

## Development of animal operated farm yard manure applicator

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■ **ABSTRACT** : FYM is the oldest organic manure used by man ever since involved in farming. It consists of litter, waste products of crops mixed with animal dung and urine. Therefore, it contains all the nutrient elements present in the plant itself and returns these nutrients to the soil when it is applied to the field for the benefit of succeeding crop. Development of animal operated manure applicator include the different components viz., bullock cart chassis and frame, main axle shaft, steel wheels with rubber padding, agitator, manure box, sliding plate and power transmission system. A pair of bullock acts as power sources for hauling purpose. Power is transmitted by 1:3 ratio of power reduction (main axle shaft: agitator shaft). The animal walking speed is mainly decided to the power transmission of manure applicator, because agitator rotation is directly related to the main axle shaft. This research work briefly describes the development and evaluation animal operated manure spreader.

■ **KEY WORDS** : Bullock cart, Agitator, Pair of bullock, Power reduction, animal walking speed

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