

RETHINKING THE BUFFET: A MOVE TOWARDS ZERO WASTE

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ABSTRACT

Changing Indian lifestyle led to increase in number of people eating out, thus shifting food waste from home to restaurants. In Buffets, guests self-serve food in an all-you-can-eat fashion thus leading to food wastage. Food wastage is said to have severe environmental and social concerns. The paper reflects upon how this problem of food wastage leads to environmental damage and what can be done to curb it for a more sustainable growth of the Indian hospitality industry.

INTRODUCTION

THE BUFFET CULTURE AND FOOD-WASTE ISSUE

- Buffet meals increases hotel performance by increased spending by guests and by increased satisfaction.
- People overfill their plates due to abundance of food displayed at no extra costs.

FOOD WASTAGE AND SOCIAL IMPACT



**194.4 million (14.5%)
Indian population is
undernourished**

Source: FAO report, 2019



**India ranked 103 in 119
countries for proportion of
undernourished**

Source: Global Hunger Index 2018

FOOD WASTAGE AND ENVIRONMENTAL IMPACT



**1 kg food waste generates 2 kgs of CO2 emissions
leading to depletion of 2.9 tons of natural resources.**

Source: BIO Intelligence Services (2010)



**Unconsumed food in landfill releases methane
which is 25x more harmful than CO2**

Source: EPA (2016)



**One-third of the food produced each year goes
uneaten**

Source: WRI & Rockefeller Foundation (2018)

MATERIALS AND METHODS

Secondary data like research articles, newspaper articles and industry reports are used. The objectives of this paper are:

- To draw attention towards the environmental impact of food wastage through hotel Buffet in India.
- To find key reasons leading to food wastage and measures to food waste

CONCLUSIONS

Buffets give the freedom to the guests to pick and self-serve food from a spread of delicacies which increases the chances of food wastage. Restaurants should work in a sustainable direction by reducing environmental impact of wasted food by following the strategies submitted in this proposal.

INDUSTRIAL SIGNIFICANCE

Hospitality industry can save unnecessary cost in both food purchasing and food production by decreasing plate waste thus being environmentally sustainable. Also, this paper calls for more start-ups and volunteer-led organizations who can transport excess food from hotels to people in dearth.

TECHNOLOGY READINESS LEVEL: This poster reports basic principles observed from previous research works and several articles and can be used for future research interest

RESULT

Reasons of food wastage in Buffet setting in Restaurants:



**Tragedy of commons
make Guests overfill
their plates**



**Dishes replaced long
before they are
completely empty to
maintain the beauty.**



**Children pile up more
food than what they can
eat (Juvan et.al.(2018))**



**Lack of standardized
food donation services**

Suggested measures to curb food wastage in buffet setting:



Getting Estimates

Estimating number of guests arriving helps in production forecasting



Smart Display

Use 'Rescued fruits/vegetables' for decoration



Reducing the Serving Size

20% less food wastage by changing plate size from 24cm to 21cm. (Kallbekken and Saelens(2012))



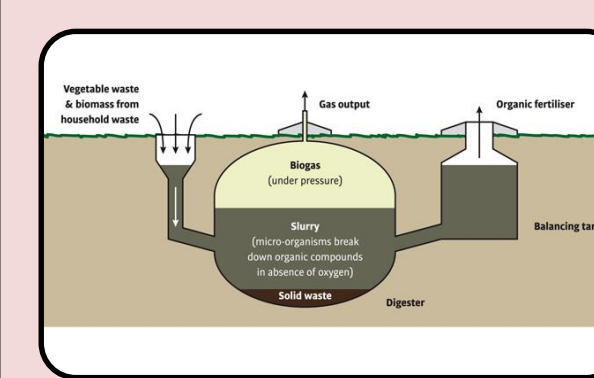
Prepare Live

Perishable dishes should be cooked at live stations to reduce food wastage.



Changing mindsets

Install software to weigh food wastage and its carbon emission to sensitize people



Install Biodigesters

ITC Maurya Delhi's Bio-Urja converts food waste into gas which is used as cooking fuel.



Community Efforts

Donate excess food from buffet to people in need. NGO's like Feeding India and Robin Hood Army are doing this in India

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