

**1. CUSTOMER SEGMENT(S)****CS**

- ❖ Farmers who trying to protect crops from various problems

**6. CUSTOMER CONSTRAINTS****CC**

- ❖ Low availability of improved hybrid seed.
- ❖ Limited supervision
- ❖ Weeds can cause significant reduction in crop field if not controlled.

**5. AVAILABLE SOLUTIONS****AS**

- ❖ Sensors provides location of crop mapping helps the farmers to identify the crops easily
- ❖ CCTV camera to monitor and supervise Lack of manpower. the crops
- ❖ Effective weed dessication and seeding must be done to increase the yield of crop.

**2. JOBS-TO-BE-DONE / PROBLEMS****J&P**

- ❖ Automatics sprinklers systems must be implemented.
- ❖ To monitor soil,pest,insect attacks in the fields.
- ❖ Requires protecting crops from wild animals attacks birds and pests

**9. PROBLEM ROOT CAUSE****RC**

- ❖ The crops are being ravaged by animals leads to huge loss for farmer.
- ❖ Due to various environmental factors such as temperature climate and soil quality
- ❖ By using,chemicals the soil quality is diminished and leads to annual loss.

**7. BEHAVIOUR****BE**

- ❖ Consumes more time in cropland
- ❖ To predict the soil ,Humidity ,Temperature ,ph,Cattle ,Fertilization Monitoring so many things are Benefical here.In addition to agricultural use, they can also be used for pollution and global warming

**CH****3. TRIGGERS****TR**

- ❖ Farmers are able to recognise the issues and work without anyone help.
- ❖ By seeing surrounding cropland with installing machineries

**4. EMOTIONS: BEFORE / AFTER**

Available technologies with low cost

**10. YOUR SOLUTION****SL**

- ❖ Smart farming can make agriculture more profitable for the farmer.
- ❖ Decreasing resource inputs will save the farmer money and labor, and increased reliability of spatially explicit data will reduce risks.

**8. CHANNELS of BEHAVIOUR**

Data Analytics helps to give data to farmers systematically. By using IoT the data can be stored safe and secure.

Giving awareness among farmers about the Applications of the devices