A Study on Food Wastage by Restaurants, Households & Effective Strategies for Food Waste Management

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ABSTRACT

Food wastage is the growing problem which is quite unseen and ignored in most parts of our country. It can be said that a very handful of population know its relevance and its hazardous effects on our society. Globally, it is estimated that about 1/3rd of food is wasted and hence it becomes compelling in addressing this travesty. The research provides a systematic review of the inevitable nature of food wastage, understanding and interpreting the consumer's psychology behind leftover foods by conducting surveys and getting insights from restaurants with their food management techniques. The analysis and statistics of our research is based on the suburbs of Thane and Mulund. According to the survey conducted, majority of consumers waste food because of the excessive quantity or food which is stored in refrigerators for prolonged periods of time and later becomes stale. On the other hand, our survey of restaurants shows that many of them redistribute the surplus amount of food among their employees and sometimes they simply dispose food carelessly which drives us to conduct research and our moto is to mitigate the prevalence of food wastage and help alleviate the hunger among the needy. This study presents a recommended model for food waste management.

Keywords: Food Wastage, Restaurants, Household, Management

[A] INTRODUCTION

Food wastage and Food loss are the most talked topic almost in the last few decades. Food waste refers to the edible parts of plants and animals that are produced or harvested for human consumption but that are not ultimately consumed by people whereas food loss refers to food that spills, spoils, incurs an abnormal reduction in quality such as bruising or wilting, or otherwise gets lost before it reaches the consumer. Food waste also leads to socio economic concern such as global food insecurity and excessive global food price inflation. Food wastage is global phenomenon which is an increasing concern for governments and organizations such as united nations, the FAO etc, with each passing year. It is especially relevant in a developing nation like India, because the country is on the cusp of maintaining its traditions while at the same time witnessing an improved quality of living along with seemingly unending food options in the form of restaurants, snack shops, tiffin services, etc.

Indians waste as much food as the whole of United Kingdom consumes- Food wastage is an alarming issue in India. Our streets and Garbage bins, landfills have enough proof to prove it. Weddings, restaurants, hotels, social and family functions, household spew out so much food. As the covid-19 pandemic becomes protracted, the World Food Programme (WFP) estimated 271.8 million people suffer from severe food insecurity. Food wastage in India is happening at every level; from harvesting, transporting, processing packaging and consuming. According to the FSSAI (Food Safety and Standard Authority of India), one third of all food in India is wasted or gets spoilt before it is eaten. According to the UNEP food index Report 2021, Household food waste in India is estimated to be around 50kgs per person, annually 68.76 million tonnes. A rough estimated figure by the food produced in India is wasted every year due to fragmented food and insufficient supply chain system. There are many organizations in the country who are working towards helping to reduce this food wastage by collecting the food and distributing it to the needy. According to the agriculture ministry,

Rs 50,000 crore of food is wasted every year in the country. India ranks 107 among 121 countries in Global Hunger Index 2022. Also India stands 2nd worldwide in terms of household wastage of food only followed by China. Only government policies are not responsible for the problems we are facing today, but our culture and traditions are also playing a lead role in this issue. In India, the bigger the wedding, the larger the party and more colossal the waste.

The research is designed with a focus on viewing the current issue of wastage through the workings of upcoming non-profit organizations. Mumbai is renowned around the world as the financial capital of India. It has one of the largest population of inhabitants; 18.4 million residents living in an area stretching out to about 603 sq.km. Of this, Mulund is a suburb situated in the North-Eastern part of Mumbai. The Thane city ends just when Mumbai officially begins from Mulund.

[B] LITERATURE REVIEW

According to **(Williams et al., 2012),** shopping groceries more frequently can lead to a reduced food waste.

A study on food waste of **(Stefan et al., 2013),** has shown that the intention to reduce food waste isn't significantly correlated with a reduced self-reported food waste although other researchers have had contradicting results.

As per **(Parizeau, 2015),** situational factors also come into play when discussing household food waste. The household size, having children and spending more money on groceries have a negative effect on food waste.

Results of the study of barriers to reducing food waste, performed by **(Graham-Rowe et al. 2015),** have shown that psychological factors such as being a good provider and offering the family healthy and/or ample food, the desire to minimize inconvenience and a lack of awareness and information may represent barriers to the reduction of food waste.

According to **(Ascheman-Witzel et al., 2017),** in order to take efficient measures of reducing food waste, a holistic approach regarding the drivers of food waste must be considered. Considering the supply chain, causes related to food waste must be viewed from an integrated approach – decisions that are taken within a segment of the supply chain, at retailer level for example, can have an influence of food being wasted at consumer level.

A systematic review of research concerning the consumer food waste was performed by **(Schanes et al. 2018),** where the authors synthetized food waste reasons into two main categories: understandings and perceptions of food waste, and food-related household practices and routines – planning, shopping, storage, cooking, eating, managing leftovers, assessing edibility and disposal. Results of **(Leverenz et al. 2019),** are in line with those of Schanes et al. (2018) – the authors have identified the following drivers for household food waste: "cooking too much, spoiling during storage, not using saved leftovers in time, expired shelf life, mistakes in handling and other reasons".

(Hebrok and Heidenstrøm 2019), argue that informing consumers about the societal aspects of food waste is not enough to help reduce the phenomenon. Instead, information and awareness campaigns should highlight the effects of everyday practices. In this regard, the authors underline the importance of an unstructured approach to food waste, such as the fridge analysis, in providing a more detailed context of the causes of the phenomenon.

(Leverenz et al. 2019), has shown that receiving coaching for food waste reduction managed to reduce the quantity of wasted food significantly, with the majority of the households included in the research reducing the quantity of wasted food by more than a half.

Based on the Organizational Theory, **(Özbük and Coşkun 2020),** have classified factors affecting food waste generated within the downstream segment of the supply chain into internal, micro-environmental and macro-environmental factors. Among internal factors the authors have listed organizational, operational, marketing-related, product-related and food waste handling practices.

[C] RESEARCH METHODOLOGY

1] NEED FOR THE STUDY –

Despite adequate food production, the UN has reported that about 190 million Indians remain undernourished. It is further estimated that the value of food wastage in India is around ₹92,000 crores per annum. These are some bleak statistics, but they help us to realise the magnitude of the problem of food waste, as much as inequity, in India. The world recognises that no truly sustainable and developed country can exist without tackling the issue of food waste, and while the challenge in front of us may be monumental, thus some steps need to be taken sooner than others. And restaurants food wastage is also a part of all above details, so it is required to make this waste as useful as we can. The leftover food in restaurants are either thrown in dustbin or distributed among the staff who are already capable to earn money. So, for taking this leftover food from restaurants to stomach of homeless and poor people, in Thane and Mulund cities of Maharashtra, we are coming up with a new initiative by "tie-up of restaurants with NGOs".

2] RESEARCH GAP -

Previous studies conducted shows that there are various reasons that leads to food wastage like frequent groceries shopping, situational factors like household size, having children, money spent on groceries, desire to minimise inconvenience in providing healthy food to family, etc. The researcher thinks that the household practices like planning, shopping, storage, cooking, eating, managing leftovers and disposal plays an vital role in handling the food wastage of household. Certain observers have the opinion that main drivers in household food wastage are cooking too much, spoiling during storage, not using saved leftovers in time, expired shelf life, etc.

According to some investigators awareness campaign/ coaching shall be undertaken for highlighting how food wastage can be managed and what are the benefits that they can have by reducing the food wastage. Followed by this (Leverenz) researcher observed that by arranging coaching it has helped a major household (involved in research) to reduce quantity of food wastage by more than a half. Thus, we can conclude that there are a lot of reasons which enhance food loss such as insufficient infrastructure, technology, lack of poor refrigeration facilities and other logistical issues.

Thereby many research has been conducted but concentrating either on restaurants or households' food wastage. Hence the current study is conducted as there is a information gap in the research of restaurants and households food wastes which are likely to contribute to development of various economy problems like insufficient food to all, etc. Thereby these gaps motivated to perform the following research wherein we try to analyse the food wastage in restaurants and in households, and try to minimise the food wastage by framing a model where the surplus food of restaurants and households must be taken by NGOs which are involved in providing the surplus food to the needy people through their NGO.

3] RESEARCH OBJECTIVES -

1] To analyse the food wastage in restaurants and households.

2] To identify the food waste management practices followed by restaurants and household.

3] To make effective models in order to create awareness among restaurants, NGOs.

➢ **Details of the Survey Conducted –**

		Restaurants	**NGO**	**Households**
1.	**Nature of research**	Qualitative and Quantitative	Qualitative and Quantitative	Qualitative and Quantitative
2.	**Type of research**	Research design is exploratory	Research design is exploratory	Research design is exploratory
3.	**Sample size**	30	6	72
4.	**Type of questionnaire**	Structured	Structured	Structured
5.	**No. Of questions involved**	15	15	10
6.	**Type of questions**	Open as well as close ended	Open as well as close ended	Open as well as close ended

Collection of Data -

➢ **Primary Data:**

The researchers have collected primary data from restaurants by an in person interview whereas for NGOs and household Google Forms were rolled out to collect data from these people. We have collected data from 30 restaurants, 6 NGOs and 72 household. The respondents were approached with a structured questionnaire. The questions were limited, formalized, probing, standard and structured.

➢ **Secondary Data:**

The researchers have gathered some information like NGOs which were involved in food donation by either preparing the food by themselves/ and taking the surplus food from restaurants, weddings, etc and restaurants name from various sites. Also, the information related to various research paper conducted earlier was assembled from several web page.

**[D] DATA ANALYSIS AND INTERPRETATION**

A. Restaurant's Response

1. Food Wastage in Restaurant.
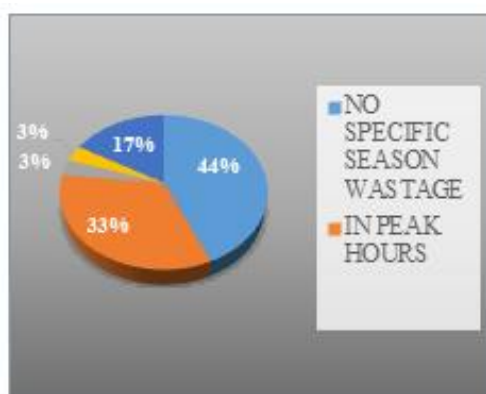
Food wastage is considered to be a major factor for the problem of food scarcity in a developing country like India where poverty has its footprints, it's very important to take preventive measures in order to minimize the food wastage as far as possible. There might be various reasons which might be contributing to food wastage like as the response received in the survey, we can see that there is no specific season food wastage and apart from that a major reason for food wastage is seen during the peak hours run by the restaurants as there might be fluctuations in day to day demand for the food which ultimately results into food wastage. Apart from that

there is a minimal percent of food wastage during the period of festivals and daily routine. We can observe that there is a positive portion of responses received that there is no food wastage.

2. Food Wastage Proportion in Your Restaurant
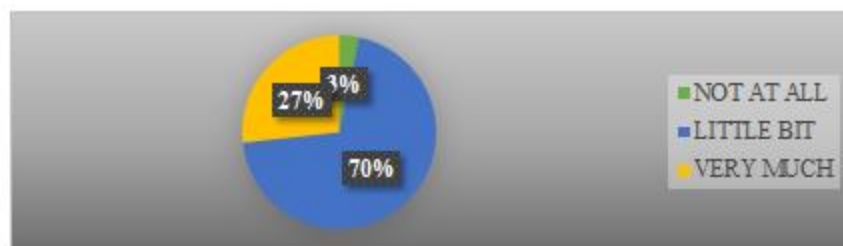
While considering the level of food wastage done by the restaurants, we can see that a high level of responses has been received for less quantity of food wastage. Then we can see that about 27% responses have been received for very much quantity and a low level of responses i.e.3% have been received for not at all food wastage

3. Tracking of the Food Wastage in Restaurant
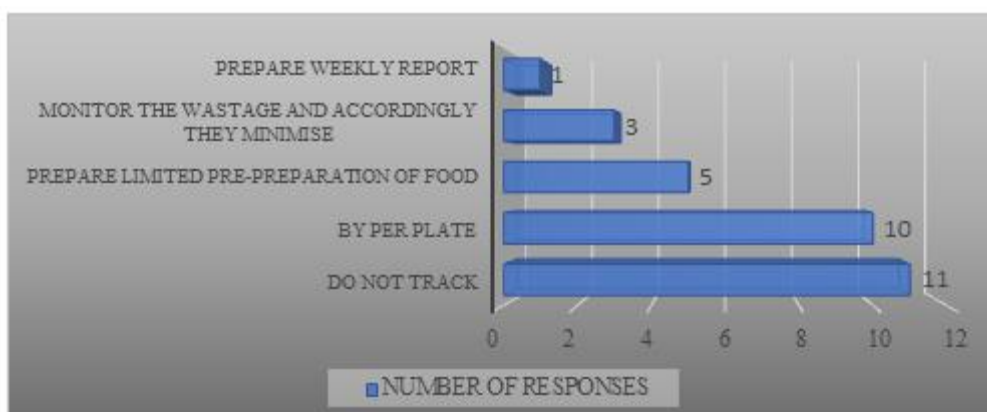
Based on above graph we can conclude that some of the restaurants don't track the food wastage even though the food wastage is a major problem, while most of the restaurants take some measures to track food wastage by preparing the weekly report, preparing limited pre-preparation like boiling of vegetables and so on. Thus, we can say that it should be made compulsory to track the food wastage in restaurants so that the food wastage can be minimized and gradually we can make it null.

4. Main Reasons for the Food Wastage in Restaurants
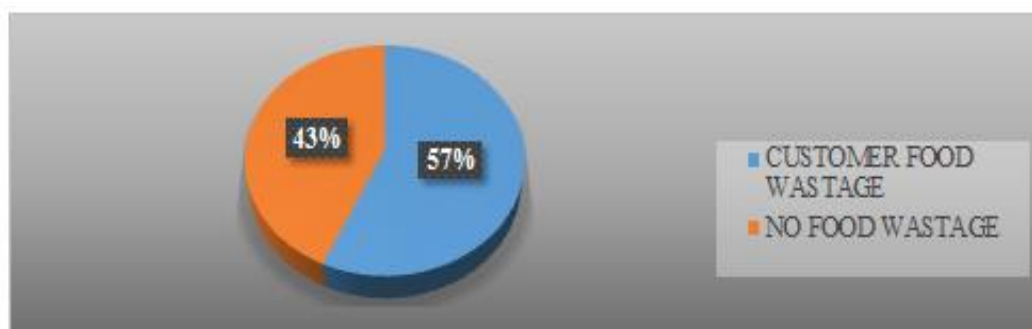
From the above graph we can say that most of the food wastage is from the customers end, thus they must order the food according to their need in order to avoid the food wastage. While there is no food wastage in

some restaurants as they prepare according to the orders or distribute the surplus and leftovers among the staff itself. Thus, we can conclude that restaurants are taking enough measures to avoid food wastage.

5. Treatment of Leftover Food
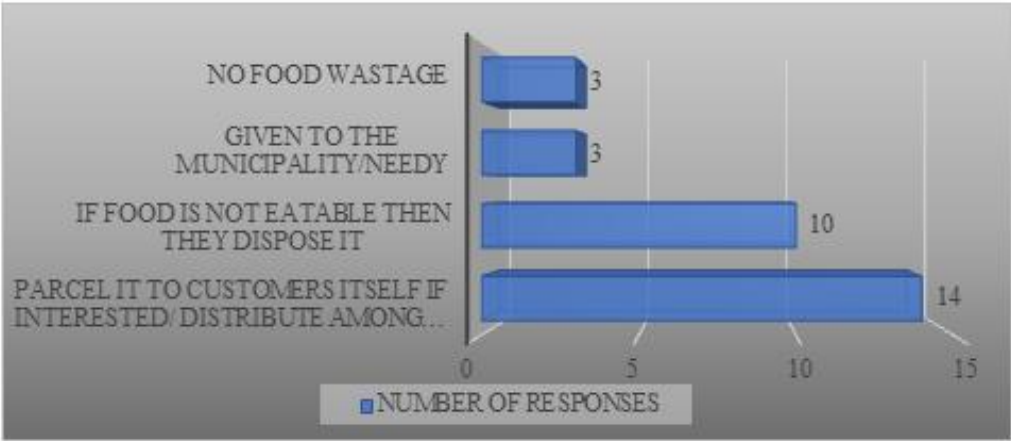
From the above graph, we can understand that most of the restaurants distribute the leftover food among the staffs only instead of throwing it. While only a few restaurants give the leftover food to the needy. Thus, we can conclude that the number of restaurants giving food to the needy should be increased so that the food can be had by the less fortunate people instead of wasting it.

6. Major Types of Food Waste in Restaurants
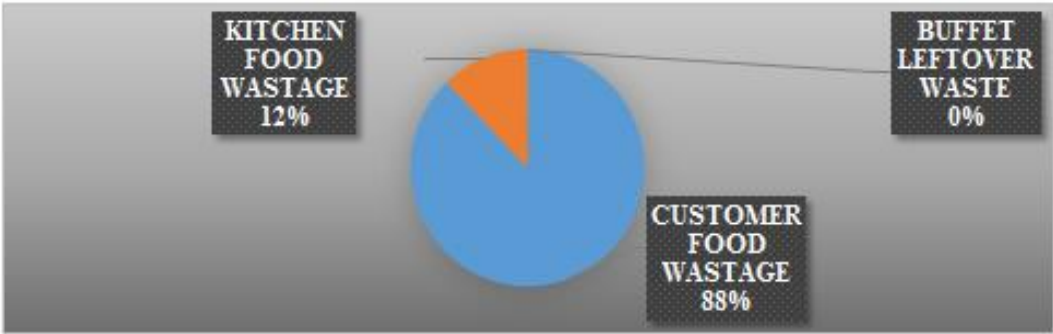
From the above chart we can see that customer food wastage is more, thus we can say that they should order according to their need so that their money and food is not wasted. Even the restaurants can also give some additional benefits to customers who waste less food as it may motivate the customers to reduce the food wastage from their end.

7. Sustainable Initiatives Undertaken by Restaurants in Regard to Reduce the Food Wastage
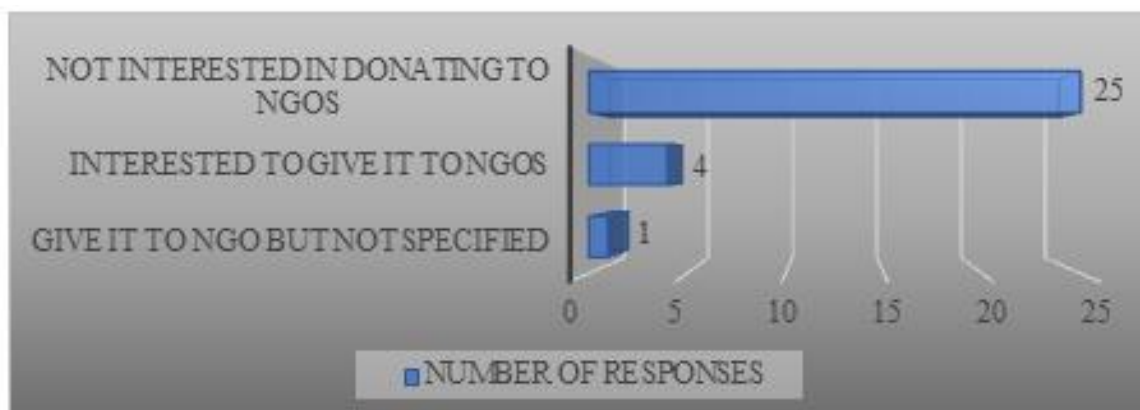
From the above graph we can see that most of the restaurants prepare the food after the order comes in order to reduce food wastage. While other restaurants take various sustainable initiatives like they give incentives and training to staffs, give the surplus/leftover food to poor people and so on. But we can see that some restaurants did not take up any initiatives to reduce food wastage thus, such restaurants also should take the initiatives so that the food wastage can be minimized, and food can be availed to needy people instead of wasting it.

8. Challenges Faced by Restaurants in Reducing Food Wastage
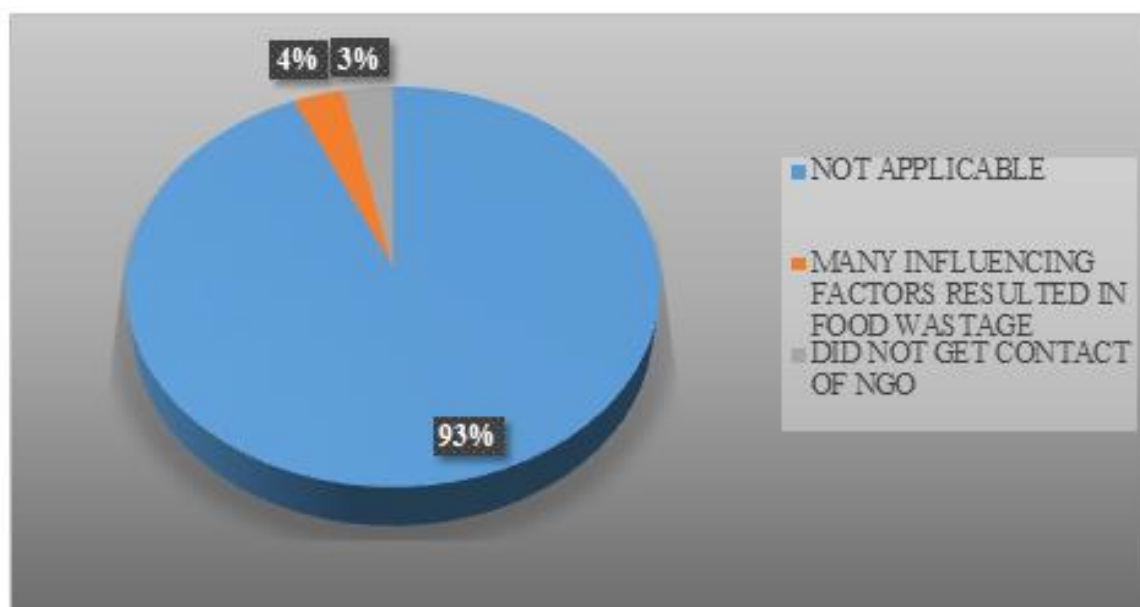
From the above chart we can consider that most of the restaurants do not face any challenges in food wastage, while only few of them faces certain challenges like due to influencing factors some food is wasted, and they did not get the contact of NGO to provide the surplus/leftover food. Thus, we can conclude that NGOs redistributing the food should make their NGOs famous enough so that the restaurants can contact those NGOs while they have the surplus/leftover food.

9. Whether Restaurants are Interested in Donating Food

From the above graph we can consider that most of the restaurants are not willing to give to NGOs as they distribute the surplus/leftover food among staffs or give it to the needy there itself. Thus, we can conclude that more NGOs must be involved in donating leftover food from restaurants to needy so that the food wastage can be minimized.

10. Reason for not Donating Leftover Food.
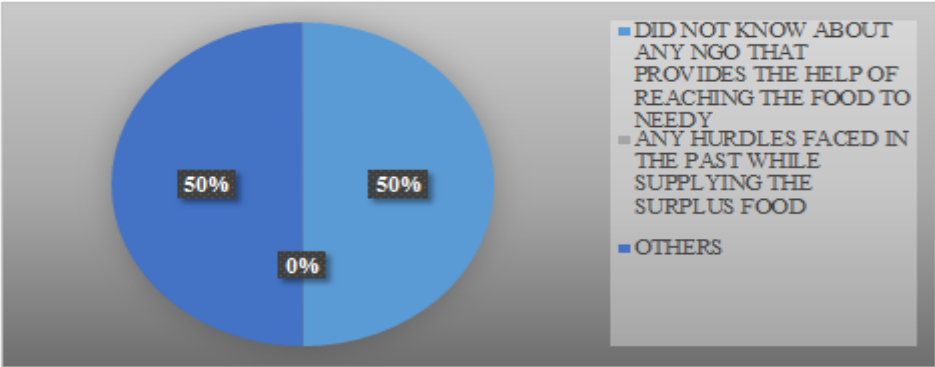
From the above chart we can understand that there are very less NGOs that are involved in redistribution of food and those NGOs are not known to restaurants, so the number of NGOs involved in redistribution of food must be increased and also must be made famous enough so that the food can be availed to the needy people through those NGOs. While other restaurants addresses various other reasons for not providing excess food to NGOs like food wastage is minimal, they only give to needy people by themselves and so on.

B. Householder's Response

1**.** Type of Food Ending Up in Garbage at Home
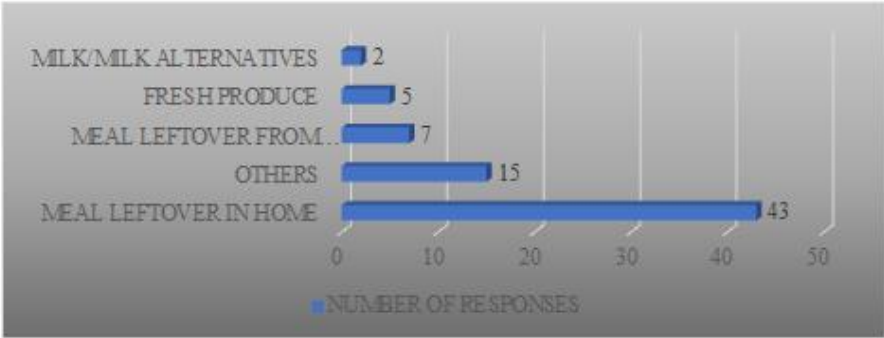
From the above graph we can understand that the type of food that is wasted is most is the meals that is leftover at home apart from that a miscellaneous response have been received for the category of others then leading to a decrease in the responses received for other categories like meal leftover from restaurant parcel, fresh produce and ilk/milk alternatives.

2. Top Reasons for Households to Avoid Food Waste

As to know the awareness level among the respondents regarding the food wastage there is mixed responses that have been received for different reasons to avoid the food wastage. The high level of response has been received for the reason to control wastage of food is to reduce waste in all aspect. Then 14 responses have been received for ensuring food access for all followed with a decreasing response for the reduce amount of money spent, follow long time habits, concerned about the environment.

3. Ways by Which Households Manage Daily Food Wastage
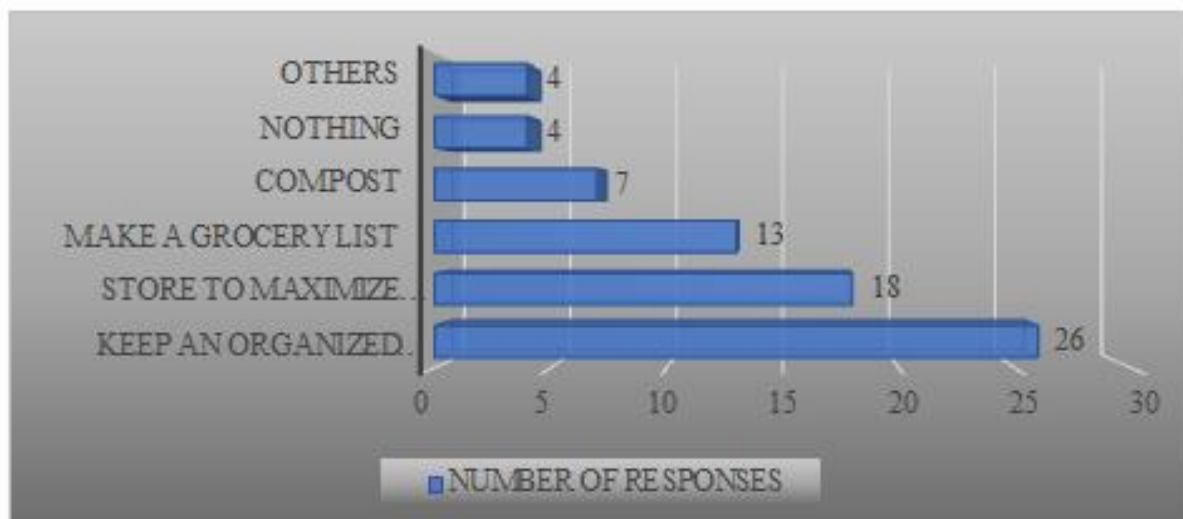
With respect to ways in order to manage the daily wastage of food among the respondents most of the responses were received to keep an organised pantry followed by 18 responses for store to maximize shelf life, 13 responses for make a grocery list, 7 responses for compost. Finally with a minimum response of 4 each for both nothing and others.

4. Measures/ Suggestions by Households to Treat Food Leftover
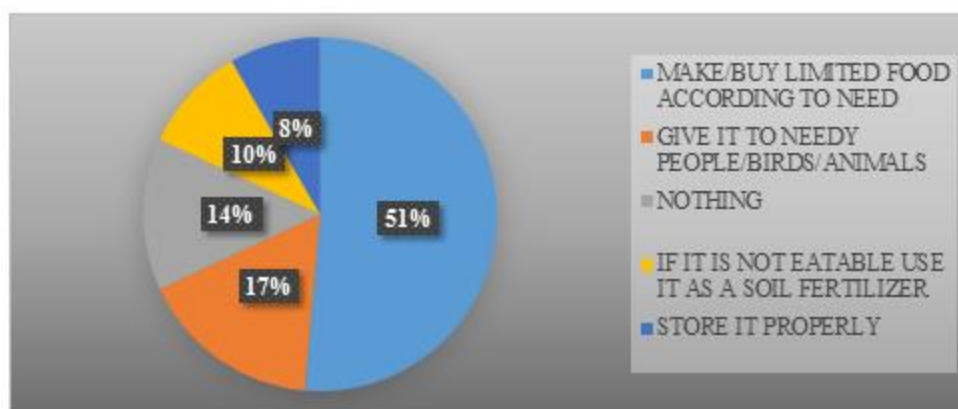
From the above graph we get to know about various techniques that the household are using to reduce the food wastage from their end. High responses were received to make/buy limited food according to need as people considers this as an important measure in reducing the food wastage followed by to give extra food to street animals or poor people. A moderate response was received for an important suggestion from their end is we can use the not eatable food as a soil fertiliser, so the wastage can be recycled in a better manner, followed by storing the food properly so it can be reused for the other day rather than wasting it.

[E] FINDINGS AND SUGGESTIONS

➢ FINDINGS-

A] RESTAURANTS -

1] The research paper shows that a range of measures and activities is being undertaken with regard to minimise the food wastage in restaurants and availing the leftover/surplus food through NGOs to needy people.

2] But the number of restaurants taking such initiatives to reduce food wastage is comparatively very less.

3] From the survey it can understood that most of restaurants are not concerned about food wastage by which they are not undertaking any initiatives to reduce food wastage even though there is a limited / minimal kitchen wastage like peeling of vegetables, etc as the food wastage from consumer end is more in restaurants.

4] Current techniques/ methods used by restaurants to reduce food wastage:

i. Monitoring of food wastage reductions.

ii. Preparing the weekly reports.

iii. Giving incentives to workers in terms of gifts, kind or any other reward in order to motivate them.

B] Non-Government Organizations [NGOs] -

1] From the survey it can be considered that the number of NGOs involved in donating the leftover food from restaurants to less fortunate are very much limited.

2] And the reason for which most of the NGOs are not involved in taking the surplus food is lack of funds as they only have to bear the transportation cost to collect the surplus/leftover food.

3] Also, in accepting the surplus/leftover food from restaurants, trust issue may arise on first time accepting the food, and for the safer side most of the NGOs cook the food by themselves and not willing to accept the leftover/surplus food from restaurants.

4] There is lack of government support in terms of limited schemes in overall country and in each state which promotes food waste reduction.

C] Household -

1] It can be inferred from household responses that there has been a lot of food wastage in consumer's households rather than in restaurants and most type of waste ended up in garbage of households are food wastage and the major reasons for throwing the food in dustbin as it got spoiled or stale.

2] But the people are equally concerned about food wastage for which they are using various techniques / initiatives to minimise the food wastage from their end by using not eatable food into soil fertilisers, keep an organised pantry, give it to needy people/ birds/ animals, etc

➢ SUGGESTIONS-

A] For Restaurants -

1] Avoid over buying of stock even though the supplier has a good deal on bulk purchase as excess stock may led to spoilage in storage itself.

2] Use the "FIFO" rule - "First In, First Out" i.e. storing newer stock routinely behind the older stock in order to avoid the chance of wastage of older stock.

3] Give customers more customised menu options like the freedom to select the side dishes of their own choice and offering the foods in portions according to need of customers.

4] Compost the not eatable foods into soil fertilisers, etc.

5] Restaurants can also inculcate various initiative in reducing the food wastage from the customer end by engaging them in activities through conducting contests , providing various coupons , etc for reducing the food wastage created from the consumer side. For e.g. Restaurants can give away coupons in a month through lottery system to those customers who never waste food when they visit the restaurants.

6] As a part of the above initiative system the restaurants can also make their employees a part of this activity towards the wastage of the food by gathering a feed back form filled from the customers behind which the employees involved in taking the orders of those customers will be submitting a report related to food wastage done by that customer.

7] This would ultimately help in making a step towards reducing the food wastage with the help of their employees and customers.

B] For NGOs -

1] NGOs should update their official website timely by providing correct information about the activities that they undertake so that it lead to lesser misunderstanding about donating among household i.e. donors.

2] The NGOs should make such provisions by which they can accept the leftover/surplus not only from weddings, parties but also restaurants.

3] More collaborations should be done by NGOs with restaurants so that whenever there is more food they can contact such NGOs.

4] Awareness should be created by NGOs about their food donation through campaigns, advertising through social media, etc by which the people, restaurants can contact them whenever there is surplus/leftover food.

5] They can also arrange many awareness campaign in such a way so that it has a good impact on people and thereby they understand the serious issues of food wastage and try to reduce/minimise it from their end.

C] For Households -

1] The people should have a proper planning for buying the groceries as per their own requirements which could be a solution to minimise the food wastage in each and every household.

2] Instead of wasting or simply throwing away food in dustbin, the people should proactively indulge in various activities like reusing the food into another dish by which the food life can be extended or if it is not reuseable they can give it to needy people in their vicinity.

3] Make a weekly menu meal which will help the people to organize their food usage and cut back on waste.

4] Freezing the extra food can help to preserve them for later use and prevent them from spoiling as many fruits and vegetables can be kept well in freezer by extending their shelf life and reducing waste.

5] Take food in the plate according to the need as the food taken on the plate cannot be given to anybody else, thus it has to be thrown away.

D] For Government –

1] The Government shall give recognition to restaurants which in turn will motivate such restaurants which are involved in bringing down the food wastage.

2] They can also offer recognition/ reward in kind to the NGOs.

❖ CURRENT SCENARIO & RECOMMENDED MODEL FOR MINIMISING FOOD WASTAGE PROBLEM

Before our analysis it is observed that whatever the reason behind which the food was wasted without giving it a second thought of how such wastages can be reduced even though we have been taught and made to practice that we should not waste food which has been a traditional advice by our ancestors to us. Then too its relevance is not seen even in this 21st century. Hence our model aims in transforming the thoughts of the people in reducing the food wastage occurred by them in various possible ways that would be brought into action in this fast-moving world. And our thought was not only restricted to minimize the wastage of food but also in utilizing the best possible manner in re-using such food as possible which is explained in our model.A small flow chart representation of our model in comparison with the situation that prevailed before our conduct of research: -

CURRENT SCENARIO
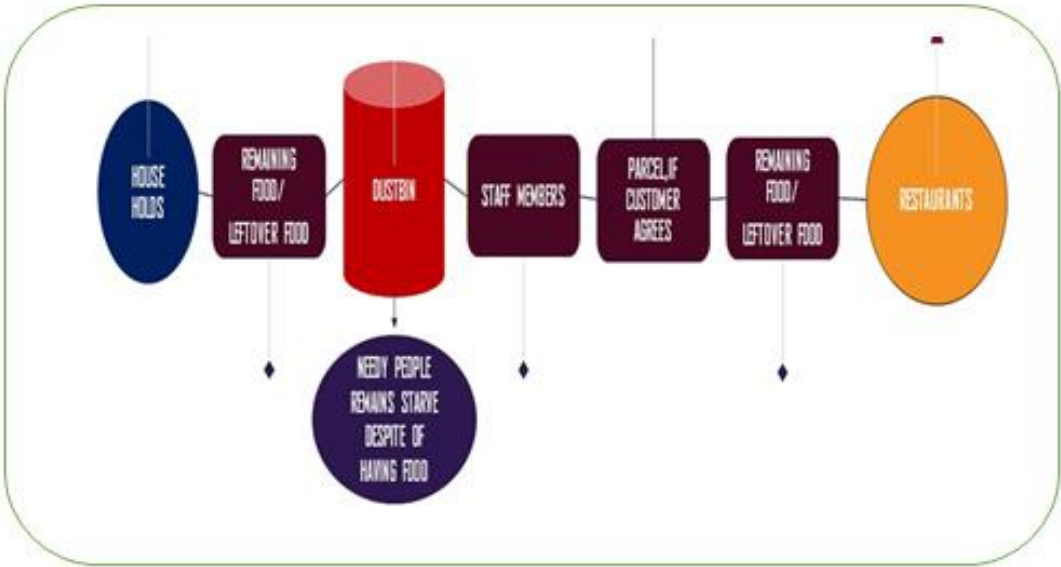
RECOMMENDED MODEL
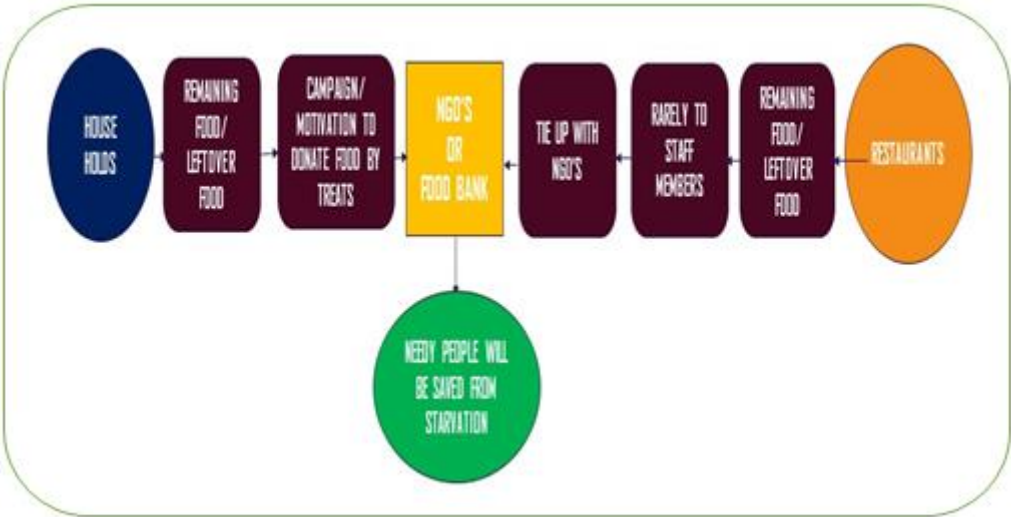
Source: Compiled by the Researchers

[F] CONCLUSION

Food waste is a significant challenge for the country. This study aims to spread awareness about the issue of food wastage among people, restaurants and also educate them towards building a platform of a sustainable food system. This study employed qualitative method by interviewing on-site restaurants manger/owners, providing first hand data of food waste in restaurants while qualitative and quantitative method was employed by NGOs and household. The findings of this research shall contribute to knowledge of food waste management in restaurants and in households. In addition to these it would be a better solution if the following hierarchy practice is performed by every people of the society for food wastage reduction. Like it is similar to the funnel system in which the process involves in reduction of the food wastage by following the technique in the first stage itself we would try to avoid the food wastage from reducing wastage as much as possible. Then we must try to re-use the surplus food to the needy, hence making the efficient use of the food as much as possible. Then it will undergo the reprocess system in which the remaining food which were not suitable for the above process will be involved in reprocess. Then the residual which were unsuitable for the above process gets shuffled to the next process of treating the unavoidable food waste and try to recover the energy which would be obtained like biogas, methane, etc. Finally, the remaining residual would be disposed thus leading to an efficient usage of the wastage of food created.
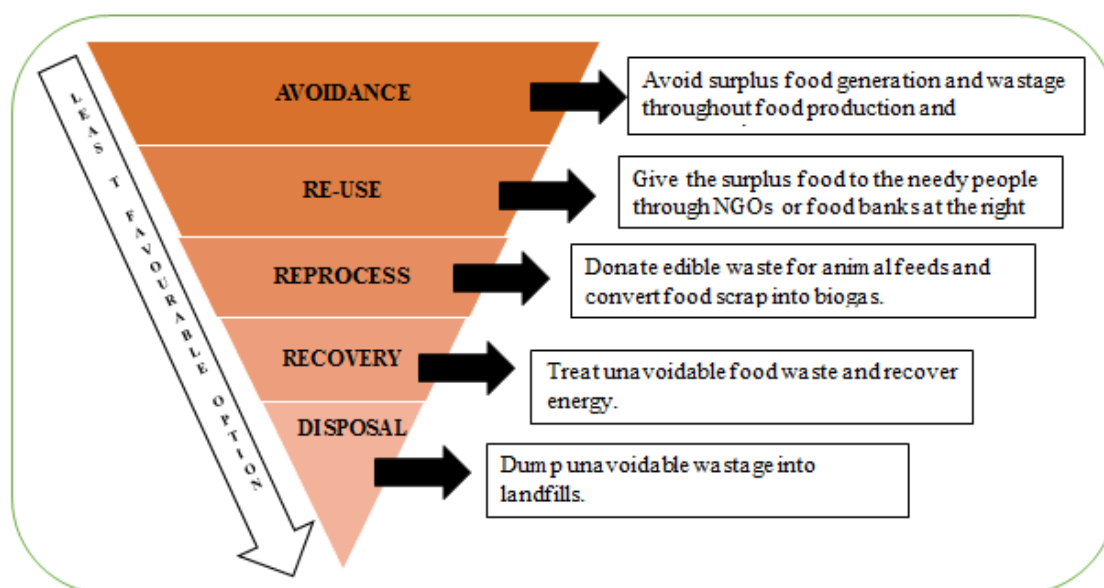
Source: Compiled by the Researchers

The practical implication of this study is the interpretation of models through which food wastage could be reduced and have been efficient enough in delivering an optimal solution. The multifaceted approach to tackle this challenge can be done through collaborative efforts. Governments, NGOs, and individuals must recognize their roles in mitigating food wastage's adverse effects on nutrition and sustainability. By raising awareness, optimizing supply chains, redistributing surplus food, and implementing policy reforms, we can collectively pave the way for a future where food resources are valued, utilized efficiently, and directed towards nourishing communities and preserving our planet. Through such concerted actions, we not only combat food wastage but also sow the seeds of positive change for generations to come.

REFERENCES

1. Graham-Rowe, E., Jessop, D. C., & Sparks, P. (2015). Predicting household food waste reduction using an extended theory of planned behaviour. Resources, Conservation and Recycling, 101, 194-202.

2. Hebrok, M., & Heidenstrøm, N. (2019). Contextualising food waste prevention-Decisive moments within everyday practices. Journal of cleaner production, 210, 1435-1448.

3. Jessica Aschemann-Witzel, Jacob Haagen Jensen, Mette Hyldetoft Jensen, Viktorija Kulikovskaja, (2017) Consumer behaviour towards price-reduced suboptimal foods in the supermarket and the relation to food waste in households, Appetite,Volume 116, , Pages 246-258, ISSN 0195-6663, https://doi.org/10.1016/j.appet.2017.05.013.

4. Leverenz, D., Moussawel, S., Maurer, C., Hafner, G., Schneider, F., Schmidt, T., & Kranert, M. (2019). Quantifying the prevention potential of avoidable food waste in households using a self-reporting approach. Resources, Conservation and Recycling, 150, 104417.

5. Özbük, R. M. Y., & Coşkun, A. (2020). Factors affecting food waste at the downstream entities of the supply chain: A critical review. Journal of Cleaner Production, 244, 118628.

6. Parizeau, K., Von Massow, M., & Martin, R. (2015). Household-level dynamics of food waste production and related beliefs, attitudes, and behaviours in Guelph, Ontario. Waste management, 35, 207-217.

7. Schanes, K., Dobernig, K., & Gözet, B. (2018). Food waste matters-A systematic review of household food waste practices and their policy implications. Journal of cleaner production, 182, 978-991.

8. Stefan, V., van Herpen, E., Tudoran, A. A., & Lähteenmäki, L. (2013). Avoiding food waste by Romanian consumers: The importance of planning and shopping routines. Food quality and preference, 28(1), 375-381.

9. Williams, H., Wikström, F., Otterbring, T., Löfgren, M., & Gustafsson, A. (2012). Reasons for household food waste with special attention to packaging. Journal of cleaner production, 24, 141-148.

WEBLIOGRAPHY

1. https://www.researchgate.net/publication/358506294_Efforts_are_made_but_food_wastage_is_still_going_on_a_study_of_motivation_factors_for_food_waste_reduction_among_household_consumers

2. https://www.sciendo.com/pdf/10.2478/picbe-2020-0078

3. https://eprints2.undip.ac.id/id/eprint/6157/3/THESIS%20PRAYGOD%20BAB%20II.pdf

4. https://timesofagriculture.in/food-wastage-in-india-farm-to-bin/#:~:text=According%20to%20the%20UNEP%27s%20(United,food%20only%20followed%20by%20China

5. https://docs.google.com/forms/d/e/1FAIpQLSfNH-LO4p0zIEe3WAET48mrNmSgV_dtEoDcxxMWzSsQv46MRA/viewform?usp=sf_link

6. https://docs.google.com/forms/d/e/1FAIpQLScycP7EVmUYlk8k5pfFMmdCFtvUd0JUvA9z3JAJIcc3VNXoxw/viewform?usp=sf_link

7. https://docs.google.com/forms/d/e/1FAIpQLScetJGihpSbAXgiqHsVm87OHXOxrbsFSvAnRep1BjXEM6rJKg/viewform?usp=sf_link