

# Self-propelled Walking Behind Type Rice Transplanter – A Better Alternative For Manual Transplanting

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## ABSTRACT

Rice transplanting by self-propelled transplanter ensures timely operation, saving in cost and minimum human drudgery. A detailed economics of both manual and mechanical transplanting were worked out based on the study done at College of Agricultural Engineering, Bapatla during the year 2008-09. The self-propelled walking behind type rice transplanter gave net profits of Rs.1189 and Rs.1860 ha<sup>-1</sup> when annual use of machine was one season (300 h) i.e *kharif* and two seasons (500 h) i.e both *kharif* and *rabi* respectively over manual transplanting. The field capacity, field efficiency and fuel consumption of the transplanter were 0.12 ha ha<sup>-1</sup> , 58.39% and 5.10 l ha<sup>-1</sup> respectively. The grain yield in respect of mechanically transplanted rice crop was 5.13 t ha<sup>-1</sup> and incase of manually transplanted rice crop was 4.57 t ha<sup>-1</sup> . 12% more yield and an additional income of Rs. 8339/ha were realized for mechanical transplanting over manual transplanting.

**Key words :** Economics, Manual rice transplanting, Mechanical rice transplanting, Self-propelled walking behind type rice transplanter