PROBLEM STATEMENT-1

Title: **Enhanced Agriculture, Smart Food Storage and Waste Management**

India is a developing country with a steep rise in population but falls in the cultivable land area. There is a sharp need to manage food resources to minimize the amount of food wastage and provide smart management of the resources available.

Objectives:

1. Farmers must be able to sell their produced items at a better rate. This platform should enable direct movement of goods from the farmer to the consumer and reduce the intermediates who take away a lion's share of the commission.
2. Provide a network of warehouses and farmers. Additionally, provide facilities to access warehouses and cold storage. Such a network will also enable judging whether enough storage capacity is available using smart management techniques.
3. Waste management, collection, segregation including e-waste & medical waste through SHG (self help groups) and NGO participation on PPPP with an app/SMS/Call based on-demand waste collection mechanism linked with smart Card.

Interfaces required:

1. For farmers to sell their products and connect with the buyers all over India.
2. Simple interface that works on mobile, SMS to upload produce details and respond via phone and SMS (taking care of the digital divide).
3. For anyone to buy the produce/vegetables – initially visit the place and buy or have courier service integrated to deliver the vegetables.
4. For monitoring waste management in cities and houses.
5. For payment methods.

Farmers can get a better price for their produce, no additional cost spent in marketing and delivery of goods. However, they can choose to charge more by delivering the items themselves. The application developed must benefit Farmers, Restaurant owners, Buyers, Courier Companies, Delivery Agencies, Vegetable Vendors, Nagar Nigam.

Category: Software

Domain: Agriculture and Rural Development

Technology Bucket:

- Integration across systems – Integration platform across systems with the security model for data extraction
- SMS and Mobile Computing
- Analytics & Data Science (if possible) - Big Data/Hadoop, AI / ML
- Data Aggregation
- Visualization.