

Solving the Current Organic/Food Waste Management Issues of Households Using Mass Media in Kerala.

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ABSTRACT

Proper waste treatment is a major crisis facing Kerala, which has a population of 3.5 crores. When many people are reluctant to choose proper methods, it causes many problems. The place where most of the waste is generated is from each of our own homes. The various types of household waste can be sorted and treated at home or handed over to the local government. The need for the recycling of organic and non-organic waste is very urgent today. New methods and methods of disposing of household waste should be adopted. There will likely be many difficulties today in maintaining the ancient processing methods or performing them at home. It is essential that we use each other and that sustainable waste management practices make us aware of the responsibility and obligation of every citizen. Bio-waste from households and apartments should be treated using waste treatment facilities to convert waste into organic manure and expand in-house cultivation. Similarly, find out which method is currently the most cost-effective and suitable for each household for waste treatment, or find the difficulties in choosing such a waste treatment method. Help people to think about how effectively they can use it in many ways, how to treat their own waste treatment as their own responsibility, and how to convince people of the need to treat each type of waste separately through the mass media. Methodology surveys and interviews are used for this purpose.

KEYWORDS: Mass Media, Organic, Kitchen Waste Management, Source Waste Management.

INTRODUCTION

India is one of the most populous countries in the world. Known as God's Own Country, Kerala is rich in vegetation and mineral salts and many gifts of nature. For various reasons, we consider things that we do not need and seem unnecessary to be waste. Increasing population growth, modern marketing, factories, hotels and many other factors are accelerating the rapid increase in waste levels. As we all build new projects, it is a matter of not paying much attention to what to do with the potential waste heaps that can be emitted from there. The latter leads to the view that everything is being dumped in field collections, roads, and water bodies. Many problems arise because of this exclusion. Sometimes leading to various deadly infectious diseases and even environmental degradation.

Lack of time or any other reason makes it difficult to adopt a proper method. The difficult thing for everyone is that we must be mentally and physically able to choose the source waste treatment methods. There are dirty and non-dirty waste in their homes. Both of this type of waste problem is more prevalent in apartments, buildings, people with limited space, etc. One of the important things is to educate every household on how to choose the source waste treatment method by making effective use of mass media. Most of the waste disposal in a household is done by the elderly and women. Such people need to find out the merits of resource processing and the practicalities of selecting it using mass media.

WHAT IS SOURCE WASTE TREATMENT?

Source waste treatment is a method of recycling household waste at source and reusing it as compost. There are several systems in place to treat bio-waste, both at the government level and in the private sector. Systems such as potting compost, pipe compost and ring compost are suitable for the above source waste treatment.

WHAT IS MASS MEDIA

A medium that makes people think and laugh through television, newspapers, radio, etc., and thus imparts knowledge. An effective way to reach more people in less time. Mass media is seen as a necessity to change the changing attitudes of the people towards waste management. This study seeks to find out the inaccuracies and appropriate methods of household waste treatment using mass media and to identify the difficulties in selecting proper treatment methods.

RESEARCH PROBLEM

As part of the process of improper waste management, dirt and non-polluting wastes are dumped on roads, streams and field collections. This causes many serious problems for the environment and human beings. When waste is thrown away, it can return to us through the food we eat and the air we breathe, leading to deadly diseases such as cancer and many other infectious diseases.

Problems with waste disposal

- Soil and water sources are polluted.
- Infectious diseases are caught.
- Unbearable odor
- Respiratory diseases, asthma, skin diseases, etc.
- Harassment of street dogs
- Mosquitoes and a variety of insects abound.
- Environmental damage

LITERATURE REVIEW

1.DrNiviyaBoomiylKathery, UshaKarunakarn paper, "**Household waste management in a rural area of Northern Kerala**". This study was conducted on attitude of households in waste management systems. peoples are interested in recycling, composting, segregation methods. But the people think about Government initiatives are very less and careless. The conclusion of this research paper says that continuous awareness of proper waste management and changing for everyone's attitudes toward the disposable waste treatment system.

2.Anju A Kumar, DipuS,Salimgnana worked "**Effect of municipal solid waste Leachate on groundwater quality of Thiruvananthapuram district**". This study also aimed for Thiruvananthapuram Corporation area groundwater quality. The result groundwater quality is very poor quality contaminated by leachate. Foods, paper, and textiles these all categories of waste dumping, and landfills are caused by bacteria for drinking water. So proper waste management and build a new landfill system designed to prevent these environmental issues.

3. Amrutha Subash, Sruthi M paper "**The fate of landfills on Kureepuza**" paper study about waste dumping issues at Kureepuza, some remedies, and protect surrounding areas. They give remedies like constructed properly designed landfills, municipal waste reduction, reuse, recovery, and recycling. Their study shows water quality very poor for Ashtamudi groundwater level. They highly recommended implementing a plan to restore water.

4.Hridya K K, PrincyLullese, R Rajesh "**Solid Waste Management in Cochin, India practices, challenges and dumpsite**" paper presents solid waste management practices and disposing Kochi

city, Kerala. They concluded for this study for open dumping and landfills not sufficient for Kochi city. Make proper sustainable methods for waste disposal otherwise, it is harmful to our lives.

5. Rajesh C A, K Joseph paper "**Environmental health hazards of solid waste dumping in Calicut city cooperation**" paper shows waste many infectious diseases are spread due to improper sanitation. The research area was Calicut city cooperation under the Njeliyanparambu dumpsite. According to this study, waste management needs to be done properly and it is very dangerous for the health of the people living around.

6. The paper "**Study of the attitude and perception of community towards solid waste management in Thiruvananthapuram**". According to this paper was in two phases. Degradable and non-degradable solid waste management issues in Thiruvananthapuram city. This study focus understanding of the waste management of the people of Thiruvananthapuram City. Everyone is aware of this problem. He is even willing to spend money on waste management. However, most people are reluctant to dispose of waste properly when it comes time.

7. Jaseelachonattu, KavyaPrabhakar, P S Harikumar paper "**Geospatial and statistical assessment of Groundwater contamination**" study evaluates the problems of groundwater resources around Njeliyanparambu Solid Waste Dumping in Kozhikode District. The result was found to be significant contamination in the quality of drinking water. Pollution was found to be as high as 300 meters around the landfill.

8. Sruthi Pillai, Anju Elizabeth peter "**Soil pollution near a municipal solid waste disposal site in India**" this study looks at the serious problems that occur at the municipal solid waste disposal site in Thrissur district of Kerala. Therefore, this study suggests that land sites are causing significant problems in soil quality. It has been found that leachate can significantly reduce soil fertility. This study shows that there is a significant breakdown in the soil structure.

9. Sheela A M, Andrea Bheemandi, Vineeth P, Sheeja Ramakrishnan Vinod worked "**Assessment of relation of land use characteristics with vector-borne diseases in tropical areas**" The study focuses on the causes of the spread of various infectious diseases in Kerala such as Chikungunya and Dengue, as well as the land use of Kerala and identifying land cover changes and taking appropriate action. This study suggests that inadequate pollution can cause significant environmental problems.

10. Athira Ravi, Subha Vishnu das paper "**Sustainable solid waste management solutions to Kofi**". The study was footprint analysis, changes in the environment, especially in the city of Kochi, suggest strategies to reduce pollution. Footprint Analysis analyzes how the city of Kochi can be made cleaner, greener and more sustainable through this study. Therefore, this study aims to study urban areas using footprint analysis and to develop a footprint calculation for this purpose.

11. A Pakistani content Qazi Mohammed Ahmed, ZeenatJabbar, Muhammed Farooq, Mohammad Muzakkirah paper "**The role of mass media advertising in shaping attitudes**". This study also shows the role of mass media in shaping consumer attitudes. The survey was prepared to understand consumer attitude and changes. This study has found that mass media plays an important role in shaping a person.

12. Ramzan Sama worked "**Impact of media advertisements on consumer behavior**". It focuses on consumer attitudes in media advertising. Television, Radio, Newspapers, Magazines and the Internet find out which of these can have a greater impact on purchasing and awareness. This research shows that television creating more awareness of rather than Internet.

RESEARCH GAP

According to the above review of literature figures and journals, household waste problems and its solutions can be seen. The proper waste treatment problem is a global issue, so there are lot of journals and studies there. All of these say that it is essential to constantly give people the right awareness. Most of the studies are comparative studies in waste treatment problems. Even though, research gap is mass media. Household waste management issues effectively solve the by using mass media.

METHODOLOGY

Quantitative Study: Survey

Qualitative Study: Interview

Sampling Method: Cluster sampling – Dividing population into smaller groups known ad clusters. Then randomly select among these clusters to form a sample. Cluster sampling is a method of probability sampling that is often used to study large populations, particularly those that are widely geographically dispersed.

Mean: Measures of central tendency help you find the middle, or the average, of a data set. The mean is the most frequently used measure of central tendency because it uses all values in the data set to give you an average. For data from skewed distributions, the median is better than the mean because it is not influenced by extremely large values.

Contingency table: Contingency tables (also called crosstabs or two-way tables) are used in statistics to summarize the relationship between several categorical variables. A contingency table is a special type of **frequency distribution table**, where two variables are shown simultaneously.

Chi-Square Test: A Chi-square test for hypothesis tests about whether your data is as expected. The basic idea behind the test is to compare the observed values in your data to the expected values that you would see if the null hypothesis were true. The test for independence compares two variables in a contingency table to see if they are related. In a more general sense, it tests to see whether distributions of categorical variables differ from each another.

RESEARCH QUESTIONS

1. What is source waste treatment?
2. Which type of methods currently using of organic waste management?
3. What is the difficulty of people in adapting to new waste management systems?
4. Which mass media mostly influencing in householders?

OBJECTIVES

- To study the barriers, issues and current methods of organic/food waste management in household.
- To study and compare the current organic waste management methods.
- To identify the influence of mass media in house holders (influence of advertisement in high frequency.)
- To solve the organic/food waste management issues with the use of mass media (study and strategy development)

HYPOTHESIS

1. The barriers affecting the proper of organic & food waste treatment process: - Time, space, ownership of the house, Knowledge, Other issues
2. Advertisements are the major attraction for buying and selling products.
3. Informative advertisements are more helpful to follow the guidelines.
4. Most of the readers follow the instructions from the printed advertisements.
5. Age between 18 and 30 not interested to purchase the products on the advertisements.

FINDINGS AND INTERPRETATIONS

Part of the study using some statistical tools and analyze the study. The results will be summarized there.

FINDINGS

A survey conducted all over the Kerala to identify the problems and find a better solution for organic/food waste management system in our households. 308 samples selected among them. population 3.5 Cr. of Kerala. Selected most of the samples 102 from city, 105 from urban, and 101 from rural area. Considered constraints are employment of women (who managing the waste), proper waste treatment system at home, ownership of settlement, implementer of waste management system, type of waste treatment methods, quantity of waste producing, time consumption for treating the waste, knowledge about proper waste management, and issues while treating the waste, and collected many opinions to know their mentality, acceptance of waste as their responsibility. And the other survey conducted among the same samples to know their mentality and influence of mass media and ads.

OBJECTIVES

OBJECTIVE 1: TO STUDY THE BARRIERS, ISSUES AND CURRENT METHODS OF ORGANIC/ FOOD WASTE MANAGEMENT IN HOUSEHOLD.

The common problems, barriers effecting the proper waste management of organic and food waste management in households are: Time/ engagement in a job (employees), Space availability to place the waste treatment systems, Ownership of the settlement, Knowledge about the proper and simple waste management system, Problems faced in waste management systems. In the further study, we found the following.

THIS CROSS TABULATION SHOWS THE TIME AS A BARRIER WHEN THE EMPLOYMENT STATUS AND THE WASTE MANAGEMENT SYSTEM (Table 1.1)

		Having proper organic/food waste management system		Total
		Yes	No	
Employment status of householders	Employed	74	93	167
	Unemployed (Housewife)	55	79	134
Total		129	172	301

Table 1.1 shows time as a barrier in employment status of house holders is 172 respondents out of 301 and remaining time is not a barrier. Other 129 respondents time is a barrier.

THIS CROSS TABULATION SHOWS THE SPACE AS A BARRIER WHEN THE SPACE OCCUPIED TO PLACE A WASTE MANAGEMENT SYSTEM IN A LIMITED SPACE (Table 1.2)

		Having proper organic/food waste management system		Total
		Yes	No	
Type of settlement	Single House	86	75	161
	Hostel/PG's	5	1	6

Shared House	25	55	80
Apartments/Flats	15	35	50
Total	131	166	297

Table 1.2 shows about the different settlement and waste management facilities and Respondents out of 297 in 166 respondents' space is not a barrier and 131 space is barrier.

THIS CROSS TABULATION SHOWS THE OWNERSHIP OF THE SETTLEMENT AS A BARRIER FOR WASTE MANAGEMENT FACILITY IN THE SETTLEMENT (Table 1.3)

		Having proper organic/food waste management system		Total
		Yes	No	
Ownership status of settlement	owned	83	110	193
	Rented	48	67	115
Total		131	177	308

Table 1.3 shows ownership is another barrier and out of the 308 respondents owned houses 177 and rented houses 131.




THIS CROSS TABULATION SHOWS KNOWLEDGE AS A BARRIER FOR PROPER WASTE MANAGEMENT AT HOME (Table 1.4)

		Having proper organic/food waste management system		Total
		Yes	No	
Proper knowledge about the waste treatment methods	Yes	83	114	197
	No	48	33	81
Total		131	147	195

Table 1.4 shows knowledge is another barrier for proper waste management system out of the 195 respondents 147 respondents' proper knowledge about waste treatment process is haven't. 131 respondents know the treatment methods.

OBJECTIVE 2: TO STUDY AND COMPARE THE CURRENT ORGANIC WASTE MANAGEMENT METHODS.

Product Name	BIO-DIGESTER POT 	BIO-BIN 	Clay composter 	Kuzi compost 	Ring compost 
size	3 type of pots	300 mm	Preferable your pot		4.5 cubic feet
material	Clay/terracotta	Bin	pot	kuzi	Concrete ring
Capacity	2 kg waste per day	2 Kg waste per day	2 kg waste		3 to 5 KG
Composting time	30 to 35 days	Up to 45 days	-	6 months	45 days
Difficulty of use	normal	normal	normal	average	normal
Area required		1 Feet	As a preferred		
Availability area	Panchayat, municipalities	Panchayat, municipalities, other private waste disposal center's	home	Availability in required their space	Panchayat, municipalities, private sectors
Price	2000	1800	home		2500

Product Name	BIO POD 	Biogas plant 	Pipe compost 
size	Mini and big Buckets	Different sizes available.	8 inches, 10 inches
material	Concrete slab	Concrete slab or ferry cement	2 PVC pipes
Capacity	2 – 32 kg waste per day	630 cubic meters	1 kg waste per day
Composting time	30 to 35 days	6 to 12 weeks	60 days
Difficulty of use	Normal	-----	easy
Area required		5 meters	1 meter
Availability area	Panchayat, municipalities, private companies	Panchayat, municipalities, other private waste disposal centers	Panchayat, municipalities, other private waste disposal centers
Price	2000	3500 to 12000	2000 to 3000

From the detailed study, majority methods are failure and few service providers having strong research team to rectify the issues and find a proper solution in the private sector. Meanwhile, the govt. must adapt these techniques, or we must upgrade failed system. All the methods mentioned above table is based on the space availability, simplicity, cost effective, and the problems are minimal.

OBJECT 3: TO IDENTIFY THE INFLUENCE OF MASS MEDIA IN HOUSEHOLDS (INFLUENCE OF ADVERTISEMENT IN HIGH FREQUENCY)

THIS CROSS TABULATION SHOWS THE AGE WISE POWER OF PURCHASE BY SEEING THE ADS (values is the mean of TV, Radio, Newspaper, Magazine) (Table 2.1)

		Purchased products on ads		Total
		Yes	No	
Age category	19-30	30	47	77
	31-54	59.25	44.25	103.5

	55 Above	53.25	51.5	104.75
Total		142.5	142.75	285.25

Table 2.1 shows 142.75 respondents between the ages of 19 and 55 saw the advertisement and purchase the products. 142.5 respondents saw the ad and did not buy the products.

THIS CROSS TABULATION SHOWS THE AGE WISE REPORT OF ACCEPTANCE AND IMITATION OF GUIDELINES (values is the mean of TV, Radio, Newspaper, Magazine) (Table 2.2)

		Follow the instructions from the media		Total
		Yes	No	
Age category	19-30	55.33	21.66	76.99
	31-54	70.33	44	114.33
	55 Above	80	38.33	118.33
Total		76.99	103.99	338.66

Table 2.2 shows in the age of 19 to 55 out of 338 respondents 103.99 respondents doesn't following the instructions from media. 76.99 respondents following the instructions from media. The categorical of above the 55 age persons, 80 respondents follow the instructions from media.

THIS CROSS TABULATION SHOWS THE FREQUENCY OF ADS/ARTICLES / GUIDELINES ABOUT ORGANIC/FOOD WASTE TREATMENT IN HOUSEHOLDS IN A MONTH (values is the mean of Newspaper, Magazine) (Table 2.3)

		Purchased products on ads		Total
		Yes	No	
Age category	19-30	57	20	77
	31-54	75	40.8	115.8
	55 Above	68	50	118
Total		200	110.8	310.8

Table 2.3 describes 19- 55 above age category purchased products on ads in printed form out of 310.8 respondents 200 respondents purchase the products on ad. 110.8 respondents doesn't purchase the products on ads.

THIS CROSS TABULATION SHOWS THE AGE WISE POWER OF PURCHASE BY SEEING THE ADS IN THE AGE GROUP 18 TO 30 (Table 2.4)

		Purchased products on ads		Total
		Yes	No	
Media	TV	42	35	77
Category	Newspaper	61	16	77

Radio	21	15	36
Magazine	41	36	77
Total	165	102	267

Table 2.4 shows age wise report of a purchased products in ads. Out of the 267 respondents 165 respondents purchase the products on ad. 102 respondents doesn't purchase the products.

OBJECT 4: TO SOLVE THE ORGANIC/FOOD WASTE MANAGEMENT ISSUES WITH THE USE OF MASS MEDIA (STUDY AND STRATEGY DEVELOPMENT)

While organic waste treatment in the home is still a problem, changing the attitude of everyone can lead to the selection of new treatment methods and the use of mass media to solve them. But the key factor is to find reasons not to choose the proper methods. Ignorance, limited space and lack of time are the reasons. Everyone must be mentally and physically nurtured to choose proper methods. Surveys have shown that those who are at the forefront of waste management spend more time in mass media such as television. Intermittent advertisements and campaigns will provide more information. Everyone is paying attention to the change in presentation style. At the government level itself, many advertisements have been made and succeeded by mass media, such as campaigns and television, by placing movie stars. As well as being able to give not only social media but also bus stops, hospitals, public places, evening serial time breaks and news bulletins where television is likely to be a regular occurrence. Broadcast short videos on the benefits of source waste treatment, where the systems come from, details of subsidized rates, and the need for recycling. Pay attention to newspaper ads and constant advertising and talk on a station like FM stations. With the help of government-private institutions, it is possible to change people's attitudes and thereby choose proper methods.

QUALITATIVE METHODS

1. In an interview with the KSEB Board Chief Public Relations Officer, 6 years ago, a publicity stunt organized by film stars on television, such as "Vaidhuythiamoolymanu, athpazakkaruth, vaidhyuthiyasamprakashiku," with KSEB was able to make a significant impact on the people of Kerala at that time. He testified that it aired that day and encouraged people to use less electrical equipment between 6pm and 10pm, while in 2014 they aired it on social media YouTube. However, the impact of advertising in newspapers, radio, and television was so great that load shedding and other forms of current use could be avoided.

2. SulfiBasheer, owner of CNG Solutions, a private waste management company in Thrissur, has eight years of experience in waste management filed and has worked as part of the Suchitha Mission project of the Government of Kerala. According to this interview, bio-pods, bio-bins and pipe compost are among the machines that seem to be the easiest to treat bio-waste in the home. In the rest of the districts, there is still a reluctance to select systems here and there. But it is also a fact that most people do not have much knowledge about such a system. Everyone is looking for the easiest way when faced with the waste management problem. Therefore, the tendency to throw it in someone else's yard increases. There are many individuals who are interested in choosing all of these. laziness and financial hardship are some of the reasons why it is wise to choose.

HYPOTHESIS TESTING

1. THE BARRIERS EFFECTING THE PROPER OF ORGANIC & FOOD WASTE TREATMENT PROCESS.

- 1. Time: majority of organic & food waste treatment is depending on the employment of women.**

H_0 : Employment is a barrier for waste management in household.

H_1 : Employment is not a barrier for waste management in household.

		Having proper organic/food waste management system		Total
		Yes	No	
Employment status of householders	Employed	74	93	167
	Unemployed (Housewife)	55	79	134
Total		129	172	301

We Accept H_1 . The conclusion is Employment is not a barrier for waste management at household.

2. Space: lack of space is affecting the organic & food waste treatment depending on different types of households.

H_0 : Space is a barrier for waste management.

H_1 : Space is not a barrier for waste management.

		Having proper organic/food waste management system		Total
		Yes	No	
Type of settlement	Single House	86	75	161
	Hostel/PG's	5	1	6
	Shared House	25	55	80
	Apartments/Flats	15	35	50
Total		131	166	297

We accept H_1 . The conclusion is: the space is not a barrier for waste management system. Different types of waste treatment methods are available based on the space limitations.

3. Ownership: People living in rented properties are backward to the proper waste management.

H_0 : People living in rented properties is a barrier to the proper waste management.

H_1 : People living in rented properties is not a barrier to the proper waste management.

		Having proper organic/food waste management system		Total
		Yes	No	
Ownership status of settlement	owned	83	110	193
	Rented	48	67	115
Total		131	177	308

We reject H_1 . The conclusion is: People living in rented properties is a barrier to the proper waste management.

4. Knowledge: The proper knowledge about the organic & food waste treatment is a barrier.

H_0 : The proper knowledge is a barrier for organic & food waste treatment.

H_1 : The proper knowledge is not a barrier for organic & food waste treatment.

	Having proper organic/food waste management system		Total
	Yes	No	
Proper knowledge Yes about the waste treatment methods	83	114	197
No	48	33	81
Total	131	147	195

We Accept H_0 . The conclusion is: the proper knowledge about waste treatment methods is a barrier for organic & food waste treatment.

5. Issues: Unsolved problems and less supporting are the barrier to the proper waste management.

H_0 : Unsolved problems and less support is a barrier to the proper waste management.

H_1 : Unsolved problems and less support is not a barrier to the proper waste management.

			Current issues and problems				Total
			Stenches	Worms	Insoluble in soil	Leakage	
Active Waste Management System	Active		26	8	23	16	73
	Inactive		28	28	25	31	112
Total			54	36	48	47	185

We accept H_0 . The conclusion is: Unsolved problems and less support is a barrier to the proper waste management.

2. TO STUDY AND COMPARE THE CURRENT ORGANIC WASTE MANAGEMENT METHODS

(Compare all organic waste management system using collected information)

Pipe compost is suitable for detached houses and flats as many systems have been tested for bio-waste treatment in existing houses. Low cost, ideal for those with limited space, can dispose of 1 to 2 kg of household waste per day. It is easy to get and everything. But the downside is that it takes time to dig into the compost. It takes longer to convert into compost than other systems. Also, as it is a digging system, it should be moved anywhere, or it should not rain. Bio-digester pot, bio bin, bio pod and clay composter are also suitable for household waste treatment. It does not cost much

and does not require space. Specifically, clay composter is a very inexpensive method. It can be composted with any soil in the house. But if something happens to the pot, the compost will not work. That is the problem with clay compost. Similarly, pottery can be bought and used by everyone. The joining processing systems are the bio bin and the pod. Kuzi compost, ring compost and slurry are all suitable for those who need space. However, this comparison proves that even if it takes time to compost, it is still very environmentally friendly.

3. IDENTIFY THE INFLUENCE OF MASS MEDIA IN HOUSEHOLD (Advertisement)

1. Ads are the major attraction for buying and selling products.

H₀: Ad is the major attraction for buying and selling products.

H₁: Ad is not the major attraction for buying and selling products.

TV + Radio + Newspaper + Magazine (Calculating with mean value)

	Purchased products on ads		Total
	Yes	No	
19-30	30	47	77
Age category 31-54	59.25	44.25	103.5
55 Above	53.25	51.5	104.75
Total	142.5	142.75	285.25

We accept the H₀. The conclusion is: Ads are the major attraction for buying and selling products. Most of the people remember the ads when they go to purchase something.

2. Informative ads are more helpful to follow the guidelines.

H₀: Informative ads are more helpful to follow the guidelines.

H₁: Informative ads are more helpful to follow the guidelines.

TV +Radio+ Newspaper + Magazine (Calculating with mean value)

	Follow the instructions on the media		Total
	Yes	No	
19-30	55.33	21.66	76.99
Age category 31-54	70.33	44	114.33
55 Above	80	38.33	118.33
Total	76.99	103.99	338.66

We accept H₀. The conclusion is: Informative ads are more helpful to follow the guidelines. Majority people follows the instructions on the ads.

3. Most of the readers follows the instructions from the printed ads.

H₀: Most of the readers follows the instructions from the printed ads.

H₁: Many of the readers does not follow the instructions from the printed ads.

Newspaper + Magazine (Calculating with mean value)

	Purchased products on ads		Total
	Yes	No	
19-30	57	20	77
Age category 31-54	75	40.8	115.8
55 Above	68	50	118
Total	200	110.8	310.8

We accept the H₀. The conclusion is: Many of the readers follows the instructions from the printed ads. Newspapers are considered as a guideline/sign board for daily life.

4. The ads about organic & food waste management/source waste treatment are broadcasts at high frequency in mass media.

H₀: Mass media broadcasting ads about waste management at very high frequency.

H₁: Mass media broadcasting ads about waste management at very low frequency.

	Waste management Ads on mass media		Total
	Yes	No	
19-30	7	70	77
Age category 31-54	6	106	112
55 Above	7	112	119
Total	20	288	308

We reject H₀. The conclusion is Mass media broadcasting ads about waste management at very low frequency.

5. Age between 18 and 30 not interested to purchase the products on the ads.

H₀: Age between 18 and 30 interested to purchase the products on the ads.

H₁: Age between 18 and 30 not interested to purchase the products on the ads.

Purchased products on ads		Total
Yes	No	

	TV	42	35	77
Media	Newspaper	61	16	77
Category	Radio	21	15	36
	Magazine	41	36	77
Total		165	102	267

We accept the H_0 . The conclusion is: Age between 18 and 30 interested to purchase the products on the ads.

4. TO SOLVE THE WASTE MANAGEMENT ISSUES WITH THE USE OF MASS MEDIA. (Suggest solutions, Strategies with the help of a case study of KSEB: Interview + bites)

Many advertisements have proven that advertisements can have a huge place in the human mind. The recently released Bhima Jewelers Advertisement, the advertisements released by the Jose Alukkas Group during the covid Onam period and many other advertisements that convey such great messages have played a huge role among the people then and now.

In the interview given by KSEB public relations officer, the advertisements and campaigns that change the style of presentation have been able to make a lot of people aware. An example of this is the cap that movie stars put in place to avoid load shedding in 2014. When campaigning for ads, it should not only show the problem but also what it should do. In a nutshell, it should state the problem as well as the solutions and where and how. But if you want to see and hear it all, it is important to choose different short videos, compelling content, and as many people as possible to telecast. Look at the time people spend most of their time in front of the television and put-up ads like this. Only when such advertisements are placed regularly will it help to bring attention and change the attitude of the people.

DISCUSSION

This study aims to find a solution to organic/food waste management issues in households with the use of mass media. For this study, the survey was conducted in two ways focusing on 308 houses in Kerala itself. One was to find out the problems of bio-waste treatment in homes and the methods currently in use and another was to look at the age of the survey and find out how much mass media is influencing. For Qualitative Government learned to know mass media influence at the private level and learn more about new systems for waste management.

The table was made using cross-tabulation to find problems in selecting new proper waste treatment methods and to know the mass media influence. The mean mode was also used to detect mass media inflation by age. The hypothesis test used the chi-square test. This study shows that time and space are not barriers to proper methods. Similarly, most of the mass media users in waste management are in their 31's and 50's. It has also been seen that if advertising campaigns are used effectively in mass media, there will be people buying and looking at it.

CONCLUSION

Based on the research, discovered that the mass media can highly influence the mass amount of people within a short period of time. To reduce the organic food waste at same place of source of production. In the research, recommend some waste management methods/ systems based on the space limitations based on their settlement.

SCOPE FOR FUTURE STUDY

Waste management will remain a problem if the man is on earth. Therefore, the adoption of proper methods is also an important factor. As the world grows through the world of the Internet, so does

mass media. With source waste treatment, it is possible to grow organic farming in your own home. We can have a fertile, clean country and city without harming the environment and the earth with proper methods, even for the next generation.

LIMITATIONS

We only consider the biodegradable/organic/kitchen waste management facilities in households. Other hazardous waste management we do not consider in this research.

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