

## **Design, Fabrication, Development and Performance Evaluation of Four (4) Row Conical Drum Seeder for Lowland Paddy Cultivation**

B. M. C. P. Balasooriya<sup>1</sup> and M. H. M. A. Bandara<sup>2</sup>

<sup>1</sup>Farm Mechanization Research Center, Maha-illuppallama

<sup>2</sup>Department of Agriculture, Peradeniya

As rice is the staple food of the country, it is the single most important crop in Sri Lanka. It occupies 34% of the total cultivated land. 1.8 million farmer families are engaged in rice cultivation. Rice cultivation in Sri Lanka is still labour intensive, although it is expensive, less efficient, ineffective and unattractive. Among the various activities in paddy cultivation, plant establishment is the least mechanized activity. Majority of farmers follow traditional manual broadcasting though it has many disadvantages. Despite the fact that transplanting is the best method of plant establishment, it is not feasible to introduce at this moment because lack of local technology and also due to high machinery cost which farmers cannot afford. Line seeders have been introduced by various institutes but not popular among farmers as they have shortcomings. Hence a drum seeder was designed, fabricated, developed and performance was evaluated in several stages in order to introduce line hill seeding eliminating shortcomings of existing paddy seeders.

Key words: paddy seeders, Four Row Conical Drum Seeder

