

Characteristics Morphometry Some Watershed Sub Cimanuk Of Upstream And Implications For Erosion And Surrounding Region Garut, West Java

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SUMMARY

Cimanuk watershed included in Sumedang, Majalengka, and Garut Districts, precisely at 107°42'0"E to 108°12'0" E and 6°43'12" S to 7°25'48"S. Geologically, Variety of morphometric characteristic because of ongoing tectonic condition can become geological disaster threat in study area and it is ought to be studied. The aim of this research is to reveal the relationship between drainage density and erosion rate in the study area.

Several methodologies that used in this research are desk work, field work, and laboratory work. Desk works is a preparation stages consist of literature study, determining the location of the research, preparation of tools and materials, and plan the field work. Field works consist of plotting the observation location on the base map, rocks and soils description, rocks and soils sampling, and measurements of the river flow. Laboratory works consist of sampling analysis, grain size analysis, and soil mechanic analysis.

Morphometric characteristics of Cimanuk watershed show the variety of erosion potential start from the lower rate to medium rate. It indicates the erosion value belongs to class I and III. The other factors that influence process of erosion is rainfall. The higher the intensity of the rainfall and the longer it takes, the erosion will be grater. Some of the land in the study area experienced the moderate erosion that it requires special attention in the form of effort to control the erosion such as land conservation and land productivity, and etc.

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