

# Geological Chacacteristis Analysis of Cimanuk Watershed Towards Flood Disaster Mitigation

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## SUMMARY

The study area is located in Upper Cimanuk Watershed, Garut and Bandung Regency, Wes Java Province. This watershed was the second biggest river in West Java Province. Regional Physiography of this watershed included in several zones and formations. These things make the environmental mitigation need some method to make it balance. So the aim of this study is to know the detailed of geological condition of Upper Cimanuk Watershed to know how to treat the environmental.

The methodologies of this research are desk study, field work, and laboratory work. Desk study consists of literature review, topographic analysis, and Digital Elevation Model (DEM) analysis. Field work consists of geological mapping, outcrop analysis, geological structure analysis, petrology analysis, measured section, and rock sampling. Laboratory work consists of petrography analysis and morphometric analysis.

Cimanuk Watershed area has the characteristics of different rock. Based on lithological Cimanuk watershed area belongs based on lithology and stratigraphy, Cimanuk Watershed belonging Twenty-eight formation of and dominated by volcanic rocks. This various formation of in the region affects the stability of different environments in a particular place. thus we must be aware of these conditions to prevent disasters such as floods and landslides in the region of watershed Cimanuk