence, alcoholism and family breakdown in the *agrovilas*. While not discounting the possibility that these increasing, such occurrences also occur in many populations in this region including those unaffected by Itaparica. In the absence of baseline data, it is impossible to determine what the effect of lack of productive infrastructure was on the incidence of violence, alcohol abuse or family breakdown.

Complaint: Erosion and Salinization of Soils is Occurring in Irrigation Perimeters Financed by the Project.

47. The Bank, CHESF and CODEVASF are not aware of any significant degree of erosion or salinization in any irrigated area supported under the Itaparica Project. The alleged salinization in the Apolônio Sales subproject, a private colonization cum irrigation scheme which is not part of the projects financed by the Bank, is denied by CHESF technical personnel. The reference made to salinization in the Senador Nilo Coelho Project is irrelevant because it is not part of the Itaparica project or located in the same region. Under the soil and climate conditions prevailing in the region, a *risk* of salinization exists if proper soil and water management procedures are not followed. Aware of these risks, the Bank has stressed the need for adequate training of farmers in proper soil and water management through the programs that have been supported through

²¹ The current VMT is R\$231/month. The national minimum wage is R\$112/month.

²² Part of the increase may be an artifact of a slightly lower value of the VMT in 1994 (2.2 minimum salaries vs. 2.5 in 1991).

CODEVASF, technical assistance consultants, and, more recently strengthened with the CHESF-IICA partnership to minimize these risks. This question further stresses the importance of strong WUAs to socialize the farmers for good environmental management.

48. CHESF reports indicate that there are some plots not yet turned over to their occupants that may have suffered erosion. Some four plots in Borda de Lago, Pernambuco, seem to have undergone an erosive process because the vegetative cover was removed prematurely. Other plots are cut by naturally occurring gullies and CHESF has taken steps to arrest this erosion and prevent its becoming an obstacle to production.

Complaint: Poor Materials Led to Deterioration of Housing and Infrastructure in the Agrovilas.

49. The Request does not indicate the extent or nature of the alleged deterioration, but such deterioration, if it exists, is exceptional and localized. Construction and quality of infrastructure were monitored by Bank supervision and problems detected were corrected. In one area, some 600 houses were affected by cracking of walls and slab floors due to expansive soils that were not detected prior to construction. These defects were corrected and, in some cases, houses or entire villages were completely rebuilt. There have also been isolated, temporary breakdowns in water supply to some of the villages, mainly those not yet served by irrigation water. These problems, some caused by water theft and vandalism, have also been corrected as they arise. These problems were not caused by the use of poor materials.

Complaint: Misuse of Resources or Diversion of Allocation to Other Works

50. The complaint does not make specific allegations or document this claim. CHESF officials recall that at one point, CHESF proposed that some stocks of material originally acquired for another irrigation system, be used for the Apolônio Sales Subproject and returned at a later date. However, because of the protests from Pólo Sindical, the proposed exchange was not made and no material was diverted to other purposes. The Bank is unaware of any other specific allegations of diversion of material.

Complaint: Project was not Adequately Supervised by the Bank.

51. As documented above, the Bank supervised this project continuously and closely throughout its life. Starting on April 29, 1988, there were 21 formal supervision missions in which from one to four Bank staff or expert consultants participated²³ (see Annex C). From 1987 onward, an average of 19 staff-weeks per year was spent on the project. In addition, there were innumerable informal visits and contacts made in person, by telephone, fax and letter between Bank staff in Recife, Brasília and at Headquarters and CHESF and ELETROBRAS. The project file documents extensive correspondence with the Borrower and CHESF concerning all of the key issues mentioned in the Request.

²³ The Request itself recognizes the Bank's careful supervision of the project and its attention to the concerns of the affected population: "Pólo Sindical leaders from different periods recall that an average of at least three meetings per year were held with World Bank representatives in Petrolândia and in other affected areas on problems related to resettlement and irrigation systems." (p 8 of translated version). It also states that, "... the World Bank, despite the availability of many of its managers and experts, was unable to make CHESF implement its resettlement guidelines ..." (p. 9 of translated version).

Conclusion

52. The Bank has complied with all relevant policies in the design and implementation of the Itaparica Resettlement Project. It is true that compliance with the Bank's requests was not always sufficient, and many unconscionable delays occurred due to an accumulation of factors. However, the history of this project shows that Management and staff made significant efforts to detect and correct problems as they arose and took appropriate and timely action to remedy problems. The current situation is far from ideal, but the shortcomings to which the Request points did not arise from the Bank's failure to follow its policies.

IV. SUMMARY OF REQUEST ISSUES AND MANAGEMENT RESPONSE

Complaint	Relevant Policy, (date)	Pertinence	Comments	Action Taken	Proposed Action
a) Irrigation works are incomplete (35% completed; 34% under construction; 31% in design phase)	OMS 2.33 Involuntary Resettlement (February, 1980) (Replaced by OD4.30 Involuntary Resettlement June 1990)	Bank did not finance Itaparica hydropower project. Responding to late Government request made it impossible to plan resettlement together with planning for hydropower project as OMS required.	Allegation is correct although percentages are incorrect. (Correct numbers for Bank financed subprojects are 44% irrigated plots in operation, 53% under construction; 3% in design phase - see Annex B). Reasons for delays are: fluctuation in Borrower commitment; construction stoppages due to delays in release of counterpart funds; unanticipated design changes after construction began; and institutional problems.	Many actions to accelerate works including: numerous mission aides memoires and letters to the Borrower urging faster disbursement; temporary suspension of disbursement; supplemental loan of US\$100m; temporary increase in financing percentage for works.	GOB is committed to complete the project; special interministerial committee currently reviewing Program will issue report soon. Bank extended closing date to 12/31/97 and agreed to continue supervision through 1999.
b) Tuxá Indigenous community resettled but unable to resume production because the irrigation system is still under design	OMS 2.34 (Feb. 1982) Indigenous Peoples (Replaced by OD4.20 Indigenous Peoples June 1990)	OMS recommends that planning take account of special needs of indigenous people.	The Tuxá were resettled in two locations of their choice in Ibotirama and Rodelas. In the latter area, CHESF was delayed in selecting and preparing proposed site for irrigated farming. FUNAI intervened and precipitated a debate over suitability of soil. FUNAI and CHESF unable to agree on suitable site.	Bank held innumerable meetings with CHESF, FUNAI, indigenous leadership and served as mediator in dispute but has not succeeded in breaking the deadlock. Issue raised repeatedly in meetings with Borrower and GOB.	Bank will continue to help seek adequate solution for agricultural production for Tuxá.
c) Several irrigation systems in place have operational and maintenance problems	OMS 2.33 Involuntary Resettlement (February, 1980)		Request does not specify the extent of the alleged operational/maintenance problems, but such problems are in fact minimal and have been promptly corrected.	Bank has been instrumental in assuring that water user associations are set up and trained in O & M and has carefully supervised training activities for resettled farmers.	Bank will continue to seek lasting organizational solutions to O & M problems and to stress training activities under the project.

Complaint	Relevant Policy, (date)	Pertinence	Comments	Action Taken	Proposed Action
d) Beneficiaries are in worse social and economic conditions than before the construction of the Itaparica dam	OMS 2.33 Involuntary Resettlement (February, 1980)	OMS requires that standards of living be maintained or improved by resettlement projects.	Request omits mention of maintenance payments (VMT) paid since the day rural families were resettled. Bank believes that the maintenance payments, while palliative, have been sufficient to maintain a level of living substantially higher than previous levels for a large majority of cases.	Bank has carefully supervised implementation of the maintenance payments and frequently recommended alternative means for income maintenance or enhancement.	Bank recommended and will supervise phaseout of maintenance payments as irrigation systems become operational.
e) Delays in the installation and commissioning of the irrigation works have contributed to an increase of violence, alcoholism and family breakdown in the resettled communities	OMS 2.33 Involuntary Resettlement (February, 1980)	The OMS recommends avoidance of excessive dependency on state assistance, and also recommends involvement of local authorities and local leaders to avoid social breakdown.	No data demonstrating increased alcoholism, violence or family breakdown have been presented or are known to Bank staff. Not possible to evaluate this claim.	Bank stressed the risk of social breakdown to the Borrower and suspended disbursements because of inadequate counterpart financing.	Bank will continue to supervise implementation of project to accelerate implementation.
f) Erosion and salinization of soils caused by project works	OD4.01 (Environmental Assessment) (10/03/91)	OD not in force when project appraised.	Request does not specify the extent of the alleged erosion and salinization. Such problems are localized and rare.	No specific actions needed.	Bank will take appropriate action in supervision if such problems arise.

Complaint	Relevant Policy, (date)	Pertinence	Comments	Action Taken	Proposed Action
g) Deterioration in some of the 110 agrovilas built with project financing	OMS 2.33 Involuntary Resettlement (February, 1980)	OMS requires adequate planning.	Some structures in agrovilas have suffered damage from expandable soils and other problems; in general these and other isolated problems have been promptly repaired by CHESF contractors.	Bank supervision missions raised this issue frequently and requested that Borrower make prompt repairs which were done.	Continue to monitor this problem.
h) Bank failed to provide adequate supervision of project.	OD 13.05 Project Supervision (March 1989)	Prescribed SPN procedures in great detail.	Bank management and staff have provided ordinary and, in many cases, extraordinary levels of supervision due to the complexity of the project.	Since 1987, there have been at least 24 supervision missions to Itaparica plus innumerable meetings with the Borrower, CHESF, GOB officials, representatives of the beneficiaries including POLOSINDICAL.	GOB has requested the Bank to continue supervision throughout Calendar 1999.

V. ACTION PLAN

53. Both the GOB and the Bank remain committed to accomplishing the original goals of the project. The GOB has also assumed responsibility for honoring all agreements made with the affected population. To this end, in December 1996, GOB formed a high level Interministerial Committee to propose lines of action to conclude the program. This group was formally installed on January 14, 1997, with representatives of the following Ministries: Mines and Energy (coordinator), Planning and Economic Coordination, Finance, Environment, and Agriculture, as well as ELETROBRAS and CHESF. The group's goal is to reach agreement on all outstanding issues, and to prepare a detailed action plan. The group has already made visits to all the principal subprojects and has held discussions with representatives of CHESF, ELETROBRAS and the Bank. A preliminary report has been issued and discussed internally.

54. The GOB, largely in response to the urging of Pólo Sindical, has also requested that the Bank extend the closing date of the Loan through December 1997, an unusual action in view of the relatively small remaining balance in the Loan Account. In the context of this extension, the Bank and Government have already agreed on a minimum set of actions that will be completed by December 31, 1997, as listed below. The ultimate objective is the self sufficient operation of all subprojects in the Bank financed project through the creation of WUAs that will take over responsibility for O&M and organize efficient water use. With regard to the subprojects under construction, the objective is to complete construction as quickly and efficiently as possible. With regard to subprojects that have been suspended because of unexpected soil problems encountered, the objective is to complete the supplemental studies as quickly as possible with the necessary level of accuracy, and to prepare specifications and bidding documents for the conclusion of these subprojects.

55. The Benchmarks established for December 31, 1997 are as follows:

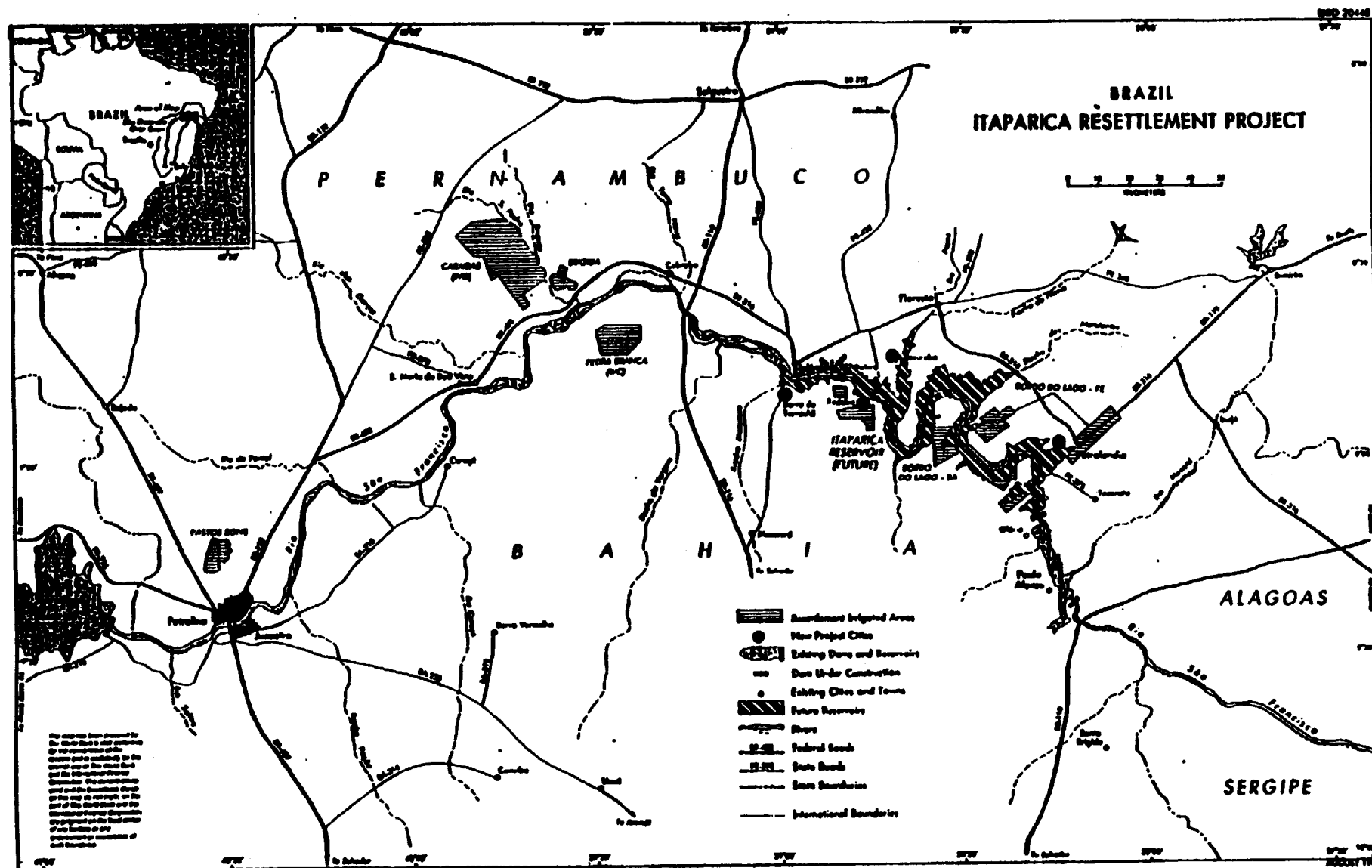
- (a) Creation of at least one WUA in 1997 (Gloria sub-project);
- (b) Issuance of 20% of rural land titles of those subprojects currently in operation by the end of 1997;
- (c) Initiate the reduction of VMT on those subprojects in production (current proposal of a progressive reduction of 25% every three months with half of this amount going into a fund to support the WUA of each subproject);
- (d) Complete issuance of 100% of urban land titles;
- (e) Conclusion of construction and start of settlement of the Ico Mandantes BL3 subproject;
- (f) Completion and commissioning of at least 40% of the Caraibas subproject;
- (g) Initiation of training in the Caraibas and Ico Mandantes subprojects;

- (h) Conclusion of negotiations between CHESF and FUNAI for the implementation of the Ibotirama (Tuxá) community;
- (i) Conclusion of negotiations between CHESF and FUNAI for the implementation of the Rodelas (Tuxá) program; and
- (j) Conclusion of supplementary studies and detailed implementation schedule for the completion of the Barreira BL2 subproject.

The above-listed actions will be financed primarily out of ELETROBRAS and GOB funds in view of the small loan balance and the fact that some disbursement categories have already been reduced to zero.

56. The GOB and Bank management have also initiated discussions concerning the role the Bank would play in insuring satisfactory completion of any components of the project left unfinished after the Loan Closing Date. The Government of Brazil has asked the Bank to extend formal supervision of the project two years beyond the closing date of the Loan Agreement (i.e. until December 1999). The point of departure for any future Bank involvement will be the Interministerial Action Plan referred to above. The Bank will not assume responsibility for supervising subprojects outside those appraised in the original project, but will work with the Brazilian authorities to seek solutions for all the affected people. Bank Management will seek to insure that the following principles are adhered to in any solution adopted and intends to use every possible avenue of influence to secure agreement on them:

- (a) Maintain and improve lines of communication and negotiation with affected families through their legitimate representatives;
- (b) Timely completion of supplementary studies, bidding, contracting and construction of all remaining works;
- (c) Preparation and adherence to timetables for all actions;
- (d) Continuous monitoring of project financial and physical performance;
- (e) Timely provision of funds for studies, training and completion of works;
- (f) Continued payment of VMT for eligible farmers until production is restored;
- (g) Commissioning and operation of completed irrigation perimeters;
- (h) Timely and adequate training of farmers in irrigation techniques, soil and water conservation, O&M of irrigation systems, commercialization of crops;
- (i) Formation of WUAs for all irrigated areas; and
- (j) Issuance of Land Titles to all project beneficiaries.



ITAPARICA RESETTLEMENT AND IRRIGATION PROGRAM: CURRENT STATUS

SUBPROJECT	MUNICIPALITY	NUMBER OF FAMILIES	IRRIGATION AREA (ha)	NUMBER OF PLOTS	DRY LAND (ha)	LEGAL, ENVIRONMENTAL OR PUBLIC AREAS (ha)	TOTAL AREA (ha)	OPERATION START-UP
Subprojects In Production		2,239	7,609	2,237	34,599	15,772	57,980	
I. Barreiras (BL1)	Petrolândia - PE	95	330	95	2,045	891	3,266	Apr-93
I. Icó/Mandantes (BL4)	Petrolândia - PE	260	875	260	5,625	2,437	8,937	Mar/Dec-94
II. Glória (1* -2-3-5)	Glória - BA	122	377	123	2,544	1,095	4,016	Apr/Nov-93
II. Rodelas (II-4/5-6-7-8-9)	Rodelas - BA	405	1,192	405	8,703	3,701	13,596	May-95
III. Brígida	Orocó - PE	431	1,436	431	4,290	2,996	8,722	Feb-94
IV. Pedra Branca	Curaçá/Abaré - BA	709	2,363	709	7,270	3,747	13,380	Jun-95
Apolônio Sales (BL5){*}	Petrolândia - PE	100	800	100	1,560	885	3,245	May-93
Manga de Baixo {*}	B.S. Franc. - PE	25	93	25	549	-	642	Dec-87
Brejinho	Petrolândia - PE	11	11	11	206	-	217	Jun-96
Jeremoabo {*}	Jeremoabo - BA	12	12	11	97	-	109	Dec-84
Remanso	Remanso - BA	40	120	40	880	20	1,020	Dec-83
Canafistula (3) {*}	D. Gouveia - AL	29	-	27	830	-	830	Dec-82


Subprojects Under Construction		2,405	8,621	2,405	38,155	20,388	67,164	
I. Icó/Mandantes (BL3)	Petrolândia - PE	397	1,355	397	9,540	4,086	14,981	1° semester-97
I. Barreiras (BL2)	Petrolândia - PE	600	2,036	600	13,135	5,689	20,860	2° semester-98
V. Caraibas (4)	S.M.B. Vista - PE	1,408	5,230	1,408	15,480	10,613	31,323	Jun-97

LEGEND

- (1) Bank financed subprojects (4,541 families - 78% of the total); Indicated by Numerals I.-V.
- I All subprojects grouped under Borda de Lago: Pernambuco Project
- II All subprojects grouped under Borda de Lago: Bahia Project
- III Brígida
- IV Pedra Branca
- V Caraibas
- (2) {*} Self-sufficient projects for which payment of VMT has been discontinued (172 families - 3%);
- (3) Project does not include irrigation. Plots are for cattle, goat, and sheep raising;
- (4) The settlement of the Caraibas subproject (5,230 ha) is scheduled to begin in May, 1997, and conclude by June, 1998. The planned completion of most of the largest subprojects in 1997 was one of the reasons for the latest extension in loan closing date.

SUBPROJECT	MUNICIPALITY	NUMBER OF FAMILIES	IRRIGATION AREA (ha)	NUMBER OF PLOTS	DRY LAND (ha)	LEGAL, ENVIRONMENTAL OR PUBLIC AREAS (ha)	TOTAL AREA (ha)	OPERATION START-UP
Subprojects Under Study		1,165	4,097	1,219	19,750	7,988	31,835	
II. Itacatiara (1-2-3-Alag)	Rodelas - BA	90	326	90	1,920	854	3,100	
II. Baixa do Penedo	Rodelas - BA	24	77	24	523	225	825	
Itacuruba	Itacuruba - PE	271	930	300	5,845	2,075	8,850	
Inajá (Tuxá)	Inajá - PE	9	27	9	123	-	150	
Jusante	Glória - BA	462	1,671	462	4,680	2,449	8,800	
Rodelas (Tuxá)	Rodelas - BA	88	270	100	1,930	550	2,750	
Ibotirama (Tuxá)	Ibotirama - BA	98	390	100	2,060	610	3,060	
Barra do Tarrachil	Chorrochó - BA	123	406	134	2,669	1,225	4,300	
GRAND TOTAL		5,809	20,327	5,861	92,504	44,148	156,979	

LEGEND

- (1)  Bank financed subprojects (4,541 families - 78% of the total); Indicated by Numerals I.-V.
 I All subprojects grouped under Borda de Lago: Pernambuco Project
 II All subprojects grouped under Borda de Lago: Bahia Project
 III Brígida
 IV Pedra Branca
 V Caraibas
- (2) {*} Self-sufficient projects for which payment of VMT has been discontinued (172 families - 3%);
- (3) Project does not include irrigation. Plots are for cattle, goat, and sheep raising;
- (4) The settlement of the Caraibas subproject (5,230 ha) is scheduled to begin in May, 1997, and conclude by June, 1998. The planned completion of most of the largest subprojects in 1997 was one of the reasons for the latest extension in loan closing date.

NOTES

Brief History and Current Status of Subprojects Under Study:

- (a) Barreiras Bloco 2 → Significant investments have been made in the implementation of the irrigation infrastructure. The reservoir, pipeline, water intake and electric sub-station are complete and all the necessary hydro-mechanical equipment has been purchased and delivered to CHESF. In addition, houses

(agrovilas) and all access roads are finished. The implementation of on-farm systems was discontinued due to unexpected soil problems. Soil experts were hired to study the situation and reformulate the original design of on-farm systems to accommodate permanent crops (fruit crops). The study is basically complete and construction will begin soon with conclusion expected by the end of 1998.

- (b) Itacuruba → Originally, this subproject was named Angicos. The land and a significant part of the equipment was purchased by CHESF. Subproject included irrigation plots and fish ponds which were partially constructed. Soil problems indicated that the subproject was not viable as originally planned and a firm was contracted to look for alternatives within the same municipality. The revised feasibility study has been concluded.
- (c) Inajá → This small subproject for only nine Indian families that did not feel part of either the Ibotirama or the Rodelas group was completed in 1989 and operated until 1992. However the Moxotó river has gone dry, and as a consequence, operation has stopped. Alternative solutions are being studied.
- (d) Itacoatiara → Main water intake is ready. Access roads and electricity infrastructure are finished. The subproject was originally designed for crops such as onions, corn, and beans; however, soils are not adequate for these crops. Alternative solutions are being investigated.
- (e) Baixa do Penedo → Six families have voluntarily moved into this area. CHESF is studying alternatives to improve the agricultural practices in place and is considering moving eighteen additional families into the area. The subproject was not in the original agreement.
- (f) Jusante → The water intake system, in addition to soil studies and topographical studies for the main pipeline, have been completed. Remaining studies have been initiated.
- (g) Rodelas (Tuxá) → An early agreement presented by the Indian group (prepared by a local NGO hired by the Indian tribe and paid by CHESF) was accepted. The Riacho do Bento farm was purchased but additional demands presented by the Indians following the agreement has hindered implementation. FUNAI is preparing a revised plan for this community to be presented to and negotiated with CHESF.
- (h) Ibotirama (Tuxá) → The revised action plan for this community was completed by FUNAI and presented to CHESF. The extremely high cost of the proposed plan (US\$391,000/family) has created an impasse. CHESF and FUNAI are still negotiating.
- (i) Barra do Tarrachil → These 123 families chose not to subscribe to the original agreement via Pólo Sindical. In January, 1988, they signed a separate agreement with CHESF that included the provision of irrigated plots (where possible); equipment and supplies for rain fed agriculture in the alluvial valleys; or fish farms. As suitable land for agriculture was not found, fish ponds were constructed and operated until 1992 when, as a consequence of poor maintenance, operation was discontinued. Three years ago, a farm of 700 ha (Cacimba do Pedro) was identified by the population. CHESF hired a firm to conduct feasibility studies for irrigation development at this site. The studies have been completed and indicate that this subproject may be extremely expensive. CHESF is looking for other least-cost alternatives for negotiation.

ITAPARICA RESETTLEMENT AND IRRIGATION PROJECT (LOAN 2883-BR)

A. C

SUPERVISION MISSION DATES AND STAFFING

MISSION END DATE	RESETTLEMENT SPECIALIST	WATER RESOURCES AND IRRIGATION ENGINEER	OTHER
4.29.88		X	
10.8.88		X	
5.10.89		X	X
6.15.90	X	X	
12.01.90		X	
4.15.91		X	X
8.16.91	X	X	
1.31.92	X	X	X
8.5.92		X	X
12.15.92		X	X
3.27.93	X	X	
7.6.93		X	
12.03.93	X	X	
6.7.94		X	
1.31.95		X	
6.3.95		X	
8.3.95		X	
11.30.95		X	
5.9.96		X	
9.27.96		X	
1.25.97		X	

Informal translation for internal use only

PÓLO SINDICAL DOS TRABALHADORES DO SUBMÉDIO SÃO FRANCISCO

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C.G.C. nº 35.677.707/0001-11

**REQUEST FOR THE WORLD BANK INSPECTION PANEL
TO INVESTIGATE THE PROJECT FOR RESETTLEMENT
OF PERSONS AFFECTED BY THE ITAPARICA DAM**

**REQUEST FOR THE INSPECTION PANEL OF THE
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
- THE WORLD BANK - TO INVESTIGATE THE PROJECT FOR
RESETTLEMENT OF PERSONS AFFECTED BY THE
ITAPARICA HYDROELECTRIC PROJECT (IBRD 2883-1)**

**To the World Bank Inspection Panel
International Bank for Reconstruction and Development - World Bank,**

We are peasants who were involuntarily displaced due to the construction of the Itaparica dam and are represented by the Pólo Sindical do Submédio São Francisco. We herewith ask the World Bank Inspection Panel to recommend to the Executive Directors that an investigation be made into the execution of the project for resettlement of affected families. Said project is financed by the IBRD; the borrower is ELETROBRÁS, a Brazilian state enterprise, and the executor is the São Francisco Hydroelectric Company - CHESF which is responsible for dam works and resettlement of the population.

The Resettlement Project, which was the outcome of an intense struggle undertaken by affected communities, sought to provide compensation for the irreversible cultural, economic, social and environmental losses experienced by the peasant population due to involuntary removal. It thus sought to raise the quality of living of these people by providing them with housing, education, health and means of production. It consisted of the implementation of 110 agricultural settlements (*agrovilas*) with health and educational infrastructure, and six irrigation projects, totaling 19,512.5 hectares. It was a project that was to have left the population with better living conditions than before the dam was constructed.

It therefore dealt with concerns expressed by the World Bank which states: "*if involuntary resettlement is unavoidable, the Bank's policy requires the formulation and financing of a resettlement plan in order to ensure that those persons who are resettled have development opportunities that improve, or at least restore, the living standards they enjoyed prior to the project*" (OD 4.30/1990, translated from the Portuguese). Moreover, accumulated experience regarding the irreversible, adverse impacts caused by dam construction is already well known by the Bank which analyzes and regulates them in its "Environmental Assessment Sourcebook," Vol. 1, Ch. 3 (Social and cultural problems in environmental analysis) and in Vol. 3, Ch. 10 (Hydroelectric Projects), as well as in Operational Directive-OD 4.00/1989 (Annex B - Environmental Policy for Dam and Reservoir Projects) which requires environmental studies and the preparation of programs for supervision, monitoring and mitigation of impacts for dam construction and operation.

However, the Itaparica Resettlement Project has not fulfilled the objective of promoting improved living conditions for those affected, ignoring the policies and regulations of the financial agency, IBRD. The following data demonstrate this.

Nearly ten years after the population was involuntarily displaced, only 35% of the irrigation projects (6,800 ha) have been implemented, 34% are under construction (6,600 ha) and 31% (6,000 ha) are still being studied (Annex A);

Of the 35 irrigation systems in operation, most have technical problems in terms of operation and maintenance;

The Tuxá indigenous community (in the municipality of Rodelas) is resettled but unable to cultivate its crops because the promised irrigation system is still being studied;

The delay in the implementation and operation of irrigation projects has contributed to increased violence within communities, to alcoholism and family breakdown (as indicated in 1991 by The World Bank and the Environment in Brazil: a Review of Selected Projects, May 3, 1991, Operations Evaluation Department).

Thus, nearly ten years after involuntary displacement, the results of the Resettlement Project are that a large portion of the beneficiary population is in worse conditions of production and social reproduction than before the construction of the Itaparica Hydroelectric Project.

Pólo Sindical do Submédio São Francisco and the Itaparica Hydroelectric Project

The Pólo Sindical São Francisco was created in 1979 as an organization of rural workers dedicated to the defense of the rights of rural communities in relation to CHESF.

The innovative proposal of organizing a committee of rural workers' unions, which later began to operate across municipal boundaries, had a major impact on the Lower-Middle São Francisco region because it was there that the struggle against the negative effects of the construction of the Itaparica Hydroelectric Project brought together the region's squatters, tenant farmers, small farmers and landless people.

Thus, the Pólo Sindical gradually became a coordinating body for issues relating to the Itaparica dam and established itself as a mediator for affected communities in dealings with CHESF, the World Bank and local authorities. Over the years it has organized hundreds of demonstrations, some of them bringing together over 5000 persons, petitions, seminars, protests and campaigns dealing with the social and environmental effects of the dam.

CHESF built the Itaparica dam on the São Francisco River, bordering the states of Bahia and Pernambuco. The dam flooded nearly 834.0 km² and involuntarily displaced over 40,000 people. However, the company did not plan in advance what to do with these people, despite the dramatic experience of the cases of the Sobradinho and Moxotó dams, both located in the same river basin (Annex B).

The Pólo Sindical began to pressure the company to obtain irrigated resettlements for the displaced population, which was achieved with the signing of the Agreement between the

Pólo Sindical and CHESF in 1986 (Annex C) which obliged the company to resettle the rural population in *agrovilas* and on land with irrigation.

When Itaparica began operating in 1988, CHESF was still taking the first steps toward meeting the demands agreed with affected communities. It was only after the release of financing for the Resettlement and Irrigation Project was submitted by Eletrobrás-CHESF to the World Bank, that the problem began to be tackled.

The World Bank thus played an important role in meeting the demands of involuntarily displaced communities, not only as the founder of works but as co-participant in planning the resettlement and irrigation projects.

World Bank Projects in the São Francisco River Valley, and Financing for the Itaparica Dam and for Resettlement

The International Bank for Reconstruction and Development (IBRD) - World Bank has been supporting projects in the São Francisco River Valley, in Northeast Brazil. According to a report by IBRD's Operations Evaluation Department (OED), these projects have benefited millions of northeasterners by increasing the supply of electricity, but, on the other hand, they have involuntarily displaced nearly 170,000 people who demanded solutions for resettlement that were treated in different ways (The World Bank and the Environment in Brazil: A Review of Selected Projects, May 3, 1991, Operations Evaluation Department).

Although on the one hand some of these projects were designed to produce hydroelectricity from large dams (Annex D), others sought to mitigate the "negative impacts" of displacement and even to provide social and economic support to an impoverished rural population.

In fact, the World Bank provided funds for the Brazilian Power Sector through a loan to Eletrobrás, approved in 1986, when the construction of the Itaparica dam was one of the sector's principal priorities; this leaves no doubt about the Bank's responsibility for the socio-environmental effects caused by the project (The World Bank and the Environment in Brazil: A Review of Selected Projects, May 3, 1991, Operations Evaluation Department).

But this was not all. CHESF representatives stated at a joint evaluation seminar with the World Bank that *the plan for vacating the reservoir area (of Itaparica), submitted to the World Bank and started in 1986, created such significant social tensions that the Bank, in order to grant an important sector loan to ELETROBRÁS, required the formulation of a community-based resettlement policy* (Environmental Aspects of Projects Co-Financed by the World Bank - Lessons for the future, org. Alencar Soares de Freitas and Pedro Ribeiro Soares, IPEA/146, Brasília, 1994, based on conclusions of studies made by the World Bank's OED) (Annex E).

Thus, the World Bank's responsibilities in relation to the Itaparica Resettlement Project stem from two factors: the dam was partially financed by a sector loan to the Power Sector, and resettlement, according to recommendations of the Bank's evaluation, was also financed (The World Bank and the Environment in Brazil: A Review of Selected Projects, May 3, 1991, Operations Evaluation Department).

More recently, the International Bank for Reconstruction and Development (IBRD) - World Bank financed the conclusion of the Itaparica Resettlement Project with a US\$100 million loan, out of a total of US\$271.7 million [sic], having disbursed US\$93.5 million [sic] to date (Annex F).

In reality, the Itaparica Resettlement Project is a resettlement and irrigation project for nearly 6,000 rural families, the rural population involuntarily displaced by the construction of the hydroelectric plant and the filling of the reservoir.

The area and population directly affected by the Itaparica Dam

In the municipalities of Glória and Chorrochó in the state of Bahia, farmland was flooded, villages were relocated and communities were resettled. In Rodelas (state of Bahia), 71% of the municipality's residents were affected, besides suffering the flooding of the municipality's administrative center, villages and farm lands. In Curaçá and Paulo Afonso (Bahia), no areas were flooded; however, Curaçá was the site of a large resettlement project that took in affected populations from Chorrochó, Rodelas and Belém do São Francisco.

The riverbank on the Pernambuco side was more affected by flooding, with more than twice the area flooded as on the Bahia side. Itacuruba, Petrolândia, Belém do São Francisco and Floresta saw parts of their land flooded. In Itacuruba, the loss of land affected 27% of the municipality and consequently 65% of the population suffered. Petrolândia, the second most severely affected municipality, lost 9% of its area and 27% of its population was displaced. Orocó and Santa Maria da Boa Vista, although not flooded, took in a considerable number of affected persons who were resettled in irrigation projects (Annex G).

Irrigation projects

Irrigation projects are located in the municipalities of Glória, Rodelas and Curaçá - in the state of Bahia, and Petrolândia, Orocó and Santa Maria da Boa Vista - in the state of Pernambuco. The size of the plots ranges from 1.5 to 8 hectares, as described in the summary below.

Borda do Lago de Itaparica (Itaparica Lake Shore) - Bahia: includes the municipalities of Glória and Rodelas, with a total area of 1745.5 hectares and 547 plots measuring 1.5 to 6 hectares; it is divided into three sub-areas: Glória, Rodelas and Itaquatiara.

Borda do Lago de Itaparica (Itaparica Lake Shore) - Pernambuco: in the municipality of Petrolândia, with a total area of 5712 hectares and with 1723 plots measuring 1.5 to 6 hectares; it is comprised of two sub-areas: Barreiras and Icó-Mandantes.

Brígida - Special Project: in the municipality of Orocó, with a total area of 1501.5 hectares, 429 plots measuring 1.5 to 6 hectares, and six *agrovilas*.

Pedra Branca - Special Project: in the municipality of Curaçá, with a total area of 2466 hectares, 706 plots measuring 1.5 to 6 hectares, and 19 *agrovilas*.

Caraibas - Special Project: in the municipality of Santa Maria da Boa Vista, with a total area of 5605.5 hectares, 1603 plots measuring 1.5 to 6 hectares, and 47 *agrovilas*.

Apolônio Salles - Special Project: in the municipality of Petrolândia, with a total area of 880 hectares, and 101 plots measuring 8 hectares. It is the only project where settlers live on their own plots, not in *agrovilas*.

Resettlement of Tuxá Indians was carried out by dividing the community into two groups, one relocated to the municipality of Ibotirama (94 families) and the other to Rodelas (96 families).

The Downstream Project is being prepared. Located in the municipality of Glória, it covers an area of 1600 hectares, divided into 580 plots (Annex H).

Problems with resettlement and with irrigation projects

The Itaparica Resettlement Project has not achieved the more general objectives of promoting improved living conditions for all those affected and is not even following the policies and regulations of the financial agency, the IBRD - World Bank.

The gap between progress in the resettlement plan and the implementation of productive infrastructure has produced high social costs, such as increased crime, idleness and excessive alcohol consumption in the *agrovilas* (Environmental Aspects of Projects Co-Financed by the World Bank - Lessons for the future, org. Alencar Soares de Freitas and Pedro Ribeiro Soares, IPEA/146, Brasília, 1994, based on conclusions of studies made by the World Bank's OED), which also occur with part of the Tuxá indigenous community.

Recent CODEVASF data (December 1995 and August 1996) indicate that the levels of productivity achieved *were very low in the various crops, and far below those programmed* and the average of other irrigation schemes in the region (EVALUATION REPORT ON TECHNICAL ASSISTANCE IN IRRIGATION PROJECTS UNDER THE ITAPARICA SYSTEM - JAN - JUNE 1996 - CODEVASF/GEEP) (Annex I).

These data reveal the existence of natural limitations to the formation of soils selected for most of the irrigation projects, showing that resettlements will only be feasible by developing a suitable technological standard that facilitates production factors, or else, in some areas, by changing the location selected for irrigation.

But, along with natural limitations, there are also technical and operational problems.

Some of the *agrovilas* that have been constructed are deteriorating due to the use of inappropriate materials, as in the case of Itaquatiara (municipality of Rodelas), Borda do Lago - Bahia.

The irrigation projects in operation contain significant problems in their installed irrigation systems, such as: excessive electrical demand for operation, which can make it infeasible to produce some of the region's traditional crops; defects in the installation of systems that have caused rapid deterioration of equipment; mistakes in preliminary technical analyses which are causing difficulties in irrigating the entire prepared area; signs of soil erosion and salinization that show the unsustainability of the system from an environmental standpoint; low-quality materials used in irrigation systems, resulting in a significant reduction in their useful life.

There are important signs of misuse of resources or of the diversion of allocations to other works, which explains the "excessive" costs per resettled family: US\$63,000, acknowledged by CHESF and questioned by World Bank experts (Environmental Aspects of Projects Co-Financed by the World Bank - Lessons for the future, org. Alencar Soares de Freitas and Pedro Ribeiro Soares, IPEA/146, Brasília, 1994, based on conclusions of studies made by the World Bank's OED).

Thus, the resettlement and irrigation projects have not succeeded in restoring the social and economic conditions of production and reproduction for most of the population forced to leave the more fertile lands of the São Francisco Valley. Part of the population still lacks minimum conditions for agricultural production, nearly ten years after involuntary displacement. And some of those who are already producing are beginning to see that the irrigation projects were poorly planned and executed, making them economically and environmentally unsustainable. Project execution did not meet technical specifications, the material used in irrigation systems is often of low quality and some units already need immediate repair.

In view of the above, we believe that IBRD - World Bank, as a financial institution, bears responsibility for the project's current state, by omission, by not adequately supervising and monitoring progress in the implementation of resettlements and irrigation systems. The World Bank is obviously not the only one responsible, since the Brazilian Government, Eletrobrás and CHESF are borrowers and executors of the work. However, IBRD bears an important share of the responsibility for having financed the work without ensuring that borrowers and executors comply with policies for resettlement and treatment of communities involuntarily displaced by dams.

Complaints to the World Bank

The concerns of the involuntarily displaced population were submitted to the World Bank - as well as to Brazilian Government agencies - on various occasions. Pólo Sindical leaders from different periods recall that an average of at least three meetings per year were held with World Bank representatives in Petrolândia and in other affected areas on problems related to resettlements and irrigation systems.

Only a few of all these meetings and contacts were recorded in documents, such as:

Meeting with IBRD representatives in 1991, in Petrolândia, on the need for more resources and denouncing the diversion of materials from resettlement works (Annex K).

In February 1992, Pólo Sindical representatives met with World Bank officials in Washington to discuss ways in which the Bank might support the conclusion of the implementation of irrigation systems (Annex L).

Official letter 136/93 dated November 18, 1993, from Pólo Sindical to the World Bank, begins with the following statement: *We herewith wish to inform you about the current situation of the Itaparica resettlements, which we think is highly alarming. We would also like to bring your attention to the International Bank for Reconstruction and Development's responsibility toward the settlers who were affected by the dam.* The document continues to narrate the process of the Itaparica Resettlement and the difficulties encountered at that time in its implementation, such as: problems with delays in delivery of works, the issue of high electricity costs, and technical defects in implementation. IBRD replied on December 15 of the same year in a letter from the Chief of the Environment and Agriculture Operations Division, Department I, stating that *the specific problems indicated in (...) letter were the subject of broad discussion with CHESF and CODEVASF during our latest supervision mission. The Bank is planning a mission in March 1994 to follow up on the implementation of agreed actions.* Despite the hopes raised in IBRD's letters, nothing was actually resolved (Annex M).

In 1994, the Coordinator of the Pólo Sindical sent a letter to Mr. Lewis Preston, then President of the World, in which he stated:

In a letter sent recently to the World Bank by fax, we alerted that your institution is running the risk of supporting a policy which you yourself criticize: Through technical negligence or other motives, the irrigation systems that have been implemented or planned do not correspond at all to minimum needs: the systems have serious technical flaws and defects which may soon make production infeasible...; the system's efficiency is well below the acceptable economic level...; (...); CHESF has still not resolved the basic pre-requisite for operating an irrigation system, especially in the semi-arid region: drainage. In the Senator Nilo Coelho Project (Petrolina, CODEVASF), many lands are already salinized due to the lack of, or insufficient, drainage; very high costs... according

to a technical report, (showing) "clearly that the resettled farmer will not be able to afford to pay by means of income generated by agricultural production on his plot." (Itaparica Consortium, June 1993, pp. 3 and 4); in the Borda do Lago projects, systems are being implemented in which sprinklers are spaced 15 by 15 meters, which is valid in laboratory conditions, but not with wind speeds of 10 meters per second or more. Consequently, up to 50% of the area is not properly irrigated. The coordinator concludes his letter by exhorting the World Bank to act in favor of the project: We wish to draw your attention once again to this cynical disregard, so that the World Bank can truly assume its responsibility toward families affected by the dam, and so that we do not go hungry in the future, as victims of a mistaken policy that the Bank itself publicly condemns (Annex N).

Official letter 13/95, dated January 24, 1995, from the Pólo Sindical to the World Bank, attaches copies of documents dealing with requests made by the Pólo Sindical to CHESF and CODEVASF to accelerate the conclusion of hydraulic systems and resettlement projects, seeking in this way to avoid repeating the errors of the past (Annex O).

On September 24, 1996 a meeting was held between the Pólo Sindical and two World Bank representatives who are monitoring the project. At the meeting, problems with resettlements and irrigation projects were discussed, with emphasis on outstanding issues in the projects that hinder their productive process. The position of the Bank representatives, although favorable to the Pólo Sindical, showed that the financial institution does not plan to have greater involvement with project continuity (annex, Minutes of Meeting with World Bank, 9-24-96) (Annex P).

Official letter 133/96 from the Pólo Sindical to the World Bank, requesting IBRD support for a research program that seeks to find solutions to technological problems related to settlements and irrigation projects (Annex Q).

As noted above, in response to requests and complaints, the World Bank, despite the availability of many of its managers and experts, was unable to make CHESF implement its resettlement guidelines, nor has it managed to adequately supervise and monitor the implementation and operation of irrigation projects, with the result that, to date, the project remains unfinished and has serious operational problems, which amounts to negligence.

Demands to the World Bank Inspection Panel

Thus, in light of the situation and negligence described above, which materially affect our interests, we ask the Inspection Panel to recommend to the World Bank's Executive Directors that an investigation be made into this matter, so that appropriate measures can be taken to solve these problems. Furthermore, we expect the measures to be taken by the Bank, as a financial agency, to correct errors already made that have caused most of the resettled population to remain effectively unable to produce.

In addition to the Bank's raising the issue with the Brazilian Government, we request a new IBRD loan to ensure the implementation of the measures listed below:

Implementation of drainage structures (macro and localized), soil rehabilitation, adjustment to the hydromechanical system and installation of agricultural research programs in all the irrigation projects, in order to make production viable.

Identification of alternative types of subsidies for the electricity used in the irrigation projects.

Construction of physical works and installation of facilities (Storage Center, mini-hospitals, etc.) in the main centers of all projects.

Creation of special credit lines for operating costs, investments and working capital.

Installation of meteorological stations to provide weather data that is needed for efficient irrigation management.

Borda do Lago Project - Pernambuco (Block 2): total reformulation of the project, including the transfer of *agrovilas*, redefinition and rehabilitation of agricultural plots, overhaul of the irrigation system.

Icó-Mandantes Project, Borda do Lago - Pernambuco (Block 3): guarantee that hydraulic works will be concluded and land tenure problems resolved.

Itacuruba Project - Pernambuco, Downstream Project (Glória - Bahia), Barra do Tarrachil Project (Chorrochó) and Itaquiara Project (Rodelas): complete implementation of irrigation projects that were never even started, to the detriment of a population of nearly 6,000 people.

Caraíbas Project (Santa Maria da Boa Vista - Pernambuco): 80% of the project is concluded but hindered from operating because the remaining 20% remains unfinished, jeopardizing a population of approximately 11,000 persons. We request that this project be fully concluded.

Pedra Branca Project (Curaçá - Bahia): the project is fully operational, but without means of marketing its production. We request the conclusion of the BR 116 highway, in the section from Euclides da Cunha to Trevo do Ibó, and the construction of the section from Curaçá to Barra do Tarrachil on the BR 110 highway.

Experimental projects (Manga de Baixo, Glória 01 and Rodelas 02): economic rehabilitation of projects.

Furthermore, we believe an international financial and technical audit should be made of the Itaparica Resettlement and Irrigation Project. The financial audit is necessary due to

suspicion of diversion of project resources to other works. A technical audit is necessary because the irrigation systems are jeopardizing the viability of production.

As requested in the World Bank's Operational Procedures, our request to the Inspection Panel is brief, but we are ready to provide you with any additional information you may require.

As we are an organization of Brazilian civil society, we authorize and ask that this request, with its annexes, be made public. We take this opportunity to inform you that we are sending a copy to the World Bank Resident Mission in Brasília, to the Secretariat of International Affairs of the Brazilian Ministry of Planning and Budget, to CHESF, to Eletrobrás, to the Federal Chamber of Deputies, as well as to the Federal Senate.

Our contact address is:

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Brazil**

tel/fax: (081) 851-1160

Bahia and Pernambuco (Brazil)

Area of the Itaparica Resettlement and Irrigation Project, March 12, 1997.

(signed)

Eraldo José de Souza, General Coordinator

NOME	PROJETO
1- Humberto de Barros	AG-09 BLOCO 300 Mand.
2- Frouthi da Silva Farias	Jusante
3- Claudio Alvaro da Silva	JUSANTE
4- Yvonne dos Santos Souza	Ag. 05 Bloco 04. 300 mandantes
5- Maria Regina de Carvalho	Ag. 05, Bloco 04, 300-Mandantes
6- José Carlos dos Santos Alves	Ag. 05 Bloco 04 300 mandantes
7- Cristiano José dos Santos	AG-06 BLOCO
8- Rita de Lúcia dos Santos	Rodebas
9- Maria Isabel do Nascimento	300-Mandantes
10- Benedito da Silva Santos Filho	Rodebas
11- M ^{re} do Amor da C. Silva	Rodebas
12- Afonso Carlos da Silva	Rodebas - BA
13- Silvana Almeida	Rodebas - BA
14- Valdir dos Santos	Rodebas - BA
15- Lina Cláudia dos Santos	Instituto AR-09 Rodebas
16- Adriano Manoel Gomes da Silva	AG-10 BLOCO 03 300-MANDANTES
17- Evandro Cruz Santos	P. Aplicação AR-08 Rodebas
18- Ovídio José da Silva	AG-09 BLOCO 04 300-MANDANTES
19- José Vitor B. Santos	AG-09 BLOCO 03 300-MANDANTES
20- Valter Gomes da Silva	Projeto 300-Mandantes Bloco 04
21- José Edilson do Nascimento	300-MANDANTES BLOCO 03
22- Marcos Sidney Santos de Azevedo	
23- Amílcar Alves dos Santos	Projeto Instituto Agrícola 09
24- Daydison Nogueira de Souza	Rodebas - BA

NOME

- 25- *Almeida Selerino da S.* STR ST. 172
- 26- *Odinela Nepomuceno de Silveira* STR ST. 172
- 27- *Celia Regina de Souza Lima*
- 28- *João Luiz Balbino* PROJ.
- 29- *Maria Elita Ramalho Leal* Projeto
- 30- *João Paulo de Azevedo* PROJ.
- 31- *União de Mulheres Negras* (Projeto) Barreiras
- 32- *Lucia de Oliveira* (Gloria)
- 33- *Cirineia Maria de Sa* (Gloria)
- 34- *Genivaldo Gomes de Sa* (Gloria)
- 35- *Julma Floris Lima* - Rodelas
- 36- *Adriano de Almeida* (Gloria)
- 37- *Edison Gomes do Nascimento* (Ico-Mandante)
- 38- *Cléia da Silva Macê* (Gloria - 37)
- 39- *Silvia Rêgo de Oliveira* (Barreiras)
- 40- *Ediiane de Lima Xavier* (Pr. Barreiras)
- 41- *Maria de Lourdes dos Santos* (Ico-Mandantes)
- 42- *Gili Marques de Souza* (Proj. Barreiras)
- 43- *Janaína da Silva Lima* (Proj. Barreiras)
- 44- *Maria de Lourdes Barbosa* (Ico-Mandantes)
- 45- *Lucileide Maria Rodrigues* (Ico-Mandantes)
- 46- *Mariadela Armita Barbosa* (Ico-Mandantes)
- 47- *Ozeni Maria da Silva* (Ico-Mandantes)
- 48- *Maria do Socorro do Nascimento* (Ico-Mandantes)
- 49- *João José do Nascimento* Projeto Gloria
- 50- *Antonio Cecilio de Sa* Projeto Gloria

NOME *durel*

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 52 Maria Alves de ~~Guimarães~~ Guimarães p. caraiabas STR str
 53 Tânia Maria da Silva - Caraiabas.
 54 Evirânio Ferreira Ramos - Caraiabas.
 55 Edmilson Silveira Pereira - Caraiabas
 56 ~~Elton~~ Elton ~~de Araújo~~ - Caraiabas.
 57 ANTONIO FERNANDO DA C. SILVA - P/CARAIABAS
 58 Maria Odete de Araújo Lima - Caraiabas.
 59 OAS LEONÉRIO DA SILVA - P.J. CARAIABAS.
 60 Prof. João da Silva - P.J. CARAIABAS
 61 AVALATO Vieira - P.J. CARAIABAS
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 63 Danilo Félix Bezerra - Caraiabas
 64 Zefa Evelina Santos - Caraiabas - STR str
 65 João Alberto ~~Araújo~~ - Proj. Caraiabas
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 67 Maria Tília de Souza - Proj. Caraiabas
 68 ~~Clara Maria de Souza~~ Clara Maria de Souza - P. Caraiabas
 69 Maria Adeline filha da Silva - Caraiabas
 70 Jorge João da Silva - Caraiabas
 71 Lucilene Maria dos Santos - Caraiabas
 72 Jozilda Senharinha da Silva. CARAIABAS
 73 José do Pedro da Silva - CARAIABAS
 74 Antonio Marco da Silva - CARAIABAS
 75 Mariécia de Araújo - Caraiabas.

NOME

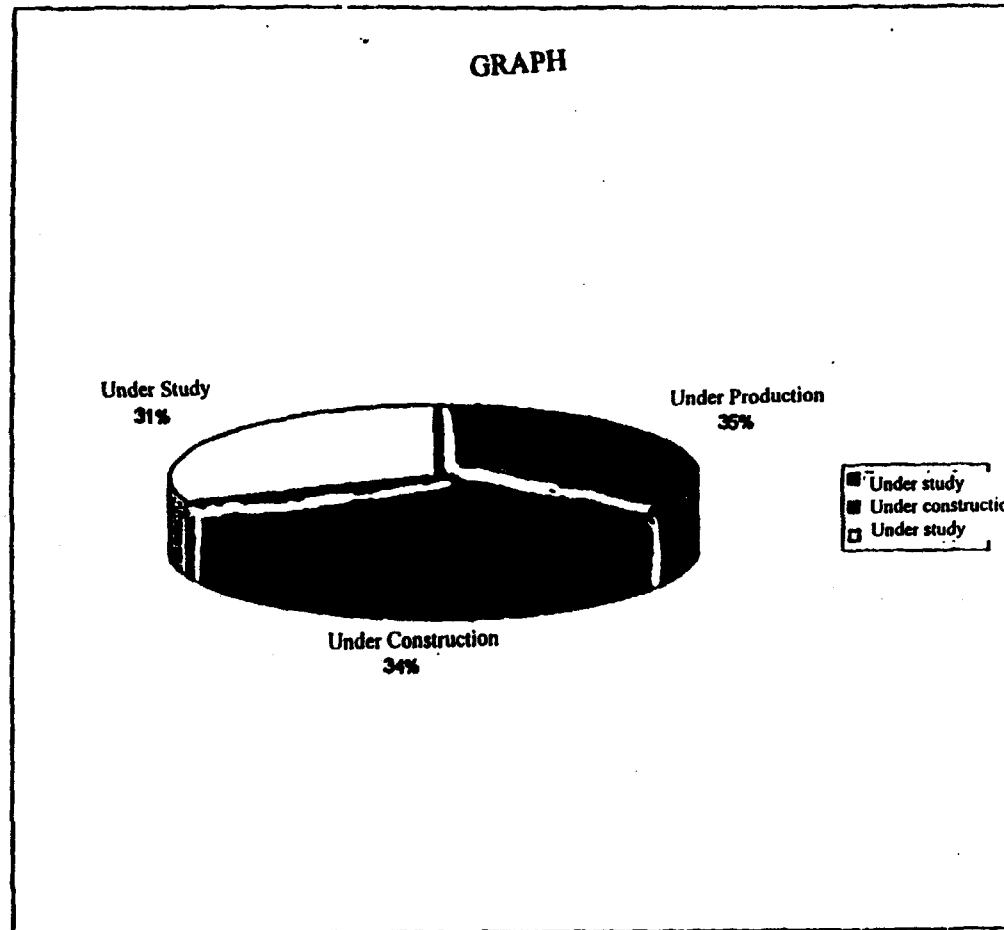
PROJETO

76. Pedro Basso de Melo - Caraiibas
 77. José Dias do Nascimento - Caraiibas
 78. Inaldo Antonio do Nascimento - Caraiibas
 79. ALDENIR-GONCALVES TORRES - CARAIBAS
 80. Luzeide maria Novas Oliveira Caraiibas
 81. Rosilma Alves de Carvalho - Caraiibas
 82. FRANCISCO DIASSILVA FILHO - Caraiibas
 83. Igor Roberto da Silva Ribeiro - Caraiibas
 84. MARCOS DE SA SOUZA - Caraiibas
 85. Agnaldo José de Sousa - Caraiibas
 86. Manoel Ribeiro da Silva - Caraiibas
 87. Dionisio Gleberson da Silva, Caraiibas
 88. Antonio Carlos dos Santos - Caraiibas
 89. Izael Ferreira dos Santos - Caraiibas
 90. João Lucas dos Santos - Caraiibas
 91. Washington Manoel da Silva - BRIGIDA
 92. José Fernandes Ribeiro da Silva - P.B
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 94. Alair José dos Santos Silva - Projeto Pedro Branca.
 95. ANTONIO FERNANDO CAMPOS - PROJETO BRIGIDA
 96. José Carlos dos Santos Simão - PROJETO BRIGIDA
 97. Elzer Yancy Remy Figue - PROJ. BRIGIDA
 98. Carlos Silva Pereira - PROJ. PED. BRANCA.

NOME	PROJETO
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100. Welma Dixey Nascimento	P. P. Branca.
101. Gloriana Ribeiro Barbosa	P. P. Branca
102. Josimar dos Santos	P. P. Branca
103. Jilmar Ribeiro dos Santos	P. P. Branca
104. Jocete dos Santos Silva	P. P. Branca
105. Maria Silvana Damascena -	P. P. Branca
106. Baya do Socorro Gomes dos Santos	Projeto P. P. Branca
107. Jansen Carlos de Silva	Projeto Brigida
108. Edvanira Maria de Sa' Gonçalves	Projeto Brigida
109. JOSELÂNIO BERNARDINO FILHO	P. BRIGIDA
110. Biliarne Soares Silva	P. Brigida
111. Odvânia Campos Matias Cabral	P. Brigida
112. M ^{re} Senira dos Santos	Projeto Brigida
113. Wanderleya Máira Freire da Silva	Projeto Brigida
114. Leonildo Pedro Ferreira da Silva	P. Brigida
115. Josildo dos Santos	P. Brigida
116. Giovanni do Espírito Santo	P. Brigida
117. Joviana Regina Ribeiro	P. Brigida
118. Gervinaldo Barbosa do Nascimento	P. Brigida
119. Rosineide dos Santos Silva	P. P. Branca.
120. Maria Silva	P. Brigida
121. Elizete dos Santos	P. Brigida

IMPLEMENTATION STAGES OF THE ITAPARICA PROJECT

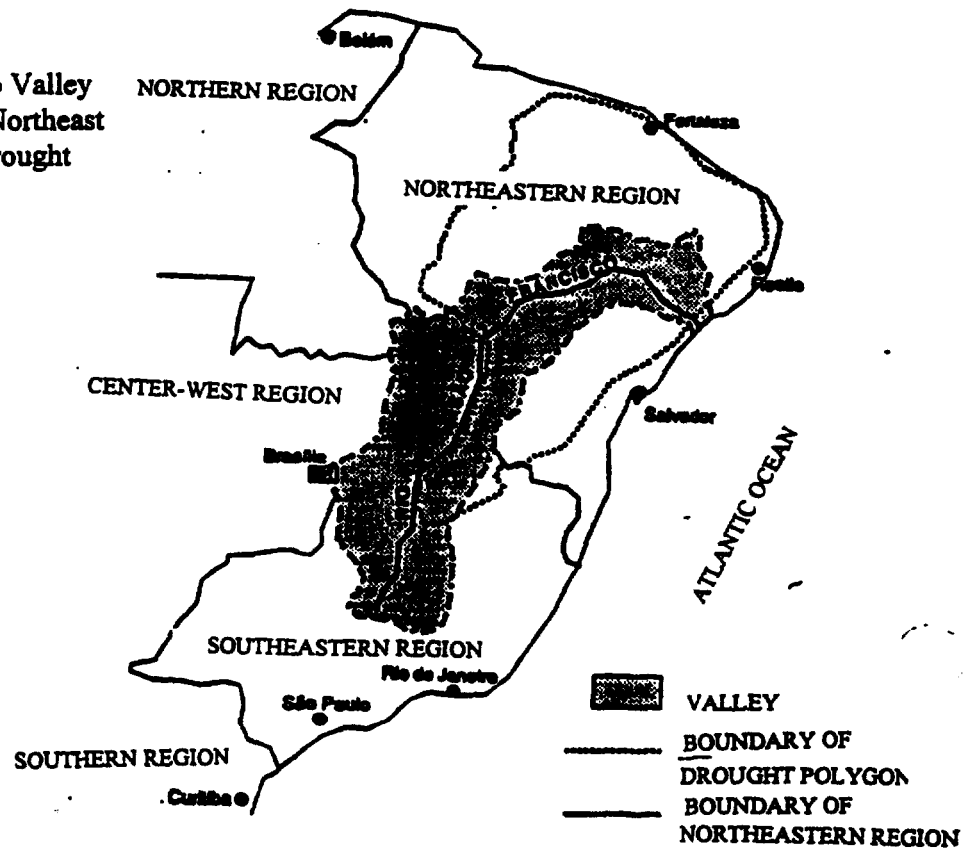
	Ha.
Under production	6,800
Under construction	6,600
Under study	6,000



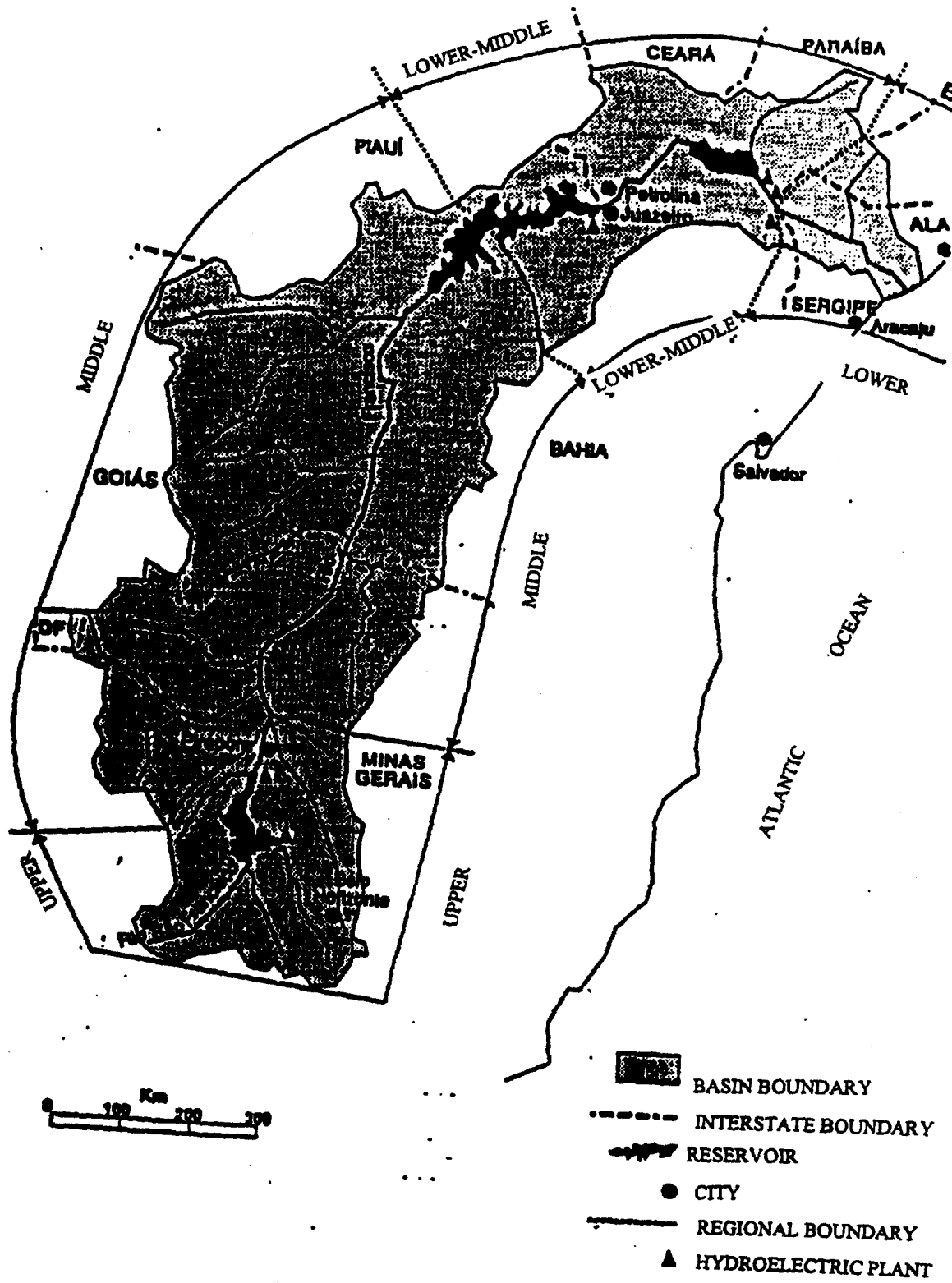
The São Francisco Valley in relation to Brazilian territory



The São Francisco Valley in relation to the Northeast Region and the Drought Polygon



ANNEX B



**AGREEMENT BETWEEN CHESF AND RURAL WORKERS
AFFECTED BY THE RESERVOIR OF THE ITAPARICA
HYDROELECTRIC PLANT,
WITH THE PRESENCE OF THE MINISTRY OF MINES AND ENERGY**

The present Agreement, signed following negotiations that took place from December 5 to 6, 1986 at the Contractor's Construction Camp at Itaparica, based on claims contained in the document titled "MANIFEST OF RURAL WORKERS AFFECTED BY THE ITAPARICA DAM ELEVEN MONTHS AFTER FLOODING," dated December 1, 1986, states the following commitments:

I. RESETTLEMENT TIMETABLE

12-15-86	The expropriation decree for the lake shore should be signed.
12-30-86	Deadline for beginning the expropriation process in the area of Fazenda Pastos Bons, in the municipality of Petrolina.
1-15-87	Submission of economic feasibility study for the Downstream Project, by CHESF.
3-30-87	Deadline for CHESF to be legally in possession of all areas necessary for resettlement.
April 1987	Start-up of housing construction in areas of Special Irrigation Projects.
August 1987	Start-up of resettlement.
July 1988	Conclusion of implementation of irrigation systems.

II. GENERAL CRITERIA FOR DISTRIBUTION OF RURAL PLOTS

- a) Single rural workers over the age of 18 are considered an integral part of the family unit.
- b) Families registered as owners, squatters or tenants and who irrigate 6 ha or more shall receive a plot with an irrigated parcel of 6 ha.
- c) Single rural workers over the age of 18, and who were cadastred by December 1985 as family units because they live alone and do not fit the previous item, shall receive a plot with an irrigated area of 3.00 ha.

- d) For those families who irrigate an area smaller than 6.00 ha, the following tables shall apply:

1. Criteria for determining family work force

Table 1

SEX	AGE GROUPS				OBSERVATIONS
	0-6	7-1	15-64	over 65	
Male	-	0.20	1.0	0.5	Invalids will not be included in work force
Female	-	0.15	0.6	0.3	

2. Criteria for defining a plot's irrigated area.

- Function of working capacity

Chart 2a

Cultivated Area (ha)*	Worker Equivalent
0 - 3.00	-
3.00 - 5.99	1.0

- Function of family work force

Chart 2b

Family work force (worker equivalent)	Plot Area (ha)
0 - 3.00	3.00
3.01 - 4.50	4.50
over 4.50	6.00

The definition of the plot's irrigated area to be provided to each family shall be obtained in the following manner:

- Owner, squatter or tenant: the sum of family work force obtained based on chart 2a. The total found is applied in chart 2b, thereby obtaining the size of the plot's irrigated area.
- Sharecroppers and other landless workers: using table 1 to obtain the family work force, then applying this result in chart 2b, thereby obtaining the plot's irrigated area.

e) Active retirees shall be provided a plot with an irrigated area of at least 1.5 ha. This parcel shall increase in terms of the work force to be defined using the table specified in the above item.

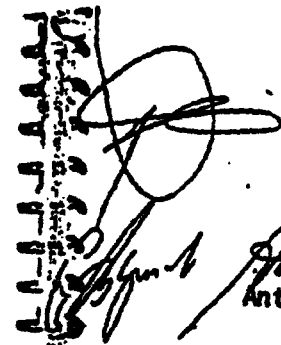
- III. In lakeside settlements, an ideal fraction is assured, varying from 19.00 to 23.50 ha of collective area situated near the project.
- IV. In Special Projects settlements, an ideal fraction is assured, consisting of 10 ha of collective area for rainfed farming and livestock, as close as possible to the projects.
- V. Once a family is transferred, CHESF shall provide a remuneration of 2.5 minimum salaries through construction companies to a member of the family group, in the locality where the Project is to be implemented, until the first harvest is marketed.
- VI. CHESF shall readjust the prices in the compensation table, whenever necessary, with the participation of the Pólo Sindical do Sub-Médio São Francisco.
- VII. CHESF and the Ministry of Mines and Energy agree to work together with competent agencies to obtain a special line of credit for resettled persons.
- VIII. Persons whose lands have been expropriated and who opt for resettlement shall be guaranteed the use of the lands and improvements made to them until the day they move to a new plot, by means of a contract for concession of use which will form part of the process of appropriation of improvements to lands.
- IX. CHESF shall assure, for a five-year period, beginning at the start of irrigation, a new resettlement for a family settled in projects, blocks of irrigation projects or mini-projects, whose plot undergoes salinization which makes it unsuitable, following a report issued by technical experts proving that such salinization was not the result of oversight or negligence in the application of irrigation.
- X. CHESF shall provide technical assistance, rural extension and marketing support for all persons resettled, for a five-year period.
- XI. CHESF shall assure continuity of active participation by communities and union agencies in all stages of the resettlement process.
- XII. It is assured that the filling of the reservoir will only begin when the resettlement of rural workers is resolved; it is understood that this condition shall be met with the delivery of a house to the resettled person in the area where he will carry out his activities.
- XIII. Rural workers under the coordination of Union Agencies agree to vacate on this date the Contractor's Construction Camp of the Itaparica Hydroelectric Plant which will allow work to restart immediately.

This document is signed by representatives of Minister Aureliano Chaves, of CHESF, and of Union Agencies representing Rural Workers in the area of the Itaparica Hydroelectric Plant Reservoir.

Petrolândia, December 6, 1986

(signed by 20 officials of CHESF, Ministry of Mines and Engineering and Union Agencies)

Petrolândia, 06 de dezembro de 1.986.


Antônio Ferreira de Oliveira Britto
Presidente da CHESF

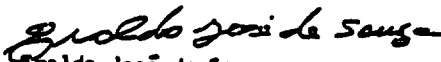

José Carlos Atelúia Costa
Diretor de Engenharia da CHESF



Aurelino Bastos da Guarda
CONTAG e FETAG-BA


Antônio Marques dos Santos
FETAPE

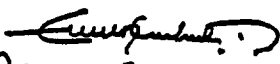
(signed by 20 officials of CHESF, Ministry of Mines and Engineering and Union Agencies)



Genildo Gomes de Souza
Diretor Econômico-Financeiro da CHESF


Geraldo José de Souza
Polo Sindical Submédio São Francisco



Luiz Fernando Motta Nascimento
Diretor de Suprimento da CHESF


Aldalísio Borges Gonçalves Veras
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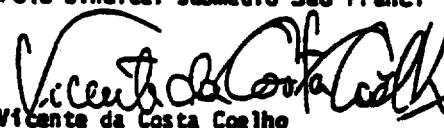

Evaristo José Braga Cavalcanti
Departamento de Implantação de Reservatórios

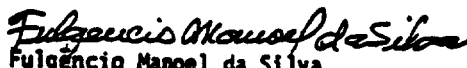

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Nildo José da Silva
Sind. Trab. Rurais de Glória



Vicente da Costa Coelho
Sind. Trab. Rurais de Petrolândia



Fulgêncio Manoel da Silva
Sind. Trab. Rurais de Floresta


João Batista dos Santos
Sind. Trab. Rurais de Rodelas


Teodorico Francisco dos Santos
Sind. Trab. Rurais de Chorrochó


José Soares Novais
Sind. Trab. Rurais de Itacuruba


Deusdedit Silvano Pereira
Sind. Trab. Rurais de Belém do São Francisco


Getúlio Lamartine de Paula Fonseca
Diretor Geral do DNAEE
Representante do MME



ANNEX D

Effects of CHESF Hydroelectric Plants in the São Francisco Valley

Hydroelectric Plant-State	Flooded area (km ²)	Installed Capacity (Mw)	N° of persons affected	Year of operation	Effects
Paulo Afonso I, II and III BA/AL	4.8	1524	—	1955/ 1961/ 1971	Decreased flow from Paulo Afonso waterfalls and socioeconomic changes
Moxotó/AL- BA-PE	89.2	2440	1007	1977	Flooding of farmable areas in municipalities of Glória, Petrolândia, Delmiro Gouveia and Paulo Afonso
Sobradinho/BA- PE	4225.9	1050	70000	1979	Flooding of towns of Casa Nova, Remanso, Pilão Arcado, Sento Sé; flooding of rural areas in <i>várzeas</i> (floodplains); disappearance of islands
Paulo Afonso IC/AL-BA-PE	14.6	2460	—	1979	Changes in socioeconomic activities
Itaparica/BA- PE	834.0	2500	40000	1988	Flooding of towns of Petrolândia, Itacuruba (PE), Rodelas, village of Barra do Tarrachil in Chorocho, Glória - partial (BA), 23 rural centers, farmable areas and islands
Xingó/AL-SE	60.0	5000	Not estimated	1994 (*)	Transfer of population, changes in socioeconomic activities, loss of historic, cultural and scenic patrimony

Source: Pólo Sindical/CEDI - 1993

* (planned)

— data not available

Total area flooded	5228.5 km ²
Total installed capacity	14974 Mw
Total affected persons	111,007 persons

**Environmental Aspects of Projects Co-Financed
by the World Bank**

Lessons for the Future

**Alencar Soares de Freitas
Pedro Ribeiro Soares
(Organizers)**

**IPEA Series 146
Brasília, 1994**

IPEA 14

Projects in the São Francisco Valley

2.1 Description of Projects and Financing by the World Bank

- a) Paulo Afonso IV/Sobradinho Project: cost US\$692.6 million, of which US\$81.0 million was financed by the Bank, signed in 1974. The evaluated project deals with resettlement of communities displaced by flooding caused by the Sobradinho reservoir. Executing agency: CHESF.
- b) Lower São Francisco Polder Project; cost US\$56.5 million, of which US\$23 million was financed by the Bank, signed in 1975. Executing agency: CHESF.
- c) Second São Francisco Irrigation Project: cost US\$74.5 million, of which US\$7.7 million was financed by the Bank, signed in 1979. Executing agency: CHESF.
- d) Itaparica Resettlement and Irrigation Projects: cost US\$303.7 million, of which US\$132.0 million was financed by the Bank, signed in 1987. Executing agency: CHESF (CODEVASF was in charge of coordinating operation and maintenance, technical assistance and rural extension for irrigation projects).

2.2 Summary of OED Assessment

The four financed projects, dealing with energy production, human settlements and irrigated agriculture, as a consequence of the implementation of the Sobradinho and Itaparica reservoirs and the use of lesser floodplains (*várzeas*), had profound impacts on the Valley's physical and socioeconomic environment. One should recall that nearly 170,000 people were displaced from their original habitat and that the economic growth that was directly or indirectly induced caused intense urban expansion.

In Sobradinho, urban resettlements were relatively successful. In contrast, planned rural settlements failed, mainly because of decisions taken without the participation of the communities involved, with solutions imposed rather than proposed by CHESF. Thus, the area slated for most rural settlement was located nearly 800 km upstream, near Bom Jesus da Lapa. Consequently, and also due to insufficient planning and the lack of implementation support, the project was practically abandoned, and resettled persons preferred to settle on the periphery of the lake that was formed.

In these settlements that were planned for most of the population, infrastructure was lacking in the agricultural settlements (*agrovilas*), as well as difficulties for farmers caused by very poor soils, lack of means of irrigation, lack of credit, and great distance from consumer markets.

Consequently, many plots were abandoned or sold to larger, wealthier farmers from other regions and land ownership became concentrated, resulting in a swelling of the population in cities that received homeless people. Many former property owners became paid rural workers in private irrigation projects that managed to develop in the Valley. Major physical impacts, besides the flooding of lands naturally fertilized by the lake itself and by

the increased permanent level downstream from the dam, included flooding, also permanent, of *várzeas* formerly used for seasonal cropping in the Lower Valley.

It was the use of these *várzeas* with the polder system that gave rise to two Bank-financed projects which also had social targets; lands whose ownership was highly concentrated were expropriated. However, with the displacement of nearly 50,000 rural inhabitants, in light of the projects' maximum capacity of absorbing 20,000 people, more than half of the population was displaced, in this case with no pre-planned destination, causing additional pressure on urbanization in the Valley.

Besides this characteristic, the implementation of projects - which absorbed little labor due to its high technical level - was carried out with all sorts of shortfalls, such as lengthy delays between expropriation and project operation, low compensation paid for expropriation, done in a coercive manner, and the resettlement methods used by CODEVASF.

Non-compliance with initial targets also contributed to incentives to raise sugarcane, causing greater concentration of land ownership which had already begun with the sale of plots. Here as well, community organization movements, encouraged by the Church, were not sufficiently well-structured to contribute toward a reorientation of planning.

A physical impact on river water is the use of fertilizers, necessary to make up for lack of fertility which was once naturally replaced by periodic flooding, and the occurrence of salinization of soils due to improper drainage. Thanks to these factors, the rate of return, once estimated at 22%, dropped to 7%.

The planning of the Itaparica resettlement was already greatly influenced by pressure made in CHESF to organize rural unions, the *Pólo Sindical*. *Agrovilas* received nearly 3/4 of all relocated persons (40,000 persons), while the remainder occupied irrigated plots with sophisticated projects.

However, the delay of over two years in starting these projects, under the responsibility of CHESF and CODEVASF, kept people living in *agrovilas*, unemployed and receiving subsidies from CHESF to survive. This involuntary inactivity gave rise to all sorts of social problems.

The final cost of US\$63,000 per relocated family, considered high when compared to other relocations, is considered justifiable by the Bank since it deals with the entire population actually displaced, in contrast to other, previous projects in the Valley.

The physical impacts were more modest than those of other projects and are being monitored satisfactorily. It is expected, however, that the same problems will occur in the medium term due to the use of agrochemicals and to soil salinization.

In general, the direct and indirect consequences of these projects -- although they contributed toward increasing agricultural production and related economic activities, especially on medium- and large-scale irrigated projects aimed at export -- caused a concentration of land ownership and the consequent disappearance of the Valley's traditional small farmers who could no longer farm because of increased land value. Meanwhile, urban centers in the area of influence grew four times during the period that began with the implementation of Sobradinho.

The main conclusion is that there was a major human impact, within the set of actions carried out in the Valley, under the four projects. The initial focus of the institutions involved was inadequate and incomplete in terms of the Valley's problems, and lack proper command of the process due to technical and financial shortcomings which transcended to the organizations.

If the projects had been properly set up under a comprehensive plan for the Valley, most of the problems would at least have been known *a priori*, thereby facilitating regional involvement in these projects which were initially only sectorally focused.

In its review of Sobradinho, the World Bank lacked defined policies regarding involuntary resettlements. Guidelines were created for this area, similar to those used in other countries and regions, including in the case of Itaparica.

With an awareness of environmental concerns, new settlements should fit into the framework of a wide-ranging future regional development nucleus, with a degree of sustainable growth. For similar projects, in the future, the World Bank recommends that, along with an *ex ante* assessment of environmental, physical and social scope, the costs of environmental protection and resettlements should be well investigated and taken into consideration in the economic assessment of the productive infrastructure and/or projects that caused them.

In this socio-economically-oriented assessment, it is very important that the option of the technical level of projects to be implemented should always be chosen in mutual agreement with users. They should ultimately decide on the degree of the labor component involved.

2.3 Summary of Assessment by Brazilian Consultants 1/

1/ Report prepared by Sueli Corrêa and Bruno Pagnoccheschi

2.3.1 Projects in Middle São Francisco

a) Paulo Afonso IV/Sobradinho (1975-1983)

Planned socioeconomic impacts and their mitigating measures were as follows:

- to at least maintain pre-existing living conditions of the 70,000 people displaced from the reservoir area;
- to construct physical, economic and social infrastructure for 3700 families on the lake shore, assigned to the Special Colonization Project (PEC) in Serra do Ramalho, and to compensate the 1400 families who decided to leave the area;
- the population and agricultural sector of the Lower São Francisco would suffer adverse effects caused by increased minimum river flow, with the loss of 9000 hectares of land once used to plant rice;
- there would be a reduction in the number of inhabitants who lived along the water, with decreased pressure on fishing; and
- possibility of disseminating and exacerbating bubonic plague, schistosomiasis and malaria in the reservoir area.

The environmental impacts that occurred were:

- new cities now have a population that is five times higher than at the beginning. Persons resettled in rural areas suffered an enormous drop in living standards; the PEC-Serra do Ramalho became a focus of poverty, compared to the irrigation schemes implemented by CODEVASF in the area. In reality, the results are:
 - 6200 families opted to remain on the lake shore;
 - 1300 families agreed to occupy the PEC (with major exodus later on);
 - 2022 families emigrated to the nearby rural area, on the banks of the São Francisco River or in other states; and
 - 1777 families of *catingueiros* (rural dwellers) settled in municipalities throughout the area.
- the impact of increased flows during droughts was minimal in the Middle São Francisco but created the need for downstream implementation of two other projects by CODEVASF (Polders and São Francisco II), also co-financed by the World Bank,
- there is no data on the reduction in the number of riverbank dwellers; and
- there is no follow-up data on endemic diseases, but the IBRD considered control plans to be highly satisfactory.

The physical-environmental effects that took place were:

- CHESF opted not to clear the lake area, given its size, which made fishing difficult in the first years and left doubts regarding the economic future of those who opted to stay on its shores. Since CHESF did not actually work as a development agent in the region, resettlement represented an emergency effort to reach its priority objective of producing electrical energy. In this way, its plans did not include the urgency and technological excellence of geological and engineering plans. Beside the fact that resettlement resources were insignificant, the technical assistance offered to families in the rural area near the lake was also inadequate.

b) Itaparica

Planned socioeconomic impacts were:

- the major problems were the resettlement of 2400 families (including the Tuxá indigenous community) in the area around the reservoir and 2900 families in three new irrigation projects (Brígida, Pedra Branca and Caraibas), as well as the creation of four urban centers. Risks would be reduced by the involvement of farmers in the concept and implementation of the process; by payment of a salary for a period of up to nine months after water is connected to rural plots; and by training farmers in modern irrigation and agricultural techniques;
- the resettlement of the community of Tuxá "peasant Indians" (190 families) under the responsibility of FUNAI was to be concluded by July 1988. Families would receive social extension and agricultural services, and the lands they occupied would be transferred to FUNAI by 1-1-1990; and
- the reservoir could not be filled until resettlement was concluded (point of agreement between CHESF and the Pólo Sindical and the object of recommendations by the governments of Pernambuco and Bahia).

The socioeconomic impacts that occurred were:

- When dam implementation began (1976), resistance by workers broke out in Pernambuco and Bahia, unleashing an organizational process in which the major struggles were over the resettlement of evicted families, land grabbing, land conflicts between Indians and squatters, and problems caused by droughts in 1979 and 1984. Through the then-constituted Pólo Sindical, workers made an agreement with CHESF and established conditions for their transfer from the area. The different paces of the progress of the resettlement plan and of the implementation of productive infrastructure left resettled persons dependent on salaries paid by CHESF and created very high social costs such as increased crime, idleness and excessive alcohol consumption in the *agrovilas*. Project costs were far beyond those planned due to the work stoppage and the need for new resources from IBRD. An agreement with CODEVASF was only signed in November 1990 for the implementation of irrigation projects;
- the negotiation process with the Tuxá Indians resulted in the group splitting in two, bringing with it a high degree of emotional stress. In the municipality of Ibotirama, 94 families were relocated on the banks of the São Francisco; the other 96 families decided to settle in Nova Rodelas on the edge of the reservoir. The promised irrigation systems had not yet been built. Thus, the Tuxás survived on the salaries paid by CHESF but faced the same problems of social breakdown as did other persons resettled in rural areas; and
- CHESF began filling the reservoir in January 1988, upsetting many non-resettled families. In March there was an outbreak of gastroenteritis in the area, probably caused by the excessive proliferation of blue algae, affecting over 2000 people and causing over 100 deaths.

Planned physical-environmental effects only related to non-aquatic wildlife.

The physical-environmental effects that occurred were:

- Implementation of the Saci Operation to rescue animals at risk of drowning, but without an effort aimed at more vulnerable species. Since the reservoir's waters rose up to 1 m/day, the ludicrous efficiency of capturing 0.8 animals per day was achieved.

Planned institutional effects were those relating to rural resettlement, considered by the IBRD as the most complex part of the project, requiring effective cooperation among the various agencies involved in the process.

The institutional effects that occurred were:

- despite countless difficulties, the Itaparica experience contributed toward demonstrating the importance of negotiations between the project executor and the affected population as an element in solving conflicts. Except for non-compliance with an agreement for enforcing predatory fishing in the lake, by IBAMA, the documents consulted do not refer to problems of an institutional nature in the project implementation process;
- in assessing Itaparica resettlements, it should be noted, in comparison to those done for Sobradinho, that there is clear progress in focus and social scope, caused by pressure from the organized population and assimilated by IBRD and the Brazilian government, which led them to take new negotiating stances with the populations to be removed;
- in the organization of production, due to the shortage of productive land in Itaparica, there were attempts to introduce alternative forms of production, with little success. The main flaw was in marketing activities;
- counterpart delays in local currency and the habitual priority given to physical infrastructure components also jeopardized and increased the financial, and especially the social, costs of projects;
- the political willingness of CODEVASF was not enough to counterbalance the lack of technical preparation and linkage between the executing agency and co-participating agencies, and the limited technical capacity of resettled persons; and
- once again, the lack of prior regional planning, at least for the use of natural resources, was a decisive factor in the difficulty of fitting a development project, on a relatively major scale, into the regional framework.

2.3.2 Várzeas Irrigation Projects -- São Francisco I and II

a) São Francisco I

Socioeconomic aspects

Implemented in an area with a major concentration of land owners, the project sought to redistribute rural land ownership; there were major social conflicts during the

expropriation stage which lasted over five years. On the date scheduled for the end of implementation, only 44% of the area was irrigated.

The maintenance of irrigation and drainage networks was deficient, jeopardizing soil productivity and sustainability. The costs of occupation and maintenance, although anticipated in the contract, were not easily recovered from users.

Processing and marketing activities, the difficulties of which were pointed out in the project concept phase, were also not sufficiently structured in São Francisco I and were only completed in the later contract for the São Francisco II project.

Transportation, energy and sanitation infrastructure was strengthened on time and their respective goals were exceeded. Although there were flaws and delays, the educational program managed to be implemented satisfactorily. Public health sector goals were also met. The fisheries program was far from that planned due to technical problems in fingerling production. Swine-rice-fisheries had good development prospects.

The project cost exceeded budget estimates by 12.2%, although there was a reduction in the costs of social components in contrast to civil construction targets which increased over 100% in some physical components of the project.

Institutional Aspects

CODEVASF made mistakes in project coordination, either in the study phase or in the implementation phase. Although accidental factors may have occurred (unseasonal rains), implementation problems were especially of a managerial and political nature, tied to inadequate preparation, which caused a nearly two-year delay in project implementation.

By adapting project management to social demands, room was made for better criteria to select settlers and for opening outlets for the unemployed and paying financial compensation.

It became clear that measures aimed at organizing and training farmers should have been taken much earlier and separate from the priorities of engineering works.

The performance of participating private companies may be considered reasonably good, while the efforts of government agencies varied from good and reasonable to levels of inefficiency that corresponded to the non-achievement of certain project targets.

b) São Francisco II

Socioeconomic Aspects

Cuts in CODEVASF's budget and consequently in counterpart contributions caused an interruption in the contract with the Bank; later, a new contract was signed which guaranteed that the project would proceed.

In this project, the implementation of small farmers' associations and cooperatives was more successful and they should gain complete autonomy in the future. Equally positive was the dissemination of swine-rice-fisheries projects which ensured an additional supply of protein in the human diet.

Projects were delayed and their costs increased in light of the need to correct the technical deficiencies detected in the agro-engineering project. The gap between successful implementation of engineering works and the weak development of agricultural production was due to the difficulty in obtaining credit, to deficient rural extension and to settlers' lack of irrigation experience.

The project provided a considerable increase in the income of beneficiary farmers, making their work less exposed to unexpected events caused by irregular climatic conditions (droughts and floods). Although there is a sharp imbalance between the productivity of different subprojects, the average internal rate of return remained around 7%. Due to high operation and maintenance costs, however, there are doubts about long-term sustainability of the project's profitability.

Physical-Environmental Aspects

No pollution of aquifers was caused; the use of fertilizers and pesticides was controlled. No forest clearing was carried out, and no soil erosion was detected.

Institutional Aspects

Institutional arrangements for project execution, after the lessons of the São Francisco I project, were shown to be inadequate, either in CODEVASF's performance, with greater field presence, or in that of the state agencies involved. The main managerial and business involvement of farmers' associations and cooperatives allowed for a greater level of "distancing" in relation to CODEVASF.

CODEVASF demonstrated its flexibility and ability to adapt throughout project implementation, making up for deficiencies caused by lack of staff specializing in supervision and agricultural development and those occurring in operation and maintenance activities during the first years of the project. The agency also had to face an initially tense relationship with farmers who were aware of the technical and operational shortcomings of the São Francisco I project.

2.4 Synopsis of Comments Made by Executing Agencies on the OED Assessment

2.4.1 Summary of Comments Sent in 1990, Presented by Origin, Content and Reaction of OED

CODEVASF

- CODEVASF's comments dealt with relocations caused by Sobradinho, considered to be of an emergency nature. The recommendation was that, in the future, cost/benefit analyses of similar projects be made in an intersectoral and regional framework, and also include the costs of environmental protection in the economic assessment of infrastructure projects. These comments were included by OED in the footnotes to the final report.

FUNAI

- The agency's agreement with OED's comments on problems dealing the removal of Indians from the Tuxá group and the rectification of Bank statements regarding the Pankararu reserve were reproduced in the footnotes.

MINFRA

- The reaffirmation of the power of restructuring the regional space for large-scale hydroelectric plants and the problems created by the lack of environmental impact studies carried out in a timely manner, are included in the footnotes.
- The statement that the Bank failed to assess the high costs of relocation is incorrect, since this matter was treated by OED.
- There was no specific mention in the OED report of the main cause for the draining of the Sobradinho reservoir for a long period of time, which was due to a considerable delay in the implementation of Itaparica, with additional generation needs in the Paulo Afonso complex.

CHESF

- No mention was made in the final edition of the report, at least in a noticeable manner, of the company's reaction to the Bank's statement that its performance had been characterized by the use of *heavy-handed eviction methods*. In compensation, all the following observations and comments were included in the footnotes:
 - CHESF's pioneering spirit in undertaking such a large relocation effort;
 - despite the fact that, in Itaparica, its performance was aimed more at meeting the needs of the population, largely due to pressures stemming from associations of resettled persons, undesirable situations still occurred for many of them;
 - the adjustment phase for involuntarily displaced communities to a more or less imposed reality would be easy were it supported by a consensus negotiated with these communities;
 - in the case of Sobradinho, INCRA's intervention did not achieve expected results, despite attempts to adapt current legislation;

- the Bank's failure to refer to the actions of Bahia state government agencies to correct irregularities in the occupation of the Sobradinho lake shore;
- communities' claims dealt with the need for water in order to farm the land that they would receive; later, planning was aimed at integrated irrigation projects, with countless difficulties in meeting farmers' interests;
- the ascertainment of the "institutional isolation" that affected CHESF in undertaking a project with such marked social impact; for this reason, the company could not have had a much different position and performance;
- access to the resettlement of families who moved to the reservoir area during the implementation stage and start-up of operations;
- the final size of plots, negotiated with union organizations, was between 1.5 ha and 6 ha, which was not far from CHESF's initial proposal;
- the issue of making compatible the social and land tenure organization of projects with the level and type of technology to be adopted and thus with the degree of feasible capitalization;
- the effective start-up of the management of the Itaparica projects by CODEVASF.

In March 1992, CHESF published two detailed reports on the environmental aspects of the Sobradinho and Itaparica projects which expose all the phases and interfaces of its performance and confirm the limitations of a sectoral company's performance in the framework of regional development.

2.4.2 Additional Comments from 1993

In addition to the above statements (all included in footnotes in the final edition of the OED report), CODEVASF sent comments on the Report for Discussion prepared for the seminar.

The comments summarized below deal with the "Brazilian report," presented in item 2.3:

- in the initial phase, CODEVASF, under an agreed obligation, only had to give technical orientation to CHESF, the sole agency responsible for delays or other deviations from planning;
- the agreement signed by CHESF and CODEVASF in 1990 is still not operational, and the work program and definition of co-responsibilities are still at the discussion stage;
- CODEVASF says that the Brazilian consultant's statement that there was a "lack of technical preparation" on the agency's part is untrue; among other arguments, mention is made of structural and institutional problems of a general nature;
- CODEVASF emphasizes that the main objective of *várzea* efforts was not to redistribute effective ownership but rather to reduce the impacts resulting from the new hydroelectric scheme imposed by the Sobradinho reservoir.

During the seminar, CODEVASF's representative stated that the works had a redistributive effect, an unusual fact in this type of undertaking.

CHESF's comments on the Report for Discussion complement those that had been made in relation to the OED document, the only one previously analyzed by the agencies. 2/ Besides several errors in the final review that were detected and corrected, the following observations were made:

- CHESF believes there was no "error" in the definition of the area of influence, allegedly jeopardized by the lack of understanding of these issues at that time;
- rural resettlement, originally slated for all 6623 families who were cadastrated, was readjusted by the fact that one party opted for "its own solution" and another opted to live in municipal centers; in the end, rural resettlement was carried out on 20,000 ha under irrigation;
- CHESF attributes the cost increase, considered final, per settled family (US\$63,000) to two causes: the first, resulting from deficient coordination and management (work stoppage and resulting costs, as well as the delay in settling families on plots, also with unexpected maintenance costs), and the second, unexpected cost allocation (maintenance of social infrastructure);
- efforts will be made to minimize the impact of the use of agrochemicals and the salinization of soils, through proper extension efforts;
- CHESF is updating the balance of the final destinations of families relocated from Sobradinho, as follows:
 - up to 1500 families on the lake shore and 4000 families (up to 8000) in the PEC-Serra do Ramalho were anticipated;
 - 5378 families on the lake shore were settled, with 1013 occupying the PEC (with major exodus later on), 2047 found their own solution, and 181 were deceased or had unknown destinations.
- CHESF disagrees with the statement found in the "Brazilian report" that the submerged vegetation in Sobradinho jeopardized fishing in the first years of filling (which, by the way, was the case in Tucuruí);
- CHESF notes that the gastroenteritis epidemic in Itaparica was not due to the proliferation of blue algae, and does not agree that the Saci operation was not very successful. 3/

2/ Although in the preamble CHESF states that it will only make comments on the "Brazilian report," it also presents corrections to, and observations on, the OED report.

3/ See item 2.5.3.

2.5 Summary of Presentations and Debates during the Seminar's Technical Session

2.5.1 Project Presentation

Antônio Pereira Gomes, adviser to CHESF's Environmental Department, made a presentation on the Sobradinho and Itaparica projects and offered some initial information

on the São Francisco Hydroelectric Company (CHESF); the company, one of four controlled by ELETROBRÁS, handles a population of 37 million.

From the Sobradinho project, he pointed out the initial idea of Suvaia (now CODEVASF) was to draw 100 m³/s for use in irrigation, but that it opted for only 25 m³/s (Massangano project, on the left bank). Since 1977, with the first partial filling, the Sobradinho reservoir began its work of regulating the São Francisco River, both for droughts and for flood control, as occurred in the 1989 flood. One of the first environmental problems with the reservoir was the minimum depletion needed to deal with the 1984-87 dry period, when the banks receded and the fishery stock decreased.

The number of affected families reached 11,853, 27% in urban areas and the rest in rural areas. The proposed options for urban populations were compensation, housing exchange, settlement on the lake shore or in the Serra do Ramalho project (far upstream from Sobradinho), or finding their own solutions; and for rural populations, compensation, new city, lake shore or rural centers.

Destinations were finally settled, with 70% of families staying on the lake shore, 20% going to new cities and rural centers or finding their own solutions, and only about 10% going to the Serra do Ramalho Project.

Regarding Itaparica, 10,623 families were affected, distributed nearly equally between rural and urban centers. The options were compensation, housing exchange, finding their own solutions, community labor efforts (*mutirão*) or irrigation projects, for urban families; and compensation, irrigation projects or lake shore, for rural populations.

The plan for vacating the reservoir area, submitted to the World Bank and started in 1986, created such significant social tensions that the Bank, in order to grant an important sector loan to ELETROBRÁS, required the formulation of a community-based resettlement policy. Due in great part to the delay that the financial crisis caused in the Itaparica works, with work stoppage in 1990 and 1992, most of the irrigation projects that began in 1987 were postponed to 1993.

Final Considerations and Recommendations

To begin, let us recall the third purpose of carrying out the seminar (see chapter 1): to promote the institutional strengthening of a system for *ex-post* evaluation of the impact and design of externally financed projects.

The considerations that we feel are worth discussing, in this context, will demonstrate how the use of the "extended" management concept, *project management*, allows for a broader understanding of most of the shortcomings identified in evaluated projects and the justification of the *ex-post* evaluation process as an essential element for managerial efficiency. 1/

In his presentations at the seminar, OED Director Hans E. Kopp stressed the actual importance of effective management of the public sector of the economy, accompanied by an evaluation that is characterized by its autonomous execution and appropriate operational structure, that it be participatory and that it should promote dissemination of its results.

Moreover, the evaluation summary-report prepared by Brazilian experts recommends that "*ex-post* evaluations of completed projects should be an integral part of the activities of contractors as well as of ministries directly or indirectly linked to these investment projects, whether or not external financing is involved."

1/ In its report on POLONOROESTE, OED stresses this focus by stating that *monitoring, on-going and ex-post evaluation are essential parts of project management.*

7.1 Management and Evaluation

In the most generic sense, management is nothing more than the set of decisions and actions that an individual or organization must assume in order to carry out a simple or complex activity.

This set of decisions and actions is found for all types of activities, from the simplest, such as an individual's daily routine, to the most complex, dealing with the performance of large-scale entities, following a sequence that can be divided into three stages: 1) concept and measures for execution; 2) execution and respective monitoring; and 3) evaluation (to a greater or lesser degree) of results. The understanding of this reality and the growing complexity of activities linked to undertakings, along with the need to ensure effective, led to the development of modern techniques for project management.

When dealing with economic development projects at sectoral or central level, management starts at the stage of planning and/or programming the implementation of programs and projects, followed by monitoring of their implementation, and finally by evaluating the performance of the project that was implemented.

The main purpose of this final, *ex-post* evaluation is to verify the project's degree of compatibility with original expectations or to note drawbacks and identify their causes. In either case, the positive or negative "lessons" identified should be communicated systematically to decision-makers for subsequent planning: feedback on the decision-making process.

Either for the purpose of planning for *ex-post* evaluation from the time of project start-up and ensuring correct execution at the lowest cost, or of managerial efficiency, evaluation is really an ongoing activity that is intrinsic to the complete project cycle. It includes an *ex-ante* stage during project concept and formulation, and another stage during execution; *pari passu* or monitoring evaluation, containing monitoring functions in its process; and finally the *ex-post* evaluation of project performance and impacts.

Thus, the identification of a list of drawbacks common to nearly all projects and all their stages leads to the observation of a lack of management, since most of these defects are nothing more than the absence of basic components for project management.

With the exception of inefficiencies directly motivated by political efforts at different levels, each of the drawbacks observed in the *ex-post* evaluation can be added to the lack of one of the types of activities that characterize the *ex-ante* or *pari passu* evaluation stages. And, as the main function of the latter is to follow up and monitor execution in order to quickly detect any deviation or unforeseen event -- to be communicated to central management so that corrective measures can be taken in a timely manner --, it is evident that most defects occurring during project execution could most likely be eliminated or corrected before they become irreversible, if such a system were adopted.

The most frequent defects, common to the projects presented here (even in the first stage of Procop), were the lack of articulation between the companies and agencies involved, or between the sectors containing them; inefficient control, which increased with the number of agencies linked to the projects; lack of technical-managerial preparation; and, in the case of CVRD in Carajás, the fact that the command center did not cover all project components. These defects, although occurring with various aspects, are nothing more than the result of the lack of a single central management with power delegated by the sectors that assist the project to formulate, plan and implement all actions and activities needed to implement and start up project operations. Although a management agency should exist, for the operations stage, it would not be the same as in previous stages, even if its structure stems from the former.

Political support is evidently a *sine qua non* condition to be able to exercise effective management. And this support translates into the delegation of powers, needed by the management unit, which were formerly the prerogatives of the various sectors involved, which will give a business-oriented stamp to management.

Another essential characteristic of this method is that the management agency, during the implementation stage, should have available competent monitoring instruments and decision-making power to correct, in a timely manner, defective concepts or unexpected external factors as soon as they are detected. As we saw, this is what happened during the first stage of the Procop program which underwent changes and adaptations that corrected, in the short term, the inefficiencies detected during its implementation.

It should be made very clear that the organization of a single central management covering all levels of projects is easier said than done. It will require effective political decision-making that grants this central management the autonomy to take on the technical and administrative responsibilities once intrinsic to the agencies involved in the project (which, for POLONOROESTE, were more than ten).

In the case of the POLONOROESTE Program, practically all the problems had been detected in the occupation caused by the Trans-Amazon Highway. However, although there are studies and analyses on these problems, the lack of an in-depth, wide-ranging evaluation of all the direct and indirect impacts of the Highway meant that there were no instruments for analysis that were conclusive enough to use in the preparation of POLONOROESTE.

Values in US\$ million

Project Name and Number	Effect. Date	Closing Date	Current Value			% not disbursed	Executing Agency	Beneficiary States	Borrower: Federal or State
			Bank	Counterpart	Total				
Health									
2899 Projeto Nordeste I	7/29/87	12/31/88	59.50	70.20	129.70	11%	MIN SAUDE/STATES	BA, MG, RN, PI	F
2931 Controle de Endemias do NE	12/14/88	6/30/89	82.00	109.00	191.00	5%	SUCAM (PNUD)	AL, BA, CE, MA, PE, PI, RN, SE, MG, GO, PR, RS, NA	F
3072 Controle Malária B. Amazônica	9/20/89	6/30/90	72.80	89.00	171.80	1%	MIN. SAUDE/SUCAM	AC, AM, AP, MA, MT, PA, RO, RR, TO, NA	F
3135 Nordeste II	12/28/90	6/30/90	217.00	343.80	560.80	45%	MIN SAUDE/ST. HEATH SEC. (PNUD)	AL, BA, CE, MA, PE, PI, SE	F
3659 Controle do DST - AIDS	6/1/94	6/30/98	160.00	90.00	250.00	48%	MIN SAUDE	Toda a Federação	F
TOTAL HEALTH			681.40	711.80	1393.20	31%			
Education									
3255 PADCT II	6/15/81	12/31/88	140.00	150.00	290.00	30%	MIN. CIENCIA E TEC	Não Disponível	F
2810 PRODEBIO	12/15/87	6/30/87	15.80	81.90	107.80	8%	MIN. TRABALHO	Não Disponível	F
3375 Inovação no Ensino Básico	1/7/82	6/30/88	245.00	355.00	600.00	79%	STATE SP	SP	S
3804 Educação Nordeste II	2/6/84	12/31/88	212.00	168.80	378.80	77%	MIN. EDUCAÇÃO	CE, MA, SE, PE, NA	F
3683 Educação Nordeste III	5/27/84	6/30/89	208.50	160.30	368.80	78%	MIN. EDUCAÇÃO	AL, BA, PB, PI, RN	F
3788 Qualidade Ensino Público - PR	1/28/88	12/31/89	96.00	109.00	205.00	82%	Sec. Educação (SSED/PR)	PR	S
3733 MG PROQualidade	6/5/95	6/30/00	150.00	152.00	302.00	86%	Sec. Educação (SSE/ MG)	MG	S
TOTAL EDUCATION			1086.20	1184.80	2250.60	73%			
Environment									
2831 PRONACOP	7/11/88	6/30/88	47.80	60.00	97.80	16%	IBAMA/BANESPA(PNUD)	SP	F
3444 Prog Manejo Recurso Nat. RO	1/15/83	12/31/86	167.00	81.90	228.90	49%	SEPLAN - RO(PNUD)	RO	F
3018 Microbacias - Paraná	6/6/89	3/31/97	63.00	78.30	138.30	11%	STATE PR-SEAB	PR	S
3173 Prog. Nat Meio Amb. - PI/MA	12/5/90	6/30/97	117.00	48.40	165.40	51%	IBAMA (PNUD)	Não Disponível	F
3488 Proj. Controle Poluição Indust.	3/9/93	6/30/97	50.00	100.20	150.20	76%	IBANES	BA, SP, RJ, ES, MG, RS, SC, PR	F
3188 Microbacias - Santa Catarina	10/19/91	9/30/97	32.00	38.80	71.80	48%	STATE SC	SC	S
3492 Prog Manejo Recurso Nat. MT	1/15/83	12/31/87	208.00	90.70	298.70	70%	SEPLAN - MT (PNUD)	MT	F
3924 Reabilitação e Conservação Ambient	3/4/86	6/30/00	50.00	59.90	109.90	100%	CVRD	MG, ES, PA, MA	F
TOTAL ENVIRONMENT			732.80	818.60	1248.60	55%			
Power									
3043 Distribuição de Gás Natural	6/12/80	12/31/86	84.00	181.00	265.00	38%	COMGAS	SP	S
3378 Transp. Pres. Hidrocarbonetos	1/22/83	12/31/87	280.00	283.10	623.10	68%	PETROBRAS	BA, SC, SP, PA	F
TOTAL POWER			364.00	554.10	908.10	53%			

Current Project Portfolio

Values in US\$ million

Project Name and Number	Effect. Date	Closing Date	Current Value			% not disbursed*	Executing Agency	Beneficiary States	Borrower Federal or State
			Bank	Counterpart	Total				
Rural Poverty									
2718 NRDP - Pernambuco	11/14/86	12/31/95	72.00	88.40	160.40	15%	SEPLAN - PE	PE	F
2761 NRDP - B	10/19/87	12/31/95	111.00	185.20	296.20	12%	STATE - BA	BA, CE, PB, PE, PI, SE	F
2763 NRDP - Ceará	10/19/87	12/31/95	92.00	132.30	224.30	34%	SEPLAN - CE	CE	F
2762 NRDP - Piauí	11/20/87	12/31/95	93.00	82.30	175.30	13%	SEPLAN - PI	PI	F
2623 NRDP - S	12/12/85	12/31/95	60.30	69.00	129.30	4%	SCU - SE	SE, BA, CE, PI, PE, PB, MA	F
2624 NRDP - Rio Grande do Norte	5/7/88	12/31/95	51.40	74.80	126.20	15%	CEPA - RN	RN	F
2860 NRDP - Paraíba	10/16/87	3/31/96	80.00	63.90	143.90	42%	SEPLAN - PB	PB	F
2861 NRDP - Minas Gerais	10/20/87	3/31/96	55.00	58.50	113.50	87%	STATE MG	MG	F
2862 NRDP - Maranhão	12/18/87	3/31/96	84.00	88.30	172.30	55%	SEPLAN - MA	MA	F
2863 NRDP - Alagoas	10/19/87	3/31/96	42.00	44.40	86.40	62%	SEPLAN - AL	AL	F
3917 NERPA - BA	11/13/95	12/31/00	105.00	70.00	175.00	87%	CAR/ SEPLANTEC - BA	BA	S
3918 NERPA - CE		12/31/00	70.00	48.70	118.70	100%	DEPES / SEPLAN - CE	CE	S
3919 NERPA - SE		12/31/00	36.00	24.00	60.00	100%	PRONESES / SEPLAN - SE	SE	S
TOTAL RURAL POVERTY			891.70	1036.80	1927.50	48%			
Irrigation									
2883-1 Irrigação Brigação	1/24/92	12/31/96	100.00	171.70	271.70	11%	ELETRONBRASICHEFS	BA, PE	F
2950 Substancial de Irrigação	8/31/89	8/30/96	169.00	240.00	409.00	12%	MIN. INTEGRAÇÃO REGIONAL	MS, MT, GO, DF, MG, ES, RJ, SP, PR, SC, RS, TO	F
3170 Irrigação I	8/20/91	8/30/97	141.00	255.00	396.00	82%	CODEVASF&DNOCs	BA, CE	F
3013 João Irrigação	8/28/89	8/30/97	71.00	87.00	158.00	40%	CODEVASF&PNUD	MG	F
TOTAL IRRIGATION			481.00	753.70	1234.70	36%			
Research and Extension									
2679 Extensão Rural II	10/9/88	12/31/95	100.00	184.10	284.10	15%	Toda a Federação	Toda a Federação	F
2864 Controle de Doenças Animais	10/27/87	3/31/96	41.00	57.40	98.40	31%	MIN. AGRIC.	RS, SC, PR, SP, MG, RJ, ES, MT, MS, GO, TO, PE, CE, BA	F
3130 Pesquisa Agropecuária II	4/27/90	6/30/96	42.00	50.80	92.80	7%	EMBRAPA	AC, AP, AM, BA, CE, PA, PR, PE, PI, RO, RN, SE	F
2895 Florestal Minas Gerais	8/19/89	12/31/96	40.50	51.50	92.00	7%	BDMG&STATE MG	MG	S
TOTAL RESEARCH AND EXTENSION			223.50	353.80	677.30	16%			

COUNTERPART: Original amounts, indicated in Loan Contract

World Bank
Current Project Portfolio

Valores em US\$ milhões

Project Name and Number	Effect. Date	Closing Date	Current Value			% not disbursed	Executing Agency	Beneficiary States	Borrower Federal or State
			Bank	Counterpart	Total				
Highways									
3169 Sist. Gerenciamento Rodoviário	7/30/81	12/31/86	270.00	448.00	718.00	12%	DNER	MA, CE, PB, TO, AL, BA, MG, MS, SP, SC	F
2830 Gerenciamento de Pavimentos	8/18/88	12/31/86	142.25	231.85	373.90	8%	DER-SP	SP	S
3547 Gerenciamento Rodoviário-SC	4/22/83	12/31/86	50.00	86.80	136.80	81%	DERs - SC	SC	S
3548 Gerenciamento Rodoviário-AL	4/25/84	12/31/86	38.00	66.80	94.80	87%	DER - AL	AL	S
3713 Gerenciamento Rodoviário-PI	6/17/84	12/31/89	36.00	86.80	122.80	89%	DER - PI	PI	S
3715 Gerenciamento Rodoviário-MA	5/5/84	12/31/89	61.00	130.50	191.50	92%	DER - MA	MA	S
3714 Gerenciamento Rodoviário-TO	8/2/84	12/31/89	87.00	165.40	252.40	89%	DER - TO	TO	S
TOTAL HIGHWAYS			684.25	1158.75	1843.00	87%			
Urban Transportation									
3467 CBTU São Paulo	2/3/83	8/30/84	128.00	166.00	294.00	43%	CBTU&STATE-SP	SP	F
3633 CBTU Rio	3/14/84	12/31/87	128.50	143.90	272.40	89%	CBTU	RJ	F
3818 CBTU - Recife		12/31/81	102.00	101.80	203.80	100%	CBTU - PE	PE	F
3916 CBTU - São Horizonte		12/31/81	89.00	88.30	177.30	100%	CBTU - MG	MG	F
TOTAL URBAN TRANSPORTATION			447.50	499.00	946.50	78%			
Railroads									
2857 Remup. e Modern. do FEPASA	12/1/87	12/31/88	100.00	171.50	271.50	0%	FEPASA	SP	S
TOTAL RAILROADS			100.00	171.50	271.50	0%			
Urban									
Classed Reconstrução Rio	12/25/88	8/30/86	168.20	218.50	386.70	1%	CEF	RJ	F
3100 PEDU	1/18/80	12/31/86	100.00	128.90	228.90	4%	FAMEPAR	PR	S
3128 FMES	8/25/80	12/31/86	80.00	127.00	207.00	0%	BADESUL/BANRISUL	RS	S
2881 Salvador Metropolitan	8/18/87	12/31/88	36.81	86.00	122.81	21%	CONDER	BA	S
3638 SOMMA	1/18/84	12/31/88	150.00	182.10	332.10	84%	SDMG&STATE MG	MG	S
3788 Froub/CE	5/15/86	3/31/88	140.00	100.00	240.00	83%	SDU - State Environment Sec.	CE	S
TOTAL URBAN			674.81	851.50	1526.31	42%			
Sanitation									
2883 PROBANEAR	2/23/88	8/30/86	80.00	110.74	190.74	13%	CEF	AM, CE, PE, RJ, MS, MG, PA, SC	F
3102 Abastecimento Águas Sabesp	7/5/80	8/30/86	280.00	320.00	600.00	39%	SABESP	SP	S
3503 Prog. Saneamento Ambiental	9/28/84	8/30/87	8.00	162.60	170.60	83%	sec.saneamento	Não Disponível	F
3504 Prog. Saneamento Amb.-SP	8/17/83	8/30/87	119.00	142.90	261.90	82%	SEPLAN- SP	SP	S
3506 Prog. Saneamento Amb.-PR	5/17/83	8/30/87	117.00	108.10	225.10	82%	SEPLAN PR	PR	S
3554 Conserv. Atitudes e Onças-MG	9/8/83	8/30/87	145.00	182.60	327.60	89%	STATE MG/PMG	MG	S
3442 Moderniz. Sator Saneamento	8/8/83	12/31/87	250.00	250.00	500.00	81%	STATESP/MD/PEA	BA, ME, SC, MA	F
3767 Saneamento - ES	12/19/84	12/31/89	154.00	154.00	308.00	86%	CESAN e SEAMA-ES	ES	S
TOTAL SANITATION			1154.00	1408.94	2562.94	69%			
TOTAL PROJECT PORTFOLIO			7408.5	9248.4	16648.4	82%			

COUNTERPART: Original amounts, indicated in Loan Contract

ANNEX G

EVOLUTION OF THE POPULATION IN AREA MUNICIPALITIES, 1980-1991

MUNICIPALITIES	1980	1991	GROWTH 1980-1991 (%)
Lower São Francisco	24154	22982	-0.43
Itacuruba	4410	3238	-2.17
Orocó	7081	10769	3.88
Petrolândia	23709	32934	3.03
Santa Maria da Boa Vista	23883	42027	5.27
Total - Pernambuco	82237	111950	2.73
Chorrochó	10256	9601	-0.56
Curaçá	20637	25035	1.77
Glóra	9871	12818	2.40
Rodelas	4486	4292	-0.39
Total - Bahia	45250	51746	1.23
Total - both states	128847	163696	2.23

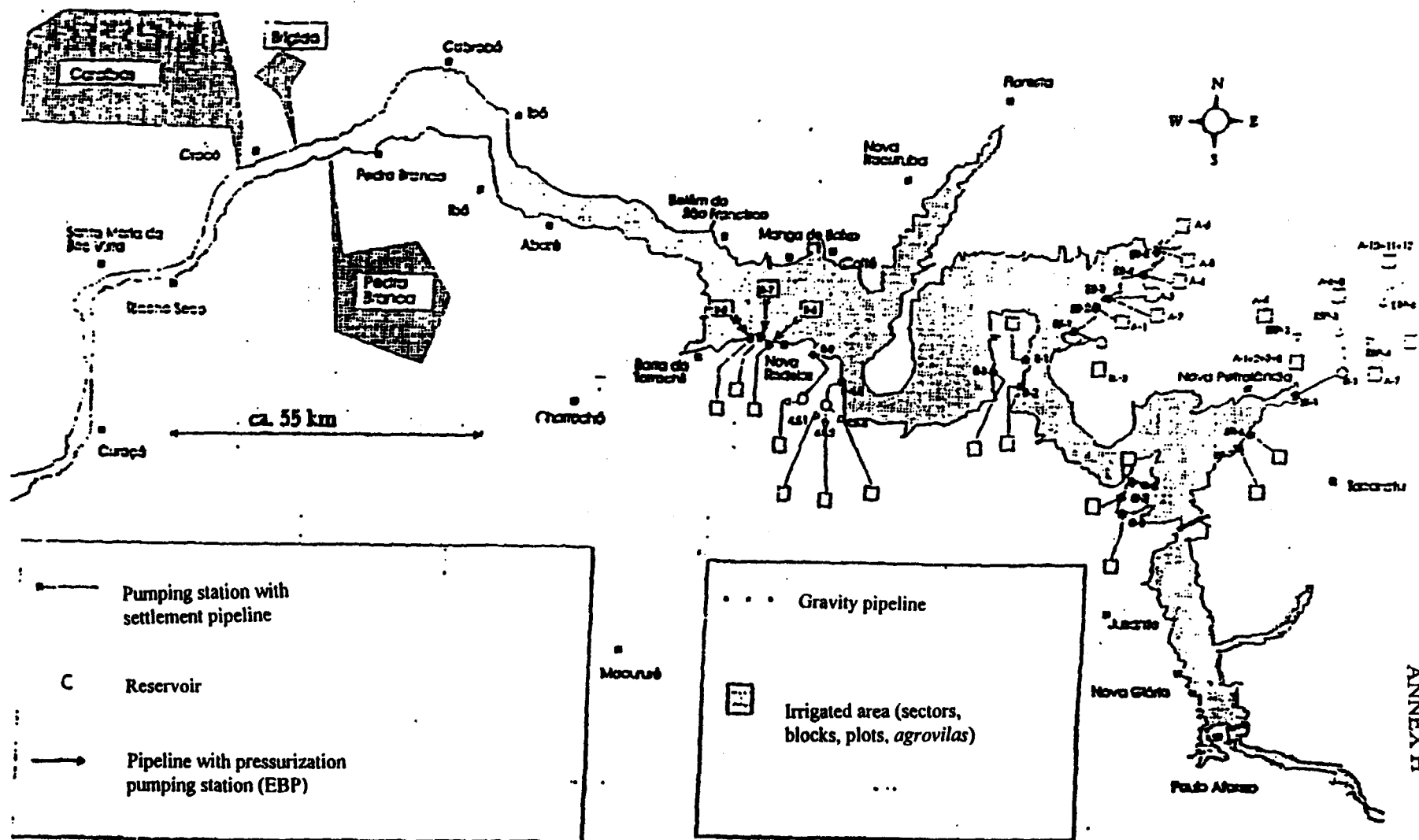
SOURCE: IBGE - Demographic Census

Irrigation projects in municipalities affected by the Itaparica dam

Municipalities	Area flooded (ha)	% of municipal area flooded	Population affected	% of rural population affected	% of total population affected	Irrigation projects	Area (ha)	Number of plots	Agrovilas
Glória	10.150	5,4	1.975	22,5	20,0	Borda do Lago Glória Jusante	409,5 1.600,0	139 —	3 —
Rodelas	14.990	5,3	3.180	71,0		Borda do Lago Rodelas	1.012,5	323	2
						Borda do Lago Itaquatiara	325,5	112	3
Chorrochó	630	0,2	565	6,2	5,7	0	0	0	0
Curaçá	0	0	0	0	0	Pedra Branca	2.466,0	706	19
Paulo Afonso	0	0	0	0	0	0	0	0	0
Petrolândia	14.310	8,9	6.400	46,0	27,0	Borda do Lago Barreiras	2.682,0	809	10
						Borda do Lago Icó-Mandantes	3.030,0	914	16
						Apolônio Salles	880,0	101	0
Floresta	16.270	3,4	3.675	12,1	9,0	0	0	0	0
Itacuruba	10.640	27,2	3.503	104,1	65,0	0	0	0	0
Belém de São Francisco	4.640	2,6	3.540	21,9	13,8	0	0	0	0
Orocó	0	0	0	0	0	Brigida	1.501,5	429	10
Santa Maria	0	0	0	0	0	Caraibas	5.605,5	1.603	47
Total	57.320		16.438				19.512,5	5.136	110

Source: Pólo Sindical/CEDI - 1993

Obs.: 1980 data on municipalities' total and rural population



ANNEX H

**São Francisco Valley Development Company
CODEVASF**

Special Executive Group on the Itaparica Project - GEEPI

**EVALUATION REPORT
ON TECHNICAL ASSISTANCE
AND RURAL EXTENSION SERVICES
IN THE IRRIGATION PROJECTS
OF THE ITAPARICA SYSTEM**

JANUARY TO JUNE 1996

Petrolina - PE

August 1996

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(Translator's Note: the following page of text appears to have been taken out of context. The preceding and following pages were not supplied, nor is the source clearly identified.)

- During the evaluation period, tomatoes were only being grown in the Brígida Project, primarily under contracts with agro-industrial processing plants.
- Harvested areas and tomato production, after a marked growth of the former by the second half of 1995, underwent major reductions. In addition, average production in the semesters evaluated were greatly reduced, from a threshold of 43 to 11 t/ha.
- Decreases occurred in harvested areas, production and productivity in onion production in the three semesters evaluated, and average productivity dropped from 11.5 to 7 t/ha.
- In the Pedra Branca Project, which began production in the first semester of 1996, average productivity for onions was 11.2 t/ha.
- Similar to onion production, melon production in the Brígida Project decreased, both in terms of areas planted and harvested, and of production and productivity. The same occurred with bean crops.
- As shown in the Annex, the productivity levels were very low in various crops and far below those programmed, as were regional averages and those in other CODEVASF irrigation schemes.

7.2 LAKE SHORE PROJECTS

- a) **Income Targets.** Various events were planned in all the projects to discuss/compare income targets, based on research carried out in the Barreiras Project from February to March 1995 when income values were defined for that project. The actions carried out during that period were aimed at discussions with strategic groups of farmers, although it was not possible to discuss with all of them, in order to define project targets.
- b) **Crop Model.** In all projects, actions were programmed and developed aiming at presenting to, and discussing with, strategic groups of farmers the Integrated Agricultural Model. In some of them, this stage was evaluated for purposes of presenting the model to other groups of farmers; the Barreiras Project, for example, was evaluated and discussions with all farmers were programmed. These presentations, however, were suspended due to the need to broaden the discussions - Consortia/Institutions.
- c) **Agricultural Plan.** The activities that were programmed, and those that were carried out, deal with events aimed at helping farmers to understand agricultural planning. However, records do not show that the activities occurred in a manner.....

ANNEX J
 (informal translation of newspaper article)
 GAZETA MERCANTIL
 October 18, 1996

Itaparica, a controversial project

**Resettlement by Chesf has been dragging for nearly 10 years
 and has already cost US\$1.25 billion**

by Eugênio Melloni, from Petrolândia

Cícero Argemiro Torres, a farmer from Petrolândia (PE), has spent the last nine years waiting for water. Torres owns a 3 hectare plot of parched land on which the only things that thrive are *caatinga* (stunted vegetation growing in drought areas) and *algaroba* - a native shrub highly appreciated by goats that provides the only green hue in the region's gray landscape which borders the states of Bahia, Pernambuco and Alagoas.

In contrast to the *sertanejos* from other areas of Northeast Brazil, Torres doesn't gaze up at the sky waiting for water that comes from the clouds, which eventually -- this can mean only once a year, if at all -- discharge their contents onto the sterile soil of Petrolândia. "When it rains here, we run to plant on top. People often don't harvest anything but misfortune," he says dejectedly.

The water that will fertilize his land should come from the São Francisco River, under an irrigation project planned by the São Francisco Hydroelectric Company (Chesf), the electrical power generating company of the Eletrobrás group that serves the Northeast, with the support of the São Francisco Valley Development Company (Codevasf).

The "rigação," as Torres calls irrigation projects, was promised by Chesf experts, ever since his home and the area he sharecropped were submerged by the filling of the Itaparica hydroelectric reservoir in 1987. At that time, they promised that Torres, his wife and five children would only stay for six months in the small four-room house in one of the *agrovilas* (agricultural settlements) built by Chesf for resettlement. The house has since grown with the construction of two more rooms. "The latest estimate we have is that we will be irrigating in 1998. But I'll only believe it when I see it," states the farmer, with the mistrust of someone who has witnessed nearly a decade of successive postponements in Chesf's timetable.

Torres' fate and that of nearly 6,000 rural families -- out of the 10,100 families who were displaced by the waters of the São Francisco -- who will need irrigation in order to farm in this part of the semi-arid Northeast, will depend on decisions taken by an executive group from the federal government, established last Thursday in Brasília. Participants will include representatives of the Ministries of Mines and Energy, Planning, Agriculture, Environment, as well as the President's Office. Government officials will study the

resettlement and irrigation projects presented by Chesf, which is demanding a supplementary allocation of US\$300 million to conclude all irrigation canal works.

The projects are controversial and are being viewed with mistrust within the executive branch. Resettlement works and irrigation project works, both concluded and under way, whose initial budget was US\$450 million, have already absorbed investments of US\$1.250 billion.

ANNEX K

LOCATION	PARTICIPANTS	ACTIVITIES/OBJECTIVES
UNDP/SUDENE Recife-PE	Pólo Directors and Adviser	Meeting with WORLD BANK to discuss resources and diversion of Resettlement material
Recife -PE	Pólo Directors	Meeting with Federal Attorney General's Office, Attorney Dra. Socorro, to deliver documentation (dossiers) on Indians and squatters
Workers' Center Petrolândia-PE	Pólo Directors and Advisers	Pólo meeting to assess cancellation of meeting with CHESF
Rodelas-BA	Pólo Directors and Advisers	Contacts for Meeting of Agrovilas Representatives on March 4, 5 and 6, 1991 in Glória-BA
Recife-PE	Pólo Directors	Meeting with OXFAM to discuss the PÓLO/OXFAM situation
CHESF Office Rodelas-BA	Pólo Advisers and Director of STR-Rodelas-PE	Meeting to discuss Regulation of Training Plots; Selection of Trainees
Rio Grande do Norte-RN	Pólo Director	Meeting of CDDH-Human Rights Defense Center of Natal-RN
Brigida Project Orocó-PE	Pólo Adviser	Meeting with agrovilas representatives to present research results and submit proposals (Production Plan)
Paulo Afonso-BA	Directors of STRs - BA	2nd PRO-CUT/Regional Seminar to discuss Union Structure
Aracaju-SE	Pólo Directors	Meeting to prepare for PLANVASF Meeting, May 17, 18 and 19, 1991

ANNEX L
(informal translation of newspaper article)
Jornal do Brasil
2-13-92

IBRD assists families of settlers in Pernambuco

Teodomiro Braga
correspondent

Washington. Backed by important American environmental agencies, representatives of families made homeless by the construction of the Itaparica hydroelectric plant in Pernambuco obtained the support of the World Bank (IBRD) in their struggle for the conclusion of the government irrigation project in new lands they received in 1987. After meetings held the past two days with union leaders Vicente da Costa Coelho from Petrolândia (PE) and Maria Edileide Rodrigues Pereira from Rodela (BA), World Bank officials agreed to pressure the Brazilian Government to release local counterpart funds to finance the conclusion of the irrigation project which has already received US\$132 million from IBRD.

The plan to resettle families made homeless by the construction of the Itaparica dam was the first of its kind in the world to be financed by the World Bank, which explains the interest of environmental and human rights defense organizations in its outcome. The visit to the US capital by the two Northeast Brazilian union leaders was sponsored by Oxfam, an English organization that fights hunger. An official ceremony in support of the Itaparica homeless was held yesterday afternoon at the headquarters of the Environmental Defense Fund, with the participation of various representatives of US ecological organizations.

The Oxfam representative, Patricia Fenney, admitted to the Jornal do Brasil that the purpose of mobilization in support of the Itaparica homeless was to take advantage of the upcoming Rio-92 conference "which obliges the Brazilian Government to be more concerned with its external image." During meetings with the World Bank, Vicente Coelho proposed that Bank suspend new lending to projects in the Brazilian power sector until the government releases resources to conclude the irrigation project, totaling US\$62 million. This amount refers to local counterpart funding for a new US\$100 million loan approved by the Bank for the program, for which disbursements were suspended because of a dispute over local funding.

The World Bank's Director for Brazil, Armeane Choksi, rejected the idea of suspending new lending, alleging that it would be more productive to use other means to pressure the Brazilian government. He promised that the World Bank will "do everything within its power" to help those made homeless by Itaparica, including studying the possibility of beginning to disburse the US\$100 million loan, separate from the solution of the counterpart problem. "They showed good intentions," admitted Vicente Coelho.

The 7,000 families made homeless by the Itaparica dam were resettled in 122 agricultural settlements (*agrovilas*), constructed on the banks of the São Francisco river in a total area of 19,000 in southern Pernambuco and Northern Bahia. Until now, however, families could not farm their lands because the irrigation project, scheduled in the resettlement plan agreed with the World Bank, was not concluded. Irrigation equipment costing millions of dollars has been stored in the *agrovilas* for over two years, because of the lack of money to buy the remaining parts and set up the equipment. At the meeting with US environmentalists, Vicente Coelho denounced the fact that numerous plastic pipes are deteriorating because they are exposed to the effects of sunlight, when they should be buried under ground. The Brazilian government agency responsible for project execution is Chesf (São Francisco Hydroelectric Company).

Pólo Sindical do Submédio São Francisco

Bahia and Pernambuco Rural Workers' Union
Rua Dantas Barreto, 139, Tel: (081) 851-1160
Petrolândia, PE, Brazil

Petrolândia (PE), November 18, 1993
Official letter PS 136/93

To:
World Bank
Mr. Daniel R. Gross
Washington - U.S.A.

Gentlemen:

We herewith wish to inform you about the current situation of the Itaparica resettlements, which we think is highly alarming. We would also like to draw your attention to the International Bank for Reconstruction and Development's responsibility toward the settlers who were affected by the dam.

RECALLING OUR HISTORY

The Pólo Sindical was formed in 1979 to coordinate the struggle against arbitrary eviction of persons affected by the construction of the Itaparica Hydroelectric Plant - UHI. It was necessary to put a stop to the effects left by CHESF with its dam construction policy. Violence, wretched compensation, disorganized production, lack of prospects for rural workers.

The struggle organized by the Pólo Sindical brought to the forefront all the contradictions involving Brazil's energy policy, and the different social and environmental costs.

With the achievement of resettlement, rural workers were transferred to agricultural settlements (*agrovilas*) in early 1988. Irrigation was expected to begin by July 1988. However, the training of 26 settlers in the Bahia sub-project G.2 only began in April 1993. CHESF "promises" that by 1994 all projects will be operating. During this entire period, CHESF was inflexible and Rural Workers' Unions had to carry out a constant, exhausting struggle to force CHESF to comply with the Agreement.

Today, the struggle is entering into a new phase. To date we have managed to achieve resettlement and a series of improvements in the areas of health and education, although with the same deficiencies which exist nationwide, transportation, infrastructure, the

Temporary Maintenance Appropriation - VMT, and especially progress in irrigation works.

The impressive pumping stations, kilometers of canals, and pipelines have made it possible to farm on 112 plots. In all, 217.2 hectares are producing corn, beans, tomatoes, onions, peanuts and melons. Within the entire area of the project to be irrigated, this represents only 1.8%. However, this small planted area has a priceless value in the process of the settlers' struggle.

All this equipment, and the green crops contrasting with the stunted vegetation (*caatinga*) parched by drought, while filling the hearts of most settlers with pride, also produces another feeling, that of insecurity and uncertainty about new things.

The challenge now is to administer the Project, production, and marketing, and to show that rural workers managed not only to fight for their rights to Agrarian Reform and ensure its consolidation, by joining together to resolve market problems in a collective manner and to seek ways of using the land that ensure ecological balance, minimize the use of agrochemicals, include organic and green manure, and use crop rotation, among others, to avoid salinization of land and offer an example of peaceful coexistence with the "Velho Chico" - the São Francisco River, now a victim of all sorts of aggression, and placing at risk the survival of all who depend on the Valley.

However, this model that would prove that workers are capable of working the lands they conquered and of competing in the marketplace while observing the laws of nature, and that would show that agrarian reform remains on the political agenda, is once again in danger due to CHESF's inflexibility.

ARE RESETTLEMENTS DOOMED TO FAIL EVEN BEFORE THEY START?

CHESF, which is responsible for resettlement, as well as CODEVASF, which was initially responsible for the operation and maintenance of irrigation systems, have already given sufficient proof that they have no interest whatsoever in ensuring the minimum conditions for reasonable operation of irrigation in the hands of the workers themselves.

- The systems have serious technical flaws and defects which may soon make production infeasible;
- The system's efficiency is well below the acceptable level. The first tests showed efficiency rates of around 30% instead of 70%, which is the normal value for a sprinkler system. This causes higher energy expenses, worsens the danger of rapid salinization, and means a drop in productivity, thus jeopardizing the Project's economic viability;
- Management 12 hours per day does not allow a 3.0 ha plot to fully used. Depending on sunlight variations throughout the year, a good part of the plot cannot be irrigated;
- CODEVASF withholds or delays, sometimes for many months, the delivery of documents prepared by it or by the Consortia (ITAPARICA and HIDROSERVICE/

GERSAR) which we need in order to assess the operation of hydraulic systems, water costs/tariffs, etc.;

- CODEVASF intervenes in the work of the Consortia in a manner that leads us to think that it wants more to hinder than help;
- CODEVASF does not assume the obligations contracted with CHESF to take responsibility for the operation and maintenance of projects in operation or training. Only in November of this year did it hire an operation and maintenance company for G.2 which started training in April, and which is now showing rapid wear and tear of materials; for Rodelas where land is already irrigated, and with serious pumping problems, operation and maintenance is scheduled for January 1994.
- CHESF has still not resolved the basic pre-requisite for operating an irrigation system, especially in the semi-arid region: drainage. In the Senator Nilo Coelho Project (Petrolina, CODEVASF), up to 20% of the land is already salinized due to the lack of, or insufficient, drainage.
- Very high costs. The water tariff varies from US\$50 to US\$60 per ha/month, while settlers in Nilo Coelho were paying around US\$20. This, according to a technical report, shows "clearly that the resettled farmer will not be able to afford to pay by means of income generated by agricultural production on his plot." (Itaparica Consortium, June 1993, pp. 3 and 4)

THE CONTRACT IS THE KEY ELEMENT

All resettled persons are going to have to sign a "Contract for Concession of Use and Exoneration of Obligations" with CHESF, which establishes the regulations, responsibilities and distribution of financial obligations. The model contract that CHESF plans to use confers lack of responsibility to workers:

- The settler must already pay the operation rate 7 months after operation;
- The settler must pay 20% of energy beginning the second year, 40% the third year, etc., without taking into consideration the absurd water tariff (=energy) besides the fact that concessionaires are expected to possibly double the water tariff;
- CHESF does not foresee resources for the drainage system;
- CHESF does not foresee training so that workers can actually assume the administration, operation and maintenance of enormous irrigation systems;
- CHESF does not include the means (topographical services) to make drought areas suitable for farming, which are essential to integrate agriculture and livestock and necessary for sustainable economic activity under these social and climatic conditions;
- CHESF does not foresee the possibility of compensation or new settlements in case salinization or low fertility makes production infeasible on certain plots (which seems likely according to early experience).

Our counter-proposal regarding the contract includes all these points and seeks a true economic, social and cultural emancipation of settlers, not the continuation of the well-known paternalism that is so frequent in CODEVASF projects.

In light of this situation which is both alarming and of fundamental importance for the settlers' future, and in light of the economic, social and psychological suffering to which they have been exposed in the past six years, because they were deprived of their means of supporting their families, we would like to request the support of the Bank, which contributed financially to the construction of the Itaparica Hydroelectric Plant - UHI and which therefore is committed to settling the social debt created in this process, so that we can reach an agreement with CHESF aimed at achieving suitable conditions for production. It is essential to acknowledge that settlers need a period of adaptation, both to the technical characteristics of operation and to economic, financial, social and cultural conditions. Non-compliance with, or disregard for, such conditions could jeopardize the economic and technological viability of the resettlement projects, thereby prolonging the agony of hundreds of families.

Sincerely,

(signed)

ERALDO JOSÉ DE SOUZA
General Coordinator

ANNEX M
(informal translation of official World Bank letter)

THE WORLD BANK

December 15, 1993

Dr. Eraldo José de Souza
Pólo Sindical do Submédio São Francisco
Rua Dantas Barreto 139
Petrolândia
Pernambuco (PE), Brazil

Dear Dr. Eraldo:

As you know, a World Bank mission, comprised of Dr. Carlos Emanuel and Dra. Maria Teresa Serra, recently visited the Itaparica Project and had the opportunity to discuss, not only with CHESF officials but also with Pólo Sindical representatives, the problems stemming from the delay in implementing irrigated areas. The mission's conclusions and recommendations reflect the same concerns presented in your letter of November 18, 1993.

First, we would like to point out that, contrary to what was expressed in your letter, our institution did not participate in financing the construction of the Itaparica plant. Our involvement is linked exclusively to the implementation of the resettlement project. Throughout the development of this project, the World Bank has insisted repeatedly to Government authorities that the sole purpose of the resettlement of those affected by the filling of the Itaparica reservoir should be to ensure satisfactory living conditions for affected populations. In this regard, we have increased our financial participation in the past from US\$132 million to US\$232 million and more recently the Bank has disbursed 100% of the cost of works, instead of 30% as was originally agreed. As a consequence, there was significant progress in the construction of irrigation systems, and ELETROBRÁS assumed the commitment to complete these systems within the deadlines agreed in March 1993.

We fully agree with you that the phase now started by the project, that is, the phase dealing with support for productive activities, will require extremely careful management and will have to be implemented in mutual agreement with farmers settled in each irrigated area. These farmers should be trained not only in productive practices but also in techniques for managing irrigated systems that will be operated by irrigation districts formed by the farmers themselves. CHESF and CODEVASF have agreed with the Bank that they will develop a much more energetic and effective program in terms of settlers' participation, beginning with the establishment of irrigation districts prior to the start-up of normal operation of irrigated areas.

Finally, we would like to point out that many of the specific problems indicated in your letter were the subject of broad discussion with CHESF and CODEVASF during our latest supervision mission. The Bank is planning a mission in March 1994 to follow up on the implementation of agreed actions. At that time, we hope to count on the Pólo's presence, for the purpose of continuing our dialogue and being able to jointly recommend a series of measures that would have to be executed by the Government Agencies responsible for the project.

Sincerely,

(signed)

Kreszentia M. Duer

Chief

Environment and Agriculture Operations Division

Department I

Latin America and the Caribbean Region

ANNEX N

PÓLO SINDICAL DOS TRABALHADORES DO SUBMÉDIO SÃO FRANCISCO
Rua Dantas Barreto, 139 - Caixa Postal 02 - Telefax (081) 851-1160
CEP: 56.460.000 - Petrolândia - PE
C.G.C. nº 35.677.707/0001-11

To
Mr. Lewis Preston
President of the World Bank

Dear Sir:

On the occasion of the International Conference on Hunger in November of last year, you pointed out that, in most cases, hunger and poverty are not the result of droughts or wars but rather of mistaken policies aimed at the interests of a small minority.

We fully agree with your position. We know poverty close up. Here, in the arid *Sertão* of Northeast Brazil, there are indeed droughts, but it is politics, the so-called "drought industry," that makes people suffer with it, even though there exist simple, adapted and ecological technologies for coexisting with drought.

Another example is the resettlement of persons affected by the Itaparica dam, represented by this Pólo Sindical, and the irrigation projects that are starting to operate - badly. In a letter sent recently to the World Bank by fax, we alerted that your institution is running the risk of supporting a policy which you yourself criticize: Through technical negligence or other motives, the irrigation systems that have been implemented or planned do not correspond at all to minimum needs:

- The systems have serious technical flaws and defects which may soon make production infeasible;
- The system's efficiency is well below the acceptable economic level. The first tests showed efficiency rates of around 40% instead of 75%, which is the recommended value for a sprinkler system. This causes higher energy expenses, worsens the danger of rapid salinization, and signifies a drop in productivity;
- CHESF has still not resolved the basic pre-requisite for operating an irrigation system, especially in the semi-arid region: drainage. In the Senator Nilo Coelho Project (Petrolina, CODEVASF), many lands are already salinized due to the lack of, or insufficient, drainage.
- Very high costs. It is a known fact that an irrigation system exceeding a height of over 80 meters cannot be installed. In the so-called Special Projects this varies between 130 and 150 meters, which make energy costs astronomical. The water tariff varies from US\$40 to US\$60 per month, while settlers in Nilo Coelho were paying around US\$20. This, according to a technical report, shows "clearly that the resettled farmer will not be

able to afford to pay by means of income generated by agricultural production on his plot." (Itaparica Consortium, June 1993, pp. 3 and 4)

- In the Borda do Lago projects, systems are being implemented in which sprinklers are spaced 15 by 15 meters, which is valid in laboratory conditions, but not with wind speeds of 10 meters per second or more. Consequently, up to 50% of the area is not properly irrigated.

The Contract Is The Key Element

All resettled persons are going to have to sign a "Contract for Concession of Use and Exoneration of Obligations" with CHESF, which establishes the regulations, responsibilities and distribution of financial obligations. The model contract that CHESF plans to use assigns lack of responsibility to workers:

- The settler must already pay the operation rate 7 months after operation;
- The settler must pay 20% of energy beginning the second year, 40% the third year, etc., without taking into consideration the absurd water tariff, besides the fact that concessionaires are expected to possibly double the water tariff;
- CHESF does not foresee resources for the drainage system;
- CHESF does not foresee training so that workers can actually assume the administration, operation and maintenance of enormous irrigation systems;
- CHESF does not include means (topographical services) to make drought areas suitable for farming, which are essential to integrate agriculture and livestock;
- CHESF does not foresee the possibility of compensation or new settlements in case salinization or low fertility make production infeasible on certain plots (which seems likely according to early experience).

Our counter-proposal regarding the contract includes all these points and is aimed at a true economic, social and cultural emancipation of settlers, not at the continuation of well-known paternalism. We submitted our version of the contract in early December 1993 to CHESF. However, CHESF has twice postponed a meeting with the Pólo Sindical, a well-known tactic for gaining time, while it continues sending us official letters repeating that the conditions for use concessions will be those of CHESF itself.

We wish to draw your attention once again to this cynical disregard, so that the World Bank can truly assume its responsibility toward families affected by the dam, and so that we do not go hungry in the future, as victims of a mistaken policy that the Bank itself publicly condemns.

Sincerely,
(signed)

Eraldo José de Souza
Coordinator, Pólo Sindical

ANNEX O

PÓLO SINDICAL DOS TRABALHADORES DO SUBMÉDIO SÃO FRANCISCO
Rua Dantas Barreto, 139 - Caixa Postal 02 - Telefax (081) 851-1160
CEP: 56.460.000 - Petrolândia - PE
C.G.C. nº 35.677.707/0001-11

Official letter 13/95

Petrolândia (PE), January 24, 1995

Dr. Luiz Gabriel (Azevedo)
World Bank Representative
Washington - U.S.A:

Dear Sir:

We are attaching for your information, copies of documents containing decisions taken at the meeting on November 23 at DOI, as well as requests being processed with CHESF and CODEVASF, also for your information (annex 2).

What motivates us to try to improve relations among CHESF/CODEVASF/Pólo Sindical is the willingness to resolve outstanding issues currently.....(TEXT ILLEGIBLE) in hydraulic systems and the delay in concluding resettlement, especially to avoid the same deviations and errors, and valuing the strength of autonomous organization in project management.

Sincerely,

(signed)
ERALDO JOSÉ DE SOUZA
General Coordinator

ANNEX P

PÓLO SINDICAL DOS TRABALHADORES
DO SUBMÉDIO SÃO FRANCISCO

SPECIAL COMMISSION

MINUTES
MEETING WITH THE WORLD BANK

DATE: 9-24-96
TIME: 3:00 p.m.
LOCATION: GEI/Itaparica

WHO: WORLD BANK: Gabriel and Regina
PÓLO SINDICAL: Ademar, coordinator, plus representatives of STRs
from Glória, Rodelas, Petrolândia and Curaça
(P. Branca Project)
Advisor: Orlando
Special Consulting Commission

ISSUES:

1. The World Bank makes another inspection/monitoring visit. States that the **PRIVATIZATION OF CHESF** is already a government decision and the Itaparica resettlement is what most hinders privatization.
2. PÓLO states that without income there is no **SELF-MANAGEMENT**. A demonstration was made of projects' low productivity. The incompetence of consortia in ATER was denounced, especially in training. **RESEARCH** is necessary to ensure production with income, both in short-cycle crops and in fruit production. Pólo agreed to send the research proposal to the World Bank by 9-26, as will be done. Regarding VMT, Pólo stated that the decrease and replacement would be linked to income.
3. **WORLD BANK** informs that the VMT issue is already a government decision - its decrease/cutting/replacement - and that at first settlers will really sense the problem by reductions in their monthly earnings.
4. The **WORLD BANK** informed that the Bank's contract with the electrical sector/Eletróbrás/CHESF ends in December 1996. Contracts can still be made until December 31. The Bank still has resources allocated for Itaparica, but by May/June 97 the money will run out. It does not consider it very likely that the contract could be extended any longer, and the decision has already been made at the decision-making level of Gabriel and his Director. This could only be reversed by a decision of the World Bank's Board of Directors/President. Once the contract is ended, there is a clause in it

that obliges CHESF to comply with commitments assumed and that the Bank will require from CHESF a work plan dealing with the continuity of resettlement. But it will not have any economic power to demand compliance.

5. Existing and pending situations:

1. The consortia will continue until the end of the contract (September 1997) or until the money runs out (April-May 1997).
2. World Bank, together with CHESF, through IICA, will try measures to enable research to be carried out with EMBRAPA/IPA/etc.
3. VMT is a government decision and must be negotiated.
4. CHESF/World Bank contract is definitely ending.
5. The electrical sector/Eletróbras/CHESF are interested in continuity of World Bank financing for Itaparica, but the decision is in the hands of the MINISTRY OF PLANNING which, in view of overall Brazilian policy, would not be open to pleas for extending the contract, even if the World Bank were convinced to do so.
6. The Bank suggests that CHESF and PÓLO study measures dealing with a reduction in the 33% of projects that have not been carried out.

OBSERVATION BY SPECIAL CONSULTING COMMISSION:

1. It seems that those projects that were carried out and are now in the final stage of implementation are irreversible. Those that have not started run serious risks.
2. A major meeting is urgently needed, perhaps a seminar, with the participation of CUT, FETAPE, CONTAG, AATR, CPT, CHURCHES, UNIVERSITY (committed area) and STATE AND FEDERAL CONGRESSMEN committed to an analysis, an evaluation of the situation and the establishment of an immediate action plan to involve all resettled persons and to place coordinated, progressive pressure on those responsible for resettlement and on financiers, since this would not be the time to back out when income is not guaranteed.
3. URGENT action is necessary.

Minutes taken by: Celso
9-25-96

ANNEX Q

PÓLO SINDICAL DOS TRABALHADORES DO SUBMÉDIO SÃO FRANCISCO
 Rua Dantas Barreto, 139 - Caixa Postal 02 - Telefax (081) 851-1160
 CEP: 56.460.000 - Petrolândia - PE
 C.G.C. nº 35.677.707/0001-11

Official letter 133/96

Petrolândia (PE), September 26, 1996

Dr. Luiz Gabriel (Azevedo)
 World Bank Representative
 Washington - U.S.A:

In the Itaparica Resettlement, 8000 ha are currently in operation, and it is expected that over 6500 ha will soon be incorporated, totaling approximately 14,500 ha in 1997, and irrigated by conventional sprinklers with a fixed system (Borda do Lago) and a mobile system (Special Projects).

The process of negotiations for self-management is under way through a partnership between the PÓLO SINDICAL and CHESF with the IICA consultants, recently hired by CHESF. Progress has been observed in organization (formation of EAGs, participatory training methodology, training and technical studies, etc.) and legal aspects (conditions for titling and means of transferring goods), using as a reference an overall proposal for transition to self-management presented by the Pólo Sindical and agreed with CHESF, CODEVASF and the WORLD BANK at seminars held in Camaíba-BA (1994) and Paulo Afonso-BA (1995).

However, the issue of agricultural production in the projects is hindering greater progress in negotiations, since physical data on such production do not indicate a trend for farmers to earn income that would provide economic and financial support for self-management of resettlement, in matters of supporting their families, paying water costs (operation and maintenance), reproduction of the productive process (including maintenance and replacement of parcel system) and capitalization of farmers.

Data collected from Monthly Monitoring Reports (December 1995 and August 1996) by CODEVASF/GEEPI show the following physical status of production (see charts 1 and 2, attached).

The analysis of these data shows that the productivity achieved *"was very low in various crops, far below that programmed, as well as the regional averages and averages obtained in other CODEVASF schemes"* (EVALUATION REPORT ON ATER SERVICES IN IRRIGATION PROJECTS UNDER THE ITAPARICA SYSTEM - JAN - JUNE 1996 - CODEVASF/GEEPI).

Added to this is the downward trend of productivity in average areas collected, the average index of frustration which is considered significant, and the high relative cost of production, due to the nature of the technology used and, generally, to low product quality.

Soil classification studies on the Itaparica resettlement show that, out of the total area, 0.94% are soils with normal adaptability to irrigation, 5.55% with restricted adaptability, 31.09% are recommended following prior study, and 26.83% whose feasibility for use depends on technical studies. Soil analyses recently made by ATER in Borda do Lago, where 70% of the soils are formed by quartzite sand, indicate 0.2% levels of organic material and 98% sand, when values for soil considered very good are 4% and 35%, respectively.

This situation demonstrates the existence of natural limitations to soil formation, which require a more accurate and specific technological treatment in the agro-economic use of these soils. However, the technological package recommended by the ATER companies stems from experience and data from other schemes in the region, with several bibliographic adaptations and local experiences, whose agricultural production results attest to their inefficiency in obtaining economically competitive productivity. It could not be different because there is no scientifically-based research on agro-economic use (soil/water/plant in irrigated plots under soil conditions in the resettlement area).

These data, while also pointing to the technical causes of low productivity and high production costs, show that resettlement is viable from an agro-economic standpoint, to be achieved through the creation of a technological standard that favors production factors.

In light of these observations, we understand the need for, and urgency of, implementing an official, ongoing research program, through EMBRAPA, including the soil-water-plant relationship in aspects of genetic improvement in order to obtain varieties that are adapted to the region and competitive in the marketplace, soil management (conservation and improvement), water management, balanced use of fertilizer, crop conduction, integrated pest and disease control (soil and plant), post-harvest (packaging, protection from spoilage, classification), physical composition of development models on 1.5 ha, 3.0 ha, 4.5 ha and 6.0 ha, etc., plots in order to define a technological standard allowing the achievement of competitive productivity that provides economic and financial support to the self-management process. The program should also involve the rainfed area in terms of livestock management, *caatinga* management, etc.

Due to the magnitude of the challenges, the volume of resources already invested, and the importance of self-management in resettlements, we propose the formation of a permanent group of EMBRAPA researchers, under the following conditions:

- Involvement of CPATSA (Petrópolis-PE), CNPMF (Cruz das Almas-BA), CNPTC (Aracaju-SE), CNPA (Campina Grande-PB) and CNPC (Sobral-CE).
- Negotiations with EMBRAPA's central management in Brasília, with the participation of Pólo Sindical, CHESF/IICA and the World Bank.
- Installation of a permanent office in the area, with all necessary working conditions.

Finally, this is our understanding of the problems that involve agricultural production and of the solutions that will promote the economic viability of resettlement and the resettlement's consequent self-management by rural producers.

Sincerely,

(signed)

ADEMAR FAGUNDES VIEIRA
Coordinator of Pólo Sindical

Daniel R. Gross
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