

## **Consolation Award**

## **Tractor Mounted Multi-Crop Harvester**

Jhabarmal Khokhar Sikar, Rajasthan Scout: Swabhiman

Jhabarmal (34) left studies after completing 8th standard and now owns a small workshop in Sikar, where he experiments and tries to innovate while developing farm machines.

Four years ago, while on a visit to Nagaur district of Rajasthan, Jhabarmal observed the farmers cutting green gram crop with cutter mounted on one side of tractor. He found that the cutter did not work effectively. After noting this problem, he decided to develop a machine, which could harvest low height crops like green grams, cumin, soya bean, gram, etc. He developed the first prototype in 2015 and further improved the design in 2017. He developed it so that it could be mounted on a tractor and can also function while the tractor is operated in reverse direction. The tractor mounted multi crop harvester is useful to cut crops like green gram, isabgol, cumin, soya bean, black gram, chickpea, etc. It is mounted at the rear side of tractor for easy control and adjustments using the hydraulic system of a tractor. While in operation, tractor can be operated in reverse direction, this enables harvesting of crops sown in any pattern. It has a working width of 1.75 m, left over cutting height of 2.5-4.0 cm, field capacity of 0.25-0.43 acre/h (for different crops) and fuel consumption of about 2.5 lit/acre (at an average speed of 0.5-1 km/h). The machine costs about Rs. 65.000/- and 25 units have been sold till now.



10<sup>th</sup> National Grassroots Innovation and Outstanding Traditional Knowledge Awards 2019