



W03L05: Water Management

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Water Management

- ✓ Problems in water management
- ✓ Benefits of irrigation
- ✓ How much to irrigate?
- ✓ Water use efficiency
- ✓ When to irrigate?

Problems in Water Management

- ✓ Loss of water through evaporation and run-off
- ✓ How much and when to irrigate crops?
- ✓ What will be the cropping system and crop planning?

Benefits of Irrigation

- Increases productivity
- Three to four crops in a year
- Helps against problematic soil
- Water saving

How much to irrigate?

- Soil physical condition
- Soil fertility
- Moisture content in soil
- Water table
- Quality of irrigation water
- Crops and their rooting behaviour

Increasing water use efficiency

- ✓ Land leveling
- ✓ Good irrigation method
- ✓ Good agronomic management (Weeding, mulching)
- ✓ Drainage facility
- ✓ Short duration crops
- ✓ Low water requiring crops

When to irrigate?

- ✓ Plant indices
- ✓ Feel and appearance method
- ✓ Indicator plants
- ✓ Soil-cum-sand miniplot technique
- ✓ Sowing high seed rate
- ✓ Critical stage approach
- ✓ Climatological approach
- ✓ Tensiometer
- ✓ Infrared thermometry
- ✓ Remote sensing