



# **BEST PRACTICES FOR SUFFICIENT QUALITY FODDER PRODUCTION**

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# The Problems



Lack of proper soil management:

- No soil sampling to upgrade fertility / use
- No fertilization on Grass / Pastures
- Low yields (in general) and thus poor results (in quantity & quality)
- Seasonality



# Recommended Practices

- Use MOULD plough instead of disc plough:
  - Flat beds
  - 1 round of harrowing required
  - Only costs sh.200 more
- Harrow immediately after ploughing when soil still soft





# Disc-plough







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# Mould Plough



# Minimum tillage

## Advantages:

No waste of water

Reduction on cost of machinery

Better soil management

Better use of Nutricious value

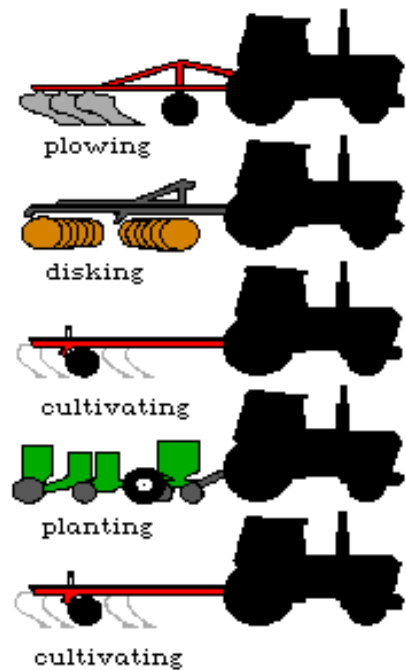
In future..... better yield (soil investment)

# Conventional Tillage Practices

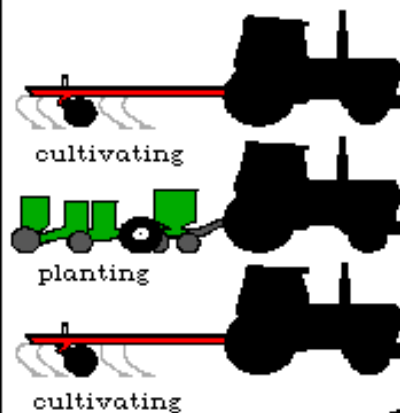
Source: Fundamentals of No-Till Farming.  
Chevron Chemical Co.

Comparison of steps  
needed for types of  
tillage.

## CONVENTIONAL TILLAGE



## REDUCED TILLAGE



## NO-TILL



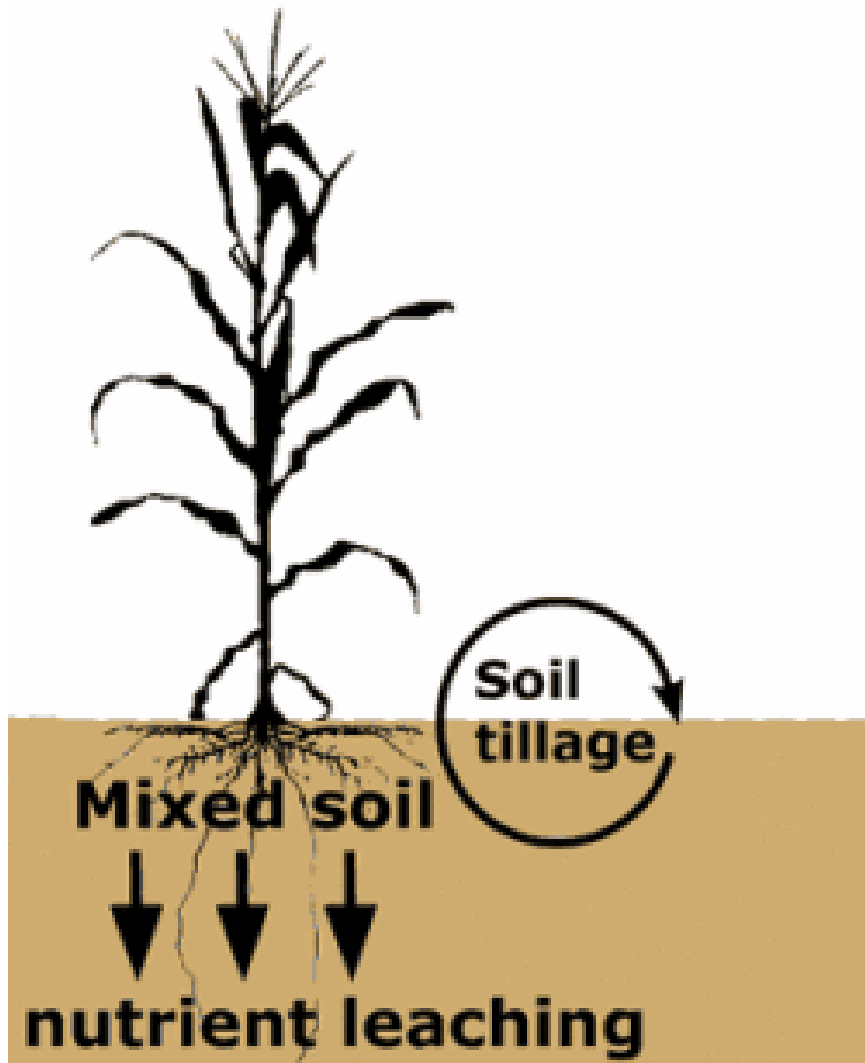
———— CONSERVATION TILLAGE ————



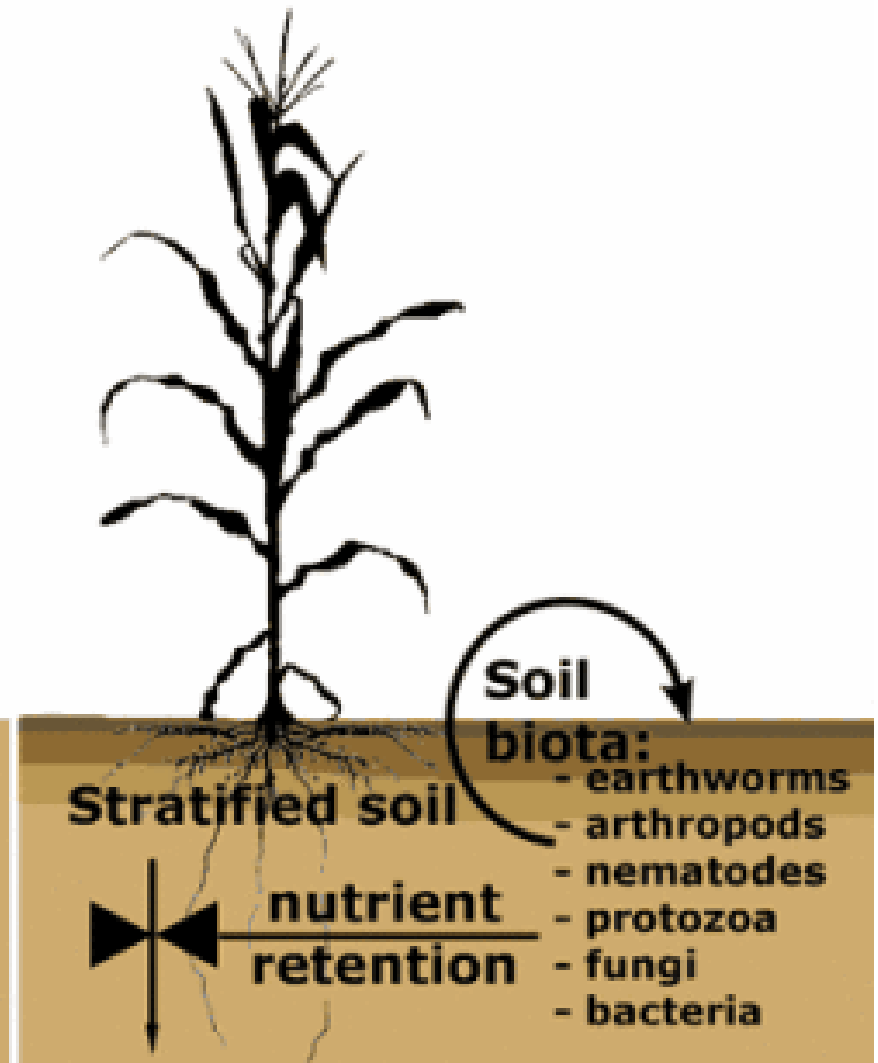
# Cultivator with Roll



## Conventional Tillage



## Conservation Tillage





# Recommended Practices

- Plant improved, certified and treated seed
- Fertilizing the soil
- Use calibrated planter that places fertilizer 5cm-below 5cm-aside of seed
- Right harvesting time
- Short harvest time: logistics
- Optimal conservation practice (storage)!
- Do trials before upscaling new technologies

# Fodder Nutrition



- Soil analysis for other basic nutrients once every 5 years
- Soil analysis for N done every year,
- For Rhodes hay production apply CAN after every cut
- For cost-benefit analysis of fertilizing, refer to Technology farm case study



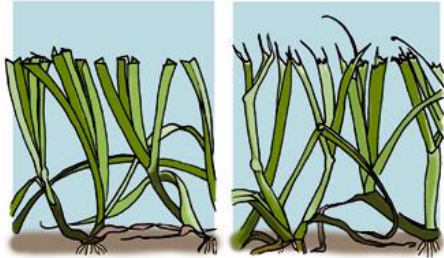
# HAY/Silage?



- Use improved and certified seed
- Cut the grass at knee height: nutrients!
- Cut before the spike is coming out, when this is coming out, the leaves are dying and the food-value decreases.
- Mowing height from the ground: +5 cm



# Hay/ Silage production





# Fertilizing for Hay production



- At planting 150kg DAP pro acre
- After each cutting 100 CAN pro acre



# PASTURE



- Start with the cows at 16 cm grass height



- After grazing top-off the grass (same stage)



- Give CAN 100 kg pro acre after each grazing
- You can feed your cows on the same field 5 or 6 or even more times a year (rotational grazing)

# MAIZE

- Use improved, certified and treated seed if possible hybrid seed
- Look for difference in earliness of the variety
- Look for stay green variety harvest at dough ripe stage
- Chop the maize at 1 or 1,5 cm





# Fertilizing Maize

- Before planting 140 kg CAN per acre
- At planting 50 kg Mais-map = per 100 kg:  
20 N and 40 P<sub>2</sub>O<sub>5</sub> .
- Later (at length knee-high) 140 CAN per acre  
given/supplied by hand















