# TO WAYS FARMERS ARE SAVING WATER

found to improve soil structure, increasing its water-holding capacity. Mulch is a material spread on top of the soil to conserve moisture. Mulch made from organic materials such as straw or wood chips will break down into compost, further increasing the soil's ability to retain water.

#### 8 Cover Crops



Planted to protect soil that would otherwise go bare, cover crops reduce weeds, increase soil fertility and organic matter, and help prevent erosion and compaction. This allows water to more easily penetrate the soil and improves its water-holding capacity.

#### 9 Conservation Tillage

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. Like the use of cover crops, such practices help increase



water absorption and reduce evaporation, erosion, and compaction.

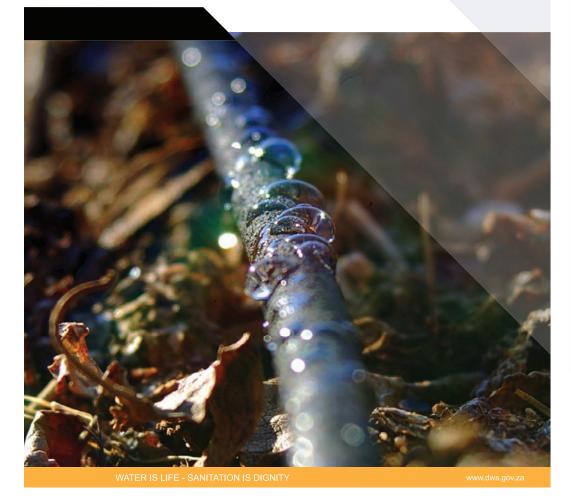
# **10 Going Organic**



Corn grown in organic fields had 30 percent greater yields than conventional fields in years of drought. In addition to keeping many of the more toxic pesticides out of our waterways, organic methods help retain soil moisture. Healthy soil that is rich in organic matter and microbial life serves as a sponge that delivers moisture to plants.

Layout & Design by: Communication Services Department of Water and Sanitation www.dws.gov.za

# 10 WAYS FARMERS ARE SAVING WATER







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#### 1 Drip Irrigation

Drip irrigation systems deliver water directly to a plant's roots, reducing the evaporation that happens with spray watering systems. Timers can be used to schedule watering for the cooler parts of the day, further reducing water loss. Properly installed drip irrigation can save up to 80 percent more water than conventional irrigation, and can even contribute to increased crop yields.

#### 2 Capturing and Storing Water



Many farms rely on surface (dam, rivers etc.) and rain water or wells (ground

water), while some have built their own ponds to capture and store rainfall for use throughout the year.

Properly managed ponds can also create habitat for local wildlife. Use of rain water ponds can help to minimize the impact on the surrounding watershed.

#### 3 Irrigation Scheduling

PROGRAMME	WATER DAYS	START TIMES	VALVENO	LOCATION	VALVE RUN TIME

Smart water management is not just about how water is delivered but also when, how often, and how much. To avoid under- or overwatering their crops, farmers carefully monitor the weather forecast, as well as soil and plant moisture, and adapt their irrigation schedule to the current conditions.

#### 4 Drought-Tolerant Crops

Growing crops that are appropriate to the region's climate is another way that farmers are getting more crop per drop. Crop species that are native to





arid regions are naturally drought-tolerant, while other crop varieties have been selected over time for their low water needs.

## 5 Dry Farming



Dry farming, don't need to irrigate, rely on soil moisture to produce their crops during the dry season. Special tilling practices and careful attention to microclimates are essential. Dry farming tends to enhance flavours, but produces lower yields than irrigated crops.

### **6** Rotational Grazing



Rotational grazing is a process in which livestock are moved between fields to help promote pasture regrowth. Good grazing management increases the fields' water absorption and decreases water runoff, making pastures more drought-resistant. Increased soil organic matter and better forage cover are also water-saving benefits of rotational grazing.

## 7 Compost and Mulch



Compost, or decomposed organic matter used as fertilizer, has been