

KAJIAN DAYA DUKUNG AIRTANAH UNTUK KEBUTUHAN INDUSTRI KECIL-MENENGAH KERAJINAN GERABAH KASONGAN DI KALURAHAN BANGUNJIWO KAPANEWON KASIHAN KABUPATEN BANTUL

INTISARI

Industri kerajinan gerabah kasongan di Kalurahan Bangunjiwo terus meningkat berdampak pada kebutuhan air terutama airtanah akan terus mengikuti. Kajian status daya dukung airtanah dibuat untuk memperhitungkan ketersediaan, kebutuhan, dan kualitas untuk mendukung perkembangan IKM Kerajinan Gerabah Kasongan. Ketersediaan, kebutuhan, dan kualitas airtanah kemudian dibuat untuk mengetahui status daya dukung airtanah untuk IKM Gerabah Kasongan.

Airtanah dianggap diam atau statis sehingga ketersediaan airtanah dapat dihitung menggunakan metode statis serta dihitung batas aman panuran airtanah. Kebutuhan airtanah untuk Industri Kecil Menengah dilakukan dengan wawancara sejumlah 27 IKM Kerajinan Gerabah Kasongan. Sementara Kualitas Airtanah menggunakan beberapa sampel sumur dan ditambah data sekunder lainnya.

Hasil penelitian menunjukkan perbandingan antara ketersediaan airtanah dan kebutuhan airtanah masih menunjukkan surplus airtanah. Jumlah hasil aman batas panuran airtanah sebesar 8.535.013.776 Liter/Tahun dan kebutuhan airtanah sebesar 25.406.941,88 Liter/Tahun, dengan rasio *supply/demand* sebesar 335,93. Rasio *supply/demand* >2 menandakan airtanah masih sangat cukup untuk digunakan untuk mendukung kegiatan IKM Kerajinan Gerabah kasongan. Sementara untuk kualitas airtanah terdapat beberapa parameter yang tidak memenuhi batas baku mutu air, yaitu mangan, total caliform, dan fecal coliform. Keadaan surplus airtanah tersebut tidak menjadikan keberlanjutan airtanah di Kapanewon bangunjiwo tidak diperhatikan, sudah seharusnya selalu menjaga airtanah secara kuantitas dan kualitas.

Kata kunci: daya dukung airtanah, IKM Kerajinan Gerabah Kasongan, Ketersediaan airtanah, Kebutuhan airtanah, kualitas airtanah

STUDY OF GROUNDWATER CARRYING CAPACITY FOR SMALL-MEDIUM CRAFT INDUSTRIES GERABAH KASONGAN IN KALURAHAN BANGUNJIWO, KAPANEWON KASIHAN, KABUPATEN BANTUL

ABSTRACT

The Kasongan pottery industry in the Bangunjiwo Village continues to increase, which has an impact on the demand for water, especially groundwater. The study of the carrying capacity of groundwater was made to take into account the availability, need, and quality to support the development of Kasongan Pottery Crafts Small and Medium Enterprises. Availability, demand, and quality of groundwater are then made to determine the status of groundwater carrying capacity for Kasongan Pottery IKM.

Groundwater is considered stationary or static so that the availability of groundwater can be calculated using the static method and the safe limit for groundwater is calculated. The need for groundwater for Small and Medium Industries was carried out by interviewing a number of 27 Kasongan Pottery Handicraft SMEs. Meanwhile, groundwater quality uses several well samples and additional secondary data.

The results showed that the comparison between the availability of groundwater and the need for groundwater still showed a surplus of groundwater. The number of safe yield limits for groundwater recharge is 8.535.013.776 Liters/year and groundwater needs are 25,406,941.88 Liters/year, with a supply/demand ratio of 335,93 . A supply/demand ratio > 2 indicates that groundwater is still very sufficient to support the activities of Kasongan Pottery Crafts Small and Medium Enterprises. Meanwhile, for groundwater quality, there are several parameters that do not meet the water quality standard limits, namely manganese, total caliform, and fecal coliform. The condition of the groundwater flow does not make the sustainability of groundwater in Kapanewon Bangunjiwo unnoticed, it should always maintain groundwater in quantity and quality.

Keywords: groundwater carrying capacity, Kasongan pottery craft IKM, groundwater availability, groundwater demand, groundwater quality