

## PROBLEM OF DOMESTIC WASTE MANAGEMENT IN KERALA: AN ANALYSIS

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## Abstract

This study is based on the Domestic solid waste management. It tries to put some light on the Kerala state solid waste management (SWM) policy. This details the domestic waste management initiatives in SWM policy of the state, its inadequacies and suggestion for future improvements.

#### Introduction

Economic development have led to increase in the quantity and complexity of waste generated in the state .Solid waste and its management is of prime concern at present .Household being the basic unit of every economic and social activity, Domestic Solid Waste generated and its management is worth discussing .Domestically generated solid waste is a mixture of organic and inorganic component. They severely challenge the natural environment and spread health hazards. Appropriate waste management strategy is based on the principle of reduce, reuse and recycle along with appropriate collection, transportation processing and disposal system. This analytical study is based primarily on secondary data from authentic sources.

#### Kerala State Solid Waste Management Policy- Features of Domestic Waste Management

State of Kerala has come forward with the Solid waste Management policy in 2018. Some of the salient features related to Domestic Waste management in the SWM Policy are :-

- Mandatory segregation at source
- Treatment of bio degradable fraction at the source
- Ensure decentralized facilities for biodegradable waste that overflow from source
- Door to door collection of non biodegradables
- Develop regional land fill facilities
- Rationalize and strengthen enforcement of rules.

State Action Plan assign Duties and Responsibilities for the 'Waste Generators' and for 'Grama Panchayath and Urban Local Bodies'

## **Duties and Responsibilities of the Waste Generators**

- Segregation, storage, processing of biodegradable waste
- Collection, segregation, storage and channelizing for recycling of non bio degradable waste
- It emphasis the implementation of Green Protocol.
- Waste management at source by house hold level composting and bio methanisation
- Behavioral change communication for preventing throw, burn or bury solid waste.

## Duties and Responsibilities of Grama Panchayath and Urban Local Bodies

- Preparation of solid waste management plan
- Segregation and door to door collection
- Facilitate formation of entrepreneur group (SHGs,NGOsetc)
- Establishment of Material recovery Facility (MRFs) of different capacity in all Grama Panchayath and Urban Local Bodies based on number of households
- Formalize the informal sector of waste pickers, collectors, scrap pickers etc.
- Developing system for domestic hazardous waste management including collection ,transportation and disposal as per rules
- Preparations of bylaws including spot fine for littering and failing to comply
- Prescribing user fee for collection of waste from waste generators
- Training for waste collectors ,entrepreneur groups and other stake holders



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- Forward linkage of composting with organic farm and horticulture etc.
- Construction , operation of sanitary landfills at regional level
- Provision in budget for solid waste management action
- Ensure personal protection equipment (PPE) and uniform for persons engaged in handling solid waste
- Crate public awareness through print ,mass and social media

## Working of SWM Policy

Bio degradable waste management at source has achieved 76.84% coverage at household level. Decentralized biodegradable waste management at source has a 20 % coverage in urban areas .In grama panchayath 80% of house hold are doing compositing in traditional composite pit. The collection ,segregation and storage and channelization for recycling is yet to reach such a figure . 15% for urban local bodies and 10% for rural local bodies of plan fund earmarked for SWM activities and additional state funds has also been granted. Formation of entrepreneur group as part of Haritha Kerala Mission (HKM) activities is worth mentioning. Collection and transportation of domestic hazardous waste through Clean Kerala Company Ltd and its disposal through hazardous waste landfill needs special mention .Direction are issued through police department for preventing littering and burning of waste. Training of waste collectors and providing them with personal protective equipments(PPE) and uniforms are going on. Forward linkage are initiated through HKM activities through organic vegetable cultivation . Print and visual media have put their influence here too by bringing ,though too little, behavioral changes among the people.

## **Inadequacies in Domestic Waste Management**

Domestic garbage disposal and waste management remains one of the grave concerns for every Keralite, no matter urban or rural. There are only few grama panchayath and urban local bodies that pay heed to this problem. The daily struggle to segregate and dispose garbage is a menace. Usually biodegradable waste is dumped into the backyard of a house and non biodegradable waste are often dumped into a corner of one's house or more often buried. If not, most of the waste is simply landing up on streets and authorities seem to have lost control. Whole landscape of Kerala is thus dotted with garbage hotspot.

The Kerala state SWM policy is well set towards this direction but unfortunately its implementation faces a lot of lag. It fails in panning which is the prior requisite of any policy. The much hailed door to door collection of segregated waste is yet to begin. Establishment of MRFSs at regional level has also failed to take off. Formalizing of waste pickers and collectors have a long way to go. Prescribing of user fee have already set a wave of discontent among the common people. Construction and operation of sanitary landfills at regional level need identification of suitable place and effective planning. Proper monitoring and enforcement of rules is usually not done. Existing of such short comings shows the real plight of domestic waste management in the state.

#### Suggestions

- The authorities must make sure that budget allocated fund are timely and properly being utilized. Reinforcement can be given to such local bodies who make better results so that their working could be improved.
- Availability of adequate waste collectors must be ensured and they must be provided with PPE and better remuneration so that they stay in work. Giving a formal status to their job will further increase the participation of youth in this field, if wise fully utilized it could even turn in to an employment generation programme with a green face.
- Steps should be taken by authorities to identifie land for setting up of sanitary landfills. Regional availability of such landfills will enhance the speed of mobilizing domestic waste.
- Imposing user fee must be on a voluntary basis .Mindset of people change only gradually and if they are forced to pay to dispose what they consider ' waste' may have a negative response from the part of the

International Journal of Business and Administration Research Review. Vol.1, Issue.17, Jan-March 2017. Page 259



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households. Instead incentives for best practices of household must be reinforced in kind. Imposing a compulsory user fee can be considered in the second face.

• Appropriate monitoring and timely working on the part of local government authorities must be ensured. House visit on regular interval and providing households with necessary direction as well as materials and addressing there grievances should be given utmost importance.

# Conclusion

The current system of domestic solid waste management in Kerala has many limitations .Though decentralized, waste disposal practice needs to be addressed more seriously .Except few, no good domestic waste management practices are under taken by the local governing bodies .They have failed to collect waste from household in a time bound manner. For decentralization to work, implementation on ground has to improve. Convince people of the necessity of this system. Dumping and burning cannot be a solution. A behavioral change among households and strong initiative on part of local government authorities for flawless implementation of domestic waste management is necessary.

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