Mobile-based Data Service for Agricultural Prices

This is an idea submission for a mobile-based data service using mandi-level price data for various agricultural produces. An Android application can also be developed later.

The application allows an user to obtain two kinds of price data for a particular agricultural product for a particular mandi – (1) price data for the product for the previous day, and (2) price forecast for the product for a future period, based on already available historic data of the product concerned.

A typical use scenario would be as follows: user sends a SMS to a specific number with the name of the state in which he/she is interested in; given the name of the state (mechanism needs to be developed to allow for various spellings of state names), he/she receives a SMS asking him/her to send the name of the mandi he/she is interested in; given the name of the mandi (mechanism needs to be developed to allow for various spellings of mandi names), he/she receives a SMS asking him/her to send the name of the agricultural product he/she is interested in; finally the user receives both the previous day price of the product concerned, and its price forecast for the next week and month. The user should be charged only for the first SMS sent to the designated number for the service.

The mechanism to equate various spellings of state, mandi and agricultural product names should be able to learn dynamically. That is, in case the system cannot process a request with a specific spelling, it should generate a report, which the system administrator(s) can take a look at and resolve, and the system should incorporate this resolution (of spelling differences) into its existing database of equivalent spellings.

This is the user-facing part of the application.

On the administrators' side, the application should have a dashboard that displays gathered data about mandi-level information seeking behaviour of individuals identified by their unique mobile numbers. Anonymised data about users of this application should be made available to the Ministry of Agriculture for analysing the possible influence of information availability on agricultural selling practices, and hence prices (and possibly on hoarding of agricultural products).