

A STUDY ON GENERATION OF HOUSEHOLD ORGANIC WASTE AND ITS DISPOSAL

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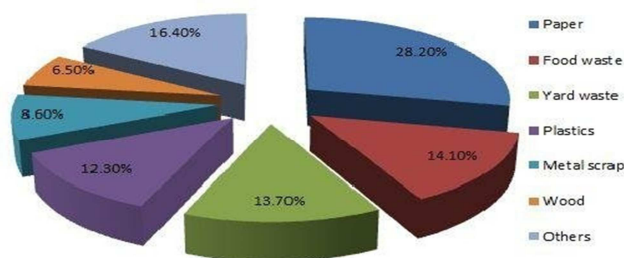
Introduction:

With rapid urbanization, the country is facing massive waste management challenge. Over 377 million urban people live in 7,935 towns and cities and generate 62 million tons of municipal solid waste per annum. Only 43 million tons (MT) of the waste is collected, 11.9 MT is treated and 31 MT is dumped in landfill sites.

Waste, in general, can be defined as any solid, semisolid, liquid, and gaseous material that is released into the environment as a result of industrial, agricultural or other communal activities. Due to the ever blooming globalization and the rising standards of lifestyle habits of the society, the rate of resource consumption has been elevated, which has had and continues to have a severe effect on the environmental balance. Further, dumping of waste at one of the corners of the locality not only create hygiene issues but also attract undesired animals, as pigs, stray dogs and gives shabby look to the society as a whole.

With the present Governments ambitious program of "*Swatch Bharat*", it becomes imperative to identify various means and methods of waste disposal to avoid any accumulation of waste and help to keep the environment clean and hygiene. Imposition of proper waste management measures have certainly become a necessity, however, without individual's participation creation of healthy and hygienic atmosphere would be a dream. As depicted in the figure, as shown below, total waste generation in a city having Corporation, almost 14.01% is contributed by Food waste or organic waste. Thus, as an individual, if every citizen start disposing household generated organic waste within his or her residential premises, helps reducing load on local Corporation for the disposal of organic waste and not only disposal shall also help in generation of organic fertilizer which can be utilized within the premises to grow varied plants and shrubs. Thus, an individual, not only helps reduce generation of household organic waste but also green environment.

Municipal Solid Waste



Objectives:

- To study various measures by which the waste, resulted due to the household activities, can be managed and disposed properly.
- To collect information on the quantity of the waste generated by a household kitchen.
- To gain knowledge about the reusability of the bio-degradable waste materials.

Methodology:

The information is gathered from a total of 30 households based in Aurangabad city. Methodology comprises obtaining duly filled questionnaire form Family members along with interviewing them separately with the help of an interview schedule, specially prepared for this purpose. Information gathered pertinent to generation of kitchen, and organic waste within the home and disposal methods being adopted by them.

On the basis of the data obtained, information was tabulated, analyzed, correlations, if any, were examined and on basis of some observations some fundamental facts were drawn.

Hypothesis

1. Household waste is being dumped in the area specified in the locality,
2. Family members are unaware about segregation of household waste as plastic/dry waste and organic/ kitchen waste,
3. Family members unaware about disposal and utilization of organic waste , and
4. Reluctant to accept any suggestion for the disposal of organic waste.

Findings

Details gathered through questionnaire and interview, Table 1 indicates awareness about the segregation of household generated waste is as below,

Table 1 : Status of awareness about segregation of waste

No of Household Surveyed	Aware about segregation of waste		Unaware about segregation of waste	
	Nos	%	Nos	%
30	26	86.67	4	13.33

A majority, **87%** of the household observed to be aware of segregation of the waste and are kept in separate dustbin.

From the one aware of segregation of waste, amount of organic or kitchen waste generated is collected and the details found are as per Table 2.

Table 2 : Amount of Organic waste generated in kilogram per day.

No of Households	Particulars of waste generated			
	Plant waste		Kitchen waste	
	2 kgs & below	Above 2 kgs	2 kgs & below	Above 2 kgs
26	08	18	07	19

Waste as generated is varying from family to family depends on the size, as the members increase the amount of waste increases.

During survey we observed, methods generally adopted by total 26 households surveyed as

Sr. No.	Particulars of Method	No of Household responded	% to Total Household
1	Incineration	6	23.07
2	Composting	13	50.00
3	Discarding outside home /handing over to collecting cart	7	26.92

Data revealed that **50%** the households are following environ friendly methodology, however, out of balanced, **23.07%** are creating pollution and needs to be educated to avoid incineration.

Limitations

1. We presume that all the information provided by the respondents is true & factual,
2. Data collected from sample size 30 only, which is miniscule to generalize the trend as found.
3. The data collection has been done from a limited geographical area. Hence the findings & conclusions have got their own limitations.

Conclusion

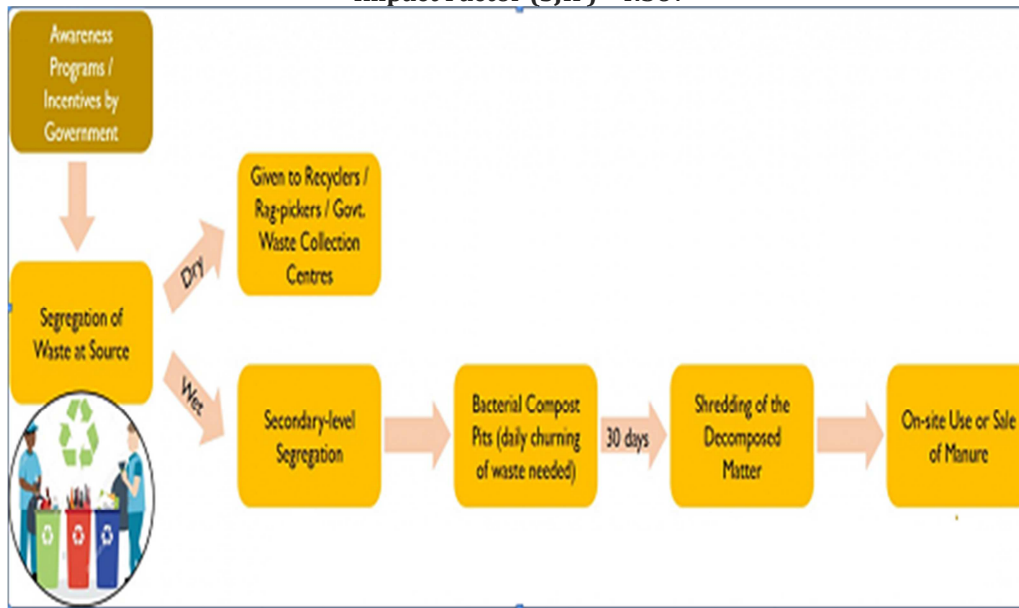
Quantity of Organic waste, comprising plant and kitchen waste, generates depends on family members and as the number increases, quantity (by weight) increases.

Everyone observed to be aware of the ill effects of dumping waste and majority of them observed to blame Corporation/Government accumulation of waste and its disposal.

Households, who are disposing the organic waste within their premises observed to avail dividend from it. The composting of the organic waste is used as fertilizer. Amongst 13 household, 2 of them observed to make an arrangement for vermicomposting.

Even when the message of '*Swatch Bharat*' by Indian Government is loud and clear, awareness to keep the locality clean has increased, however from the data it is certain that still efforts are needed to make it successful in real term. Local Cooperator along with NGO to educate at least one member of every household, particularly lady, on importance of segregation of waste as Solid & Organic and ill effects of disposal in open. Further, to be made aware of the usefulness of compost fertilizer by burying the organic waste.

The detailed cycle of creating awareness for household waste disposal amongst stakeholders and the use of the compost there on is depicted in the picture as shown below.



The time has come to make the environment green and for that everyone, generating the waste, to be made responsible for its disposal.

References

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