1. **Crop suggester**

* Based on entered npk ph values. (A2)(keep it as an option)
* Based on the gained profit.
* Based on the current date, weather, and requirements. (based on financial condition)

1. **Generic guidance**
2. **Weather guidance**

* Generic preparation.
* Red alerts.
* Insurances education.

1. Pest attacks guidance

* Pre preparation.
* Red alerts.

1. Banking

* Lones.

1. Automate the online purchase of tools and goods

* Fertilizer. (organic as an option)
* Agricultural tools.

1. Govt plans

Crop Guidance and Farmers Friend

* Problem Title: Helping the farmers in terms of Crop suggestion, precautions based on the met department forecast of rainfall/weather, potential pest attacks, weather warnings, etc.
* Problem statement in Description of System that provides details to farmers on weather patterns that could impact the crop, possible pest attacks, weather warnings of Steps for producing high yield that is specific for a farmer based on the local, regional terrain, weather scenario, rather than generic guidance of Helping the Farmer to be well prepared if there is a pest, insect attack of Better Farmer Financial Inclusion for planning out loans, interest and managing his costs
* Purpose of this analysis and who will benefit of Farmers, Pesticide firms, Govt agencies helping farmers, Agriculture loan banks
* How does it help the nation o Better crop produce and farmers have better income o High Yield and prescriptive guidance
* Practical and reasons why this idea could be a challenge of Working with the larger teams like Govt Agencies, Brokers, Chemical Factories producing medicines, pesticides o Single Owner driving and investing in the product of Famers basic digital divide to access such information
* How does this help CDK: What’s in it for us o limited usage from this scenario?
* Domain Bucket of Agriculture
* Technology Bucket of Integration across systems – Integration platform across systems with security model for data extraction o SMS and Mobile Computing o Analytics & Data Science (if possible) - Big data/Hadoop, AI / ML o Data Aggregation o Visualization

**Inadequate and uneven distribution of rainfall**

In general, the rainfall is low and highly variable which results in uncertain crop yields. Besides its uncertainty, the distribution of rainfall during the crop period is uneven, receiving a high amount of rain, when it is not needed and lack of it when the crop needs it.

**Late-onset and early cessation of rains**

Due to the late onset of the monsoon, the sowing of the crop is delayed resulting in poor yields. Sometimes the rain may cease very early in the season exposing the crop to drought during flowering and maturity stages which reduces the crop yields considerably

**Prolonged Dry spells during the crop period**

Long breaks in the rainy season is an important feature of the Indian monsoon. These intervening dry spells when prolonged during crop period reduces crop growth and yield and when unduly prolonged crops fail.

**Low moisture retention capacity**

The crops raised on red soils, and coarse-textured soil suffers due to lack of moisture whenever prolonged dry spells occur due to their low moisture-holding capacity. Loss of rain occurs as runoff due to undulating and sloppy soils.

**Low Fertility of Soils**

8. Drylands are not only thirsty but also hungry too. Soil fertility has to be increased, but there is limited scope for extensive use of chemical fertilizers due to lack of adequate soil moisture.