

TF(2)15231/2018

Directorate of Agriculture Development
& Farmer's Welfare, Vikas Bhavan,
Thiruvananthapuram
Dated: 09.04.2018

CIRCULAR

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

Ref: G.O (Rt) No. 308/2018/ AGRI dated 05.04.2018

As per the reference 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 2018-19 at a cost of Rs. 2340 lakh from the total outlay of Rs. 2833 lakh 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 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 acidic with pH ranging from 4.5 to 6.0, while the water logged problem areas of Kuttanad, Kole and Kaippad lands have ultra acidic 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 the 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 could 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. 2327.40 lakh is set apart for the subsidy of liming materials for an area of 43100 ha and an amount of Rs. 12.6 lakh 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 quotations should be invited observing Stores 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

In the case of dolomite, materials of different quality and different price tags are available in the local market. To ensure supply of quality materials to the farmers at fair prices, it is absolutely necessary to enforce standards already fixed by the Bureau of Indian Standards (BIS).

Pricing:

The neutralizing value requirement (minimum) for dolomite is 70% and this shall be taken as the basis for fixing maximum price. Materials with neutralising value less than 60% shall be rejected. Price of materials with NV in between may be fixed using the following formula:

$$\text{Price (calculated)} = A \times B \div 70$$

where, A = market price, B = NV as per analytical report

For example, Sample with NV 65 % and market price for standard material is Rs. 4.50 per Kg, the price for the sample can be calculated as follows:

$$\text{Price} = 4.5 \times 65 \div 70 = \text{Rs. } 4.17 \text{ ps.}$$

This scheme is intended to be implemented in an area of 43100 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 under 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 scheme will be implemented by the Deputy Directors of Agriculture (WM) at the 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. 2340 lakh. 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. Transportation and handling charges can be given to Padasekhara Samithies etc.

Sl.No.	Item	Area (Ha)	Subsidy per ha (Rs)	Total Assistance (Rs. Lakh)
1	Liming materials	43100	5400	2327.40
2	Transportation and handling charges			12.60
	Total	43100	5400	2340

The district wise physical and financial target is as follows:

Sl. No.	Name of District	Area in Ha	Financial (Rs. in lakh)		
			Subsidy for liming material	Transportation and handling charges	Total
1	Thiruvananthapuram	400	21.6	0.185	21.785
2	Kollam	400	21.6	0.185	21.785
3	Pathanamthitta	1750	94.5	0.235	94.735
4	Alappuzha	9650	521.1	2.685	523.785
5	Kottayam	5900	318.6	1.325	319.925
6	Idukki	350	18.9	0.135	19.035
7	Ernakulam	2150	116.1	0.685	116.785
8	Thrissur	8750	472.5	1.685	474.185
9	Palakkad	7780	420.12	2.625	422.745
10	Malappuram	2750	148.5	1.6	150.1
11	Kozhikode	760	41.04	0.335	41.375
12	Kannur	1900	102.6	0.585	103.185
13	Kasaragod	560	30.24	0.335	30.575
	Total	43100	2327.4	12.6	2340

The block wise target is attached as Annexure-I. Any changes in block wise target, if necessary, can be made by the Principal Agricultural Officer and intimated to this office.

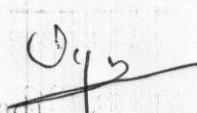
The total financial requirement of the programme of Rs. 2340-lakh can be met from the current years' budget provision under the head of account 2401-00-800-28 Plan.

Sd/-

Director of Agriculture

Copy to:

1. All Principal Agricultural Officers (Except Wayanad)
2. Assistant Directors of Agriculture of all districts (Except Wayanad)
3. TA to Director of Agriculture
4. All Additional Directors of Agriculture


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

5. DDA, IT Cell (for publishing in the website)
6. Planning section for allotment of funds
7. SW section
8. Stock file/ Spare

ANNEXURE-1

BLOCK WISE TARGET UNDER SOIL AMELIORANTS IN SELECTED DISTRICTS

Sl.No.	District	Name of Block	Area in Ha	Financial (Rs. in lakh)		Total
				Subsidy for liming material	Transportation and handling charges	
1	TVPNI	Atingal	40	2.16000	0.01850	2.17850
3		Pallichal	10	0.54000	0.00460	0.54460
4		Parassala	80	4.32000	0.03700	4.35700
5		Pulimath	180	9.72000	0.08325	9.80325
6		Varkala	70	3.78000	0.03240	3.81240
7		Vamanapuram	20	1.08000	0.00925	1.08925
8	KLNI	Oachira	75	4.05000	0.03250	4.08250
9		Chavara	25	1.35000	0.02000	1.37000
10		Eravipuram	25	1.35000	0.02000	1.37000
11		Kundara	40	2.16000	0.02000	2.18000
12		Sasbanicotta	150	8.10000	0.03250	8.13250
13		Vetikkavala	50	2.70000	0.02000	2.72000
14		Anchal	10	0.54000	0.02000	0.56000
15		Punalar	25	1.35000	0.02000	1.37000
16	PTA	Konni	100	5.40000	0.05875	5.45875

17	Thiruvalla	1400	75.60000	0.05875	75.65875
18	Pullad	200	10.80000	0.05875	10.85875
19	Pandalam	50	2.70000	0.05875	2.75875
20	ALP Alappuzha	250	13.50000	0.29800	13.79800
21	Ambalappuzha	3035	163.89000	0.29800	164.18800
22	Haripad	1200	64.80000	0.29800	65.09800
23	Charummoodu	135	7.29000	0.29800	7.58800
24	Kayamkulam	125	6.75000	0.29800	7.04800
25	Mavelikkara	330	17.82000	0.29800	18.11800
26	Chengannur	185	9.99000	0.29900	10.28900
27	Ramankary	2330	125.82000	0.29900	126.11900
28	Champakulam	2060	111.24000	0.29900	111.53900
29	KTM Kottayam	950	51.30000	0.21000	51.51000
30	Madappally	300	16.20000	0.06500	16.26500
31	Uzhavoor	100	5.40000	0.02500	5.42500
32	Kaduthuruthy	1250	67.50000	0.28000	67.78000
33	Elthumanoor	1800	97.20000	0.40000	97.60000
34	Varkom	1500	81.00000	0.34500	81.34500
35	IDK Thodupuzha	70	3.78000	0.02250	3.80250

36	Elamdesam	80	4.32000	0.02250	4.34250
37	Idukkī	40	2.16000	0.02250	2.18250
38	Kattappana	50	2.70000	0.02250	2.72250
39	Nedumkandom	50	2.70000	0.02250	2.72250
40	Adimaly	60	3.24000	0.02250	3.26250
41	EKL M Aluva	150	8.10000	0.04800	8.14800
42	Nedumbassery	100	5.40000	0.03200	5.43200
43	Perumbavoor	255	13.77000	0.08170	13.85170
44	Ankamali	164	8.85600	0.05250	8.90850
45	Keezhmad	148	7.99200	0.04700	8.03900
46	Poothikka	373.33	20.15982	0.11500	20.27482
47	Moovatupuzha	180	9.72000	0.05760	9.77760
48	Kothamangalam	310	16.74000	0.09920	16.83920
49	Piravam	204	11.01600	0.06500	11.08100
50	Mulanthuruthy	265.67	14.34618	0.08700	14.43318
51	TSR Anthikkad	1476	79.70400	0.12035	79.82435
52	Chalakudy	92.25	4.98150	0.12035	5.10185
53	Chavakkad	461.4625	24.91898	0.12035	25.03933
54	Cherpu	1014.75	54.79650	0.12035	54.91685

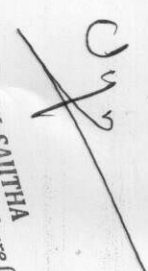
55	Chowannur	738	39.85200	0.12035	39.97235
56	Irinjalakkuda	876.375	47.32425	0.12035	47.44460
57	Kodakara	322.875	17.43525	0.12035	17.55560
58	Mala	336.7125	18.18248	0.12035	18.30283
59	Mullassery	802.575	43.33905	0.12035	43.45940
60	Ollukkara	92.25	4.98150	0.12035	5.10185
61	Pazhayannur	553.5	29.88900	0.12030	30.00930
62	Puzhakkal	1153	62.26200	0.12040	62.38240
63	Velangallur	369	19.92600	0.1204	20.04640
64	Wadakkanchery	461.25	24.90750	0.12040	25.02790
65	PKD Alathur	1200	64.80000	0.40500	65.20500
66	Kuzhalnannam	950	51.30000	0.32300	51.62300
67	Nemmara	1000	54.00000	0.33000	54.33000
68	Kollenkode	1400	75.60000	0.47600	76.07600
69	Palakkad	350	18.90000	0.10000	19.00000
70	Malampuzha	350	18.90000	0.10000	19.00000
71	Mannarkkad	250	13.50000	0.08500	13.58500
72	Streekrishnapuram	300	16.20000	0.10000	16.30000
73	Shornur	900	48.60000	0.30000	48.90000

74	Pattambi	300	16.20000	0.10000	16.30000
75	Thrithala	780	42.12000	0.30600	42.42600
76	MPM Aluva	687	37.09800	0.20000	37.29800
77	Thavanur	400	21.60000	0.20000	21.80000
78	Valanchery	350	18.90000	0.20000	19.10000
79	Tirur	300	16.20000	0.20000	16.40000
80	Parappanangadi	300	16.20000	0.20000	16.40000
81	Angadipuram	90	4.86000	0.20000	5.06000
82	Perinthalmanna	523	28.24200	0.20000	28.44200
83	Manjeri	100	5.40000	0.20000	5.60000
84	KKD Kozhikode	40	2.16000	0.04185	2.20185
85	Kakkur	100	5.40000	0.04185	5.44185
86	Koduvally	30	1.62000	0.04185	1.66185
87	Mukkam	50	2.70000	0.04185	2.74185
88	Thodannur	100	5.40000	0.04185	5.44185
89	Koyilandy	140	7.56000	0.04190	7.60190
90	Thikkodi	50	2.70000	0.04190	2.74190
91	Perambra	250	13.50000	0.04195	13.54195
92	KNR Payyannur	2375	20.25000	0.11000	20.36000

93	Taliparamba	450	24.30000	0.11000	24.41000
94	Kalliassery	384	20.73600	0.11000	20.84600
95	Edakkad	66	3.56400	0.02500	3.58900
96	Thalassery	50	2.70000	0.02500	2.72500
97	Kuthuparamba	50	2.70000	0.02500	2.72500
98	Iritty	120	6.48000	0.05000	6.53000
99	Peravoor	40	2.16000	0.02000	2.18000
100	Irikkoor	365	19.71000	0.11000	19.82000
101	KSGID Nileshtar	125	6.75000	0.06700	6.81700
102	Kanhangad	110	5.94000	0.06700	6.00700
103	Karadka	100	5.40000	0.06700	5.46700
104	Kasaragod	125	6.75000	0.06700	6.81700
105	Manjeshwar	100	5.40000	0.06700	5.46700

Sd/-

DIRECTOR OF AGRICULTURE


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