Agriculture- Seed Traceability and Certification

Problem Description: Seed supply chain is a complex ecosystem involving various stakeholders. Seed quality issues have demanded a need for effective traceability solution. Several important criteria such as origin of the seed, stages in production, conformance to quality standards such as genetic purity, germination rate etc. are to be validated.

Minimum Desired Outcome: Farmers would be able to trace the origin of the seeds they buy. Using technologies such as barcode and QR code, the software solution will allow the farmers to cross check whether they are buying the genuine seeds.

Scope :

PRODUCER – Seed Producer can register himself on system by providing some basic information of himself, land and seed**.**

- View Progress of the batch that are created by them.
- Create batch- Name, Type of seed, Quantity, quality, origin, etc.

INSPECTOR **–** Inspector is responsible for farm and seed inspection and updating some initial quality

standards**.** The following attributes are visible for Inspector

- Can see all batches in progress
- Can update batch after Inspection - Type of seed, Fertilizer Condition, Quantity, Crop condition

Seed Lab – Seed Lab is responsible for updating some important like quality standards like temperature, germification, purity etc. The following attributes are visible for Inspector

- Can see all batches in progress
- Can update the batch after lab test - Temperature, Germification, Quantity,Seed moisture, Purity

Seed Distributor **-** Distributor is a person/organization who distributes seeds to the Farmers. Distributor adds his information, quantity, warehouse information and transport info. The following attributes are visible for Distributer-

- Can see all batches
- Update batch
- distributor info
- warehouse location
- transport type - plane, ship, by road time

Farmer **-** Farmer is the last entity in the ecosystem who will buy seeds. He can check seeds quality by entering batch id/scanning QR code. Farmer can also enter the batch ID received and get info of batch and its attributes.