

**ANALISIS EKONOMI TEKNIK PEMBANGUNAN EMBUNG LADA
MANDALA JAYA DI KECAMATAN PANGKALAN LADA
KABUPATEN KOTAWARINGIN BARAT**

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Abstrak

Desa Lada Mandala Jaya berada di Kecamatan Pangkalan Lada, Kabupaten Kotawaringin Barat, Provinsi Kalimantan Tengah. Areal pertanian di wilayah ini adalah areal sawah beririgasi teknis dan bagian lain adalah sawah tadah hujan yang hanya dapat ditanami padi pada musim I, sedangkan pada musim II dan III meskipun kadang dapat ditanami padi tetapi hasilnya kurang baik karena kekurangan air. Salah satu program yang dilakukan pemerintah untuk mengatasi permasalahan ini adalah pembuatan embung penampung air hujan dan bangunan air lainnya. Selain dapat menyimpan kelebihan air hujan saat musim penghujan, dapat juga digunakan untuk mengatasi kebakaran hutan serta memenuhi ketersediaan kebutuhan air baku agar tidak terjadi kekeringan saat musim kemarau.

Perhitungan proyek (Detail Engineering Design) DED Pembangunan Embung Lada Mandala Jaya dilakukan kelayakan dengan parameter NPV (Net Present Value), BCR (Benefit Cost Ratio), IRR (Internal Rate Of Return). Analisis Sensitivitas yang bertujuan untuk menghitung keberhasilan proyek pada sektor ekonomi teknik. Data didapatkan dari PT. Studi Teknik.

Pada analisis kelayakan digunakan suku bunga 11% pada kondisi normal, maka proyek diperoleh nilai positif dari NPV sebesar Rp. 5.142.159.178,21, nilai > 1 dari BCR sebesar 1,233%, dan nilai IRR > suku bunga 11% yaitu sebesar 11,6176% sehingga proyek layak secara ekonomi. Analisis Sensitivitas pada kondisi normal dan pada biaya tetap dan manfaat naik 5% dianggap paling efektif terhadap nilai biaya dan manfaat karena mengalami keuntungan.

Kata kunci : *air baku ; ekonomi teknik ; embung ;kelayakan*

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**ENGINEERING ECONOMIC ANALYSIS of LADA MANDALA JAYA
RESERVOIR in SUBS-DISTRICT of PANGKALAN LADA DISTRICT of
WEST KOTAWARINGIN**

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Abstract

Lada Mandala Jaya village is located in subs-district of Pangkalan Lada, District of West Kotawaringin, Province of Central Kalimantan. The agricultural area in this region is technically irrigated paddy fields and in the other part is rainfed paddy fields which only can be planted with paddy in season I, while in season II and III sometimes it can be planted with paddy but the results are not good because lack of water. One of the programs carried out by the government to overcome this problem is the construction of rainwater reservoirs and other water structures. Beside from being able to save excess rainwater during the rainy season, also it can be used to overcome forest fire and supply the availability of raw water needs to avoid drought during the dry season.

The calculation of project (Detail Engineering Design) DED the Construction of Lada Mandala Jaya Reservoir is carried out the feasibility with parameters like a NPV (Net Present Value), BCR (Benefit Cost Ratio), IRR (Internal Rate Of Return), Sensitivity Analysis which aims to calculate the success of the project in the engineering economics sector. The Data obtained from PT. Studi Teknik.

In the feasibility analysis used an interest rate of 11% under normal conditions, then the project's obtained a positive value from the NPV as much as Rp. 5.142.159.178,21, the value > 1 from the BCR 1,233%, and the IRR > interest rate by 11% as much as 11,6176% so that the project is economically feasible. The Analysis of Sensitivity under in normal condition and in fixed cost and benefits up 5% is considered as the most effective to value of cost and benefits because it has profits.

Keywords : raw water ; engineering economic ; reservoir ; feasibility

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