

# **KAJIAN PENGELOLAAN SEDIMEN ALIRAN DEBRIS DI KALI GENDOL CANGKRINGAN SLEMAN YOGYAKARTA**

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## **ABSTRACT**

Mount Merapi is the active mount and often emerges eruption. Its lava stream is very dangerous for resident whose live on this inhabiting area around the slope of the mountain. Every eruption releases millions metercubic of lava, surger, dust, sand, and also the larger ones. The hot sprayed out material usually fall on resident 's settlement that caused detriment of material and immaterial. After the eruption, piroclastick hoard surrounded the slope of mountain, hill, and also the river path. When the accumulation of piroclastick hoard and rain water occured, caused soil erosion or landslide on this area and also large debris flown. Kali Gendol is one of the rivers which it 's reso urce from Mount Merapi and will possibly receive the debris flown from the sediment source which located on it.

This research studied the sediment level which descend in one year on 2006 and possibly fall on to sediment area. The primary data got from interviews about the eruption, mining and profile picture of Kali Gendol. Whereas secondary data got from the result of Kali Gendol profile data analyzed that configured on digitation of topography map and piroclastick hoard at present got from interviews and December 6 th 2006 Kompas daily newspaper, internet, hidrology data, and mining result data.

From this analyzed result, the level of descend sediment is 1.563.238 metercubic each year. Whereas the capacity of the sediment holder building is 2.800.000 metercubic. The mined sediment is 704.450 metercubic each year and the maximum sediment mining that allowed is 2.229.294 meter cubic. Acording to this result, if the sediment in Kali Gendol is mined in one year, its still left about 858.833 metercubic.

**Keywords :** *management of sediment, debris flow, Kali Gendol.*