# Turkey

## Third Agricultural Credit Project

Date of Report: June, 2002
Date of Survey: July, 2001

## 1. Project Profile and Japan's ODA Loan


Location Map of the Project

Project Site

### 1.1. Background

While the relative importance of the agricultural sector in the Turkish economy had been declining, it still represented 18% of GDP, 18% of export earnings, and 56% of civilian employment in 1987. The Agricultural Bank of Turkey (TCZB) is the oldest and largest bank in the country, extending more than 90% of agricultural credit. TCZB's sources of finance consist mainly of deposits of public enterprises, borrowing from the central bank, and government subsidies. Nevertheless, these funds are not sufficient to cover all the financial needs of the agricultural sector. The Government sought foreign financial sources in order to respond to the imminent demand for agricultural credit, and two agricultural credit projects were implemented through World Bank financing. The current project is the third agricultural credit project, jointly financed by the World Bank and JBIC. The World Bank financed US$ 179.3 million for investment loans (medium- to long-term), production loans (short-term) and institutional building, while JBIC co-financed 35,200 million Yen for investment loans.

### 1.2 Project Objective

To increase agricultural production and the income of farmers through the expansion of agricultural credit, and to strengthen the capacity of agricultural credit institutions (TCZB and TKK - the Agricultural Credit Cooperatives)

## 1.3 Project Scope

As a co-financier, JBIC provided TCZB with a two-step loan for the purpose of medium-/long-term investment credit. The following are the conditions for the sub-loans:

(1) Borrowers: farmers and agricultural cooperatives operating 48 selected provinces (poorer provinces with low financial needs and wealthier provinces were excluded)

(2) Interest rates: to be raised to positive rates, i.e. rates higher than the current inflation rates

(3) Ceiling of sub-loans: between 60% and 90% of the sub-project costs

(4) Purposes of sub-loans: farm mechanization, infrastructure, livestock and horticulture.

## 1.4 Borrower/Executing Agency

The Government of Turkey / The Agricultural Bank of Turkey (TCZB)

## 1.5 Outline of Loan Agreement

| | |
|---|---|
| Loan Amount (estimated)<br>Loan Disbursed Amount | 35,200 million Yen<br>35,200 million Yen |
| Exchange of Notes<br>Loan Agreement (L/A) | Dec 1989<br>Dec 1989 |
| Terms and Conditions<br>Interest Rate<br>Repayment Period (Grace Period)<br>Procurement | <br>2.90%<br>25 years (7 years)<br>General Untied |
| Final Disbursement Date | Jan. 1997 |

## 2. Results and Evaluation

### 2.1 Relevance

Turkey's national development strategy has been placing emphasis not only on balanced and adequate nutrition for the increasing population, but also on increasing the production and export of products for which Turkey has a relative advantage. Agriculture in Turkey is currently experiencing a shift from extensive farming to intensive farming using modern techniques, producing for both the domestic and foreign markets. It is of the utmost importance that, during this transformation process, producers make decisions suited to economic conditions and implement plans that will improve yields, income levels and, eventually, the standard of living. The Sixth and Seventh Five-year Development Plans in Turkey (1990-1994 and 1995-2000) emphasized that agricultural production must be increased by improving efficiency, given that there is limited agricultural land in Turkey, and that animal husbandry will be promoted to increase the share in agriculture, with a view to making up for the animal protein deficiency in Turkey and increasing the income level of producers.

Most farmers do not have access to official financial sources for making investments in agriculture, and the primary reason for the limited access is Turkey's under-developed financial sector. The Agricultural Credit Bank (TCZB) has played an essential role in the development of the agricultural sector. TCZB is the oldest and largest bank in the country, extending more than 90% of agricultural credit. TCZB's sources of finance are mainly deposits from public enterprises, borrowing from the central bank, and Government's subsidies; however, these funds are not sufficient to cover all the financial needs of the agricultural sector. Thus, co-financing by the World Bank and JBIC was essential to fill the gap between the supply and demand for agricultural credit. In this light, the current project has maintained its relevance and is consistent with the circumstances of the agricultural sector in Turkey, and with the Turkish Government's development policy, up through the present.

### 2.2 Efficiency

#### 2.2.1 *Project Scope*

There was no change in the project scope, except in the determination of the interest rates, which is explained in 2.2.3. JBIC's two-step loan was used for medium- to long-term investment credit, financing mainly farm mechanization, livestock and horticulture. The number of project provinces increased from 48 to 50, since the number of provinces in Turkey also increased from 71 to 76, owing to administrative reorganization.

#### 2.2.2 *Disbursement of Sub-loans*

Originally, the loan was scheduled to close in December 1994, four years after the beginning of the Project. The actual closing date was January 1997, two years after the original closing date, mainly because of the increase in loan funds in local currency equivalent, caused by the appreciation of the Yen. Table 1 shows the actual schedule of loan disbursement.

**Table 1 Loan Disbursement (million Yen)**

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | Total |
|---|---|---|---|---|---|---|---|---|---|
| Planned | 16,600 | 12,000 | 6,600 | - | - | - | - | - | 35,200 |
| Actual | 17,254 | 5,638 | 4,049 | 3,294 | 1,877 | 2,640 | 437 | 11 | 35,200 |

Source: JBIC

There were direct loans by TCZB, and indirect loans through TKK (the Agricultural Credit Cooperatives). Table 2 shows the status of the sub-loans as of December 31, 1994.

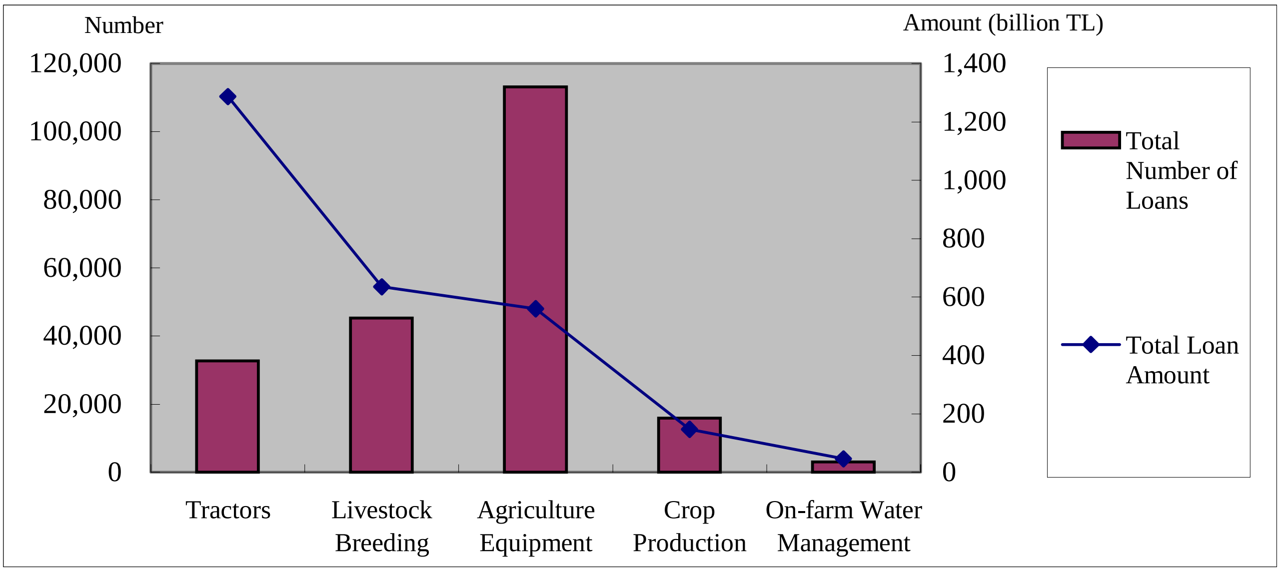
**Table 2 Status of Sub-loans Financed by TCZB, the World Bank and JBIC (1989 -1994)**

| | Farmers (direct investment) | TKK |
|---|---|---|
| Number of investment loans | 93,500 | 114,000 |
| Number of short-term loans (TCZB and the World Bank only) | 1.5 million | 560,000 |
| Average size of sub-projects | US$ 7,814 | US$1,780 |
| Average size of sub-loans | US$ 4,300 | US$ 938 |

Source: TCZB

Half of the borrowers used the loan for the purchase of agricultural equipment, while approximately 20% of the borrowers used the loan for livestock breeding. More than 50% of the loan amount was spent for tractors. Figure 1 shows the distribution of investment loans in number and value by type of investment from the beginning of the Project to December 1994. The maturity period for medium- to long-term sub-loans averaged 7 years for crop production and 5 years for livestock and mechanization.

**Figure 1 Distribution of Investment Loans in Numbers and Amount by Type of Investment (1989-1994)**




Source: TCZB

### *2.2.3 Interest Rates*

It was agreed in May 1989, between the World Bank, TCZB and the Government of Turkey, that the weighted average sub-loan interest rate would have to be positive in real terms by March 1990.

The Government's efforts to achieve macroeconomic balances and bring inflation under control were a prerequisite for the implementation of the Project. Although there was encouraging progress through the first half of 1990, the Gulf War led to the deterioration of the economic situation in the second half of 1990, and inflation persisted at high levels. The Government maintained that it was not possible to raise interest rates at a time when farmers were already hit by the consequences of inflation, and did not make fundamental changes in agricultural support policies. In contrast, the World Bank's position was that support policies were not sustainable and interest rates were not an appropriate vehicle for income distribution because inflation rates exceeded interest rates. As a consequence, further loans were cancelled (US$ 70 million remained undisbursed).

Although the World Bank had cancelled further loans, JBIC continued its loan by following reasons,

1) The objective of the Project was "to increase farm productivity and farmers' income through expanded access to agricultural credit and the financing of productive investments at the farm level through the scheme of the sub-loans" and its loan had contributed enough to above objective,
2) ODA Yen loan is based on bilateral cooperation between the government of Japan and Turkey, which is different from multilateral cooperation by World Bank,
3) Incorporating the impacts on low-income farmers, it was more important to have policy discussions with the government of Turkey to find solution to an adequate interest rate than just suspending the loan.

Table 3 shows the comparison between the weighted average of the interest rates on sub-loans and the weighted average of the inflation rates.

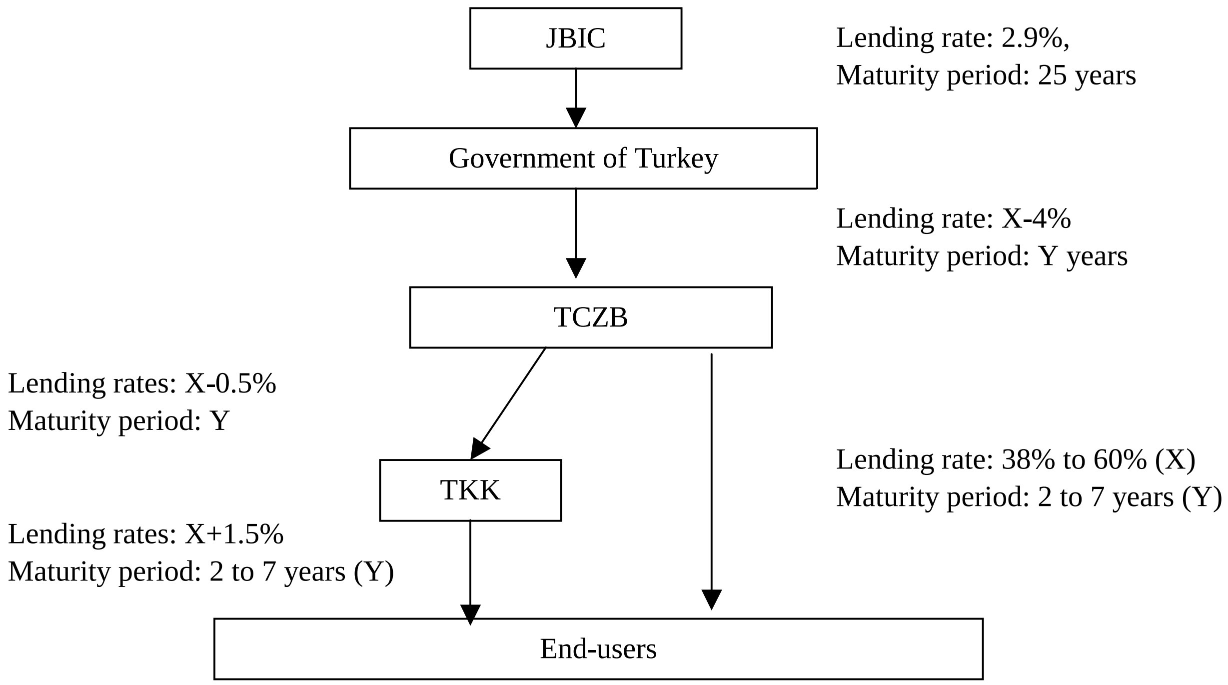
**Table 3 Interest rates and Inflation rates**

| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Weighted average of Interest rates on sub-loans | 41.6 | 41.5 | 41.1 | 40.6 | 39.9 | 39.6 | 38.7 | 46.3 | 65.4 | 60.2 | 59.6 | 45.6 |
| Weighted average of Inflation rates (Reference for the "positive rate") | 62.3 | 48.6 | 59.2 | 61.4 | 60.3 | 149.6 | 65.6 | 84.9 | 91.0 | 54.3 | 62.9 | 32.7 |

Source: TCZB

Figure 2 shows the relationships between JBIC, the Government, TCZB, TKK and end-users, in terms of interest rates and maturity period.

**Figure 2 Lending Scheme of the Two-Step Loan**




## 2.3 Effectiveness

The objective of the Project was to raise farmer incomes. In accordance with the Loan Agreement with JBIC, TCZB conducted a “loan effect survey” in the presence of JBIC staff in 1991, in which 100 farmers in 10 provinces were interviewed. However, since the interview survey failed to obtain data comparing farmer incomes before and after the sub-loan, the effect of sub-loans is not known. Therefore, another interview survey was conducted, as part of the present ex-post evaluation, with 23 individual farmers in five provinces (Afyon, Bursa, Edirne, Tokat and Eskisehir). The sample of the interviews was quite limited;[ the individual accounts of the original fund were already closed, while the current users of the revolving fund were quite difficult to identify because their accounts were not separated from others. The respondents were selected from among the group of farmers who had been interviewed in the above-mentioned loan effect survey in 1991, so that the long-term impact of the Project could be evaluated. Table 4 shows the average project costs and sales increases achieved.

**Table 4 Sales Increase Due to Investment**

| Type of Investment | Number of Projects** | Average Project Cost in 1991 | Average Annual Sales Increase Achieved (1991 prices) |
|---|---|---|---|
| Tractor | 7 | 49.0 million TL* | 11.3 million TL |
| Livestock breeding | 14 | 35.3 million TL | 47.1 million TL |

Source: JBIC Interview Survey July 2001

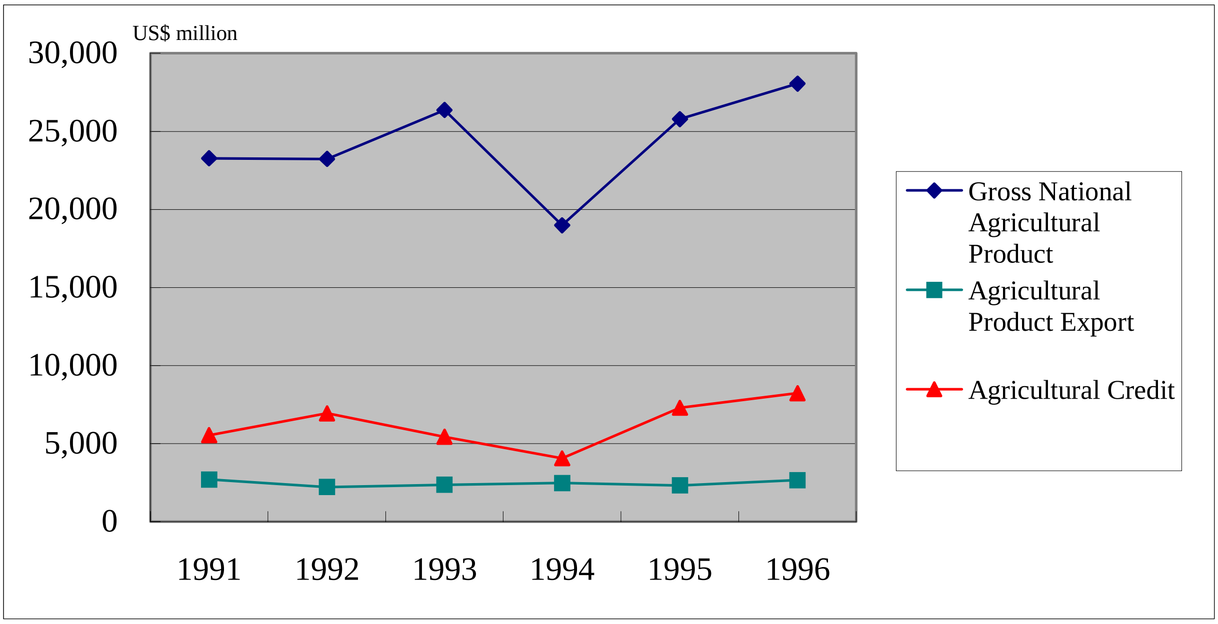
*Turkish Lira

**Two projects were excluded from the calculation because one end-user had his cattle stolen immediately after the purchase, and another end-user had his loan terminated for misuse of funds.

It was confirmed, through the interviews, that the farmers who used the loan to purchase a tractor achieved roughly a 20 to 25 percent increase in annual production volume. Since these farmers could not increase the size of their farmland (except for one farmer who bought the farmland that he had rented before the loan), the increase in production was achieved by the increase in productivity on the same farmland. All of the farmers that introduced or expanded livestock breeding with their loans increased their sales in real terms, except for the two projects that were excluded from the calculation. The profitability of the investments was modest; the recovery period of investment was, in real terms, typically 5 to 6 years for tractors, and 2 to 4 years for livestock breeding. However, it should be noted that since the interest rates were set much lower than the inflation rates, as shown in table 3, all investments were in fact subsidized and helped raise the profitability of sub-loans.

TCZB extends more than 90% of the agricultural credits in Turkey. Between 1991 and 1996, the total amount of TCZB's outstanding agricultural credits increased from US$ 5.5 million to US$ 8.2 million. During the same period, the value of agricultural production in Turkey increased from US$ 23 million to US$ 28 million. TCZB's agricultural credit is playing an important role in the increase in agricultural production in Turkey.

**Figure 3 Agricultural Production in Turkey and TCZB's Agricultural Credit**




Source: Ministry of Village Affairs & Agriculture, and TCZB

* The decrease in production value and credit in 1994 was mainly caused by over-valuation of TL against US dollar.

## 2.4 Impact

### 2.4.1 *Employment Generation*

Although the population engaged in the agricultural sector has been shrinking in Turkey, the Project achieved a modest increase in employment. Employment at the 23 farms scrutinized in JBIC Interview Survey July 2001 had increased 20% in the previous 10 years, from 90 to 117 workers. The increase in employment is mostly attributable to the farmers who introduced livestock breeding. Through investment in labor-intensive activities, the Project has contributed to an increase in job opportunities.

### 2.4.2 *Environmental and Social Impact*

The Project did not foresee any negative environmental or social impact at the appraisal. There has been no environmental or social impact reported by TCZB with regard to the Project.

## 2.5 Sustainability

### 2.5.1 *Sustainability of Sub-Projects*

Out of the 23 sub-projects interviewed in the present PEDAC survey, 21 sub-projects continued operation properly after receiving credit, as was discussed in Section 2.3. Among these 21 sub-projects, three farmers sold all or part of their livestock due to immediate cash needs and shift their focus on farming afterwards. The rest of the farmers have continued operations up to the present. Overall, the sub-projects are deemed sustainable.

### 2.5.2 *Sustainability of Executing Agencies*

TCZB's Institutional capacity was strengthened in the framework of the World Bank's Third Agricultural Credit Project. TCZB significantly improved its lending procedures and emerged with a well-qualified cadre of staff in its four agricultural credit departments. Improvement in the Management Information System came with the further computerization of branches. TCZB's personnel data system was upgraded to a more adequate computer-based status.

Table 5 shows the TCZB's financial position.

**Table 5 TCZB's Financial Position in 1998 and 1999 (million US$)**

| Financial Statement | 1998 | 1999 |
|---|---|---|
| Total Assets | 36,141 | 40,987 |
| Liquid Assets | 3,047 | 3,283 |
| Customer Deposits | 15,146 | 17,746 |
| Equity and Retained Earnings | 714 | 612 |
| Net Banking Product | 1,337 | 1,935 |
| Operating Expense | 1,240 | 1,723 |
| Net Income after Tax | 67 | 74 |
| | | |
| Loan Portfolio | 1998 | 1999 |
| Gross Loans | 5,768 | 5,728 |
| Overdue Loans | 292 | 325 |
| Overdue Loans / Gross Loans | 5.1% | 5.7% |
| Allowance for Probable Losses | 27 | 65 |
| | | |
| Indicators of Performance | 1998 | 1999 |
| Operating Expense / Net Banking Product | 93.7% | 89.0% |
| Return on Assets | 0.2% | 0.2% |
| Net Loans / Customer Deposits | 36.2% | 30.4% |
| Stockholder's Equity Ratio | 2.0% | 1.5% |

Source: TCZB Annual Reports

Although TCZB's overdue loan ratio is low, and the bank has recorded positive net incomes, its financial position is highly illiquid. There is an agreement between TCZB and the Government that stipulates that the latter must cover losses accrued by the negative spread between the deposit rates and the lending rates (called "duty losses"). However, actual compensation has not materialized, and "duty losses" in the assets of TCZB reached US$ 8 billion in December 2000, causing a significant loss in TCZB's liquidity. In the Letter of Intent submitted to the IMF in March 2001, the Government stated that TCZB would undergo financial and operational restructuring to ensure its future profitability. The governing board is also scheduled to formulate plans for the privatization of the bank. Its financial restructuring will entail the elimination of the remaining “duty losses”. The instruments used for this purpose are expected to be transferable government securities at market terms, in order to ensure that the bank has sufficient liquidity to operate and honor any deposit withdrawals.

Under the restructuring process, TCZB is working to reduce its operating costs. It has introduced market interest rates on its agricultural loans, in an effort to cut its reliance on government subsidies As of June 2001, TCZB’s interest rate for short-term credit was 118%, while that for long-term credit was 125%. Most of the farmers interviewed for the JBIC evaluation survey claimed that they were not able to borrow from TCZB at these high rates. It may take sometime for TCZB to successfully transform itself into an efficient and strong commercially based agricultural credit bank.

### 2.5.3 *Sustainability of the Two-Step Loan*

The recovery of sub-loans is moderate. The status of collection is known only for the period between 1994 and 1996, as shown in Table 6. During this period, the arrears ratios by number were 15 to 25%, while the arrears ratios by amount were 8 to 10%. Amounts that have not been recovered one year after due date are subject to legal action, with the possibility of foreclosure against collateral. Recovery against overdue amounts under legal follow-up for medium- and long-term loans was 52% in 1993.

**Table 6 Collection of Sub-loans (as of end of year)**

| | 1994 | 1995 | 1996 |
|---|---|---|---|
| Number of current sub-loans (a) | 856,023 | 833,105 | 867,879 |
| Number of non-performing sub-loans (b) | 216,638 | 132,263 | 130,913 |
| Arrears ratio by number (b)/(a) | 25% | 16% | 15% |
| Total amount outstanding (billion TL) (c) | 18,952 | 52,679 | 123,752 |
| Total arrears (billion TL) (d) | 1,950 | 2,711 | 10,387 |
| Arrears ratio by amount (d)/(c) | 10% | 5% | 8% |

Source: TCZB

### 2.5.3 *Special Account and the Revolving Fund*

The original two-step loan and its revolving fund have been controlled through a special account. Table 7 shows the status of the special account and the revolving fund. The entire amount deposited in the revolving fund has been used for sub-loans.

**Table 7 Status of Special Account and the Revolving Fund (billion TL)**

| | 1989-1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Opening Balance (a) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Disbursement from JBIC loan (b) | 274 | 131 | 287 | 520 | 740 | 1,501 | 443 | 10 | 0 | 0 | 0 |
| Principal received (c) | 44 | 57 | 170 | 307 | 480 | 731 | 1,011 | 1,121 | 904 | 770 | 636 |
| Total amount received (d)=(b)+(c) | 318 | 187 | 456 | 827 | 1,220 | 2,232 | 1,454 | 1,131 | 904 | 770 | 636 |
| Lending of sub-loans (e) | 318 | 187 | 456 | 827 | 1,141 | 1,938 | 1,071 | 738 | 510 | 376 | 242 |
| Repayment of JBIC loan (f) | 0 | 0 | 0 | 0 | 79 | 294 | 383 | 394 | 394 | 394 | 394 |
| Total amount paid (g)=(e)+(f) | 318 | 187 | 456 | 827 | 1,220 | 2,232 | 1,454 | 1,131 | 904 | 770 | 636 |
| Ending Balance (h)=(a)+(d)-(g) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: TCZB

## 3. Recommendations

The restructuring or privatization process of TCZB must be monitored continuously.

# Comparison of Original and Actual Scope

| Item | Original | Actual |
|---|---|---|
| **Project Scope** | Medium/long term investment credit for the purpose of farm mechanization, livestock and horticulture | Medium/long term investment credit for the purpose of farm mechanization, livestock and horticulture |
| **Implementation Schedule** | Dec.1989 to Dec.1993 | Dec. 1989 to Jan. 1997 |
| **Project Cost** | | |
| Foreign Currency | US$ 564.1 million | US$ 571.2 million |
| Domestic Currency | US$ 643.5 million. | US$ 522.0 million. |
| Total | US$ 1,207.6 million | US$ 1,093.2 million |
| ODA Loan Portion | 35,200 million yen | 35,200 million yen |
| Exchange Rate | US$ 1 = 140.80 yen (Oct. 1998) | US$ 1 = 127.90 yen (weighted average between 1989 and 1997) |