Mini Pan-evaporimeter for On-farm Irrigation Scheduling



ICAR-IIWM

RELEVANCE

- Scientific irrigation scheduling using USWB Class A evaporation has been used extensively worldwide.
- However, it has certain drawbacks due to its big size and bulkiness, high cost, and difficulty in maintenance and daily measurement.
- Therefore, an attempt was made to develop a low-cost, easy-to-use, small-size pan evaporimeter for on-farm irrigation scheduling.

DESCRIPTION

- The mini pan-evaporimeter has been developed using a 20-gauge galvanized iron (GI) sheet with a 30 cm diameter and 25 cm height.
- It is comparable to the USWB Class A pan (Regression coefficient 0.86-0.89 compared with Class A pan).
- The conversion factors from USWB Class A pan to 30 cm GI mini pan evaporimeter for the *kharif, rabi*, and summer seasons are 1.51, 1.52, and 1.28, respectively.

BENEFITS

- Tentative cost is ₹ 1029 and can be easily fabricated.
- It is portable and easy to handle.
- Potential for use in on-farm irrigation scheduling for different crops.