

# ESTIMATION OF EVAPOTRANSPIRATION USING VARIOUS METHODS

Prepared by: Lim Chee Leong

## ABSTRACT

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This project is estimation of evapotranspiration (ET) using various methods in Malacca from the year 2001 – 2010. A number of methods for estimating the Potential Evapotranspiration (PET) which are important for irrigation project have been applied using the climatological data, such as, temperature, solar radiation, humidity, wind speed, daytime hours, characteristic of vegetation, and so on. Three types of climatological data are necessary to collect from Malaysia Meteorological Department to estimate the PET, which are mean monthly temperature, mean monthly relative humidity, and mean monthly wind velocity. Six methods have been chosen to estimate the potential evapotranspiration which are Penman's Equation, Blaney-Criddle Formula, Thornthwaite Formula, Christiansen Methods, Jensen-Haise Methods and Turc Method. The availability of the data and suitability of the region can affect the choice of the methods. In order to estimate evapotranspiration, the method used has to be contributing good results with the least of climatological data and also suitable to be applied over a wide range of climatic condition. The results that are calculated for 10 years will be compared with various methods and evaporation results.