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Sanjiang Plain Longtouqiao Reservoir Construction Project

Contributing to the improvement of farmers' living standards through flood control and a stable water supply

Loan Amount/Disbursed Amount 3,000 billion yen/3,000 billion yen
Loan Agreement December 1996
Terms & Conditions Interest rate 2.3%, Repayment period 30 year (grace period 10 years), General untied
Final Disbursement Date October 2002
Executing Agency Heilongjiang Province Ministry of Water Use



Project Objectives

The objective of this project was to ensure a stable water supply for the farmland area located downstream of Naolihe River in Baoqing Prefecture, Heilongjiang Province, to improve the level of flood-control capabilities from a 10-year probability to a 20-year probability, and to implement electric power generation and fish raising operations by constructing a multipurpose reservoir, with a total pondage of 472,000,000m³, in the Naolihe River and thereby contribute to increasing food production in the area, the improvement of farmers' earnings and living standards, and the development of the regional economy.

Effectiveness & Impact

Rating **b**

The construction of a multipurpose reservoir through this project achieved a level of flood control capabilities almost as planned—that is, a twenty-year probability level. On the other hand, the project's effect was insufficient in terms of providing a stable water supply for the farmland area located downstream: in 2005, the volume of water supplied was 164,000,000m³ and the area of land benefiting from irrigation was 5,333ha compared to planned goals for 2005 of 213,000,000m³ of supplied water and 28,733ha of land benefiting from irrigation. This was due to the fact that water could not be supplied to the initially planned area for irrigation because of delays with a separate project, the Downstream Area Irrigation Facilities Improvement Project. Therefore, this project has brought certain effects, and its effectiveness is moderate.

Relevance

Rating **a**

This project has been highly relevant with the China's national policy both at the time of the appraisal and at the time of the ex-post evaluation. At the time of appraisal, China's ninth five-year plan emphasized the importance of increasing food production by concentrating heavily on flood control and the development of agricultural infrastructure. At the time of ex-post evaluation, the 10th five-year plan placed the stabilization of food production capacity through the improvement of water facilities and other means as a

top-priority issue. With its objective of providing a stable supply of water to the farmland area located downstream of Naolihe River through flood control and irrigation facilities, this project was highly relevant.

Efficiency

Rating **b**

Although the project cost was kept almost as planned, the project timeframe turned out to be longer than planned (143% of planned time). Therefore, the evaluation for efficiency project is moderate. The main factor behind the project delays was the time needed until the start of construction due to delays in receiving basic design approval and in effectuation of the loan. However, there were no extensions in the construction schedule itself.

Sustainability

Rating **a**

Although some concern remains regarding the delay in progress of the Downstream Area Irrigation Facilities Project, with no problems in terms of technical capacity, structural organization, financial status, or operation and maintenance, sustainability of this project is high.

Conclusion, Lessons Learned, Recommendation

In light of the above, this project is evaluated to be satisfactory. Although this project was completed almost as planned, some of the project's facilities are not being effectively utilized because the Downstream Area Irrigation Facilities Project, which was being conducted simultaneously with this project by the Chinese Government, has not been completed. This project and the Downstream Area Irrigation Facilities Project should have been coordinated in order to realize a stable supply of water to the downstream farmland area through irrigation, which was one of the objectives of this project. Furthermore, it is hoped that monitoring will continue, since there is concern regarding the effect of the reservoir's operation on the downstream swamp and its ecosystem.

Third-Party Opinion

This project had an impact on raising the safety and standard of living of farmers. It also implemented appropriate resident relocation. In future, people hope to see the completion of an irrigation project planned by the Chinese Government as well as consideration for the swamp ecosystem that occupies part of the area affected by this project.

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Waterways for power generation (left) and irrigation (right).