

PROSIM

Promoting Sustainable Irrigation Management
and non-conventional water use in the Mediterranean

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MEDWAYCAP



PROSIM



WHAT

11 innovative solutions for water efficiency in irrigation will be tested in 27.5 hectares, involving 104 farmers.

The evaporation pan is one of the innovative solutions being installed in Jordan for crops of vegetables in greenhouses as well as open fields. Since Jordan is endemically affected by drought, the situation imposes an optimal management of its water reserves through accurate estimation of the climatic evaporative demand and the potential evapotranspiration (E.T.P.). Thus, this low cost innovative solution allows farmers to evaluate local evaporation and water needs for irrigation at plot/greenhouse level.



HOW

It consists of a water basin or tank with a large enough surface and sufficient depth to measure the change in water level due to evaporation.

It measures the evaporation rate of a given volume of water and surface exposed to the air (expressed in mm per day, month or year).

media link



more info



project

This data depends exclusively on the temperature and humidity of the air, as well as on precipitation. The basin size ranges from 1 to 5 meters in diameter and from 10 to 70 cm deep. It is usually placed 15 cm above the ground on a wooden pallet that allows air to circulate underneath it.

This prevents the transmission of thermal energy between the ground and the tank, which could distort the results obtained. In all cases, the water level is maintained at a short distance below the edge of the tank. The variations in the water level of the tank, measured at fixed intervals, reflect the intensity of evaporation. The information provided by the evaporation pans will provide farmers with how much water the farmers should use for irrigating their fields given a fixed irrigation interval.



AGRICULTURAL

IRRIGATION NON-CONVENTIONAL WATER EFFICIENCY WATER MANAGEMENT PLAN

