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Erodibility Analysis of Cikapundung Hulu: A Study Case of Mekarwangi Catchment Area

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Abstract : The aim of the research was to investigate the effect of land use and slope steepness on soil erodibility index. The research was conducted from September to December 2013 in Mekarwangi catchment area, sub watershed of Cikapundung Hulu, Indonesia. The study was carried out using descriptive method. Physiographic free survey method was used as survey method, it was a survey based on land physiographic appearance. Soil sampling was carried out into transect on the similarity of slope without calculating the range between points of observation. Soil samples were carried onto three classes of land use such as: forest, plantation and dry cultivation area. Each land use consists of three slope classes such as: 8-15%, 16-25%, and 26-40% class. Five samples of soil were taken from each of them, resulting 45 points of observation. The result of the research showed that type of land use and slope classes gave different effect on soil erodibility. The highest C-organic and permeability was found on forest with slope 16-25%. Slope of 8-15% with forest land use give the lowest effect on soil erodibility.

Keywords : land use, slope, erodibility, erosion
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