

**DRIP**  
**IRRIGATION**  
& fertigation



**IRRI·altal**  
irrigation & water systems

 [www.irri-altal.com](http://www.irri-altal.com)  
 +972.72.220.1417  
 Kibbutz Ramat David  
3658700, Israel

# IRRIGATION AROUND THE WORLD

6 mil. ha -  
0.4%

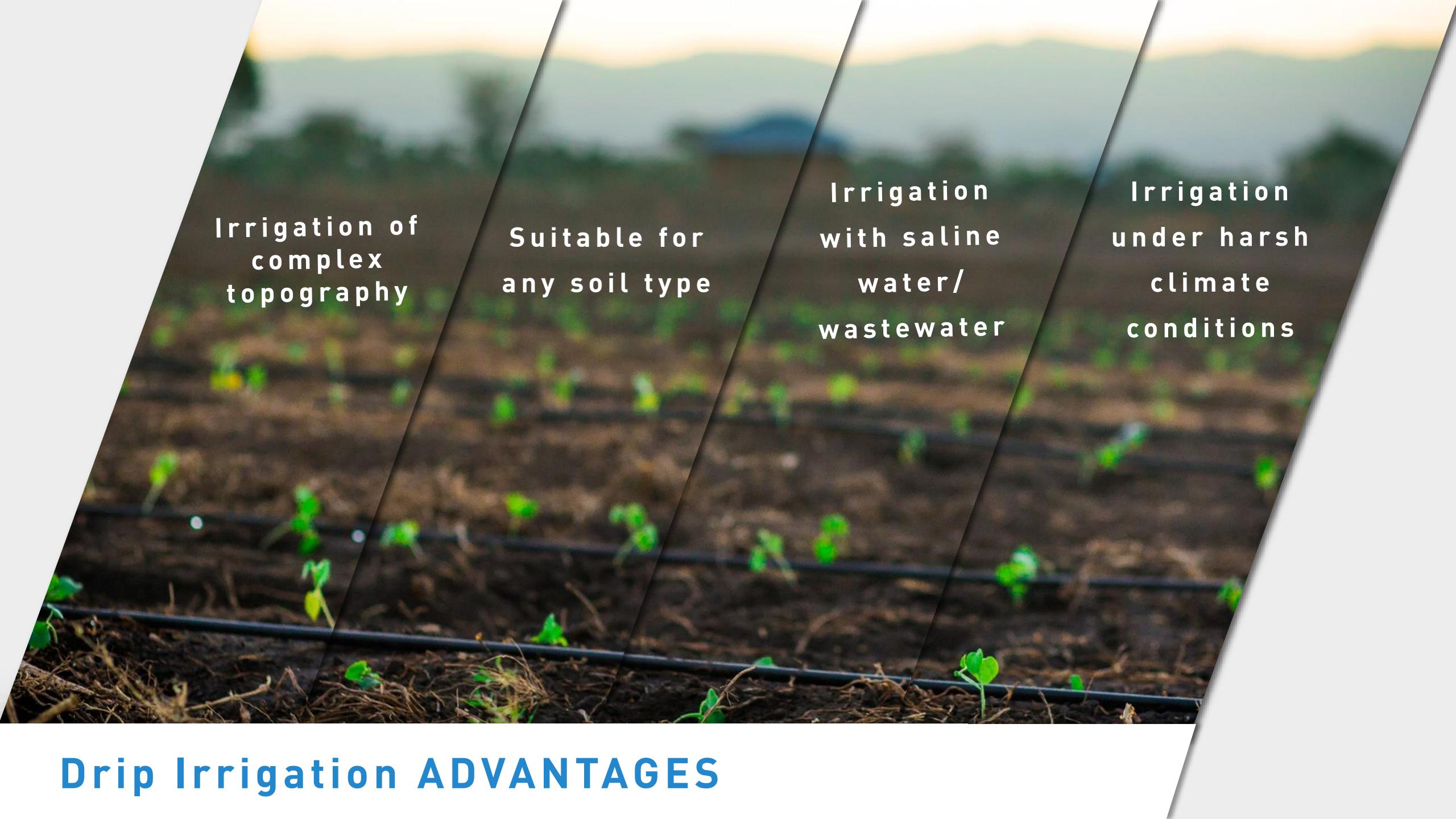


18% of irrigated land  
around the world =  
40% Food!!

275 mil. ha -  
18%

\*\* Water and Food for Ending Poverty and  
Hunger. International Commission on  
Irrigation and Drainage (ICID). March 2009.



The background image shows a agricultural field with rows of young green plants, likely seedlings, growing in dark brown soil. A black drip irrigation tube runs horizontally across the frame, with small white emitters visible from which water is dripping onto the soil. The field extends into the distance under a clear sky.

Irrigation of  
complex  
topography

Suitable for  
any soil type

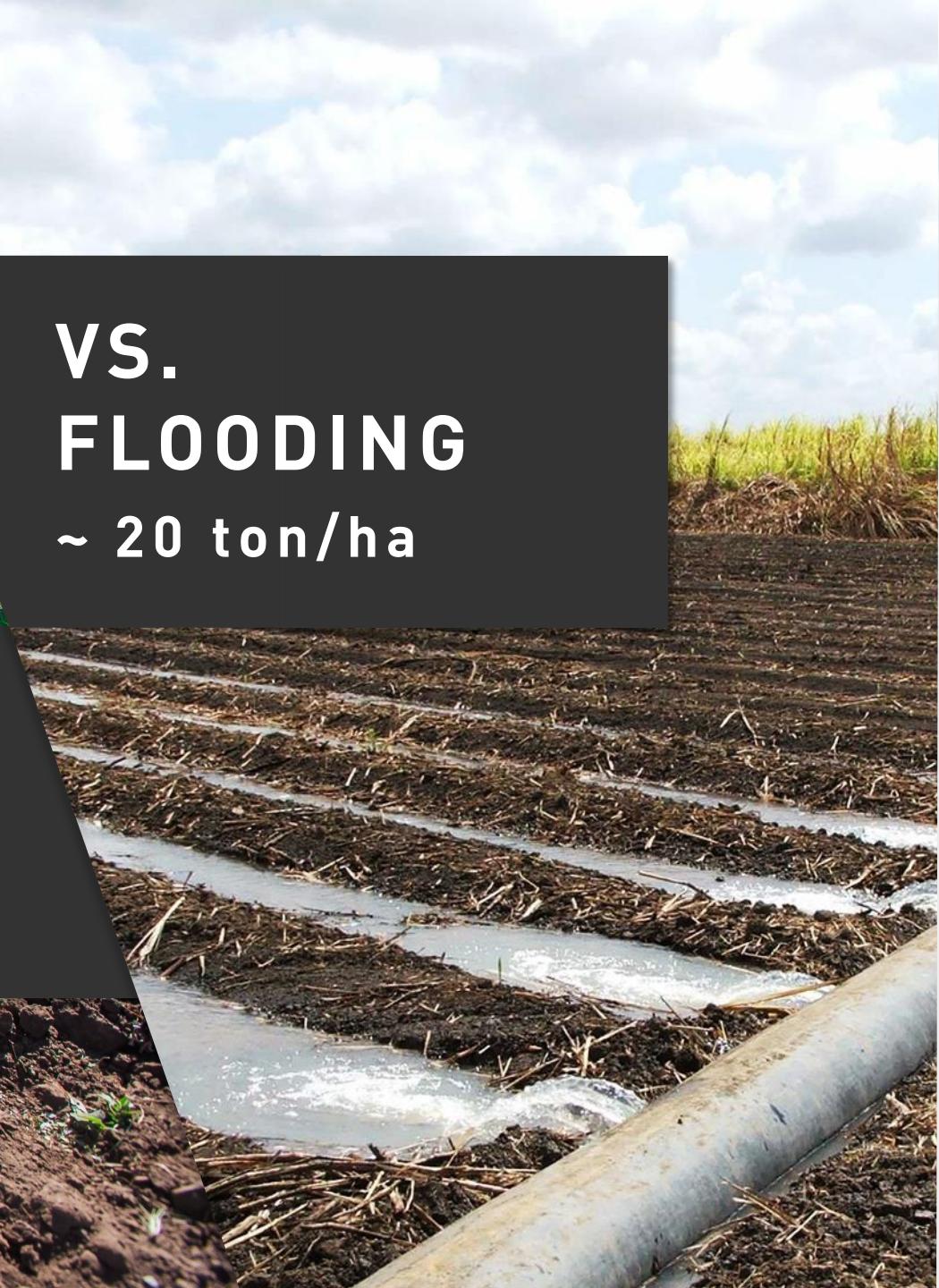
Irrigation  
with saline  
water/  
wastewater

Irrigation  
under harsh  
climate  
conditions

## Drip Irrigation ADVANTAGES



**DRIP  
FERTIGATION**  
80- 90 ton/ha



**VS.  
FLOODING**  
~ 20 ton/ha

# DRIP FERTIGATION

**Suitable for many types of crops:**

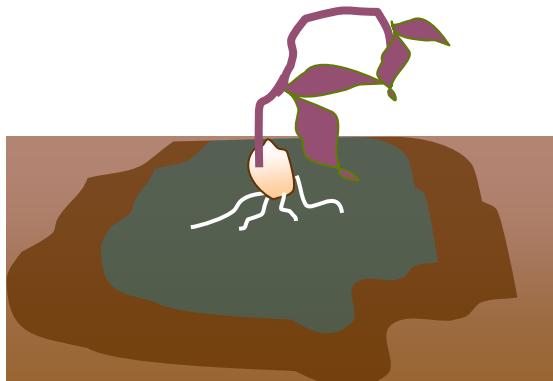
- ✓ Apple orchards
- ✓ Vineyards
- ✓ Palm trees
- ✓ Onion field
- ✓ Tomato field
- ✓ Corn filed
- ✓ Watermelon field
- ✓ & many more



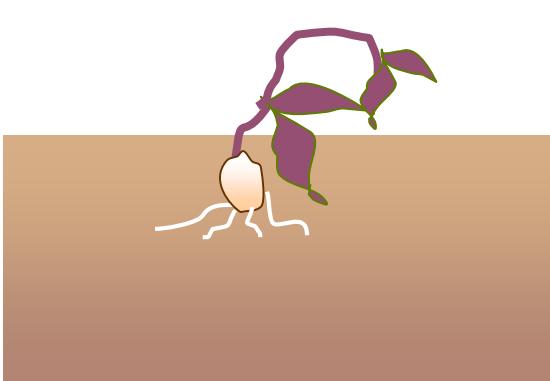
# DRIP FERTIGATION

## Advantages

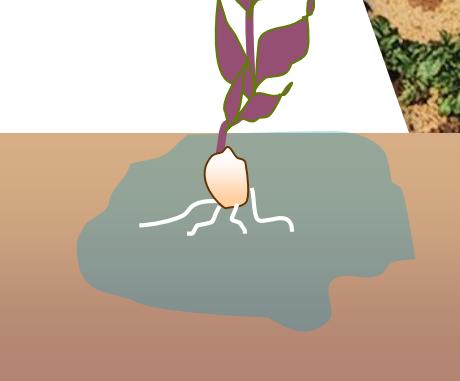
- ✓ Accurate & cost-effective
- ✓ Optimal conditions in the root zone
- ✓ Maximum plant nutrition uptake
- ✓ Prevention of weeds & nutrient leaching
- ✓ High efficiency (>95%)



Excess



Deficit



Optimal





## **DRIP FERTIGATION**

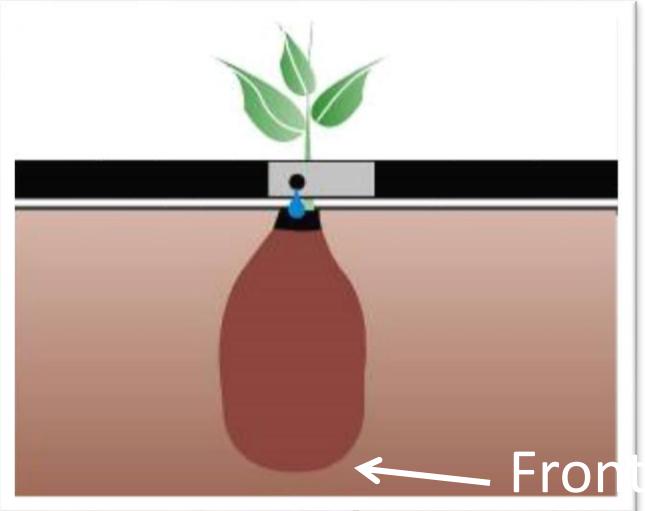
### **Advantages**

- ✓ Accurate & cost-effective
- ✓ Optimal conditions in the root zone
- ✓ Maximum plant nutrition uptake
- ✓ Prevention of weeds & nutrient leaching
- ✓ High efficiency (>95%)

# Water & fertilizer profile VS. soil type

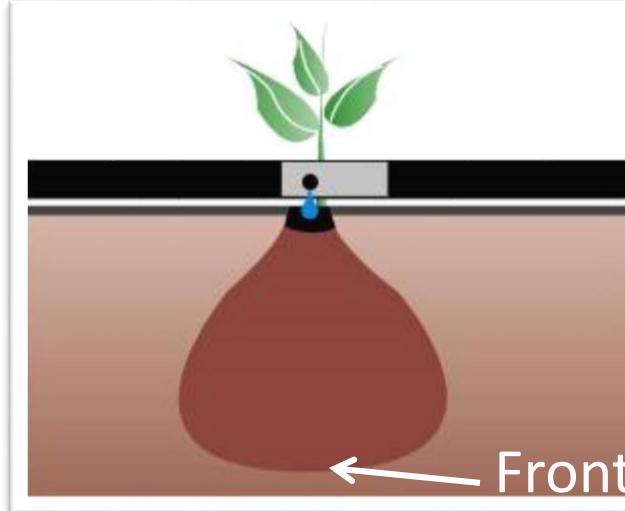


**Light**



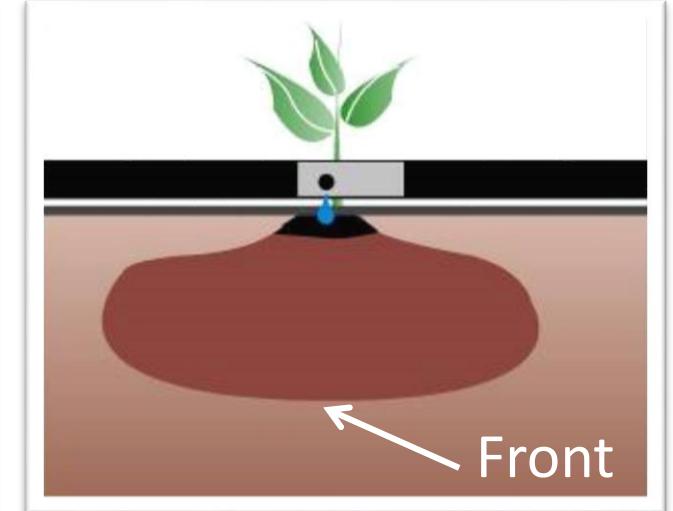
Wetting diameter  
~ 0.30 m

**Medium**



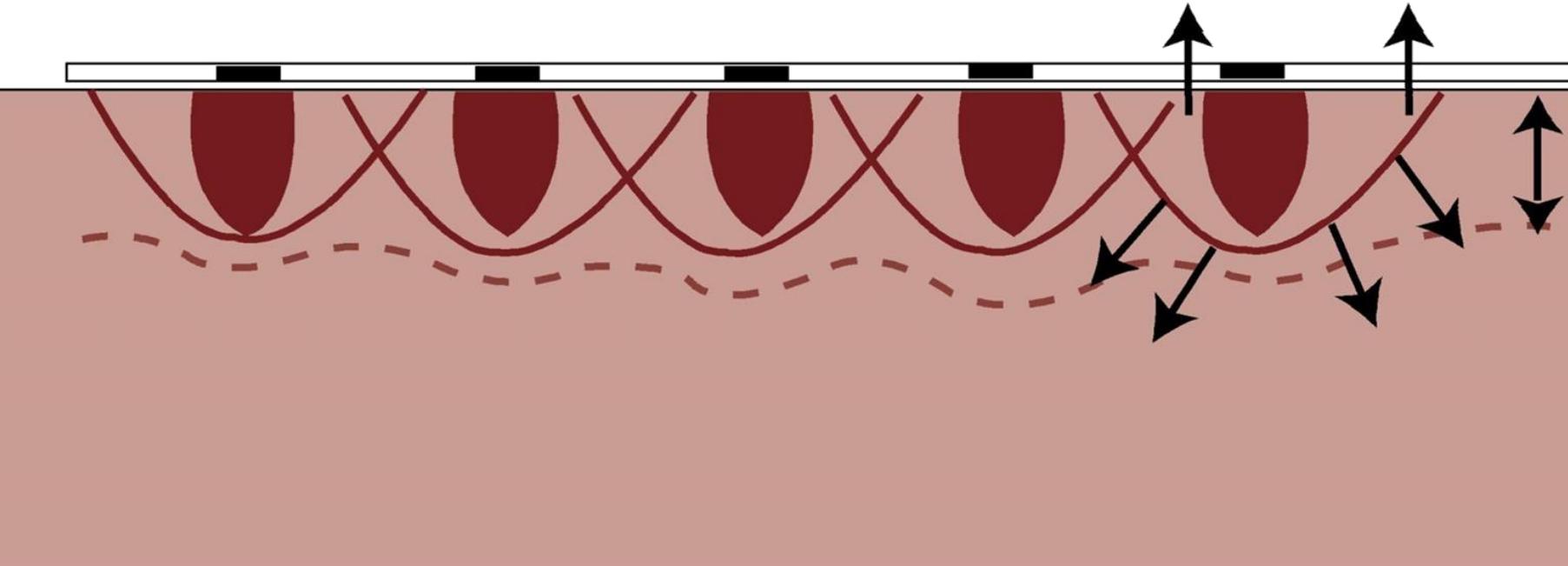
Wetting diameter  
~ 1.0 M

**Heavy**



Wetting diameter  
~ 1.5 M

# Water profile below dripline



Saturated zone

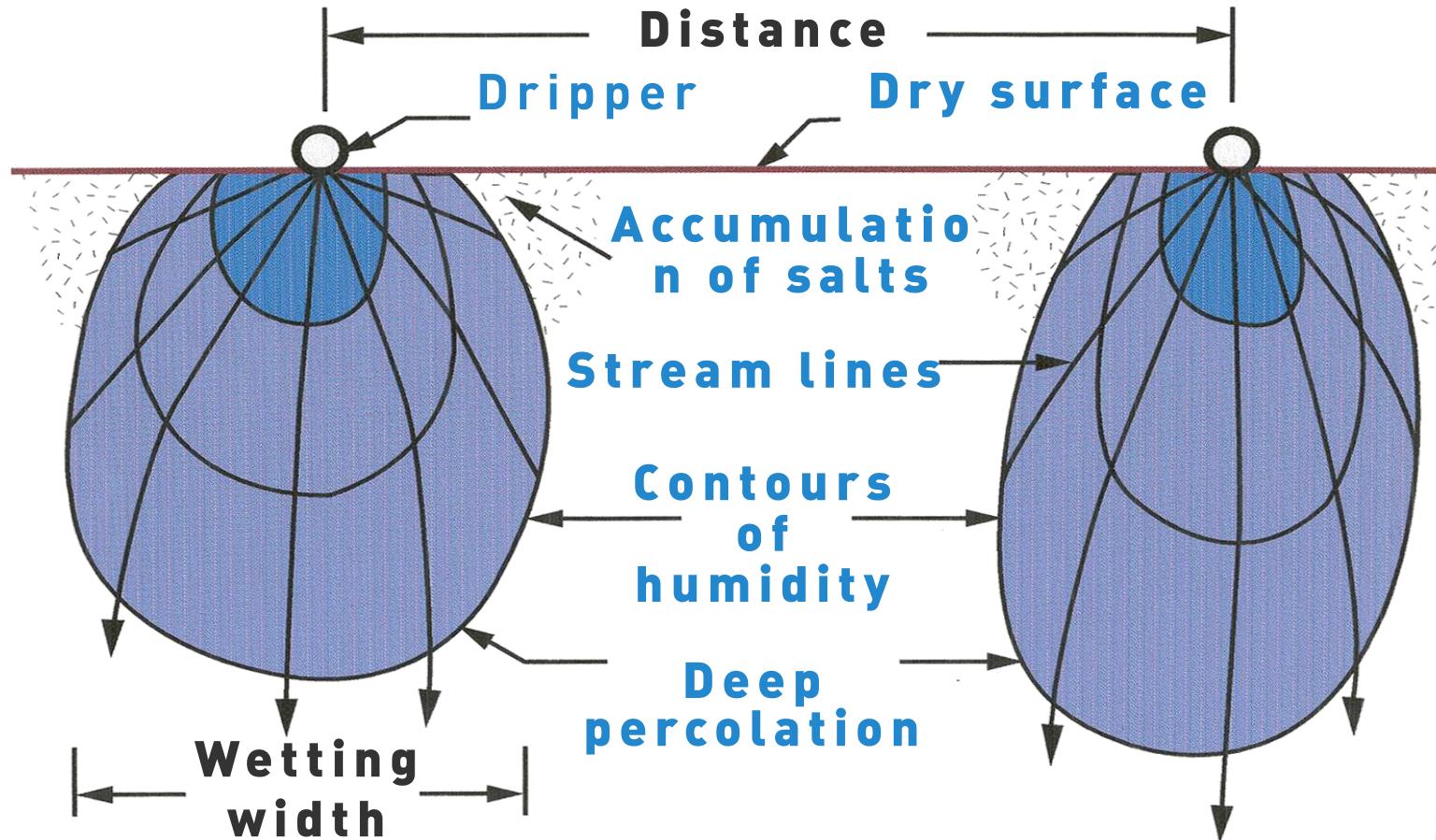


Wetting limit of a single dripper



Wetting limit of the dripline

# Accumulation of salts below the dripper





# Types of DRIPLINES

- Diameter - 16 - 23 mm
- Wall thickness - higher/ lower than 0.65 mm
- Shape - cylindrical/ flat
- Flow rate - low/ high
- Pressure compensation - PC/ Non PC



# RANGE OF DRIP PRODUCTS

## Driplines



## Button drippers



## Accessories



# PRESSURE COMPENSATION

## Non-compensated drippers (Non PC)

- Flow rate is dependent of pressure (varies). Flat surface or moderated slope

## Compensated drippers (PC)

- Flow rate is constant (within pressure range)
- Silicone element
- Complex topography and/ or long laterals



# OUR GOAL is to help you in:

- ✓ Improving yields & produce quality
- ✓ Establishing sustainable agriculture
- ✓ Reaching maximum profitability



# THANK YOU

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