



Agricultural Land Leveling

What are the benefits of land leveling for Rice?

1. Higher yield

Good field leveling increases the rice yield considerably. In two experiments conducted at different localities, a strong correlation was found between the levelness of the land and crop yield.

2. Better weed control

Land leveling increases yield to a large extent because it improves weed control. Improved water coverage from better land leveling reduces weeds by up to 40%. This reduction in weeds results in less time for crop weeding.

3. Larger farming area

Good land leveling enables larger fields. Larger fields increase the farming area and improve operational efficiency. Increasing field sizes from 0.1 hectare to 0.5 hectare increases the farming area by between 5% and 7%. This increase in farming area gives the farmer the option to reshape the farming area and can reduce operating times by 10% to 15%.

4. Faster seeding/Less work

Leveling reduces the time needed for transplanting and for direct seeding. Land leveling provides greater opportunity to use direct seeding.

5. Better use of water

Rice farmers often rely on water to accumulate in the field before starting land preparation. The higher the difference between the highest and lowest portions of a rice field, the more water is needed to achieve complete water coverage. Good leveling may reduce total water requirement to grow the crop by up to 10%.

How can you get the land leveled?

By a 4-wheel tractor using rear mounted tractor blades or drag buckets. 4-wheel tractors are very effective for leveling both wet and dry fields. Wet fields are best leveled with a rear-mounted tractor blade. Dry fields are best leveled using hydraulically operated drag buckets.

Laser leveling systems are commonly used in agricultural applications in Australia, Japan and the United States. Increasingly, laser guided systems are being used in lesser developed country contexts as well. Using laser leveling results in a much more level field because accuracy can be improved by as much as 50% compared with the other systems.

A laser transmitter transmits a laser beam, which is intercepted by the laser receiver mounted on the leveling bucket. The control panel mounted on the tractor interprets the signal from the receiver and raises or lowers the bucket. This way the soil gets shifted to the right places to make the entire field level. Check [best Agricultural Land Leveling](#) Company !

GPS machine control equipment is increasingly being used in this area too.