

RINGKASAN

Sektor pertanian masih memegang peranan penting bagi perekonomian nasional karena sektor ini yang mendasari kehidupan masyarakat di Indonesia terutama di pedesaan sebagaimana yang terjadi khususnya di Kecamatan Karangjambu, Kabupaten Purbalingga, Jawa tengah. Kenyataannya budidaya pertanian tanaman pangan secara intensif dan menetap pada lahan kering dihadapkan pada masalah penurunan produktivitas lahan. Salah satu penyebabnya adalah tanahnya peka terhadap erosi. Penelitian bertujuan untuk: 1) Mengetahui besarnya tingkat bahaya erosi di Kecamatan Karangjambu Kabupaten Purbalingga dengan Metode USLE (*Universal Soil Loss Equation*), dan 2) Membuat perencanaan pertanian konservasi di Kecamatan Karangjambu Kabupaten Purbalingga berdasarkan hasil prediksi tingkat bahaya erosi.

Penelitian dilaksanakan di Kecamatan Karangjambu Kabupaten Purbalingga pada bulan Januari sampai April 2017. Analisis sampel tanah dilakukan di Laboratorium Balai Pengkajian Teknologi Pertanian Yogyakarta. Penelitian menggunakan metode survei tingkat tinjau mendalam dengan teknik pengambilan sampel tanah berdasarkan satuan lahan homogen (SLH). Variabel yang diamati adalah faktor erosivitas hujan (R), erodibilitas tanah (K), panjang dan kemiringan lereng (LS), pengelolaan tanaman dan tanah (CP), nilai toleransi erosi (T), dan tingkat bahaya erosi (TBE).

Hasil penelitian menunjukkan tingkat bahaya erosi di semua wilayah penelitian sangat tinggi. Besarnya tingkat bahaya erosi di Kecamatan Karangjambu Kabupaten Purbalingga dengan Metode USLE (*Universal Soil Loss Equation*) berkisar antara 33,20 ton/ha/th sampai 1138,84 ton/ha/th. Perencanaan pertanian konservasi di wilayah penelitian yang dianjurkan berdasarkan hasil prediksi tingkat bahaya erosi yaitu dengan metode vegetasi (pengelolaan tanaman) dan metode mekanik (tindakan konservasi khusus). Metode vegetasi dilakukan dengan cara mengelola wilayah tersebut menjadi kebun talun, kebun campur dengan kerapatan sedang sampai tinggi, pemberian mulsa, hingga dijadikan hutan alam seresah banyak. Metode mekanik (tindakan konservasi khusus) dilakukan dengan pembuatan teras bangku tradisional hingga teras bangku dengan kontruksi baik.

SUMMARY

The agricultural sector still an important role for the national economy, because this sector was the base for life of every community in Indonesia especially in rural as found in Karangjambu Subdistrict, Purbalingga Regency, Central Java. The reality, intensive cultivation of food crops and settling on dry land is faced with the problem of decreasing land productivity. One reason is that the soil is sensitive to erosion. This research aims to: 1) Knowing the magnitude level of erosion hazard in Karangjambu Subdistrict, Purbalingga Regency using USLE (Universal Soil Loss Equation) method, and 2) Making conservation agriculture planning in dry land based in prediction of erosion hazard.

This research was carried out in Karangjambu Subdistrict, Purbalingga Regency in January until April 2017. Analysis of soil samples conducted in the laboratory of Agriculture Assessment Institute of Yogyakarta. The research methodology used a deep-level survey method with soil sampling techniques based on SLH. The variables observed were rain, erodibility, the length and slope of the slopes, the management of plants and soils, the value of tolerance erosion, and the level of erosion hazard.

The results showed that the level of erosion hazard in all study area is very high. The amount of erosion hazard in Karangjambu District Purbalingga Regency with USLE (Universal Soil Loss Equation) method ranged from 33,20 ton/ha/year to 1138,84 ton/ha/year. Conservation agriculture in study area is recommended based on the results of a prediction of the level erosion hazard that is by the vegetation methods (plant management) and mechanical methods (specific conservation). Vegetation method is done by way of managing these areas into talun gardens, mix garden with moderate to high density, land closure with mulch, and natural forest. While the mechanical methods is done by the creation of a traditional terrace until terrace with good construction.