ABSTRACT

Agriculture is the most important and the only source of producing food. the agriculture done by humans has facing many troubles such as manpower consumption, time consumption, slower process, etc. To overcome the impact, we move forwards to robotics. The robotics in agriculture is an effective welcome to the agriculture process. It deals effectively with reducing the manpower and time consumption and increasing the speed of cultivation. Not only such problems also the nutritional problems may reduce the cultivation of particular land. The weeds on the farming fields are also one of the reasons in which the crops can't get sufficient nutrition from the soil. According to this, our project is based on removing the weeds from the farming fields without making any damage to the crops. In this paper, strives to develop a robot regarding solutions to the hand weeding without damaging the crops. It is a versatile design to overcome hand weeding. The main components are the Arduino Uno microcontroller that is supervised the entire process in the system, the IR sensor continuously senses the data to the microcontroller. As per the condition when the robot reaches the ridge it will move right or left for performing the same excavation process in the field. The completion of the entire process robot automatically sends the message to the farmer. Farmers spend more money on machines it helps them to decrease labors and increase yield but profit and efficiency are very less in order to improve the overall performance of coordinated weeding algorithms being developed for commercial agriculture, this paper presents advancements in weed increase predictive models and a stepped forward planning index these synthetic substances kill the weed as well as obliterate the great supplements in the yield.This work presents advances in predictive modelling of weed growth. The Ag-Bots will find their way towards weed and pick the grown weed by the mechanical arm. This system is very useful for agriculture. Hence the automation is an ideal solution to overcome all shortcomings by creating a machine that performs one operation and automates it to increase the yield on a large scale.