ABSTRACT

EVALUATION THE DEVELOPMENT OF THE IRRIGATION NETWORK OF (TERTIARY) CHANNELS OPEN INTO A CLOSED DUCT (PIPE) IN THE VILLAGE BANARESEP TIMUR DISTRICT LENTENG SUMENEP

Supervisor 1: Ir.H. SUTRISNO, MT.
Supervisor 2: MOH. IKSAN, S.Pd.,MT.

Ground water irrigation network so that it can be used in accordance with its function, it is necessary for the effective management of irrigation networks and efficient. Management of irrigation networks will affect the water supply system in the rice fields and the level of service received by farmers for irrigation. To calculate the water discharge issued by the machine pumps in accordance with conditions on the ground by using methods meetdrempel. As for calculating the irrigation water needs using Penman method.

The methods used in compiling this thesis consists of data collection methods, interviews, analysis and calculation methods, methods of presentation of the report, and report construction stage. Steps in the calculation of irrigation water requirements, among others: Calculation of ten daily rainfall (R10), the calculation of rainfall mainstay (R80), the calculation of effective rainfall (Re), perhitngan evapotranspiration (Eto), the calculation of consumptive use (Etc). While the capacity of the pump can be searched by formula meetdrempel.

Water irrigation on the farm village of East Banaresep is 5.42592 million liter/day, while the availability of water out of the pump engine is 6825.6 m3 / day.

Keywords: Ground water irrigation system, irrigation water demand and water availability