

Ideation Phase

Define the Problem Statements

Date	19 September 2022
Team ID	PNT2022TMID46736
Project Name	IoT Based Smart Crop Protection System for Agriculture
Maximum Marks	2 Marks

Problem Statement Template:

Crop protection combines strategies, tools and products that protect against various wild animals. There are various ways to crop loss from wild animals, in some areas farmers burn elephant dung or other materials that smolder and create heavy smoke, that repels rabbits and deer. Develop smart and affordable solution to protect crops from wild animals is an ultimate objective of this work.

With the help of remote sensing technologies we can develop crop protection solution from wild animal attacks. Provide alerts on any crop damage in case animals destroy crops. The wild animals are like elephant, deer, wolf, chimpanzee, cheetah, Monkey are the major animals that damage crops.

I am	a Farmer	Crop protection combines strategies, tools and products that protect against various wild animals. There are various ways to crop loss from wild animals including for smoke, in some areas farmers burn elephant dung or other materials that smolder and create heavy smoke, that repels rabbits and deer.
I'm trying to	Protect crop from wild animals	Electronic Repellents is an effective long-lasting and eco-friendly method for crop protection that repels animals without harming them. Farmers use one of the following two types of electronic repellent; Ultrasonic electronic repellent; silent to humans, high-frequency sound waves repels wild animals.
But	They damage their crops field	They can damage the plants by feeding on plant parts or simply by running over the field and trampling over the crop fields. Therefore, wild animals may easily cause significant yield losses and provoke additional financial problems.
Because	The animal running and trampling over the crop field	This leads to poor yield of crops and significant financial loss to the owners of the farmland. This problem is so pronounced that sometimes the farmers decide to leave the areas barren due to such frequent wild animal attacks.
Which makes me feel	Unprofitable from crop field	Farmers experience significant losses to their crops due to raiding by wild species such as elephants; predation of livestock by wild carnivores.

Problem Solution Template:

