

TF (2) 30404/17

Directorate of Agriculture  
Development & Farmers Welfare  
Dated: 24/07/2017

**CIRCULAR**

Sub: Annual Plan 2017-18-Scheme on Soil Health Management and Productivity improvement - Demonstration on Micro Nutrients and Panchayath Adoption Programme-working instructions-issued.

Ref: 1.GO(RT) No 634/17/AD Thiruvananthapuram dated 23.06.2017  
2.Letter No. TP (2) 16107/17 dated 04/05/2017 of Director of Agriculture, Thiruvananthapuram.

As per reference 1st cited above, administrative sanction has been issued for the implementation of the scheme "**Demonstration on Micro Nutrients and Panchayath Adoption Programme including Soil Health Cards in Adopted Panchayats excluding manpower component**" with components for laying out demonstration plots, expenses for transportation of soil samples, awareness, seminars etc. The scheme is implemented during 2017-18 at a cost of Rs.25 lakhs from a total budget outlay of **Rs.2700 Lakhs** set apart for "Soil Health Management and Productivity Improvement" under the H/A 2401-00-800-28 Plan.

**Objectives:-**

- Creating awareness among the farmers regarding the importance of micro nutrient application.
- To maximize the returns from investment on fertilizers and to avoid wasteful expenditure.
- To make the demonstration plots a live tool for transfer of technology among farmers.

**Programmes:-**

**Selection of farmers:**

Three Agricultural potential Panchayaths in each district should be selected with at least 4 dominant crops such as Paddy, Banana, Vegetables and Tapioca to conduct multi location trials. Innovative farmers cultivating these crops will be selected from each ward of the Panchayaths by the Agricultural Officers of the concerned Krishi Bhavans. Decision of the crop, venue and details of demonstration will be done by the Agricultural Officers in consultation with the Assistant Soil Chemist, District Soil Testing Laboratory.

While selecting farmers for conducting demonstration trials, the best farmers' model farms and progressive plots should be avoided. Preference should be given to those plots which are having micronutrient deficiency.

### Conducting demonstration trial:

The crops for which demonstrations trials proposed include paddy, banana, tapioca and vegetables. The area of demonstration trial is 30 cents. The demonstrations will be conducted as ABC trials including three treatments i.e. Soil test based recommendations, Package of Practices Recommendations and Farmer's practices in 10 cents each giving safe distance between each plots. As the three treatments are done in the same plot a safe distance between the treatments are to be given i.e. 1m for Paddy, two rows for Banana, four rows for Tapioca and four rows for Vegetables. The same crops without any treatment will be grown in the above spaces. Name Boards with details of demonstration is to be exhibited in the plots.

*The district wise crop wise physical and financial targets of demonstrations is given in Annexure 1.*

### Analysis of soil sample

Soil samples will be collected from the selected plots and analyzed in the concerned District Soil Testing Laboratories. The expenses connected with the transportation of soil sample can be met from the scheme provision. The fertilizer and organic manure application will be done in the demonstration trials based on the soil test data.

The assistance for conducting demonstration trials for the selected crops is as follows:

Sl. No.	Crop	Area of demonstration	Rate (in ₹)
1	Paddy	30 cents	6000
2	Tapioca		4800
3	Banana		12000
4	Vegetable		12000

### Steps to be followed

- Collection of soil samples and analysis after the harvest of each crop should be done and comparison of analytical result with the pre sowing results for confirming the soil fertility variation.
- Recording of crop yield after the harvest of the crops in each plot and computation of total nutrient uptake for each plot should be carried out. *The observations to be taken and recorded in each stage of the crops are given as Annexure 2.*
- The collected data should be recorded in the field register maintained by the farmer and in the Krishibhavans.

During the year 2017-18 this programme will be continued in three panchayaths in each district.

**Documentation of the scheme:**

Documentation of the scheme should be carried out before the commencement of the programme and after the completion of the programme.

The documentation of micronutrient studies should be done.

**Monitoring:-**

At the state level the scheme will be monitored by Additional Director of Agriculture (Plg.). Chief Soil Chemist, will assist Additional Director of Agriculture (Plg.) in the monitoring and review of the programme. The Chief Soil Chemist will closely monitor the programme on monthly basis and report the progress to the Director of Agriculture.

At District level the scheme will be monitored by the Deputy Director of Agriculture (WM), Assistant Soil Chemists of the Districts and Assistant Directors of Agriculture. All supervisory officers should visit the demonstration plots and record the same in the Registers maintained at Krishi Bhavans, and the registers maintained by the farmers. Monthly progress reports on the implementation of the scheme will be submitted to the Director of Agriculture before the 5<sup>th</sup> of every month.

The observation of the demonstrations should be presented in the workshops / MTA meeting.

**Financial Programme:-**

To provide assistance for the conduct of Demonstration trials, and expenses for transportation of soil samples, awareness, seminars etc. an amount of ₹ 25.00 lakhs is set apart under this programme as given below. *The district wise, component wise allotment of funds is given in Annexure 3.* The funds will be allotted to Chief Soil Chemist

Sl. No.	Item	No of demonstrations	Rate (in ₹)	Amount (Rs. Lakhs)
1	Laying out demonstration plots	266 nos	6000-12000/-(as given in the table above)	24.72
2	Expenses for transportation of soil samples, awareness, seminars etc		LS	0.28
	<b>Total</b>			25.00

The expenditure will be met from the provisions under the H/a scheme 2401-00-800-28  
**Plan "Soil Health Management and Productivity Improvement".**

**Sd/-  
Director of Agriculture**

Copy to:

1. All Principal Agricultural officers.
2. Chief Soil Chemist, CSPHC Thiruvananthapuram
3. Deputy Director of Agriculture (IT) for publishing in website
4. All Additional Directors of Agriculture
5. Planning section for allotment of funds
6. T.A. to Director of Agriculture.
7. Stock File.

  
LEENA EDWIN  
Assistant Director of Agriculture  
Directorate of Agriculture  
Thiruvananthapuram

Annexure-1											
PHYSICAL AND FINANCIAL TARGET OF DEMONSTRATION 2017-18											
No	District	PADDY		TAPIOCA		BANANA		VEGETABLE		TOTAL	
		Rs.6000/-	Rs.4800/-	Rs.12000/-	Rs.12000	Rs.12000	Rs. in lakhs)				
No	Amount	No	Amount	No	Amount	No	Amount	No	Amount	No	Amount
1	Thiruvananthapuram	4	24000	1	4800	7	84000	3	36000	15	1.488
2	Kollam	6	36000	2	9600	7	84000	3	36000	18	1.656
3	Pathanamthitta	4	24000	1	4800	7	84000	3	36000	15	1.488
4	Alappuzha	10	60000	1	4800	7	84000	4	48000	22	1.968
5	Kottayam	8	48000	1	4800	7	84000	3	36000	19	1.728
6	Idukki	6	36000	2	9600	7	84000	4	48000	19	1.776
7	Ernakulam	6	36000	1	4800	7	84000	3	36000	17	1.608
8	Thrissur	10	60000	2	9600	8	96000	4	48000	24	2.136
9	Palakkad	10	60000	1	4800	7	84000	4	48000	22	1.968
10	Malappuram	6	36000	2	9600	7	84000	4	48000	19	1.776
11	kozhiode	6	36000	2	9600	7	84000	4	48000	19	1.776
12	Wayanad	4	24000	2	9600	8	96000	4	48000	18	1.776
13	Kannur	10	60000	1	4800	7	84000	4	48000	22	1.968
14	Kasargode	6	36000	1	4800	7	84000	3	36000	17	1.608
	Grand Total	96	576000	20	96000	100	1200000	50	600000	266	24.72

## Annexure – 2

### Data to be taken and recorded under demonstration

- Name & Address of the Farmer
- Name of crop
- Variety used
- Area under each treatment
- No. of plants in each treatment (Except for paddy)
- Soil test results prior to the demonstration
- Refined recommendations based on soil test results
- Biometric observation taken during critical stages of the crop
  - a. No. of tillers/plant for paddy
  - b. Girth of the plant (Except for paddy)
  - c. Height of the plants
  - d. No. of Panicles (Paddy)
- Incidences of Pest/Diseases
- Nutritional deficiency symptoms noticed if any
- Corrective measures taken
- Climate during critical stages (Rainfall/temperature)
- Average yield in each treatment (including straw for paddy)
- Economics of cultivation in each treatment
- Details of soil analysis after demonstration
- Overall responses of Farmers on the treatment

Annexure 3

		Allotment of funds to districts		
		Demo.Plots	Expense for transportation of soil samples analysed	Total
SI No	District	(in lakhs)	(lakhs)	
1	Thiruvananthapuram	1.488	0.02	1.508
2	Kollam	1.656	0.02	1.676
3	Pathanamthitta	1.488	0.02	1.508
4	Alappuzha	1.968	0.02	1.988
5	Kottayam	1.728	0.02	1.748
6	Idukki	1.776	0.02	1.796
7	Ernakulam	1.608	0.02	1.628
8	Thrissur	2.136	0.02	2.156
9	Palakkad	1.968	0.02	1.988
10	Malappuram	1.776	0.02	1.796
11	kozhikode	1.776	0.02	1.796
12	Wayanad	1.968	0.02	1.988
13	Kannur	1.608	0.02	1.628
14	Kasarode	24.72	0.28	25