

**Project Design Phase-II**  
**CUSTOMER JOURNEY MAP**

Date	08 NOVEMBER 2022
Team ID	PNT2022TMID29726
Project Name	Project – IoT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE

STEPS	AWARENESS	INFORMATION GATHERING	DECISION MAKING	EXECUTION OF IDEA	ADVANCEMENTS
GOALS	Understanding the various factors affecting crops	Gathering knowledge about the external and internal factors which affects crop yield	Making an cost effective and quicky responsible decision	Much more money and time is saved , and the healthy crop is grown	Asking experiences from the people who already executed this
ACTION PLANS	Surveying other near by fields to collect data about factors of crop unprotection	Asking with experts how to overcome animal invasion and other things using IoT sensors and cloud computing	Setting a threshold value to all the affecting factors to make proper preventive measures using actuators	Using various sensors for animal movement, insect cluster, bird movement and weather conditions	Simulating the algorithms using softwares for better clarification
POSITIVE COMMENTS	There are a lot of people who have huge knowledge about this field	Researchers still improving the methodologies used and developed countries accept them.	There is always a former technology is present for comparison and improvement	The networking of sensors is much more easier	Making the components embedded in a single hardware unit
NEGATIVE COMMENTS	The users are farmers they lack in technical knowledge	In our country a very few implementations are there and lack of records about yield using this method	The demand of electronic components causes a fluctuation in price	The salary for the technical ,maintenance people are high	Providing some education about IoT is needed
KEY INSIGHTS	The knowledge of Sensors must be given to the farmers	Verification of existing solutions and sharing the pros and cons by public meetings and TV shows	A good confronting mechanism for expelling of animals should depends upon the money and farmer	<ul style="list-style-type: none"> <li>➤ Animals are detected using PIR sensor</li> <li>➤ Insects can be detected using acoustic and IR sensor</li> <li>➤ Climatic conditions are monitored using temperature, Humidity sensors</li> </ul>	<ul style="list-style-type: none"> <li>➤ The soil fertility plays a major role it should be monitored</li> <li>➤ Analysing where the field is located is it near the forest area ,near the mines</li> <li>➤ Which crop is being cultivated</li> <li>➤ The rainfall rate</li> </ul>