National Award- First

Tractor Operated Groundnut Decorticator cum Grader

Kishan Lal Suthar
Bikaner, Rajasthan
Scout: FIMTTC, SKRAU, Bikaner

A school dropout, Kishan Lal Suthar (40) is a farm machinery manufacturer having a small workshop where he works on innovative farm machinery. His interest in machines dates back to his childhood when he tinkered with any and every toy or a gadget he could lay his hands on. Growing up among agriculturists, his interest in agro-machinery grew and he started fabricating machines and tools for farmers.

About ten years ago, upon request of neighbouring farmers, he started working on a machine to separate groundnut seeds from the pods and segregate them based on their size. After several attempts over the next five years, he succeeded in developing the required machine.

The innovation is a tractor PTO-powered implement that decorticates groundnut to separate seeds. It also has a provision for a grading unit where groundnut seeds are graded based on their size and specific gravity. The machine has the capacity to decorticate and grade 800 - 1000 kg groundnut pods per hour at a fuel consumption of 4-5l/h at a decorticating efficiency of 97.63–98.87% and cleaning efficiency of 89.14–91.49%. The performance evaluation of the machine was undertaken at FIMTTC, SKRAU, Bikaner. He has sold over 150 machines.