

**SINDANGHEULA DAM
SERANG, BANTEN, INDONESIA**

Slope Protection

Problem

Sindangheula Dam Project is located in Serang, Banten, Indonesia. The dam with a capacity of 9.26 million m3 is a National Strategic Project (PSN) which was built to anticipate the increasing demand for domestic and industrial raw water in Serang District, Serang City and Cilegon City by supplying 800 liters / second raw water.

The surrounding slopes around the dam need to be protected from potential erosion. The slope which has the sandy-clay type of soil required protection from erosion created by rain and surface water flow. The selection of the right solution is necessary in order to prevent failure by the presence of water. Erosion Control Solution by Maccaferri Indonesia was selected considering its ability to allow surface seepage and to grow vegetation (LCC - Legume Cover Crop).

Solution

An Erosion Control System made of a combination between HDPE geomat and double-twisted wire mesh panel with longitudinal high tensile strength steel cables called Macmat HS was installed on the slopes. An array of mulching contained of seeds was then applied onto the Macmat HS to bring vegetation. The vegetation shall bring nature back as rehabilitation. Available in rolls, Macmat HS has an easy installation procedure with the support of a T-shape deformed bar to hold the mesh onto the cut slope. Maccaferri Erosion Control System shall grant some advantages such as Easy and Quick Installation; Allows drainage on the surface of the slope; Allows vegetation as rehabilitation; Capable for combination with Soil Nailing; Suitable for steep slopes.

Client: BBWS CIJUNG CIDURIAN

Designer / Consultant: PT. TRI TUNGGAL PRATYAKSA

Contractor: PT PP - PT HUTAMA KARYA (CONSORTIUM)

Products used (Qty.)

- MacMat HS 6000 m2

Date of construction: 12/2018 - 03/2019



Slope Condition before Macmat Installation



Macmat HS + Vegetation Installed



Lush Grown Vegetation



Lush Grown Vegetation