

# CASI Machines Comparison Chart



**Multi-Crop Zero Tillage Planter**



**Mechanical Rice Transplanter**



**Happy Seeder**

## Used For (Crop Type)

Wheat, Maize, Rice, Barley, Millets, Green gram, Chickpea, Lentil, Mustard, Soybean, Jute, and many more

Rice

Rice, Wheat, Maize, Barley, Millets, Green gram, Chickpea, Lentil, Mustard, Soybean, Jute, and many more

## Advantages

- Increases farm income by reducing labor and energy use
- Saves time and reduces turnaround period between two crops
- ZT Wheat helps in control of Phalaris minor, a major weed of wheat
- Improves soil quality and water retention capacity
- Improves the soil organic matter

- Saves labor and water.
- Timely transplant of seedling.
- Reduced transplanting shock.
- Increases 5-10% rice grain yield

Additional benefits over Zero Tillage:

- Stops farmers from crop residues burning and reduces air pollution.
- Reduces weed control measures pressure as mulch act as a physical barrier to suppress weeds.
- Saves labor, water and energy while reducing cost of production.
- Improves soil health and physical properties.
- Provides better crop resilience under adverse climatic conditions.

## Things to consider

- If weeds are present prior to seeding, weeds should be killed by spraying herbicides.
- While sowing wheat, the soil should have 3-4% more moisture than under the conventional method.
- First irrigation in Zero Tillage should be applied 4-5 days earlier than conventional tillage

- Mat-type nursery is a prerequisite.
- Avoid using this machine in a lowland conditions where water remains deep during transplanting.

- Crop residue retention on soil surface is mandatory to use machine efficiently.
- Uniform crop residue dispersion is prerequisite to run the machine.
- >45 HP tractor is required to run the machine with skilled driver

## Purchase Price

**Nepal (NPR):** 150000-180000  
**India (INR):** 80000-100000  
**Bangladesh (BDT):** 150000-180000

**Nepal (NPR):** 350000-450000  
**India (INR):** 150000-250000  
**Bangladesh (BDT):** 300000-400000

**Nepal (NPR):** 220000-250000  
**India (INR):** 130000-170000  
**Bangladesh (BDT):** 200000-250000

## Rental Cost

**Nepal (NPR/ acre):** 4000-5000  
**India (INR/ acre):** 2500-3000  
**Bangladesh (BDT/ acre):** 3000-3500

**Nepal (NPR/ acre):** 5000-5500  
**India (INR/ acre):** 3000-3500  
**Bangladesh (BDT/ acre):** 3500-4000

**Nepal (NPR/ acre):** 5000-5500  
**India (INR/ acre):** 3000-3500  
**Bangladesh (BDT/ acre):** 4000-4500

## Contact (to purchase or rental services)

**Nepal:** Rupandehi, Itahari  
**India:** Commercially available in local markets (SSCOP-Coochbehar)  
**Bangladesh:** Janata engineering-Chaudanga

**Nepal:** Kathmandu, Itahari,  
**India:** Commercially available (Mahindra, Yanmar, VST, Kubota etc)  
**Bangladesh:** Commercially available (ACI, Metal, Janata)

**Nepal:** Rupandehi, Itahari  
**India:** Commercially available in local markets (SSCOP-Coochbehar)  
**Bangladesh:** On Order

# CASI Machines Comparison Chart



**Power Tiller Operated Seeder**



**Strip Tiller**



**Laser Land Leveler**

## Used For (Crop Type)

Wheat, Rice, Maize, Mung beans, Sunflower, Onion, Lentil, Jute and more

- Use conserves soil moisture from previous crop by advancing sowing dates which are beneficial for yields.
- Reduce the seed requirements per unit of land area.
- Increase farm profits by doing 3 operations in as single operation (tilling, seeding and pressing)
- Yields winter dry season crops can be improved by up to 5-10% just by line sowing.

## Advantages

## Things to consider

- Wear tight-fitting clothing when operating this machine to prevent entanglement in its moving parts.
- Overloading of the machine can cause the horizontal transmission shaft to break, resulting in complete machine failure.
- Poor germination due to fast loss of soil moisture from the field after seeding due to shallow tillage

## Purchase Price

**Nepal (NPR):** 70000-80000  
**India (INR):** 35000-40000  
**Bangladesh (BDT):** 65000-75000

## Rental Cost

**Nepal (NPR/ acre):** 5500-6000  
**India (INR/ acre):** 3500-4000  
**Bangladesh (BDT/ acre):** 5000-5500

## Contact (to purchase or rental services)

**Bangladesh:** Chinese model commercially available

Maize, Rice, Wheat, Lentil, Chickpea, Mustard, Soyabean, Sunflower, Jute and more

- Creates an environment favorable for rapid seed germination and growth.
- Provides excellent residue management and erosion control.
- Optimum fertilizer placement for plant uptake, warmer seed bed, and ideal soil moisture.
- Increase farm profits by reducing labor, energy and time.
- Improves soil health and physical properties

- Keeps anchored crop residue about 30 cm height from previous crop harvest.
- Higher crop residue retention can create problem in operating the machine.
- Strip tillage machine needs special blade sheeting arrangements as per the crop spacing.

**Nepal (NPR):** 75000-80000  
**India (INR):** 35000-40000  
**Bangladesh (BDT):** 700000-800000

**Nepal (NPR/ acre):** 5500-6000  
**India (INR/ acre):** 3500-4000  
**Bangladesh (BDT/ acre):** 5000-5500

**Bangladesh:** Chaudanga, Dinajpur, Jamalpur, Dhaka

Prerequisite for all crops

- Saves water by 15-30% depending on field situation.
- Improves input (fertilizer, pesticide and herbicides) use efficiencies.
- Reduces crop diseases and weed problem.
- Increases productivity compared to unlevelled land.

**Nepal (NPR):** 450000-600000  
**India (INR):** 250000-400000  
**Bangladesh (BDT):** 450000-600000

**Nepal (NPR/ hr):** 1200-1500  
**India (INR/ hr):** 800-1000  
**Bangladesh (BDT/ hr):** 1000-1200

**Nepal:** Order basis from India  
**India:** Commercially available at dealer shops  
**Bangladesh:** Order basis from India