The Directorate of Agricultural Development & Farmers Welfare Department, Thiruvananthapuram. Dated: 13.07.2017.

#### CIRCULAR

Sub:- NMSA - Soil Health Management 2016-17 - under National Mission for Sustainable Agriculture (NMSA) Guidelines for Mini Soil Testing Labs regarding.

Ref:- 1)Letter No. 14-23/2014/Fert. Use dated 22.02.2017 & 05.06.2017 of Additional Commissioner, INM GoI.

2)Letter No.16-34/2015Fert.Use dated 29.08.2016 of Additional Commissioner, INM, GoI

3) Letter No. TF(2)15640/16 dated: 28.06.2017 of Director of Agriculture, Thiruvananthapuram.

As per reference (1) cited Government of India have accorded Administrative approval for the inclusion of the component Mini Soil Testing Labs 'Mridaparikshak' developed by ICAR, under Soil Health Management 2016-17 of NMSA. As per reference (1) dated 05.06.2017 cited Government of India have also accorded revalidation sanction for the amount of Rupees 78.432 lakhs for the procurement of 152 Mini Soil Testing Labs.

# Mini Soil Testing Labs

ICAR -Indian Institute of Soil Science, Bhopal has developed a mini lab named "Mridaparikshak" which can assess the soil health and can be used in the preparation of Soil Health Cards. It is a digital mobile quantitative mini lab to provide soil testing service at farmers doorsteps. It comes with balance, shaker, hot plate and Smart Soil Pro, an instrument for determining the soil para meters and displaying of fertilizer nutrient recommendations. It determines all the important soil parameters ie. Soil pH. EC, organic carbon, available nitrogen, Phosphorus, Potassium, Sulphur and micro-nutrients like Zink. Boron and Iron.

The results as obtained by 'Mridaparikshak' are stable, reproducible and correspond (up to 90%) to the standard laboratory procedures employed in India. It is highly compatible with soil health card. The quantity of chemicals provided are sufficient for analyzing 100 samples which can be refilled. It can be operated by young educated farmers / rural youths (11 – 12 pass) with 2-3 days of training.

#### Procurement of Mini Soil Testing lab

As per reference (2) cited above GoI had informed that soil testing mini labs manufactured using ICAR technology are being marketed by National Agricultural Cooperative Marketing Federation of India Ltd (NAFED) and states were advised tom procure soil testing labs in accordance with their financial rules. Accordingly supply order was placed from this office to NAFED for the supply of mini labs to all Assistant Director of Agriculture offices in all the Blocks of the state as follows:-

Sl. No.	Districts	No.of Mini labs
1	Thiruvananthapuram	11
2	Kollam	11
.3	Pathanamthitta	- 8
4	Alappuzha	12
5	Kottayam	11
6 ·	Idukki	8
7	Eranakulam	14
8	Thrissur ,	16
9 _	Palakkad	13
10 ·	Malappuram 3	15
ſ1	Kozhikode -	12
12	Wayand	04
13	Kannur	11
14	Kasaragod	06
Total		152

## **Mode of Implementation**

The Principal Agricultural Officers of each District will issue the Mini labs supplied to them by NAFED to all Assistant Directors of Agriculture in the District. The Assistant Directors of Agriculture will receive the Mini labs, while issuing preference should be given to Plant Health Clinics. The Mini labs may be made available to other Krishi Bhavans as per their requirement.

Training on the installation and demonstration of the Mini labs will be done by NAFED. The dates for the training will be intimated to Principal Agricultural Officers from this office.

One set of reagents sufficient for testing 100 soil samples are supplied free of cost along with the Mini labs supplied. Further purchase of reagents may be done according to the availability of funds under State Scheme, NMSA etc.

Assistant Directors of Agriculture and Agricultural Officers should give wide publicity of these Mini labs among the farmers and effect soil testing in the farmers field. This tool may be effectively used in the second cycle of Soil Health Card Scheme under NMSA.

Assistant Directors of Agriculture should ensure that the Mini Soil Testing labs are used effectively and not kept idle.

### Financial Outlay

The cost of 1 Mini lab is Rs.86,000/-. The total cost of 152 Mini labs comes to Rs.130.72 lakhs. The sharing pattern for this is 60:40. i.e. Rs.78.432 Lakhs Gol + Rs.52.288 lakhs GoK.

(Sd/-)

Director of Agricultural Development & Farmers Welfare Department

1. All Principal Agricultural Officers.

2. All Project Directors ATMA.

3. All Additional Directors of Agriculture.

4. TA to Director of Agriculture.

Chief Soil Chemist, CSPHC.

Stock file / Spare.

C. K. AJITHA

Addi. Director of Agriculture (Pig)

Directorate of Agriculture

Vikas Bhavan, Thirewananthapuram