

Performance evaluation of reaper-binder in rice crop

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■ **ABSTRACT** : Field performance of reaper-binder was assessed in rice crop and compared with manual method of harvesting by sickle at farmer's field under farm implements and machinery scheme during *Rabi* 2013. The effective field capacity of the reaper-binder was found 0.294ha h⁻¹ with a field efficiency of 67 per cent at an average operating speed of 3.6 kmph compared to 0.025 ha h⁻¹ for manual harvesting. The fuel consumption was found 5.27 l ha⁻¹. Labour requirements for mechanical and manual harvesting were 36 and 176 man-h ha⁻¹, respectively. The harvesting losses for mechanical and manual harvesting were 1.44 and 1.88 per cent, respectively. The cost of harvesting operation was Rs.5500/ha for manual harvesting and Rs.2241/ha for mechanical harvesting. The harvesting cost of reaper binder was reduced by 40.74 per cent compared to manual harvesting method with sickle. The feedback of machine operation was collected by some farmer's at the time of harvesting and the performance of the reaper-binder at the farm was satisfactory.

■ **KEY WORDS** : Rice, Reaper binder, Harvesting, Manual harvesting, Paddy

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