

WORD OF LIFE PHILIPPINES
CALAUAN, LAGUNA, REGION IV-A, PHILIPPINES**Slope Protection****Problem**

Word of Life Philippines (WOLP) is a part of Word of Life International, a non-denominational Christian organization based in the United States. WOLP has called for assistance on the pending slope erosion problem in their Laguna Camp, which is a 14-ha camp ideal for youth camping, church, and mission retreats and conferences. The camp's canteen is located just less than five meters away from a slope adjacent to a creek. Local government authorities have called the attention of the camp's management to find the soonest slope protection solution.

A visit to the site was first conducted by Maccaferri engineers in March 2015. Although the subject slope portion was densely vegetated, a closer inspection showed that its top portion has signs of erosion and tension cracks started appearing. Upon further investigation, it can be noted that the absence of a proper drainage system for surface runoff was the main culprit.

Solution

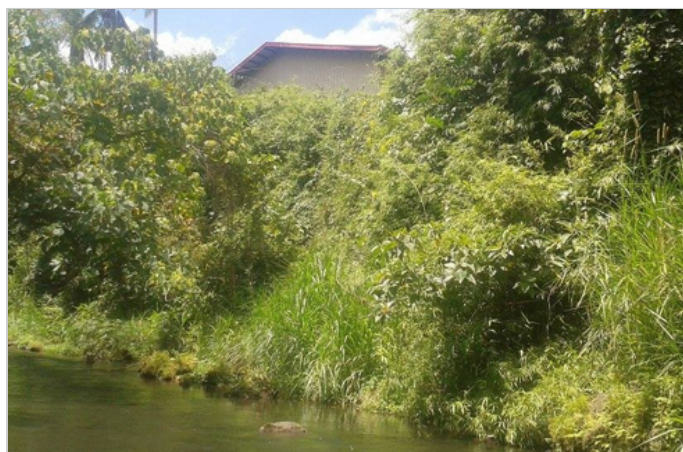
Considering the height of flood water in the river as well as the soil properties of the slope, an efficient and cheap erosion control system using a combination of Maccaferri gabions as toe wall and MacMat R geoblanket was recommended.

The existing slope has been trimmed of unnecessary vegetation, and filling of soils to relax slope angle was recommended on some portions. Also, this time, an interceptor canal was required on top of the slope for drainage and anchorage of MacMat R.

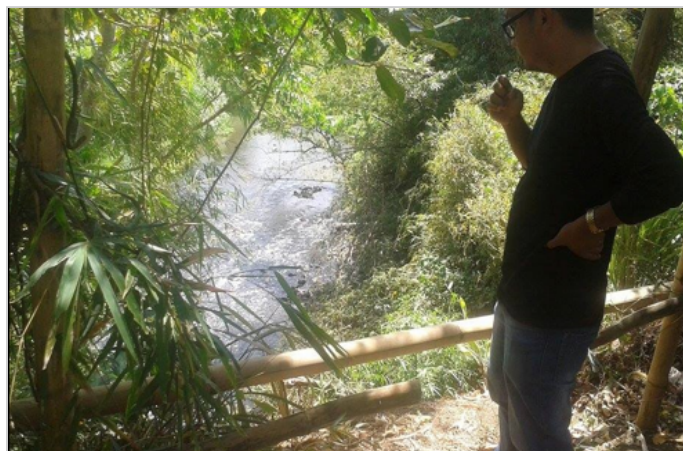
Besides its constructability and being a cheap alternative to other erosion control systems, the distinct advantages of MacMat R include: 1) its ability to be fitted to slope geometry requirements because of its size and flexibility, 2) its ability to promote vegetation in the slope due to its moisture-retention capability during the dry season, and 3) superior durability while allowing local vegetation to grow.

Client: Word of Life Philippines**Designer / Consultant:** Maccaferri**Contractor:** World of Life, Philippines**Products used (Qty.)**

- MacMat R - Steel	N/A
- Gabion	N/A
- MacTex Non-woven Geotextile	N/A

Date of construction: 01/2016 - 05/2016

March 2015 - Existing Condition



January 2016- Existing Condition Before Construction



June 2016 - Complete Installation of MacMat R for Erosion Control



June 2016 - Complete Installation of Gabions as Toe Wall



Completed Project