

ABSTRAK

KAJIAN TINGKAT BAHAYA EROSI PERMUKAAN DI SUB DAERAH ALIRAN SUNGAI CIROMPANG

Oleh :
Solehudin (1103286)

Sungai Cirompang mengairi area irigasi teknis seluas 1.135 ha di kecamatan Mekarmukti dan Bungbulang dengan produksi \pm 13.620 ton/tahun. Energi listrik yang akan dan sedang dibangun di sungai ini berkapasitas 16 MW dengan total investasi > 300 milyar. Pada saat yang bersamaan ekosistem DAS ini mengalami kerusakan, kondisi tersebut terlihat dari perbedaan Q_{maks} dan Q_{min} yang sangat jauh, serta intensitas banjir bandang yang semakin sering.

Tujuan penelitian adalah menganalisis karakteristik fisik lahan, tingkat bahaya erosi serta upaya penanggulangan, sementara metode penelitian berpedoman pada rumus USLE. Pengambilan sampel didasarkan pada peta satuan lahan, peta satuan lahan tersebut dibuat dengan overlay peta jenis tanah, penggunaan lahan dan kemiringan lereng.

Sebagian besar sub DAS Cirompang memiliki kelas kemiringan lereng III – V, curah hujan berkisar antara 2500 – 3250 mm/tahun. Regosol dan Podzolik merupakan jenis tanah yang terdapat di sub DAS ini, sementara penggunaan lahannya didominasi oleh hutan dan persawahan. Tingkat bahaya erosi di sub DAS Cirompang didominasi oleh kelas sangat berat sebesar 72,61% kemudian oleh kelas ringan 13,4%, sangat ringan 11,92% dan berat 2,06%. Atas dasar data tersebut, maka upaya penanggulangan erosi yang disarankan oleh peneliti berupa arahan penggunaan lahan ideal.

Kata Kunci : Sub DAS Cirompang, USLE, Tingkat bahaya erosi, Konservasi lahan.

ABSTRACT

Cirompang river irrigate the technical irrigation area that covering 1,135 hectares with production capacity \pm 13,620 tonnes/year in Mekarmukti and Bungbulang sub-district. The electrical energy that will be and being built along the river has the capacity of 16 Megawatt with a total investment of more than 300 billion. At the same time, the ecosystem of this watershed is having damaged. The condition can be seen from the huge difference between Q_{maks} and Q_{min} , as well as the intensity of flash floods to become more frequent.

The purposes is to analyze the physical charecteristics of the land, the erosion hazard level and also about the countermeasure efforts, the method that is used in this research based on USLE formula. The sampling of this research is based on the land unit map of the study area, the land unit map is created by overlaying the maps of soil types, land use, and slope.

Most of the slope at Cirompang sub watershed are in class III – V, rainfall ranges from 2500 – 3250 mm/year. The types of soil in this sub watershed are Regosol and Podzolic, while the land use is dominated by forests and paddy fields. The rate of erosion in Cirompang sub watershed is dominated by a very heavy class amounted to 72.61%, then by lightweight class 13.4%, very lightweight 11.92% and heavy 2,06%. Based on these data, the erosion countermeasure effort that is suggested by researcher is in the form of directive for ideal land use.

Key words : Cirompang sub watershed, USLE, Erosion hazard level, land conservation

