Soil and Water Testing Laboratory

KVK Nandurbar developed Soil and Water testing laboratory since year from 2005 analyst total 12 nutrient Viz, N.P.K, Ph, EC, OC, CaCo3, Mn, Zn, Fe Cu. The NPK ratio, which is the measure of balanced use of fertilizer. There has been an impressive growth in the consumption of fertilizers in post green revolution period, their indiscriminate use has been one of the reasons for declining productivity in recent years. Studies and Evaluations have revealed that the lack of adequate soil testing facilities and related advisories have forced the farmers to depend on unreliable sources for advice on the fertilizer requirement, which is one reason for the unbalanced fertilizer use.

Soil test based nutrient management has emerged as a key issue in efforts to increase agricultural productivity and production since optimal use of nutrients, based on soil analysis can improve crop productivity and minimize wastage of these nutrients, thus minimizing impact on environmental leading to bias through optimal production. Deficiencies of primary, secondary and micronutrients have been observed in intensive cultivated areas. Soil test constitute the basis to assess the type and extent of problem and the needed management to problematic soils. These facts clearly demonstrate the utmost need to establish more and more soil testing labs in the State.

Objectives of Soil Testing

1. To estimate the available nutrient status (macro, secondary and micro-nutrients) of soils.
2. To assess the type and extent of problem for reclamation of problematic soils
3. To evaluate the fertility status of soils in district.

By soil test summaries the fertility status i.e. available nitrogen status or available phosphorous status or available potassium status expressed as **High, Medium or Low**. A soil fertility map showing such fertility status can be prepared.

Status of Soil Testing Laboratory in Nandurbar :

Nandurbar district has around 3-4 Soil Testing Laboratories which are being funded by different government agencies for soil sample testing. KVK, Nandurbar developed Soil and Water testing laboratory since year from 2005 analyst which has been total 12 nutrient Viz, N.P.K, Ph, EC, OC, CaCo3, Mn, Zn, Fe Cu. These laboratories are full filling the soil test need of the farmers. Earlier farmers were mainly dependable on Agricultural universities for their soil testing however, to provide the facility at farmers door steps as well as at farm level thought Pusa STFR mini soil testing lab and to provide Soil health card to the farmer.

Admissible items and list of equipment for setting up of Soil Testing Laboratory with annual analyzing capacity of one to two thousand samples per annum (For analyzing N P K , and micronutrients in soils and water)

Elements to be analysed.

While carrying out the complete analysis of soil, following categories of elements are normally determined:

a) N,P,K (Majornutrients)
b) Ca,Mg,S (Secondary nutrients)
c) Zn,Fe,Cu,Mn,B,Mo,Cl (Micronutrients)

Besides these nutrients soil are also analyzed for following properties

a) pH
b) EC
c) Organic carbon

Rates of sample checking :

Sr No.	Parameters	Rate (Rs/Sample)
1	Major Nutrients (pH, EC,OC, N,P,K, Caco3)	150
2	Micro Nutrient (Zn,Fe,Cu,Mn)	200
3	Water	100

Benefits.

The laboratory is primarily used for soil testing, This Laboratory will also provide the extension advisory to the farmers. Along with the testing reports, the farmers will also be provided with advise and recommendations on soil condition and the crops suitable to be cultivated in that particular soil, methods for improving the soil health and package of practices to be followed during crop production. People engaged in commercial cultivation of Cash crops and Fruits crops will be particularly benefitted through this advisory. The scientific analysis in every 2-3 years, will enable them to assess the condition of their soil and do the necessary improvements.

Photographs:

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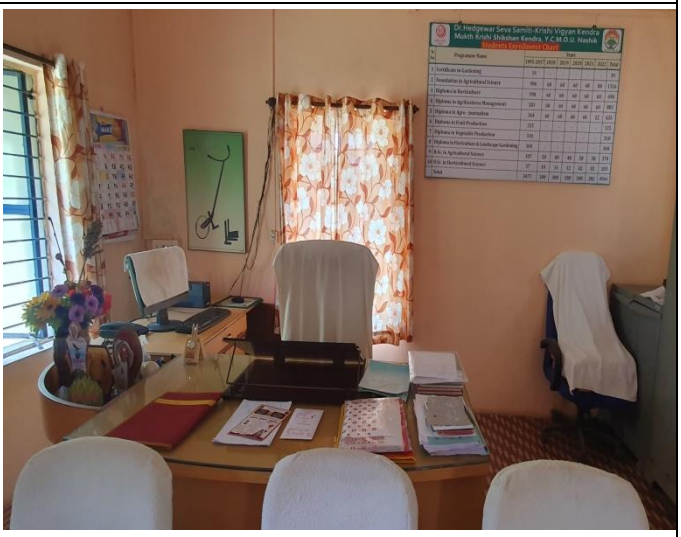
<tr><td>  </td><td>  </td></tr>
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