

# A Study on the Zero Food Waste Mindset and Practices Among Young Adults with Special Reference to Coimbatore District

Assistant Professor Dr. G. Kowsalya, Mr. Pavithran S

Department of Commerce, Rathinam College of Arts and  
Science.

**Abstract** – Food waste is a critical global issue with severe economic, environmental, and social consequences. In India, approximately 40% of food produced is wasted, contributing to greenhouse gas emissions, resource depletion, and food insecurity. Young adults, as key decision-makers of the future, play a pivotal role in transforming food consumption patterns. This study examines the zero food waste mindset and practices among young adults in Coimbatore district. It identifies the level of awareness, behavioural patterns, and the barriers they face in adopting zero waste food habits. The research also explores the influence of social media, education, and household practices on their food waste behaviour. The findings indicate that while many young adults are aware of food waste issues, actual adoption of waste-reduction practices remains inconsistent. The study concludes with actionable suggestions for promoting zero food waste culture among youth.

**Keywords** – Zero Food Waste, Young Adults, Food Consumption, Sustainable Practices, Coimbatore District

## I. INTRODUCTION OF THE STUDY

The concept of zero food waste refers to a mindset and lifestyle in which individuals aim to minimize the amount of food discarded at every stage — from purchase and storage to cooking and consumption. In a country like India, where millions face hunger and malnutrition, food waste represents both a moral failure and a missed economic opportunity. According to reports by the Food and Agriculture Organization (FAO), approximately one-third of food produced globally for human consumption is either lost or wasted every year.

Coimbatore district, known as the "Manchester of South India," is a rapidly urbanizing city with a growing young population engaged in educational institutions, IT companies, and businesses. Young adults in Coimbatore are exposed to modern lifestyles, fast food culture, and food delivery applications that often contribute to overconsumption and food waste. At the same time, increasing environmental awareness and the influence of global sustainability movements are encouraging many young people to reconsider their food habits.

Despite the rising awareness, there remains a significant gap between knowledge and action among young adults regarding food waste. This study aims to understand the depth of the zero food waste mindset among young adults in Coimbatore, identify the practices they follow, and assess the challenges that prevent them from embracing a fully zero-waste lifestyle.

### Objectives of the Study

- To assess the level of awareness about zero food waste among young adults in Coimbatore district.
- To examine the food waste habits and practices followed by young adults in daily life.

- To identify the factors influencing zero food waste mindset and behaviour.
- To analyse the barriers faced by young adults in adopting zero food waste practices.
- To suggest measures to promote zero food waste culture among young adults.

## II. STATEMENT OF THE PROBLEM

Food waste is one of the most pressing sustainability challenges of the 21st century. While global movements like the United Nations Sustainable Development Goal 12.3 aim to halve per capita food waste by 2030, ground-level implementation remains weak, especially among younger demographics. In Coimbatore district, a city experiencing rapid urbanization and lifestyle changes, young adults are increasingly exposed to food delivery apps, buffet dining, and packaged food culture — all of which contribute to elevated food waste.

Despite growing environmental awareness through social media and education, many young adults in Coimbatore lack a structured zero food waste mindset. There is limited understanding of how individual food habits contribute to larger environmental problems. The disconnect between awareness and action creates a significant problem. This study addresses the gap by exploring the zero food waste mindset and practices among young adults and identifying areas where targeted interventions are needed.

### Limitations of the Study

- The study is confined to Coimbatore district and may not be representative of other regions.
- The sample size is limited, which may affect the generalizability of findings.
- Responses are self-reported and may be subject to social desirability bias.

- The study focuses only on young adults and does not include other age groups.

### III. RESEARCH METHODOLOGY

#### 1. Research Design

The study adopts a descriptive and analytical research design to understand the zero food waste mindset and practices among young adults.

#### 2. Data Collection

- **Primary Data:** Collected through structured questionnaires distributed among young adults (aged 18–30) in Coimbatore district.
- **Secondary Data:** Gathered from journals, published research articles, government reports, and websites related to food waste and sustainability.

### IV. REVIEW OF LITERATURE

#### Parfitt, Barthel & Macnaughton (2021)

Parfitt et al. examined food loss and waste at the consumer level in developing countries. Their study revealed that consumption stage waste is higher in urban areas due to changing dietary preferences and over-purchasing. They found that young urban consumers tend to waste more due to improper meal planning and poor storage habits. The study emphasized the importance of behavioural change campaigns targeted at youth. They concluded that education and community engagement are critical for reducing food waste at the household level.

#### Thyberg & Tonjes (2020)

Thyberg and Tonjes explored the drivers of household food waste among different age groups. Their research identified that attitudes, knowledge, and social norms significantly influence food waste behaviour. Among young adults, peer influence and social media were found to play a strong role in shaping food consumption patterns. The study highlighted that the zero food waste mindset is growing among environmentally conscious youth. They recommended incorporating food waste reduction into school and university curricula to build long-term habits.

#### Ganglbauer, Fitzpatrick & Comber (2019)

Ganglbauer et al. investigated the relationship between digital technology and food waste management among young adults. Their study found that food tracking apps and recipe suggestion tools can significantly reduce waste by promoting efficient meal planning. The research highlighted that tech-savvy young adults who use digital tools for grocery planning generate less food waste. The authors also found that social media platforms play a dual role — promoting food culture that encourages overconsumption and simultaneously raising awareness about food waste. The study called for greater integration of sustainability messaging in food-related digital platforms.

### V. DATA ANALYSIS AND INTERPRETATION

Table 1: Level of Awareness About Zero Food Waste Among Young Adults

Awareness Level	Respondents	Percentage
High	32	32%
Moderate	48	48%
Low	20	20%
Total	100	100%

**Interpretation:** The table reveals that 48% of young adults in Coimbatore have moderate awareness about zero food waste, while 32% demonstrate high awareness. Only 20% have low awareness, suggesting that the concept is familiar to most respondents but deeper understanding and consistent practice remain areas of improvement.

Table 2: Common Food Waste Practices Among Young Adults

Practice	Respondents	Percentage
Over-ordering food online	38	38%
Discarding leftovers	27	27%
Improper food storage	20	20%
Buying excess groceries	15	15%
Total	100	100%

**Interpretation:** The most common food waste practice among young adults is over-ordering food online (38%), followed by discarding leftovers (27%). This reflects the impact of food delivery culture and lifestyle habits on food waste generation among the youth of Coimbatore.

Table 3: Barriers to Adopting Zero Food Waste Practices

Barrier	Respondents	Percentage
Lack of time for meal planning	35	35%
Limited knowledge of waste-reduction techniques	30	30%
Peer and social influences	20	20%
Lack of motivation	15	15%
Total	100	100%

**Interpretation:** The primary barrier to adopting zero food waste practices is lack of time for meal planning (35%), followed by limited knowledge of waste-reduction techniques (30%). Social influence and lack of motivation also play notable roles, indicating a need for both education and attitudinal change among young adults.

### Findings

- Nearly half of the young adult respondents (48%) possess only moderate awareness about zero food waste concepts and practices.
- Over-ordering food through online delivery applications is the most prevalent food waste behaviour among young adults in Coimbatore.
- Discarding leftover food is a common practice, often due to lack of knowledge about preservation and reuse techniques.
- Time constraints and busy academic or professional schedules are the primary barriers to consistent meal planning.
- Social media influences food consumption behaviour both positively (awareness campaigns) and negatively (over-ordering trends).
- Young adults who received sustainability-related education are more likely to adopt zero food waste practices.

### Suggestions

- Introduce food waste awareness campaigns in colleges and universities across Coimbatore district to build a zero waste mindset from an early age.
- Encourage the use of meal planning apps and digital tools that help young adults track and minimize food waste.
- Promote awareness of leftover management and creative cooking techniques through social media and community workshops.
- Food delivery platforms should introduce portion-size flexibility and anti-waste nudges to reduce over-ordering behaviour.
- Government and NGOs should collaborate to organize community-level composting and food donation drives to channel food waste constructively.
- Sustainability curricula should be integrated into higher education to cultivate responsible food consumption habits.

## VI. CONCLUSION

This study concludes that while young adults in Coimbatore district are increasingly aware of the zero food waste concept, the translation of awareness into consistent practice remains a significant challenge. Behavioural factors such as over-ordering, discarding leftovers, and poor meal planning continue to drive food waste among this demographic. The study highlights that systemic factors including the convenience economy, social media

influence, and time pressures are major contributors to food waste behaviour.

Addressing food waste among young adults requires a multi-pronged approach involving education, digital tools, community engagement, and policy support. With the right interventions, young adults in Coimbatore can become powerful advocates and practitioners of zero food waste living, contributing to a more sustainable and equitable food system. A zero food waste mindset is not merely an environmental responsibility — it is an economic and social imperative for the younger generation.

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