

**IPO DAM SILT CURTAINS
NORZAGARAY, BULACAN, REGION III, PHILIPPINES**

Silt Fence

Problem

The Ipo Dam, a gravity dam situated approximately 7.5km downstream from the Angat Dam near the confluence of the Ipo River in Bulacan province, plays a vital role in the water supply system of Metro Manila. It not only serves as a major water source for the metropolitan area but also contributes to the preservation of biodiversity in the municipality of Norzagaray and the wider Bulacan Province.

However, due to its close proximity to urban centers, the Ipo Dam has gradually suffered from degradation. Presently, nearly 70% of the dam's expansive 6,600-hectare coverage has been stripped of its natural vegetation, resulting in severe denudation. Informal settlers who have occupied the watershed area have converted substantial forested regions into farmlands. This rampant conversion has had detrimental effects on the ecosystem, including excessive soil erosion, heightened run-off, and siltation of the lake reservoir. Consequently, these issues compromise the water quality within the dam.

Solution

To address the degradation of the Ipo Dam and mitigate the adverse effects of soil erosion and water contamination, various long-term solutions are being implemented. Local Government Units (LGUs) and several Non-Government Organizations (NGOs) are actively involved in reforestation efforts within the dam's watershed area.

In the interim, measures are being taken to mitigate the immediate impact of heavy precipitation and surface run-off on the dam's water quality. Maccaferri MacFence (silt curtains), which act as barriers, are being deployed to contain silt particles carried by run-off during periods of intense rainfall. By effectively trapping the sediments, these curtains prevent silt from contaminating the water and causing disruptions in the water supply.

These interim measures provide a temporary solution while the long-term reforestation efforts take effect. They help maintain the water quality within the dam, ensuring a continuous and clean water supply to the metropolitan area.

Client: Aquatrade and Industrial Development Corporation

Designer / Consultant: China International Water & Electric Corp.

Contractor: Aquatrade and Industrial Development Corp

Products used (Qty.)

Date of construction: 01/2023 - 05/2023



During Construction



During Construction



Completed



Completed