



Weeding Equipment

- Khurpi (a hand hoe) take 300 – 400 man hours per hectare. Takes more time so yield is loss by 20 – 60 %.
- Wheel hoe and peg type weeder are more efficient than khurpi take 25 – 110 hours per hectare.

S. No.	Name of implement	Size(mm)	Work Capacity	
			Ha/h	h/Ha
Power of tiller operated				
1	3 tyned cultivator/sweep	1000	0.2	5
1	9 – 11 tyned tiller	2500	0.45	2-2.5
2	5 tyned sweep	2500	0.45	2-2.5
Self-propelled weeder				
3	CIAE/TNAU power weeder	500	0.125	8
Manual Operated				
4	Gruber	150-200	0.012	80
5	Dry land peg weeder	150-200	0.025	40
6	CIAE twin wheel hoe	150-200	0.025	40
7	PAU wheel hoe	150-200	0.035	30
Animal Operated				
8	Three tyned sweep/cultivator	600	0.2	5
9	Dora	300	0.1	10

Equipment for Spraying and dusting operations

- Manually Operated:

S. No.	Name of the Implement (manually operated)	Size(mm)	Work Capacity	
			ha/h	h/ha
1.	Hand compression sprayer	14 liters	0.095	10.5
2.	Lever operated Knapsack sprayer	13 – 16 litters	0.095	10.5
3.	Foot sprayer		0.165	6
4.	Duster	4 – 5 kg	0.25	4
5.	Controlled droplet sprayer	1 kg	0.22	5

- Power operated:

S. No.	Name of the Implement (power operated)	Size(mm)	Work Capacity	
			ha/h	h/ha
1.	Knapsack sprayer cum - duster	5 liters	0.22	5
2.	Stationary power operated sprayer	5 – 10 litters	0.35	3



- **Tractor Operated:**

S. No.	Name of the Implement (tractor operated)	Size (mm)	Work Capacity	
			ha/h	h/ha
1.	Tractor operated sprayer	5000 mm	0.5	2

- **Self -Propelled**

S. No.	Name of the Implement (self-propelled)	Size (mm)	Work Capacity	
			ha/h	h/ha
1.	High clearance sprayer	10000 mm	0.5 – 1.0	1-2

Equipment for harvesting operation

- **Manually operated implement**

S. No.	Name of the Implement	Size (mm)	Working Capacity	
			Ha/h	h/ha
1.	CIAE Serrated sickle.		0.008	125

- **Animal operated implement**

S. No.	Name of the Implement	Size (mm)	Working Capacity	
			Ha/h	h/ha
1.	CIAE Groundnut – cum – potato digger	500	0.1	10-12



- **Power tiller operated**

S. No.	Name of the Implement	Size (mm)	Working Capacity	
			Ha/h	h/ha
1.	Vertical conveyor Reaper	1200 mm	0.25	4

- **Tractor operated**

S. No.	Name of the Implement	Size (mm)	Working Capacity	
			Ha/h	h/ha
1.	Vertical conveyor Reaper	2000 mm	0.4	2.5
2.	CIAE Soyabean reaper	2000 mm	0.25	2.5

- **Self-propelled machines**

S. No.	Name of the Implement	Size (mm)	Working Capacity	
			Ha/h	h/ha
1.	Vertical conveyor Reaper	1000 mm	0.25	4
2.	Combine harvester	4200 mm	1.5 – 2.00	0.75 – 0.25



Equipment for Threshing Operation

S. No.	Equipment for threshing Operation	Size	Work Capacity Kg/h.
1.	Power operated thresher	5 – 10 HP	200 – 500
2.	2. CIAE Multi – crop thresher	5 – 10 HP	200 - 500
3.	3. High capacity multi – crop thresher	15 – 20 HP	1500 - 2000
4.	4. Tractor PTO operated multi-crops thresher	25 – 35 HP	1500 - 2500
5.	5. Paddy thresher	5 – 15 HP	200 - 1000
6.	6. Maize thresher	5 – 15 HP	500 - 2000
7.	7. Ground nut thresher	10 – 15 HP	500 - 1000

- Most of farmer used thresher which are operated by 5 – 15 HP.
- Dangerous machine(regulations) act 1983 – guideline for manufactures, users and dealers.