

## **BUSINESS PROPOSAL**

### **Earth Care – THE NAME YOU CAN TRUST**

At Earth Care, we have a powerful story to tell – a history of great achievements, world class talent and innovative breakthroughs. Most importantly we have a history of helping our customers in reaching new heights. We provide our customers with a wide of solutions based on farming and soil related issues.

Our enterprise has been working to improve the quality of agricultural produce for 5 years. Our vision is to make modern science and technology reach every farmer of India.

## Project Details

### PUSA STFR METER KIT

PUSA is manufacturing Digital Soil Test and Fertilizer Recommendation (STFR) Kit. This soil testing kit helps farmers in testing 12 parameters of soil & recommends crop-specific fertilizer dose for 100 crops within a short time and at a center nearby, and thus helps them to achieve higher yields, increase their income and keeps soil fertile.



## **PUSA STFR METER TESTS FOLLOWING 12 PARAMETERS OF SOIL**

- AVAILABLE ORGANIC CARBON (OC) NITROGEN (By Calculation) (N)
- AVAILABLE PHOSPHOROUS (P)
- AVAILABLE POTASSIUM (K)
- AVAILABLE ZINC (Zn)
- AVAILABLE SULPHUR (S)
- AVAILABLE BORON (B)
- AVAILABLE IRON (Fe)
- AVAILABLE MANGANESE (Mn)
- ELECTRICAL CONDUCTIVITY
- pH Value
- Lime Requirement Test for Acidic Soil
- Gypsum Requirement Test for Alkaline Soil



- TESTS 12 PARAMETERS OF SOIL

It tests 12 parameters of soil.

- RECOMMENDS FERTILIZER DOSE FOR 100 CROPS

It recommends crop-specific fertilizer dose for 100 crops.

- ISSUES SOIL HEALTH CARD

It prints Soil Health Card for farmers.

- SENDS SOIL REPORT ON SMS

Sends complete Soil Test Report to farmer on SMS.

- In-built Battery Backup & Solar Charging

In-built battery backup in meter & solar panel for charging.

- KEEPS SOIL FERTILE

Helps in keeping soil fertile, increases yield & income of farmer.

## **Significances of the STFR Meter**

We have about 1000 soil testing laboratories (STLs) throughout the country, which are not sufficient to cater the soil testing needs of the farming community. In case soil of each farm holding is to be tested, its turn would come at an interval of 10-12 years. Even the existing STLs are not utilized up to their potential, one of the major reason being lack of voluntary participation of farmers in providing samples and receiving as well as implementing recommendations. The STL staff cannot reach the farmers regularly; instead expect the farmers to come to the STLs. As a result, farmers seldom get soil test reports in time i.e., before sowing/planting of their crops, and continue to use fertilizers in ad hoc manner depending on their resources and availability of fertilizers in the market. Such indiscriminate or inadequate use of fertilizers over the years without soil testing is considered one of the major reasons deterioration of soil fertility at large scale. There was long-felt need of a quantitative soil test kit to support the soil testing service. Pusa STFR Meter would increase farmers' access to soil testing, and thus help them to achieve higher yields owing to soil test based fertilizer application.



## The Kit Comprises Of

- Digital STFR Meter
- Mini Shaker
- Thermal Printer
- Reagent Kit
- Accessories Kit
- Glassware
- Plastic ware
- Solar Panel
- Pen-Drive with Training Videos
- Printed User Training Manual

## **Benefits of using PUSA STFR Meter Kit**

- Helps in determining the available nutrients in the soil
- Helps in determining the correct dosage of fertilizers according to the crop
- Saves money of farmers & nation by optimal usage of fertilizers
- Optimal use of fertilizer also ensures good health of ground water
- Prevents soil deterioration & maintains soil fertility
- Increases crop yield & hence farmers have more income
- Soil tests can be done within a short time frame
- Testing can be done at a Centre near a Village or Panchayat
- Accurate & reliable digital results
- Easily portable to any region
- Can be handled by an Under Graduate level person after training
- Issues printed Soil Health Card & also sends Soil Test Report on SMS

## **Features / Specification**

- Input Voltage-85V to 265V AC
- Load- 27VA
- Battery Backup
- Charge from solar panel also(10 W Solar Panel)
- Wide Blue LCD Display
- Micro controller based technology
- Tackle back switches for easy operation
- Deep Discharge / Over charge protection
- Port for Computer Connectivity

# Business Proposal

Providing soil testing service is a knowledge based business. You must have the knowledge and skill for this business. However, if you don't have, you can get the knowledge through practical training. Here in this post, we share a detailed soil testing service business plan for your ready reference.

The land is a perishable item. And day by day the amount of land is reducing because of growing population and fast urbanization. Therefore, the need for maximizing the productivity from a specific piece of land is increasing. In the present scenario, one can't afford to a singular crop from a piece of land. Additionally, farmers are looking to get maximum yield with utilizing minimum agricultural inputs. And here the requirement of soil testing comes in.

## **Who Can Start Soil Testing Service Business**

This business is perfect for the people who have an educational background in agriculture, biotechnology or microbiology or chemistry. If you are an agronomist, this business is just for you. However, a passionate individual can start this business with consistent dedication.

## **Soil Testing Service Business Model**

You can start the business by two ways. One is an immovable soil testing laboratory. And another is the mobile soil testing van. In the first option, you will test the soil which will come to your lab. And after getting the result, you will be sending the report to your client's email address.

In the second option, you will set up the laboratory on a van. And you offer the service as the mobile basis. In this case, you will collect the soil samples from the farm and you will give your clients an instant report. This option is more profitable than the first one. However, this model demands more capital investment than the first option.

## **What Services You Can Offer?**

A soil testing service business can offer a wide range of services. You can start as small scale basis. And you can scale up steadily as you start getting confidence from the business. When you establish a laboratory, then it comes with a wide range of opportunities for you. Apart from the agriculture, you can cater food and food processing industries as well. Additionally, you can provide the service to the companies in agrochemicals, seed, biofuels, fertilizers, farm machinery and supplies, financial and insurance industries, storage, processing facilities and logistical construction, preparation of fresh produce for market and prepared food products.

## **List Of Soil Testing Services You Can Offer**

- Determining the suitability of the soil and assess whether it can accommodate client's farming project
- Providing basic services like pH balance, Buffer pH, P205, K20, Ca, Mg, Cation Exchange Capacity (C.E.C.), with or without Lime/Fertilizer Requirements.
- Soil Texture Characterization
- Conductivity of the soil
- Availability of the organic matter in the soil
- Secondary and micronutrients availability or shortage in the soil.
- According to the crop, the requirement of soil preparation etc.

## **Investment For Soil Testing Service Business**

The major investment is the space and the laboratory equipment. If you are an absolute beginner in this industry, then we will recommend you not to buy the space. Just start the business from a rental space. Apart from the laboratory, you must have a small office space. Because you have to receive the soil samples, raise the bill and accept the payment.

Apart from the fixed cost, you have to arrange the working capital. It includes procuring the laboratory chemicals, utility bills payment, staffing and advertisement cost.

Check whether there is a Govt. subsidy or not for this business. India Govt provides financial assistance to the entrepreneurs to setting up the soil testing service business.

## **Things To Consider In Starting Soil Testing Service Business**

In starting the business, first, craft a business plan. It is a must. You have to determine several things. It includes what are the services you will offer, how much capital you will invest, how you will promote your services etc.

Plan the manpower requirement. Because a major portion working capital goes to pay the employees.

Check the licensing and permission issues at your area. It hugely depends on your location. Additionally, have a clear conception of tax liabilities of this business.

Have a marketing strategy. You must consider promoting your business. You must aware your target demographics about the services you are offering.

Procure excellent quality testing equipment. Because upgraded and modern equipment always shows the accuracy of the testing result.

Promote your business as much as possible. Farmers training program is the most effective way of spreading the awareness.

Go digital. You must have an informative website. Put your company details, contact details and service details clearly. Additionally, include a guide of collecting the soil samples for testing.

Soil testing service providing is a self-rewarding business. However, you must have the passion, persistence, and dedication to get the long sustaining success in this business.