

**Outreach Activity – An Awareness Program on
“Municipal Solid Waste Management”
at Pondurangavari Palli, Chandragiri Madal
13th March 2019**

The Department of Civil Engineering of Sree Vidyanikethan Engineering College has conducted an Outreach Programme to create awareness on Municipal Solid Waste Management for Sustainable Development of villagers of Pondurangavari Palli, Chandragiri Mandal on 13-03-2019.

Dr. D. Sreenivasulu, Assoc. Prof. & Head, Dr. Hemadri Prasad Raju, Assoc. Prof. Department of Civil Engineering, SVEC along with 40 student volunteers had organized the outreach programme. During the programme session, the different methods of conservation and management of Municipal Solid Waste were explained to the villagers and answered the queries raised by the villagers. Mainly the two types of wastes namely biodegradable and non-biodegradable wastes are to be stored separately in the green and red colored bins respectively. The biodegradable waste can be used to convert into bio-fertilizer by windrow or vermi-composting or pit composting also can be done. Or else, it can be used for biogas generation by anaerobic digestion process. During anaerobic digestion process, biogas containing methane gas (CH_4) about 55 to 65%, carbon dioxide (CO_2) about 25 to 35% and remaining hydrogen (H_2) and Hydrogen Sulphide (H_2S) is produced. Apart from this biogas there will be by-products such as digested sludge (known as digestate can be used as bio-fertilizer) and supernatant water (H_2O) with abundant nutrients which can be used for plants and gardens.

Thus the biogas plant simultaneously produces biogas and liquid and solid bio-fertilizers out of which liquids can be used as bio-fertilizer for watering plants and sludge can be dried and used as organic manure for the plants.

The following are the objectives of the outreach programme:

- To create the awareness on the actual problems posed by the disposal of waste indiscriminately.

- To make them aware of the wastes that have end value when it is properly segregated the recyclable materials and compostable materials.
- To impart the knowledge about how to generate biogas using compostable materials and how to produce bio-fertilizers (organic manure) from the digested sludge.
- To instill the villagers and students, importance of handling the waste properly.
- To impart knowledge for individuals, at the local and community levels and to address issues related to Municipal Solid Wastes segregation at source, collection, transportation, storage, use of recyclable materials and composting materials.



Dr. D. Sreenivasulu, Dr. Hemadri Prasad Raju and student volunteers at the site in Pondurangavari Palli, Chandragiri Mandal on 13-03-2019.



Dr. Hemadri Prasad Raju is addressing and creating awareness on Municipal Solid Waste Management to the villagers of Pondurangavari Palli, Chandragiri Mandal on 13-03-2019.



Group photo of outreach activity team along with the coordinator and head of Department of Civil Engineering, SVEC



Group photo of outreach activity team along with the faculty coordinators of outreach programme of the Department of Civil Engineering, SVEC