OPERATION AND MAINTENANCE IRRIGATION NETWORKING OF MENTURUS DISTRICT MOJOKERTO PROVINCE EAST JAVA

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Abstract

Wide of DI Menturus area is equal to 3274 Ha, in this time the existing pattern plant is divided to 3 classification, then for increasing agriculture production will be planned to divided 4 classification used climatology method where water resources still covered so that don’t need the application of FRP system. Menturus – Mojokerto Irrigation area with classification of A, B and C pattern plant → Rice Plant – Sugar Cane, Rice Plant – Second Crop – Sugar Cane, Rice Plant – Second Crop – Sugar Cane. Plant intensity for existing situation : MT 1 100% (Rice Plant 18.6%; Second Crop 3%; Sugar Cane 78.4%), MT 2 (Rice Plant 12.4%; Second Crop 9%; Sugar Cane 78.4%), MT 3 (Rice Plant 7%; Second Crop 14.6%; Sugar Cane 78.4%).

In order to increasing agriculture production to achieve food self supporting in East Java, where one of them in Menturus – Mojokerto Irrigation area, will need some effort to increase agriculture farm productivity by exploitation of water resource to be more effective, and also good and regular operational and maintenance with changes of pattern plant. The other side also needed to improve and completion of existing building. With
classify pattern plant A, B, C and D → Rice Plant – Sugar Cane, Rice Plant – Second Crop – Sugar Cane, Rice Plant – Second Crop – Sugar Cane. Plant instensity for planned situation: MT 1 100% (Rice Plant 26%; Sugar Cane 0%), MT 2 (Rice Plant 18%; Second Crop 18%), MT 3 (Rice Plant 6.6%; Second Crop 19.4%; Sugar Cane 74%). By used plan pattern will not be insufficiency of water, so the production result more optimum. This is very important because irrigation water could be arrange and used based on demand.

From operational and maintenance DI Menturus is obtained result of calculation agriculture production cost analysis which is the level of production compared with production cost and also O&P cost released can obtained BCR (Benefit Cost Ratio) value equal to 1.06 > 1. For BCR plan value equal to 1.17 > 1 with existence of BCR value, hence can be concluded if this project is profiting and competence to executed or applied.