

Final year project report

**“Design & Management of irrigation scheme for Markandeya
Reservoir project using Cropwat”**

(sponsored by K.S.C.S.T)



A report submitted in fulfillment of requirements for 10CV85 – 2015

BY



Mr. Prokshit A
Angadi



Miss. Priyanka
Pujar



Mr. Abhishek
Gurav



Mr. Anand
Sannakkinavar

GUIDED BY



Prof. R. Shreedhar

ABSTRACT

Irrigation has been a central feature of agriculture for over 5000 years and the result of work of many cultures, and was the basis of the economy and society of numerous societies, ranging from Asia to Arizona.

Irrigation is the artificial application of water to the land or soil. It is used to assist in the growing of agricultural crops, maintenance of landscapes, and re-vegetation of disturbed soils in dry areas and during periods of inadequate rainfall. Additionally, irrigation also has a few other uses in crop production, which include protecting plants against frost, suppressing weed growth in grain fields and preventing soil consolidation. In contrast, agriculture that relies only on direct rainfall is referred to as rain-fed or dry land farming.

Irrigation systems are also used for dust suppression, disposal of sewage, and in mining. Irrigation is often studied together with drainage, which is the natural or artificial removal of surface and sub-surface water from a given area.

Here is this project we are going to prepare an irrigation schedule using hand calculation using excel and also using Cropwat Software.

The objectives of the project are:

To decide the crops to be grown in the study area.

To calculate evapo-transpiration and crop water requirements for each crop.

To propose the irrigation scheme and scheduling of crops for the end user