

SUSTAINABLE FOOD CHOICES AMONG INDIANS: A PATH TO CUSTOMER SATISFACTION

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Abstract: Adopting sustainable eating patterns is essential for our health and the environment. Food production contributes approximately twenty-five percent of global greenhouse gas emissions, making slight dietary adjustments impactful. Selecting locally-sourced products reduces carbon emissions and supports local manufacturers. Sustainable eating involves choosing food alternatives that promote both human and environmental well-being, while also considering social and economic factors. Sustainable consumption within the food system is crucial for alleviating environmental challenges, ensuring food security, and strengthening local communities. The fundamental principles of sustainable eating include environmental conservation via the reduction of carbon emissions, the minimisation of food waste, and the use of locally sourced and organic products. This study aims to investigate sustainable dietary practices among Indians within the Indian environment. The study aims to examine the several factors that conceptualise Sustainable food choices within the Indian context. This study facilitates the understanding of Indian consumers' dietary habits.

Keywords: Sustainable, Food Choices, Indians, Customer Satisfaction

Introduction

India serves as a centre for ecologically friendly enterprises. A plethora of businesses in India are using sustainable techniques to manage their businesses. Furthermore, it is not just small companies; even large corporations are engaging. To create an eco-friendly firm in India, many resources and support systems are accessible to aid you in your quest. With an effective plan and execution, your sustainable business may thrive in this burgeoning economy. Organic vegetable cultivation is the foremost sustainable business model achieving worldwide acclaim. One might develop an organic farm by using natural methods and pesticides instead of harmful chemicals. Organic farming is important since it aids in environmental conservation, energy efficiency, and the protection of the well-being of humans and animals. This facilitates the preservation of soil and water resources while reducing pollution from pesticides and fertilisers. Organic farming advocates for the use of renewable energy sources, including wind and solar energy. The biodegradable products business is rapidly growing in India due to increased consumer awareness about the importance of eco-friendly alternatives. These commodities include natural materials that bacteria may breakdown into their original constituents, hence enhancing their environmental sustainability. A plethora of Indian enterprises are already producing biodegradable products, such as disposable cups, forks, spoons, plates, and straws. These products are cost-effective and simple to use, making them appropriate for barbecues as well as other outdoor events. Moreover, biodegradable bags function as a viable alternative to

plastic bags while purchasing or carrying food items. Our planet faces several waste-related challenges, including a significant accumulation of debris in the seas, substantial electronic waste, and inadequate waste management infrastructure. The recycling and waste disposal business mitigates these challenges by cleansing the environment while decreasing emissions of greenhouse gases. Organic catering is progressively becoming more popular in India. As people gain more awareness of their well-being, they choose food that can be both flavourful and healthy. Organic catering businesses provide an alternative to traditional restaurants, which often use processed ingredients and dangerous chemicals. The popularity of natural catering businesses is rising owing to their offering of healthful food options, better culinary flavours, and improved ecological support for local farmers and companies. The rise of veganism in India is resulting in an increased demand for vegan-friendly restaurants. Despite India's small number of vegan establishments, this percentage is negligible compared to the whole population. In recent years, investigations in food science and nutrition have proliferated considerably. These discoveries have clarified the body's need for certain nutrients and the impact of dietary choices on wellness and enjoyment of life. Emerging technologies facilitate the development of many innovative products that meet consumer needs in the food industry. In response to consumer needs, food producers are developing novel products that represent the future generation of food. Changing nutritional trends necessitate that the food industry and engineers pursue innovative products that are not only ready for consumption right away but also unique in nutritional composition and contain minimum chemicals. The challenge of convincing consumers to modify their eating habits towards more environmentally sustainable food consumption is becoming pressing. Food tastes, choices, and eating patterns are notoriously hard to change, since they represent a crucial aspect of people's lives and their social and cultural environments. A substantial proportion of persons have positive attitudes towards sustainable food; yet, a notable gap remains between these favourable impressions and the actual acquisition and use of eco-friendly food products. The complex interplay of various variables related to customer is crucial for addressing the distinct challenges and opportunities inherent in sustainability. Literature exists about the correlation among various variables related to the customer. However, a notable shortcoming persists in analysing the same model from a sustainability lens. This study seeks to enhance understanding of the interplay between customer satisfaction and sustainability in the context of food choices in Indians via a thorough investigation.

Literature Review

Shifting diets to include leafy vegetables, pulses, as well as coarse grains, reducing dependence on rice, and minimising agricultural greenhouse gas emissions—while simultaneously tackling nutritional deficiencies within food budgets—can assist Indian adults in cultivating sustainable eating practices (Rao et al., 2018; Baroni et al., 2018). Indian adults may cultivate sustainable eating habits that enhance nutrition and diminish environmental impact by selecting local foods, optimising food purchases and storage, valuing food, using leftovers, consuming millets, and minimising food waste (Perignon et al., 2016). Research emphasises the importance of sustainable nutrition and advocates for organic farming, plant-based diets, and locally sourced products (Agrawal, 2015). It emphasises the importance of individuals making deliberate

dietary choices (Omidvar & Begum, 2014), which may significantly enhance ecological footprints and promote the health of both humanity and the planet. The research analyses sustainable buying behaviour among Indian millennials via five categories: aware consumers, conscientious consumers, consumers in transition, hesitant customers, and rejecters, highlighting their heightened concern for environmental problems above social and economic matters. The report analyses the current state of veganism in India, highlighting challenges such as cost, gender, age, and knowledge levels. It analyses consumer behaviour and proposes interventions such as nudges and a fat tax to promote sustainable food consumption in the country (Misra, A., et al., 2011). Despite the diet's environmental sustainability, lower socioeconomic groups cannot purchase healthful food that complies with international standards; hence, accessibility must be prioritised. The research indicates a correlation between the use of processed food and obesity in India, particularly among women. Ultra-processed foods impact higher socioeconomic classes and need specialised dietary treatments, whilst semi-processed foods are associated with increased obesity rates among lower-middle socioeconomic status groups. The research highlights the need of promoting sustainable diets among Indian adults to enhance food security and environmental sustainability in the Indian food system, including complete legislation, backing for sustainable agriculture, and indigenous food systems. A thorough literature evaluation was conducted to examine sustainable dietary habits among Indian adults. That pursue the resolution of the following five principal research enquiries in literature:

Research Questions:

- 1) What are the predominant sustainable dietary practices embraced by Indian adults and their effects on overall health?
- 2) In what ways do different Indian demographic factors influence their comprehension of sustainable nutrition?
- 3). What variables impact the adoption of environmentally friendly diets among Indian adults?
- 4) What is the relationship between ecological responsibility and sustainable eating patterns among Indian adults?
- 5). How might public health policy facilitate the development of sustainable dietary practices among Indian adults?

The primary databases referenced for the literature review are Science Direct, Elsevier, ResearchGate, Semantic Scholar, and the National Library of Medicine. Only chosen papers were assessed and then categorised into five distinct topics as given below. Thematic findings are shown below, stating

- 1: Sustainable dietary practices embraced by Indian adults and their effects on overall health

Author/Aut hors	Methodol ogy	Objecti ves	Research Gap	Res ults
Misra, A., et al. 2011	Widely endorsed nutritional guidelines for a healthy lifestyle Mitigating the risk of diabetes, metabolic syndrome, and obesity in Asian Indians	Provide dietary suggestions for Asian Indians to promote a healthy lifestyle. Prevent noncommunicable illnesses linked to adiposity.		Dietary suggestions for Asian Indians that are widely regarded as beneficial. Focusses on reducing the intake of detrimental food to prevent disease.
Rao et al., 2018	Deficiencies in food intake in India are delineated. Optimisation algorithm for cost and emissions analysis.	Eliminate deficiencies in vitamin A, iron, zinc, and protein. Assess compatibility with measures aimed at mitigating climate change.	Lack of data about agricultural emissions associated with indirect energy. Comprehending dietary choices and the determinants that affect them is essential.	Iron and vitamin A are micronutrients that are insufficiently consumed by two-thirds of the Indian population. Modifications in dietary habits might reduce greenhouse gas emissions by up to 25%.

Agrawal, 2015	The cross-sectional data from the National Family Health Survey was analysed. Multivariable logistic regression models are used to estimate associations.	Examine the incidence of diabetes and dietary habits in India. Investigate the associations between certain diets and the likelihood of developing diabetes.	Validation from clinical and longterm research is required. Analysis of the physical activity data is lacking.	Vegetarian diets and the risk of diabetes are inversely related. Fish consumption and the incidence of diabetes are positively correlated.
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2: Demographic characteristics of Indians vary in their comprehension of sustainable nutrition

Author /Authors	Methodology	Objectives	Research Gap	Results
Chaudhary and Krishna, 2021	Diet identification is conducted with a nonlinear optimisation approach including 35 Indian states.	Identify sustainable dietary practices for the 35 states of India. -Guarantee that diets fulfil nutritional and ecological criteria.	The research identifies sustainable meals that meet environmental constraints and nutritional needs for all 35 states of India. The cost of these diets would be fifty	-The sustainable diets of all 35 Indian states have been established. - In the majority of states, it is 50% more costly than existing diets.

			percent lower than current diets, highlighting the need for Indian adults to embrace sustainable eating practices .	
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3: Factors influencing the adoption of sustainable food practices among Indian adults

Author /Authors	Methodology	Objectives	Research Gap	Results
Werner et al., 2020	Exploratory Factor Analysis (EFA) Multiple Regression Analysis	Analyse consumer views about sustainable eating practices. Investigate the relationship between yoga and dietary choices.	There is a deficiency of research about the spiritual components of sustainable diets. Minimal study has been conducted on the criteria consumers use to	Four components were identified: disorganised cognition, affirmative mentality, inherent spirituality, and transcendent spirituality. Factors two and three strongly influenced dietary knowledge and food intake.

			choose sustainable meals.	
Rasool et al., 2017	Assessing the deficiencies of Firebase as a Mobile Cloud Computing platform.	Identify the deficiencies of Firebase as an MCC platform. To improve Firebase services for compute offloading, recommend RQL.	Firestore does not provide computation offloading in mobile cloud computing	The drawbacks of Firestore as an MCC platform were acknowledged. RQL was proposed to augment Firestore's capability for computational offloading.

4: Environmental sustainability and sustainable eating behaviours among Indian adults

Author /Authors	Methodology	Objectives	Research Gap	Results
Perignon et al., 2016	Assessment of study analysing the nutritional value of foods and their environmental impact Identifying the essential factors to reduce diet-related greenhouse gas emissions	Analyse the environmental impacts of self-selected diets. Examine dietary patterns, nutritional content, and general well-being.	Restricted access to nationally representative, standardised food	The primary method to reduce diet-related greenhouse gas emissions is to decrease meat consumption and energy use. - Selecting appropriate

			pricing data.	alternatives to meat is crucial for reducing greenhouse gas emissions associated with the overall diet.
Li, 2016	The study synthesised studies and literature about sustainable diets.	The post aimed to advocate for chances to adopt healthy lifestyle choices and activities .		This article addresses the obesity pandemic and unsustainable dietary practices. It underscores the need for medical professionals to reevaluate their roles.
Baroni et al., 2018	examination of the literature with the Google Scholar and PubMed databases	Promote sustainable dietary practices to save the environment. Highlight the impact of food choices on resource utilisation and health outcomes.	The research does not explicitly address sustainable eating behaviours among Indian adults. A narrative literature review may lack comprehensive analysis. The resilience of self-selected non vegetarian diets has not been thoroughly examined.	An individual consuming mostly animal proteins need tenfold the acreage to provide sufficient food compared to one who only consumes plant proteins.

Chen et al., 2018	Developed nine distinct dietary scenarios using data on present food intake. established many indicators for both traditional and alternative diets, including human health outcomes, economic factors, environmental impact, and nutritional quality.	Analyse the several methods by which dietary modifications influence sustainability. Employ several dietary situations and metrics to discern trade-offs.	Precise outcomes need the completion of existing data deficiencies. Research gaps exist in the assessments of dietary sustainability.	Transitioning to a healthier option results in a 36% reduction in environmental impact. The Swiss diet represents the most sustainable choice. Embracing a diet rich in meat or protein has adverse consequences.
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5: Public health policy and sustainable food practices among Indian adults

Author/Authors	Methodology	Objectives	Research Gap	Results
Parker and Johnson, 2018	Advocating for holistic dietary guidelines as an integral aspect of national and global policy initiatives addressing nutrition-related non-communicable diseases (NCDs).	The research emphasises extensive dietary guidelines that promote ecologically sustainable and health-conscious food selections. The themes may be used to advocate for sustainable and improved dietary patterns globally, although not specifically targeting the Indian population.	-Potential legal challenges pertaining to foreign investment and trade regulations. Analysis of the impact of comprehensive standards on the food environment.	Advocates for comprehensive dietary guidelines as an integral aspect of national and international policy measures addressing food-related non-communicable diseases (NCDs). Holistic dietary guidelines include environmental sustainability and human health, providing a foundation for

				policy development.
Ellen et al., 2017	Cross-sectional quantitative online survey Methodology of convenience sampling	Analyse consumer perceptions of sustainable and nutritious diets. Identify the fundamental factors influencing sustainable and nutritious dietary practices.	Limited investigation of the barriers to selecting sustainable, nutritious meals. Inadequate examination of trade-offs in dietary choices.	Plant-based, sustainable, and nutritious diets are considered very compatible.

Implications, Limitations, Future Research and Conclusion

This study seeks to clarify the relationship between customer satisfaction and sustainability. We used thematic analysis to look at the research gap across literature available. Future study should broaden its scope to include further sustainability terminology. An in-depth literature review can be conducted so that already established can be known for the future researches. Each research endeavour has certain limitations that may affect the results derived from it. The limitations impede its generality and need more investigation. Future research may expand by assessing other concepts of sustainability via empirical studies. Researchers may collect data from diverse sample sets to enable generalisation. This research largely focusses on Indian clientele; however, a similar study with customers from other countries may be feasible.

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