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## Assessment of precipitation deficit using cropwat

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■ **ABSTRACT** : Precipitation deficit of wan river basin was assessed using CROPWAT. It also cleared that more or less the effective rainfall was constant around 600 mm over entire basin. Soil moisture deficit decreased from Wari Bhairavgarh to Khatkali *i.e.* from low to high altitude. There was no precipitation deficit in case of soybean crop whereas it was observed maximum for pigeon pea followed by cotton. Daily soil moisture deficit analysis confirmed that readily soil moisture is available though less than field capacity, to satisfy E<sub>Tc</sub> need of plants up to last decade of September. Thus, two protective irrigations should required during the month of October-November for maintaining optimal growing conditions in the basin.

■ **KEY WORDS** : Cropwat, Precipitation deficit, Pigeonpea, Cotton, Wan river basin

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