Soil moisture and food security

Water is the “lifeblood” of agriculture — improved soil moisture management is critical for sustainable food production.

Soil moisture and food security

The great challenge for the future will be increasing food production with less water.

Meeting food security targets requires sustainable agricultural policies that ensure improved soil quality and water retention.

Improving soil moisture

Many sustainable agricultural and land management practices can improve soil moisture retention:

- Residue covers, cover crops and mulching
- Conservation tillage
- Zero-tillage
- Conservation agriculture
- Capture of runoff from adjacent lands
- Rainwater harvesting
- Knowledge-based precision irrigation
- Efficient use of water, reduced use of pesticides and improvements in soil health can lead to average crop yield increases of 79%