



## The Philippines

# 14 Pampanga Delta Development Project, Flood Control Component (1)

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This project's objective was to enhance flood controls on the lower basins of the Pampanga River in Central Luzon, an area prone to perennial flooding, by implementing river improvement works, thereby contributing to improvements in living standards and to regional economic growth.

**Loan Amount/Disbursed Amount:** 8,634 million yen/7,537 million yen

**Loan Agreement:** February 1990

**Terms and Conditions:** Interest rate 2.7%; Repayment period 30 years (grace period 10 years); General untied (consultant's agreement: partial untied)

**Final Disbursement Date:** December 2001

**Executing Agency:** Pampanga River Control System (PRCS) of Department of Public Works and Highways (DPWH)



**External Evaluator:** Taro Tsubogo (KRI International Corp.)

**Field Survey:** November 2004

## Evaluation Result

In this project, river improvement works (dike construction, sluice gates, etc.) were planned. However, because of a shortage of funds caused by the bid price for civil engineering works exceeding estimations, and the difficulty of land acquisition, the length dikes had to be cut back to 60% of the original plan. The project period was much longer than planned due to the shortage of counterpart funding, dredger accidents, delays in land acquisition, etc.

In the section of the river covered by the project, certain effects have been achieved as dike breakage and overflow are being prevented. However, on the left bank in particular, flood damage has been caused by inundation from the area without new dikes, even after completion of the project.

The majority of residents (80% on the right bank and 75% on the left bank) of the area where new dikes were constructed along the Pampanga River stated that "concerns about flooding have abated since the project was completed". With the decrease in flood damage, improvement in livelihood activities, including increased aquaculture production, has been achieved, and with the development of dike roads, access to cities and municipalities has also improved.

There is no problem with technical capacity and operation and maintenance system of Pampanga River Control System (PRCS). Regarding finances, the operation and maintenance budget was slashed in 2004.

One of the lessons learned from this project is that, had the budget been secured for the resettlement program at an early stage and preparation of the resettlement site been timed to coincide with eviction orders, these measures might have helped to build consensus among relocated residents and have facilitated the eviction process. It is advisable to properly hold explanatory meetings and public hearings when launching the subsequent phase of the project.

## Third-Party Evaluator's Opinion

This project greatly contributed to the mitigation of flood damage and benefits not only residents in the beneficiary areas but also approximately 10 million people of Metro Manila through stable food supply from those areas.

**Third-Party Evaluator:** Ms. Lydia P. Sarmiento-Enrile (private company)

Obtained a bachelor's degree in social activities from Maryknoll College. Presently holds the posts of Chair of Sarmiento Foundation, Inc. and Vice President of the League of Corporate Foundations. Specializes in small-scale loan programs, etc.

### Effect of the project: reduction in flood damage

The project covered an area of 100km<sup>2</sup> and benefited approximately 70,000 people (almost equal to the population of Kunitachi City, Tokyo). Many residents have experienced flooding since completion of the project, but the frequency of flooding is on the decrease. Results from the beneficiary survey show that 69% of residents living on the left bank and 78% of residents living on the right bank have recognized a decrease in the frequency of flooding from pre-project levels.

### Changes in frequency of flood damage (post-completion)

