PROUD TECHNOLOGIES
FLEXIBLE,RELIABLE,EFFICIENT

Smart Agropedia

the Wikipedia of Agriculture

About Proud Technologies

- Founded in the year 2009, Proud Technologies has established itself as a name that is now synonymous with being the ultimate end-to-end IT solution provider. We have efficaciously strengthened our roots across Africa with our ever-evolving applications, digital imaging and communication through a combination of technical know-how, domain and process expertise.

- The urban development idea of a 'Smart City' integrates Information and Communications Technology to manage the assets and functioning of a city in a low-cost, efficient and secure manner. From Smart Schools to Smart Transportation, from Revenue Collection to Integrated Waste Management - Proud Technologies provides the digital architecture for every step of creating a smart world.

- Over the past decade, with a list of eminent and impressive clienteles and a widespread global presence, we have literally left our 'digital footprints' in the IT sector. We have been assessed at leading global quality benchmarks and standards including ISO 9001:2015.

Smart Agropedia

A package of digital solutions for agriculture

The primary objective of **Smart Agropedia** is to serve as the 'Wikipedia of Agriculture'. It is a portal where a layperson can have access to the A-Z of agriculture in a few clicks.

- **Access to all Information**
- **Preparation for Unexpected Weather**
- **Analyzing the Health of Soil**
- **Buyer Bidding**
- **Augmenting Crop's Nutrition**
- **Beneficiaries or Stakeholders**
  - Farmer gets all the information about the land they own, the soil deficiencies, the agriculture inputs required.
  - **Government Agencies** gets information about the land available for agriculture and how can they make us of the same up to full potential and the overall financial situation of the farmers.
  - **Private Enterprises** get information about the ways in which they can collaborate with agriculture sector to convert it into a profitable venture.

Reports generated for the stakeholders

▶ **Farmer Database Report:** all the information about the registered farmers including their registration details, the land they own and their agricultural history.

▶ **Land Database Report:** This is a comprehensive report that includes details about the type of land i.e. tapped or untapped, arable or barren, cultivated and unutilized land.

▶ **Soil Health Report:** Generated to provide all the soil-related information.

▶ **Farmer Credit Report:** Provides an overview of the credit behavior of the farmers.

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▶ Primarily, the process is initiated with the registration of farmers and the land they own. This information is geographically mapped and updated using the Geographic Information System (GIS).

▶ In the second stage, a sample of the soil is taken to identify the health of the soil. After the soil analysis takes place in the laboratory, a soil health report is generated. This report helps the farmers make accurate decisions regarding the type of crop that can yield maximum output on that soil or the quantity and quality of inputs required in case the farmer wants to grow a certain crop (say banana plantation) on the same land area.

▶ The third stage involves the amount of loan that can be provided to the farmers, depending upon the data of the land that indicates whether or not the farmer meets the eligibility criteria. This prevents frauds and the right amount of financial assistance reaches to the farmers in actual need of monetary help.

▶ Thus, from the verification and validation of documents submitted by the farmers to keeping track of the transaction details of the loans given to them, the 'Smart Agropedia' portal attempts to make a paperless automation system for collecting statistics, maintaining records and digitising agriculture.

Integrated Crop Support (IT) System
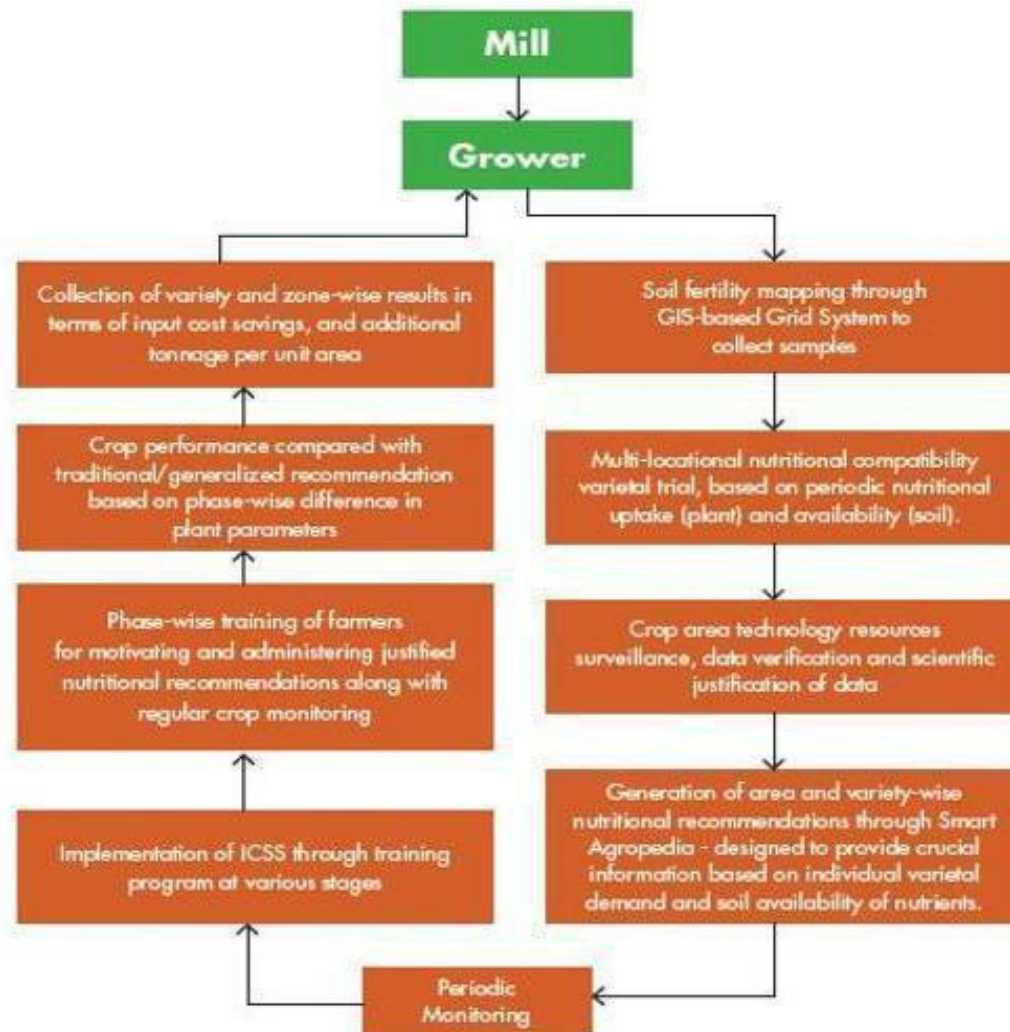
Challenges in the current scenario

▶ No database of the famers of a particular area

▶ No record of the crops grown in a certain region

▶ Lack of information on agricultural inputs

▶ Indiscriminate use of chemicals

▶ Degradation of soil health

▶ Low yield and losses

▶ Difficulty for farmers in correlating production techniques and crop	yields with land variability.

▶ Limited ability to develop effective agricultural strategies

Objectives of Smart Agropedia

▶ **Access to all information**

Serves as the 'Wikipedia of Agriculture' where farmers can get information about the best seeds and fertilizers available for their region and the equipment they can buy or lease.

▶ **Preparation for unexpected weather**

Designed to send SMS alarms about upcoming weather patterns, such as unexpected rainfall

▶ **Analysing the health of soil**

Generating soil health report after analysing soil health, providing information about the quantity and quality of agriculture inputs

▶ **Buyer Bidding**

Farmers can broadcast about their upcoming produce and find prospective buyers through buyer bidding.

Projects included in Smart Agro

- Soil Fertility Mapping
- Integrated Crop Support (IT) System
- Resources Development
- Green House Technology
- Plantation Establishment
- Specialized R&D Programs
- Green Field Turnkey Projects
- Improved Seeds and Nurseries
- Varietal Development Program
- Field Demonstrations and Trials

- Crop Production Feasibility Audit
- Custom Hiring Agriculture Services
- Farm Layout, Planning and Budgeting
- Skill Development and Training Program
- Digital Land Survey and Agri-Development System
- Manufacturing of Soil Health Bio-Organic Conditioners
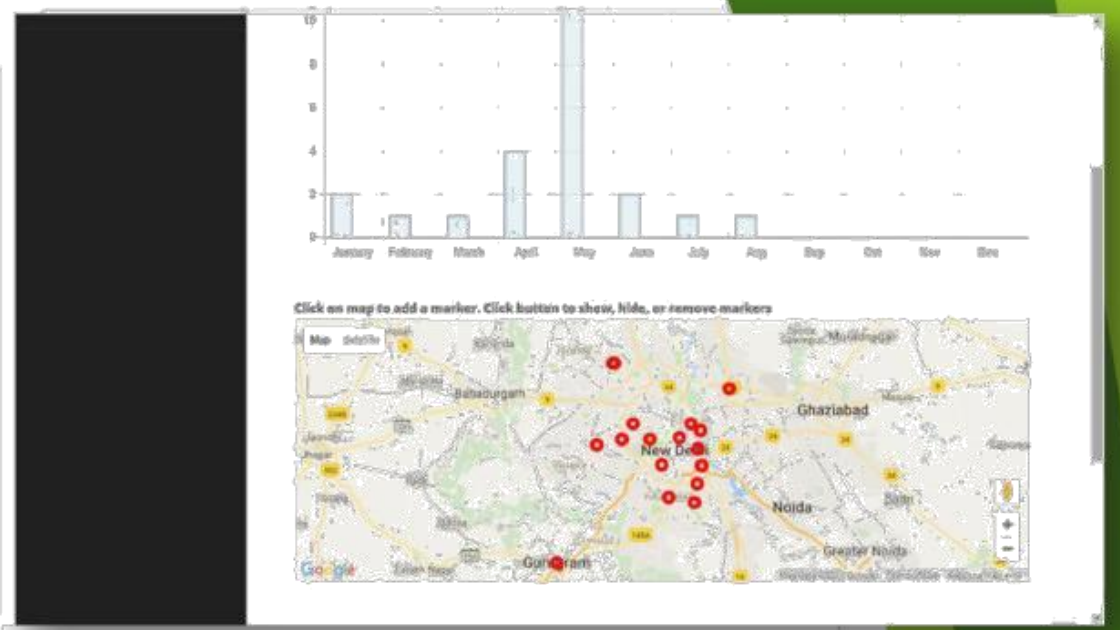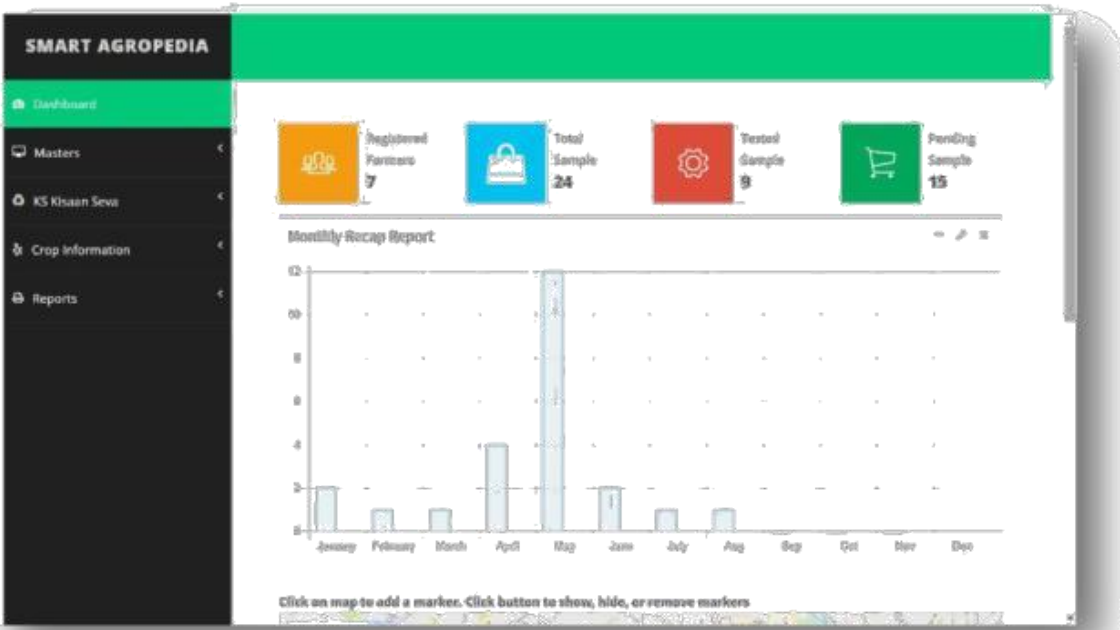- Crop Production Technology, Modification and Development
- The Agro-Smart Card

The Smart Agropedia Advantage

- Collects database of farmers
- Maintains record of the agricultural land available
- Provides A-Z of agriculture-related information to the farmer
- Comprehends area wise availability of soil and type of crop
- Effective application of fertilizer inputs at farmers end
- Individual grower and his individual plot will get specific crop wise recommendations
- Reduces indiscriminate use of fertilizer input
- Avoids the nutritional unbalancing in plant crop
- Enhances efficacy of agricultural inputs
- Reduces the cost of production
- Develops area and variety wise crop production management practices
- Enhances crop production up to the best possible potential
- Suggests and implements soil development programs and measures

Goals

Making optimized use of Information and Communications Technology (ICT) to make Smart Agro the ultimate solution provider for any and all agriculture-related matters.

- Crop Advisory
- Soil Health
- Nutrients
- Fertilizer
- Unexpected Weather Alert
- Land Records
- Buyer Bidding
- Equipment – rent or buy
- Input Information

Smart Agropedia is the solution