

**KAJIAN TINGKAT BAHAYA EROSI PADA LAHAN TEGALAN DAN
KEBUN DI DESA NGALANG KECAMATAN GEDANGSARI
KABUPATEN GUNUNG KIDUL YOGYAKARTA**

Oleh: Arif Surahmat

Dibimbing Oleh: Dyah Arbiwati Dan Susila Herlambang

ABSTRAK

Penggunaan lahan yang tidak sesuai kaidah konservasi dengan kondisi lahan, seperti halnya lahan yang ada di daerah kemiringan agak curam sampai curam (8%-45%) mengakibatkan area lahan tersebut dapat mengalami erosi lebih cepat. Banyaknya lahan tegalan yang ditanami tanaman ubi kayu dan ketela yang umumnya mempunyai jarak tanam dan kanopi yang tidak menutupi permukaan tanah dengan baik sehingga terjadi tumbukan air hujan ke permukaan tanah maka potensi terjadinya erosi makin tinggi dan pada lahan kebun umumnya ditanami tanaman tahunan mampu membuat erosi karena tanaman tersebut mampu membebani lereng. Tujuan penelitian ini untuk mengetahui besarnya erosi pada lahan tegalan dan kebun di Desa Ngalang dengan metode USLE dan memetakan tingkat bahaya erosi pada lahan tegalan dan kebun di Desa Ngalang. Penelitian ini menggunakan metode survei dan *purposive sampling* untuk penentuan titik sampel. Penentuan titik sampel berdasarkan hasil *overlay* peta jenis tanah, peta kemiringan lereng, dan peta tataguna lahan sehingga dihasilkan 11 sistem lahan dan 13 titik sampel. Hasil penelitian ini menunjukkan bahwa erosi di lahan tegalan 28,33 ton/ha/tahun sampai 43,55 ton/ha/tahun pada kemiringan 11%-15, serta erosi di lahan kebun 30,78 ton/ha/tahun pada kemiringan 10% termasuk kategori ringan. Erosi di lahan tegalan 62,98 ton/ha/tahun sampai 168,49 ton/ha/tahun pada kemiringan 10%-25% termasuk kategori sedang. Erosi di lahan kebun 343,03 ton/ha/tahun sampai 739,82 ton/ha/tahun pada kemiringan 10%-30% termasuk kategori sangat berat. Tingkat bahaya erosi di lahan tegalan termasuk kategori kelas sedang seluas 220,95 ha pada kemiringan 10%-23% dan kategori kelas sangat berat seluas 330,46 ha pada kemiringan 10%-25 serta di lahan kebun termasuk kategori berat seluas 1,83 ha pada kemiringan 10% dan kategori sangat berat seluas 14,52 ha pada kemiringan 10%-30%.

Kata kunci: Erosi, Kebun, Metode USLE, Tegalan, Tingkat Bahaya Erosi

**STUDY ON THE EROSION HAZARD LEVEL OF THE MOOR AND
GARDEN IN NGALANG VILLAGE, GEDANGSARI DISTRICT,
GUNUNG KIDUL REGENCY, YOGYAKARTA**

Author: Arif Surahmat
Supervised by Dyah Arbiwati and Susila Herlambang

ABSTRACT

Land use that is not in accordance with conservation principles and land conditions, such as land in areas with moderately steep to steep slopes (8%–45%), causes these land areas to experience faster erosion. The large amount of dry land planted with cassava plants generally has spacing and canopies that do not cover the soil surface properly, resulting in rainwater colliding onto the soil surface, so the potential for erosion is higher, and garden are generally planted with annual crops capable of causing erosion because the plant is able to burden the slope. The purpose of this study was to determine the amount of erosion on moor lands and gardens in Ngalang Village using the USLE method and to map the level of erosion hazard on moor land and gardens in Ngalang Village. This study used survey methods and purposive sampling to determine sample points. The determination of sample points based on the overlay of soil type map, slope map, and land use map resulted in 11 land systems and 13 sample points. The results of this study indicated that erosion on moor land was 28.33 tons/hectare/year to 43.55 tons/hectare/year on a slope of 11%-15% and that erosion on garden was 30.78 tons/hectare/year on a slope of 10% was included in the mild category. Erosion on moor land from 62.98 tons/ha/year to 168.49 tons/ha/year on a slope of 10%–25% was in the moderate category. Erosion on moorland from 343.03 tons/hectare/year to 739.82 tons/hectare/year on a slope of 10%–30% was categorized as "very severe." The erosion hazard level on moor land was in the moderate category at 220.95 hectares on a slope of 10% -23%, and it was in the very heavy category at 330.46 hectares on a slope of 10% -25%; on garden land, it was in the heavy category at 1.83 hectares on a slope of 10%, and it was in the very heavy category at 14.52 hectares on a slope of 10% -30%.

Keywords: Erosion, Erosion Hazard Level, Garden, Moor, USLE Method