

METODE PELAKSANAAN PEMBUATAN *U-FLUME* DENGAN *CARMIX* DAN *PORTABLE MIXER* PADA SALURAN TERSIER DAERAH IRIGASI RENTANG KABUPATEN INDRAMAYU, JAWA BARAT

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ABSTRAK

Kabupaten Indramayu merupakan daerah yang berperan penting dalam produksi tanaman padi di Indonesia. Dalam pertanian komponen yang paling berpengaruh adalah ketersediaan air. Maka dari itu Kementerian PUPR melalui Balai Besar Wilayah Sungai Cimanuk-Cisanggarung mengupayakan perbaikan jaringan irigasi pada daerah irigasi Rentang melalui *Rentang Irrigation Modernization Project* (RIMP). Pada proyek ICB Package LOS-04: *On-Farm System and Tertiary Canals Upgrading Works Left Bank IV for Rentang Irrigation Modernization Project* (RIMP) terdapat tiga jenis pembangunan saluran tersier yaitu saluran *u-flume*, saluran pasangan batu, dan saluran tanah. Penelitian ini membahas saluran *u-flume* yang dimaksudkan untuk mengetahui metode pelaksanaan dan perbandingan produktivitas pengecoran antara *carmix* dan *portable mixer*. Metode penelitian yang dilakukan berupa deskriptif kuantitatif yaitu dengan menguraikan kondisi atau pelaksanaan yang terjadi pada saat pengamatan di lapangan kemudian dilakukan perhitungan produktivitas berdasarkan biaya, waktu, dan mutu yang diperlukan. Berdasarkan hasil pengamatan, metode pelaksanaan saluran *u-flume* meliputi pekerjaan persiapan, pengukuran, *stripping* dan galian, timbunan, *lean concrete*, pengecoran *u-flume*, *curing*, dan *joint sealant*. Dari perhitungan diperoleh hasil bahwa perbandingan produktivitas pengecoran dengan *carmix* lebih tinggi daripada *portable mixer* dengan masing-masing produktivitas sebesar $3,85 \text{ m}^3/\text{jam}$ dan $1,20 \text{ m}^3/\text{jam}$. Dari segi biaya pengecoran untuk saluran sepanjang 350 m penggunaan *portable mixer* lebih murah daripada *carmix* dengan total biaya Rp 12.225.037 sedangkan untuk *carmix* Rp 21.759.865. Apabila dilihat dari segi mutu, beton yang dihasilkan dari pengecoran menggunakan *carmix* memiliki mutu yang lebih unggul daripada menggunakan *portable mixer*.

Kata Kunci : RIMP, Metode Pelaksanaan, Produktivitas, *Carmix*, *Portable Mixer*

***IMPLEMENTATION METHOD OF MAKING U-FLUME WITH
CARMIX AND PORTABLE MIXER IN TERTIARY CHANNEL
IRRIGATION AREA OF INDRAMAYU DISTRICT RANGE,
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ABSTRACT

Indramayu Regency is an area that plays an important role in rice production in Indonesia. In agriculture, the most influential component is the availability of water. Therefore, the Ministry of PUPR through the Cimanuk-Cisanggarung River Basin Hall seeks to improve the irrigation network in the Rentang irrigation area through the Rentang Irrigation Modernization Project (RIMP). In the ICB Package LOS-04 project: On-Farm System and Tertiary Canals Upgrading Works Left Bank IV for Rentang Irrigation Modernization Project (RIMP) there are three types of tertiary canal construction, namely u-flume canals, masonry canals, and earthen canals. This research discusses the u-flume channel which is intended to determine the implementation method and comparison of casting productivity between carmix and portable mixer. The research method carried out is descriptive quantitative, namely by describing the conditions or implementation that occurred during field observations and then calculating productivity based on the cost, time, and quality required. Based on the observation, the u-flume channel implementation method includes preparation work, measurement, stripping and excavation, backfill, lean concrete, u-flume casting, curing, and joint sealant. From the calculation, it was found that the productivity comparison of casting with carmix was higher than that of portable mixer with respective productivity of $3.85 \text{ m}^3/\text{h}$ and $1.20 \text{ m}^3/\text{h}$. In terms of casting costs for 350 m long channels, the use of portable mixers is cheaper than carmix with a total cost of Rp 12,225,037 while for carmix Rp 21,759,865. When viewed in terms of quality, the concrete produced from casting using carmix has a superior quality than using a portable mixer.

Keyword : RIMP, Implementation Method, Productivity, Carmix, Portable Mixer