Directorate of Agriculture Development & Farmer's Welfare Department Thiruvananthapuram, Dated: 18.04.2018

Email: fertilizer2010@gmail.com

Circular

Sub: Annual Plan 2018-19 - Scheme on Support for Secondary and Micro nutrients - working instructions - issued.

Ref: 1. G.O (Rt) No. 634/17 dated: 23.06.2017

> 2. Order No. 7457/18 dated: 11.04.2018 of Director of Agriculture Development & Farmer's Welfare Department

Government vide Government Order 1st cited above have accorded sanction during 2017-18 for the implementation of the Scheme Component "Support to Secondary and Micronutrients" for an amount of Rs.250.00 Lakhs under the Head of Account 2401-00-800-28 Plan from the total financial outlay of 2700 lakhs under "Soil Health Management and Productivity Improvement" Scheme. As per reference cited as 2nd above continuous sanction has been acorded for implementation of the scheme component during 2018-19 for an amount of Rs.250 Lakhs.

Plants require seven essential micro nutrients viz. Zinc, Copper, Boron, Iron, Manganese, Molybdenum & Chloride. Kerala soils are generally deficient in essential secondary and micro nutrients. Calcium, Magnesium and Sulpur are the three essential secondary nutrients.

The deficeincy of Boron is acute and extensive, requiring immediate intervention through Boron suppliments. Copper & Zinc are also required in small quantities in most of the soils. Government of Kerala had notified the use of Zinc, Copper and Boron in Kerala Soils and its application level for foliar and soil applications. In the joint survey conducted recently by the State Planning Board & Department of Agriculture under the "Soil Based Plant Nutrient Management Plan for Agro-Eco Systems of Kerala" reveals that Kerala Soils are deficient in micronutrients.

High-yielding crops remove more micronutrients from the soil hence application of micronutrients is essential to achieve full balanced nutrition for crops. These are nutrients used in small quantities and there are seven micro nutrients which are needed for proper growth and productivity. Through soil testing and plant analysis, micronutrient deficiencies can be identified.

Soil factors that affect the availability of secondary and micronutrients are organic matter content, soil texture and soil pH. Soils very low in organic matter will usually be deficient in micronutrients. Sandy soils are more likely to show micronutrient deficiencies than clay soils. Micronutrient availability generally decreases as the soil pH increases, with the exception of Mo. Objectives:-

- The main objective of the scheme is to apply sufficient quantity of Secondary and Micronutrients to overcome the deficiency. Boron deficiency can be avioded by the use of borax (20 kg pr ha), Magnesium dificiency by the use of Magnesium Sulphate (80 kg/ha) and Zinc deficiency can be corrected by the use of 10 kg of Zinc Sulphate per ha. For coconut 50 gms of Borax, 500 gms of Magnesium sulphate and 50 gms of Zinc Sulphate can be used.
- To assist farmers in the application of Secondary and micro nutrients thereby increasing the productivity of paddy, coconut, vegetables and spice crop.

Mode of Implementation:-

This programme will be implemented to promote the use and application of Secondary and micro nutrients for better soil status and crop productivity. Among micronutrients Zinc, Copper & Boron are the only nutrients which are notified by the State Government, subsidy can be given only to these micronutrients and secondary nutrients such as Calcium, Magnesium & Sulphur under the scheme.

The Additional Director of Agriculture (CP) will monitor the programme at the state level. At district level Deputy Director of Agriculture (WM) at Principal Agricultural Office will implement the programme. The Assistant Directors of Agriculture of the block will supervise the implementation of the programme in the concerned blocks. The field level implementation charge is given to

Agricultural Officers of the concerned Krishi Bhavans.

The purchase of the Secondary and Micro nutrient fertilizers will be arranged by Co-operative Societies/Banks and supplied through farmer cluster, coconut clusters, vegetable clusters and padasekhara samithies through permit system by Krishi Bhavans. Agricultural Officer of the Krishi Bhavan will ensure the quality of the fertilizer supplied.

The programme will be implemented in 1400 farmer clusters of paddy/vegetable/coconut/spices. Soil/plant analysis will be undertaken in the field of the farmers involved in these cluster groups. Since the department labs are equiped with AAS for analysing micronutrients, the soil samples under the scheme will be analysed at the Soil Testing Laboratoties of the department free of cost.

Assistance @ Rs.500 per ha will be provided to farmers and this programmes will be implemented in an area of 50000 Ha.

An amount of Rs.250.00 Lakh is set apart for this component. Out of this an amount of Rs.200.00 Lakhs will be utilised in Kuttanad GAP area and Thrissur Kole lands, based on soil test recommendations. Balance funds will be utilised in other district.

Supply will be arranged through Agencies like (FACT), Government or quasi Government institutions like Kerala Agro Industries Corporation, RAIDCO and through approved agencies etc. As the actual input materials are supplied to the farmers through the cooperative societies/banks or other agencies who are willing to stock and distribute the micronutrient fertilizer to the farmers, the normal issue of subsidy to the farmers through e-payment system will be delinked for the implementation of this scheme. The farmers who avail any assistance from any other scheme for the same purpose will not be considered for this scheme. Micro nutrient mix developed by IIHR Bangalore can also be considered.

Financial Outlay Districtwise

Districtwise Physical & Financial Allocation

Sl No	Name of District	Assistance for purchase of Secondary & Micro nutrient fertilizer		Total Amount in lakhs
		Area in Ha	Amount in Lakhs	
1	Thiruvananthapuram	1000	5.00	5.00
2	Kollam	1000	5.00	5.00
3	Alappuzha	25000	125.00	125.00
4	Pathanamthitta	750	3.75	3.75
5	Kottayam	2000	10.00	10.00
6	Ernakulam	1000	5.00	5.00
7	Idukky	1000	5.00	5.00
8	Thrissur	12250	61.25	61.25
9	Palakkad	1000	5.00	5.00
10	Malappuram	1000	5.00	5.00
11	Kozhikkode	1000	5.00	5.00
12	Wayanad	1000	5.00	5.00
13	Kannur	1000	5.00	5.00
14	Kasaragod_	1000	5.00	5.00
	Total	50000	250.00	250.00

Rupees Two Hundred and Fifty Lakhs Only

During the year 2018-19 an amount of Rs.2833 lakhs is available under the head of account 2401-00-800-28 Plan "Soil Health Management and Productivity Improvement". An amount of Rs.250.00 lakhs set apart for the implementation of the programme "Support for Secondary and Micro nutrient" can be utilized.

TN3MTA493

For Director of Agriculture Development

& Farmer's Welfare Department

Copy to

- 1. All Additional Directors of Agriculture
- 2. All Principal Agricultural Officers
- 3. TA to DA
- 4. File
- 5. IT Section
- 6. SW Section

H.V18.4.18

C. K. SAJITHA

Addl. Director of Agriculture (Plg)
Directorate of Agriculture
Vikas Bhavan, Thiruvananthapuram