

# SWAT model

Digital elevation model (DEM), soil, land cover/land use, weather

Calibration & validation

Scenario 1 - irrigation; scenario 2 - no irrigation

Water conveyance efficiency of canal

Total irrigation water use

Field irrigation water use

Ground water use

Field discharge

Green water use

Measured, simulation, local data

Canal water loss

Blue water use (BWU)

Green water use (GWU)

Crop yield (Y)

$$WF_{blue} = BWU/Y$$

$$WF_{green} = GWU/Y$$

$$WF = WF_{blue} + WF_{green}$$

