

Latin America Brazil

# Jaiba Irrigation Project II





Contributing to increase agricultural production and regional economic development by building irrigation facilities

## [External evaluator]

Kenji Momota, IC Net Limited

Rating		
Effectiveness, Impact	а	
Relevance	a	Overall rating
Efficiency	С	В
Sustainability	a	

### **Project Objectives**

To construct agricultural facilities and provide financing to farmers and agricultural cooperatives in Jaiba, Minas Gerais State, as Phase II of the Jaiba Irrigation Project, in order to expand the irrigation area and to improve agricultural production and productivity, thereby contributing to enhancement of the socioeconomic status of Minas Gerais State.

#### **Outline of the Loan Agreement**

- Loan amount / disbursed amount: 14,740 million yen / 14,282 million yen
- Loan agreement: September 1991
- ■Terms and conditions: 4.0% interest rate; 25-year repayment period (including a 7-year grace period); general untied
- Final disbursement date: September 2005
- Executing agency: Minas Gerais State Government (Planning and General Coordination State Secretariat [SEPLAG]; State Secretariat of Agriculture, Livestock and Supply [SEAPA]; Minas Gerais Electricity Center [CEMIG]; State Development Bank of Minas Gerais State [BDMG]
- Website URL: https://www.mg.gov.br/

# Effects of Project Implementation (Effectiveness, Impact)

The irrigated area in the Jaiba II district totals about 19,200 ha, almost achieving the planned figure of 20,000 ha. The utilization rate of this district was about 36% by April 2008, less than two years since the irrigation infrastructure went into full operation. This rate, however, is expected to rise substantially in a few years as all lots have already been sold out. The development of the Jaiba II district has been led by large-scale farmers and enterprises. It is expected that sugar cane, a raw material for bio-ethanol, production will exceed 60% of total agricultural production in this district.

Irrigation projects have had a substantial impact on the regional economy and this project is no exception. Such projects have therefore been playing a pivotal role in the regional economy. For example, the Gross Regional Domestic Product (GRDP) of Minas Gerais State has been steadily on the rise. In addition, the involvement of large-scale farmers has created many employment opportunities.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

## Relevance

This project has been highly relevant with Brazil's national policies and development needs at the times of both appraisal and ex-post evaluation. Northeast Brazil, including the northern part of Minas Gerais State, occupies about 20% of agricultural production in the country, underlying the significance of the project. The project originally expected migration of small and medium-sized farmers with farms of 5 to 25 ha. Actually, however, large-scale farmers with hundreds of hectares of farmland occupy the majority of lands. This shift was an appropriate since it was aimed at coping with changes in the project environment, such as the increase of demand for large-scale intensive by rising production costs.

#### Efficiency

This project took longer than planned (160% of planned period) and cost exceeded the plan in proportion to the outputs; therefore the evaluation for efficiency is low. The project was delayed for two major reasons. First, it took more than three years to obtain environmental approval as environment-related regulation in Brazil got stricter. Second, additional construction work was required, including the construction of a trunk road.

# Sustainability

No major problems have been observed in the capacity of the executing agency, nor its operation and maintenance (O&M) system; therefore, sustainability of this project is high. Since the water fees are still under negotiation, the state government is bearing the costs for its O&M. In the long term, there is expected to be no major problems with the technical and financial aspects.

## **Conclusion, Lessons Learned, Recommendations**

In light of the above, this project is evaluated to be satisfactory. The evaluator proposes two major recommendations. First, to enhance the productivity of the entire area including Jaiba 1 district which is in difficulty in developing its productivity, it is necessary to transfer the technology and experience of large-scale farmers and enterprises to small and medium farmers within the Jaiba 2 district. Second, it is advisable to improve operation efficiency by harmonizing O&M rules and even consolidating the O&M system for Jaiba I and II districts. Currently, Jaiba I district is managed by the Federal Government and Jaiba II district by the State Government.



Harvesting at a banana plantation