**“An Astute Irrigation System with Crop Management and Marketing”**

**By**

Lasya Vadapalli

Suraj Padhy

Yashshree Patil

Rashmi Pawar

**Guided by:**

Prof. Kalpana Wani



**Department of Information Technology**

**Fr. Conceicao Rodrigues Institute of Technology**

Sector 9A,Vashi,Navi Mumbai–400703

**University of Mumbai**

**2017-2018**

**ABSTRACT**

The rapidly increasing population of India has led to widening of the gap between the demand and supply for food. To cater to this increasing demand farmers are compelled to grow more crops with the help of irrigation systems. This system of farming uses a pump mechanism which requires the presence of an individual to check the water level. Sometimes it’s not feasible for the farmer to be present all the time. It causes difficulty in managing all farming activities. In addition to this, the warming climate is causing the lakes and rivers to dry up at a faster rate, while rapid urbanization and water pollution are putting enormous pressure on the quantity and quality of available water. A lot of water is wasted in the conventional irrigation system which can be reduced by effective usage and proper management.

Adhering to this problem we want to propose a solution in the form of a mobile application which includes features such as automation of water pump operation that helps effective monitoring of water level, prediction of crop to be sown, marketing of crop, make available the current rate of the produce and ensure profitability by identifying potential buyers.

The application will also provide information on the latest schemes introduced by the government. The usage of NodeMCU proves to be more cost effective than raspberry pi, and in turn benefit the farmer.

\_------------------------

Mrs. Kalpana Wani