

# Project Design Phase-I

## Problem Solution Fit

Date	28 October 2022
Team ID	PNT2022TMID46534
Project Name	IOT based Smart crop protection system for Agriculture

Define CS, fit into CL	<b>1. CUSTOMER SEGMENT(S)</b> <span>CS</span> <ul style="list-style-type: none"> <li>Farmers who trying to protect crops from various problems.</li> </ul>	<b>6. CUSTOMER LIMITATIONS</b> <small>EG. BUDGET, DEVICES</small> <span>CL</span> <ul style="list-style-type: none"> <li>1) Exorbitant adoption fees and security issues.</li> <li>2)Not aware of the implementation of IoT in agriculture.</li> </ul>	<b>5. AVAILABLE SOLUTIONS</b> <small>PLUSES &amp; MINUSES</small> <span>AS</span> <ul style="list-style-type: none"> <li>Monitor different parameters and mobile or web application make easily to farm the crop field .</li> </ul>	Explore AS, differentiate
	<b>2. PROBLEMS / PAINS</b> <small>+ ITS FREQUENCY</small> <span>PR</span> <ul style="list-style-type: none"> <li>It's difficult to monitor and control</li> <li>Requires protecting crops from Wild animals attacks, birds and pests.</li> <li>Ain't known if the application doesn't work properly.</li> </ul>	<b>9. PROBLEM ROOT / CAUSE</b> <span>RC</span> <ul style="list-style-type: none"> <li>1)If the environment is seriously harmed by factors such as temperature,PH level,humidity and light intensity.</li> <li>2)Farmer affected by less productivity which will affect in their profit.</li> </ul>	<b>7. BEHAVIOR</b> <small>+ ITS INTENSITY</small> <span>BE</span> <p><b>Direct related:</b> Tries to find a solution to prevent this problem</p> <p><b>Indirect related:</b> Located in rural where internet connectivity might not be strong enough to facilitate fast transmission speeds.</p>	
Identify strong TR & EM	<b>3. TRIGGERS TO ACT</b> <span>TR</span> <p>Create opportunities to lift people out of poverty in developing nations. (Over 60% )</p>	<b>10. YOUR SOLUTION</b> <span>SL</span> <p><i>"IoT based Smart crop protection system for agriculture" !!</i></p> <p>It help farmers grow more food on less land by protection crops from pests, diseases and weeds as well as raising productivity per hectare.</p>	<b>8. CHANNELS of BEHAVIOR</b> <span>CH</span> <p><small>ONLINE</small></p> <p><b>ONLINE:</b> The Data send through application for the farmers to know about the farms.</p>	Extract online & offline CH of BE
	<b>4. EMOTIONS</b> <small>BEFORE / AFTER</small> <span>EM</span> <p><b>BEFORE:</b> Financial issues, heavy workload, and marital discord.</p> <p><b>AFTER:</b> It will easier to make more yield in field</p>		<p><small>OFFLINE</small></p> <p><b>OFFLINE:</b> Farmers use control measures to keep an eye on their fields.</p>	