

## **DEVICE TO CONTROL THE IRRIGATION PROCESS OF SHELF CULTIVATION WITHIN INR 500**

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Over population has been a major problem across the world. Especially in countries like India and china over population resulting drastic situations. As the population increases the demand for food materials also increases. Mainly like countries like India, where Agriculture is backbone of country, will face many problems in producing food for total population. If this situation continues within no time we will witness a drastic Food Crisis. In order to escape from that crisis our Farmers are struggling lot to produce more food with available land . As population Is increasing Deforestation is also increasing this results in Heavy imbalance in Eco system . The present era, where technology is making its way to the zenith, there is no requirement for human to do every small work. Many works are being done by Machines. In Previous Generation like our Father's they witnessed many changes in technology, particularly in aspect of Agriculture. Farmers use technology to make advances in producing more food for a growing world. Using technology, each farmer can feed 155 people today, compared to 1940, when one farmer could feed only 19 people. Farmers use technologies such as motorized equipment, modified housing for animals and biotechnology, which allow for improvement in agriculture. Better technology has allowed farmers to feed more people and requires fewer people to work on farms to feed their families but, this production of food is no longer sufficient for people. So there is a need to develop a new method of cultivating crops. One of the best method to increase food production in very less space is Shelf cultivation or Layered cultivation, The main problem which we will come across while cultivating crops in this method is irrigation process. It is mandatory that the water level in soil should be at particular level it should not increase or decrease optimum level. To overcome this problem we are introducing a simple device which automatically regulate soil moisture level and works accordingly. This project will automatically senses the water level in soil and pumps the water when it is required and stops when it reaches optimum level. This project will be a great help for farmers as it costs less than 500ruppes.