



India

40 Upper Kolab Irrigation Project

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This project's objectives were designed to increase agricultural production and improve productivity by constructing irrigation facilities in Orissa State, where agriculture's reliance on rainwater results in unstable harvests and low productivity, and thereby contribute to the alleviation of poverty by raising the incomes of the scheduled castes* and scheduled tribes who suffer social discrimination and extreme poverty, together with raising the state's food self-sufficiency rate.

*People positioned outside the caste system that includes Brahmins, etc.

Loan Amount/Disbursed Amount: 3,769 million yen/3,114 million yen

Loan Agreement: December 1988

Terms and Conditions: Interest rate, 2.5%; Repayment period, 30 years (grace period, 10 years); Partially untied

Final Disbursement Date: July 1998

External Evaluator: Ayako Namura (IC Net Limited)

Field Survey: July 2003



Evaluation Result

In this project, the procurement of materials and equipment and the engineering works including the main canal were carried out almost as planned. The project period was extended considerably beyond the planned period due to the time required to acquire land for the canal construction. However, the project cost was less than planned because the devaluation of local currency exceeded the rate of inflation. Due to the installation of irrigation facilities, the planted acreage during the wet season of Fiscal Year 1998 was 12,718 ha, an increase of approximately 20% compared to prior to the project. During the dry season, the planted acreage was 5,312 ha, approximately 3 times the amount prior to the project, and diversification of crops is also progressing. Agricultural yield during the dry season increased by approximately 3 times compared to prior to the project. However, the planted acreage is approximately half of the amount planned, and the amount of rice produced is approximately 20% short of the amount planned. The number of beneficiary families reached approximately 24,000 households in Fiscal Year 1998. Farm family income is increasing gradually but is still at only 66% of the planned level. Meanwhile, the state has attained 100% rice self-sufficiency, and even people who do not own land have more opportunities to find employment as farm laborers since the start of irrigation. The executing agency, the Department of Water Resources, Government of Orissa, is presently working on strengthening the irrigation

associations, on the basis of the suggestion of the JBIC study. There are no problems in the technical capacity, operation and maintenance system, or financial condition of the executing agency or the irrigation associations. A lesson learned from this project is that, in order to promote operation and management of the project by the beneficiaries, first a study should be made of the social and economic conditions and the actual problems should be clarified, and then an action plan that clearly states the roles of related parties should be drafted in the early stages. Also, it would be desirable to transfer management authority to the irrigation associations at an early stage.

Third-Party Evaluator's Opinion

Sustainability of a project is conditioned by the capability - both economic and social - of its users in maintaining the assets and thus calls for a sound system for their operation and management. Relevant institutional mechanisms are necessary to ensure the sustainability of the assets generated. Over a longer term perspective, strategies aimed at steady supply of other complementary inputs like credit, fertilizers, extension services, etc., and adjoining forests are necessary to ensure a higher rate of return.

Third-Party Evaluator: Mr. Milindo Chakrabarti

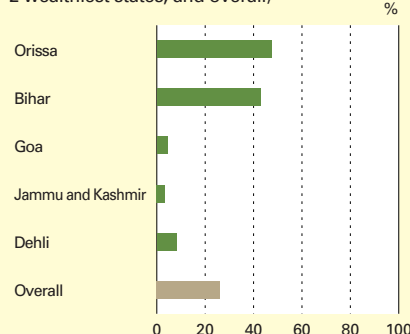
Obtained a doctorate in economics from University of North Bengal. Presently holds the post of Professor, Department of Economics, St. Joseph's College. Specializes in rural development, political economy, etc.

Orissa State, site of the project



Poverty ratio in India

(figures for Delhi, 2 poorest states, 2 wealthiest states, and overall)



Source: Planning Commission, Government of India (2000)

India, which is composed of 25 states and 7 union territories, is a country where the natural conditions as well as the social and economic conditions vary enormously by region. In Orissa State, where this project was implemented, approximately 47% of the population is poor, which is a high figure compared to other Indian states and to the overall figure for India. Moreover, while the amount of rainfall varies from one extreme to the other in India, Orissa State in particular is often subject to drought damage, and agriculture harvests are unstable. This means that there is a strong need for irrigation projects in this state. Among the eight irrigation, flood control, and land drainage reclamation projects that JBIC supports in India (total loan amount of approx. 55,700 million yen), four of these projects are located in Orissa State.