

The Benefits of Tillage

- 1) Soil surface is left covered residue (conserve moisture)
- 2) Residue protects soil from erosion
- 3) Reduced costs (fewer operations)
- 4) Soil tilth improved (less compaction)
- ↳ Weeds are controlled with chemicals

Description on Primary Tillage Implements

Primary Tillage implements

- Furrow Former
- Plough
 - Mould board Plough
 - Disc Plough
 - Chisel Plough
- Bed Furrow former
- Cultivator
- Disc Harrow
- Subsoil Plough
- Rotary Plough

Chisel Plough

- Used to stirring the soil donot invert & pulverize the soil
- Used to loosen hard, dry soil

Plough

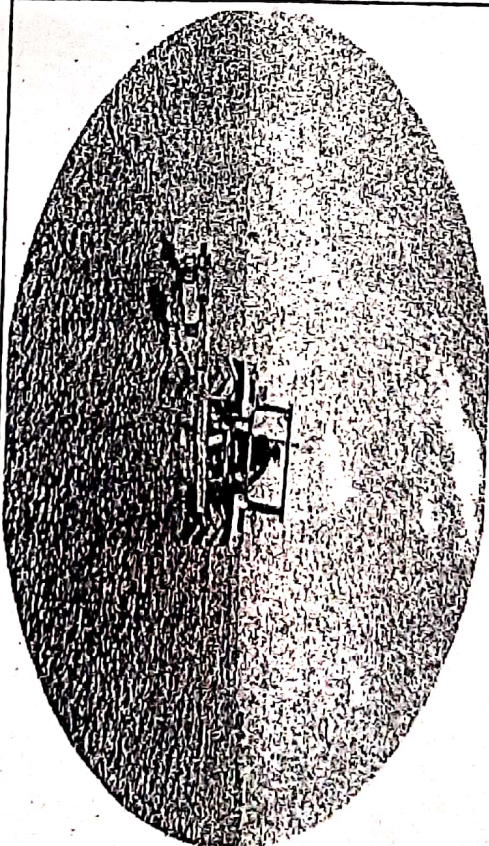
- Plough is a primary tillage implement .
- It is designed to work in all types of soil for basic functions , such as soil breaking , soil raising , soil turning ad soil mixing .
- It is especially useful in hard and dry trashy land conditions and in soils where scouring is a major problem

Furrow Former

- It is used for making bunds or ridges by collecting the soil .
- Bunds are required to hold water in the soil , thereby one can conserve moisture and prevent run-off .
- Bund former consist Of farming board , Beam and handle



Furrow Former



Bed Furrow Former

- It is capable of farming alternate beds and channels.
- The Beds are suitable for planting Crops like Sorghum , maize and cotton .
- The Bed and furrow system is ideal for efficient irrigation management .
- It is also facilitates intercropping and intercultural practices .

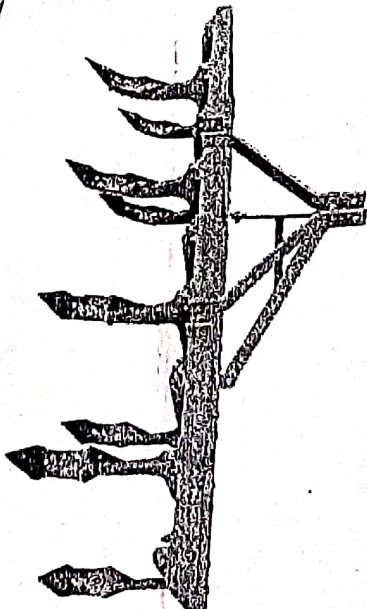
Bed furrow former



Cultivator

- It consists of a frame, tynes having reversible shovels and 3 point hitch system.
- It is commonly used for interculture operations after the crop has come up a few centimeters above the ground.
- ✓ Cultivator is also used for opening the land, preparing the seedbed and sowing of the seedbed as well.

Cultivator



Disc Harrow

- The disc harrow consist of a number of concave discs of 45 to 55 cm in diameter .
- The disc harrow cut through the soil and effectively pulverize the clods .
- Blades are used for different purposes like removal of weeds and stubbles , crushing of clods .



Disc Harrow



Sub-Soil Plough

- The subsoil plough is designed to breakup hard layers or pans without bringing them to surface .
- The body of the subsoil plough is wedge shaped and narrow .
- The share of subsoil plough is wide so as the shatter the hard pan and making only a slot on the top layers .

→ Improve Soil Structure

The Sub-Soiler

