KAJIAN KEDALAMAN ANGKUTAN SEDIMEN
DI SUNGAI TANGGIK PASCA LETUSAN G. RINJANI LOMBOK

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ABSTRACT

River Tanggik is one of the rivers which originates at Lake Sugarcane at Mount Rinjani. The flood disaster at River Tanggik in November 1994 was caused by lava sediment of volcanic dust resulted from the eruption of Mount Rinjani, that was brought along by the rainfall into the river. As a result, the flood formed sedimentation on the river channels. This caused the river to be shallower and narrower in some river joints. The river was no longer capable to flow the flood discharge. So, when there is huge flood, there would be water abundance which inundated housing and agriculture along the river.

This study is aimed at analyzing the sediment transport volume which is brought along by flood. The analysis of sediment transport in this study is done by using MPM and Frijlink equations, based on a five-year-period flood discharge.

The result of sediment transport analysis shows that Frijlink equation gives the most approximate figure to the actual condition. The maximum transport is 989.40 m^3, which gives 38 cm sedimentation in average. The sediment makes the river channel shallower and narrower, and thus causes the river no longer capable to flow the flood. To anticipate the flood abundance, it needs the effort such as adding the height of dikes, mainly on the right side of the dikes ? 1.5 m higher on river upstream of Weir Kukusan as long as ? 200 m, and ? 2 m higher on the reach between Weir Tegaron and Weir Larung as long as ? 2.000 m, and the other dikes both on the right and left sides 2.5-3 m higher between Weir Larung and Komalasari beach as long as 2.700 m.

Key words : River, sedimentation, sediment, control.