

Irrigation scheduling using computer softwares

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■ **ABSTRACT** : A study was carried out to develop irrigation schedule using CROPWAT and CRIWAR software for command area of Wadi Adampur distributory of Wan River Project. The analysis revealed that the actual amount of water applied during the year 2006-07 to 2010-11, except 2009-10 varied between 2.56 to 16.93 Mm³. On average 9.23 Mm³ water was applied annually. The irrigation schedules were prepared using CROPWAT and CRIWAR software. The estimated water requirement of the command with CROPWAT and CRIWAR varied between 4.89 to 6.92 and 9.80 to 12.90 Mm³, respectively. The average discharge required was estimated as 2.05 l/s/ha and 4.59 l/s/ha using CROPWAT and CRIWAR software, respectively. Average actual water applied was 53.06 % more and 14.77% less as compared to that estimated with CROPWAT and CRIWAR model. Though, average actual water applied is more than that estimated with CROPWAT, average actual area irrigated is less (*i.e.* only 730 ha). Using CROPWAT developed schedule, in less water significantly more area about 1111.88 ha is to be irrigated. Considering above findings, it is suggested to use CROPWAT developed schedule for proper scheduling of irrigation in the command.

■ **KEY WORDS** : Irrigation scheduling, Softwares

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