

# PLOUGH

Classification of ploughs according to power used

## 1. INDIGENOUS PLOUGH

- It also called as country ploughs
- It is an animal drawn plough. It penetrates into the soil and breaks it open. It forms V shaped furrows with 15-20 cm top width and 12-15 cm depth.
- Except share all other parts are made up of wood.
- The field capacity is around 0.4 ha per day of 8 hours.

### Indigenous plough

**Share** - It is the working part of the plough attached to the shoe with which it penetrates into the soil and breaks it open.

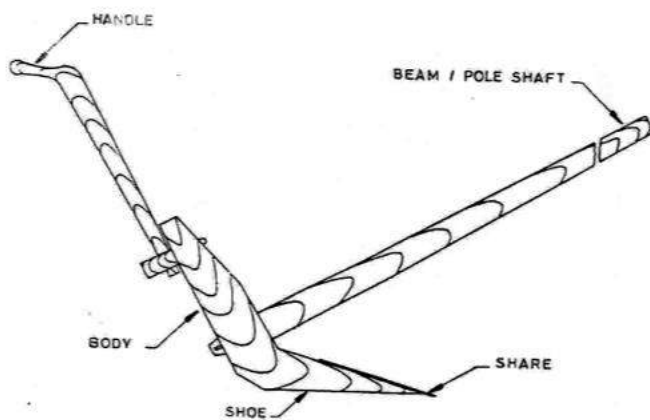
**Shoe** - It supports and stabilizes the plough at the required depth.

**Body** - It is the main part of the plough to which the shoe, beam and handle are wood.

**Beam** - It is a long wooden piece, which connects the main body of the plough to the yoke

**Handle** - A wooden piece vertically attached to the body to enable the operator to control the plough while it is working

In each state farmers use indigenous ploughs of their own make.



## MOULD BOARD PLOUGH

Mouldboard plough is one of the oldest of all agricultural implements and is generally considered to be the important tillage implement.

a mouldboard plough does four jobs namely

- cutting the furrow slice
- lifting the furrow slice

- inverting the furrow slice
- pulverizing the furrow slice



### Components of Mould Board plough

- Plough bottoms:** The part of the plough which actually cuts, lifts, pulverizes and through the soil out of the furrow.
- Share:** It is that part of the plough bottom which penetrates into the soil and makes a horizontal cut below the surface.
- Mould board:** It is the curved part which lifts, turns, and pulverizes the soil slice.
- Land side:** It is the flat plate which presses against the furrow wall and prevents the plough from lateral swinging. The rear part of land side is called heel which slides on the bottom of the furrow
- Frog:** It is the part to which share, land side and mouldboard are attached.
- Tail piece:** It is an adjustable extension, which can be fastened to the rear of the mould board to help in turning the furrow slice.

### Types of mould board

#### (i) General purpose

- It is a mould board having medium curvature lying between stubble and sod types.



### (ii) Stubble type

It is short but broader mould board with a relatively abrupt curvature which lifts, breaks and turns the furrow slice. This is best suited to work in stubble soil that is under cultivation for years together. This type of mould board is not suitable for lands with full of grasses.

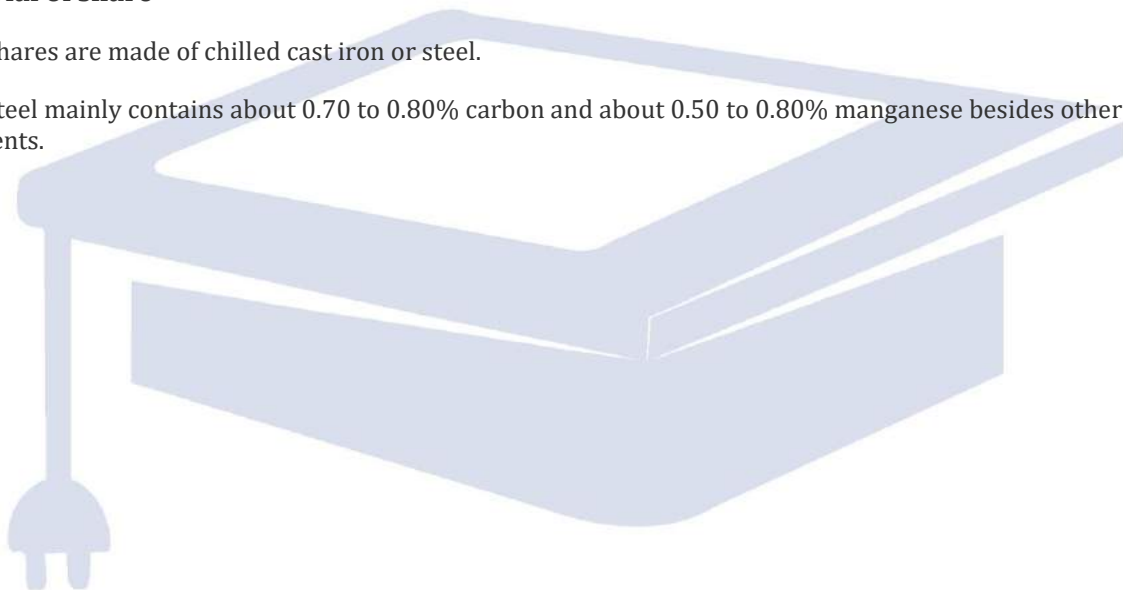
### Sod or Breaker type

It is a long mould board with gentle curvature which lifts and inverts the unbroken furrow slice. This is very useful where complete inversion of soil is required by the farmer. This type has been designed for used in sod soils (**soil with much of grass**).

### Slat type

#### ➤ Material of share

- The shares are made of chilled cast iron or steel.
- The steel mainly contains about 0.70 to 0.80% carbon and about 0.50 to 0.80% manganese besides other minor elements.



LEARNIZY