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Report No. 13827

PROJECT COMPLETION REPORT

BRAZIL

AGRICULTURAL CREDIT PROJECT
(LOAN 2971-BR)

DECEMBER 29, 1994

Environment and Agriculture Operations Division
Country Department I
Latin America and the Caribbean Regional Office

CURRENCY EQUIVALENTS
(June 1, 1994)

Currency Unit	:	Cruzeiro Real (Cr$)[1]
Cr$1.00	=	Cr$ 1,000.00
US$1.00	=	Cr$ 1,850[2]
CR$1.00	=	US$ 0.0011

WEIGHTS AND MEASURES

Metric system

FISCAL YEAR OF THE GOVERNMENT OF BRAZIL

January 1 to December 31

GLOSSARY OF ACRONYMS

BACEN	-	*Banco Central do Brasil* Central Bank of Brazil
BTN	-	*Bonos do Tesouro Nacional* National Treasury Bond
CD	-	Certificate of Deposit
CLC	-	*Comite de Limites de Credito* Credit Limits Committee
DTN	-	*Departamento do Tesouro Nacional* National Treasury Department
FEBRABAN	-	*Federacao Brasileira das Associacoes de Bancos* Brazilian Federation of Bankers' Associations
IGP-DI	-	*Indice Geral dos Precos-Disponibilidade Interna* General Price Index - Domestic Supply
IPC	-	*Indice de Precos do Consumidor* Consumer Price Index
MCR	-	*Manual de Credito Rural* Rural Credit Manual
ORTN	-	*Obligacoes Readjustaveis do Tesouro Nacional* Readjustable Obligations of the National Treasury
PB	-	Participating Bank
PNDA	-	*Programa Nacional de Desenvolvimento Agroindustrial* National Program of Agro-Industrial Development
PNDR	-	*Programa Nacional de Desenvolvimento Rural* Notional Program of Rural Development
PRONAGRI	-	*Programa Nacional de Asistencia Agroindustrial* National Program of Assistance to Agro-Industries
SNCR	-	*Sistema Nacional de Credito Rural* National Rural-Credit System
STN	-	*Secretaria do Tesouro Nacional* National Secretariat of the Treasury
SUDAM	-	*Superintendencia do Desenvolvimento da Amazonia* Amazon development superintendency.
TR	-	*Taixa Referencial* Reference Rate

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1 The Cruzeiro Real was introduced in November 1993, replacing the Cruzeiro (Cr$) at a one-thousand-to-one ratio. The Cr$, which replaced and was equal to one of the Cruzado (NCz$), was Brazil's currency from March 15, 1990, until the end of November 1993. The Cruzado was Brazil's currency at the time the loan became effective.

2 At June 1, 1994.

THE WORLD BANK
Washington, D.C. 20433
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Office of Director-General
Operations Evaluation

December 29, 1994

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Project Completion Report on Brazil
Agricultural Credit Project (Loan 2971-BR)

Attached is the PCR on the Brazil—Agricultural Credit Project (Loan 2971-BR) prepared by the Latin America and the Caribbean Regional Office, with Part II by the Borrower. The project was the twin of the Fourth Agro-Industries Credit Project (Loan 2960-BR) with similar objectives, design, scale and experience.

The project aimed to support productive on-farm investments and to liberalize credit in the agricultural sector, with a US$300 million loan mostly for local expenditures. The loan was considered necessary because investment finance had virtually disappeared in Brazil's unstable economic environment.

Driven by pent up credit demand and subsidized sub-loans (since indexation lagged high inflation), most of the funds were committed within a week of loan effectiveness (by Banco do Brazil, the traditional public source of credit for agriculture), but erosion of the real value of Treasury's project account led to such sub-loans being discontinued. Credit demand then fell sharply and US$21 million of the Bank loan was canceled. Progress reporting and Bank supervision were inadequate.

The PCR provides little information on the composition or quality of the sub-loan portfolio, other than stating that a broad spectrum of activities contributed to significant productivity gains. It notes that this type of project can be a useful tool for policy reform towards more efficient intermediation in rural credit markets, and that the project supported a key sector of Brazil's economy at a time of financial turmoil and economic uncertainty. However, the PCR concludes that a follow-up project should be postponed until the economic environment regains stability and inflation abates to a more acceptable level. Also, that achieving a meaningful degree of financial liberalization remains an elusive objective as long as macro-economic instability distorts financial markets.

Given the project's failure to liberalize credit and its negative fiscal impact, the outcome is rated as unsatisfactory. Sustainability is rated as likely, but institutional impact as negligible. The main lessons are not new: as suggested in the current guidelines, the Bank should hesitate to lend for credit lines in countries where inflation is high; the fiscal risks of credit lines in highly inflationary times; the difficulty of achieving credit liberalization in a monopolistic environment, and the need for good monitoring and reporting.

An audit is planned together with the twin project.

Attachment

PROJECT COMPLETION REPORT

BRAZIL

AGRICULTURAL CREDIT PROJECT
(Loan 2971-BR)

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PROJECT COMPLETION REPORT

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AGRICULTURAL CREDIT PROJECT
(Loan 2971-BR)

PREFACE

1. This is the Project-Completion Report (PCR) for the Agricultural Credit Project, Loan 2971-BR (PNDR), which was approved on June 23, 1988. The approved Loan amount was US$300 million for a total project cost of US$600 million. The US$300 million in counterpart funding was to be financed by beneficiaries of sub-loans and participating banks in freely negotiated proportions. The purpose of the Loan was to provide investment finance and working capital to agricultural enterprises and cooperatives, at a time term finance for investment had virtually disappeared in Brazil's unstable economic environment.

2. The Loan and Project Agreements are dated May 31, 1989. The loan became effective on August 22, 1989 and closed on December 31, 1993. The balance of US$20,897,427.91 in uncommitted funds that remains in the Special Account is being recovered by the Bank.

3. Part I of this PCR is the work of the Agriculture and Environment Division of Country Department I (LA1EA) of the LAC region. It is based on the Staff Appraisal Report, the President's Report, the Loan and Project Agreements, Bank Supervision Reports, STN's audit reports of the project, other project documents, and correspondence and internal memoranda pertaining to the Project. Part II was prepared by the Federal Treasury in Brasilia.

PROJECT COMPLETION REPORT

BRAZIL

AGRICULTURAL CREDIT PROJECT
(Loan 2971-BR)

EVALUATION SUMMARY

Objectives

1. The project's main objective was to shift lending to farmers and rural cooperatives, away from the official credit system to voluntary lending by commercial banks, at market rates. The Bank's support for that effort was important because term credit had virtually disappeared from Brazil's financial intermediation, at a time when uncertainty and high inflation were disrupting economic activity and distorting financial intermediation. In 1988, when the project was negotiated, 90 percent of agricultural credit was from official sources, mostly short-term and at subsidized interest rates.

2. The project ran in tandem with another loan--the Fourth Agro-Industries Credit Project (Loan 2960-BR -- PNDA). PNDA's structure is comparable to that of this project and had the same broad policy objectives, but provided medium-term financing to agro-industrial enterprises. Together, the two projects aimed to consolidate all Bank support for, and credit to, Brazil's agricultural sector under two credit lines. This was a departure from the earlier practice of including agricultural and rural-credit components in broader projects.

3. Through gradual liberalization of agricultural credit, the project also sought to relieve the Brazilian Treasury of the fiscal burden of providing large volumes of subsidized credit. This would eliminate the existing regressive practice of allocating scarce fiscal resources to subsidize credit, instead of funding priority social programs (the estimated cost to the Government of providing agricultural credit subsidies in 1986 and 1987 was more than US$800 million equivalent).

Project organization

4. Eligible investments: PNDR funds have been used to refinance commercial-bank loans to farmers, agricultural cooperatives and firms that provide contractual services (such as plowing, harvesting, and irrigation) to farms. The intention was to help agricultural producers raise their productivity

and output by financing new fixed investments and working capital (for the purchase of farming inputs).

5. PNDR financed up to 50 percent of each subproject, with the remainder to be divided between beneficiaries and PBs in freely-negotiated proportions. There was no counterpart funding from the government. Sub-loans up to US$1 million or the equivalent in local currency, could be committed freely by PBs, but had to be screened by BACEN for compliance with the project's guidelines on eligible sub-projects. Sub-loans above the free limit of US$1 million had to be approved by the Bank, and no single beneficiary could borrow more than US$15 million (5 percent of the Loan amount).

6. Loan Administration and Supervision: BACEN and STN, the two implementing agencies, share responsibilities for local supervision. BACEN had to (i) accredit commercial banks by applying normal prudential criteria, (ii) verify that sub-loans comply with the project guidelines on eligible borrowers, investments and expenditures, and (iii) withhold funding for, or cancel all sub-projects that do not comply with the guidelines. STN was responsible for the financial management and supervision of the project. It made disbursements to, and must recover funds from, the PBs. STN also had to prepare monthly and quarterly financial summaries of disbursements.

7. Currency options: At the PBs' and sub-borrowers' option, refinancing could be in the Bank's Currency Pool (option A), in U.S. dollars (option B), or in local currency (option C).

Implementation experience

8. Phased implementation: The loan was implemented in two phases: (i) disbursements on all contracts signed between October 1989 and September 1990 were in local currency (option C); (ii) all subsequent disbursements involve the other two options (but, with only one exception, have all been in US dollars -- Option B). Option C was discontinued in October 1990. Given the complexity of the Bank's Currency Pool and difficulty of hedging the foreign-exchange risk on the Pool, practically all subsequent refinancing was in US dollars. It included supplementary financing on existing sub-loans, to restore the real value of existing 'C' subloans, and enable beneficiaries to complete investment projects. On the whole, after 1990 disbursements dropped sharply because the cost of dollar-based funding was considered too high by most farmers.

9. The skewed distribution of funds among PBs: Ten PBs participated in the first round of PNDR. Banco do Brasil (BdB), the largest source of farm credit, has used over 98 percent of PNDR funds and accounts for 83 percent

of all sub-projects. By comparison, the second largest user of the loan, Banco de Credito Real of Minas Gerais (Credireal), financed 44 sub-projects (less than 0.5 percent of the total) and used about 10 percent of the loan amount.

10. The pace of disbursement: Loan commitments and disbursement were much faster than expected: over 90 percent of the loan was committed to PBs during the first month of effectiveness and two-thirds of the loan had been disbursed by end-1989. The pace of disbursements became irregular and much slower after Option C was discontinued in October 1990. At closing, US$20 million in uncommitted funds remained on the Special Account and are being recovered by the Bank.

11. Problems with loan supervision: The quality of local supervision has been affected by conjunctural factors (hyper inflation and economic instability) and by the difficulty of reconciling STN's disbursements to PBs with the PBs' own data on disbursements to beneficiaries.

12. Differences between PNDR and PNDA: In PNDA the use of funds was far less skewed (the three largest participants used 60 percent of the funds), the average size of sub-loans much larger (US$1.6 million), the pace of disbursements was much slower, and only 80 percent of the loan was disbursed.

Project Results

13. At appraisal, total project cost was estimated at US$600 million, of which US$300 million (50 percent) would be financed by the Loan. At closing, on December 31, 1993, total project costs had been revised to US$558.2 million, of which US$279.1 million (50 percent) were proceeds from the Loan, and the rest from counterpart funds. The shortfall of 7 percent, relative to the original forecast, has had no significant impact on the project's results.

14. PNDR's results have been generally satisfactory. It has helped reduce the volume of official rural credit at subsidized rates, restored term financing at market rates and covered a broad base of beneficiaries. PNDR has already funded close to 9,500 sub-projects, at an average project cost of US$61,000 (after including counterpart funding). By covering such a broad spectrum of agricultural producers, PNDR has had a significant impact in helping finance this sector.

15. A key measure of the project's success is that it has exceeded its targets for the reduction in the volume of official agricultural credit. In real terms, the project had targeted a reduction of official agricultural credit of 14 percent

from 1987 to 1990, and 12.5 percent from 1988 to 1990. The actual result for the 1988-90 period was a reduction of the order of 70 percent Moreover, the share of official credit in all lending to agriculture dropped from 85 percent in 1988 to 79 percent in 1990. What stands out, however, is that, during the same period, total lending to agriculture declined by some 67 percent.

16. Despite its generally good results, the project's performance would have benefitted from macroeconomic stability and lower inflation during the key phase of implementation. Aspects of PNDR were particularly affected by the prevailing economic uncertainty include:

a. Lending in Local Currency: Lending in Cruzados was ill-adapted to an environment of extreme exchange-rate volatility and hyper-inflation of more than 30 percent per month, especially so because technical and legal problems caused occasional delays in the release of funds by STN. Under the circumstances, any delays in disbursing committed sub-projects caused financing gaps for PB sub-borrowers. On the other hand, after disbursement, Cruzado loans contained an implicit subsidy to borrowers because the inflation-correction index (the value of the National Treasury Bonds -- BTN) of the amount owed by PBs to STN lagged behind actual inflation. Until 1991, when a more reliable indexation mechanism (TRD) replaced BTN, the subsidy to end-users of PNDA resulted in a foreign-exchange loss for STN, because there was a mismatch between the value of STN's Cruzado assets and that of the government's borrowing from the Bank in the Currency Pool.

b. Foreign exchange losses: STN has incurred a combined foreign exchange loss of US$62.6 million, being the result of (i) an unrealized loss of US$24.4 million for the dollar-equivalent revaluation adjustment of its currency-pool debt to the Bank, and (ii) US$38.2 million actual loss, due to unexpectedly fast loan disbursements, financed out of STN's own account, without protection against Special Account foreign exchange losses.

c. Loan Supervision: Because of difficulties in reconciling data on disbursements to PBs with the PBs' disbursements to their clients, supervision by BACEN and STN could not be as thorough as intended. At the same time, competing work priorities within the Bank prevented supervision at the desired six-monthly intervals. This has undoubtedly affected the project's implementation.

d. Ineligible expenditures: BACEN had to check compliance with the loan's eligibility criteria for a huge number of sub-projects. In the first rush of applications several projects involving ineligible expenditures were not detected. Most of these cases involve simple technical errors in interpreting eligibility criteria. There were also several irregularities in the use of funds, and BACEN had to suspend the accreditation of five of the ten PBs. Since most cancelled loans were quite small, this has had no significant impact on the loan's performance.

Sustainability

17. PNDR's excellent reception, as evidenced by the rapid pace of disbursements to a large number of sub-participants, shows that this type of operation is important in supporting rural development through more efficient agriculture. Thus, despite some implementation problems, there is no doubt about PNDR's sustainability.

18. As for a follow-up operation, it should only be considered if three conditions can be met. First, there should be relative macroeconomic stability, to make it more likely that real financial liberalization and deepening can be achieved, in a less distorting financial environment. Secondly, all future onlending by STN should be exclusively in US dollars, meaning that the PBs take the local-currency/dollar risk and the Government the dollar/currency-pool exchange-rate risk. Thirdly, participation should be distributed more evenly across the banking system, rather than monopolized by a single dominating bank.

PROJECT COMPLETION REPORT

BRAZIL

AGRICULTURAL CREDIT PROJECT
(Loan 2971-BR)

I. PROJECT REVIEW FROM THE BANK'S PERSPECTIVE

Project Identity

Name	:	Agricultural Credit Project
Loan Number	:	2971-BR
RVP	:	Latin America and the Caribbean Region
Country	:	Brazil
Sector	:	Farming and Agriculture

Project Background

1. The project was appraised at a time of relative slowdown in agricultural production. During the first half of the 1980s, the rate of growth of the area for planted crops had declined to 1.7 percent per year, compared to 3.3 percent per year in the 1970s. Moreover, the production of basic food crops (wheat, maize, casava, potatoes, rice and beans) had remained relatively constant. This meant that per capita food production was declining, and Brazil's imports of food increasing. Another indicator of problems at the time is that the consumption of fertilizers declined by close to 30 percent during the 1980s.

2. Given its place in Brazil's economy, support for agriculture is important. Though the share of agriculture in GDP declined somewhat during the 1980s, it still stood at 10 percent in 1991. Despite that relative decline, the average growth rate in agriculture during the 1980s (2.6 percent per annum) was still higher than in any other sector of the economy, except services. Agriculture also accounts for close to one third of the country's exports, and is a major main source of employment.

3. Looking at the social and economic importance of the farm subsector, there are over six million farms in Brazil, nearly half of which are in the northeast, with the next highest concentration in the south (about 20 percent), and southeast (17 percent). The north and center-west are of marginal importance. The regional shares of crop values are even more disproportionate, with the south and southeast -- where productivity is greater

and infrastructure highly developed -- accounting for close to three quarters of the total.

The Structure of Rural Credit

4. Rural credit in Brazil's financial system: Given the importance of agriculture in Brazil's economy, rural credit features prominently in the financial system. There are three basic types of rural credit: (i) credit at managed interest rates, where the degree of interest-rate subsidy is a function of each farm's annual income, or of the type of activity being financed (ii) lending at market rates by banks and other sources, such as crop buyers and exporters, and (iii) special funds and regional programs that target particular activities or types of producers. Of these three sources, the first is, by far, the largest. It includes the financial institutions that are part of the *Sistema Nacional de Credito Rural* (SNCR). BdB, the country's largest commercial bank, is the dominant player in SNCR.

5. The preferential interest-rate program: This program covers the bulk of lending at subsidized interest rates, and is regulated by the Central Bank. There are three levels of preferential rates (TP), with subsidies depending on farms' and producers' co-operative annual gross income. TP lending is at positive real rates (but, when converted to dollar equivalents, real rates can be negative in periods rapid depreciation of the cruzeiro), expressed as fixed spreads over the nominal *Taxa Referencial Diária* (TRD). TRD fluctuates widely in a high-inflation environment. The spreads over TRD are:

a. 6 percent p.a. for mini producers, with gross annual income of up to US$6,000 equivalent (at end-February 1993 exchange rates);

b. 9 percent p.a. for small farms and producers' cooperatives, with gross annual income between US$6,000 and US$18,000 equivalent;

c. 12.5 percent p.a. for medium and large farms and producers' cooperatives whose annual gross income exceeds US$18,000 equivalent. At present, 70 percent of TP lending goes to large farms and cooperatives, in the 12.5 percent rate bracket.

6. All credit institutions, except BdB and regional development banks, must allocate 25 percent of all funds on deposit in sight accounts to TP lending. Of that total; (i) at least 80 percent must be allocated to priority

activities[1], and (ii) not less than 30 percent must be loaned to mini and small farms. BdB, and the regional development banks must allocate 65 percent of lending to agriculture. Most of it goes to large farms, at spreads of 12.5 percent. Loans can be for up to 3 years

7. BdB, the country's largest bank, is, by far, the largest single source of rural credit and the main channel for official credit at subsidized rates. BdB's agricultural-credit portfolio includes lending at market rates, but there is been no clear pattern for the relative shares of BdB's official and commercial agricultural credit. In recent years, official credit, as a percentage of BdB's total agricultural lending has varied considerably, as has the total volume of its lending to that sector.

8. During the 1988-1990 period, BdB's official lending to agriculture dropped sharply in real and nominal terms. In real terms, its official agricultural credit in 1990 was less than 25 percent of its 1988 volume. In fact, had it not been for the extremely sharp involuntary contraction in BdB's rural lending, the project's targets for the reduction of official credit could not have been met. Even so, BdB remains by far the largest source of official lending. Its share dropped from 90 percent in 1998 to 72 percent in 1990 and 1991 (see Table 1 below). As for the other sources of official rural lending -- the other official federal banks and commercial banks -- the volumes of their lending continues to vary widely from year to year.

9. The characteristics of agricultural credit: 'Mini-producers' usually have no access to formal credit, unless they produce exportable cash crops (in which case they can obtain pre-financing by buyers/exporters), or are in regions, such as the Northeast, where they can benefit from specially targeted rural-credit programs. The reason for this is that commercial banks are generally unwilling to accept the high transaction costs, insufficient collateral and excessive risks involved in lending to the smallest farms. In this context, regional funds and other special programs that target these small producers are means of reducing rural poverty and generating employment. However, as a rule, subsidizing interest rates on agricultural credit is inefficient and regressive from the point of view of income distribution: even with targeting, scarce official resources seldom go to priority areas.

1.Priority activities that are covered at TP rates include, (i) the production of most cash crops and staple foods, (ii) fish farming, (iii) poultry and dairy production, (iv) the purchase of poultry and cattle feed, (v) investment for soil conservation and improvement, including soil recovery in sugar-cane plantations, (vi) production costs and investments by all mini and small farms, and (vii) the refinancing of short-term (90-day) loans from the Federal Government.

Table 1: Agricultural Credit in Brazil - 1990 (value in million cruzeiros)

Type of Benefit	Operating Expenses		Investment		Marketing		Total	
	Number	Value	Number	Value	Number	Value	Number	Value
AGRICULTURE								
Small	506.033	120.461	45.321	8.876	4.643	3.730	555.997	133.068
Medium	83.983	84.161	5.222	6.992	1.699	2.958	90.904	94.112
Large	34.515	136.217	3.655	17.345	1.475	11.701	39.645	165.263
Coop	1.977	50.170	43	1.022	2.503	37.523	4.523	88.716
Others	4.004	1.597	2.741	1.041	1.092	22.650	7.837	25.290
TOTAL	630.512	392.607	56.892	35.276	11.412	78.563	698.906	506.447
RANCHING								
Small	26.499	5.768	16.291	11.053	18	7	42.808	17.000
Medium	7.411	4.024	4.311	5.964	3	5	11.725	10.000
Large	3.351	13.372	1.956	8.635	1	0	5.308	22.007
Coop	102	1.224	14	70	41	431	157	2.724
Others	498	32	56.082	56	0	0	56.580	88
TOTAL	37.861	24.420	78.654	25.778	63	443	116.578	50.642
GENERAL TOTAL	668.373	417.028	135.636	61.054	11.475	79.007	815.484	557.089

Source: Central Bank

10. The 1990 distribution of SNCR lending by borrower and type of activity is shown in Table 1. This is the most recent year for which detailed data are available. Those data are consistent with trends in previous years. As the table shows, patterns differ considerably in agriculture and ranching.

a. Agriculture. The bulk of lending, both in number of projects and amounts loaned, has been for operating expenses, with comparative neglect of investment in plant and equipment, and soil conservation. On average, about 15 percent of lending is for marketing expenses. Surprisingly, the trend is the same across all categories, except that coops and the unspecified 'others' allocate more funding to marketing.

b. Ranching. Here the position is reversed. Almost equal amounts go to investment and operating expenses, and only a minimal amount to marketing. Surprisingly, small ranchers spend a larger proportion on investment than large ones.

11. Other, nonbank sources of credit at market rates, such as discounting warehouse certificates for agricultural commodities, are limited because of outdated laws and regulations. This shows that there is great need for reform and modernization in more specialized areas that directly support agricultural

financing, especially the system of warehousing agricultural commodities, and the classification of such commodities. Such steps would help supplement agricultural lending at a time budgetary pressures are likely to cause further reductions in official lending, while commercial banks remain reluctant to provide investment credit in a high-inflation environment.

12. One interesting initiative in agricultural credit has been developed by the Sate Bank of Sao Paulo, Banespa. Of the bank's 600 branch offices in the sate of Sao Paulo, some 370 specializes in agricultural lending. Through those branch offices, Banespa has launched a program of crop financing, where the principal amount of the loan is indexed to the market price of the crop being financed. This removes the producers' risk of having loan repayments that exceed the value of crops. Under Banespa's system, if the market price of a given cash crop drops, Banespa reduces the principal amount of its loan by an equivalent percentage. At the same time, Banespa rolls over the borrower's obligation to repay the difference between the original and reduced loan amounts to a future date. The program is available for all cash crops, except sugar and oranges, and cannot finance livestock.

Special Agricultural Credit Programs

a. Rural credit governed by Law 8.023/90 and Central bank Circular 2147/92: This applies to all financial institutions that are part of SNCR and accept term deposits. They must allocate at least not less than 60 percent of their total term deposit base for lending at real interest rates up to a maximum of 12.5 percent p.a. Eligible borrowers are all agricultural producers, including cooperatives. The tranche of lending at 12.5 percent p.a. must go to the same priority activities as all other TP lending.

b. Loans funded with *Depositos Especiais Remunerados* (DER) -- Law 8.024/91: These loans are funded with the proceeds of former blocked Novo Cruzado accounts, that were converted into Cruzeiros. 40 percent of the proceeds of such conversions must be allocated to lending at the three TP rates. DER-funded loans are made by the same financial intermediaries that lend at the TP, except certain credit unions and mortgage lenders. Lending must be for the same projects/activities as other TP loans, as well as to (i) pre-finance crops for co-operatives, (ii) discount agricultural trade receivables, and (iii) finance stocks of agricultural commodities and the production of ethanol for motor fuel.

c. Rural credit governed by Treasury Law B. 409/92: This is a special credit facility, funded by the Federal Budget and managed by the Ministry of Planning. All formal financial intermediaries can participate in this program, acting on the Ministry of Planning's behalf. Refinancing by the Ministry can be at one of three types of interest rates, at the borrower's option: (i) the Cruzeiro-equivalent cost of a reference currency basket, plus 8.2 percent p.a. (ii) exchange-rate variations of the Cruzeiro, plus 9.7 percent p.a., or (iii) TRD plus 10.5 percent. There is also a 'special' rate of TRD plus 5 percent p.a., for rural development programs. Onlending must be to (i) finance price-stabilization stocks and programs, (ii) finance the government's strategic coffee stock, (iii) invest in agricultural production and special farming programs, or (iv) 'colonize' new farming land.

Project Origin

13. PNDR was the first Bank-supported, free-standing loan for farm credit in Brazil. Given the conditions in Brazil's financial system at the time of appraisal, the project's main policy objectives were to:

a. Help stimulate sustainable growth of agricultural production by providing funding for productivity-boosting investment in agro-industrial enterprises that play an important role in the domestic and foreign-trade sectors.

b. Together with PNDA, streamline the Bank's lending to agriculture and agro-industry by regrouping it under two specific long-term credit lines.

c. Gradually phase out directed official credit at subsidized interest rates -- and the associated fiscal burden for the Government -- by setting a three-year target for the reduction in the volume of official agricultural credit and reducing the agricultural sector's dependence on official credit (by raising the volume of lending from commercial sources).

d. Make financial intermediation more efficient and responsive to borrowers' needs by fostering a culture of voluntary, long-term commercial lending, at market rates for productive investment.

14. In seeking to reduce official involvement in financial intermediation, PNDR was an important part of the Bank's policy dialogue with the Brazilian Government. To achieve its objectives, it had to help bridge the gap between what commercial banks could do (provide short-term loans) and what was needed for productive investment and working capital for agricultural producers (long-term loans).

Project Description and Organization

15. Eligible investments: Under the terms of PNDR, eligible sub-borrowers are: (i) individual farmers; (ii) cooperatives of agricultural producers; and (iii) firms providing contract services to agriculture with mechanized equipment. The project excluded financing for computers and vehicles. International competitive bidding applied only to contracts of US$3 million equivalent or more, and Brazilian suppliers and contractors would receive a 15 percent preference over foreign bidders.

16. All onlending to eligible borrowers is through the refinancing (i.e., rediscounting) of PB loans to sub-borrowers. As in the case of PNDA, PBs had to be accredited by BACEN. For subloans up to US$1 million, or the equivalent in local currency, any accredited PB could freely commit the funds and have sole right of approval. The PB only had to inform STN that the loan had been made by submitting the appropriate loan documentation. That was consistent with the Bank's wish to eliminate discretionary. Sub-loans of more than US$1 million had to be approved by the Bank, and no single beneficiary could borrow more than US$15 million (5 percent of the loan amount). Matching counterpart funds had to be provided by PBs and beneficiary agro-industrial enterprises, in freely-negotiated proportions.

17. Loan administration and supervision: BACEN and STN were jointly responsible.

a. BACEN's role was to (i) administer the PNDA Special Account, by obtaining timely replenishment of the account to enable STN to refinance eligible PB sub-loans, (ii) accredit PBs for participation in PNDA -- to be accredited by BACEN, PBs had to be financially sound and able to appraise sub-borrower projects, (iii) check each PB's compliance with the projects guidelines on eligible sub-projects, and deny funding for all sub-projects that were not in compliance, (iv) cancel and recover all disbursed subloans that violate eligibility criteria, and (v) if necessary, suspend or cancel the accreditation of PBs. In accrediting individual PBs, BACEN had to set credit ceilings, based on the recommendations of CLC.

b. STN's task was the overall coordination of the financial aspects of the project, through a special unit that was set up in 1988 to administer all official credits to the Federative Republic of Brazil. STN's role was to (i) make disbursements to accredited PBs on all sub-loans under the US$5 million free limit, unless BACEN had stated that the projects violate PNDA regulations, (ii) monitor balances outstanding with each PB, (iii) apply monetary correction to Option C loans, (iv) verify that counterpart funds were available and disbursed on time, (v) ensure that loans that have been declassified are recovered, and (vi) provide monthly and quarterly financial summaries of the loan, with quarterly data showing disbursements, disaggregated by PBs, type of sub-borrower and geographical region.

18. Refinancing options: The Federal Government's liabilities to the Bank are denominated in the Currency Pool. To pass on the foreign-exchange risk to PBs and sub-borrowers, the project initially offered PBs three options:

a. **Option A**: This option involves on-lending to PBs in the Bank's currency Pool, so that PBs take on the full foreign-exchange risk on the Pool. This is the most straightforward solution from the Government's point of view, since it involves no risk of exchange-rate loss: the principal outstanding in PB refinancing is automatically readjusted by the same exchange-rate factor as the Government's own debt to IBRD. Option A is also the most difficult (and potentially costly) for PBs.

b. **Option B**: Here the Government took the Currency-Pool/US dollar exchange-rate risk and on-lends to PBs in dollars. The PBs, in turn, take the dollar-local currency exchange-rate risk, when on-lending to beneficiaries in Cruzado. The Government, in this case, charges the PBs the Bank's variable rate plus a premium to cover its dollar-Pool risk.

c. **Option C:** This option was introduced at the Government's own request. In this case, the PBs have no exchange-rate exposure whatsoever: their assets (the sub-loans) and liabilities (to STN) are both in domestic currency. All sub-loans that are refinanced under this option must be indexed to inflation, so as to ensure maintenance-of-value of their principal amount, and protect the Government against value erosion (relative to its own debt to the Bank). At the time of appraisal, Brazil's inflation-correction index for financial contracts was the value of the BTN (National Treasury Bonds) as corrected from time to time. Option C was discontinued in October 1990.

19. The pricing of loans to PBs: The Government's cost of funds (i.e., the Bank's variable lending rate) was passed on to PBs. At negotiation it was agreed that the PBs' refinancing rate would include a spread of 1.0 percent p.a., to cover the Government's cost of administering the Loan, and an additional 0.25 percent p.a. to cover the commitment fee on undisbursed balances. Under Option A the PBs' base cost was the Bank's variable interest rate on the currency Pool plus those spreads. Refinancing under Option B carried a premium to cover STN's foreign-exchange risk, and Option C

involved inflation indexation. In July 1992, the Bank and STN agreed that the exchange-rate premium on Option B would be maintained at 1.5 percent for the duration of PNDA.

20. The value adjustment of Option C proved quite complicated. When the loan first became effective, Brazil's inflation-correction index for financial contracts was the BTN Index (i.e, the value of National Treasury Bonds). But, because that index trailed inflation, there was real-value erosion, thus a shortfall in STN's liabilities to the Bank (denominated in the Currency Pool). In July 1991, the TRD became the general index for all financial contracts and the basis for adjusting the principal balances of subloans under the discontinued Option C. Since the TRD tracks inflation (as measured by the retail-price index), there have been no further capital losses on existing Option -C contracts. Since July 1991, STN has kept a constant real rate of interest of 12 percent on PBs' C contracts (see Table 1 below). This is in contrast with negative real rates on Option C when the BTN was the monetary correction index. Based on experience to-date, the current formula should be enough to cover STN's cruzeiro/dollar cross-currency risk.

Relation to Other Bank Loans

21. PNDR marked the continuation of the Bank's long involvement in providing finance for Brazil's agro-industrial sector, which started in 1973, when the First Agro-Industries Credit Project became effective. Including this Loan, as of December 31, 1993, the Bank has made 61 loans -- including supplemental loans -- totalling US$51,341.2 million (net of cancellations), for agricultural and rural development in Brazil. These loans include: (a) one agricultural credit and export Loan for US$301 million; (b) one agricultural credit Loan (loan 2971-BR) for US$300 million; (c) one credit and marketing-reform Loan for US$495 million; (d) four loans--including the Loan under review--for agro-industries, for US$758.8 million; (e) three loans (US$111.5 million) for livestock, including a Loan for a livestock disease control project of US$51 million; (f) one Loan (US$18.2 million) for grain storage; (g) three loans (US$147 million) for agricultural research; (h) two loans (US$255 million) for agricultural extension; (i) one Loan (456.6 million) for land-tenure improvement; (j) 22 loans (US$1,176 million) for rural-development projects; (k) nine loans (US$771.5 million) and two supplemental loans (107.5 million) for irrigation development; (l) eight loans (319.3) for natural-resource management, and two loans (US$96 million) for land management and soil-conservation projects in the States of Santa Catarina and Parana; and (m) two loans (US$372 million) for zoning and native-forest protection.

Project Implementation

22. At appraisal, total project cost was estimated at US$600 million, of which US$300 million (50 percent) would be financed by the Loan. Matching counterpart funds had to be provided by PBs and beneficiary agro-industrial enterprises, in freely-negotiated proportions. There was no counterpart funding by the government. At closing (12/31/1992) total project cost was US$558,205,144, of which US$279,102,572 were in project funds. The balance of US$20,897,427.91 in uncommitted funds that remains in the Special Account is being recovered by the Bank.

23. Despite the loan's general success in reducing the volume of official agricultural credit (see below) and encouraging commercial-bank lending at market rates, a number of factors have affected its implementation. They are: (i) the two-phase implementation of the loan and delays in the implementation of phase-two projects, (ii) problems of indexing sub-loans; (ii) the skewed distribution of PNDR funds among PBs, (iii) problems with loan supervision, and (iv) ex post loan cancellations and the suspension of accreditation of several PBs. Most of those problems were almost direct consequences of the prevailing macro-economic instability.

24. Phased implementation: The particularities of the three currency options explain why the loan was implemented in two phases. All refinancing of sub-loans with contracts signed between October 1989 and September 1990 was under Option C. After Option C was discontinued, all refinancing has been under the other two options. However, the demand for PNDR funds tapered off rather sharply. The main reason for this is that there were competing and cheaper lines of credit (e.g., FINAME program of BNDES).

25. Due to the complexity of the Bank's Currency Pool and the difficulty of hedging the currency exposure on the pool, virtually all post-1990 refinancing has been in US dollars. Much of it was for supplementary financing of existing 'C' sub-loans, to restore their real value, and enable beneficiaries to complete investment projects.

26. Delays in the release of funds to PBs: At various stages during implementation, there were delays in the release of funds by STN to PBs. In November and December 1989, legal issues and the need to review STN's refinancing agreements with PBs caused delays of up to two weeks. There were also delays of several delays in October 1989, and in early 1990. Because these delays occurred in a period of hyperinflation, they caused significant cash-flow problems for PBs and beneficiaries. The reason for this is that inflation indexation was initially done on the basis of BTN. BTN was based on the retail price index (IPC) and trailed inflation. In addition, BTN

was set at the beginning of each calendar month and remained constant throughout the month. Thus, any delay in releasing funds to PBs meant that the actual cost of sub-projects continued to rise, whereas disbursements were based on beginning-of-the-month BTN values. As a result, when funds were released, the allocation often fell far short of the Bank's 50 percent share.

27. This combination of factors caused severe financing gaps for many borrowers who had pre-financed investments with short-term commercial loans. While some sub-borrowers applied for additional PNDR financing in US dollars (which raised total financial charges), or used their own resources to cover the gap, others scaled down the scope of projects, or, in extreme cases, abandoned them.

28. The reciprocal of the PBs' and sub-borrowers' loss was that STN made windfall savings, due to the lag between BTN and actual inflation. Between October 1989 and mid-may 1990, these 'savings' amounted to US$28.2 million equivalent on PNDR sub-projects. The proceeds of these savings have been used to make additional refinancing.

29. Changing the indexation of C sub-loans: Given the problems that resulted from occasional delays in the release of funds, the indexation base was modified. As of July 1991, the TR became the general index for all financial contracts, includes 'C' subloans. Since the TR tracks inflation (as measured by the retail-price index), there have been no further capital losses on existing Option-C contracts.

30. Foreign-exchange losses: Notwithstanding delays in the release of funds on certain occasions, in the early stage of the loan's implementation the pace at which refinancing was committed and disbursed led to losses for STN. The reason for this is that, because balances in the Special Account were often insufficient to cover those disbursements, STN refinanced some sub-loans to PBs with of its own resources. In most of those cases, STN did not have the Bank's 60-day protection against foreign-exchange losses on expenditures financed through the Special Account. The crux of the matter is that, because BTN was fixed on the first day of the month, any delay in obtaining funds from the World Bank without foreign-exchange protection meant that STN would receive a lower dollar equivalent value, because the Cruzado was depreciating by 1.5 percent to 2 percent daily. Due to this, STN incurred a foreign-exchange loss of US$38.2 million on PNDR.

31. Another source of foreign-exchange losses for STN is that the principal value of subloans indexed to BTN has been falling, relative to that of STN's currency-pool liabilities. Between October 1989 (the date of first 'C' subloan) and end-1993, the dollar equivalent value of Option 'C' contracts dropped by

57.5 percent. Taking the revaluation adjustment on the loan, through January 15, 1994 (i.e the dollar equivalent appreciation of STN's currency pool liability to the Bank, since the loan has become effective), the principal outstanding was US$ 303,505,447.74, which represents an unrealized adjustment loss of US$24,402,875.65 for the Government. Fortunately for STN, a part of that foreign-exchange loss was offset by the above-mentioned "savings".

32. The skewed distribution of funds among PBs: Although ten PBs have, so far, received PNDR funds, Banco do Brasil has used over 98 percent of total resources and accounts for 83 percent of all sub-projects. By comparison, the next largest user of the loan, Banco de Credito Real of Minas Gerais, financed 44 subloans (less than 0.5 percent of the total) and used about 10 percent of the loan amount. Though unfortunate (because it reenforces Banco do Brasil's virtual monopoly in rural and farm credit), that concentration was almost inevitable. Banco do Brasil has a unique, dominating position in Brazil's financial system, and is the only bank with a country-wide branch network that covers small rural towns. It is also the country's main source of farm credit. That gave this bank a considerable advantage in preparing and submitting sub-projects to be financed with PNDR. The first-come-first-served allocation of funds to PBs generally favored BdB, which had accumulated a large pipeline of sub-projects, in anticipation of PNDR's launching. Given the broad distribution of its PNDR portfolio, Banco do Brasil also had a larger proportion of disqualified sub-projects.

33. Loan Supervision: Several factors have affected the quality of loan supervision. In particular, STN has experienced considerable difficulties in reconciling its data on disbursements to the PBs, with the PBs' data on loan disbursements to beneficiaries. Another difficulty is that the PBs' own reports to STN are not standardized. This can cause reporting errors and discrepancies, especially in an environment of high inflation and rapidly depreciating domestic currency, where differences of even a few days in reporting dates can seriously affect the reported results. STN's monthly and quarterly summary financial reports on of the Loan have always been on time. However, they did not include data on project implementation progress in terms of the location of and nature of sub-projects being refinanced. Admittedly, that information was only requested by the Bank in late 1992.

34. A further complicating factor is that there was no reliable central mechanism to monitor cases of non-compliance by PBs or to check continued observance of PNDR's regulations and eligibility criteria for subloans, and compliance with the MCR rules for rural credit. Thus, because the PBs -- especially Banco do Brasil -- were asking BACEN to review hundreds of sub-

projects at any one time quite a few ineligible sub-projects were cleared and had to be disqualified after disbursement.

35. The cancellation of Ineligible Sub-loans. Cancellation of disbursed subloans can take place for several reasons, including purely technical violations of PNDR's eligibility criteria, the refinancing of expenses outside the allowed period of 180 days, and irregularities in the use of funds. Another reason can be failure to provide counterpart funding, given the prevailing hyper-inflation. This happened often, especially for the smaller sub-borrowers, some of which tried to pay 'in kind' with land and existing equipment.

36. Though practically all PBs had some of their sub-loans cancelled, there were relatively few cases of blatant irregularity, and auditors have reported no cases of deliberate misallocation and misuse of funds, or of use of false documents. The problem has remained within manageable proportions, and its impact on the overall financial performance of PNDR fairly limited. However, taking the combination of irregularities in the use of PNDR and PNDA funds, and general prudential concerns, BACEN had to suspend the accreditation of five PBs. This makes them ineligible for refinancing. One of the PBs with suspended accreditation is BNCC, whose final liquidation is still pending. Fortunately, BNCC's US$2.2 million in PNDR sub-projects outstanding are performing well, without major difficulties. Once BNCC is liquidated, its PNDR and PNDA portfolios will be taken over by Banco de Brasil. STN is negotiating that transfer.

37. Most PBs have already repaid cancelled loans to STN. Nevertheless, some PBs, including some that are no longer accredited, have appealed BACEN's decision with the National Monetary Council, and are holding back repayment to STN, pending the Council's decision.

The Bank's Performance

38. Because of competing work priorities, Bank staff were only able to supervise project at nine-month intervals, which made it difficult to detect, or attempt to deal with, some of the implementation problems. Other factors that have weakened the quality of the Bank's supervision are (i) the lack of continuity in task management, (ii) excessive reliance on a consultant, as the main repository of 'institutional knowledge' of the project, and (iii) the fact that mission and supervision reports, and aide memoires invariably lumped together PNDR and PNDA. This may have blurred critical perspective in dealing with implementation problems.

Project Results

39. Despite its implementation problems PNDR has had good overall results. It had a measurable impact in reducing the volume of official rural credit, succeeded partly in liberalizing interest rates for farm lending, was disbursed rapidly -- though not in full -- and touched a broad base of producers, including many medium-sized farms. PNDR did so by making funds available to agricultural producers nation-wide through thousands of individual subloans.

40. Reducing the volume of official rural credit: The project succeeded in reducing the volume of official agricultural credit by more than had been projected at the time of appraisal. In real terms the project had targeted a reduction of official agricultural credit of 14 percent from 1987 to 1990, and 12.5 percent from 1988 to 1990. The actual result for the 1988-90 period was a reduction of the order of 70 percent. Another indicator, the share of official credit, as a proportion of total agricultural credit fell to 70 percent in 1990, compared with 85 percent in 1988. As was stated earlier above, the fact that the target reductions were exceeded is entirely attributable to the extremely large reduction in the volume of Banco do Brazil's agricultural lending.

41. Interest rates: Real interest rates on agricultural credit are now higher than before the loan had become effective. The Government's cost of funds (i.e. the Bank's variable ending rate), was passed on to PBs, with a spread of 1 percent per year, to cover the Government's cost of administering the loan, and an additional 0.25 percent p.a. to cover the commitment fee on undisbursed balances. Under Option A, the PBs' base cost was the Bank's variable interest rate on the Currency Pool. Refinancing under Option B carried a premium to cover STN's foreign-exchange risk, and in Option C, monetary correction, (see the table below). In July 1992, the Bank and STN agreed that the exchange-rate premium on Option B would be maintained at 1.5 percent for the duration of PNDA. In onlending to beneficiaries, the PBs added a freely-negotiated spread over that cost of refinancing from STN. These spreads range between 2 percent and 4 percent p.a. plus, in the case of Option C monetary correction, and for the other options the exchange-rate risk, relative to its sub-loans in domestic currency. Thus, in broad terms, real interest rates to PBs and sub-borrowers under this credit were market determined (see the table 2 below).

42. Since July 1991, the real rate of interest on C contracts has been at 12 percent per year, except in the first half of 1992. This is in contrast with negative real rates on Option C when the BTN was the monetary correction index. However, from July 1991 through April 1992, the rate of devaluation of the cruzeiro, relative to the dollar (22.6 percent per month) exceeded the

rate of inflation (21.2 percent per month). Thus, in dollar-equivalent terms, there was erosion of principal value, which translated into a negative refinancing rate of minus 3 percent for PBs.

Table 2 Rates for the Refinancing of PBs

Period	Option	Interest rate (in % p.a.)
5-1-89 to 12-31-89	A: B: C:	8.15 9.65 10.45
1st half 1990	A: B: C:	8.15 9.65 12.00
2nd half 1990	A: B: C:	8.25 9.75 10.55
1991	A: B: C:	8.20 9.70 12.00
1st half 1992	A: B: C:	8.20 9.70 12.00
2nd half 1992	A: B: C:	8.20 9.70 10.50
1993	A: B: C:	8.10 9.60 12.00

Source: STN

43. Rapid commitments and disbursements: As noted, the fact that the pace at which PNDR was committed and disbursed was faster than had been expected at appraisal resulted in cash-flow problems and foreign-exchange losses for STN. However, the pace of commitments and disbursements was also a measure of the loan's success: two-thirds of the loan amount were disbursed in the first quarter after it became effective, and by end-June 1992. A total of 93 percent of the loan had been disbursed, as opposed to an

appraisal forecast of 73 percent. More than 90 percent of the loan amount had already been committed to PBs, within five weeks of the loan's effectiveness.

44. That situation is attributable to a combination of factors: (i) a large sub-project pipeline had been built up between the time of loan preparation and effectiveness, (ii) the absence of other sources of long-term investment credit for agriculture, and (iii) the availability of financing in local currency (Option C) during the first phase of implementation. The demand for refinancing dropped off sharply after the cessation of Option C, and there have been hardly any disbursements after mid-1992. The reason for this is that, after factoring in the exchange-rate risk, the real cost of financing was quite high. The US$20.9 million in uncommitted funds that remain in the Special Account are being canceled by the Bank.

45. A large number of beneficiaries: With thousands of small sub-loans, PNDR was also able to touch a broad base of borrowers. Banco do Brasil took the lion's share of the funds and covered over 90 percent of the participants. It did so by using PNDR as an additional 'window' for its traditional rural clientele, and making efficient use of its nation-wide branch network to promote the PNDR program.

46. A broad spectrum of activities to improve agricultural productivity: The types of activities and inputs covered by PNDR sub-projects include: (i) the purchase of lime (to reduce soil acidity and rain fertility), (ii) the purchase of tractors, combine harvesters and other agricultural equipment (for improved mechanization), (iii) the installation of irrigation equipment, (iv) the purchase of chemical fertilizers for soil improvement, and (v) technical assistance and extension services. Together, these have contributed to significant productivity gains and increased output.

Lessons Learned

47. As the Bank's first free-standing credit for agriculture in Brazil, PNDR was well received by the PBs and beneficiaries alike. The project's nation-wide coverage, involving thousands of sub-participants, shows that this type of project can be a useful tool for policy reform in support of rural development and more efficient financial intermediation in rural credit markets. Together, these factors have been important in supporting a key sector of Brazil's economy at a time of financial turmoil and economic uncertainty.

48. However, experience to date contains a number of important lessons, both for the remaining life of PNDR itself, and for a possible second-generation operation:

a. As was stated in several Bank supervision reports and mission Aide Memoires, ongoing local supervision by BACEN and STN is crucial to the project's success and should be strengthened. Supervision mechanisms and procedures should include a central system to monitor non-compliance with the project's regulations and with those of Brazil's Credit manual, and a framework for the prompt resolution of cases of non-compliance, and of suspended PB accreditation that are under appeal with the National Monetary Council.

b. STN's quarterly reports should be expanded to provide data on the project's local impact (e.g., type of producer, geographical distribution, amounts of loan cancellations and prepayments, funds available in the pool for re-lending).

c. Because on-lending by STN to PBs has been for shorter maturities than those of the Bank's loan, the reflow of PNDR funds to STN's general pool of external funding should be used to finance additional sub-projects (but excluding add-ons to existing projects), and adhere to the same eligibility criteria as at present.

d. All future refinancing should be in US dollars, to the exclusion of all other options. This means that, if actual subloans are financed by PBs in local currency, the PBs take on the local-currency/dollar risk and the Government the dollar/currency-pool exchange-rate risk.

e. Unlike PNDA, where it is recommended that there be an auction mechanism, the allocation of funds for PNDR can continue on a first-come-first-served basis. This is because the relatively small size of projects, and nation-wide coverage of loan demand would make it highly impractical to adopt an auction system.

f. There should be deliberate efforts to involve broader, and more significant participation by PBs, so as to introduce more competition in rural financial markets. Though Banco do Brasil's de facto monopoly has yielded good results so far, it is not desirable from an efficiency point of view.

Sustainability and Replicability

49. While there is no doubt that the project is sustainable, it would be premature to consider a second-generation agricultural development project. That decision should be postponed until Brazil's macroeconomic environment regains stability and inflation abates to a more acceptable level. The reason for this is that projects of this type blend two objectives, namely rural

development by providing financing for agriculture, and financial liberalization. The difficulty is that achieving a meaningful degree of financial liberalization and deepening remains an elusive objective, as long as macroeconomic instability distorts financial markets. The implication is that when there is doubt about prospects for near-term improvements in the institution and macroeconomic environment for project implementation, going ahead with a project usually causes more problems than delaying it.

PROJECT COMPLETION REPORT

BRAZIL

AGRICULTURAL CREDIT PROJECT
(Loan 2971-BR)

II. PROJECT REVIEW FROM THE BORROWER'S PERSPECTIVE

Project Implementation

50. Project implementation has been generally satisfactory, given the difficulties of operating in an environment of high inflation, unpredictable foreign-exchange markets, and general macro-economic instability.

Particular aspects of implementation that must be emphasized include:

a. Multiple currency options: The menu of three options for the refinancing of PB sub-loans proved to be complicated, and ill adapted to the operational environment of the project. Though it was financially attractive to beneficiaries, Option C for refinancing in Cruzados experienced problems of value indexation during the first phase of project implementation. Because the resulting erosion of the principal amount of Option-C loans entailed a risk of loss for STN (relative to the Government's borrowing from the World Bank in the Currency Pool), Cruzado refinancing had to be stopped in October 1990. As for on-lending in the World Bank's Currency Pool (Option A), there has been practically no demand, due to the complexity and foreign-exchange exposure that option entails. In conclusion, all future refinancing should be done exclusively in US dollars, as has already been the case during the second phase of project implementation.

b. Eligibility Criteria: On balance, the project's criteria on eligible expenditures were too vague. This has created uncertainty for the PBs and their clients. It has also, undoubtedly, contributed to the high level of rejections of sub-projects at application, and to the disqualification of many disbursed sub-loans. The rush of applications in the first months after PNDR's effectiveness (plus the fact that BACEN had the check eligibility of PNDA sub-projects at the same time) have further complicated that task.

c. Local supervision: The effectiveness of local project supervision has been affected by conjunctural factors, namely high inflation and economic instability. In addition, STN has experienced considerable difficulties in reconciling its own figures on disbursements to participating banks, with the banks' data on disbursements to clients. Those difficulties are due to then fact that, with high inflation and extreme volatility in foreign-exchange markets, differences of only a few days can result in substantial differences, both in Cruzeiro and in US dollar equivalent disbursement data. Moreover, (i) the participating banks have, so far, failed to provide the necessary information, and (ii) the banks' reporting standards are not uniform, which makes reconciliation in a single data base difficult.

d. STN's quarterly reports: In 1992 the World Bank requested that STN's quarterly statements also include information on disbursements by sub-sectors and region. That request was only made in 1992, and the Bank did not give enough details on the type and format of the information it needs. STN has not been able to provide that information, because its internal data base is not adapted to processing that information. Moreover, the commercial banks have failed to provide implementation data.

e. Foreign-exchange losses: In the early stage of the loan's implementation, STN had to finance some sub-loans to commercial banks out of its own resources, because balances in the Special Account were insufficient to cover the high level of PB refinancing. Because STN made these disbursements without the Bank's 60-day protection against foreign-exchange losses on expenditures financed through the Special account, it incurred a foreign-exchange loss of US$38.2 million on those disbursements.

f. The highly-uneven distribution of funds among participating banks: Although ten commercial banks have participated in the first round of PNDR lending, Banco do Brasil took the lion's share. Its refinancing accounts for over 98 percent of loan funds and 83 percent of all sub-projects. Given that the project has used a first-come-first-served method to allocate funds to commercial banks, and that Banco do Brasil is the country's most experienced agricultural lender, that outcome was virtually inevitable.

g. Difficulties in raising counterpart funding: Unlike in other sector loans, in PNDR (and PNDA) the participating banks and beneficiaries -- not the government -- must provide matching counterpart funds. Project implementation shows that, in the prevailing economic environment, a number of beneficiaries experienced problems in raising the matching funds. In such cases the sub-projects were either abandoned or cancelled.

Project Results

51. The initial response to the project has been extremely positive: more than 90 percent of the loan was committed to participating banks during the first month of effectiveness and two-thirds of the loan was disbursed in the first quarter, all of it for the refinancing of sub-projects under Option C.

52. Although there has been no independent evaluation of the project's results, and there are no socio-economic data to measure its sectoral impact, PNDR's term lending for productive investment in agriculture proved invaluable, at a time when rural commercial lending was drying up. The project has covered an extremely large number of agricultural producers throughout the country, and contributed to modernizing this sector of the economy, and making it more efficient. Through forward linkages this has benefitted agro-industry by providing it better quality inputs at lower prices, which points to the useful complementarity between this project and PNDA: the productivity gains achieved by PNDR have benefitted agro-industry, and magnified the positive impact of PNDA.

53. In addition, notwithstanding an extremely unfavorable and unstable macroeconomic environment, PNDR has managed to advance the process of liberalization in Brazil's financial markets. Moreover, because target reductions in the volume of official agricultural credit, at managed interest rates, have been exceeded, PNDR has helped diminish the fiscal burden of providing interest-rate subsidies.

PROJECT COMPLETION REPORT

BRAZIL

AGRICULTURAL CREDIT PROJECT
(Loan 2971-BR)

III. SUMMARY OF STATISTICAL DATA

1. Related Bank Loans

LOAN TITLE	PURPOSE	YEAR OF APPROVAL & STATUS	COMMENTS
Agro-Industries Credit I 928-BR US$54 million	Support investment program to further the growth of exports of processed agricultural products	1973 Completed	Refinancing through Central Bank restricted to 5 state development banks, a limited range of activities and the central and southern regions
Agro-Industries Credit II 1317-BR US$83 million	As above	1977 Completed	As above, but with more state development banks participating
Agro-Industries Credit III 2268-BR US$400 million	As above. In addition, reform for liberalization of credit.	1983 Closed 12/31/89	As above, for nation-wide investment in the development of effort-oriented agro-industrial enterprises. Support for institutional development of commercial banks and reduction of official credit for agro-industries.
Agro-Industries IV 2960-BR US$300 million	Promote productive investments in agro-industry and the liberalization of credit	1988 Effective August 1989	Final on-lending terms to be freely negotiated by sub-borrowers and participating private and official banks. Only 80 percent of the loan has been disbursed.

2. Project Timetable

ITEM	PLANNED	REVISED	ACTUAL
Identification	--	--	12/85
Preparation	--	--	12/86
Appraisal Mission	--	--	12/87
Loan Negotiations	--	--	05/88
Board Approval	06/88	--	06/88
Loan Signature	05/89	--	05/89
Loan Effectiveness	08/89	--	08/89
Loan Closing	12/93	--	12/93
Loan Completion	06/93	--	06/93

3. Cumulative Estimated and Actual Disbursements (US$M)

	FY89	FY90	FY91	FY92	FY93	FY94
Appraisal Estimate	40	90	150	220	300	300
Actual	--	226.9	274.9	278.9	279.1	267.7[1]
Actual as % of estimate	0	252.1	183.2	126.7	93	89.2

[1] US$11.4 million was paid back due to delinquent projects and US$32.3 million was cancelled.

4. Project Costs and Financing

A. Project Cost (US$ million)

	APPRAISAL ESTIMATE			REVISED ESTIMATE[1]		
	Local	Foreign	Total	Local	Foreign	Total
Fixed and Associated Working Capital Credit	510	90	600	n/a	n/a	535.4[1]

[1] Actual data on project costs for all subprojects not available
n/a = not available

B. Project Financing

SOURCE	PLANNED LOAN AGREEMENT	REVISED ESTIMATE
Bank	300	267.7
Participating Banks and Sub-borrowers	300[1]	267.7

[1] Proportions negotiated freely between PBs and Sub-borrowers.

5. Project Results

MONETARY CORRECTION INDICES		
MONTH/YEAR	BTN % CHANGE	CUMULATIVE % CHANGE
11/89	40.21	40.21
12/89	53.46	115.16
1/90	56.27	236.24
2/90	71.93	478.12
3/90	44.86	737.46
4/90	0.43	741.09
5/90	4.23	776.64
6/90	9.78	882.41
7/90	11.39	972.01
8/90	9.78	1,076.88
9/90	12.49	1,223.79
10/90	14.35	1,413.77
11/90	16.23	1,659.40
12/90	18.57	1,986.06
1/91	19.78	2,398.73
MONTH/YEAR	IRD % CHANGE	CUMULATIVE % CHANGE
2/91	7.00	2,635.69
3/91	8.50	2,868.23
4/91	8.93	3,133.29
5/91	9.00	3,424.29
6/91	9.40	3,755.57
7/91	10.05	4,143.06
8/91	11.95	4,650.10
9/91	16.78	5,447.17
10/91	19.77	5,543.84
11/91	30.52	8,571.54
12/91	28.42	11,036.00
1/92	25.48	13,873.45
2/92	25.61	17,452.05
3/92	24.63	21,775.12
4/92	21.08	26,386.40
5/92	19.81	31,633.35
6/92	21.05	38,313.22
7/92	23.69	47,413.31
8/92	23.22	58,445.90
9/92	25.38	73,304.86
10/92	25.07	91,707.45
11/92	23.29	113,089.41
12/92	23.95	140,198.27
1/93	26.78	177,742.09
2/93	26.40	224,692.40
3/93	26.18	283,543.05
4/93	26.22	363,587.12
5/93	28.68	467,882.59
6/93	30.08	608,664.76
7/93	30.37	793,546.61
8/93	33.34	1,058,148.39
9/93	34.82	1,424,513.88
10/93	36.53	1,944,925.48
11/93	36.16	2,848,245.69
12/93	36.80	2,648,246.69

Source: STN

6. Status of Legal Covenants
(As of March 31, 1994)

Loan Number	Agreement/ Section	Type of Covenant	Description of Covenant	Original Date	Revised Date	Status	Overall project Rating	Comments
2971-BR	L.A.						2	
	3.01 (b) & (c)	F	The Borrower shall enter into a participating agreement acceptable to the Bank and including the terms and conditions set forth in Sched. 6 to the LA with each participating bank. Except as the Bank shall otherwise agree, the Borrower shall not amend,			OK		The TR is a satisfactory substitute for the now extinct IBGE IPC, the monetary correction index stipulated in Sched. 6 of LA for adjusting the principal balance of DTN loans to PBs. Sched. 6 of the LA was amended to replace the IPC with the TR.
			Waive, abrogate or fail to enforce the provisions of any such Participating Agreement.					
	3.02	M	Procurement of goods and works required for project shall be in accordance with provisions of Sched. 4 of the LA.			OK		
	3.03	M	Participating Banks (PBs) would be accredited by the Central Bank according to agreed criteria concerning financial soundness and loan appraisal capability. PBs not accredited shall not make further subloans while they are unaccredited.			ACT		Four of the fourteen PBs have had their accreditation suspended.
	3.04 (a)	M	DTN to carry out supervision of the project, in a manner satisfactory to Bank with Mgt. and staff adequate in numbers, qualifications and experience and utilizing appropriate financial control systems.			ACT		STN lacks a management information system to monitor PNDR operations considered by the Central Bank to be not in compliance with PNDR regulations.
	3.05	E	Proposed subloans of US$5million or more should be submitted to the Bank for its review and approval. The first four free-limit subloans should be submitted to the Bank for its review.			OK		

	3.06	E	Gov't would prepare and submit to the Bank quarterly reports on the status of implementation of the Gov'ts program to contract official credit to the agricultural sector, and the Gov't would meet with the Bank on an annual basis to review this program.			ACT		Annual reports submitted to the Bank have proved sufficient as a basis for reviewing the program. Data problems have occasionally delayed submission to the Bank of the reports on official agro-industrial credit .
	4.01 (b)(ii)	F	Gov't would furnish to the Bank a certified copy of the audit report on the project accounts not later than six months after the end of each fiscal year.			OK		