

**PENILAIAN KINERJA SALURAN IIRIGASI TERSIER
DAERAH IIRIGASI RENTANG
KABUPATEN INDRAMAYU PROVINSI JAWA BARAT**

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ABSTRAK

Daerah Irigasi Rentang Kabupaten Indramayu memiliki permasalahan dalam pembagian air yang tidak merata. Kelebihan air terjadi di bagian hulu dan kekurangan air terjadi di bagian hilir. Hal tersebut diakibatkan oleh penurunan prasarana fisik terutama saluran irigasi tersier dan kurang optimalnya kegiatan Operasi dan Pemeliharaan sehingga dapat berpengaruh pada produktifitas tanam. Saluran irigasi perlu dijaga kondisi dan fungsinya agar dapat mendistribusikan air irigasi secara merata sehingga pendistribusian air tidak terhambat dengan adanya kerusakan-kerusakan kecil yang dapat mengurangi debit air pada saluran irigasi tersebut. Oleh karena itu, perlu dilakukan penilaian kinerja saluran irigasi tersier untuk memeriksa kondisi saluran tersier khususnya saluran BD 5 Ki.2 di Daerah Irigasi Rentang. Metode penelitian yang digunakan yaitu dengan cara observasi langsung ke lapangan dengan melakukan penelusuran saluran irigasi tersier BD 5 Ki.2 di Daerah Irigasi Rentang yaitu pengukuran dimensi penampang saluran, sedimentasi, serta panjang kerusakan saluran. Kondisi kinerja saluran irigasi tersier berdasarkan hasil penelusuran/*walkthrough* di saluran tersier BD 5 Ki.2 di Daerah Irigasi Rentang menunjukkan bahwa kondisi saluran kurang baik dengan nilai kinerja saluran irigasi 52,81%. Hasil pengukuran debit menggunakan metode apung di ruas BD 5 Ki.2-T₁ (Q_1) = 3,22 m³/s, ruas

T1-T2 (Q_2) = 1,43 m³/s, T2-K1 (Q_3) = 0 m³/s. Sementara nilai debit rencana Q_1 = 0,106 m³/s, Q_2 = 0,072 m³/s dan Q_3 = 0,042 m³/s. Dengan nilai kondisi kinerja saluran irigasi tersier BD 5 Ki.2 Daerah Irigasi Rentang kurang baik sehingga kinerja saluran irigasi terjadi penurunan debit aliran di saluran irigasi tersier BD 5 Ki.2 Daerah Irigasi Rentang.

Kata kunci: Saluran Irigasi Tersier, Penilaian Kinerja Irigasi, Pengukuran Debit



PERFORMANCE ASSESSMENT OF TERTIARY IRRIGATION CANAL RENTANG IRRIGATION AREA INDRAMAYU REGENCY JAWA BARAT PROVENCE

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ABSTRACT

The Rentang Irrigation Area of Indramayu Regency has problems in the uneven distribution of water. Excess water occurs in the upstream and water shortage occurs in the downstream. This is caused by a decrease in physical infrastructure, especially tertiary irrigation channels and less than optimal Operation and Maintenance activities so that it can affect crop productivity. Irrigation channels need to be maintained in their condition and function in order to distribute irrigation water evenly so that the distribution of water is not hampered by small damages that can reduce the water discharge in the irrigation channels. Therefore, it is necessary to evaluate the performance of tertiary irrigation canals to examine the condition of the tertiary irrigation canals especially the BD 5 Ki.2 canal in the Rentang Irrigation Area. The research method used was direct observation in the field by tracing the BD 5 Ki.2 tertiary irrigation canal in the Span Irrigation Area, namely measuring the cross-sectional dimensions of the canal, sedimentation, and the damaged length of the canal. The performance condition of the tertiary irrigation canal based on the results of the walkthrough in the BD 5 Ki.2 tertiary canal in the Rentang Irrigation Area shows that the canal condition is not good with an irrigation canal performance value of 52,81%. The results of discharge measurements using the floating method on BD 5 Ki.2-T1 ($Q1$) = 3.22 m³/s,

$T1-T2 (Q2) = 1.43 \text{ m}^3/\text{s}$, $T2-K1 (Q3) = 0 \text{ m}^3/\text{s}$. Meanwhile, the planned debit value of BD 5 Ki.2-T1 ($Q1$) = $0,106 \text{ m}^3/\text{s}$, $T1-T2 (Q2) = 0,072 \text{ m}^3/\text{s}$ and $T2-K1 (Q3) = 0,042 \text{ m}^3/\text{s}$. With the value of the performance condition of the tertiary irrigation channel BD 5 Ki.2 the Rentang Irrigation Area is not good enough so that the performance of the irrigation channel has decreased flow discharge in the tertiary irrigation channel BD 5 Ki.2 the Rentang Irrigation Area.

Keywords : Tertiary Irrigation Channels, Irrigation Performance Assessment, Discharge Measurement

