Directorate of Agricultural Development and Farmers welfare Department,

Vikas Bhavan, Thiruvananthapuram.

Date: 15/04/2017

#### CIRCULAR

and Root

Sub:- Annual Plan 2017-18 Scheme on "Soil Health Management and productivity Improvement "-Soil Ameliorants in selected Districts -working instructions- Regarding.

Ref:- 1)Note TP(2) 5242/2017 dated: 05/04/2017.

2) G.O (Rt) No. 378/2017/ AD Thiruvananthapuram dated: 04/04/2017.

As per the reference Ist and 2nd 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 year 2017-18 at a cost of Rs. 2210 lakhs from the total outlay of Rs. 2700 lakhs set apart for "Soil and Root 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 enviornment, characterised by high rainfall and temperature conditions which are condusive 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 acidic with PH ranging from 4.5 to 6.0 while the water logged problem areas of Kuttanad, Kole and Kaipad lands have ultra acid soild 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 nutirent 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 tha 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 @ 600Kg/ ha sould be applied to paddy crop. More quantity of lime as per soil test data if required, can be applied by farmers. As per the scheme, 75 % subsidy @ Rs. 5400/ha will be given towards the cost of lime to paddy crop. An amount of Rs. 2200 lakhs is set apart for the subsidy of limiting materials for an area of 40740 ha and an amount of Rs. 10 lakhs is set apart for transportation and handling charges.

The liming material like Dolomite/ Lime/ powered lime stone @ 600 Kg should be arranged in the Primary Agricultural Co-op Banks/ Societies and supplied to the farmers delinking the e- payment system.

Tender or Quatations 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 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 percent. 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 40740 hectares

covering all districts of Kerala except Wayanad. In Wayanad district, seperate scheme under Wayanad package will be implemented for soil amelioants. The famers 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 amelioants should be ensured before distribution. The required soil amelioants 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 Cooperative Societies/ Co-operative Banks who distribute the soil ameliorants, after the completion of the distribution.

The scheme 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 5<sup>th</sup> of every month.

## Financial Outlay:-

The finanacial outlay for this programme is Rs. 2210 lakhs. The rate of assistance for purcahse 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. Transporation and handling charges can be given to Padasekhara Samithies etc.

Sl.No	Item	Area (Ha)	Subsidy per ha (Rs)	Total Assistance (Rs. Lakhs)
1	Liming materials	40740	5400	2200
2	Transporation and handling charges			10
	Total	40740	5400	2210

SL.No	Name of District	Area in Ha	Financial (Rs. in lakhs)		
			Subsidy for lime	Transporation and handling charges	Total
1	Thiruvananthapuram	400	21.6	0.1	21.7
2	Kollam	400	21.6	0.1	21.7
3	Pathanamthitta	600	32.4	0.15	. 32.55
4	Alappuzha	10740	580	2.6	582.6
5	Kottayam	5100	275.4	1.25	276.65
6	Idukki	250	13.5	0.05	13.55
7	Ernakulam	2100	113.4	0.5	113.9
8	Thrissur	6100	329.4	1.5	330.9
9	Palakkad	10200	550.8	2.55	553.35
10	Malappuram	2100	113.4	0.5	113.9
11	Kozhikode	600	32.4	0.15	32.55
12	Kannur	1600	86.4	0.4	86.8
	Kasargode	550	29.7	0.15	29.85
	Total	40740	2200	10	2210

The total financial requirement of the programme of Rs. 2210/-lakhs can be met from the budget provision under the head of account 2401-00-800-28 Plan.

Sd/-

Director of Agricultural Development and Farmers welfare Department .

## Copy to:

- 1. All Princiapl Agricultural Officer (Except Wayanad)
- 2. T.A to Director of Agriculture
- 3. All Additional Directors of Agriculture
- 4. DDA, IT Cell ( for publishing in the website) Additional Director of Agriculture (CP)
- 5. Accounts Section
- 6. Planning section for allotment of funds
- 7. Stock file/ Spare.