

Low-cost machines to level farmlands

Chitra Unnithan | TNN

Ahmedabad: Uneven agricultural land is difficult to sow. Sometimes it also becomes important to remove the extra soil, which may have been deposited after rains. Two innovators identified by the Honey Bee Network — set up by Prof Anil Gupta of IIM Ahmedabad — have independently developed low-cost machines which can not only level the land but also fill tractor trailers with the soil scraped off during levelling.

Resham Singh, 56, from Rajasthan

In Hanumangarh, extra soil gets deposited on land during monsoon, thereby raising the height of the field. The difference between the soil level and the nearby canal makes it difficult to get the canal water to the field. Hence the extra soil needs to be scraped off to bring its level down to the original or below it. Resham Singh, whose expertise in innovative machinery, was approached by a farmer in 2009 to develop a land-levelling machine. He took up the challenge and developed a land-leveller, which is a tractor-operated machine. The machine scrapes and collects the soil using a scraper blade and fills the soil in the tractor's trailer through a conveyor arrangement. Resham Singh has a farm equipment and machinery workshop in Hanumangarh, Rajasthan. He studied till Class 10 but could not continue further due to poor financial condition. He started working as a mason, tried Punjabi poet-



The land-leveller is a tractor-operated innovation



Two innovators have independently developed the machines

ry for a while and then settled as mechanic.

He has sold 40 machines in Hanumangarh and nearby areas. The machines are of great help to farmers as they can level the land and fill sand in trolleys which can then be sold in the market.

Kuldeep Singh, 52, from Punjab

Kuldeep Singh was not able to sow his 200 acre land as it was very uneven. He first tried to level the land using tractors but even after spending much money, he did not get satisfactory results. Using labour was another option but that would have been quite costly. Hence,

he decided to develop a land-levelling machine. He started working on it in 2005 and finished it in 2009.

Born in a farmer's family, Kuldeep Singh grew up to be an expert mechanic and fabricator. In the early 1980s, his family felt the need for a harvester combine but it was beyond their reach because of its price tag. Kuldeep took it as a challenge and developed a harvester combine which they also rented to other farmers.

Kuldeep Singh's land leveller and loader is also a tractor operated machine that, on an average, can level about 5 acres in a day. Kuldeep Singh claims to have sold over 200 machines in Punjab, Rajasthan, Haryana, Maharashtra and Gujarat.

INDIA
INNOVATES

