# VSB Engineering College,karur-639111

# **Project Design phase – I**

# **Problem Solution fit**

**Project name**: IoT enabled smart farming Application

**Domain Name:** Internet of Things

**Team ID** : PNT2022TMID33476

**Team Lead**: Bharathkumar.D

Team Member 1: Chandru.S

**Team Member 2:** Harikrishnan.N **Team Member 3:** Dhayananth E.P

#### 1.Customer segments:-

Generally farmers are customers, there are different types of farmers such as marginal farmers, small farmers and large farmers. Mostly Large farmers requires smart farming, because they are not able to monitor entire field and they need to Cope with climate change, soil erosion and biodiversity loss.

#### **6.Customer constraints:**

Lack of proper irrigation facilities, production machinery, and access to institutional credit, difficulties procuring inputs and storing products, and negative impacts of climate.

#### 5. Available solutions

Smart Farming has enabled farmers to reduce waste and enhance productivity with the help of sensors (light, humidity, temperature, soil moisture, etc.) and automation of irrigation systems. Further with the help of these sensors, farmers can monitor the field conditions from anywhere.

## 2. Jobs to be done :-

The rapid changes in climate, soil erosion, improper usage of pesticides are solved by Internet of Things via smart farming

#### 9. Problem route cause:-

The main problems faced by the farmers are Cope with climate change, soil erosion and biodiversity loss.

Satisfy consumers' changing tastes and expectations.

Meet rising demand for more food of higher quality.

Invest in farm productivity.

## 7. Behavior:

Predict the climate change in advance and prevent from biodiversity loss is always a difficult task for an customer such as farmer

## 3. Triggers:

Some of the triggers in smart farming are advertising in television and create awareness about smart farming.

#### 4. Emotions:

Framers have an emotional bond with traditional farming that's why some farmers don't think about switching to smart farming. After trying smart farming they are interested in smart farming because of high yield with less investment

## 10. Solution: -

To overcome the all types of problems faced by customers

We have to switch from traditional farming method IoT enabled smart farming system.

## 8. Channels of behavior:

With the help of various online mentorship, farmers can switch to smart farming

Farmers can buy the products trusted shops and platforms