

FABRICATION OF MULTI-PURPOSE AGRICULTURAL EQUIPMENT

A project report submitted in partial fulfillment of the requirements for the award of the

Degree of

BACHELOR OF TECHNOLOGY

IN

MECHANICAL ENGINEERING

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CERTIFICATE

This is certify that the project work entitled “**FABRICATION OF MULTI-PURPOSE AGRICULTURAL EQUIPMENT**” is a bonafied record of work done by **G.THATHAJI, D.SURESH, N.SIVA NAIDU, V.ARUN KUMAR** in partial fulfillment of the requirement for the award of Bachelor of technology in **MECHANICAL ENGINEERING** by Jawaharlal Nehru technological university, Kakinada During the year 2015-2018.

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ABSTRACT

Presently, small land holding farmers use work bulls mostly for land preparation. Their use can be increased and made more economical by using them for other farm operations such as ploughing, harrowing, fertilizer application, sowing and weeding. Improved hand tools will also facilitate farm work. Oxen can be used to pull a cart throughout the year which keeps them in training. Ploughs, ridgers, seeders and weeders are all seasonal implements. Manual method of seed planting, results in low seed placement, low crop yield and serious back ache for the farmer which limits the size of field that can be planted. The cost price of imported planters has gone beyond the purchasing power of most of our farmers. Farmers can do much to increase crop production especially grains if drudgery can be reduced or totally removed from their planting operations.

All trades of village artisanship in black-smith carpentry, stone etc. contributed to the design of development of farm tools through artisan's ingenuity. Big size of earthenware was made by potters to store grains for month to be safe from insects and pest's cobblers used whole skins of animals to carry water to irrigate horticultural crops besides entering dust roads as an Engineer we extend our hand in helping farmer by fabricating multipurpose agricultural machine. A detailed study is made on need of agricultural machine for developing this multipurpose agricultural machine. The alteration in existing machine was made insignificant figure. This project describes the practical implementation of forward thinking trivial solution to various agricultural prorgue seen in premature period. During this mature period the cost which engrossed the farmer has to be reduced complimented with various other adeptness. The indentation of this project is cost reduction with basic amenities like easy compressing mechanism, simple bundling technique without much spill attached with easy detaching system and motor less working model with gear and sprocket arrangement. This model is effective with almost all types of crops and other agricultural crop residues. The crop collection may be effectively utilized by the farmers. The compressing mechanism finds its application in crop residue bundling which is either fed to animals or effectively used for construction of roofs in hut. This project aims at 50%reduction in the production cost of existing model.