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Conceptual Design and Development of Portable Solar Multi Crop Cutter

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Abstract

Agriculture is one of the most important sector of Indian economy since decades. It is the most vital source of employment for majority of human resource in the country. In our country approximately about 60 percent of the total labor force is engaged in agriculture. Solar energy abundantly available from sun can be utilized and resourceful farming can be done by designing the equipment's for agricultural purpose, mainly in India to focus in certain situations such as how to increase the production and revenue, how to reduce the cost and labor. To excel these problems, the work aims to conceptually design, select and develop the machine which runs with the help of solar power which targets the small scale farmers to cut the multi-crops at a time who have land area of less than two acres for farming. The machine is designed for its low cost, rough use and high compatibility. The machine utilizes solar power, which is directed to the rotary blades via solar panel, DC motor and battery arrangement. Thus providing a portable, cost effective, and pollution free machine to farmer.

Keywords:
Agro Waste, Shredding Machine, Multi Crop Cutter, Spur Gear, DC Motor,

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