C.O.D.S
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T-222

System for Farmers of India To Support the Farmers of India

Problem Statement: "There are around 9 crore farmer families in India and about 0.2% percent face problems all year round. Come up with a solution to help the farmers of India overcome their problems, grow and make ends meet"

Introduction: Our team believes we could help farmers of India by introducing them to the advancements in technology which will help them maximize their yield. There are many factors that impact crop yield from a slight change in pH or nutrients in the soil to improper farming practices that go unnoticed. Hence our interface is prepared to keep such conditions in track and suggest the farmer of the practices he/she must implement for the best yield.

Abstract for solution:
The various methods to increase yield and how these can be implemented through the project are:-

1. **Before planting crops, the farmer must know if the soil is ready for the crop. This can be inferred from the moisture content of the soil**
2. **The soil nutrient levels can be monitored and required measures informed to the farmer as a certain fertilizer**
3. **Farmer can be informed of modern methods of farming like crop rotation based on whether the soil is strong enough for the required crop. If not, farmer would be suggested to grow a crop which helps in nitrogen fixation**
4. **When the crop and amount of crop has been decided the interface calculates an estimated yield based on market prices. This information can in turn be used to invest accordingly**
5. **Along with this the sensor is used to gauge humidity and temperature of the soil at feasible intervals of time. This information can be used to activate sprinklers according to the requirements of the crop.**
6. **The interface will also include information about various hybrid seeds suitable for the soil and season based on collected information**
7. **Lastly, it includes any updates related to the agricultural sector and its development in India**