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Performance evaluation of bullock drawn planter with low cost metering device

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■ **ABSTRACT** : Sowing the seed is an important practice in crop production. There are various methods of sowing the seeds, but precision planting is highly desirable. Precision planting is defined as the placement of single seed in the soil at desired plant spacing in a row. The spacing of the seed is affected when the mechanism fails to select or drop a seed resulting in large spacing between seeds. Keeping this in mind, the present study was undertaken to develop the bullock drawn planter with low cost metering device. To achieve this objective the planter, consisting of main frame, seed metering and power transmission unit, was developed. The nylon plastic was used for seeding unit. The single seeding unit was used for three furrow openers. The seed plate had the equidistance holes on its periphery. The row to row spacing was adjusted by varying the holes on the seed plate. Tests indicated that weight of machine was 44 kg. Its average field efficiency was 69.44 per cent and the field capacity of 0.175 ha/h with 180 per hectare as an average cost of operation. Machine showed satisfactory results and it was suitable for small and marginal farmers.

■ **KEY WORDS** : Bullock drawn planter, Low cost, Metering device

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