

Review Report Of  
**SOLAR POWERED SEED SOWING AND PLANT WATERING  
AGRICULTURE HARVESTING ROBOT**

A thesis is submitted in the partial fulfillment of the requirement for the award for  
the degree of

**BACHELOR OF TECHNOLOGY**

**IN**

**MECHANICAL ENGINEERING**

Submitted by

**N ANIL** 17811A0341

**D PRAVEEN SAI KRISHNA** 17811A0314

**D PAVAN** 17811A0315

**K HARI BABU** 17811A0337

Under the guidance of

**MR. MS. NAIDU M.TECH**

**Assistant Professor**

**DEPARTMENT OF MECHANICAL ENGINEERING**



**AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
**(NBA accredited)**

**(Affiliated to Jawaharlal Nehru Technological University Kakinada, A.P)**  
**MAKAVARAPALEM, NARSIPATNAM (RD), VISAKHAPATNAM-531113**  
**(2017-2021)**

**AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY**

**(Approved by AICTE, Permanently Affiliated to JNT University, Kakinada)**

Tamaram, makavarapalem, Narsipatnam-531113, Visakhapatnam

District

**DEPARTMENT OF MECHANICAL ENGINEERING**

**CERTIFICATE**



This is certify that project report is entitled “**SOLAR POWERED SEED SOWING AND PLANT WATERING AGRICULTURE HARVESTING ROBOT**” was carried out by **N. ANIL (17811A0341), D. PRAVEEN SAI KRISHNA (17811A0314), D. PAVAN (17811A0315), K. HARI BABU (17811A0337)** in paritial fulfillment requirements for the award of the degree of bachelor of technology in “**MECHANICAL ENGINEERING**” by Jawaharlal Nehru technological university , Kakinada during the years 2017-2021

**MR. MS.NAIDUM.TECHMR. V.HARI KIRAN**

Assistance professor (head of the department)

(Project guide)

**EXTERNAL EXAMINER**

## **ABSTRACT**

The agricultural robot is used to reduce human efforts made by farmers during farming. There are many aspects to the future of this Agribot. Agriculture is considered one of the most important economic activities in India. The bot uses various techniques that help us track the various activities involved in the farming process such as soil moisture level, soil type, different nutrient levels in the soil, suggestion of the crop to be cultivated. The multi functionality of the robot will also help the farmer use the same robot to extract weeds, maintain records on soil data, and make it available at any time as it will be stored in a cloud server. Farmers using bots will be easier to monitor the field.

In recent years, robotics in agriculture sector with its implementation based on precision agriculture concept is the newly emerging technology. The main reason behind automation of farming processes are saving the time and energy required for performing repetitive farming tasks and increasing the productivity of yield by treating every crop individually using precision farming concept. Designing of such robots is modeled based on particular approach and certain considerations of agriculture environment in which it is going to work.

These considerations and different approaches are discussed in this project. Also, prototype of an Agriculture Robot is presented which is specifically designed for seed sowing task only. It is a four wheeled vehicle which is controlled by microcontroller. Its working is based on the precision agriculture which enables efficient seed sowing at optimal depth and at optimal distances between crops and their rows, specific for each crop type.