

**CIRCULAR**

Sub:- Annual Plan 2016-17- Scheme on "Soil Health Management and Productivity Improvement" - Soil Ameliorants in selected Districts - Working Instructions- Regarding.

Ref:- (1) G.O.(MS) No.28/2016/AD dated 03-02-2016.  
(2) Circular No.TP(2) 10507/16 dated 01-04-2016 & 04-04-2016

As per the reference 1<sup>st</sup> and 2<sup>nd</sup> cited, Government have accorded sanction for the inclusion of the Scheme component- Soil Ameliorants in selected Districts in the Green Book for implementation during the 5th year of 12th Five year Plan ie 2016-17 at a cost of **Rs.2136 lakhs** from the total outlay of **Rs. 2626 lakhs** set apart for "Soil Health Management and Productivity Improvement"scheme under the **Head of Account 2401-00-800-28(plan)**.

The principal factors deciding the acidic nature of soils of a region are the nature of the parent material and the climatic conditions under which the soil has been formed. The soils of kerala have developed from acidic parent rocks under the humid tropical environment, characterised by high rainfall and temperature conditions which are conducive to rapid removal of bases from the soil. The highly weathered laterite soils covering more than 70 percent of the state are very strongly to moderately acid with pH ranging from 4.5 to 6.0 while the water logged problem areas of Kuttanad, kole and Kaipad lands have ultra acid soils with pH less than 3.5. The predominantly acidic nature of soils of the state warrants a regular liming practice. The improvement of soil health is essential for augmenting crop productivity considering the depleted nutrient status of the soil resource of the state. Since soil acidity is a major issue in kerala soils, amelioration of soil acidity has to be given top priority and this component is included in the scheme as a systematic intervention in correcting soil acidity to improve soil fertility status.

**Objectives:-**

1. To correct this soil acidity(pH) and improve the soil fertility status and thereby the crop productivity.
2. To supplement Calcium and Magnesium deficiencies in the soils.
3. To improve the intake of primary, secondary and micro-nutrients by the crops by improving soil health status.
4. To sustain good soil health and improved agricultural practices.

### Programme:-

Based on the soil test data, lime @ 600 Kg /ha should be applied to paddy crop. More quantity of lime as per soil test data if required, can be applied by farmers at their cost. As per the scheme , 75 % subsidy @ Rs 5400/ha will be given towards the cost of lime to paddy crop . An amount of Rs 2136 lakhs is set apart for the implementation of the scheme in 39556 ha.

The liming material like Dolomite/Lime/powdered lime stone @600 Kg should be arranged in the Primary Agriculture Co-op Banks/Societies and supplied to the farmers **delinking the e-payment system**. Tender or Quotations should be called observing Store Purchase Rules for arrangement of the materials at the Co-operative Societies/ Co-operative Banks. The Agricultural Officer will test the materials and only quality materials alone will be distributed.

### Neutralising value (Calcium carbonate equivalent) of liming materials

Liming materials differ markedly in their ability to neutralise soil acidity. The effectiveness or efficiency of liming material is expressed as calcium carbonate equivalent or neutralising value. Pure calcium carbonate is taken as the standard with a value of 100 per cent. The neutralising value of common liming materials is given in Table below. The values mentioned are for pure materials and will change depending on the material. The highest neutralising value for calcium oxide is indicative of its superiority over other liming materials in terms of efficiency to neutralise acidity.

**Table . Calcium carbonate equivalent of pure forms of liming materials**

Liming materials	Neutralizing value
Calcium oxide	179
Calcium hydroxide	136
Magnesium carbonate	109
Dolomite (Calcium magnesium carbonate )	109
Calcium carbonate	100
Calcium silicate	86

Source : Outcome of Soil Based Plant Nutrient Management Plan for Agro Eco systems of Kerala

This scheme is intended to be implemented in an area of 39556 hectares covering all districts of Kerala except Wayanad. In Wayanad district, separate scheme under Wayanad Package will be implemented for soil ameliorants. The farmers who avail any assistance from any other scheme for the same purpose will not be considered for subsidy in this scheme.

### Mode of implementation:-

The field level implementation will be done by the Agricultural Officers of the concerned Krishi bhavans. The quality of soil ameliorants should be ensured before distribution. The required soil ameliorants will be stocked and distributed to Padasekhara Samithies/ farmers as per the permits issued by the Agricultural Officers of the concerned Krishi Bhavans. The subsidy amount will be issued to the concerned Co-operative Societies/ Co-operative Banks who distribute the soil ameliorants after the completion of the distribution.

The sheme will be implemented by the Deputy Directors of Agriculture ( W.M) at District level and the Assistant Director of Agriculture at Block level.

### Monitoring:-

Additional Director of Agriculture (CP) will be in charge of the programme at the state level. The Principal Agricultural Officers will monitor and co-ordinate the programme at the district level. Monthly progress report should be furnished to the Director of Agriculture by the 5th of every month.

### Financial Outlay:-

The financial outlay for this programme is **Rs.2136.00 lakhs**. The rate of assistance for purchase and application of soil ameliorants like dolomite/lime for one ha of paddy will be maximum of 75% of the total cost limited to **Rs.5400/- per hectare**.

Sl. No.	Item	Area (Ha)	Subsidy per ha (Rs.)	Total Assistance (Rs. Lakhs)
1	Liming materials	39556	5400	2136
	<b>Total</b>	<b>39556</b>	<b>5400</b>	<b>2136.00</b>

### Physical and Financial Targets of Distribution of lime

Sl.No	Name of district	Area in Ha	Financial (Rs. in lakhs)
1	Thiruvananthapuram	400	21.6
2	Kollam	300	16.2
3	Pathanamthitta	500	27
4	Alappuzha	10656	575.4
5	Kottayam	5000	270
6	Idukki	200	10.8
7	Ernakulam	2000	108
8	Thrissur	6000	324
9	Palakkad	10000	540
10	Kozhikkode	500	27
11	Malappuram	2000	108
12	Kannur	1500	81
13	Kasargod	500	27
	<b>Total</b>	<b>39556</b>	<b>2136</b>

The total financial requirement of the programme of Rs 2136.00 lakhs can be met from the budget provision under the head of account 2401-00-800-28 plan

sd/  
Director of Agriculture

Copy to:

1. All Principal Agricultural Officers (except wayanad)
2. T.A. to Director of Agriculture
3. All Additional Directors of Agriculture
4. DDA, I.T. Cell (for publishing in the website)
5. Accounts section
6. Planning section for allotment of funds
7. Stock file/Spare.



17.10.16  
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