

# A STUDY ON SUSTAINABLE AND GREEN PRACTICES CONDUCTED IN FOOD OUTLETS IN PUNE CITY

## Abstract

This research paper is an attempt to highlight the sustainable and green practices adopted and conducted in the Foodservice outlets with special reference to the city of Pune, India. The Foodservice outlets conduct food cooking and serving to the customer on the daily basis.

This is also to find out the about sustainability awareness, knowledge, and green practices adopted in the food outlet to the customer, employer, and employees of the food outlets. Available food outlets were contacted in Pune city for the survey and a google form link is used to conduct the survey. There were 30 restaurant and normal food units approached for this survey.

Overall it is found that there is less awareness and knowledge about sustainable development and green practices among the customer, food owners, and employees like cooks and waiters. Although there is scope and hope to exhilarate the thought of sustainability and green initiatives in the food outlet. This study was conducted to bring forward the importance and awareness of sustainability and green practices in the food outlets (customer, employer, employee), further study may be conducted on this topic to enhance the green initiative.

**Keywords:** Sustainable, Green practices, Food outlet, Food Service

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## I. INTRODUCTION

**United Nations Brundtland Commission** defined sustainability as meeting the needs of the present without compromising the ability of future generations to meet their own needs (<https://www.un.org>). Sustainable development takes into account the needs of future generations while managing the present needs. Sustainability is concerned with the balance of environmental, economic, and social aspects.

A huge growing emphasis on sustainable and green development within the hospitality industry globally. This incorporates the connections between the restaurant owner, the customers, and people working as cooks and waiters, linking them together, as green service providers. All the stakeholders must be trained and motivated and capable of providing green and sustainable service.

- 1. Sustainable food outlets:** Food outlets offer healthy cuisine that also takes care of the planet. This type of restaurant has come out of the need to meet ever-higher numbers of consumers who want sustainable healthy food and who are aware that having certain lifestyle habits. Eating sensibly and sustainably is being aware of what you eat and adjusting you're eating habits accordingly. When you pay attention to the sustainability of food, you think, for example, about animal welfare, and the fair trade of products and you take the environment into account. Within these topics, there are several other things to do with sustainability in the food industry. Food sustainability has explored the three main subjects in depth in nine themes in which sustainability plays a role: water & soil, energy, emissions to the air such as greenhouse gases, transport, residual flows, biodiversity, labor, fair trade, and animal welfare and health. So when you think about more sustainable food, there is a lot to consider. We will give you as complete a picture as possible of what sustainable food is and how you can get started with it yourself.
- 2. Key features of sustainable food outlet:** The key features of sustainable food outlets are organic produce, local consumption, and, the staff to the carbon footprint. The products and processes are environmentally friendly. For a sustainable food outlet, we need to take into account several factors: that run from the social and the economic (local suppliers and efficiency) to those linked to the environment (carbon footprint, waste management).
  - **Animal welfare:** This is about taking into account how animals are cared for, both mentally and physically. There are several important points that animal welfare organizations are working on according to the Nutrition Center.
  - **Nature and environment:** In addition to fair agreements and animal welfare, nature and the environment are also important pillars of sustainable food. When growing food, for example, overfishing, land use, and deforestation must be taken into account. There is a growing emphasis on sustainability within the hospitality industry. Food outlets which are often small businesses, operate poorly structured and are less valued to green practices do not support green practices. More awareness and understanding through suitable agencies are required, also research on green practices to support these businesses.

3. **Sustainable and green dining** : Sustainable and green practices for food outlets mean operating in a way that protects, and preserves, the use of organic, and the natural environment advocates social equity and quality of the people and communities. It contributes to economic prosperity for all.
  - **Reduce/alternative energy**: Food outlets have many alternatives and opportunities for cost savings through energy efficiency upgrades and renewable energy management. The use of an Energy Management System to allow for exact tracking and monitoring of energy use across the foodservice facilities. The new digital devices support reducing and saving energy.
  - **Zero garbage waste**: Garbage could be converted into compost and used as organic fertilizer for gardens and farms. Food waste can be converted as an opportunity for many food outlets to save money and enhance public perception and community relations. All these financial losses are much higher for the food waste that's closer to the fork than to the farm, because all the costs of agriculture, production, and distribution are embedded in that waste. The official certification program can be a great guide for businesses to move their entire facility to zero waste.
  - **Reduce & reuse water waste**: Water is the most scarce commodity. Water conservation and recycling reusing are essential to all food outlets. It is important to understand the huge economic and social benefits of water reduction in restaurants. Reducing water use not only directly saves money on the water bill, but also saves money on the energy used to pump the water. The energy used to warm water, and the costs associated with sending the water off to sewage to be treated.

## II. OBJECTIVES

1. To study the sustainable and green practices adopted by the food outlets in the city of Pune.
2. To understand the awareness about sustainable and green practices in food outlets.
3. To discuss the connection among all the stakeholders of sustainable and green practices.

## III. LITERATURE REVIEW

Research and study into the factors that are important to making the food business more sustainable and adopting green practices are divided into three pillars: food outlet owner, the guest, and employees. There is a lack of suitable and substantial literature on sustainable and green practices in the food business, especially in developing countries like India.

1. **The Food outlet owner**: Food outlets vary in size and operations i.e. small and medium-sized businesses. In these situations, big food outlets likely have a vision of sustainability and green practices that are imposed on the organization. The study shows that small and medium-sized businesses are limited in their capacity to be innovative in terms of increasing sustainability scores.

Owners of these businesses are often highly value-driven (Garay & Font, 2012; Tzschentke, Kirk, & Lynch, 2008), and these businesses have simple structures (Klewitz & Hansen, 2013, Walker et al., 2008). These features are conducive to the transition towards increased green practices and sustainability.

2. **The Customers:** There is a demand for sustainable foodstuffs and being sold (Monitor Duurzaam Voedsel, 2013). Awareness is the key to making sure that customers ask for sustainable food and green practices. The existence and growth of retailers such as Marqt ([www.marqt.com](http://www.marqt.com)) are evidence of the demand for sustainable food. These developments also indicate that research results into an eagerness to buy sustainable food should probably be treated as snapshots in time and that continuous research should be carried out into changes in that willingness.
3. **The Employees:** As we mentioned the three stakeholders and pillars who could bring sustainable and green practices into the food business, the third one is the employee, the chefs, cooks, and the servers who prepare and serve the food to the customer. The employee must be well trained and aware of the sustainable and green practices to promote the change in the food outlets. The entire menu of food and commodities is handled by the people working in the food outlets so this is a very important pillar to carry and conduct the green practice regularly.

#### 4. Green practices in food outlets

- **Recycling and composting:** There are many waste products that can be recyclable in food outlets. There are glasses, plastic, metal, cardboard, and aluminum. This can be segregated as dry waste and wet food waste further composting to reduce the solid waste and improves the quality of the soil.
- **Green practices in food outlets**
  - Recycle all dry paper, plastic, cardboard, glass, and aluminum at the back of the house
  - Color-coded recycling bin in store (Self-service restaurant setting)
  - Food waste composting programs
- **Energy and water-efficient equipment:** Devices and equipment could be installed in the food outlets to conserve energy.
  - Use flow restrictors on faucets, low-flow toilets, and waterless urinals
  - Water upon request by the glass.
  - Avoid plastic water bottles
  - CFL light bulbs or LED use
  - Use motion detectors for lights in the restroom
  - Use of a system that monitors and controls comfortable temperatures efficiently with
    - the HVAC(Heating, Ventilating and Air Conditioning) system
    - Keep the entrance door closed or use a double entrance door

- **Eco-friendly cleaning supplies:**
  - Safe and non-toxic supplies for the environment and people in the following
  - Use of environmentally friendly cleaners for dishes, and linen
  - Use of environmentally friendly cleaners for tables and floors
  - Use of natural sunlight or moonlight
- **Serving ware and packaging:** Use take-out containers that are biodegradable (paper) or recyclable instead of using Styrofoam. Such as clay earthenware for service
- **Organic Menu:** Organic food is raised with non-toxic pesticides and fertilizers and made without genetic engineering. Local foods ingredients vegetables reduce the amount of pollution associated with transportation that uses fossil fuels: Food outlets must offer-
  - Locally grown ingredients on the menu
  - Organic food dishes on the menu
  - Fish and seafood harvested sustainably and free of harmful pollutants
  - Avoid genetically modified foods

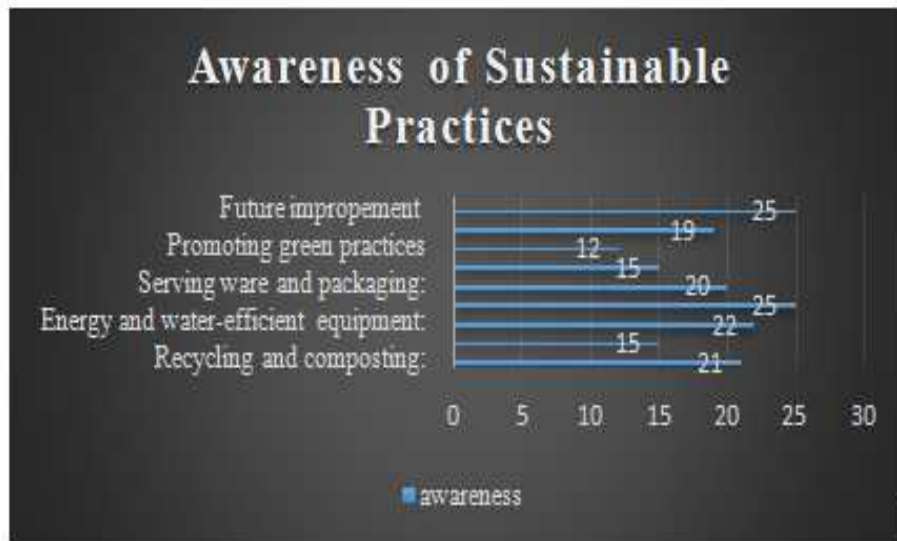
#### IV. RESEARCH METHODOLOGY

1. **Primary Data:** This study is conducted to obtain sustainable practices followed in the food outlets i.e. restaurants in the city of Pune Maharashtra. The researcher has attempted to connect 30 food outs/restaurants to obtain the data on various sustainable food practices. Further surveys and visits were conducted to collect the data from the food outlets.
2. **Secondary Data:** The sustainable concept is relatively new to the food industry and gearing up in recent times. Although there are few research papers, journals, magazines, and reports found on sustainable practices in food outlets.

#### V. DATA ANALYSIS

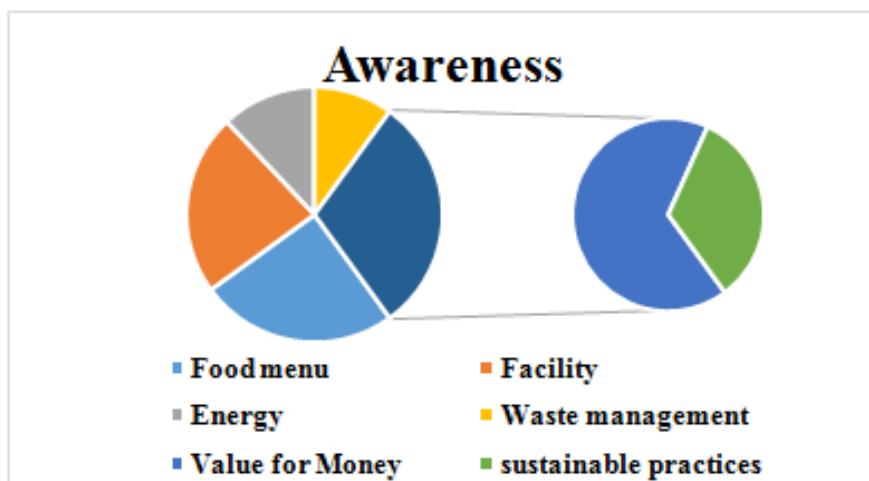
The following questions were asked in the sustainable practices in food outlet survey:

1. **Awareness Of Sustainable Practices in Food Outlets:** The below bar chart suggests that there is a need for more awareness programs for food outlets to use effective sustainable practices. However, almost the majority of the food outlets have agreed to look into and improve on sustainable practices.



**Chart No-1**

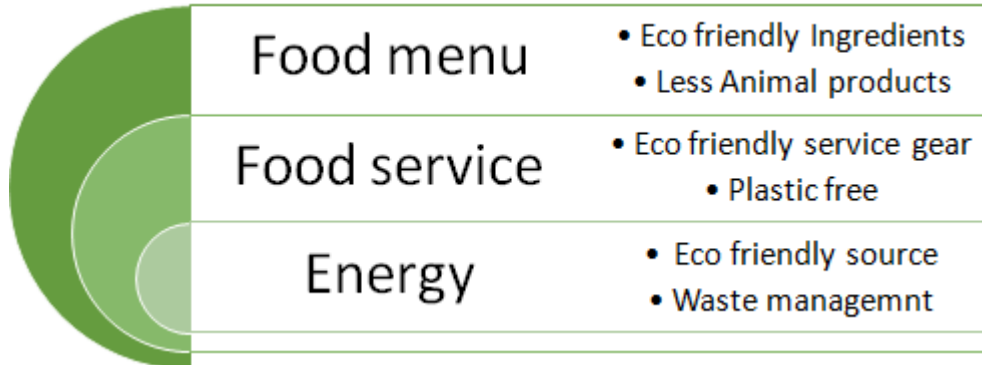
**2. Customer Support and Awareness of Sustainable Practices in Food Outlets.**



**Chart No-2**

The above pie chart indicated that the majority of the customer is not aware of sustainable practices. But the trend is developing toward green food practices.

**3. Sustainable Practices in Adopted and Conducted in Food Outlets.**



**Chart No-3**

The above charts indicate the sustainable practices observed in the food outlets.

**4. Sustainable practices training and learning to employees:** As employees are the backbone of the foodservice. All employees i.e. cooking and service, purchasing, and storing staff, must be provided orientation and induction program while recruitment. Also, from time to time training is provided to understand sustainable food practices.



**Chart No-4**

**VI. CONCLUSION**

It is observed that the present study concentrated on understanding and awareness level of sustainable and green practices in the food outlets in Pune city. The growing awareness about sustainable and green practices is in high demand amongst people going to food outlets and menus. This is a good sign that people prefer to have organic and healthy food over other kinds of stuff. But it is still in the initial phase. We need more restaurants offering sustainable menus and services. There are fewer food outlets in Pune found offering organic and sustainable menus.

Hereby, it would be advisable for food outlet owners to become motivated and capable of offering such sustainable and green menus. Food outlets need to be supported with a suitable program based on industry-specific research. We need to look into all the stake holders i.e. food outlet owners, customers, and the employees working in the food business.

The food entrepreneurs need to be focused and trained in the sustainable awareness and the further implementation of these practices. Awareness is the key to all success and I feel all the stakeholders including government agencies and private firms related to sustainability need to work hand in hand to achieve food sustainability. The approach towards making food, waste management, energy management, resources, and manpower management have to be changed. The government needs to introduce sustainable policies to guide and grade based on green and sustainable practices conducted by the food outlets. Government agencies, academic, and professional bodies can offer significant solutions to attain sustainable solutions in the food business. People, Employees, and organizations working towards attaining sustainable development must be funded and rewarded awarded for their commendable work. After all, sustainability is the key to future life.

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