

# **PENENTUAN SKALA PRIORITAS KINERJA FISIK JARINGAN IRIGASI PADA DAERAH IRIGASI SEMEN KRINJO DENGAN METODE *ANALYTIC HIERARCHY PROCESS* (AHP) DAN METODE *ANALYTIC NETWORK PROCESS* (ANP)**

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**ABSTRAK** : Daerah Irigasi (DI) Semen Krinjo saat ini kondisinya banyak saluran yang rusak serta bangunan pelengkap yang tidak dalam kondisi baik, hal itu dikarenakan DI Semen Krinjo terakhir direhabilitasi pada tahun 2012. Pengelolaan aset irigasi meliputi inventarisasi aset irigasi, penilaian kinerja aset irigasi, hingga pelaksanaan operasi dan pemeliharaan harus dilakukan karena kondisi suatu jaringan irigasi mempengaruhi efektifitas dan efisiensi kinerja irigasi. Tujuan penelitian ini untuk mengetahui urutan skala prioritas kinerja fisik irigasi berdasarkan inventarisasi dan penilaian kondisi sebagai acuan untuk dilaksanakan rehabilitasi. Penilaian kondisi fisik irigasi berdasarkan pedoman yang dikeluarkan Kementerian PUPR. Hasil dari penilaian tersebut dihitung dengan metode AHP dan metode ANP hingga didapatkan urutan skala prioritas berdasarkan alternatif dan kriteria. Berdasarkan hasil penelitian yaitu bangunan utama dalam kondisi baik (83.08%), saluran pembawa dalam kondisi sedang (75.79%), bangunan pelengkap dalam kondisi sedang (79.27%). Urutan skala prioritas berdasarkan alternatif yaitu urutan pertama DI Krinjo, selanjutnya DI Semen. Urutan skala prioritas berdasarkan kriteria yaitu urutan pertama Saluran Pembawa, selanjutnya Bangunan Pelengkap, dan Bangunan Utama.

Kata kunci: irigasi, urutan skala prioritas, *analytic hierarchy process*, *analytic network process*.

**ABSTRACT** : Semen Krinjo Irrigation Area (IA) is currently in a lot of damaged channels and complementary structures that are not in good condition; this is because Semen Krinjo IA was last rehabilitated in 2012. Management of irrigation assets includes an inventory of irrigation assets, assessment of irrigation asset performance until the implementation of operation and maintenance must be carried out because an irrigation networks's condition affects the effectiveness and efficiency of irrigation performance. This study aimed to determine the order of priority scale for physical irrigation performance based on an inventory and assessment of conditions as a reference for implementing rehabilitation. Assessment of the physical condition of irrigation is based on guidelines issued by the Ministry of Public Works and Public Housing of the Republic of Indonesia. The assessment results are calculated using the AHP method and the ANP method to obtain a priority scale order based on alternatives and criteria. Based on the research results, the main structures is in good condition (83.08%), the off-taking channel is in moderate condition (75.79%), the complementary structures is in moderate condition (79.27%). The order of priority scale based on alternatives is the first order in Krinjo IA, then Semen IA. The priority scale order is based on criteria, namely the first order of Off-Taking Channels, then Complementary Structures, and Main Structures.

Keywords: irrigation, priority scale order, *analytic hierarchy process*, *analytic network process*.