



National Award – Second

Tractor Powered Sprayer

Gurmeet Singh Bhupal
Hanumangarh, Rajasthan

Gurtej (38) owns a workshop where he carries out the manufacturing of combine harvester, hole digger, maize cutter, high quality screw conveyor vermi segments and straw reaper, and also undertakes repairing of farm machineries.

He has been manufacturing reel type combine harvesters since 2000. However, he found them to be inefficient for maize harvesting due to the crop height. This led to farmers buying new header cutting type combine harvester. Gurtej then tasked himself to develop a reel type cutting unit for maize harvesting in 2013, which could

be attached to any combine harvester.

He successfully developed a modified cutting unit for combine harvester, which has a rotating reel (triangular shape) with three tine bars for covering the maize crop effectively. The effective reach has increased because of the triangular shape and large diameter protecting the crops from getting damaged. It covers an area of 4.5 to 5 acre/h with a speed of operation of 5 to 6 km/h at an operational width of 3425 mm. The developed cutting unit can be attached to any combine harvester. Costing Rs. 2,10,000, around 70 units have been sold.

