Title of the project: “Design and Fabrication of Multipurpose Machine for Agricultural purpose”

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Abstract: India is an agriculture based country in which 70% of people depends on the outcome of farming. But it is observed that with increase in population the farm gets distributed among the family and because of this farmers in India holds only two acre farm in average. Also most of the farmers are economically weak and hence resort to traditional ways of farming. The aim of this project is to design and develop a multipurpose machine which will help the farmers in many ways in less time and in economic way.

Introduction: Agriculture is the backbone of Indian economy and it will continue to remain so far a long time. Agricultural sector is changing the Socio-Economic environment of the population due to liberalization and globalization. Paddy and Wheat is one of the new targets in agriculture where still, not many researchers and manufacturers participate. This field faces some problems such as how to maximize the profit, how to increase productivity and how to reduce the cost. In India, two types of agricultural equipment are used, manual method (conventional method) and mechanized type. Mechanization involves the use of a hybrid device between the power source and the work. This hybrid device usually transfers motion, such as rotary to linear, or provides ample of mechanical advantages such as increase or decrease or leverage of velocity.

Objectives:
1] To Design and Fabricate a MultiPurpose Agricultural Machine Which Is Economic and convenient to Farmers In Today’s World.

2] The machine should be easy to maintain and less complicated in design

3] More work extraction in less time with minimal labour cost placement should be properly designed
Methodology: After deciding the project we first designed the model by comparing with the previous models and added our requirement to the model and started working on it and completed the project with the requirements focusing on farmers problems by reducing the cost and made it as a ecofriendly multipurpose machine for farmers.

Scope of the Project: Multifunctional agricultural vehicle mainly focuses on the basic problems faced by fellow farmers. i.e. Seed Sowing, plowing, soil leveling. We are looking this project as revolution in small farms in India, which is most uncovered area in this sector is cost and more efficient way.

Design of Model:
Fabricated Model:

Conclusion: 1. Multipurpose agriculture equipment can efficiently perform number of functions like Sowing, Weeding, Tillage.

2. This equipment can be run on engine. It will have minimum cost and easy handling. Also there will have minimum weight and compact in size.

Future scope: 1. In the multipurpose farming machine in place of petrol engine, the diesel engine and other gasoline engine can be used for improving performance and the environmental friendly.

2. In multipurpose machine in addition to ploughing and seed sowing, the arrangement for fertilizer and manure can be made.

3. In this machine instead of sowing in two rows it may be increased further.

4. In our machine farmer is walking with machine during seed sowing and ploughing, providing seating arrangement into the machine will be beneficial.