NO-TILL



CONSERVATION AGRICULTURE IN ACTION GIVES FOOD FOR THOUGHT AND ULTIMATELY FOOD SECURITY NO-TILL CONSERVATION AGRICULTURE IS ALL ABOUT MANAGING WATER AND WIND EROSION, WHILE BUILDING HEALTHY FERTILE SOILS

Everyone in South Africa must be conscious of their actions on our most valuable natural resource: – THE SOIL WE USE TO PRODUCE FOOD –

Soil is lost at a rate of 60 times faster than it is being formed

This is serious! Stop! Listen! Learn! Think and apply no-till on your farm.

Raindrops come with great force in a severe storm. You need to control this force! Good mulch acts as a shock absorber and reduces the velocity of the water on the soil surface.



A magnified picture of the force of a raindrop IS THIS RAINDROP A FRIEND OR FOE? LIKE EVERYTHING IN LIFE IT NEEDS TO BE CONTROLLED



Is this like your land as you watch your valuable soil, fertiliser, seed, and work being washed away along with your title deeds?



The importance of mulch cannot be over emphasised



Happy plants need good mulch



This is why you need good mulch on the surface of the soil



A SATELLITE PHOTO OF A DUST CLOUD BLOWN OFF AFRICAN SOIL!



HOW SERIOUS IS WATER EROSION?

SA loss of soil is estimated at 300 million tons per annum

(10 million 30-ton Inter-Link trucks!!!)

On an Inanda soil, over a 10 year period, annual average soil loss of 7.1 tons per ha. FOURTEEN times greater than the rate at which soil could be replaced (generated) i.e. 0.5 tons/annum.

ONLY 13% OF SA IS SUITABLE FOR CROP PRODUCTION, OF WHICH 3% IS CONSIDERED HIGH POTENTIAL CROPPING LAND.

The dams of SA are silting up! Shongweni dam silted up in 60 years! Hazelmere dam lost 20% of capacity in 12 years!

WHAT ABOUT WIND EROSION?

Approximately two million ha of cropland on the Highveld is subject to severe wind erosion. Losses of 20 to 60 tons/ha of fine material, which is the most fertile part of the soil, could be lost when cultivation takes place.

In the Free State, 100000 ha of cultivated land is subject to severe wind erosion.

The extent of cover on the soil is by far the most important factor influencing soil losses. Sixty per cent of South African soils are very low in organic matter. The major problem, following cultivation is the initial loss of organic matter and soil nitrogen and the subsequent increasing tempo of erosion.

WE CERTAINLY CANNOT CONTINUE WITHOUT CONSIDERING CONSERVATION AGRICULTURE