

## Performance of self-propelled vertical conveyor reaper for harvesting rice (*Oryzae sativa*) and wheat (*Triticum aestivum*) in Uttar Bastar Kanker district of Chhattisgarh state

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■ **ABSTRACT** : Use of appropriate machinery is one of the major factors for reducing labour requirements and production costs of second crop cultivation after rice. A feasibility study was undertaken on reducing the cost of cultivation and ease of operation in paddy and wheat through mechanizing harvesting operations at Krishi Vigyan Kendra, Kanker, and also in the farmer's field during two seasons (*Kharif* and *Rabi*) in year 2012-13. A self propelled vertical conveyor power reaper was used for harvesting paddy and wheat in *Kharif* and *Rabi* season in year 2012-13, respectively. The overall performance of the vertical conveyor reaper was quite satisfactory. The actual field capacity for paddy harvesting was 0.276 ha/hr whereas for wheat it was found 0.311 ha/hr with fuel consumption 6.12 l/ha and 5.29 l/ha, respectively. Cost of mechanical harvesting with reaper was found 47.11% less for paddy and 44.4% for wheat as compared to the manual harvesting. The cost of cultivation of paddy and wheat crop could be reduced through mechanization of harvesting operations.

■ **KEY WORDS** : Self-propelled vertical conveyor reaper, Mechanization, Field capacity, Field efficiency, harvesting

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