

National Award Second

Manual Paddy Transplanter

Sadasibo Majhi Koraput, Odisha

Scout: Mukhyamantri Abhinav Krishi Yantrapati Samman Yojana awards, organised by Govt. of Odisha & NIF

Sadasibo Majhi (43), class 9 pass, is a mechanic and a fabricator. He makes iron gates, window grills, agricultural machines and tools such as cage wheels for tractors, paddy threshing machines, paddy winnowing machines etc. Learning fabrication while working in various workshops, he now owns one.

Koraput is an economically backward district with a large tribal population. Most of them cannot purchase costly agricultural machines and tools from the market. Considering this, Sadasibo developed a low-cost manual paddy transplanter after several design and material iterations.

The device used for the wash-root method of transplanting is a manually operated (pulled type) paddy transplanter requiring two persons for its operation. The mechanism for picking (using rubber roller and fingertips) and transplanting is simple, with a provision of adjustment in width and depth of the plantation. At a time, six rows can be transplanted. The field capacity of this device is 0.6 acre per hour, with 6-inch spacing between two plants and 91 cm being the overall width of the planter. The power is obtained from the ground wheels through the chain and sprocket mechanism. The operational cost (including labour) is Rs. 400/per ha compared to the alternatives available on contract for ₹4500/- per ha.





