Agro-hydrological models can be considered an economic and simple tool for optimizing irrigation water use in areas where water represents a limiting factor for crop yield.

<http://www.academia.edu/17362276/Comparison_of_SWAP_and_FAO_Agro-Hydrological_Models_to_Schedule_Irrigation_of_Wine_Grapes>

**Agricultural hydrology** is the study of water balance components intervening in [agricultural water](https://en.wikipedia.org/wiki/Farm_water) management, especially in [irrigation](https://en.wikipedia.org/wiki/Irrigation) and [drainage](https://en.wikipedia.org/wiki/Drainage).[[1]](https://en.wikipedia.org/wiki/Hydrology_%28agriculture%29#cite_note-1)

<https://en.wikipedia.org/wiki/Hydrology_%28agriculture%29>

Agrohydrology can be regarded as the study of hydrological processes and the collection of hydrological data, aimed at increasing the efficiency of crop production, largely by providing beneficial soil moisture conditions.

Vegetation, soil conditions and topography determine how much water infiltrates into the soil, how much runs off the land's surface and where it goes. It is the interaction of these complex processes and the volumes of runoff that these processes produce that form the core research of agrohydrology.

<http://www.nzdl.org/gsdlmod?e=d-00000-00---off-0hdl--00-0----0-10-0---0---0direct-10---4-------0-1l--11-en-50---20-about---00-0-1-00-0--4----0-0-11-10-0utfZz-8-00&a=d&cl=CL1.8&d=HASH3b4d99e5f9716ab628b9b2.4.fc>