



## ABSTRACT

Mahatma Gandhi National Rural Employment Guarantee Scheme - Construction of 12,139 Vermi Compost sheds at an estimated cost of Rs.121.39 Crore for production of compost and promotion of agriculture, etc. during the year 2017-18 under MGNREGS - Permission accorded - Guidelines approved - Orders issued.

## RURAL DEVELOPMENT AND PANCHAYAT RAJ (CGS.1) DEPARTMENT

G.O.(Ms) No.123

24904/17  
100132 - ✓

Dated: 31.10.2017

Read:

From the Director of Rural Development and Panchayat Raj Letters No.24904/2017/MGNREGS-I-2, dated 25.04.2017 and 25.07.2017.

## ORDER:

In the letters read above, the Director of Rural Development and Panchayat Raj has stated that during the Empowered Committee meeting of the Government of India for approval of Labour Budget, it has been decided to take up 12,139 Vermi-Compost units for the year 2017-18 under MGNREGS. The revised Schedule-I of the MGNREGA Act Para 4(III)(i) permits the works which are "promoting agricultural productivity by creating durable infrastructure required for bio-fertilizers and post harvest facilities including pucca storage facilities for agricultural produce". Therefore Vermi Composting units will be executed in all 12,139 Village Panchayats in 2017-18 based on the pilot study conducted in 385 Village Panchayats during 2016-17.

2. The Director of Rural Development and Panchayat Raj has also stated that Vermi-composting is a method of producing bio-fertilizers. The bio-compost produced from Solid Waste Management unit will form as base material for Vermi-composting. Nurseries are maintained for plantation activities under MGNREGS like Massive Tree Plantation, Avenue Plantation and Nurseries for which application of manure and bio-fertilizers have become basic need for healthy growth of plants. It has therefore been decided to construct Vermi-compost sheds on the Village Panchayat land and produce compost through women Self Help Groups and Solid Waste Management workers i.e. Thoomai Kavalars, who are regularly working in MGNREGS.

3. The Director of Rural Development and Panchayat Raj has further stated that the instructions regarding selection of village panchayats & site, construction of shed, methodology for production of Vermi-cast and Vermi-compost along with the details of components involved in Vermi-composting, persons to be engaged for the work, the marketing methodology for the excess compost produced and the monitoring

mechanism are given in the guidelines. The tentative target has already been communicated to the districts and to ensure fund release the districts-wise targets for these works have also been entered online in Management Information System (MIS).

4. The Director of Rural Development and Panchayat Raj has worked out the funding pattern for construction of Vermi-compost shed on Village Panchayat lands for the year 2017 -18 as follows:-

(Rupees in Crore)

Description	Material Component (88.72%)			Labour Component (11.28%) (Central Share 100%)	Grand Total
	Central Share 75%	State Share 25%	Total		
Cost for 12139 Vermi Compost sheds (12139 X Rs.1,00,000)	80.78	26.92	107.70	13.69	121.39

5. The Director of Rural Development and Panchayat Raj has therefore requested the Government to accord permission for the construction of 12,139 Vermi Compost sheds at an estimate cost of Rs.121.39 Crore for the year 2017-18 under MGNREGS and approve the guidelines therefor.

6. The Government after careful examination of the proposal of the DRD&PR, accord permission for the construction of 12,139 Vermi Compost sheds at an estimated cost of Rs.121.39 Crore for production of compost and promotion of agriculture, etc. during the year 2017-18 under MGNREGS and approve the Guidelines therefor annexed to this order.

7. This order is issued with the concurrence of Finance Department vide its U.O.No.42343/RD/2017, dated 09.09.2017.

(BY ORDER OF THE GOVERNOR)

**HANS RAJ VERMA,  
ADDITIONAL CHIEF SECRETARY TO  
GOVERNMENT**

To

The Director of Rural Development and Panchayat Raj,  
Chennai – 15.

All District Collectors (Except Chennai)  
(Thro' the Director of Rural Development and Panchayat Raj,  
Chennai – 15)

All Project Directors, District Rural Development Agencies  
(Thro' the Director of Rural Development and Panchayat Raj,  
Chennai – 15)

The Accountant General, Chennai – 18.

Copy to:

The Pay and Accounts Office (South), Chennai – 35.

The Finance (RD) Department, Chennai – 9

Chief Minister's Office, Secretariat, Chennai-9.

The Senior Personal to Hon'ble Minister (Municipal Administration  
& Rural Development, Implementation of Special Programme),  
Chennai – 9.

The Principal Private Secretary to Additional Chief Secretary to  
Government, Rural Development and Panchayat Raj  
Department, Chennai – 9.

The Rural Development and Panchayat Raj (OP.2) Department,  
Chennai – 9

The National Informatics Centre, Chennai – 9.

Spare copy/Stock file

**//FORWARDED BY ORDER//**

*K. Jeyalakshmi*

**(K. JEYALAKSHMI)**

**UNDER SECRETARY TO GOVERNMENT**

*31/10/17*

**ANNEXURE****GUIDELINES FOR CONSTRUCTION OF VERMI-COMPOST SHEDS AND ITS OPERATION****[G.O.(MS).NO.123, RURAL DEVELOPMENT AND PANCHAYAT RAJ (CGS-1) DEPARTMENT, DATED : 31.10.2017]****1. Introduction**

The revised Schedule I and II of the MGNREGA Act Para 4(III)(i) permits works for promoting agricultural productivity as noted below:

- i) Works for promoting agricultural productivity by creating durable infrastructure required for bio-fertilizers and post harvest facilities including pucca storage facilities for agricultural produce;

During the Empowered Committee meeting to finalise the Labour Budget for 2017-18, it has been informed that Vermi compost unit/NADEP pits can be taken up under Mahatma Gandhi National Rural Employment Guarantee Scheme.

Vermi-composting is a method for producing bio-fertilizers. Composting of bio-degradable wastes will be taken up in 12,139 Village Panchayats other than the Village Panchayats in which construction of Vermi-Compost units was taken up during the year 2016-17. This bio-compost produced from Solid Waste Management unit will function as source material for Vermi-composting. Further, lot of plantation activities have been taken up under MGNREGS for which, application of manures / bio-fertilizers has become a basic need for the healthy growth of plants.

The guidelines for the construction and operation of Vermi-compost units are provided below:

**2. Selection of Village Panchayat:**

- The remaining 12,139 Village Panchayats will be selected other than the Village Panchayats in which construction of 385 Vermi Compost units were taken up during the year 2016-17. (Annexure – II).

**3. Selection of Site:**

- Vermi-compost units can be established in any place with shade, high humidity and cool environment. A Place adjacent to the Solid Waste Management compost pits is preferred for setting up such units. A thatched roof should be provided to protect the process from direct sunlight and rain.
- Water availability is essential for Vermi-composting and hence water supply should be ensured for the shed every day. If not already available, extension of pipeline should be provided from the available source. The vermi-beds are required to retain a moisture content of 40% to 60%.

- Care should be taken that the site should not be located in an area which gets submerged / inundated in the rainy season.

#### **4. Construction of Shed:**

- A shed comprising of around 270 sqft (12 ft x 22 ft) is considered adequate as Vermi-compost shed.
- Tanks may be constructed with a height of 2½ feet and a breadth of 3 feet. The length may be fixed to any level depending upon the size of the room and the volume of material generated.
- The bottom of the tank should have a slope to drain the excess water from Vermi-compost unit.
- Thatched roof is preferable since the temperature of 20<sup>o</sup> – 30<sup>o</sup> Celsius should be maintained.
- Provision of Green net for shade and protection from birds all-round the shed should also be provided.
- The type Design of Vermi-compost shed is enclosed.

#### **5. Methodology for preparation of Vermi-compost:**

- The segregated bio-degradable wastes should be shredded by using Garbage shredding machine (or) pre-digested with cowdung for 20 to 30 days before incorporating into the vermibed for composting.
- Hence, it is better to use the pre-digested compost available in the Solid Waste Management compost pits for Vermi-composting to produce high quality manure rich in humus and nutrients
- Vermi compost pits may be made as per the requirement of the Type Design:  
The following are the steps to be undertaken:
  - Add gravel or sand as the base to a depth of 15 cm.
  - Spread the pre-digested compost from the compost pits to a height of 45cm and over it spread a layer of cowdung to a height of about 5 cms.
  - Add earthworms @ 500gms for 1m length, 1m breadth and 0.5m height i.e.0.5 cum
  - Watering the vermi-bed - Daily watering is not required for vermi-bed. However, care should be taken that 60% moisture be maintained throughout the period. If necessity arises, water should be sprinkled over the bed rather than pouring the water. Watering should be stopped before the harvest of Vermi-compost.
  - The process takes about 45-60 days

- Earthworms can be collected after Vermi-compost production during the Sieving process. The partially composted material will be again put into Vermi-compost bed.
- Vermi-compost can be stored in a cool shaded place to maintain minimum 40% moisture and allow the beneficial micro-organisms to grow. Direct Sunlight should not fall over the composted material. It is advocated that the harvested composted material is openly stored rather than packed in sacks. Packing can be done at the time of selling.

#### **6. Manpower requirement:**

The Self Help Groups women working under Mahatma Gandhi National Rural Employment Guarantee Scheme may also be engaged for maintenance and operation of Vermi composting units. Thooimai Kavalars should be utilised for the work of Vermi-composting and the Work site supervisor in charge of Solid Waste Management activities should supervise it. The Thooimai Kavalars shall undertake the work of preparation of vermi-bed, watering, sieving and packing, etc. They should be properly trained by utilising the money available under Information, Education and Communication component (6% of admin) of MGNREGS.

The guidelines provided for the functioning of Thooimai Kavalars has to be read along with these guidelines wherever required.

#### **7. Role of Village Panchayat:**

The ownership of the Vermi-compost unit will be vested with the Village Panchayat. The Village Panchayat should identify a suitable site nearer to the site where Solid Waste Management activity is taking place. The manure/compost produced through the Vermi-compost unit may be utilised for plantation activities of their Village Panchayat at free of cost, and also for Block nurseries established under MGNREGS during 2015-16 and 2016-17.

#### **8. Marketing:**

The District Supply & Marketing Society (DSMS) functioning under Tamil Nadu State Rural Livelihood Mission(TNSRLM) should procure the excess compost over and above the need of the Village Panchayat for plantation activities at the rate not exceeding Rs.8/- per Kg and the income may be deposited in the Village Panchayat account. The DSMS may sell the Vermi-compost to farmers and general public not exceeding 1 Rupee more than the procurement cost. The excess amount is the incentive to the society (DSMS). The Project Director (Mahalir Thittam), Tamil Nadu State Rural Livelihood Mission and Project Director, District Rural Development Agency shall monitor the production and marketing of the excess Vermi-compost.

#### **9. Execution of work**

- i. The Village Panchayat shall be the implementing agency.

- ii. Nominal Muster Roll will be issued by the President of the Village Panchayat.
- iii. Measurement of works for the purpose of weekly payment of wages to workers shall be done by the Overseer of Rural Development and Panchayat Raj Department.
- iv. Processing of bills and issue of Fund Release Order shall be done by the Block Development Officer (Village Panchayat) through e-FMS.
- v. Mandays generated will be 55 personday per unit. Total No.6,67,645 persondays will be generated.
- vi. The citizen information board shall be erected at every site before execution of work.
- vii. Geo-tagging of works shall be taken immediately after completion of work.

#### **10. Monitoring:**

The Project Director, District Rural Development Agency and Project Officer, Tamil Nadu State Rural Livelihood Mission shall be vested with the responsibility of monitoring the works personally. The Project Director, District Rural Development Agency should convene meeting of stakeholders once in 15 days for proper implementation and for co-ordination with DSMS/Project Officer for the effective implementation of the scheme.

#### **11. Online reporting:**

All works taken up should be entered in MIS ([www.nrega.nic.in](http://www.nrega.nic.in)) and properly monitored as is being done for all other Mahatma Gandhi National Rural Employment Guarantee Scheme Works.

Apart from this, an online reporting regarding the compost produced and distributed / marketed shall be done through tnrd website ([www.tnrd.gov.in](http://www.tnrd.gov.in)).

#### **12. Audit:**

All the expenditure incurred towards Vermi-compost works undertaken under Mahatma Gandhi National Rural Employment Guarantee Scheme shall be brought under Social Audit and this shall be done through Social Audit Society of Tamil Nadu.

#### **13. Documentation:**

Proper documentation should be done pertaining to the Vermi-compost works undertaken under Mahatma Gandhi National Rural Employment Guarantee Scheme. Photographs of the site before undertaking the work, during execution and after execution should be taken and properly documented under the Assets Register shall be maintained for Mahatma Gandhi National Rural Employment Guarantee Scheme in every Village Panchayat.

Citizen Information Board shall be kept at the site depicting all information about the project. Geo tagging of the asset shall be done as per Guidelines.

The Director, Rural Development and Panchayat Raj is empowered to modify these guidelines, whenever necessary, in consultation with the Additional Chief Secretary to Government, Rural Development and Panchayat Raj Department.

**HANS RAJ VERMA,  
ADDITIONAL CHIEF SECRETARY TO  
GOVERNMENT**

**// TRUE COPY //**

*M. C. Verma*  
31/10/17  
**SECTION OFFICER**

*G.M.D.P.*  
21/10/17