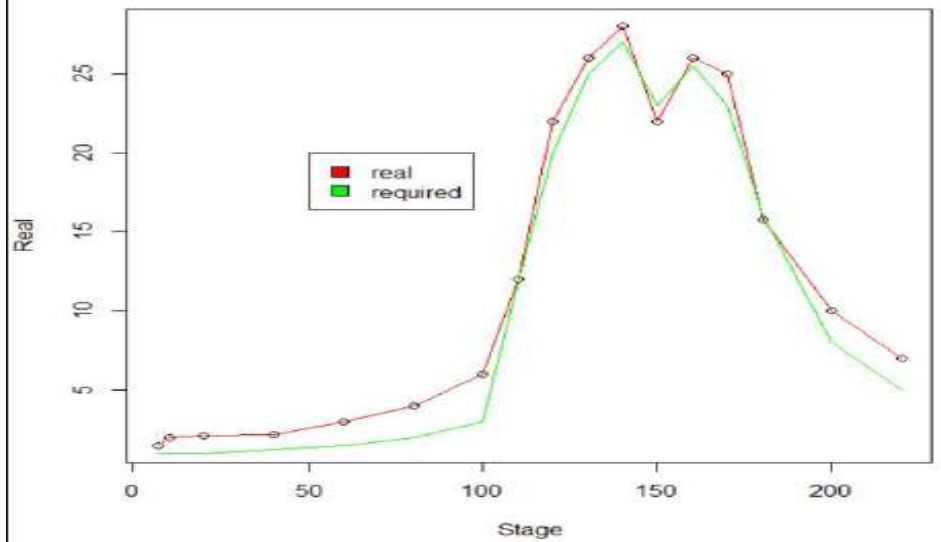
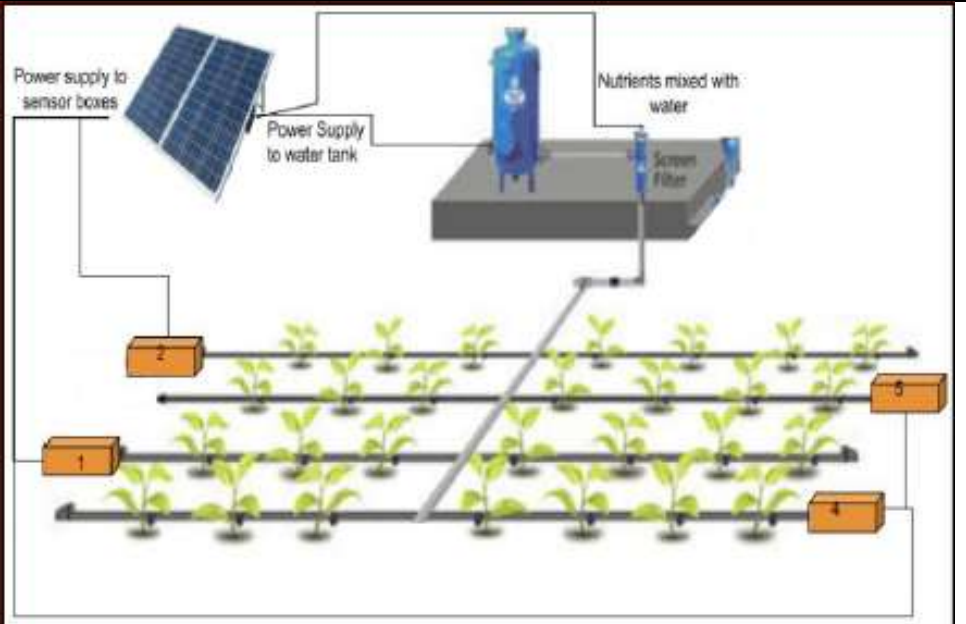


### Format for the Project Submission

Project Id/No	<b>AEL-05</b>
Project Name	Solar Powered Automated Irrigation and Nutrient Detector and Dispenser Kit
Project Members	Mentors – Dr. Swati Arora Dr. Harendra Pal Singh Mentee – Upasna Singh Vikas Kamboj
Abstract	We aim to build a complete product which can be used by Indian farmers to check the water and nutrient content of their land and fulfil its requirements accordingly. Our product will have an electromagnetic sensor which when placed on the soil surface will check its moisture and nutrient content and allow the flow of water and nutrients accordingly. The device will be solar powered. The brain of our product will be a water resistant box which will have a sensor to detect moisture and nutrient and a microcontroller for data processing and to control the dispenser unit. The amount of water and nutrient to be dispensed will totally depend on the type of crop and soil.
Project Photo	<pre>graph TD; SolarPower([Solar Power]) --&gt; Microcontroller[Microcontroller Arduino]; Sensor([Sensor]) &lt;--&gt; Microcontroller; DispenserUnit([Dispenser unit]) &lt;--&gt; Microcontroller; GSMModule([GSM Module]) &lt;--&gt; Microcontroller; SoilSample[Soil sample] --&gt; Sensor; MessageReceived([Message received on phone]) &lt;--&gt; GSMModule;</pre>



Project Report

[https://docs.google.com/document/d/1BTxhaFo2\\_hTvSWzD7Zm2SdnHoA0Gi8Ep1WeNPmegOTQ/edit?usp=sharing](https://docs.google.com/document/d/1BTxhaFo2_hTvSWzD7Zm2SdnHoA0Gi8Ep1WeNPmegOTQ/edit?usp=sharing)