ATTINGAL MUNICIPALITY

Suchithwa Mikavu - 2020

WELCOME

Presented By
B Ajayakumar
Health Supervisor
Attingal Municipality
# ATTINGAL MUNICIPALITY

## I. General Details

<table>
<thead>
<tr>
<th>Details</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formation</td>
<td>1924</td>
</tr>
<tr>
<td>Area</td>
<td>16.87 Sq.KM</td>
</tr>
<tr>
<td>Population</td>
<td>37382 (Male – 17551, Female -19831)</td>
</tr>
<tr>
<td>Wards</td>
<td>31</td>
</tr>
<tr>
<td>Taluk</td>
<td>Chirayinkil</td>
</tr>
<tr>
<td>District</td>
<td>Thiruvananthapuram</td>
</tr>
<tr>
<td>Total Houses</td>
<td>13891</td>
</tr>
<tr>
<td>Total Public Institutions</td>
<td>118</td>
</tr>
<tr>
<td>Total Commercial Buildings</td>
<td>5059</td>
</tr>
<tr>
<td>Total Traders</td>
<td>1647</td>
</tr>
<tr>
<td>Others</td>
<td>3412</td>
</tr>
<tr>
<td>Total Assessment</td>
<td>19068</td>
</tr>
</tbody>
</table>
## I (a). Waste Generation/ Day

<table>
<thead>
<tr>
<th>Waste Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Waste Generation</td>
<td>13 to 16 TPD</td>
</tr>
<tr>
<td>Wet Waste (Biodegradable)</td>
<td>13.25 TPD</td>
</tr>
<tr>
<td>Dry Waste (Plastic)</td>
<td>0.3 TPD</td>
</tr>
<tr>
<td>Others (Bags, Chappals, etc)</td>
<td>0.4 TPD</td>
</tr>
<tr>
<td>Biomedical &amp; Hazardous waste</td>
<td>Below 60 Kg/Day</td>
</tr>
</tbody>
</table>
I(b). Present Waste Disposable Facilities

- **Windrow Compost Unit**: 15 TPD Capacity
- **Vermi Compost Unit**: 0.3 TPD Capacity
- **Bio-methanaisation**: 2 TPD Capacity
- **Plastic Processing (Shredding Unit)**: 1 TPD Capacity
- **MCF/MRF**: 260 m2
- **Sanitary Landfill (Under Construction)**: 14000 m3 Capacity
- **Human Hair Processing Unit**: Pilot Project
I(c). Funding, Technical Aid & Guidelines

- Suchithwa Mission (Special Grant) : 1.45 Cr
- Haritha Keralam Mission : Haritha Karma Sena, Proper guidelines
- Kerala Pollution Control Board :
  - Model Town, guidelines for Hon. Central Green Tribunal & Bio mining
- Hon. Central Green Tribunal : Declaration of Model Town
- Govt. of Kerala : Plan Fund
II. Waste, Processing at Source

Meeting through Ward level Sanitation Committee, Residential Associations, Commercial Institutions and Haritha Karma Sena

Segregation at Source

- **Household**: 68%
- **Commercial**: 92%
- **Portable Biogas Unit**: 412
- **Kitchen Biobin**: 750
- **Community Composting**: Thumboormuzhi (Aero bin) & Biogas plant
III. Non Bio degradable Waste Processing

MCF : 3 Nos
MRF : 1 Nos
Haritha Karma Sena : 43 Members

Duration of Collection

Household : Monthly
Commercial : Weekly twice

Otherwise
Special Collection yearly four times as per council direction
IV. Solid Waste Processing

- Bio degradable waste collected through Haritha Karma Sena
- Wet and Dry segregated waste collected through Haritha Karma Sena with prefixed user fee.
- Awareness, Waste not throwing public places
- IEC, House to House publicity through HKS
- Promoting Processing at Source
- Proper Monitoring through health squad
- Public places covers CCTV
IV. Solid Waste Processing

1. Segregated Storage & Collection
2. Transportation
3. Dry Waste
4. Wet Waste

- Compost: Sale to Farmers
- Reusable Material: Sale to scrap dealers
- Non usable materials: Sanitary Landfill
- Windrow: Compost
- Vermi: Reusable Material
- Biogas: Compost, Methane, Slurry
- Non Usable Plastic: Shredding for Road Tarring
- Non usable materials: Cement factory/sanitary landfill
**V. Haritha Karma Sena**  
**Financial Statement Dec 2019**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fees Collection</td>
<td>482500/-</td>
</tr>
<tr>
<td>Expenditure</td>
<td></td>
</tr>
<tr>
<td>Salaries and Wages</td>
<td>351000/-</td>
</tr>
<tr>
<td>Vehicles</td>
<td>55600/-</td>
</tr>
<tr>
<td>(Fuel &amp; Other Expenses)</td>
<td></td>
</tr>
<tr>
<td>Safety Equipments</td>
<td>6300/-</td>
</tr>
<tr>
<td>Printing Stationary</td>
<td>2000/-</td>
</tr>
<tr>
<td>Grand Total</td>
<td>414900/-</td>
</tr>
<tr>
<td>Savings</td>
<td>67600/-</td>
</tr>
<tr>
<td>Total Savings upto Dec 2019</td>
<td>603000/-</td>
</tr>
</tbody>
</table>
VI. Waste Processing, Agriculture

City Compost Supply - Subsidy rate for farmers
Compost Processing: 1.6 TPD
Compost Distributed from processing plant & Municipal outlet
Compost Selling amount handled by service provider as per agreement (GO(MS)73/2011/LSGD)
VII. Non Bio degradable Waste Handling

- Non bio degradable waste collection through Haritha Karma Sena
- Reusable materials sale to Scrap dealer.
- Plastic waste used for road tarring
- Quantity of non bio degradable materials handled up to Dec 2019 - 168 MT
- Non bio degradable (non usable) selling to tender basis
- Expenditure for the non usable items selling – Rs. 360000/- (90MT)
VIII. Green protocol

- Green protocol implemented in all offices, institutions, Auditoriums & Government functions.
- Issuing stainless steel plates and glasses through kudumbashree units for special functions and even family functions.
- Steel water bottle issued in school level.
- Awareness, Warning, Issuing Notices, Fine Imposed.
- Action Taken - 23 Nos.
- Cases are compounding.
- Fine collected - Rs. 138520/-.
IX. Innovative Activities

- Human hair collecting from beauty parlour and converted to liquid fertilizer – Pilot project running… (20 Lakh)
- Engineering Sanitary Land Filling (14000 m³ Capacity, Plinth Area – 2000m²) – 1.13 Crore
- Quick waste composter (Automatic organic waste converter – 2tpd Capacity) (25 Lakh)
- Septage Treatment System (65 Lakh)
- Haritha Karma Sena second level activities
ATTINGAL MUNICIPALITY
Solid Waste Treatment Plant
Windrow Compost Plant Inside View
ATTINGAL MUNICIPALITY
Vermi Compost plant
Vermi compost (Labours on work)
Biogas plant for leachate treatment.
Processing at Source (Biogas plant)
Household Biogas plant
Plastic Shredding
Shredded Plastic
MRF
Sanitary Land Filling Site
Human Hair Converting to Liquid Fertilizer
Haritha Karma Sena Waste Collection
Door to Door Collection by Haritha Karma Sena
Unloading of Haritha Karma Sena collected waste
Installed CCTV Camera in Rivers