

23. FARM IMPLEMENTS AND MACHINERY

I. LAND PREPARATION IMPLEMENTS

TRACTOR OPERATED CHISEL PLOUGH

Purpose	Suitable for deep tillage upto a depth of 40 cm for breaking hard soil pan.
Type of the implement	Tractor operated
Field capacity	1.4 ha / day at a spacing of 1.5m between rows
Cost of the implement	Rs.12000/- (Approximately)
Salient Features	Operated by any 35-45 hp tractor. The implement is simple in construction and has only three components namely frame, standard and share. The share has a lift angle of 20 degree, width of 25mm and length of 150mm. The implement is protected by shear pin which prevents damage from overloading.



TRACTOR OPERATED SUBSOIL COIRPITH APPLICATOR

Purpose	The sub soil coir pith mulch is applied at 15-30 cm deep
Type of the implement	Tractor operated
Field capacity	0.60 ha/day
Cost of the implement	Rs.40,000/- (Approximately)
Salient Features	Ensures higher moisture retention, crop growth and yield



TRACTOR OPERATED ROTARY SPADING MACHINE

Purpose	Primary tillage tools suitable for all soil conditions including wet clay soil and recommended for intercultural operation in coconut orchards
Type of the implement	Tractor operated
Field capacity	1.5 ha per day
Cost of the implement	Rs. 1,20,000 /- (Approximately)
Salient Features	High energy utilization efficiency



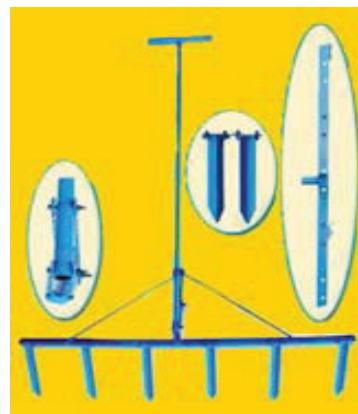
TWIN ROW PRECISION ORGANIC MANURE CUM FERTILIZER APPLICATOR

Purpose	Suitable for accurate and controlled application of organic manure/mulch directly below the root zone.
Type of the implement	Tractor operated
Field capacity	1.0 ha per day
Cost of the implement	Rs. 1,25,000 /- (Approximately)
Salient Features	<ul style="list-style-type: none"> • Helps in improving the soil nutrient use efficiency, crop yield and soil quality. • Adjustable spacing between furrows enables the use at different row spacing • Simultaneous precise placements of organic manure and inorganic fertilizer.



MANUALLY OPERATED MARKER

Purpose	Marker for line sowing
Type of the implement	Manually operated
Cost of the implement	Rs. 1800 /- (Approximately)
Salient Features	<ul style="list-style-type: none"> • Easy to operate • Reduced seed rate • Suitable for small and marginal farmers • Reduction in cost of cultivation • Maintenance of optimum plant population • Easy for inter cultural operation (Weeding, Spraying)



TRACTOR OPERATED PIT DIGGER FOR SUGAR CANE PLANTING

Purpose	Pit Digger for Sugarcane Planting
Type of the implement	Tractor operated
Field capacity	250 to 300 holes per hour
Cost of the implement	Rs. 1,20,00 /- (Approximately)
Salient Features	<ul style="list-style-type: none"> • At a time two pits of dia 90 cm can be made • Spacing between the auger is adjustable



SYSTEM FOR CONTROLLED LEVEL OF PUDDLING

Purpose	To control the level of puddling in wetland
Type of the implement	Tractor mounted
Field capacity	1.5 ha / day
Cost of the implement	Rs.50,000/- (Additional Hydraulic cylinder to the existing laser leveller)
Salient Features	<ul style="list-style-type: none"> • Constant depth of puddle can be maintained accurately, reducing the tillage energy expended by deep puddling. • Reduce water requirement for puddling. • Establishment of a strong sub soil layer that will reduce deep percolation. • Ensures good level surface layer and subsurface layer enabling easy transplanting



ii. SOWING IMPLEMENTS

SEED CUM FERTILIZER DRILL FOR PADDY

Purpose	For direct sowing of paddy and simultaneous application of fertilizer
Type of the implement	Tractor mounted
Field capacity	3 ha/day
Cost of the implement	Rs. 75,000 /- (Approximately)
Salient Features	<ul style="list-style-type: none"> • For dry sowing of paddy seeds in 9 rows at uniform depth and spacing



NEEDLE TYPE TRAY SEEDER FOR VEGETABLE NURSERY

Purpose	To sow in pro tray cavities
Field capacity	Can sow seeds in 60 trays/ hour
Cost of the unit	Rs. 35,000 /- (Approximately)
Salient Features	<ul style="list-style-type: none"> • To mechanize placement of seeds in the pro-tray cells • Singulated raw/ pelleted seeds placed in all the cells in a single stroke • Cost of operation is Rs. 280 for sowing 750 trays /day • Saving in time is 300% and saving in labour is 60

