

Evaluation Critical Level Of Water In Pencil Village, Karangsambung Districts, Kebumen Regency, Central of Java Province.

**By :
Ricardo Felisitas Damar
114090097**

Abstract

Water is abiotic factor to support biotic factor there are creature. Every creature always need the water for they life in everyday. One of village at central java that is Pencil Village, Kebumen District. Kebumen Regency have a resources of water there are irrigate in the form of well and mataair dig. Spring and well dig in countryside of Pencil not yet can answer the demand of requirement of local society. As for target of this research is conducted to know critical storey;level of water in Countryside of Pencil and determine conservation instruction irrigate as according to critical storey;level.

The Methods used in this research there are surveying and mapping, mathematical and evaluation. Parameter used to know the level of the availability of airtanah that is rainfall, infiltrate, evapotranspirasi, and run-off. Level of the availability of water compared to amount of water required pass calculation of gratuity (%) critical index. Result of comparison is]later;then analysed as according to critical index class criterion. The water balance is calculated and used to determined the most output water. Conservation water instruction conducted pursuant to analysis to balance irrigate and critical storey;level of water.

From result of research obtained by the amount of the availability of water in Countryside of Pencil in the year 2014 619.311.719 Litre and amount of water required that is 16.052.700 Litre. Result of amount of water required and availability of water calculated with gratuity (%) of critical index of water is so that obtained by value 0,0259202 % entering in class is not critical. Beside that to analyse balance irrigate and obtained by value of evapotranspirasi surface stream and represent biggest output water. Of the water balance analysis determined by conservation irrigate tapped or cropping of water (harvesting water) and improve efficiency usage of crop water. The Water conservation represent aliance among building of spring and of embung with aim to for save of water which is later;then used by moment required specially at dry season.

Keyword: Water Availabbility,Water Needs, Criticality Of Water, Water Balance, Water Conservation,Embung.