

**DAMPAK AKTIVITAS PARIWISATA
TERHADAP KUALITAS AIR SUNGAI SAMIN
DI TAMAN WISATA ALAM GROJOGAN SEWU
TAWANGMANGU**

INTISARI

Oleh :

Dennis Wara Hermiandra ¹

Aktivitas pariwisata di TWA Grojogan Sewu memperlihatkan perkembangan yang pesat, akan tetapi berkembangnya sektor pariwisata dikawasan tersebut bisa memberikan dampak negatif bagi ekosistem sungai. Pencemaran sungai akibat pembuangan limbah domestik dan industri akan sangat berbahaya dan merugikan bagi kesehatan manusia, sehingga untuk menanggulangi hal tersebut perlu ada pemantauan kualitas perairan sungai secara berkala untuk mengetahui perkembangan kualitas air saat ini. Tujuan dari penelitian ini adalah mengetahui kondisi kualitas air Sungai Samin di kawasan TWA Grojogan Sewu dan mengetahui jenis aktivitas dan usaha pariwisata di TWA Grojogan Sewu yang mempengaruhi kualitas air Sungai Samin.

Penelitian ini dilakukan dengan membagi segmen Sungai Samin menjadi empat segmen sungai dari arah hulu ke hilir yaitu segmen 1 sebelum kawasan TWA; segmen 2 sebelum air terjun Grojogan Sewu; segmen 3 lokasi Pariwisata TWA dan segmen 4 batas terluar TWA. Data yang diambil berupa kondisi fisik di sekitar Sungai Samin, jenis aktivitas pariwisata dan data kualitas fisik, kimia dan mikrobiologi yang meliputi suhu, pH, DO, BOD, COD, detergen, flourida (F) dan total coliform. Hasil uji kualitas air di laboratorium dibandingkan dengan standar baku mutu air PP No.82 Tahun 2001 dan metode STORET untuk mengetahui status mutu air sungai.

Berdasarkan PP No.82 Tahun 2001, parameter detergen dan total coliform telah melebihi baku mutu air sungai kelas II. Status mutu air Sungai Samin berdasarkan analisis STORET masuk klasifikasi kelas C (tercemar sedang). Aktivitas pariwisata tidak berdampak pada kualitas air Sungai Samin. Konsentrasi parameter detergen dan total coliform yang telah melebihi baku mutu diduga disebabkan oleh faktor lain di luar aktivitas TWA Grojogan Sewu. Aktivitas non pariwisata seperti pemukiman masyarakat dan pertanian diduga menjadi faktor penyebab konsentrasi tersebut melebihi baku mutu yang mengeluarkan limbah domestik berupa bahan organik.

Kata kunci : Sungai Samin, kualitas air, limbah, aktivitas pariwisata

¹ Mahasiswa Bagian KSDH Fakultas Kehutanan UGM

**THE IMPACT OF TOURISM ACTIVITIES
ON THE WATER QUALITY OF THE SAMIN RIVER
IN THE GROJOGAN SEWU NATURE TOURISM PARK
TAWANGMANGU**

ABSTRACT

By:

Dennis Wara Hermiandra ¹

Tourism activities in the Grojogan Sewu Nature Tourism Park, Tawangmangu shows a rapid establishment, however the development of the tourism sector could adversely affect the river ecosystem. Water pollution resulted from domestic and industrial waste are very harmful and may threaten the health of humanbeings, therefore, in order to prevent this condition, regular monitoring of water quality is required to investigate the water quality. This research aimed to identify the Samin River's water quality of the Grojogan Sewu Nature Tourism Park and to observe the tourism activities and businesses in the Grojogan Sewu Tourism Park that may affect the water quality of Samin River.

This research was carried out by dividing the Samin River into 4 reaches from the upstream to the downstream. Reach 1 is located before the area of the Tourism Park; reach 2 is located before the Grojogan Sewu waterfall; reach 3 is located in the main area of Tourism Park; and reach 4 is located on the outside boarder of the tourism park. Data collected were the physical conditions of the surrounding area of the Samin River, the types of tourism activities, and data of physical, chemical and microbiological qualities including temperature, pH, DO, BOD, COD, detergent, fluoride (F) and total coliform. The water samples were then analysed in the laboratory and compared with the quality standards stated in the Government Regulation No. 82 Year 2001. STORET method was also applied ini order to find out the water quality status.

Acording to Government Regulation No. 82 Year 2001, the parameters of the total coliform and detergents have exceeded the river water quality class II. Samin River's water quality status based on analysis STORET analysis was classified into class C (contaminated medium). It was found that tourism activities have no impact on the water quality of the Samin River. The concentration of detergents and total coliform parameter that has exceeded the quality standard might be caused by the other activities from Grojogan Sewu Nature Tourism Park. Non tourism activities, such us human settlements and agriculture, wich may result in organic waste, could be the cause of the exceeding concentration of those parameters.

Key words: Samin River, water quality, waste, tourism activities

¹ Students of Faculty of Forestry KSDH