INDIA

\*Agriculture is important sector for development

FARMERS

\* Backbone

PROBLEMS

* Low yield output
* Trading business

SOLUTION

\* assist our farmers

* Green link app
  + Predicts the crop to be cultivated
  + Links the farmer and the government
  + Ease the trade
  + vernacular language

\*Past

* Determines the fertility of soil live time

Here   
We have automated the complicated lab test and simplified it by developing smart digital device called PAST which is capable of testing the soil condition and fertility by detecting the parameters of soil.

The Microcontroller is the main processing unit which is used to automate the process of testing the parameter  of soil.

The main parameters used to detect the fertility of the soil are:

1. Cation Exchange capacity tester(CEC) :

This is a unique test which consumes time in lab to get the accurate cation exchange capacity.so here we are trying to automate or computerized the process and conduct the test on spot.

2. Sodium absorption ratio test (SAR):  
Sodium adsorption ratio is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. The ratio can be calculated using sodium sensor.