

#### <u>ABSTRACT</u>

Announcement – Announcement made by the Hon'ble Minister (MA, RD and Imp. of Spl. Prog) on the floor of Legislative Assembly on 08.07.2019 - Establishment of Micro Composting Centres in Peri-Urban / Bigger Village Panchayats and guidelines approved – Orders - Issued.

## Rural Development and Panchayat Raj (CGS.1) Department

G.O.(Ms) No.15

Dated: 07.01.2020 விகாரி, மார்கழி 22 திருவள்ளுவர் ஆண்டு 2050 Read:

- 1. Announcement made by the Hon'ble Minister on the floor of the Legislative Assembly on 08.07.2019.
- 2. From the Director of Rural Development and Panchayat Raj, Letter. Roc. No.37153/2019/SBM(G)-3, Dated: 20.09.2019.

#### ORDER:

The Hon'ble Minister for Municipal Administration, Rural Development and Implementation of Special Programme has made the following announcement on the floor of the Legislative Assembly on 08.07.2019.

"திடக்கழிவு மேலாண்மைத் திட்டம் தமிழ்நாட்டிலுள்ள 12,524 கிராம ஊராட்சிகளிலும் செயல்படுத்தப்பட்டு வருகிறது. நகா்ப்புறங்களுக்கு அருகில் உள்ள கிராம ஊராட்சிகள் மற்றும் பெரிய கிராம ஊராட்சிகளில் திடக்கழிவுகளைத் திறம்பட கையாள்வதற்கும், தற்போதுள்ள வசதிகளை மேம்படுத்தவும், மாண்புமிகு இதயதெய்வம் புரட்சித் தலைவி அம்மா அவா்களின் ஆசியுடன், மாண்புமிகு முதலமைச்சா் அவா்களின் ஆணைப்படி, முதற்கட்டமாக நகா்ப்புறங்களுக்கு அருகில் உள்ள 300 கிராம ஊராட்சிகள் மற்றும் பெரிய கிராம ஊராட்சிகளில் உள்ள திடக்கழிவுகளை மேலாண்மை செய்யும் பொருட்டு சிறிய அளவிலான உரம் தயாரிக்கும் மையங்கள் 90 கோடி ரூபாய் மதிப்பீட்டில் அமைக்கப்படும்".

2. In the letter second read above, the Director of Rural Development and Panchayat Raj has stated that Solid Waste Management (SWM) Systems have been established in all the 12,524 Village Panchayats with basic infrastructural facilities like segregation sheds, compost pits, street garbage bins, tricycles / pushcarts, e-carts, implements, etc. 'Thooimai Kaavalars' have been engaged for door to door collection, segregation of waste into biodegradable and non-biodegradable and its safe disposal. However, in Peri-Urban / Bigger Village Panchayats adjacent to Corporations and Municipalities, SWM is a major problem due to its density, change in consumption

pattern and increased per capita waste generation. These Village Panchayats find it very difficult to identify huge land for establishment of a centralized and integrated solid waste management facility within their limit. The huge quantum of waste which could not be managed effectively at local level resulted in environmental pollution due to waste dumps posing health hazard. Therefore, in order to improve the solid waste management facilities in these areas, 300 Micro-Composting Centres (MCC), may be established in Peri-Urban/ Bigger Village Panchayats similar to those already functioning in Urban Local Bodies.

# 1) Criteria for selection of Village Panchayat for establishment of Micro-Composting Centres:

Each MCC can handle a minimum of 0.5 ton to a maximum of 3 ton wet waste per day. Therefore, the Village Panchayat which generate on an average a minimum 0.5 ton of Bio-degradable waste per day and which have one or more of the following criteria can be adopted for selection of Village Panchayats for establishment of MCC.

- i. Village Panchayat with more than 10,000 population
- ii. Village Panchayats in Peri-Urban areas (adjacent to Corporation / Municipality / Town Panchayats)
- iii. Village Panchayats of Tourism and Pilgrimage Importance.
- iv. Village Panchayats with major Bus stands, Railway stations and Markets handling floating population.
- v. Village Panchayats with larger Industrial / Commercial establishment / educational institutions.

Village Panchayat in which MCC is proposed to be set up should earmark the required Poramboke Land vested with the Village Panchayat concerned for establishment of MCC, which should be away from Water bodies.

## 2) Source of funds:

During the year 2019-20, the Government of India have released Rs.137.80 crore as World Bank Performance Based Incentive Fund to Tamil Nadu. Based on the request made, the Government of India, Department of Drinking Water and Sanitation, Ministry of Jal Shakti vide Letter No.S.18020/79/2017-SBM-III-Part (8), Dated 12.09.2019 has given permission to utilize the World Bank Performance Incentive Fund for setting up of the MCC in Peri-urban / bigger Village Panchayat in accordance with the SBM(G) guidelines.

As per SBM (G) guidelines, the total assistance under SBM(G) for SLWM projects shall be worked out on the basis of total number of households in each GP, subject to a maximum of Rs.7 lakh for a GP having up to 150 households, Rs.12 lakh up to 300 households, Rs.15 lakh up to 500 households and Rs.20 lakh for GPs having more than 500 households.

Hence as permitted by Government of India as mentioned above, the actual cost of establishment of 300 MCC may be met out from World Bank Performance Based Incentive Fund received for the year 2019-20.

Since, the maximum permissible limit as per SBM(G) guidelines is Rs.20 lakh per Village Panchayat and the establishment cost of each MCC would vary according to the capacity, if any of the proposed MCC require additional amount exceeding Rs.20 lakh (due to higher capacity based on quantum of wet waste generated per pay), the excess amount over and above Rs.20 lakh can be met out from other source of funds like SFC/CFC and in convergence with such Schemes which permit SWM activities.

## 3) Implementing Agency and execution of works:

- Since MCC is established in select Village Panchayats in the District, it shall be established under the direct supervision of Project Director, DRDA and Executive Engineer (RD).
- PD, DRDA, shall be the tender inviting authority and District Collector shall be the tender accepting Authority. After finalization of tender, work / supply order shall be issued by the District Collector.
- The works shall be executed by adopting the Tamil Nadu Transparency in Tenders Act 1998 and Rules 2000 and also as per the provisions of the Tamil Nadu Panchayats (Preparation of Plans and Estimate of works and mode and conditions of contracts) Rules, 2007 vide G.O.(Ms) No.203 RD&PR (PR.1) Department, dated: 20.12.2007 and amendments issued in this regard shall be scrupulously followed.
- 3. The Director of Rural Development and Panchayat Raj has therefore requested the Government to issue orders for the utilisation of the SBM (G) World Bank Performance Based Incentive Fund received during the year 2019-20 for the establishment of 300 Micro-Composting Centres in Peri-Urban/ Bigger Village Panchayats as per SBM(G) guidelines and release of funds to the District Collectors based on the number of Micro Composting Centres established in the Districts. The Director of Rural Development and Panchayat Raj may be permitted to allocate the number of Micro Composting Centres among the districts on need basis.
- 4. The Government, after careful examination have decided to accept the proposal of the Director of Rural Development and Panchayat Raj and accord sanction for the utilization of the SBM (G) World Bank Performance Based Incentive Fund received during the year 2019-20 for the establishment of 300 Micro Composting Centres in Peri-urban / Bigger Village Panchayats as per SBM (G) guidelines and permit the Director of Rural Development and Panchayat Raj to allocate the number of Micro Composting Centres on need basis and approve the guidelines, subject to strict adherence of SBM Guidelines.

5. This order is issued with the concurrence of Finance Department vide its U.O.No.61635/RD/2019, dated:03.12.2019.

## (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)

(Through Director of Rural Development and Panchayat Raj, Chennai – 15)

All Project Directors, District Rural Development Agencies,

(Through Director of Rural Development and Panchayat Raj, Chennai – 15)

The Accountant General, Chennai – 18/35/6.

Copy to:

The Ministry of Jal Shakti, Department of Drinking Water and Sanitation,

Government of India, New Delhi – 110 003.

The Finance(RD) Department, 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.

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//FORWARDED BY ORDER//

SECTION OFFICER

#### **ANNEXURE**

## (G.O.(Ms).No.15, Rural Development and Panchayat Raj (CGS-1) Department, dated: 07.01.2020)

## Guidelines for establishment of Micro-Composting Centres (MCC) in Rural Areas

#### 1. Introduction:

Solid Waste Management (SWM) System has been established in all the 12,524 Village Panchayats with basic infrastructural facilities like segregation sheds, compost pits, street garbage bins, tricycles / pushcarts, e-carts, implements, etc. 'Thooimai Kaavalars' have been engaged for door to door collection, segregation of waste into biodegradable and non-biodegradable and its safe disposal.

However, in Peri-Urban / Bigger Village Panchayats adjacent to Corporations and Municipalities, SWM is a major problem due to its density, change in consumption pattern and increased per capita waste generation. These Village Panchayats find it very difficult to identify huge land for establishment of a centralized and integrated solid waste management facility within their limit. The huge quantum of waste which could not be managed effectively at local level resulted in environmental pollution due to waste dumps posing health hazard.

Therefore, in order to improve the solid waste management facilities in these areas, it is proposed to establish 300 Micro-Composting Centres (MCC) in Peri-Urban/Bigger Village Panchayats similar to those already functioning in urban local bodies.

## 2. Criteria for selection of Village Panchayat for establishment of Micro-Composting Centres:

Each MCC shall handle a minimum of 0.5 ton to a maximum of 3 ton wet waste per day. Therefore, the Village Panchayat which generate on an average a minimum 0.5 ton of Bio-degradable waste per day and which have one or more of the following criteria shall be adopted for selection of Village Panchayats for establishment of MCC.

- i. Village Panchayat with more than 10,000 population
- ii. Village Panchayats in Peri-Urban areas (adjacent to Corporation / Municipality / Town Panchayats)
- iii. Village Panchayats of Tourism and Pilgrimage Importance.
- iv. Village Panchayats with major Bus stands, Railway stations and Markets handling floating population.
- v. Village Panchayats with larger Industrial / Commercial establishment / educational institutions.

Village Panchayat in which MCC is proposed to be set up should earmark the required Poramboke Land vested with the Village Panchayat concerned for establishment of MCC, which should be away from Water bodies.

The District Collectors should identify the Village Panchayats as per the above norms and requirements and send necessary proposals to Director of Rural Development and Panchayat Raj in such prescribed formats for sanction.

## 3. Infrastructure for Micro-Composting Centre:

- For the establishment of Micro-Composting Centre, the infrastructure facilities like Compost Tubs, Waste Receiving Platforms, Stabilization/storage area, shall be constructed.
- Further implements like Shredding machine, Conveyor Belts, Weighing Machine, Sieving machine, Trolleys, etc., shall be provided.
- Battery Operated E-carts already provided shall be exclusively used for the MCC to transport the Bio-degradable waste collected from the households and commercial establishments by the Thooimai Kaavalars.
- Technical type design will be communicated by the Technical Unit of Directorate of Rural Development and Panchayat Raj, Chennai.

## 4. Operational Methodology:

- Collection area shall be Mapped for the Thooimai Kaavalars based on the number of Households in the habitation and distance with respect to the MCC.
- Segregated Bio-degradable waste shall be brought either from segregation shed or directly from the households/establishments taking into account quantum of waste and distance.
- As per the Solid Waste Management Rules, 2016, Segregation of waste at source and managing the organic fraction of solid waste (Bio-Degradable waste) is the responsibility of Bulk Waste Generators, viz., Hotels, lodges, marriage halls, Community Centres Apartments, Market complexes, people living under the concept of 'gated community', Institutions like Schools and Colleges, etc., within their premises. If these Bulk Waste Generators are not having the waste management facility within their premises, the Battery Operated vehicles (E-carts) shall also be used for transporting only the Bio-Degradable waste from these commercial establishments on payment basis, as may be fixed by the Village Panchayats concerned.
- On receipt of Bio-Degradable waste at MCC it shall be weighed before it is sent for screening and shredding.
- Inoculums (Made from E.M Solution with Rice husk/ Rice bran/ Saw Dust) have to be added to the Shredded waste and transferred into compost tubs for composting.

 Sufficient stock of effective microbial solution prepared onsite shall be kept in the MCC to mix with the wet waste while shredding. The shredded waste shall be transferred into the compost tubs as per the sequence mentioned in the subsequent paragraphs for composting.

## 5. Operational Manpower support for running MCC:

- In addition to Thooimai Kaavalars already engaged in SWM activities, Village Panchayat concerned shall engage five Thooimai Kaavalars, exclusively, for every approved MCC.
- The additional Thooimai Kaavalars, henceforth called as MCC Thooimai Kaavalars should be engaged on outsourcing basis through VPRC / PLF as per the eligibility conditions and payment already ordered by the Government in G.O.(Ms).No.54, RD & PR (CGS-1) Dept., dated 10.4.2018.
- Village Panchayats concerned are permitted to make payment to these five MCC Thooimai Kaavalars from their respective Village Panchayat General Fund Account No.1 through the VPRC/PRC concerned.
- MCC Thooimai Kaavalars shall perform the following functions:
  - a) Transporting Bio-Degradable waste from Segregation shed/Bulk Generators through E-Cart.
  - b) Receipt and weighing of wet waste.
  - c) Screening and shredding of wet waste.
  - d) Preparation of Inoculums (made from E.M Solution with Rice husk/ Rice bran/ Saw Dust).
  - e) Adding of inoculum into wet waste before and after shredding.
  - f) Transferring of Inoculum mixed waste into Composting tubs/ Cubicle and periodic mixing of the waste.
  - g) Sieving and packing of the compost.
  - h) Maintaining hygiene and cleanliness of the MCC.
  - i) Selling/distribution of the compost.
  - j) Any other work assigned from time to time.
- NMR for the MCC Thooimai Kaavalars will be issued by DRD& PR separately.
- Village Panchayat shall monitor the day-to-day functioning of the MCC and Report the daily activities to the Zonal Deputy BDO/Technical officers of the Block.

## 6. Composting Process in Micro-Composting Centre (MCC):

- The Segregated Bio-degradable waste collected is transported to the Micro-Composting Centre.
- The bio- degradable waste is mixed with the Inoculums and shredded into pieces of size 10 mm to 20 mm size.
- The inoculum prepared with effective microbes (EM Solution) is also mixed with the shredded waste after it is transferred to the compost tubs.

 Composting takes place in the compost tubs with necessary aeration arrangements.

A minimum of 14 compost tubs (2 pairs of 7 Compost tubs) are required for the

composting process.

A sequence of placing the bio- degradable waste in compost -tubs to be followed

in a series as given below:

- a) 1<sup>st</sup> day- 1<sup>st</sup> tub, 2<sup>nd</sup> day- 2<sup>nd</sup> tub, 3<sup>rd</sup> day-3<sup>rd</sup> tub, and so on in the first row of 1-7 tubs. After 7<sup>th</sup> day, second filling of the bio- degradable waste in series, i.e., 8<sup>th</sup> day- 1<sup>st</sup> tub, 9<sup>th</sup> day- 2<sup>nd</sup> tub, 10<sup>th</sup> day-3rd tub etc., and so on.
- b) After 14<sup>th</sup> day, third filling of the bio- degradable waste in series -15<sup>th</sup> day-1<sup>st</sup> tub, 16<sup>th</sup> day- 2nd tub, 17<sup>th</sup> day-3<sup>rd</sup> tub, till 21<sup>st</sup> day in the 7<sup>th</sup> Tub is filled.
- c) Second stage of sequence (Day-22 to 42) by filling the bio- degradable waste in series from the second row of 7 tubs (8-14) 8<sup>th</sup> tub only after 21<sup>st</sup> day, i.e, 22<sup>nd</sup> day- 8<sup>th</sup> tub, 22<sup>nd</sup> day- 9<sup>th</sup> tub, 24<sup>th</sup> day-10<sup>th</sup> tub and so on, same as noted in above (a) & (b).

 Once in three days, waste deposited in the tub shall be turned to ensure for better aeration.

- After 42<sup>nd</sup> day i.e. completion of both sequence (Day-1 to 21 & Day-22 to 42), the matured compost shall be removed from the 1<sup>st</sup> tub on 43<sup>rd</sup> day and screened for uniform size (less than 5mm) and should be kept for further five days for stabilization. Similarly 2<sup>nd</sup> tub should be emptied on 44<sup>th</sup> day and so on.
- The remains of the screening /sieving shall be again placed over the tubs as bedding material so as to have better processing of waste received on subsequent days.
- After stabilization for 5 days as mentioned above, the mature compost shall be packed and disposed.

## 7. Administrative Sanction:

 The administrative sanction shall be accorded by the District Collector after ensuring that the Village Panchayats have been selected by following conditions laid down above, viz., Criteria for selection of Village Panchayats for establishment of MCC and the same may be forwarded to Director of Rural Development and Panchayat Raj.

## 8. Implementing Agency and execution of works:

 Since MCC is established in a select Village Panchayats in the District, it should be established under the direct supervision of Project Director, DRDA and Executive Engineer (RD).

 It should be noted that civil work for construction of Compost Tubs, Waste Receiving Platforms, Stabilization area and procurement of other items for

establishment of MCC shall be executed separately.

 PD, DRDA, shall be the tender inviting authority and the District Collector shall be the Tender accepting authority. After finalization of tender, work / supply order shall be issued by the District Collector.

• The works shall be executed by adopting the Tamil Nadu Transparency in Tenders Act 1998 and Rules 2000 and also as per the provisions of the Tamil Nadu Panchayats (Preparation of Plans and Estimate of works and mode and conditions of contracts) Rules, 2007 vide G.O.(Ms) No.203 RD& PR (PR.1) Department, dated: 20.12.2007 and amendments issued in this regard shall be scrupulously followed.

 MCC will be asset of the concerned Village Panchayat. Hence, day to day maintenance of MCC shall be looked after by the Village Panchayat Secretary of

the concerned Village Panchayat.

## 9. Technical Supervision:

AEE (RD) shall be the technical authority responsible for effective functioning of the MCCs in their respective jurisdiction. The Union Overseer and Panchayat Union AE/JE shall monitor the operational aspects and ensure its uninterrupted functioning under the overall supervision of AEE (RD).

### 10. Source of Revenue:

- Village Panchayat concerned may decide for levy and collection of user charge from Bulk Waste Generators like Commercial Establishments, etc., who do not have onsite waste processing center in their own premises, by passing a resolution in the meeting convened for this purpose, immediately.
- The revenue generated from the sale of Compost generated from the MCC shall be sold and 80% of revenue generated shall be distributed to the Thooimai Kaavalars and balance amount shall be deposited into the SWM fund account maintained at Village Panchayat.
- A portion of compost generated from the MCC shall be utilized for the Vermi composting unit already established in the Village Panchayat.
- Operation and maintenance charges and current consumption charges for MCC shall be met out by the Village Panchayat concerned.

## 11. Training Programme:

To implement the scheme effectively, suitable training and awareness programmes shall be organized at the District and Block level for officials and stakeholders.

## 12. Documentation:

Documentation should be done detailing various processes in the implementation of the scheme, starting from identification of the Village Panchayats onwards.

#### 13. Social Audit:

Grama Sabha shall conduct the Social Audit of MCC in the respective Village Panchayat. The entire operations should be placed in all Grama Sabha meeting to ensure transparency and also for suggestions and improvements.

## 14. Monitoring:

The implementation of MCC shall be periodically monitored during inspections undertaken by District Level Senior Officials and by Block Level Officials.

15. Guidelines of SBM (G), Gol and other relevant guidelines are to be strictly followed. The Additional Chief Secretary to Government, Rural Development and Panchayat Raj Department, in consultation with the Director of Rural Development and Panchayat Raj, is empowered to modify any of the above guidelines based on exigencies that may arise from time to time.

HANS RAJ VERMA
ADDITIONAL CHIEF SECRETARY TO
GOVERNMENT

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SECTION OFFICER