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IMPLEMENTATION COMPLETION REPORT

PARAGUAY

**CAAZAPA AREA DEVELOPMENT PROJECT
(LOAN 2087-PA)**

May 14, 1996

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

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CURRENCY EQUIVALENTS

| | |
|--|-----------------|
| Local Currency Unit | = Gurani (G) |
| Rate at Appraisal (1982, fixed) | = US\$1/G126 |
| Rate at Completion (December 31, 1993) | = US\$1/G1352.3 |

WEIGHTS AND MEASURES

Metric System

ABBREVIATIONS

| | |
|---------|---|
| BNF | National Development Bank |
| CAH | Smallholder Credit Agency |
| CNFPA | National Council for Agricultural Production Development |
| DIEAF | Directorate for Agricultural and Forestry Research and Extension |
| DINCAP | National Directorate for Project Coordination and Administration (from 1989) |
| DPNVS | National Parks Service |
| GOP | Government of the Republic of Paraguay |
| IBR | Rural Welfare Institute |
| IERR | Internal Economic Rate of Return |
| IICA | Inter-American Institute for Agricultural Cooperation |
| INDI | The Paraguayan Institute for Indigenous People |
| IRD | Integrated Rural Development |
| MAG | Ministry of Agriculture and Livestock |
| MOPC | Ministry of Public Works |
| MSPyBS | Ministry of Health and Social Welfare |
| ONCAP | National Office for Project Coordination and Administration (1987-1989) |
| ONCP | National Project Coordinating Office (until 1987) |
| SEAG | Agricultural Extension and Livestock Research Service |
| SNF | National Forest Service |
| SINESIP | National System for Protected Forest Areas |
| UNIFEM | United Nations Fund for Women's Development |

GOP FISCAL YEAR

January 1 to December 31

IMPLEMENTATION COMPLETION REPORT**PARAGUAY****CAAZAPA AREA DEVELOPMENT PROJECT****(Loan 2087-PA)****TABLE OF CONTENTS****Page N°**

| | |
|--|------------|
| PREFACE..... | i |
| EVALUATION SUMMARY | iii |
| PART I: PROJECT IMPLEMENTATION ASSESSMENT | 1 |
| Project Objectives..... | 1 |
| Achievement of Project Objectives..... | 6 |
| Implementation Record and Major Factors Affecting the Project..... | 7 |
| Rural Roads..... | 8 |
| Agricultural Credit and Infrastructure..... | 9 |
| Agricultural Extension..... | 13 |
| Agricultural Research..... | 14 |
| Forest Management..... | 14 |
| Soil Conservation..... | 16 |
| Land Settlement and Titling..... | 17 |
| Rural Health..... | 17 |
| Indigenous Peoples..... | 18 |
| National Projects Coordinating Office (ONCP)..... | 18 |
| Flood Emergency Program..... | 19 |
| Use of Consultants..... | 19 |
| Project Sustainability..... | 20 |
| Bank Performance..... | 21 |
| Borrower Performance..... | 21 |
| Assessment of Outcome..... | 23 |
| Future Operations..... | 24 |
| Lessons Learned..... | 24 |

TABLE OF CONTENTS (Continued)

| | |
|--|-----------|
| PART II: STATISTICAL INFORMATION..... | 27 |
| Table 1. Summary of Assessments | 27 |
| Table 2. Related Bank Loans | 29 |
| Table 3. Project Timetable | 29 |
| Table 4. Loan Disbursements: Cumulative Estimated and Actual..... | 30 |
| Table 5. Key Indicators for Project Implementation | 31 |
| Table 6. Studies Included in Project | 32 |
| Table 7. Comparison of Projected and Actual World Commodity Prices | 32 |
| Table 8. Project Costs and Financing | 33 |
| Table 9. Status of Legal Covenants..... | 34 |
| Table 10. Bank Resources: Staff Inputs | 38 |
| Table 11. Bank Resources: Missions..... | 38 |
| Table 12. Comparison of Lending and Inflation Rates | 39 |
| Table 13. Financial Performance of BNF (Consolidated)..... | 40 |
| Table 14. Financial Performance of BNF's Agricultural Department..... | 41 |
| Table 15. BNF's Support to the Agricultural Sector..... | 42 |
| Table 16. Crops and Area Financed | 43 |

ANNEXES:

- A. Borrower Contribution to the ICR
- B. Map of the Project Area

IMPLEMENTATION COMPLETION REPORT

PARAGUAY

CAAZAPA AREA DEVELOPMENT PROJECT

(Loan 2087-PA)

PREFACE

1. This is the Implementation Completion Report (ICR) for the Caazapá Area Development Project for which Loan 2087-PA, in the amount of US\$31 million equivalent, was approved by the Board on January 28, 1982, and made effective on February 28, 1983.
2. The Loan closed on December 31, 1993 following four extensions of the original Closing Date of June 30, 1988. Final disbursement took place on June 14, 1994, at which time a balance of US\$307,423.86 was canceled.
3. This ICR was prepared by the Natural Resources, Environment and Rural Poverty Operations Division, Department I of the Latin America and the Caribbean Region (LAC). The Borrower provided brief comments on the draft ICR. These were taken into account in preparing the final version, and have been included as Appendix B.
4. The report is based on material in the project file and discussions with Bank staff and consultants who were involved in the project and/or evaluated specific aspects of it. The ICR also draws on an ex post evaluation of the project prepared by the National Directorate for Project Coordination and Administration (DINCAP), dated August 1993, and a June 1994 consultant evaluation of the indigenous peoples, protected areas and smallholder components. Both of these reports are on file at the LAC Information Services Center.

IMPLEMENTATION COMPLETION REPORT

PARAGUAY

CAAZAPA AREA DEVELOPMENT PROJECT

(Loan 2087-PA)

EVALUATION SUMMARY

Introduction

1. At the time the Caazapá Area Development Project was prepared, the Bank's lending to the agriculture sector of Paraguay comprised 11 credits and loans totaling US\$122.7 million. These included six loans totaling US\$72.0 million for the livestock sector, initially through the Central Bank using the banking and technical services of the National Development Bank (BNF), and subsequently through the newly-created Livestock Fund of the Central Bank. The initial focus was on large-scale ranches, then shifted to individual and cooperative small-scale farms. In general, these projects were implemented in a satisfactory manner. The Bank had also financed four other loans for credit and rural development projects in Paraguay totaling US\$50.7 million. Those projects appeared to be meeting their principal objectives, but the Staff Appraisal Report for the Caazapá project (SAR, Report No. 3590b-PA) noted substantial coordination problems and implementation delays.

Project Objectives

2. The stated objectives of the Caazapá project were to: (a) increase accessibility to the project area; (b) increase production on existing farms; (c) improve land management to decrease soil erosion and water run-off; (d) improve the utilization of timber being removed from agricultural lands; (e) test the technical and economic feasibility of sustained yield management of the area's tropical hardwood forests on small and large private landholdings and on public land; (f) improve the health of the rural population; and (g) increase rural employment opportunities. While these objectives were not formally changed during project execution, the problems of indigenous peoples in the project area assumed increasing importance over time and their alleviation became an objective of the project. The results of a project-financed study led to a full-fledged social and technical program, to which the Bank assigned high priority (Part 1, paras. 1-2).

3. **Project Components.** To meet its many objectives, the project had eleven components. Rural road improvements were needed to improve access and marketing, and facilitate the provision of other project-financed inputs (e.g., credit, extension and land titling). Components designed to meet the potential soil degradation and erosion problems

in the area consisted of establishing a soil conservation unit to promote appropriate land use practices, the resettlement of 200 families farming fragile lands, and a forest and watershed management program. Also included were components to provide additional health facilities and improve nutrition, and to establish a project coordinating unit. Further, a study was to develop a program for indigenous communities in the project area (Part 1, para. 3).

4. **Loan Covenants.** The most important legal covenants were: (a) BNF should maintain positive rates of interest on project credit; (b) the Rural Welfare Institute (IBR) should issue a specified number of land titles; (c) the Borrower would protect the forests in the project area; (d) following completion of the study of indigenous peoples, the Borrower would acquire land in the project area, ensure the rights of Indians to it, and carry out a program of social and technical support for them; and (e) the Borrower would resettle 200 families farming eroded land (Part 1, para. 83).

5. **Evaluation of Project Objectives.** While project objectives were clearly stated and consistent both with the Bank's sectoral lending strategy and with the GOP's National Development Plan, there was a basic inconsistency between the natural resource conservation objectives and the implied objectives for ensuring the project's economic viability. Both the Bank's strategy and the GOP's National Development Plan called simultaneously for conserving natural resources while increasing production through an expansion of agricultural area. In the Paraguayan context, such expansion was synonymous with land clearing through de-forestation. The project itself focused credit and technology on the principal cash crops, which encouraged land clearing. The SAR stated clearly that the net effect of project activities would be to reduce the forested area while doubling the area of cropland.

6. The project was intended to benefit existing farms, the targeted beneficiaries being smallholders averaging 18-20 ha. The beneficiary as defined in the Loan Agreement essentially fitted the client profile of the National Development Bank (BNF), which had customarily excluded the small peasant farmer. Confusion arose over whether the definition of the beneficiary referred to total land held or land cultivated, the latter interpretation potentially permitting a much larger farm. The project's expected rate of return was based on four farm models and stressed a limited number of cash crops -- cotton, soybeans, sugarcane and tobacco. The stress on cotton and soybeans was not surprising. Both provided a good living and were still the mainstays of the Paraguayan economy. Crop diversification goals were insignificant, and the likelihood of smallholders' increased dependence on cotton at the expense of subsistence crops was tacitly accepted. Financial and economic rates of return were very optimistic and implied high levels of specialization, modernization and input use; for most smallholders, these were unrealistic expectations (Part 1, paras. 6-22).

Implementation Experience and Results

7. The project's achievement of its objectives was affected by factors and events which, to a significant extent, were within the control of the Bank and the Borrower. Implementation was characterized by tremendous delays: there was no counterpart

funding in the first two years, following which the Bank suspended disbursements until 1987 for macro-economic reasons relating to the over-valued currency; most components called for procurement and contracting which experienced chronic difficulties. The project's limited risk mitigation measures could not compensate for weak Government commitment, an inappropriate fiscal, macro-economic and policy environment, and the lack of beneficiary participation. Their significance became evident when reforms were introduced in 1987 in fiscal, trade and exchange rate policies, and from 1989, with the advent of a new Government more committed to rural development, and modest efforts to introduce a more participatory element into the project. Even so, implementation continued to encounter major difficulties, resulting to a significant extent, as in the preceding years, from the project's complex design.

8. **Achievement of Objectives.** Physical access to the project area was markedly improved by completion of the planned collector and feeder roads. Collateral effects have included reduced isolation and improved communication between small centers, expanded and less monopolistic marketing arrangements and rapid modernization of the area.

9. Production objectives were substantially achieved: the output of cotton, soybeans, wheat and sugarcane increased, chiefly due to a tremendous increase in area cultivated, and yields equated to appraisal estimates. The marked restructuring of smallholder production systems continued, in response to project incentives. However, the project did not limit credit and services to holdings already in production (i.e., existing farms), or smallholders *per se*. Evidence suggests that the project benefited many medium and large farmers. For most smallholders however, except the generally more successful small commercial family farms, the outcome was a more precarious income situation due to increased dependence on cotton, market and climatic vagaries and the increased importance of pests.

10. The forest and soil management objectives had negligible success: policy and legislative impediments combined with a lack of commitment, weak enforcement capacity and project design deficiencies to reduce the possibility of their achievement from the outset. The willingness of farmers in the project area to undertake the conservation measures was largely unknown; and no system of quantitative measures was established to assess whether or not sustainable land use management practices were being adopted. Problems and contradictions were defined only after project completion.

11. The social objective of improving the health of smallholders achieved substantial success: fertility and infant and maternal mortality were reduced, and vaccination programs successfully promoted. However, the incidence of and mortality from, poverty-related health problems (e.g., anemia, parasites and pneumonia) were not lessened, since they require an emphasis on preventive care and community involvement.

12. The situation of indigenous peoples in the project area was substantially improved due to a major, highly-focused effort by the Bank, specialist consultants and (after 1989) the Borrower; this resulted, among other things, in important legislation protecting Indian land rights (Part 1, para. 21 and paras. 23-70).

13. **Flood Emergency Program:** In September 1992, some US\$5.7 million of project funds were allocated to an emergency program in areas flooded by the Paraná and Paraguay rivers. The emergency program was complex, involving construction or rehabilitation of dikes, pumping stations, roads and bridges. The program was successfully carried out and in a relatively short time (Part 1, paras. 71-72).

14. **Sustainability.** The prospects for sustainability are unclear. Government commitment is crucial. Project design did not include a plan for ex-post project operations and sustainability. Smallholder dependence on cotton is not sustainable long-term and should be addressed. In the case of the forest reserve, controls are needed over access to the reserve, and a buffer zone management system is required to address sustainable management of the remaining areas outside the reserve. The Parks Service will need strengthening to carry these out. The economic benefits from road construction will continue as long as the Government provides sufficient funds for maintenance. Sustaining the flow of credit is unlikely. Even before project closing, the cash flow from the Bank-financed portfolio was not being recycled in the project area, and BNF appears to have reduced its presence there. Greater effort to encourage and groom BNF to handle smallholder clients, and to support informal savings and loan networks would have improved sustainability. An important issue of sustainability relates to the creation of a separate coordination unit, i.e., not integrated into a key sectoral ministry with a vital interest in the longer-term outcome of the project. The question arises ex post, whether efficient coordination was obtained at the expense of sustainability (Part 1, paras. 75-76, 85).

15. **Project Costs, Financing and Timetable.** The loan amount was US\$31.0 million equivalent. At the time of final disbursement in June 1994, a balance of US\$307,423.86 was canceled. The project's actual cost was US\$55.5 million compared to US\$54.3 at appraisal. The actual allocation of project financing showed minor variations relative to the costs estimated at appraisal. However, the implementation schedule was completely different: the Loan closed on December 31, 1993, five and one-half years later than expected.

Performance of the Bank and Borrower

16. **Bank Performance.** The Bank showed commitment, perseverance and flexibility in many aspects of implementation including the indigenous peoples component, and in responding rapidly in 1992 to reallocate funds for an Emergency Flood Relief Program. The Bank correctly suspended disbursements in response to macro-economic factors which distorted the project relationship between the Bank and the Borrower, and ran counter to the Loan and Project Agreements. However, the Bank's performance can be faulted in key respects, including: (a) failing to take account in project design of major lessons of experience, the recommendations of economic and sector work (ESW), and the macro-economic context; (b) not paying adequate attention to environmental issues, through proper design and follow-up of the forest and soil components, and by not understanding the likely impact of contradictions in project assumptions concerning natural resource conservation and the project's economic and financial viability; and (c) changing the project beneficiaries and thus the spirit (and nature) of the project itself,

without amending the Loan Agreement and without internal Bank discussions, including a review of the possible need to re-appraise the project (Part 1, paras. 78-79).

17. **Borrower Performance.** The Government's commitment to this project was never wholehearted, even during preparation, and was eroded further by recession. Until 1987, the Government's uncooperative attitude, whereby virtually no effort was made to accommodate the Bank on the needs of the project, foiled project execution. When combined with weak institutions, an outdated legal and regulatory framework, major macro-economic problems and the complexity of the project, the chronic delays described in this report were virtually inevitable. Performance improved considerably after 1987, with compromises on the exchange rate, increased counterpart funding allocations, and the re-structuring of project administration. From 1989, the new Government provided a further boost through its strong political support for rural development. The performance of the coordinating unit was satisfactory overall, and improved steadily as the unit evolved institutionally (Part 1, paras. 80-89).

Project Outcome

18. The project is rated as substantially unsatisfactory due to: (a) its probable low or even negative internal economic rate of return (IERR); (b) failure to achieve its forest and soil conservation objectives; (c) apparent failure of the project to improve the incomes of smallholders; (d) significant leakage of project services and benefits to medium and larger farmers as a result of the re-definition of beneficiaries in 1987 (Part 1, para. 90).

Summary of Findings, Lessons Learned and Future Operations

19. **Main Findings.** The main findings from this analysis of the project include the following. First, it is clear that the project was over-designed relative to Paraguayan commitment, capacity and context. Thus its implementation experience was, to a significant extent, due to factors within the Bank's control. This project was among the last of a generation of projects closing out in the 1980s, and whose lessons set the stage for new approaches to rural development. Second, project targeting was flawed and ambiguous: as a result, the smallholder income and welfare objectives were eroded in favor of medium and larger farmers, thereby changing the nature of the project. Third, the project demonstrated the effects of pursuing contradictory objectives, and emphasizes the need for meticulous clarity in key definitions and parameters, as reflected in project legal and other documents. Fourth, the project experience validated current practice which involves beneficiaries as far as possible in all aspects of preparation and implementation. Fifth, Bank staff supervising the project exhibited a "can-do" philosophy which, albeit in modest pilots and examples, incorporated into the project new development concepts which became increasingly current in the Bank in the late 1980s and beyond (e.g., women's programs, participation, farmer organization and decentralization). This philosophy also permeated execution of the indigenous people's component and the Emergency Flood Control Program. Last, the project exhibited the tendency of institutions, in Paraguay and elsewhere, to use projects and external funding to strengthen themselves physically (i.e., in items of staff, buildings, equipment, vehicles, etc.): projects

need to ensure that the programs themselves are well-designed, and that measures/incentives are incorporated to ensure that programs are prioritized and implemented.

Future Operations

20. The Bank's main preoccupation in the final stages of the project was to ensure the completion of planned infrastructure (roads, health posts, and items contracted under the flood relief program) before the Closing Date, which had already been extended several times. In addition, during final missions and contacts with the Borrower, plans for future operations, principally under the protected areas, roads, research and extension components, were prepared and/or discussed. Arrangements for the management of the Caaguazu National Park formed part of a new National System for Protected Forest Areas (SINESIP) finalized in 1994, under which Caaguazu was designated an ecological reserve due to its biological and geographic characteristics. With regard to the roads, MOPC undertook to maintain the roads through force account and earmarked sufficient budget for the coming year. The Borrower produced a satisfactory research program for the experimental station including general objectives and descriptions of specific, planned research products. Finally, the Borrower undertook to assign priority to agricultural extension, but no specific plan was prepared for future operation or sustainability and therefore the outlook is uncertain (Part 1, para. 91).

Lessons Learned

21. The most important lessons learned from the project are the following:
- (a) Macroeconomic and fiscal conditions are a major determinant of project outcome, influencing Borrower commitment, counterpart funding availability, project incentives and the behavior of institutions. Project design should reflect in scope, scale and strategy a realistic assessment of the "political economy" within which the project will be implemented;
 - (b) A program approach to rural development, with carefully-sequenced sets of activities designed to build sustainable results incrementally over the medium-term, is a more rational development tool than multi-sectoral and multi-component projects which tend to overwhelm the resources of the Borrower;
 - (c) Institution building in rural development projects in Paraguay would also benefit from a programmatic approach: a few years of technical assistance financed on a sliding scale is demonstrably inadequate as a means of developing long-term institutional capacity. Projects also need to include measures/incentives to ensure that programs are accorded equal priority with the physical elements of institution-building, by executing agencies;
 - (d) A strategy is needed for targeting (and reaching) rural smallholders and landless laborers, in order to prevent the appropriation of project benefits

by better-off groups. The strategy must be transparent and participatory and should incorporate financial, social and geographic criteria; project documents should define the beneficiaries and strategy in unambiguous terms, and supervision should monitor performance;

- (e) Selection of an appropriate financial institution for credit operations requires an assessment of their financial and institutional soundness, and their customary clientele and lending practices to determine which best supports project objectives. If necessary, measures should be included to reduce the cost and risk (real or perceived) associated with lending to certain groups. The credit-worthiness of smallholders can be enhanced through risk-sharing groups, serious policies governing arrears and the building of credit histories;
- (f) Beneficiary participation and organization create "ownership" of project goals, programs and achievements, and foster sustainability; and
- (g) A monitoring and evaluation (M&E) system built on the best possible baseline data is indispensable for gauging progress, analyzing impact, and formulating strategy and policy. The M&E system should be established and operational before loan effectiveness (Part 1, para. 90).

IMPLEMENTATION COMPLETION REPORT

PARAGUAY

CAAZAPA AREA DEVELOPMENT PROJECT

(Loan 2087-PA)

PART I: PROJECT IMPLEMENTATION ASSESSMENT

Project Objectives

1. The objectives of the Caazapá Area Development Project as stated in the Staff Appraisal Report (SAR) were to: (a) increase accessibility to the project area; (b) increase production on existing farms; (c) improve land management to decrease soil erosion and water run-off; (d) improve the utilization of timber being removed from agricultural lands; (e) test the technical and economic feasibility of sustained yield management of the area's tropical hardwood forests on small and large private landholdings and on public land; (f) improve the health of the rural population; and (g) increase rural employment opportunities.

2. While these objectives were not formally changed during project execution, the problems of indigenous people in the project area assumed increasing importance as the project progressed. At appraisal, there was insufficient information to prepare a full-fledged component. A study was therefore financed to determine the basis for a social and technical assistance program, outlined in the Loan Agreement (Section 3.16). The findings of the study, combined with evidence of the overall precariousness of indigenous life in the project area, resulted in a full-scale component to which the Bank assigned top priority. It is therefore fair to say that the welfare of indigenous peoples became an additional project objective.

3. In support of its many objectives, the US\$31.0 million loan financed 11 components. Rural road improvements were needed to improve access and marketing, and to facilitate the provision of other project-financed inputs (e.g., credit, extension and land titling). Components designed to meet the potential erosion problem in the area consisted of establishing a soil conservation unit to promote appropriate land use practices, the resettlement of 200 families farming fragile lands, and a forest and watershed management program. Also included were components to provide additional health facilities and improve nutrition, and to establish a project coordinating unit. Further, a study would develop a program for indigenous peoples in the project area.

4. Most components were implemented by dependencies of the Ministry of Agriculture (MAG). The exceptions were components for roads (Ministry of Public Works - MOPC), health (Ministry of Health and Social Welfare - MSPyBS), and indigenous peoples (Paraguayan Institute for Indigenous People - INDI). Otherwise, component execution was handled as follows: forestry management, the National Forestry

Service (SNF); protected areas, the Parks Service (DPNVS); soil conservation and agricultural extension, the Agricultural Extension Service (SEAG); agricultural credit, the National Development Bank (BNF); agricultural research, the Agricultural Research Department (DIEAF); and land titling, the Institute for Rural Welfare (IBR).

5. Because of its complexity and multiple objectives, and acknowledging prior experience with weak government institutions and serious coordination problems, the project was placed under the responsibility of a newly-created body, the inter-ministerial National Project Coordinating Office (ONCP). ONCP was replaced in 1987 by the National Office for Project Coordination and Administration (ONCAP) under MAG, and then, in 1989, became a National Directorate (DINCAP).

6. The project was conceived as a watershed management operation combining soil conservation and sustainable forest management with more conventional integrated rural development (IRD) components to improve the regional and national economies. The resource conservation aspects distinguished it from IRD projects commonly supported by the Bank, bringing it closer to what were then innovative and evolving Bank policies. While project beneficiaries were a defined population of smallholders, poverty alleviation per se was not a specific project objective. Project scope, in fact, far exceeded the poverty-oriented focus of traditional IRDs and raised complex technical and institutional issues which pre-disposed the project to implementation difficulties.

7. The Government of Paraguay (GOP) chose the Caazapá area for its relative under-development and considerable agricultural potential, and because soil conservation and forest management practices could be piloted there and possibly replicated in other parts of the country. Rapid, uncontrolled agricultural development in the Eastern region of the country had devastated large areas of forest with little economic benefit to the nation, and caused widespread soil erosion. The soil conservation and forest management components were intended explicitly to protect catchment areas which form part of the Paraná River and basins upstream of the then-proposed Yacyreta Dam. Further, the area contained important parts of Paraguay's remaining forests, including the 6,000 ha Caaguazu National Forest and what was earmarked to become a 130,000 ha forest-management zone.

8. For the Bank, the Caazapa area was a rational choice. First, it was the logical extension of the Bank's area development approach in Paraguay, following on from other projects in the under-developed Eastern region, and was situated in a transitional zone between the older, more settled departments circling Asuncion, and the Eastern frontier. Second, the area was a focus of Government's colonization, regional economic development and conservation concerns, and had considerable agricultural potential.¹² Third, there were opportunities to address some of the emerging issues in the Bank including conservation and watershed management. Fourth, it fit a territorial "understanding" with the Inter-American Development Bank (IDB) whereby the Bank

¹ Regional Development in Eastern Paraguay, World Bank Country Study, 1978.

² Regional Development in Eastern Paraguay, World Bank Country Study, 1978.

would concentrate its efforts in areas south of the main Asuncion/Ciudad del Este highway and the IDB would work to the north.

9. While project objectives were clearly stated and consistent with the Bank's sectoral lending strategy³ and the GOP's National Development Plan, several issues arise. There was a fundamental inconsistency between the natural resource conservation objectives of the project and the implied objectives for production increases to ensure its economic and financial viability. Whether this stemmed from the Bank's own sectoral lending strategy, which called simultaneously for conserving natural resources while increasing production through an expansion of the agricultural area, is speculation. In Paraguayan practice, however, such expansion was virtually synonymous with land clearing through deforestation. Indeed, land use projections during preparation showed that up to 70,000 ha of forests would be converted to agricultural use in the project area. Further, the road program was expected to hasten the rate of forest removal since it would facilitate transportation. In the project itself, the main focus of credit and technology transfer was on the principal cash crops, which encouraged land clearing. The SAR states that the net overall effect of project activities would be to reduce the proportion of land under forests while doubling both the proportion and actual area of cropland.

10. Equally important, the GOP's National Development Plan, while calling for rational management and conservation of natural resources, also stressed expanding areas under cultivation through the colonization of virgin lands in the Eastern region (SAR, para. 1.18). Moreover, although the Bank's 1975 sector work had urged the establishment of a forest management system in Paraguay, no system of any importance had been undertaken, and land clearing to plant cotton and soybeans, in response to buoyant world prices, continued unabated.

11. The lessons of past experience were understood but for the most part, not adopted, because of internal Bank pressure to lend. Previous experience with the Caaguazu and Eje Este projects demonstrated the difficulties of implementing IRD projects in Paraguay. Weak institutions impeded efficient administration, chronic counterpart funding deficiencies delayed essential infrastructure components, while lengthy land title issuance procedures slowed credit disbursements. The timing of roadworks completion and land titling set the pace for on-farm development; farmers without title and access to roads contributed only marginally to production gains.⁴ Delays increased project costs, reduced benefits and decreased both projects' rates of return.

12. Lack of counterpart funding was a formidable barrier to project execution. The Bank was aware, from its earlier experiences in Paraguay, of the Government's conservative fiscal policies which established the budget to fit expected revenues and

3. The Agriculture Sector of Paraguay, World Bank, February 1976. The strategy called for: (a) expanding the agricultural area; (b) increasing agricultural productivity; (c) diversifying production; (d) increasing agricultural exports; (e) improving income distribution; (f) conserving natural resources; and (g) strengthening agricultural institutions.

4. Project Completion Report, Paraguay: Eje Norte Rural Development Project, Report No. 12647, December 30, 1993.

reduced expenditures when revenues fell short of projections.⁵ These policies had caused erratic Government support for other Bank-financed projects. Softening the impact of these policies might have entailed a scaled-down project with a higher percentage of Bank financing and less reliance on counterpart funds (although in retrospect, this tactic would probably have been insufficient to surmount the adverse circumstances of the first few years).

13. The project was intended to benefit existing farms, the targeted beneficiaries being area smallholders averaging about 18-20 ha. The Loan Agreement defined a project beneficiary as a "small-scale farmer to whom the National Development Bank (BNF) has made or proposes to make a sub-loan". Small-scale farmers were further defined as "agricultural producers operating a small-scale farm either as an individual or as members of cooperatives or similar forms of association." A small-scale farm meant a farm "having up to 30 ha suitable for cropping." The beneficiary, as defined, essentially fitted the client profile (and may have already been a client) of the BNF which had customarily excluded the small peasant farmer, while typically lending to farmers with holdings averaging 85 ha. Like most IRDs of its period, the definition was based on land size and did not consider factors such as net income. In the Paraguayan context, a land holding of up to 30 ha can cover several strata of small-scale farms, including family commercial enterprises; if the Loan Agreement was interpreted to mean land cultivated, such land might form part of a larger farm.⁶

14. Four farm models, representing typical smallholdings and incorporating average input and production costs for the principal crops in the project area in 1979, were the basis for analysis of the project's rate of return and for the design of the credit, extension and research components. The models were based on agro-ecological location in the project area and size of landholding, and stressed a limited number of cash crops: cotton, soybeans, sugarcane and tobacco. In practice, the models tended to be ignored in the confusion over who was or was not a project beneficiary, and were viewed by SEAG and DIAEF as a data-driven parameter unrelated to real conditions.

15. Crop diversification objectives were exceedingly modest; with the exception of ka'a he'e,⁷ the crops supported were already familiar and widely cultivated in the project area. The stress on cotton and soybeans is not surprising. Both provided (and still provide) a good living in good years, and they were, and remain, vitally important to the Paraguayan economy. The era of price and yield variations was still to come. In any case, diversification needs time, a supportive policy environment and strategy, markets, research, technical skills and credit integrated in a manner unlikely to occur through individual components of an IRD project.

5. Letter, May 28, 1986.

6. The Eje Norte Project also encountered confusion over the definition of beneficiaries. See PCR Report No.12647 of December 30, 1993.

7. A native crop, *Stevia rebandiana*, from which a non-caloric sweetener can be extracted, and about whose prospects even the SAR seemed doubtful.

16. Projected financial rates of return at the farm level (between 43% and 59%) and internal economic rates of return to the project as a whole (between 39% and 52%) were very optimistic, even under conditions of continued economic expansion. The achievement of such returns would have required high levels of specialization, modernization of the productive base through inputs in the form of credit, technology transfer, improved seeds, fertilizer and pesticides in timely and adequate quantities, and progressive marketing arrangements. For the majority of targeted smallholders, these were overly ambitious expectations, although they may have appeared feasible under the price conditions at appraisal.

17. With hindsight, these objectives would probably have been more successful had the project promoted farmer organization and been more participatory.⁸ This observation is intended as a lesson of the project and not a criticism: participatory practices were not a feature of IRD projects anywhere in the Bank at that time, and in Paraguay under the Stroessner government, presented real political difficulties. Nevertheless, there were some 72 small farmer committees functioning in the project area in the early 1980s. This represented an opportunity for input into the project and its execution. Consolidation for the purposes of joint marketing, communal farming to capitalize groups and demonstrate new technology, joint purchasing of inputs and equipment and organization of communal stores, would have provided the dynamic focus which engenders "ownership". It would have also demonstrated support for smallholders' greater role in civil society at a time when political conditions thwarted this, and fostered project sustainability.

18. The project was complex with many innovative features including: (a) novel contractual arrangements for ecologically efficient land use by project beneficiaries; (b) provisions for land acquisition to achieve the purposes of the project (agricultural research and resettlement); (c) establishment of a high level and relatively autonomous coordinating body (ONCP) for implementing rural development projects in Paraguay; (d) the pioneering of forest management and soil conservation components in Paraguayan IRD projects; (e) new programs (in the later stages) for women's micro-enterprise development and smallholder organization, based on participatory methodology; (f) inclusion of an indigenous peoples' component,⁹ the first in a Bank project in Paraguay; and (g) contracting consultants to implement a component (the indigenous peoples' component) with special requirements.

19. The SAR correctly identified some project risk factors: weak coordination, delayed implementation of roads and titling, and willingness of farmers to adopt forest management practices. The establishment of ONCP attempted to surmount the coordination problem but, being a new and evolving entity with a number of key weaknesses, it was unlikely to achieve this in the short-term. The project was demanding

8. Farmer organization was to be promoted as a tool for extension delivery but not in the comprehensive sense for social, civil and economic empowerment.

9. Initially a study and subsequently a full-scale program.

both for ONCP and the implementing agencies whose overall coordination was seen as the key to successful implementation. Lack of budget resources worsened this situation.¹⁰

20. Roads and titling were consciously scheduled first to pave the way for the agricultural development activities, but were vulnerable to funding interruptions. Further, with a completion schedule of four years out of a five-year project, they were not realistically timed relative to the agricultural development components -- there was bound to be significant overlap. The forest management component was especially vulnerable, lacking important ingredients for success.

21. Project design did not heed macro-economic factors such as the over-valued currency and impact of export taxes, which had affected previous projects and were described in the Bank's own ESW. Finally, the SAR should have considered the possibility that world prices might deviate from Bank projections. The project rate of return analysis was based on a few products with potentially unstable prices, and only on what had happened to those products during the period of rapid growth known as the "Paraguayan miracle".

22. Overall, project risk mitigation measures could not make up for weak Government commitment, an inappropriate fiscal, macro-economic and policy environment, and the lack of beneficiary participation -- all factors which began to change and improve from 1987, and more rapidly following establishment of a new government in 1989 -- nor for the decrease in international commodity prices and adverse climatic conditions.

Achievement of Project Objectives

23. The project's achievement of its objectives was mixed:

- (a) Physical access to the project area was markedly improved with the completion of the planned collector and feeder roads. Collateral effects have been the linking of formerly isolated communities, expanded and less monopolistic marketing opportunities and rapid modernization of the area, all of which are assumed, in the absence of hard data, to have improved employment both on- and off-farm.
- (b) Production objectives were substantially achieved: cotton, soybeans, wheat and sugarcane production increased -- chiefly due to the expansion of the area cultivated, rather than technological improvements -- and yields approximated appraisal estimates. However, the project was unable to limit the provision of credit and services under the project to holdings already in production (i.e., existing farms) or smallholdings *per se*. Further, the restructuring of smallholder production continued (as the SAR expected) in response to project incentives, emphasizing cotton at the

10. The preparation record notes MAG's concern about inadequate personnel, lack of technical staff and the fact that "most Ministry staff worked only half-time". It also notes poor coordination between MAG and the MOPC, and critical shortage of staff at MOPC.

expense of traditional low-risk, subsistence crops. Evidence suggests that for the bottom stratum of smallholders, this increased dependence caused a more precarious income situation due to the vagaries of the market and climate and the increased importance of pests.

- (c) The forest and soil management objectives had negligible success: project design deficiencies, policy and legislative impediments, lack of commitment and weak enforcement capacity, reduced their potential from the outset.
- (d) The social objective of improving the health of area smallholders achieved substantial success. Fertility and infant and maternal mortality were reduced, and vaccination programs successfully promoted. However, the incidence of and mortality from poverty-related health problems such as anemia, pneumonia and parasites were not improved, since they require, *inter alia*, greater stress on preventive care (a basic dilemma of the Paraguayan health care system) and community involvement.
- (e) The objective of improving the situation of indigenous people in the project area achieved substantial success due to a tremendous, highly-focused effort by the Bank, specialist consultants and (after 1989) the Borrower, and resulted, among other things, in the establishment of important legislation protecting Amerindian land rights.

Implementation Record and Major Factors Affecting the Project

24. The adverse impact of prevailing fiscal and macro-economic policies on project implementation was, as with the Eje Norte Project (Loan 2141-PA), significant. The policy environment was a powerful impediment to implementation and its significance became evident in the marked improvement in project implementation after 1987 when major reforms were introduced in fiscal, trade and exchange rate policies. In retrospect however, it is also clear that the project was over-designed relative to Paraguayan commitment, capacity and context. Thus its implementation experience and ability to achieve its objectives resulted, to a significant extent, from factors within the Bank's control.

25. Signature of the Caazapá loan coincided with the end of the Paraguayan "boom". World commodity prices began to fluctuate and decline, and Paraguayan cotton faced stiff competition. The economic stimulus from the construction of the Itaipú dam was fading. From 1982 to 1987, the economy was characterized by inflation, monetary instability, negative growth in GDP and widespread rural unemployment and migration. GOP micro-management of the economy created further distortions and external debt grew. The project stagnated until 1987; local counterpart funding was not included in the 1983 budget and remained insufficient in 1984. From 1985 to 1987, the Bank suspended disbursements for all projects in Paraguay for macro-economic reasons, chiefly the over-valued currency. Underlying this prolonged stagnation of the project was lack of Government commitment.

26. With the economy recovering in 1987, conditions favored improved implementation. Issues such as smallholder organization, institutional coordination, project administration, and monitoring and evaluation were addressed, reinforced or introduced. A Bank mission in December 1987 re-programmed the project: accounting and auditing problems were resolved; specialist consultants were contracted to evaluate the project, design operational and administrative systems, and complete the study on indigenous peoples. Meanwhile, the disbursement issue was resolved through a pragmatic, country-level agreement relating to exchange rate and interest rate policies.

27. Working with ONCAP and BNF, this same Bank mission expanded the definition of project beneficiaries to include: (a) agricultural producers cultivating up to 30 ha; (b) livestock producers with up to 400 ha but who cultivated less than 30 ha; and (c) family and individually-run agro-industries and artisanal enterprises. The ceiling on subloans was raised from US\$8,900 to US\$35,000. The Borrower's report also asserts that BNF credit coverage was expanded to the entire Caazapá Department, but this is refuted by Bank project staff.¹¹ The re-definition was not viewed by staff as a dramatic shift, and formal amendment of the Loan Agreement was not considered necessary.¹²

28. The changes responded primarily to BNF's need to speed up credit disbursement and to reduce intermediation costs. The immediate effects were to open up the credit line to larger farmers (contrary to the spirit of the Loan Agreement and project documents), complete the divorce of field operations from the farm models, and fragment what were intended to be synchronized credit, titling and extension services from BNF, SEAG and IBR. The Loan Agreement should have been amended and the project possibly re-appraised.

29. Project implementation improved significantly following the events of 1989 and once the new government established its development priorities and accepted Bank recommendations. The Loan Agreement was amended in 1992 to permit the allocation of US\$5.7 million of loan funds to an Emergency Flood Relief Plan. The Plan financed repairs to dikes, and provided funds for emergency medical supplies and relief in areas flooded by the Paraná and Paraguay rivers in early 1992. The project's implementation record follows.

Rural Roads

30. Appraisal of the roads component envisaged completion in the first four years, facilitating other components such as extension, credit, land titling and health care in

11. Neither the Aide Memoire of December 17, 1987 nor the file record refer to a decision to expand the project area to the entire Department of Caazapá and project staff were unaware of it, including staff with six years continuous supervision experience. However, the Borrower Completion Report refers to this decision and the Eje Norte project is known to have been expanded to the whole San Pedro Department at that time.

12. Memorandum of June 10, 1989. A consultant supervising the credit component in June 1989 remarked on the lack of amendment to the Loan Agreement and suggested that some action needed to be taken.

otherwise remote areas, especially during the rainy season. Corollary benefits such as improved marketing opportunities, communications and general modernization were also expected to follow.

31. The appraisal timetable could not be adhered to, being affected by lack of counterpart funds, the Bank's two-year suspension of disbursements, contracting, procurement and disbursement problems, and unseasonable torrential rains. The upgrading of feeder roads, scheduled for completion in late 1987, took until 1991; nevertheless, the performance of MOPC in completing feeder roads under force account (a total of 1,300 km including Eje Norte) deserves mention. The 50 km Numi-San Juan Nepomuceno all-weather road was completed more than six years behind schedule. However, it appears that the method of procurement chosen for each segment of the roads component, was not a material factor in their implementation experience.

32. Construction of the Numi-San Juan Nepomuceno road encountered serious disbursement problems. A Bank supervision mission in November 1992 determined that actual construction progress was significantly less than indicated by Borrower statements of expenditure (SOE) and the supervision reports of consulting engineers. As a result, the Bank required the Borrower, through a letter setting out the conditions for completion including time-bound actions, to take steps to bring completed works and disbursements into line. The Bank closely supervised, through missions to the site with a Bank roads engineer, the Borrower's completion of the works. These actions were taken by the Borrower to the satisfaction of the Bank. Because some minor works were still needed after project closing, the Borrower completed them using its own funds.

Agricultural Credit and Infrastructure

33. Market conditions and the incentive structure distorted by macro-economic intervention during the first five years of the project suppressed agricultural exports and, consequently, the demand for credit. Further, Paraguayan smallholders were dissuaded from borrowing due to the complexity and cost of the paperwork and the tendency of BNF staff to treat smallholders as unreliable clients.¹³ BNF remained the prudent, conservative banker and was highly selective in its lending practices. Borrowers were required to mortgage their land titles and provide other forms of guarantee but the titling component of the project was slow to start, the procedure was both protracted and costly, and in the first 4-5 years, few smallholders received title. Disbursement for subloans was only US\$0.6 million by December 1987.

34. With credit not being taken up at the expected rate, the lending criteria were redefined in late 1987 to expand the number of potential beneficiaries (para. 25). As reported by a special supervision report on the credit component, this interpretation enabled BNF to extend its lending to producers with larger holdings and contributed to the expansion of loan size.¹⁴ BNF data shows subloans totaling 5,096 representing 2,012

13. Report on Caazapá Area Development Project, June 21, 1994.

14. Supervision report, June 30, 1989. While asserting that the project seemed indeed to be focusing on small-scale farmers, the report admits that the sample of 12 subloans analyzed may have been too

individual sub-borrowers (clearly, many clients were repeat borrowers) of which 12 were "global" credits to cooperatives and committees with individual members totaling 1,420.¹⁵ Even when BNF lent to smallholders with as little as 10 ha, they tended to be in the stratum above peasant smallholder, that is, small family commercial farms (and among specific ethnic groups). The credit tended, as is often the case in IRD projects, not to reach the large number of smallholders at the lower end of the scale. A result was continued dependence on the acopiador. The Borrower Report cites 1991 Census data: the greater portion of non-institutional credit in the Department of Caazapá went to peasant smallholders with 10-20 ha, while the greater portion of institutional credit went to the cohort with 50 ha or more.

35. Demand was boosted in the last four years when the Guarani/US Dollar exchange rate was changed to levels attractive for the export of cotton and soybeans. Other factors contributed: (a) cotton prices began to improve in 1987/88; (b) better roads and transportation improved farmers' marketing prospects; (c) extension services began to improve; (d) the learning/demonstration effect prompted farmers normally averse to institutional credit to apply for sub-loans; and (e) competing funds from an IDB credit project terminated in 1987 causing BNF to shift its source of lending to the Bank's loan.¹⁶

36. BNF data shows the total cultivated area financed was about 65,000 ha compared to the planned 18,000 ha, representing 360% of target. The areas devoted to individual crops differed substantially from the appraisal estimates in parentheses, upon which the project's rate of return was based: soybeans absorbed 31.4% (20%), cotton 24.3% (50%), tobacco 0.2% (15%) and ka'a he'e was insignificant (15%)¹⁷; among the other important crops, the area devoted to sugarcane rose sharply to 16% and that planted with maize to 15%. The average area of soybeans financed was 37 ha compared to the expected 17 ha due to the investment in machinery and equipment of commercial family farms and larger enterprises, many of whom were immigrant Brazilian colonists -- soybeans was not a crop commonly grown by smallholders in the Caazapá area.¹⁸

37. The average cotton area financed was 10 ha compared to 8.7 ha at project startup. Smallholders usually cultivate 2-3 ha, determined mainly by the availability of family labor. Thus, even the recipients of credit for cotton were probably in a stratum above peasant smallholder, although not necessarily "large". Some smallholders may also have

small to draw general conclusions. Further, the report urged that a follow-up mission scrutinize larger beneficiaries with more than 50 ha because their share in total loan value seemed to be growing much faster.

15. The Borrower's Report states that interviews with cooperative members indicated that many had not received credit.

16. There is only one brief reference in the file record to competing project funds in the Caazapá area.

17. A surprising expectation, given the acknowledged marketing difficulties.

18. Project staff estimate, however, that some 10% of the soybeans would have been grown by smallholders.

sharply increased the area in cotton due to the availability of credit and promise of quick returns. Several reports, including the Borrower's, mention high rates of arrears among smallholder borrowers at the project's end.¹⁹ An important additional reason was the heavy rains in 1992 which destroyed a large part of the crops and caused many smaller farmers to default on their loans.

38. Some 50% of the investment credit went for land clearing, implying that: (a) production increases were largely attributable to increased area and less to technological input and conservationist farming; and, (b) the project did not limit credit to farms already under production. The project had modest cash crop diversification goals. In practice, the only significant change in cropping patterns in existing agricultural areas was increased sugarcane cultivation. Ka'a he'e failed completely and is a text-book example of trying to "pick winners". Project-financed research did not come up with viable alternative crops. While lack of established markets has been the main limiting factor on diversification in the project area (in addition to inadequate knowledge, technical skills and credit), the basic difficulty of finding an alternative to cotton with a similar return, is also widely acknowledged.

39. The credit line experienced substantial leakage to larger farmers and to new farm enterprises (which was foreseen at the time beneficiaries were re-defined and thus, being intentional, may not technically qualify as "leakage", except that the Loan Agreement and project documents continued unamended). The evidence, however is not conclusive. There is no documentation available either from BNF or DINCAP records which shows the farm size of project sub-borrowers. The Borrower's Report mentions, however, (without back-up data) that some 30% of sub-borrowers were smallholders, and 60% were medium and large farmers, receiving extension through the BNF program. The identity of the other 10% is not given.²⁰ Further, the Borrower's report mentions subloans of US\$15,000 and up to US\$30,000 as evidence that the project's real beneficiaries were a fairly mixed, better-off group, although some of the larger amounts may well have been the "global" sub-loans given to cooperatives.

40. Conclusions concerning the nature of beneficiaries are based on the following: (a) the nature and area of individual crops actually financed. The area of soybeans financed was ten times the appraisal estimate and extended into newly-cleared zones; soybeans were not typically cultivated by smallholders; (b) consultant reports on the credit component noted both in 1989 and 1994 that larger landholdings had benefited; (c) BNF traditionally lent to farmers averaging 85 ha and, among smallholders, the more successful echelon of family entrepreneurs; project design did not attempt to "groom" BNF to service peasant smallholders; (d) BNF technical assistance for sub-borrowers went to larger holdings; and (e) anecdotal evidence of BNF staff in Caazapá area branch offices suggests that a preponderance of sub-borrowers had 50-60 ha (although this not a "large" farm in

19. One consultant evaluation of the credit line in December 1992 however, describes arrears as minimal, without providing further details; this report, surprisingly, omits any mention of who the credit went to, i.e., the beneficiaries.

20. While no data on farm size was provided, this does not mean it does not exist.

the Paraguayan context and depending on soil quality and other factors, might well be a "small" farm). Brazilian settlers were moving into the northern and eastern parts of Caazapá in the 1980s to grow soybeans, and were seen by BNF as reliable clients.

41. **Lending Terms.** BNF data shows that credit was mainly short- and medium-term (28% and 72% respectively). At appraisal, long-term lending was defined as ten years with three years' grace, but in practice it meant four years without a grace period, and with 40% of the investment cost due in the first year, an internal regulation of BNF. For the smallholder, the credit was often insufficient and late, due mainly to BNF limits on the percentage of investment cost eligible for financing, excessive bureaucracy and the technical inadequacy of BNF staff. Further, it was not designed for smallholder systems where production and reproduction, or family consumption needs, are inseparable. Subloans were production-related, being based on the premise that smallholders would behave like commercial farmers. Subloans which did not cover the cost of production, and only partially covered labor costs, reduced technology input and perpetuated low yields. Notably, project credit funds were not recycled in the Caazapá area.

42. Smallholders were obliged to continue borrowing from the acopiador, the main benefits of which were timely, appropriate financing with a minimum of bureaucracy, services for which they were willing to tolerate exploitative rates of interest. Evidence suggests a majority of smallholders still borrow from such informal sources. Bank missions did urge BNF to finance a higher portion of the investment cost, consider other forms of guarantee and work more with groups.²¹ BNF loosened up its guarantee requirements in the later stages of the project, but only for cooperatives mainly comprising commercial family farms.

43. Section 2.11 of the Project Agreement stipulated that the funds would be on-lent at positive, real interest rates, which would be reviewed and, if necessary, adjusted commensurate with changes in the average cost-of-living index of the previous twelve months. The intention was to ensure that credit was used for economically sound agricultural investments and to protect BNF's equity. However, throughout implementation, those reviews were irregular and adjustments were insufficient to maintain positive interest rates, a situation ostensibly beyond the control of BNF itself.²² Compliance by BNF became increasingly difficult in light of the statutory ceiling on lending rates of 12% and the rapid run-up in inflation, which by the end of 1984 reached 29.2%. It was not until December 1988 that BNF was permitted by the Central Bank to adjust its lending rate to levels close to positive in real terms, and to apply variable interest rates to all subloans outstanding. However, rates were positive for only a short period of project execution.

44. **BNF as Intermediary.** It is questionable whether BNF was the most suitable institution to deliver credit to small peasant farmers. BNF favored land title as collateral,

21. Supervision Report, December 26, 1989.

22. Supervision report of June 30, 1989 questions why the Loan Agreement and Subsidiary Loan Agreement signed by BNF state that it will amend the interest rate if, in fact, this was beyond its control.

and a high percentage of small farmers in the project area lacked formal title. The alternative institution, the Smallholder Credit Agency (CAH), with its mandate to lend to small farmers, especially those without land title, and to work through farmer groups, was intrinsically more suitable. The selection of BNF was justified by the Bank on the grounds of its financial soundness compared to alternative institutions, and its previous work with the Bank. CAH, on the other hand, in addition to an extremely limited resource base, had a reputation at the time for poor management and political manipulation.

45. In any case, unlike the Eje Norte Project, Caazapá assigned high priority to titling and, arguably, providing peasant smallholders with a title which technically qualified them to join the mainstream of BNF borrowers, was good development practice. However, once the decision was taken to use BNF, a plan should have been developed to improve its capacity to deal with those farmers in the project area, including technical assistance, measures to reduce lending costs and paperwork, and more flexible collateral requirements. A prudent alternative might have been to strengthen CAH.

46. BNF's technical assistance to farmers was weak. It was focused, as would be expected, on larger farmers, and was confined mostly to limited contacts during preparation of the investment plan and during supervision visits to ascertain use of the financing.²³

47. With help from the Inter-American Institute for Agricultural Cooperation (IICA), the credit line was broadened in the late stages of the project to include micro-enterprise financing for women through revolving credit funds linked to women's cooperatives. This small pilot program was a successful model for future efforts in Paraguay.

48. **Institutional Infrastructure.** Institutional targets for BNF (hiring technical personnel, new offices, equipment) were fully-achieved or exceeded, and to a high standard.

Agricultural Extension

49. Lack of counterpart funding, vehicles and access to more distant parts of the project area hindered SEAG activities. The Borrower's Report also refers to the centralized usage of project funds at SEAG headquarters at the expense of field activities, consistent with the thesis that the institutions' preoccupation under the project was with empire-building and bureaucratization at the expense of programs. The planned Joint Action Program (PAC) with BNF and SEAG proceeded very slowly. SEAG's services tended to concentrate on cotton/specific crops and on farmers with 20 ha. or less, as intended by the project, but with BNF focusing on larger clients, the intended linkage between credit and extension was undone. Coverage would likely have been improved by greater emphasis on group formation.

23. Supervision Update, April 18, 1992.

50. SEAG estimates that it assisted some 3,576 farmer sub-borrowers of BNF over 10 years, representing about 180% of the target (2,000).²⁴ This achievement is even more impressive when matched to an "actual" implementation period of about four years. However, the accurate counting of beneficiaries is difficult given the constant ebb and flow of members from SEAG's extension groups. The Borrower's report casts doubt on these numbers, asserting that double- and triple-counting occurred. Much also depended on the level of development and location (near to or distant from centers) of individual colonies with the least developed receiving no extension services, mainly because of SEAG's lack of resources and vehicles.

51. The Borrower's Report attributes the level of BNF credit given to smallholders (some 30% of the total) to the BNF/SEAG Joint Action Program which enabled SEAG to direct potential smallholder clients to BNF's application and approval process. Nevertheless, SEAG maintained a subordinate relationship to BNF in the PAC action program and its extension leaned towards a credit-service function, focused heavily on cotton. Otherwise, human resource, equipment and construction targets under this component were achieved.

Agricultural Research

52. This component financed an agricultural experimental station to develop technology appropriate for small farmers. Personnel, structures and vehicles were acquired but the component was very late in equipping the laboratories, having to ultimately depend on local funds after project closure. The work program successfully incorporated adaptive research involving cash and subsistence crops, supported research on multi-cropping and agro-forestry systems, and conducted meetings, seminars and technical visits for extensionists, foreign technicians and NGOs. The final years of the project witnessed more open collaboration between SEAG, DIAEF and farmers at the field level through demonstrations and field days. From 1989, research focused much more on crop diversification and production systems (without however, coming up with any viable alternative to cotton). However, major lines of research were still dictated by GOP policy without consideration for regional agro-ecological differences or the demands of producers and extensionists. Further, SEAG also undertook its own agricultural research, ostensibly on the grounds that DIAEF was not responding to smallholders' expressed demands; however, the real reason was institutional rivalry.

Forest Management

53. The 380,000 ha. project area was selected for its inclusion of both forested and agricultural zones, and as a promising proving ground for sound watershed management. The area is divided by the Cordillera of Ybytyruzu which, along with the area to the north and east, were largely covered in forest at the time of preparation. The area to the south and west was used for smallholder farming and ranching. Evidence suggests there was

24. The Bank's supervision indicator for the extension component shows 4976, which seems very high, especially in view of the explanation provided by the Borrower Report concerning over-counting.

only modest economic development in the southern and western portions, while development of agriculture and ranching tended to concentrate in the area originally intended for sustainable forest management.²⁵

54. The failure to achieve the wider objectives of the forest component can be explained largely by factors outside the control of project management. The lack of an effective legislative framework for natural resource management meant the project was dependent on the goodwill and rationality of area landowners. More importantly, no effective mechanisms were established for enforcing existing laws and regulations. There has so far been little national or local enthusiasm for police action to halt unauthorized logging. Further, when the project was prepared, it was assumed that the larger landowners would share the forest management goals of the project. As it turned out, most of the 130,000 ha area belonged to a company owned by a relative of the then-President, but had been sub-divided and registered abroad in various names to avoid expropriation. These landowners were apparently not involved in negotiations over future land use.²⁶

55. After the change of government of 1989, large areas were sold to Brazilian colonists, mostly mechanized farmers growing soybeans in rotation with wheat and oats, and some smaller areas were colonized by Paraguayan smallholders. The landholding companies also cleared areas of forest for agriculture and pasture to prevent invasions by landless campesinos, thereby demonstrating that the land was being "rationally exploited", a legal but perverse incentive to de-forest.²⁷

56. It appears that BNF's lending policies also played a part in the development of mechanized farms. Following modification of the beneficiary description, subloans went to the Brazilian mechanized farmers who had the requisite collateral and guarantees and were perceived as more reliable. While an objective of the project was to increase production on existing farms, evidence strongly suggests that BNF did not refuse credit for the clearing of new areas.²⁸

57. The internal monitoring of the project was target-oriented -- the list of monitorable indicators shows the focus on structures, equipment, personnel and vehicles, and numbers of titles -- and could not demonstrate whether or how far the project's wider conservation objectives were being met. No system of quantitative measures was established to assess whether or not sustainable land use management practices were being adopted in the project area; the key problems and contradictions were only defined after project

25. Caazapá Area Project Completion Report: Protected Areas, Small Farmers and Indigenous Peoples, June 21, 1994

26. A memorandum of September 15, 1981 notes that "heavy involvement of the 17 companies which own more than half the land area will be essential to the project's success".

27. Caazapá Area Project Completion Report: Protected Areas, Small Farmers and Indigenous Peoples, June 21, 1994.

28. Ibid.

completion. In any case, a quantitative assessment of project progress would have been difficult given the lack of baseline data on the project area. Future projects will benefit from data generated by the Land Use Rationalization Project (Loan 3445-PA) as the basis for effective monitoring.²⁹

58. The supervision record is sketchy on the forest component, noting briefly and intermittently that there had been little progress.³⁰ A supervision report of December 1989 urged action on a series of project-financed studies involving: (a) an inventory of natural resources and a land use map of the area; (b) identification of watersheds and definition of critical areas for natural resource conservation; and (c) preparation and execution of an Integrated Management Plan for Renewable Natural Resources in the project area. There is no indication of what became of these studies, which were added onto project activities at a later stage.

59. The status of the Caaguazu National Park remains unclear. It now comprises two sections, the original 6,000 ha and an additional block of 10,000 ha. In mid-1994, both areas remained privately owned with negotiations continuing, hindered in part by inadequate budget to compensate for expropriation. The administrative complex and control posts were constructed to a high standard and properly staffed, although the Forest Service expressed concern at their potential cost of maintenance. While boundaries were demarcated they were not kept clear -- there was little to indicate that the area was an ecological reserve and physical inspection showed evidence of extensive, unrestricted logging. There was no sign however, that the reserve was being cleared for cultivation as some NGOs had asserted. Park protection efforts were re-focused from the southern to the northern reserve border, where settlements of Brazilian colonists were sharply increasing the rate of de-forestation.

Soil Conservation

60. Working through farm groups, SEAG extension agents were to help interested farmers to establish conservation and land use plans which would form the basis of an agreement between the farmer, MAG and IBR. This agreement would also provide for BNF credit (essentially covering family labor costs) during the set-up phase of the conservation plan. This approach had been successfully used in the Itapúa Project (Loan 1418-PA) to establish rational land use practices and gain farmer acceptance of soil conservation.

61. This component achieved only a fraction of its targets, incorporating only 250 ha, or less than 4%, of the 6,800 ha planned. Only one of the planned five soil specialists was brought in, by retitling a SEAG technician without soil conservation credentials! Despite generous inducements to participate, the initial group of producers chosen rejected the

29. Ibid.

30. Supervision Report, June 20, 1989.

program as an imposition of SEAG, which in turn suppressed the hoped-for multiplier effect.³¹

Land Settlement and Titling

62. The main elements of this component were the issuance of 1,800 titles by the IBR and the resettlement of 200 families living on fragile, marginal lands. Land titling progressed rapidly once funds began to flow and targets were far exceeded -- 3,820 or 212% of target. Several problems affected this activity. IBR granted titles to both urban and rural lots of wide-ranging size and type, driven more by a political than technical rationale and possibly motivated by the expanded definition of beneficiaries. Land topographically unsuited for crop production was titled, despite GOP commitment to adopt conservationist practices in the project area. Areas close to IBR's offices in San Juan and Tavai were treated preferentially with more distant areas receiving scant attention and, consequently, little credit.

63. IBR's processes were exceedingly bureaucratic and centralized as well as politically motivated, requiring small farmers to travel to Asuncion. IBR personnel established fee- and quota-based systems for assisting small farmers, which unacceptably increased the overall cost of titling and resulted in mismanagement of title payments, poor accounting practices, and farmers' general loss of confidence in IBR. Control and management practices improved markedly after 1989. Physical targets for personnel, buildings and vehicles were achieved and to a high standard.

64. The families slated for resettlement refused to move and the Bank could not endorse their forced relocation. The Borrower's report suggests that these farmers were never surveyed as to whether they were willing to move. IBR maintained that it had conducted such a survey but could not produce documentation. In any case, the project should subsequently have offered extension or other assistance to these families to improve their situation in situ.

Rural Health

65. The objective of this component was to raise life expectancy and reduce the incidence of disease, but it suffered from several major flaws. First, project design did not provide for sufficient participation by, and information and education of, beneficiaries. Second, the implementing agency, (the MSPyBS), was tardy in all aspects of implementation and lacked any concept of or interest in, operational coordination with other project agencies, a situation reflecting much wider problems in the Paraguayan health care system. Some of the planned health posts remained unfinished at the Closing Date but under the committed leadership of a new Minister of Health, rapid progress was made in 1993 leaving minor aspects for completion using local funds. Further, the overall situation regarding staff, equipment and medicines had improved markedly. Increasing

31. Staff who supervised the project believe soil erosion was not nearly as serious as initially depicted in the SAR.

linkages between health agencies and community organizations brought visible improvement to local health services and increased the chances of achieving the project's health objectives.

66. Installation of concrete latrine platforms was to be demand-based. Only 800 (compared to 7,000 estimated at appraisal) were installed, reflecting probable under-design and resistance by the Borrower. The nutrition program of this component -- which promoted the creation of kitchen gardens by rural households and the adoption of more balanced and nutritious diets -- gained better and wider acceptance than health care.

Indigenous Peoples

67. Caazapá was the first IRD project to address the situation of the indigenous peoples in Paraguay. This component achieved considerable success, despite unpromising beginnings. The consultants responsible for project preparation provided no information about the indigenous population in their survey, and even the Paraguayan Institute for Indigenous People (INDI) denied the existence of Indian communities in the project area. At the time the SAR was prepared, there was insufficient information to prepare a full component, and thus actions were limited to a detailed study with a GOP guarantee that an action program (specified in the Loan Agreement) would subsequently be carried out. Three attempts were made to complete the study; the third, by an NGO, Project Guarani, provided a useful and comprehensive baseline for an ambitious set of land titling proposals and a socio-technical assistance program.

68. The component presented several legal and institutional challenges, and led to the creation of two important pieces of legislation (Laws 1372/88 and 43/89) which, along with Paraguay's innovative Indian Law (904/81), provide the legal basis for the recognition of indigenous people's land rights in Paraguay. Even so, only a few communities were able to take full advantage of the new laws and, in most cases, title remained with INDI. This is partly attributable to the inefficiency and lack of motivation at INDI and political pressure from big landowners. However, as with Eje Norte, INDI often had valid reasons for stalling the regularization of Indian land titles: (a) to prevent the risk of indiscriminate clearing of native forests on communal land and the illegal sale of tropical timber, after communities had acquired clear title; (b) to limit squatting by landless farmers; and (c) to prevent lower court involvement in land and title disputes.

69. The project managed to achieve most of the targets established, and set a precedent for other rural development and road projects, supported by the Bank and IDB. The project record clearly shows the evolution of Bank commitment to the indigenous peoples in the project area, the influence of Bank and outside experts in clarifying the issues, and the tremendous effort to implement the socio/technical program in face of GOP foot-dragging and often grudging commitment.

National Projects Coordinating Office (ONCP)

70. Until 1987, the project's coordinating body, ONCP, was attached to the National Council for the Development of Agricultural Production (CNFPA), a small ministerial-

level body without specific attributions or authority. ONCP had no control over project funds, no authority over the executive agencies and little negotiating leverage at budget time because it consistently failed to prepare annual operating plans (POAs) as required by the Loan Agreement. In 1987, project administration was transferred to ONCAP, as a dependency of MAG, created to coordinate and oversee all externally funded agricultural projects. ONCAP's administrative capabilities were greater than ONCP's, as was its authority over project implementation. Project coordination was more efficient at the rural level than at the center where issues were more politicized. In 1992, ONCAP became a national directorate (DINCAP) within a restructured MAG.

Flood Emergency Program

71. In October 1992, the Loan Agreement was amended to allow the use of US\$5.7 million of project funds to finance an Emergency Flood Relief Plan in areas inundated by the Paraná and Paraguay rivers in early 1992.³² While the Bank responded quickly and positively to the GOP's request for assistance, the experience demonstrated the cumbersome nature of Bank procedures when faced with a crisis requiring rapid response (for which its procedures were never designed).

72. On the other hand, the emergency program was complex, involving construction or rehabilitation of dikes, pumping stations, roads and bridges, basic studies and engineering designs, procurement (including of medicines) and contracting. A huge effort was expended by the Bank, Borrower and also UNDP, which was responsible for administering the program. Remarkably, given the almost ten year experience with normal project activities, the emergency program was completed in a relatively short time. This experience also demonstrated the latent capacity in Paraguay for efficient inter-agency collaboration, a factor often missing from the project.

Use of Consultants

73. The project's experience with consultants was satisfactory overall, and very successful in particular cases, e.g., the indigenous peoples' component and the contracting of IICA after 1987 to provide technical guidance to the project. The IICA/MAG/ONCAP cooperative technical assistance program had a considerable impact in the project area, particularly with the organization of cooperatives, women's groups for micro-enterprise development (funded by the United Nations Fund for Women's Development - UNIFEM), and farmer organization. Consultants were also brought in to deal with implementation problems or provide advice on specific components; and to ensure continuity in project supervision in an environment in which extensions of the Closing Date and the Bank's own reorganization caused project task management to move through several divisions.

32. A supervision report of November 23, 1992 notes that the emergency program and resulting extension of the Closing Date "saved" project authorities who otherwise would not have met a substantial list of outstanding physical targets.

74. The project experience with consultants provides important guidance for future operations. The Borrower's Report refers to problems when international experts have inadequate understanding of national conditions, especially the dynamics and rationale of institutions. Accordingly, cost-effectiveness is better when the project contracts, whenever possible, with national experts having international experience.

75. **Project-Financed Training.** While praising project-financed training, the Borrower's Report is critical of the lack of a mechanism or incentives for reinserting trained people into the institutions where their training would be most useful. Many returned to the same poorly-paid duties and responsibilities, lacking professional incentives or a promotional hierarchy. Many preferred to join the private sector rather than tolerate an institutional environment in which technical competence was discounted. The report recommends that: (a) candidates for training courses be chosen strictly on professional grounds; (b) TORs be reasonable and unambiguous to avoid a mediocre outcome; (c) a follow-up program be designed to ensure that skills are transferred to the institution; and (d) institutional POAs include training plans.

Project Sustainability

76. The prospects for project sustainability are unclear. Contrary to current practice, the project design did not include a program of ex post measures to guarantee sustainability. GOP commitment is crucial.³³ Smallholder dependence on cotton is unlikely to be sustainable in the long run and must be addressed; sustainable, intensified farming systems should be promoted to reduce the pressure to clear new land (or to migrate to urban areas). In the case of the forest reserve, there is a clear need for controls over access to the reserve and for a buffer zone management program which would address issues such as the sustainable management of the remaining areas of forest outside the reserve and strengthening the institutional capacity of the Parks Service.³⁴ The economic benefits of road construction will continue as long as Government provides sufficient funds for maintenance.

77. Sustaining the flow of credit is problematic. If BNF was reluctant to lend to smallholders under the Bank project, it is even less likely to occur ex post. Even before project closure, the cash flow from BNF's Bank-financed subloan portfolio was not being recycled in the project area and it was evident that BNF was scaling down its presence there. As in the case of Eje Norte, the credit program might have been sustainable had technical and other assistance been provided to BNF to increase its capabilities and reduce its costs of lending to smallholders. Further, greater efforts should have been made to promote the formation of savings and loan groups.

33. Sustaining interest in and support for completed projects is as difficult in the Borrowing country as it is in the Bank.

34. Ibid.

Bank Performance

78. The Bank showed commitment, perseverance and flexibility in many aspects of implementation including the indigenous peoples' component; re-programming and re-vitalizing the project after 1987 through multiple actions affecting disbursements, administration, audits, coordination, and beneficiary participation and organization; and in responding rapidly to reallocate funds and other resources for the Emergency Flood Relief Program of 1992/93. The Bank correctly suspended disbursements in response to macro-economic factors which distorted the project relationship between the Bank and Borrower and ran directly counter to the Loan and Project Agreements.³⁵

79. However, the Bank's performance can also be faulted in a number of areas: (a) in project design, failing to take account of major lessons of experience, the recommendations of ESW, or the macro-economic situation; (b) not paying adequate attention to environmental issues, including through proper design and follow-up of the forest and soil components, and by failing to comprehend the likely impact of contradictions in project assumptions concerning natural resource conservation and the project's economic and financial viability; and (c) changing the project beneficiaries and the nature of the project itself, without amendment of the Loan Agreement or internal Bank discussion of these changes including the possible need to re-appraise the project.

Borrower Performance

80. GOP commitment to this project was never wholehearted, even during preparation, and was eroded further by recession. Until 1987, the Government's uncooperative attitude, whereby virtually no effort was made to accommodate the Bank on the needs of the project, foiled project execution. When combined with weak institutions, an outdated legal framework, macro-economic problems and project complexity, the chronic delays described in this report are not surprising. Performance improved considerably after 1987, with compromises regarding the exchange rate, increased counterpart funding allocations, and the re-structuring of project administration. Progress was given a further boost by the change of government in 1989 which brought greater political support for rural development. The project continued to encounter major problems, however.

81. **Procurement.** Procurement was a major problem area. In ONCAP, bureaucratic hurdles included the need for up to sixteen different signatures on contracts. Lengthy approval processes by the Controller General and special laws of Congress for most imports compounded difficulties. In some cases, including the purchase of vehicles for the extension, health and roads components, contracts were awarded more than one year after

35. The Borrower Report is critical of the suspension as a means of resolving the exchange and interest rate problems, given the circumstances of the period, and asserts that the Bank used the suspension as leverage to secure movement on non-performing components. The report also, without justification, assigns responsibility to the Bank for the prolonged stagnation of the project from 1983 to 1987, noting the cost in commitment fees to the country. The main criticism seems to be the perceived rigidity of the Bank's procedures and positions.

the Bank's no-objection, and suppliers had to ask for price adjustments. Even after Bank approval of those adjustments, further delays occurred.

82. **Audits.** Project audits, prepared by the Ministry of Finance, were often late and, on a few occasions, qualified. The Loan Agreement was, therefore, amended to permit Bank funds to finance an independent auditor, which resulted in a satisfactory system of audits by 1989.

83. **Covenant Compliance.** The most important legal covenants were that: (a) BNF maintain positive, real interest rates on project credit; (b) IBR issue a specified number of land titles; (c) the Borrower would protect the forests in the project area; (d) following completion of the indigenous peoples' study, the Borrower would acquire, and ensure the rights to, land for indigenous people in the project area and carry out a program of social and technical services on their behalf; and (e) the Borrower, through IBR, would resettle 200 families farming eroded land. The Borrower was substantially in compliance overall. Serious, if not entirely successful, efforts were made by BNF after 1989 to maintain positive rates. IBR titling reached more than double the number of beneficiaries targeted. However, no forest management system was established and significant de-forestation occurred. Further, the families slated for resettlement refused to move.

84. **Project Coordination.** Putting project management and administration in the hands of a specialized body was a project priority which ultimately paid off. Overall, the unit did a good job under difficult circumstances. The coordination of multiple agencies was exceptionally difficult for the project unit which was itself evolving. The performance of the unit was hampered by inadequate control over counterpart funding, a situation which might have been alleviated by a line item in the national budget. Allocations for the project were contained in the individual budgets of each executive agency, a budgetary convention which perpetuated uncertainty about counterpart funding.

85. Throughout project execution there was continuous institutional adjustment and readjustment in which the project unit was strengthened but became, in the process, more bureaucratic and at times, more concerned with its survival and growth, rather than the coordination of the project. However, its relatively weak coordination performance in the capital (in the later stages) was balanced by successful coordination in the rural areas. Several factors appear to be critical for the maturation and effectiveness of such units: (a) full authority over executing agencies; (b) control of project funds; (c) the authority to contract works and services to the private sector; and (d) more decentralized project execution. Despite structural and other deficiencies in the administrative arrangements, the unit's accounting records reflected a thorough control of the project's financial operations. Nevertheless, the question arises whether the creation of a separate project unit to secure more efficient project coordination, and which ultimately remained separate and was not integrated into a line ministry, was at the expense of sustainability.

86. Acting through DINCAP, the Borrower also made a valuable contribution to the project in commissioning a comprehensive and objective ex post assessment of the project.

87. The Borrower's Report suggests that the behavior of project agencies reflected a fundamental tension between the institutional (personnel, construction, equipment and

vehicles, training etc.) and operational goals of the project and that this was never resolved. Typical of most IRDs, physical and institutional targets were often prioritized (by the Bank as well as the Borrower) over the more complex strategic planning, program formulation and measures requiring technical and operational know-how.

88. **Performance of BNF.** BNF's financial performance from 1983 to 1992 was poor, due mainly to erratic GOP economic policies. Its profitability was insufficient to compensate for the erosion of its equity in real terms. BNF is the GOP's financial instrument in support of industry and agriculture. It has been obliged to channel Central Bank funds (via short-term rediscounts) and funds from external financing into cheap short- and long-term credit for both sectors. Low spreads have barely covered high operating costs. BNF was unable to charge market rates of interest. A large portion of its own resources obtained from deposits were retained by the Central Bank as legal reserve (up to 37%) without remuneration. It was obliged to bear the foreign exchange risk on some externally-financed credit lines, on-lent in local currency. Finally, low salaries prevented BNF from attracting and keeping qualified staff. Changes in GOP economic policies from 1989 saw improvement in BNF's financial performance: it was permitted to charge market-determined, variable interest rates; its dependence on Central Bank funds was reduced; and its equity was increased by additional Government contributions.

89. BNF's rate of arrears on its consolidated loan portfolio has traditionally been high,³⁶ although notable reductions have occurred (from 22% in 1983, to 16% in 1990, and to 11% in 1991). Until 1991, however, BNF recorded as loans in arrears the total outstanding loan amount, whenever an installment was due and not paid; from 1991, only installments due and not paid were recorded as arrears. Interest and late payment penalties were recorded when payment was received. Provisions for bad debts were computed on the total amount in arrears, and adjusted to cover only the portion not shielded by collateral. In BNF's agricultural portfolio, the mainstay of its activities, the rate of loans in arrears was high in 1983 but was reduced significantly thereafter, from 18% in 1983 to 7% in 1991. The Borrower's report alleges that arrears on the project credit portfolio were as high as 50% but were resolved year to year through refinancing the overdues (which deepened smallholders' indebtedness).³⁷

Assessment of Outcome

90. The project is rated as substantially unsatisfactory, for the following reasons: (a) the project's internal economic rate of return (IERR) is probably low or negative. At appraisal, the project's expected IERR was 20% and sensitivity tests showed its vulnerability to price fluctuations and delayed implementation. Deficient project monitoring resulted in insufficient data to re-calculate the project's actual rate of return,

36. See SAR, Annex 1, para. 6.

37. The Caazapá Area Development Project report of June 21, 1994 alludes to the potential for small farmers to default resulting from taking unmanageably large subloans and increasing their dependence on cotton, vulnerable to disease, price fluctuations and drought while reducing their traditional, diversified subsistence cropping. No information on arrears is available for medium and larger sub-borrowers.

but the collapse of cotton and soybean prices and extended implementation period mean that the IERR was probably low to negative. This does not mean, however, that the project is economically and financially non-viable in the longer-term; much hinges on sustaining infrastructure and services, on prices (which began to improve in 1994), and on overall economic activity in the Caazapá area and wider region, which has shown greater dynamism as a result of improved access; (b) the project did not achieve its forest and soil conservation objectives. Significant deforestation occurred, partly as a result of project incentives and the inability of the project to limit its activities to existing farms; and (c) the project had apparently not improved the incomes of smallholders (at the time it was evaluated by the Borrower) and their dependence on cotton has been increased. With favorable prices, however, incomes could be expected to improve, irrespective of questions surrounding the long-term sustainability of cotton.

Future Operations

91. The Bank's main preoccupation in the final stages of the project was to ensure the completion of planned infrastructure (roads, health structures, and items contracted under the flood relief program) before the Closing Date, which had already been extended several times. In addition, during final missions and contacts with the Borrower, plans for future operations, principally under the protected areas, roads, research and extension components, were prepared and/or discussed. Arrangements for the management of the Caaguazu National Park formed part of a new National System for Protected Forest Areas (SINESIP) finalized in 1994, under which Caaguazu was designated an ecological reserve due to its biological and geographic characteristics. With regard to the roads, MOPC undertook to maintain the roads through force account and earmarked sufficient budget. The Borrower produced a satisfactory research program for the experimental station including general objectives and descriptions of specific, planned, research products. Finally, the Borrower undertook to assign priority to agricultural extension but no specific plan was prepared.

Lessons Learned

92. While the Caazapá project was seriously flawed and fell well short of its main objectives, it should not be judged by the innovative policies and practices now widely used in the Bank. Rather, the project experience further substantiates the aggregate body of Bank lessons which gave rise to those policies and practices. Conditions for lending in Paraguay in the late 1970s and 1980s were difficult, but many of those same difficulties remain, e.g., weak institutions and laws, politicized processes, centralized administration and macro-economic problems. New projects need to be realistic, flexible, appropriate in scope and scale, and founded on the best available database and dialogue with Government and other key players.

93. The most important lessons from the project for future rural development projects in Paraguay, are:

- (a) **Macroeconomic and fiscal conditions are key arbiters of project outcome, influencing Borrower commitment, counterpart funding**

availability, project incentives and the behavior of institutions.

Project design should reflect in scope, scale and strategy, a realistic assessment of the "political economy" within which the project will be implemented; this should be complemented by a well-developed, broad-based and participatory dialogue on the main issues, to promote cooperation and support for the project.

- (b) **A program approach to rural development, with carefully-sequenced sets of activities designed to build sustainable results incrementally over the medium-term,** is a more rational development tool than multi-sectoral and multi-component projects which overwhelm the resources of the Borrower. The phased approach also provides the flexibility to periodically evaluate and adjust overall design, methodology and content.
- (c) **Institution-building in rural development projects in Paraguay would also benefit from this programmatic approach.** Weak institutions are synonymous with under-development; while there is nothing inherently wrong with accepting weak institutions as counterparts and project executors, a few years of technical assistance financed on a sliding scale is demonstrably inadequate as a means of developing long-term institutional capacity.
- (d) **Projects need to incorporate measures which ensure that executing agencies give equal priority to programs,** as to physical targets (construction, staff, equipment and vehicles); and that the content and implementation strategy are spelled out clearly for the benefit of all interested parties and supervised closely.
- (e) **A strategy is needed for targeting (and reaching) rural smallholders, especially the poorest stratum, and landless laborers,³⁸ and preventing the appropriation of project benefits by better-off groups.** For new projects, the strategy must be transparent and participatory, and should incorporate financial, social and geographic criteria; size of landholding is inadequate. Project documents should define the strategy and the beneficiaries in unambiguous terms and compliance should be ensured through regular supervision and evaluation. Constraints to access which appear during implementation should be addressed through modifications in the Loan Agreement, the practices of the financial institution and executive agencies, and/or prevailing policies.
- (f) **Selection of an appropriate financial institution for credit operations requires an assessment of their financial soundness, and their customary clientele and lending practices to determine which best supports project objectives.** Institutional weaknesses need to be

38. Landless laborers were not targeted under the Caazapá project but they would be included in any new RD project.

addressed, and if necessary, measures included to reduce the cost and risk (real or perceived) associated with lending to certain groups. The credit-worthiness of smallholders can be enhanced through risk-sharing groups, serious policies governing arrears and the building of credit histories.

(g) **Beneficiary participation and organization create "ownership" of project goals and achievements, and foster sustainability.**

Consolidation of smallholders for the purposes of joint marketing, communal farming to build up group investment and demonstrate new technology, joint purchasing of inputs and equipment and organization of community stores, would have galvanized the productive objectives of the Caazapá project. Participatory preparation and execution would have improved prospects for the successful resettlement of the families farming fragile lands, for installation of latrine platforms, for soil and forest conservation, and demonstrated support for smallholders' greater role in civil society.

(h) **Monitoring and evaluation (M&E) systems built on the best possible baseline data are indispensable for gauging progress, analyzing impact and for policy and strategy formulation.** Systems should be established and operational as a condition of negotiations. The Caazapá project was especially weak in these areas: lack of data prevented re-estimation of the IERR; progress under the forest conservation component could not be measured; and there were significant gaps in information concerning the credit component, in particular, data on the farm size of sub-borrowers.

May 14, 1996

IMPLEMENTATION COMPLETION REPORT

PARAGUAY

CAAZAPA AREA DEVELOPMENT PROJECT

(Loan 2087-PA)

PART II: STATISTICAL INFORMATION

Table 1. Summary of Assessments

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

1. Rating reflects successful achievement of objectives for indigenous peoples' component.

Table 1. Summary of Assessments (Continued)

| | | | | |
|---|--|--|--|--|
| B. <u>Project Sustainability</u> | <u>Likely</u> (✓) | <u>Unlikely</u> (✓) | <u>Uncertain</u> (✓) | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| C. <u>Bank Performance</u> | <u>Highly Satisfactory</u> (✓) | <u>Satisfactory</u> (✓) | <u>Deficient</u> (✓) | |
| Appraisal | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| Supervision | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Implementation | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| D. <u>Borrower Performance</u> | <u>Highly Satisfactory</u> (✓) | <u>Satisfactory</u> (✓) | <u>Deficient</u> (✓) | |
| Preparation | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Implementation | <input type="checkbox"/> | <input checked="" type="checkbox"/> ² | <input type="checkbox"/> | |
| Covenant Compliance | <input type="checkbox"/> | <input checked="" type="checkbox"/> ³ | <input type="checkbox"/> | |
| E. <u>Assessment of Outcome</u> | <u>Highly Satisfactory</u> (✓) | <u>Satisfactory</u> (✓) | <u>Unsatisfactory</u> (✓) | <u>Highly Unsatisfactory</u> (✓) |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> ⁴ | <input type="checkbox"/> |

-
2. Reflects the marked improvement in Borrower performance after 1989.
 3. Reflects overall compliance with over 30 covenants. However, compliance was deficient on several important covenants (e.g., forest management and interest rates).
 4. Actual rating in report is shown as "substantially unsatisfactory" to indicate that the project had a number of significant achievements.

Table 2. Related Bank Loans

| Project Title/ Loan No. | Purpose | Year Approved | Status |
|--|-------------------|--------------------------|---------------|
| <u>Preceding Operations</u> | | | |
| 1. Rural Development II Project (Ln. 1418-PA) | Rural Development | 1977 | Closed |
| 2. Livestock/Agricultural Development Project (Ln. 1674-PA) ^{a/} | Rural Development | 1979 | Closed |
| 3. Livestock VI Development Project (Ln. 1979-PA) | Rural Development | 1981 | Closed |
| 4. Eje Norte Rural Development Project (Ln. 2141-PA) | Rural Development | 1982 | Closed |
| 5. Agricultural Credit Project (Ln. 2304-PA) | Rural Development | 1983 | Closed |
| 6. Livestock Development Project (Ln. 2372-PA) | Rural Development | 1984 | Closed |

^{a/} Since 1963, the Bank has made seven credits and loans totaling US\$72 million to finance six livestock projects with a total cost of US\$136 million.

Table 3. Project Timetable

| Steps in Project Cycle | Date Planned | Date Actual/ Latest Estimate |
|--|---------------------|---|
| Identification (Executive Project Summary) | | September 1978 |
| Preparation | | October 1978 |
| Appraisal | | March 1987 |
| Negotiations | | November 1981 |
| Board Presentation | | January 28, 1982 |
| Loan Signing | | February 25, 1982 |
| Loan Effectiveness | May 28, 1982 | February 28, 1983 |
| Loan Closing | June 30, 1988 | December 31, 1993 |
| Project Completion | December 30, 1987 | June 30, 1994 |

Table 4. Loan Disbursements: Cumulative Estimated and Actual

(US\$ Million)

| Fiscal Year | Appraisal Estimate | Actual | Actual as % of Estimate |
|--------------------|---------------------------|---------------|--------------------------------|
| 1983 | 1.8 | -- | 0.0 |
| 1984 | 9.4 | -- | 0.0 |
| 1985 | 20.6 | -- | 0.0 |
| 1986 | 27.7 | -- | 0.0 |
| 1987 | 30.5 | 3.5 | 11.5 |
| 1988 | 31.0 | 4.6 | 14.8 |
| 1989 | | 9.1 | 29.4 |
| 1990 | | 11.7 | 37.7 |
| 1991 | | 15.3 | 49.3 |
| 1992 | | 19.3 | 62.2 |
| 1993 | | 25.6 | 82.6 |
| 1994 | | 30.7 | 99.0 |

Final Disbursement: March 1, 1994

Table 5. Key Indicators for Project Implementation

| Component/Item | Units | Appraisal Targets | Actual Achievements |
|--|--------------|--------------------------|----------------------------|
| 1. <u>Credit BNF</u> | | | |
| - Beneficiaries | no. | 2,000 | 2,012 ^{a/} |
| - Total investment subloans | US\$ million | 15.5 ^{b/} | 16.0 |
| - WB Disbursements | US\$ million | 8.5 | 8.5 |
| - Offices | no. | 2 | 3 |
| - Staff | no. | 13 | 12 |
| 2. <u>Extension Services SEAG</u> | | | |
| - Beneficiaries | no. | 2,000 | 3,576 ^{c/} |
| - Extension staff ^{d/} | no. | 41 | 36 |
| - Offices | no. | 4 | 5 |
| - Consultants | person/mo. | 44 | 60 |
| 3. <u>Land Titling IBR</u> | | | |
| - Delivery of titles | no. | 1,800 | 3,820 |
| - Offices | no. | 2 | 2 |
| - Staff | no. | 30 | 9 |
| 4. <u>Research</u> | | | |
| - Research center (Bldg. 1 Complex) | | 1 | 1 |
| - Staff | no. | 12 | 8 |
| 5. <u>Health MSPBS</u> | | | |
| - Health centers | no. | 4 | 4 (98%+) |
| - Health posts | no. | 4 | 4 (98%+) |
| - Latrine platforms | no. | 7,000 | 800 |
| 6. <u>Indigenous INDI</u> | | | |
| - Consultants | person /mo. | 30 | 32 |
| - Staff | no. | 5 | 18 |
| 7. <u>Forestry SFN</u> | | | |
| - Staff | no. | 25 | 24 |
| - Offices | no. | 7 | 8 |
| 8. <u>Roads MOPC</u> | | | |
| - Trunk road | km. | 50 | 98% |
| - Rural roads | km. | 293 | 297 |
| - Consultants | person /mo. | 50 | 85 |

a/ Represents individual sub-borrowers, of which 12 were “global” credits to cooperatives and rural committees with members totaling 1,420.

b/ BNF calculations of US\$16 million in subloans exceed SAR estimate due to variations in percent of reimbursement and exchange rate.

c/ The figure of 3,576 is used in the text and here; however, the number given to Bank supervision staff was 4,976, too high given possible multiple counting of extension beneficiaries.

d/ Includes original, plus 33 incremental staff, also home economics and agricultural extensionists.

Table 6. Studies Included in Project

| Study | Purpose as Defined at Appraisal/Redefined | Status | Impact of Study |
|--|---|---------------|--|
| Study of Indian communities in project area. | Analyze demography and social conditions of indigenous peoples. | Completed | Permitted acquisition and titling of land for Indian communities. Also led to passage of key laws concerning Indian land rights. |

Table 7. Comparison of Projected and Actual World Commodity Prices

(1980 Constant US\$)

| Year | Cotton cts/kg | | Soybeans \$/MT | | Tobacco \$/MT | |
|-------------------------------|-------------------------|----------------------|--------------------------|-------------|-------------------------|-------------|
| | Projected ^{1/} | Actual ^{2/} | Projected | Actual | Projected | Actual |
| 1981 | 201.3 | 192.8 | 304.0 | 302.3 | 2,145.7 | 2,463.3 |
| 1982 | 192.6 | 155.3 | 301.6 | 237.9 | 2,150.7 | 2,344.4 |
| 1985 | 249.6 | 103.1 | 370.9 | 175.3 | 2,651.0 | 1,525.8 |
| 1990 | 257.3 | 106.4 | 439.2 | 144.3 | 2,727.5 | 1,111.1 |
| % Change 1981-1990 | +27% | -45% | +45% | -53% | +27% | -54% |

^{1/} Refers to Bank price forecasts that were available in January 1982.

^{2/} Refers to historical prices. All prices are in constant US 1980 dollars.

Source: International Economics Division, World Bank.

Table 8. Project Costs and Financing

A. Project Costs

(US\$ Million)

| Item | Appraisal Estimate | | | Actual/Latest Estimate | | |
|-----------------|--------------------|---------------|-------|------------------------|---------------|-------|
| | Local Costs | Foreign Costs | Total | Local Costs | Foreign Costs | Total |
| 1. Project Cost | 23.3 | 31.0 | 54.3 | 24.8 | 30.7 | 55.5 |
| 2. Loan Amount | | | 31.0 | | | 31.0 |
| 3. - Disbursed | | | | | 30.7 | |
| 4. - Canceled | | | | | 0.3 | |

B. Project Financing

(US\$ Million)

| Source | Appraisal Estimate | | Actual/Latest Estimate | |
|---------------|--------------------|---------------|------------------------|---------------|
| | Local Costs | Foreign Costs | Local Costs | Foreign Costs |
| IBRD/IDA | | 31.0 | | 30.7 |
| GOP | 14.0 | | 15.5 | |
| BNF | 7.6 | | 7.6 | |
| Beneficiaries | 1.7 | | 1.7 | |
| Total | 23.3 | 31.0 | 24.8 | 30.7 |

PARAGUAY
CAAZAPA AREA DEVELOPMENT PROJECT
(Loan 2087-PA)

Table 9. Status of Legal Covenants

| Agreement | Section | Covenant Type | Present Status | Original Fulfillment Date | Revised Fulfillment Date | Description of Covenant | Comments |
|-----------|----------|---------------------|----------------|---------------------------|--------------------------|--|---|
| Loan | 3.01 | Counterpart Funding | CD | -- | -- | Borrower to provide the funds, facilities services and other resources needed by the Project. | There were no counterpart funds for the Project until 1985. |
| | 3.01 (f) | Resettlement | NC | Dec. 31, 1984 | -- | Borrower to resettle 200 families farming eroded land. | Families refused to move. |
| | 3.01 (g) | Implementation | C | -- | -- | GOP to cause ONCP to coordinate Project and keep at least one coordinator in the Project area. | -- |
| | 3.03 | Implementation | C | -- | -- | GOP to establish and maintain ONCP. | -- |
| | 3.05 (d) | Implementation | C | -- | -- | Borrower to prepare Completion Report. | -- |
| | 3.06 | Institutional | C | Mar. 31, 1983 | N/A | GOP to acquire at least 100 ha for agricultural research station. | -- |

Status:

C = covenant complied with
 CD = complied with after delay
 CP = complied with partially

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

Table 9. Status of Legal Covenants (Continued)

| Agreement | Section | Covenant Type | Present Status | Original Fulfillment Date | Revised Fulfillment Date | Description of Covenant | Comments |
|------------------|-----------------|----------------------|-----------------------|----------------------------------|---------------------------------|--|--|
| Loan | 3.07 (a) (b) | Implementation | C | Dec. 31, 1982 | N/A | Borrower to provide Bank with detailed research program and carry it out. | -- |
| | 3.08 | Implementation | CP | -- | -- | MAG, IBR and BNF to sign land use agreements with beneficiaries for soil conservation program. | Soil conservation program very limited. |
| | 3.09 | Environmental | NC | -- | -- | Borrower to protect forests and prevent unauthorized logging, and establish a forest district. | Forest conservation and management objectives were not achieved. |
| | 3.10 | Implementation | C | Dec. 31, 1985 | -- | Land titles to be issued to at least 1,600 farmers in Project area. | Target exceeded, but many titles went to urban plots. |
| | 3.11 | Resettlement | N/A | -- | -- | Borrower to prevent settlement on land vacated due to resettlement. | Resettlement did not occur. |
| | 3.12 (a) | Implementation | CD | -- | -- | Borrower to construct roads in a timely way to permit access and agricultural development. | |

Status:

C = covenant complied with
 CD = complied with after delay
 CP = complied with partially

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

Table 9. Status of Legal Covenants (Continued)

| Agreement | Section | Covenant Type | Present Status | Original Fulfillment Date | Revised Fulfillment Date | Description of Covenant | Comments |
|-----------|--------------|------------------------|----------------|---------------------------|--------------------------|---|----------|
| Loan | 3.13 | Facilities Maintenance | C | -- | -- | Borrower to maintain all roads in Project area. | |
| | 3.14 | Implementation | C | -- | -- | Borrower, through ONCP, to prepare semi-annual progress reports on Project execution. | |
| | 3.16 (a) | Implementation | CD | Dec. 31, 1984 | N/A | IBR to demarcate and acquire land for indigenous settlement and provide titles and other land rights. | |
| | 3.16 (b) (c) | Implementation | C | -- | -- | INDI to carry out program of social and technical services for indigenous peoples in Project area; and Borrower to provide adequate funds for this. | |
| | 4.02 | Implementation | C | -- | -- | Borrower to maintain adequate records of the Project's operations, resources and expenditures. | |

Status:

C = covenant complied with
 CD = complied with after delay
 CP = complied with partially

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

Table 9. Status of Legal Covenants (Continued)

| Agreement | Section | Covenant Type | Present Status | Original Fulfillment Date | Revised Fulfillment Date | Description of Covenant | Comments |
|------------------|----------------|------------------------------|-----------------------|----------------------------------|---------------------------------|---|---|
| Loan | 4.03 | Accounts/ Audits | CD | -- | -- | Borrower to have all Project accounts audited and furnish these to the Bank no later than four months after the end of each year. | |
| | 4.04 (a-e) | Operation and Maintenance | CD | -- | -- | Borrower to operate, maintain and staff health facilities constructed under the Project. | |
| Project | 2.11 | Implementation | CP | -- | -- | BNF to review and if necessary modify interest rates on subloans to maintain a positive effective rate compared to the average CPI in Paraguay. | BNF was permitted by the Central Bank in December 1988 to adjust rates to levels close to positive, but overall rates were positive for only a short period of Project execution. |

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

Table 10. Bank Resources: Staff Inputs

| Stage of Project Cycle | Planned | | Revised | | Actual | |
|------------------------|-------------|------|-------------|------|-------------|------|
| | Staff Weeks | US\$ | Staff Weeks | US\$ | Staff Weeks | US\$ |
| Through Appraisal | 200.6 | | 200.6 | | 200.6 | |
| Appraisal - Board | 60.5 | | 60.5 | | 60.5 | |
| Board - Effectiveness | 6.0 | | 10.0 | | 12.7 | |
| Supervision | 65.7 | | 105.0 | | 199.8 | |
| Completion | -- | | -- | | 18.0 | |
| Total | 332.8 | N/A | 372.1 | N/A | 483.6 | N/A |

Table 11. Bank Resources: Missions

| Stage of Project Cycle | Month/ Year | No. of persons | Days in field | Specialized staff skills represented | Performance Rating | | Types of problems |
|--------------------------------------|-------------|----------------|---------------|--------------------------------------|--------------------|---------------------|---|
| | | | | | Impl. Status | Develop. Objectives | |
| Through Appraisal | | | | | | | |
| Appraisal through Board Approval | | 8 | | Agr, Ec, Ce | n/a | n/a | n/a |
| Board Approval through Effectiveness | | | | | n/a | n/a | n/a |
| Supervision | 1986-1994 | 51 | | Agr, Env, Ec, Ce | 2 | 2 | Local funding, institutional, procurement, commitment, etc. |
| Completion | 1/3/95 | 1 | 0 | Ec | 2 | 2 | |

Table 12. Comparison of Lending and Inflation Rates

(% p.a.)

| Date of Adjustment | New Interest Rate | Prior 12 Months Inflation Rate | Real Interest Rate |
|---------------------------|--------------------------|---------------------------------------|---------------------------|
| up to 9/84 | 18.0 | | |
| 8/8/88 | 22.0 | 23 | -1.0 |
| 9/9/88 | 19.2 | 20.3 | -1.7 |
| 5/24/89 | 24.2 | 25.8 | -1.6 |
| 10/12/89 | 28.0 | 25.8 | 2.2 |
| 10/22/90 | 36.0 | 38.2 | -2.2 |
| 9/1/91 | 33.0 | 24.3 | 8.7 |
| 9/11/91 | 28.0 | 24.3 | 3.7 |
| 12/1/91 | 26.0 | 24.3 | |

Source: BNF/DINCAP, 1992

Table 13. Financial Performance of BNF (Consolidated) ^{1/}

(million guarani)

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|--|-------|------|------|------|------|-------|-------|-------|-------|
| Financial indicators ^{2/} | | | | | | | | | |
| Annual growth of net loan portfolio (%) | 10 | 25 | 10 | 39 | 15 | 22 | 33 | 22 | 40 |
| Loans in arrears/gross loan portfolio (%) | 22 | 20 | 20 | 18 | 12 | 9 | 13 | 16 | 11 |
| Average return on gross loan portfolio (%) | -- | -- | -- | -- | -- | -- | 17 | 26 | 25 |
| Average return on net loan portfolio (%) | 15 | 15 | 17 | 18 | 19 | 16 | 18 | 27 | 27 |
| Growth of operating cost (%) | 12 | 9 | 16 | 8 | 26 | 26 | 51 | 112 | 4 |
| Operating cost/gross loan portfolio (%) | 8 | 7 | 7 | 6 | 6 | 7 | 8 | 13 | 10 |
| Liquidity ration (times) | 1.0 | 1.3 | 1.3 | 1.4 | 1.1 | 1.5 | 1.3 | 1.4 | 1.3 |
| Growth of deposits from the public (%) | 31 | 22 | 13 | 57 | 9 | (15) | 14 | 50 | 62 |
| Average cost of borrowings (%) | 8 | 8 | 10 | 9 | 11 | 10 | 11 | 17 | 17 |
| Cost of borrowings/gross loan portfolio (%) | -- | -- | -- | -- | -- | -- | 8 | 13 | 13 |
| Net income (loss)/equity | 2 | 2 | 3 | 5 | 4 | 4 | (22) | 2 | 3 |
| Revenue earning assets/total assets (%) | 71 | 72 | 71 | 70 | 58 | 62 | 74 | 67 | 69 |
| Debt/equity ratio (times) | 3 | 4 | 4 | 5 | 3 | 3 | 4 | 3 | 5 |
| Intern. generated funds/debt serv. (times) | -- | 1.5 | 1.5 | 1.6 | 1.2 | 1.9 | 1.4 | 1.1 | 1.4 |
| Operational indicators ^{2/} | | | | | | | | | |
| Operational network (branches) | -- | -- | -- | -- | 49 | 50 | 50 | 50 | 50 |
| Total staff (number) | -- | -- | -- | -- | -- | 1,057 | 1,095 | 1,026 | 925 |
| Staff at headquarters (number) | -- | -- | -- | -- | -- | 634 | 656 | 587 | 532 |
| Country economic indicators ^{3/} | | | | | | | | | |
| Inflation rate Dec./Dec. (%) | -- | -- | -- | -- | -- | (7) | 28.5 | 44.1 | 11.8 |
| Inflation rate - average (%) | 13.5 | 20.3 | 25.2 | 31.7 | 21.8 | 23.0 | 25.8 | 38.2 | 24.3 |
| Exchange rate - Dec. 31 (G/US\$) | 126.6 | 240 | 240 | 320 | 320 | 400 | 1,220 | 1,262 | 1,382 |

-- Information not available

^{1/} Includes BNF's three main departments (Agriculture, Industry and Commercial).

^{2/} Source: BNF's Financial Department.

^{3/} Source: Central Bank of Paraguay.

Table 14. Financial Performance of BNF's Agricultural Department

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|---|------|------|------|------|------|------|------|------|------|
| <u>Financial indicators</u> | | | | | | | | | |
| Annual growth of net loan portfolio (%) | 18 | 40 | 9 | 30 | 17 | 1 | 64 | 20 | 31 |
| Loans in arrears/gross loan portfolio (%) | 18 | 14 | 17 | 13 | 10 | 8 | 6 | 9 | 7 |
| Average return on gross loan portfolio (%) | -- | -- | -- | -- | -- | -- | 14 | 24 | 24 |
| Average return on net loan portfolio (%) | 14 | 14 | 16 | 15 | 16 | 15 | 15 | 25 | 26 |
| Growth of operating cost (%) | 11 | 28 | 16 | 14 | 13 | 25 | 46 | 102 | 26 |
| Operating cost/gross loan portfolio (%) | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 10 | 10 |
| Average cost of borrowings (%) | 7 | 6 | 9 | 8 | 9 | 10 | 9 | 14 | 17 |
| Cost of borrowings/gross loan portfolio (%) | -- | -- | -- | -- | -- | -- | 7 | 10 | 12 |
| Net income (loss)/equity | 0.3 | 0.5 | 0.1 | 0.2 | 0.8 | 2 | (18) | 7 | 3 |
| Revenue earning assets/total assets (%) | 84 | 90 | 93 | 97 | 80 | 72 | 91 | 81 | 92 |
| Debt/equity ratio (times) | 3 | 4 | 4 | 4 | 2 | 2 | 3 | 2 | 2 |
| Intern. generated funds/debt serv. (times) | 0.9 | 1.0 | 1.3 | 2.2 | 0.8 | 1.3 | 1.7 | 1.4 | 1.4 |

-- Information not available

1/ Source: BNF's Financial Department.

Table 15. BNF's Support to the Agricultural Sector ^{1/}

(%)

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|------|------|------|------|------|------|------|------|
| <u>Type of Loans</u> | | | | | | | | |
| Short-term | 78 | 63 | 86 | 82 | 71 | 74 | 79 | 96 |
| Long-term | 22 | 37 | 14 | 18 | 29 | 26 | 21 | 4 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <u>Type of Farmers</u> | | | | | | | | |
| Small- and Medium- scale | 48 | 66 | 72 | 68 | 71 | 70 | 77 | N/A |
| Large-scale | 52 | 34 | 28 | 32 | 29 | 30 | 23 | N/A |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | |
| <u>BNF's share in total crops financed nationwide (ha)</u> | | | | | | | | |
| Soybeans | 23 | 47 | 30 | 38 | 42 | 39 | 40 | 43 |
| Wheat | 69 | 78 | 79 | 82 | 61 | 91 | 54 | 41 |
| Cotton | 14 | 16 | 11 | 15 | 54 | 37 | 60 | 32 |
| Rice | 23 | 32 | 29 | 40 | 24 | 26 | 13 | 16 |
| Sugarcane | 28 | 51 | 60 | 27 | 49 | 44 | 36 | 34 |
| Other ^{2/} | 7 | 10 | 10 | 10 | 6 | 7 | 8 | 4 |
| Total Area | 16 | 28 | 22 | 26 | 30 | 30 | 35 | 26 |

^{1/} Summarized from BNF's annual reports.

^{2/} Includes: corn, peanut, tobacco, shorgum, spurge, cassava.

Table 16. Crops and Area Financed

| Crop | Area Financed (ha) | % of Total Area Financed | Appraisal Estimate (ha) | Actual vs. Estimate (%) |
|--------------|-----------------------------------|-------------------------------------|--|--|
| Cotton | 15,867 | 24.3 | 5,550 | 286 |
| Soybeans | 20,559 | 31.4 | 2,370 | 867 |
| Sugarcane | 10,337 | 15.8 | 4,500 | 229 |
| Manioc | 4,651 | 7.1 | 2,040 | 228 |
| Corn | 9,730 | 14.9 | 3,640 | 267 |
| Wheat | 921 | 1.4 | 0 | 0 |
| Tobacco | 105 | 0.2 | 0 | 0 |
| Other | 3,248 | 4.6 | 0 | 0 |
| Total | 65,418 | 100 | 18,100 | 361 |

Source: BNF 1993

IMPLEMENTATION COMPLETION REPORT

PARAGUAY

CAAZAPA AREA DEVELOPMENT PROJECT

(Loan 2087-PA)

Ministry of Agriculture and Livestock (MAG)
National Office of Project Coordination and Administration (DINCAP)

Asunción, December 27, 1995

Page vi, Para. 9 (e).

Says: Sustainability of the project: based on the available history of the project, DINCAP (formerly ONCAP) always considered that support for organizations directed to women would impact favorably on the project area.

Page 8, Para. 36.

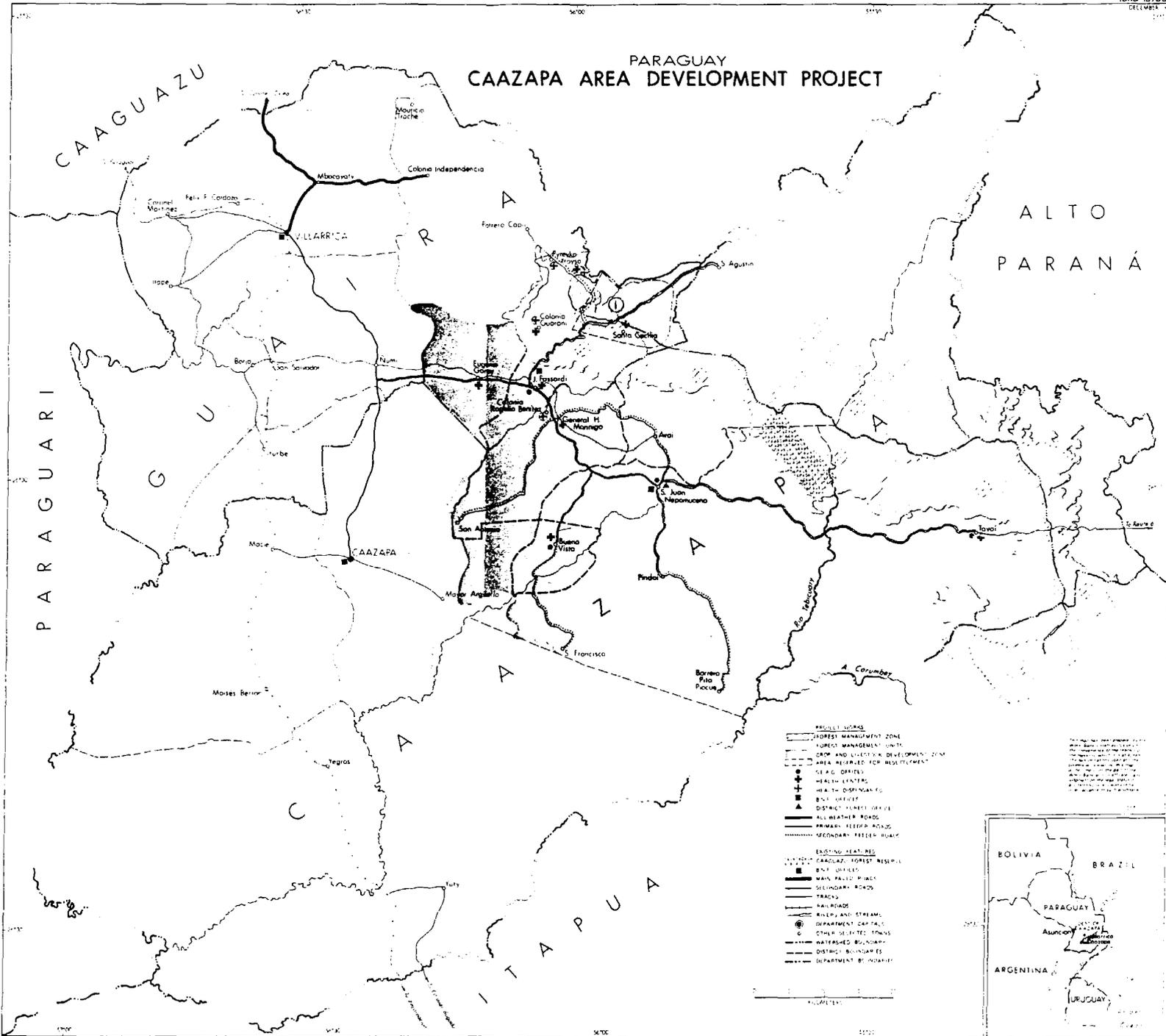
Says: Major factors affecting the project: we would like to see the information which gave rise to the assertion that MAG/DINCAP was responsible for only 15% of project operations.

Page 11, Para. 53.

Says: Borrower performance: for the purposes of the Ministry of Finance, we would like greater elaboration concerning favorable comments in the report.

(Signature)

CARLOS FRANCO S.
Director



IMAGING

Report No: 15828
Type: ICR