

Research Needs and Applications to Reduce Erosion and Sedimentation in Tropical Steeplands (Proceedings of the Fiji Symposium, June 1990): IAHS-AISH Publ. No.192, 1990.

A method of sediment control in Putih catchment

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Putih River is one of the rivers flowing from the slope of Kelud volcano. The volcano has erupted an average of once every 15 years since the year 1000. The latest eruption was in 1966. About $14.2 \times 10^6 \text{ m}^3$ of loose sediment material has been deposited along the river course. Without erosion control works, during the rainy season, this sediment could flow rapidly as debris flows and would destroy important facilities, such as roads, irrigation intakes, houses, and so on. Based on concern about the topography, type of sediment flow, socio-economic condition, and interval of eruption, a method of sediment control was established. The objective was to stabilize the sediment material in upstream areas as much as possible by means of sabo dams, step dams, and sand-pockets, and by modifying the downstream channel so that sediment could be regularly flushed out of the catchment. Using these methods, a long-term sediment control project has been implemented since 1969.

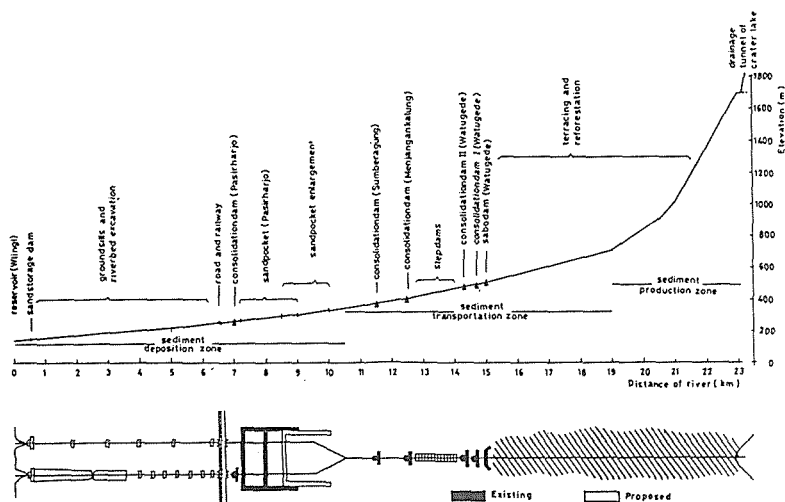


FIG.1 Sediment control facilities along the river.