

**KONSERVASI MATAAIR GUNA MEMENUHI KEBUTUHAN AIR BERSIH
DI DUSUN BOBOK TEMPEL, DESA SELOHARJO, KECAMATAN
PUNDONG, KABUPATEN BANTUL, D. I. YOGYAKARTA**

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INTISARI

Peta Kerawanan Kekeringan Kabupaten Bantul tahun 2014, menunjukkan bahwa Dusun Bobok Tempel, Desa Seloharjo, Kecamatan Pundong, Kabupaten Bantul merupakan daerah yang termasuk dalam kategori rawan kekeringan. Mataair yang terdapat di Dusun Bobok Tempel yaitu Mataair Kenongo yang digunakan sebagai sumber air bersih oleh warga sehari-hari, namun debitnya berkurang saat musim kemarau dan pengelolaannya masih belum efisien. Oleh karena itu, perlu adanya penelitian untuk mengkaji karakteristik dan potensi mataair, serta teknik konservasi mataair yang tepat di daerah penelitian.

Metode yang digunakan dalam penelitian ini di antaranya metode survei dan pemetaan, matematis, laboratorium, wawancara, dan evaluasi. Karakteristik yang dikaji meliputi sebaran dan tipe mataair berdasarkan sifat pengaliran, debit, dan tenaga gravitasi. Potensi mataair diketahui dari debit (kuantitas) dan kualitas air mataair. Kualitas air mataair diketahui menggunakan analisis laboratorium dan uji langsung di lapangan. Parameter yang digunakan untuk analisis kualitas secara keseluruhan yaitu sifat fisik (warna, bau, rasa, kekeruhan, suhu, dan TDS), sifat kimia (pH, Ca, Mg, CaCO₃, NH₃N, Fe, SO₄²⁻, Cl⁻, NO₃³⁻, NO₂²⁻, BOD, COD, dan DO), dan sifat biologi (*total coliform*) dengan acuan Peraturan Menteri Kesehatan No. 32 Tahun 2017 untuk Air Keperluan Higiene Sanitasi dan Peraturan Gubernur DIY No. 20 Tahun 2008. Wawancara digunakan untuk mengetahui kebutuhan air penduduk. Evaluasi zona perlindungan mataair terbagi menjadi zona I, II, III, dan IV (Penentuan Daerah Imbuhan).

Berdasarkan hasil penelitian, mataair Kenongo termasuk mataair kekar dan memiliki sifat pengaliran menahun dengan debit mataair 1,2623 L/detik. Kebutuhan air penduduk Dusun Bobok Tempel di tahun 2027 sebesar 84.705.842,0 L/tahun. Kualitas air Mataair Kenongo tergolong baik sesuai standar bakumutu, kecuali parameter BOD dan *total coliform*. Mataair Kenongo berpotensi rendah karena tidak dapat mencukupi kebutuhan air bersih penduduk selama sepuluh (10) tahun ke depan. Teknik konservasi mataair yang dilakukan adalah membangun bak reservoir distribusi dan empat hidran umum yang akan didistribusikan dengan sistem gravitasi serta penerapan zona perlindungan mataair I, II, III. Pengelolaan daerah imbuhan dengan penanaman rumput dan pohon, pembuatan pematang bulan sabit, dan pembuatan lubang resapan biopori (LRB), serta pendekatan ke masyarakat dan pemerintahan.

Kata Kunci: Mataair, Karakteristik Mataair, Potensi Mataair, Konservasi Mataair, Pengelolaan Daerah Imbuhan.

**SPRING CONSERVATION TO MEET THE NEEDS OF CLEAN WATER AT
BOBOK TEMPEL VILLAGE, SELOHARJO VILLAGE, PUNDONG
SUBDISTRICT, BANTUL DISTRICT, SPECIAL DISTRICT OF YOGYAKARTA**

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ABSTRACT

Drought index Map of Bantul District in 2014, shows that Bobok Tempel Village, Seloharjo Village, Pundong Subdistrict, Bantul District is an area that is classified as the area with the highest drought index. The springs in the village of Bobok Tempel are named Kenongo Springs that being used as a source of clean water by the denizens in daily life, but during the drought the discharge will decrease and the management is still inefficient. Therefore, it is needed to do a research to assess the characteristics and the springs potentials, also a proper springs conservation techniques in the research area.

The methods used in this research include survey and mapping, mathematical, laboratory, interview and evaluation. Characteristics that being assessed consisted of distribution and type of springs based on the characteristics of stream, discharge, and gravitational force. Springs potentials are known from the discharge (quantity) and the quality of the springs. Water quality in springs is identified by using laboratory analysis and direct test in the field. Parameters that being used for the overall quality analysis of physical properties (color, odor, taste, turbidity, temperature, and TDS), chemical properties (pH, Ca, Mg, CaCO₃, NH₃ - N, Fe, SO₄²⁻, Cl⁻, NO₃⁻, NO₂⁻, BOD, COD, and DO), and biological properties (total coliform) with reference to Minister of Health Regulation No. 32 Year 2017 for Sanitation Hygiene Water Requirement and DIY Governor Regulation No. 20 Year 2008. Interviews was used to determine the water needs of the population. Evaluation of the protection zone is divided into zones I, II, III, and IV (Determination of Regions).

Based on research result, the Kenongo springs include to a fracture spring and have a long-lasting characteristic with of the springs of 1,2623 L/sec. The water needs of the population of Bobok Tempel Village in 2027 is 84.705.842,0 L/year. Water quality in Kenongo Springs was quite good according to bakumutu standards, except BOD parameters and total coliform. Kenongo spring is potentially low because it can not meet the needs of clean water for ten (10) years. The conservation technique that being done was constructing the distribution reservoir and the four common hydrants that will be distributed under gravity system and the application of water protection zone I, II, III. Management of increment areas with grass and tree planting, crescent moon making, and the creation of biopori infiltration holes (LRB), as well as approaches to communities and government.

Keywords: Springs, Springs Characteristics, Springs Potential, Springs Conservation, Management of Increment Areas.