1. Name of the Project

   Precision Farming to improve Agricultural strategies

2. Domain of the Project

   Agriculture

3. Description of the Project

   Precision Farming is a technique of observing, measuring and responding to the variability in crops. Traditional agricultural practices involve farmers performing the tasks against the pre-determined schedule. However, with our precision agriculture Application, Farmers can track information about their farms in real-time and make proactive decisions to improve crop productivity. By collecting real-time data on weather, soil and air quality, crop maturity, predictive analytics can be used to make smarter decision. Sensors are placed in farms to keep track of the temperature, soil moisture, soil temperature, humidity of the soil etc. The information collected will help farmers make the best decision with regards to planting, fertilizing and harvesting crops. For example, If the farmer knows that it's going to rain heavily the next day, he won't apply fertilizers to the crops as it will get washed away.

4. Scope of the Project (What are you going to do in the project? Please write in points)

   Farmers:

   - Monitor Crop water level during growth period.
   - Check real time weather conditions and determine whether to fertilize the crops
   - Enter seed name in the Application which is to be harvested and get information about the seeds resistance to weather conditions
   - Determine when to irrigate field based on the weather conditions
   - Determine whether the humidity of the soil can support the weight of the harvesting equipment

   Admin:

   - Manage and maintain the Farmers Information
   - Identify less productive Zones

   Union/Regional Body

   - Identify the farmer with good crop yield
   - Suggest farmers about good farming practices and good crop plantation zones.

5. Conclusion (Who will be benefitted from the project and it should have a social value)

   With the help of our precision agriculture application, food production can be increased, minimize environmental impact and greater sustainability.