

KEY FACTS ABOUT WATER

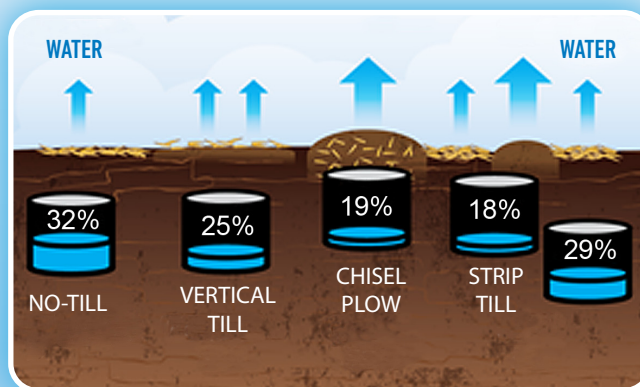
- 7-8% of the total agricultural area in Europe is irrigated.
- 40-45% of total water use in Europe is allocated to crop irrigation annually.
- Southern Europe uses about 95% of the total volume of irrigation water at the European level.
- Water losses resulting in a reduction in irrigation efficiency between 50-70%.

IMPACT OF DROUGHTS ON THE LAND

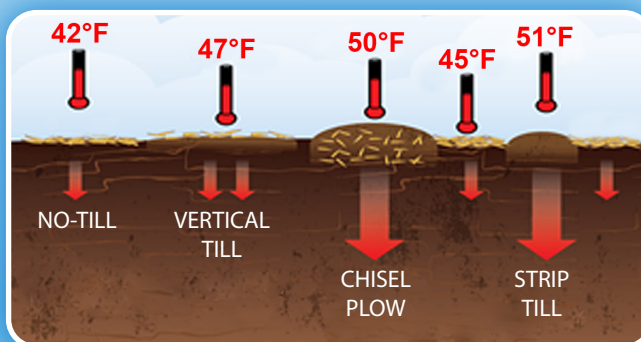
The increased evapotranspiration during droughts leads to a decrease in surface and soil moisture. This, in turn, leads to the need for more frequent irrigation of crops with greater amounts water.

Soil fertility is reduced, while soil salinization phenomena are observed limiting the ability to cultivate specific crops sensitive to salts.

The heavy rainfall that accompanies drought phenomena, results in leaching and erosion of the soil, as well as removal of fertile land.



No-tillage and conservation tillage measures have considerable benefits in terms of a decrease in soil temperatures, if combined with mulching.



EXAMPLES OF INNOVATIVE WATER MANAGEMENT

- Drip irrigation systems deliver water directly to plant roots, reducing the evaporation that occurs with sprinkler irrigation systems.
- Irrigation Scheduling. Smart water management is not only about how water is delivered but also when, how often, and how much.
- Crops resistant to drought. Growing crops that are appropriate to the region's climate is another way in which farmers achieve higher yield per drop.
- Dry farming relies on soil moisture to produce crops during the dry season, avoiding artificial irrigation.
- Cover crops reduce weeds, increase soil fertility and organic matter and help prevent erosion and compaction
- Conservation tillage uses specialized plows or other implements that partially till the soil but leave at least 30 percent of vegetative crop residue on the surface.
- Rotational grazing is a process in which livestock are moved between pastures to promote their regrowth.
- Compost, or decomposed organic matter used as fertilizer, has been found to improve soil structure and increase its water-holding capacity.

Increase technical knowledge and professionalism

HOW TO SUPPORT FARMERS

Rewarding farmers who respect good environmental practices related to pastures, rotations, through "greening" measures

More "motivating" programs to improve irrigation systems should be adopted and implemented

Raise professional profile through more training, developing new skills and providing advice on technical, bureaucratic and financial aspects