

Targets, Strategies, Good Practices, Achievements and Challenges in Reducing Pollution in the Pasig River

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The Pasig River is one of the major rivers and most important natural waterways in the Philippines. Located at the heart of the nation's capital the 27-kilometer river serves as the only link between Manila Bay and Laguna de Bai. The Pasig River also has four major and 43 minor tributaries which are directly and continuously discharging polluted water into it. These tributaries, including the Laguna de Bai had significantly caused the degradation of the water quality of the Pasig River and Manila Bay.

Recognizing its role in the socio-cultural formation and economic progress of the Philippines and the preservation of Manila Bay the Philippine government made the rehabilitation of Pasig River a flagship program for the environment. In the 1990s, the Philippine Department of Environment and Natural Resources (DENR), through the technical assistance provided by the Danish International Development Agency (DANIDA) implemented the Pasig River Rehabilitation Program (PRRP). The PRRP is a 15-year multi-project and multi-sector program which specifically aims to upgrade the water quality of the river to Class C level and improve the general condition of its riverbanks including its inhabitants.

From 2000 to 2008, the Pasig River Rehabilitation Commission (PRRC), through the Asian Development Bank (ADB)-funded Pasig River Environmental Management and Rehabilitation Sector Development Program (PAREMAR-SDP), was able to reduce dumping of garbage and discharging of industrial waste into the river; remove sunken and overstaying derelicts; resettle informal settlers to decent and socialized housing units; develop the riverbanks into environmental preservation areas (EPAs); revive the commercial ferry; continuously monitor the water quality of the river; and create public awareness.



Although these interventions have improved the condition of the riverbanks and its inhabitants and reduced the solid waste pollution loadings of the Pasig River from 10 percent in the 1990s to 5 percent in 2000 and industrial waste pollution from 45 percent to 35 percent, which resulted in the increase in the river's biodiversity, it nevertheless failed to address the domestic waste pollution loadings of the river which swelled from 45 percent to 60 percent due to the fact that more than 90 percent of the households in the metropolis are not connected to a proper sanitation facility. To significantly reduce domestic pollution in the Pasig River and its tributaries the Philippine government is now faced with the challenge to urge its private water concessionaires to fast-track the construction of sewerage facilities and cover 100 percent of Metro Manila's population by 2016.

In 2009, a year after Philippine President Gloria Macapagal-Arroyo issued Executive Order 717 declaring the Pasig River Dredging and Rehabilitation Works a Presidential Priority Project, the PRRC, through the Belgian Supersubsidy Facility, initiated the Pasig River Dredging Project, which will cover the 19 kilometer stretch of the river from the mouth of Manila Bay to the Napindan Hydraulic Flood Control Gate near the mouth of Marikina River and will remove an estimated 2.8 million cubic meters of contaminated riverbed sediments. This will deepen and widen the river and improve navigation; increase its hydraulic capacity and consequently minimize flooding in Metro Manila.

On the other hand, the initial phase of the program focused solely in the rehabilitation of the main river. At present, while rehabilitation of the Pasig River is on-going the Philippine government is looking into the rehabilitation of its tributaries given that the continuous degradation of these waterways severely affects the water quality of the Pasig River.

Initially, the PRRC, under Philippine government funds, has installed garbage traps and aeration and filtration facilities in key tributaries to mitigate further contamination of the Pasig River. The PRRC also created the Pasig River Environmental Aide to regularly patrol the Pasig River and its tributaries to prevent the squatting and returning of informal settlers; haul garbage from the creeks and estuaries; and report violations in the Pasig River. PRRC is also conducting pilot bioremediation and phytoremediation projects. If proven effective these interventions will be implemented to complement the dredging of the Pasig River.

Further intervention in the tributaries will be studied by PRRC in close coordination with its partner national and local government agencies and other stakeholders.