

Food Waste Management: Study of Restaurants in Baner, Pune

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ABSTRACT

Food business is growing tremendously in Pune especially in developing areas like Aundh, Baner, Kalyaninagar etc. According to a statement, NRAI IFSR 2019 estimates Indian food service industry's market size at Rs 4,23,865 crore in 2018-19, which is expected to grow at a CAGR of 9 per cent to reach Rs 5,99,782 crore by 2022-23 . Vast number of foreign brands have entered Indian food business, even in Baner , there are many restaurants which has opened doors. Double income, hectic life style , new trends in restaurant market, young crowd staying in the locality have increased the foot fall at existing restaurants and also given birth to many. But with new restaurants and food business rising, there are many problems showing their presence. There are problems like parking, crowded places, garbage disposal problems, littering and problem like tremendous wastage of food .The huge amount of food going waste is major worry or it will harm environment in big way.

This research paper is an effort to make everyone and especially restaurant owners at Baner to be aware about the food waste management practices by collecting the accessible resources responses from the restaurant owners and employees working in those restaurants.

Keywords: Restaurants, Baner, Food, Waste Management

INTRODUCTION

Food and restaurant business plays major part in development of particular locality and gives major employment as well. It is significant entertainment and leisure sources for people staying in that locality. In Baner, Pune last few years major QSR chains like Dominos, Mac Donald's have come. There are many other restaurants like Nawab, Tails and spirit. There are few bars and pubs like Masala Bar and Bar Stock Exchange.

All these restaurants even though, they are different in their themes, they are connected with one common thread. i.e. each type of restaurants produces huge amount of food. This entire food is made from natural material and major quantity of food is wasted daily. Hence researcher feels sustainable practices must be introduced and food wastage should be avoided. Food wastage should be managed well as it is the biggest worry of environment friendly people of society. Restaurants make significant income from the food made in the

kitchen. To produce more income some time more food is cooked than expected covers, resulting in extra food which is unsold.

The accumulation of this waste and handling it is not only a economic difficulty but ecological issue too. Majority of this food waste is biodegradable and require enormous landfills to dispose it off. Many alternatives used which essentially escalate the budget dealing it and damaging environment by generating methane gas which provides greenhouse effect. It harms flora and fauna present in locality as it generates toxins because of this.

Competition in restaurant business is daily increasing as many restaurants are mushrooming in Baner. To attract customers, each one uses different techniques and strategies. To sustain in business, all wants to gain significant profit and give good quality food to their customers. Hence sometimes large quantity of food is made, to satisfy different clientele. Various food styling techniques are used, plate presentations styles are showcased. Doing so , huge portion of food is wasted. Sometimes customers order beyond their capacity to consume, and they waste as they cannot consume. Sometimes customers throw food as they don't like it. Some times food goes waste as they cannot finish entire portion as portion sizes are big than their requirement. Even to dispose of these left over food, there is cost involved and manpower needed. Other overheads like transportation and disposal adds extra money. There have effect to be convenient and cost effective solution to this. It is predicted that 15% more restaurants will be added to Baner area in 2020-21. It says that there will be many QSRs also gets added to this number. Obviously food waste generated also will be in increased volume. There will be great amount of resources wastage. Disposal of unused food is one of the main tasks for hotel industry as well for the society also. Due to the absence of appropriate plans and training the food waste is becoming significant problem for restaurant owners.

The current paper is an attempt to make the people aware about the various waste management practices which can be adopted by the hotel industry. It will not only reduce their productivity cost but also work for the sustainable development.

LITERATURE REVIEW:

Restaurant are the massive producer of waste. So it is very imperative to have on the food waste management plan in place for particular locality. Because of less awareness it is giving rise to many future issues. Hence to pay immediate attention to this problem is necessary.

Following are the thoughts which have been shared -

Cornell (1975), states in their study that restaurants are one of the major waste producers in the field of commercial kitchen.

Barton (2000), Writes in his study that the cost of food waste is estimated to the 40 percent of a plated meal.

Ferris (1995), Found in their study that a number of variables influences the amount of wastage these are government regulation, storage capacity, beliefs of the organization, labor cost etc.

Shankling (1998), States in his paper that effective strategy and practices can reduce the amount of waste There should be an effective kind of disposal method for waste food.

National Restaurant Association (2010) The estimated food waste is approximately 53 percent by the year 2010 in take away services. This clearly shows that this kind of practices generates more wastage of food. So the suppliers should work on the effective portion control practices, so that the waste can be minimized

MSW Manual (2000) states that Composting of hotel food waste is one of the best way to manage it. Compost is a perfect soil conditioner.

Curry (2012) writes in his study that almost 50 percent of total waste of hotel industry comes from the food waste.

Kirk (1995) Suggests that we can reduce the food waste by focusing on the packaging techniques and by the method of disposal.

Vikas Mohan (2017) stated that hotels do require commitment of the management and staff to manage their waste they need to spare time out to work and implement waste management strategies.

RESEARCH METHODOLOGY

The study is investigative in nature and in total 175 stake holders from various restaurants of Baner Pune was used. The research comprises kitchen and Service employees of the restaurant in Baner Pune. The objective of research is to realize pragmatic approach of a single objective that is to explore numerous practices to bring about the food waste in restaurants of Baner Pune.

Identification of reason of Food Wastages –

- Over Ordering
- Large Portions
- Extra Cooking
- Spoilage of Food
- Left Over Food
- Not paying attention to yield management
- Tremendous variety on offer
- Not liking the Food

Numerous practices manage the food waste in restaurants of Baner Pune.

- Portion Control
- Use of First in First out
- Proper Business Forecast

- Good Storage
- Waste Reduction
- Creating awareness and show casing Messages
- Reuse and Recycle
- Separate Garbage Bins
- Distribution of extra food in Staff Meals
- Vermiculture Plant

Contacting NGO and organizations like Robinhood Army , donating food to underprivileged and giving proper thought to Menu Mix are few more but these factors are not dwell on much.

There are 10 variable related to the practices to manage the food waste in Restaurant Business. All the variables were identified after the extensive review of existing literature.

Demographic Profile of the Respondents

		Number(Valid Percentage)
Age	Below 20	25 (22.22)
	20-30	55 (24.44)
	30-40	50 (33.33)
	40-50	45 (20)
Education	10+2	130 (80)
	Graduation	45 (20)
Gender	Male	150 (88.88)
	Female	25 (11.12)

This shows the demographic profile of respondents (Restaurant employees in Baner, Pune). In all, hundred and seventy Five respondents were contacted, in 33.33 % of employee were between the age group of 30-40 years. As for as their qualification is concerned, majority of the employees (80%) were 10+2, 20 percent were Graduates (with hotel management degree). As per the sex 88.88% of workers were gentlemen and the 11.12% of workers were ladies.

RESEARCH FINDINGS

Based on the secondary data 10 variables were recognized to distinguish the effective practices for waste management of food in Restaurants of Baner. Through structured questionnaire respondents were asked question on five point Likert scale. Factor analysis method is used to decrease these variables to restricted number of factors. The study is completed with the aid of rotated component matrix.

Thus reducing 10 variables to 2 factors, these are-

	Component		
Variables	1	2	3
Waste Reduction	.851		
Proper Storage	.823		
Recycling	.801		
Business Forecasting	.790		
Business Forecasting	.649		
Separate Garbage Bins		.859	
Creating Awareness		.800	
First in First Out Principle			.726
Surplus Food for Staff Meal			.658
Portion Control			.605

Factor 1- Five Variables are loaded in this factor these are Waste Reduction (.851), Proper Storage (.823), Recycling (.801), Business Forecasting (.790) and Vermiculture (.649)

Factor 2- Two variables are loaded in this factor these are Separate Garbage bin (.859) and Training (.800)

Factor 3- Three variables are loaded in this factor these are FIFO Practices (.726), Surplus food for staff meal (.658) and Portion Control (.605)

CONCLUSION

Bulk Production of food waste from Restaurants is such immense problem, so there is a enormous requisite to formulate a complete plan for waste management. In Restaurant industry maximum of the food wastes are compostable. The present study is an attempt to show that an effective waste management not only helps the organization to work for an eco-friendly environment but also helps them to earn profit out of it. Waste management is such a grave issue which desires the consideration of public as well government establishments. The present study not only helps the restaurants to adopt concrete waste management but also benefits the researchers to work in the concern field.

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