

ABSTRAK

MOH. ARIFULLAH, NPM 720511185. Tahun Lulus 2024. Pengembangan Jaringan Irigasi tersier Di Sumber Mata air taman Desa Batuan Kecamatan Batuan Kabupaten Sumenep. Skripsi, Program Teknik Sipil, Fakultas Teknik, Universitas Wiraraja Madura. (Pembimbing: CHOLILUL CHAYATI, ST., MT. dan DEDI FALAHUDDIN, ST., MT.).

Daerah Irigasi di Desa Batuan, Kecamatan Batuan, Kabupaten Sumenep memiliki areal sawah sekitar 118,2 hektar saat ini, jaringan irigasi di sumber mata air Taman hanya dapat mencangkup sawah seluas 65,2 hektar, sedangkan sisanya merupakan tadah hujan dengan luas 53 hektar. Berdasarkan pengamatan awal Sumber Mata Air taman sangat berlimpah tetapi kurangnya jaringan irigasi membuat hasil panen petani kurang maksimal.

Penelitian ini menggunakan metode penelitian kuantitatif, dengan analisis hidrologi dan hidrolika dalam metode ini diperlukan data yang di peroleh dari instansi/ dinas terkait, wawancara dan survey lapangan guna memperoleh data yang valid untuk kemudian dilanjutkan perhitungan.

Hasil dari analisis perhitungan di atas, maka dapat di simpulkan sebagai berikut: Debit Sumber Air Taman Sebesar 130 l/det, kebutuhan air untuk sawah sebelum di kembangkan seluas 65,2 Ha sebesar 71,7 l/det, sisa debit Sumber Air Taman sebesar 58,3 l/det. Maka luas areal sawah dapat di kembangkan menjadi 53 Ha, jadi luas total keseluruhan sebesar 118,2 Ha. Pola tata tanam di Daerah Irigasi Sumber Air Taman yaitu : Padi – Padi – Palawija, yaitu Musim tanam 1 : Oktober / November – Januari / Februari, Musim tanam 2 : Februari / Maret – Mei / Juni, Musim tanam 3 : Jun / Jul – September / Oktober.

Kata Kunci : Ketersediaan Air, Kebutuhan Air, Pengembangan Jaringan Irigasi.

ABSTRACT

MOH. ARIFULLAH, NPM 720.5.1.1185. Graduated year 2024. Development of Irrigation Network in Sumber Air Taman, Batuan District, Sumenep Regency. Thesis, Civil Engineering Program, Faculty of Engineering, University of Wiraraja Madura. (Supervisor : CHOLILUL CHAYATI, ST., MT. and DEDI FALAHUDDIN, ST., MT.).

The irrigation area in Batuan Village, Batuan District, Sumenep Regency has a rice field area of around 118.2 hectares. Currently, the irrigation network at the Park's water source can only cover 65.2 hectares of rice fields, while the rest is rain fed with an area of 53 hectares. Based on initial observations, the park's springs are very abundant, but the lack of an irrigation network means that farmers' harvests are less than optimal..

This research uses quantitative research methods, with hydrological and hydraulic analysis. In this method data is required to be obtained from relevant agencies/services, interviews and field surveys in order to obtain valid data to then continue with calculations.

The results of the analysis of the calculations above can be concluded as follows: The discharge of the Park Water Source is 130 l/sec, the water requirement for rice fields before development of 65.2 Ha is 71.7 l/sec, the remaining discharge of the Taman Water Source is 58.3 l/sec. So the area of rice fields can be expanded to 53 Ha, so the total area is 118.2 Ha. The planting pattern in the Park Water Source Irrigation Area is: Rice – Rice – Secondary Crops, namely planting season 1: October / November – January / February, Planting season 2: February / March – May / June, Planting season 3: June / Jul – September October.

Keywords: Water Availability, Water Needs, Distribution of Water Development.