

A STUDY ON DEVELOPING AN EXPANDABLE SPOON FOR THE USER-FRIENDLY CONSUMERS- AN ECO-FRIENDLY INITIATIVE

Dr. L Sudershan Reddy¹, Samruddhi Pattanashetti², Tejasvani D³, Saravana Kumar⁴,
Varun N⁵, Shirisha Suresh⁶, Shridhar Srinivas Nagarhalli⁷, Suraj Ranjan Nayak⁸

Faculty of Management Studies, CMS Business School¹⁻⁸

Abstract: The research explores the conceptualization, design, and market prospect for an expandable, eco-friendly, biodegradable, rice-husk spoon. Responding to mounting environmental degradation contributed by single-use plastic cutlery, the study seeks to come up with a sustainable replacement option that falls in line with customer demand for environment-friendly products. The project, as carried out under the brand label BLOOMWARE, attempts to bridge the gap between sustainability and user-friendly convenience by designing a product which is not just biodegradable but also expandable, being portable and functional.

The research utilizes both primary and secondary research approaches to source information regarding customer preferences, trends in the market, and competitors in the domain of biodegradable cutlery. Surveys, interviews, and observation data were collected to learn about the consumption patterns of environmentally responsible consumers, whereas industry analysis was undertaken to analyze the viability and scalability of the new product proposed. The study finds that consumer awareness and acceptability of green substitutes are on the increase, particularly in food and hospitality segments.

This study adds to the existing literature on sustainable product development and offers real-world implications for startups and industries looking to shift towards environmentally friendly practices. The expandable rice husk spoon is not only unique in its environmental advantage but also in its user-friendly design, which makes it a viable player in the biodegradable cutlery industry.

Keywords: Biodegradable Cutlery, Rice Husk Spoon, Expandable Spoon, Eco-Friendly Product, Sustainable Innovation, Consumer Behavior

BLOOMWARE presents a groundbreaking, environmentally friendly solution to the worldwide problem of single-use plastic cutlery. Made from rice husk fiber and plant-based adhesives, its expandable spoons begin small (1.5–2 cm) and swell when wet—providing a practical, eco-friendly alternative to plastic. These compostable spoons break down naturally into nutrient-rich fertilizer, minimizing waste and maintaining soil health, while using farm by-products and reducing dependence on non-renewable resources. Created for convenience and contemporary lifestyles, BLOOMWARE is ideal for eco-friendly consumers, travelers, and outdoor enthusiasts—ideal for meals on-the-go, picnics, and events.

Through efficient production and minimal carbon footprint, BLOOMWARE is a model of sustainable manufacturing. It reflects the new consumer trend for ethical, eco-friendly products. In the end, BLOOMWARE shows that convenience and sustainability can actually go hand-in-hand, and people and companies can make difference-making, earth-friendly decisions.

CHAPTER – I - INTRODUCTION AND REVIEW OF LITERATURE

INTRODUCTION

In today's world, there are a lot of queries and awareness programs conducted and organized on the theme of sustainability and eco-friendly sustainable practices, but many don't take initiative of following sustainable practices as an important task in their day-to-day lives. So, to bring light to the importance of sustainable practices and its impact in

this changing world, we are here to present an eco-friendly product known as “BLOOMWARE” an expandable spoon which offers a new and eco-friendly solution to the increasing problem of single-use plastic waste with the help of rice husk fibre and plant-based binders, the product provides a functional substitute for traditional plastic spoons. This product aims in saving economy from any kind of polluted harmful effects for which we initiate ourselves starting with spoon which can be used as a multi-purpose object for the citizens to utilize well at a preferable cost in a customer-oriented market. The study aims in analysing the opinion of the public of using an expandable spoon in today's market and it's after effect after consuming the product with utmost care and caution for our target audience. It also takes into consideration of the pricing structure and usage mechanism of the product.

NEED FOR STUDY

- To comprehend the driving reasons behind the rising demand for biodegradable cutlery.
- To assess the environmental implications of utilizing rice husk-based spoons.
- To analyze the acceptance and perception of consumers toward sustainable eating solutions.
- To highlight opportunities for minimizing plastic waste by offering green products.
- To guide companies in making strategic decisions on product innovations and marketing plans.

SCOPE OF STUDY

- Assess consumer awareness and acceptance of spoons made of rice husks.
- Analyze the environmental impacts of utilizing biodegradable utensils.
- Perform a comparative examination of conventional plastic cutlery and eco-friendly alternatives.
- Evaluate the financial viability of mass production.
- Identify possible partnerships and distribution channels.
- Offer practical recommendations for manufacturers and startups in the green industry.

LIMITATIONS

- Dependence on secondary data to determine industry trends and market information.
- Changes in cost of production as a result of variation in raw material prices.
- Limited access to data.
- Time constraints.
- Basis of study is on bounded data
- Risk of regional variations in consumer behavior and product acceptance.

OBJECTIVES

- To promote the concept of sustainability and to encourage the adoption of eco-friendly practices by providing an alternative to single-use plastic spoons.
- To innovate and introduce an expandable spoon made from rice husk fibres and plant-based binders as a practical and functional solution.
- To reduce plastic waste and its harmful effects on the environment by offering a biodegradable alternative.
- To understand public perceptions regarding the usability, practicality, and appeal of an eco-friendly expandable spoon in today's market and ensuring market feasibility in terms of pricing structure and customer-oriented market.
- To promote the product in the form creating consumer awareness program and highlighting the importance of the product, its environmental benefits which helps in portraying a product as a versatile one.
- To contribute to the economy by minimizing pollution and harmful effects caused by plastic waste.

Industry Profile: Biodegradable Cutlery Industry

The biodegradable cutlery sector is growing faster with rising global consciousness toward plastic pollution. This segment manufactures environmentally friendly tableware—spoons, forks, knives, and plates—out of rice husk, corn starch, bamboo, and sugarcane. Government plastic bans and encouragement of green products in India have driven demand, further boosted by the growth of food delivery and e-commerce sites.

The industry is expected to expand at a CAGR of 8–10% (2024–2030), fueled by sustainability concerns, business sustainability objectives, and the growth of green technologies. In spite of challenges including increased costs, rural lack of awareness, and reduced shelf life, the industry is supported by product innovation, government support, and high demand for eco-certified products. Startups and major brands are embracing sustainable packaging and collaborations with retailers and hospitality operations. For the likes of BLOOMWARE, which has introduced innovative rice husk expanding spoons, the industry represents a high-conformity marketplace for market direction and consumer sentiment—making it a high-growth, forward-thinking opportunity.

REVIEW OF LITERATURE

TITLE- Review of enablers and barriers of sustainable business practices in SMEs

PRESENTED BY- Behrooz Gharleghi and Shoaib Abdul Basit (2024)

CONTEXT: The review of study talks about the factors that determine a barrier to a sustainable practice. There are many factors that persuade or discourage business owners or managers of small and medium-sized firms to adopt sustainable policies. It is important to understand how different factors are interlinked to influence the business owners'/managers' decisions for sustainability. The study intends to investigate the factors that might foster/hinder the adoption of sustainable policies in business practices. Comparatively, there are certain restricted outcomes which govern the means of sustainable practices in terms of data storage, lack of trust, lack of top management support, resistance to change to the new technology, lack of skilled workforce, data breaches, and poor network security. So, due to increased competition and technological evolution, SMEs need to constantly improve their performance if they want to survive in the market alongside large companies.

TITLE- Single-use plastics: A roadmap for sustainability

PRESENTED BY- The United Nations environment programme (2018)

CONTEXT: The study represents plastics as the main element which is a serious measure to be taken in reducing plastic usage and emissions of waste. It measures the benefits of plastics as undeniable. The material is cheap, lightweight and easy to make. These qualities have led to a boom in the production of plastic over the past century. This trend will continue as global plastic production skyrockets over the next 10 to 15 years. We are already unable to cope with the amount of plastic waste we generate, unless we rethink the way we manufacture, use and manage plastics. Ultimately, tackling one of the biggest environmental scourges of our time will require governments to regulate, businesses to innovate and individuals to act. It looks at what governments, businesses and individuals have achieved at national and sub-national levels to curb the consumption of single-use plastics. It offers lessons that may be useful for policymakers who are considering regulating the production and use of single-use plastics.

TITLE- Spatial distribution characteristics of discontinuous hillslope gullies

PRESENTED BY- Chenrui Li, Xin Yang, Xujia Cui (2022)

CONTEXT: The study covers the concept of providing well edible spoons focusing the people residing in the hilly regions. Gullies characterized by frequent material exchanges and dramatic morphological changes sculpt fragmented surface landscapes and generate severe soil erosion, yet research on discontinuous gullies is currently lacking on the Loess Plateau of China. A special kind of discontinuous gully isolated on a hillslope, termed a spoon gully, was observed during a field investigation on the Loess Plateau. Spoon gullies are permanent gullies that are basically spoon-shaped with fat heads and thin tails. The confluences between spoon gullies and other gullies mainly occur in the subsurface. Spoon gullies were mainly distributed in areas where continuous gullies developed insufficiently, and this finding can be regarded as the integrated result of precipitation, loess thickness and texture, vegetation coverage, and agricultural activities, suggesting that spoon gullies may represent an early stage in the development of continuous loess gully systems. These results not only provide new insights for understanding the formation and evolution of gully landforms but also have significant implications for soil erosion management on the Loess Plateau.

TITLE- State of art review on sustainable biodegradable polymers with a market overview for sustainability packaging

AUTHOR NAME- Sushil Kumar Verma and Arbind Prasad (2024)

CONTEXT: The overall review of the study focuses on the sustainable methods used in packaging of products and services giving a good quality and hygienic touch to a product. One of the economic sectors with the fastest growth rates is the packaging business. Nearly 60% of plastics are burned, returning the thermal energy but adding to the CO₂ footprint even if CE solutions are being promoted. This increased emission not only has a detrimental impact on climate change, but also has poor sustainability indicators that lag behind market trends. In these environments, the packaging sector is essential to the effective execution of responsibilities and the fulfilment of evolving consumer demands. To satisfy consumer and industry demands, new packaging methods are being developed. Environmental awareness, changes in consumer lifestyles, and the development of new fields of information (such as nanotechnology or biotechnology) are driving forces behind the growth of smart packages that can encompass food shelf-life while maintaining and monitoring their safety and eminence while also protecting the environment.

PRESENTED BY- Siti Zulaika Khairul Anuar, Abu Hassan Nordin, Ya Mohammad Nazir Syah Ismail

TITLE- Recent advances in recycling and upcycling of hazardous plastic waste

CONTEXT: This dynamic study focuses on how technology improvements in today's world have impacted the environment in a positive or a negative way in terms of reduction of plastics and developing an eco-friendly product as a one-time solution. Plastic is a widely used material across various industries, including construction, packaging,

healthcare, and automotive, among others. As plastic pollution poses significant environmental and health risks, effective recycling and upcycling strategies are crucial for sustainable waste management. This paper explores the impact of plastic waste on public health and ecosystems, reviews chemical, mechanical, and biological recycling methods, and examines upcycling approaches. It also addresses key challenges such as limitations in chemical upcycling, scaling up carbonization, and inefficiencies in sorting and processing for mechanical recycling.

TITLE- Conversion of plastic waste into alternative resources (2023)**PRESENTED BY-** Sabiha Sarwar, Molla Rahman Shaibur, Selina Akter

CONTEXT:The study defines an alternative option towards developing an environment- friendly product which provides benefits and usage mechanism in consuming the product with utmost care and long-lasting impact. Plastic pollution has become one of the top issues at present throughout the world. In Asian continent plastic pollution is found at the highest rate and Bangladesh is ranking as the 10th number of plastic wastes producer. To minimize the plastic pollution its management is necessary. To do that we tried to convert the plastic wastes as alternative resources for example plastic tiles or plastic tobs. Plastic products have become an essential part of human life and utilized in different sectors such as in construction, healthcare, electronics, agriculture, automotive industry, and packaging sectors. Among them, plastics products are becoming familiar at a large scale in packaging sectors therefore the production of packaging materials should be prepared in a sustainable, and environment friendly way that can keep the environment balanced in neat and clean way.

TITLE- Extraction of plant-based materials to transferring to a circular economy (2019)**PRESENTED BY-** Randal Shogren, Delilah Wood, Gregory Glenn

CONTEXT :This study portrays the importance of extraction of resources from the plant-based materials which helps in converting the economy into a circular amount of sustainability helping in implementing and making an eco-friendly practice. Plant-based materials play an integral part in transitioning to a circular economy. Bioplastics are a growing industry but still account for less than 1% of the total plastic production. Cellulose and starch are abundant, widely available plant polymers that are used extensively for paper, packaging, food service items, bags and biofuels. Poly(lactic acid) (PLA) which is derived from starch by a fermentation process and polyhydroxyalkanoates (PHA) which are renewable, microbial derived biodegradable polyesters that can be processed similar to various commodity plastics. Both polymers are projected to grasp an increasing market share of commodity plastics as production costs drop. Other synthetic biodegradable polyesters and plant-based commodity plastics are commercially available and have expanding markets.

TITLE- Consumers' sensory-based cognitions of currently available and ideal plant-based food alternatives: A survey in Western, Central and Northern Europe.**PRESENTED BY-** Sandra S. Waehrens, Ilona Faber

CONTEXT:The study presents the highlights and importance of sensory-based cognitions in food alternatives which acts as a secondary option for food development. Sensory experiences of plant-based (PB) food alternatives play a crucial role in the acceptance and increases the growth of the market. To facilitate improvements and to better direct the PB food product development, it is important to identify potential gaps in consumers' sensory-based cognition between currently available and their ideal version of PB food and beverage alternatives. The PB food alternative market is not only targeted at plant-based eaters but also aims to accommodate the demands of consumers who wish to reduce their animal-based food consumption. The market of PB alternatives is expanding rapidly as a response to the growing consumer demand for more sustainable and healthy food products (Poore & Nemecek, 2018). An increasing number of products based on alternative proteins have been launched, with an average annual growth of 13.5% from 2007 to 2017.

CHAPTER – II RESEARCH METHODOLOGY

1. Data Collection Method: The data for the research was collected using a survey-based approach, where responses were gathered from participants regarding their familiarity, interest, and concerns about eco-friendly dining products like **BLOOMWARE**.

2. Source of Data: The study used primary data, collected directly from respondents through structured questionnaires. This data helped analyse consumer awareness, preferences, and willingness to adopt biodegradable products.

3. Primary Data: The primary data was obtained through questionnaires distributed among 85 respondents. The survey included multiple-choice questions and Likert scale-based responses to evaluate consumer sentiment toward eco-friendly dining products.

4. Sample Design: The study employed a non-probability sampling method, likely convenience sampling, to gather insights from individuals with an interest in sustainable dining. The participants included eco-conscious consumers, travellers, hospitality businesses, and green retailers.

5. Sample Size: The research was conducted with a sample size of 85 respondents, which provided insights into consumer behaviour and market potential for **BLOOMWARE**.

6. Tools for Analysis: The collected data was analysed using descriptive statistical methods, including:

- Percentage Analysis to determine the distribution of responses.
- Graphical Representation (pie charts, bar graphs) to visually interpret key findings.
- Comparative Analysis to identify trends and preferences among different consumer segments.

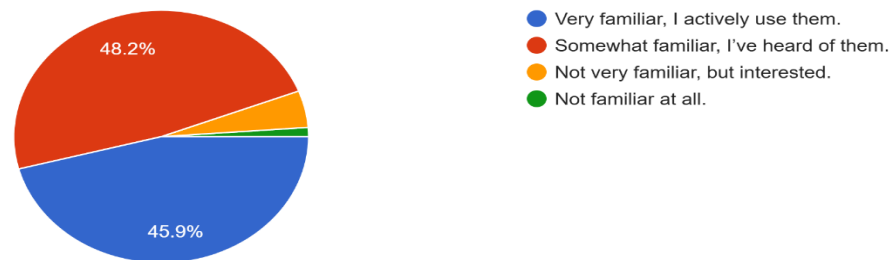
The findings from the study helped shape recommendations for marketing, pricing, and distribution strategies for **BLOOMWARE**, ensuring its alignment with consumer expectations and market demand.

CHAPTER – III DATA ANALYSIS AND INTERPRETATION

1. How familiar are you with eco-friendly dining products?

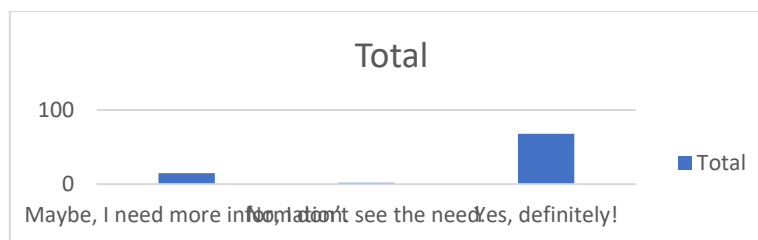
1. How familiar are you with eco-friendly dining products?

85 responses



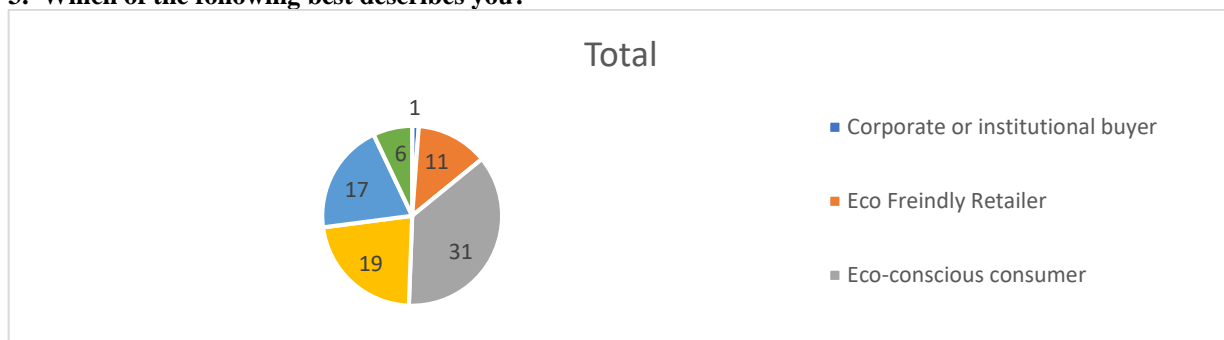
Interpretation: Acquaintance with Eco-Friendly Dining Items This is an indication of robust market awareness, where it is likely that **BLOOMWARE** can leverage the already existing demand for sustainable options. Informative content to educate the 5.9% less knowledgeable consumers will further increase brand visibility.

2. Would you be interested in using a portable, biodegradable spoon that expands with water?



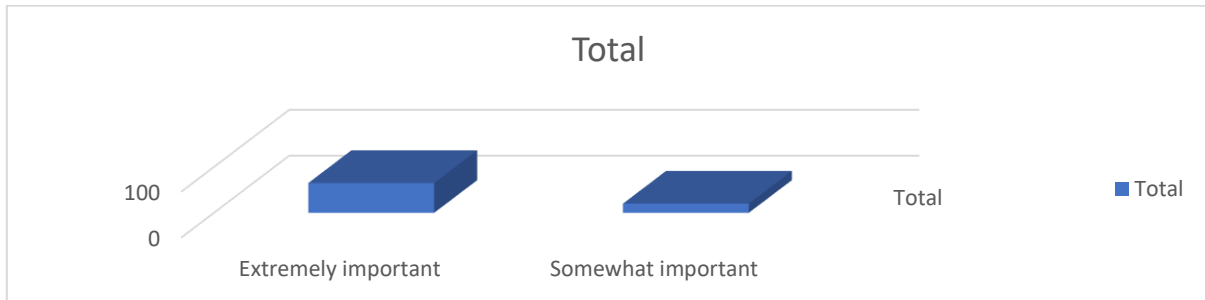
Interpretation: 55 respondents (64.7%) responded with "Yes" or "Definitely." 30 (35.3%) respondents said "Maybe" or "Need more information." This positive reaction offers **BLOOMWARE** a strong market entry chance. Through providing transparent product details, showcasing its functionality, and offering endorsements, the brand is able to turn hesitant consumers into assured buyers.

3. Which of the following best describes you?



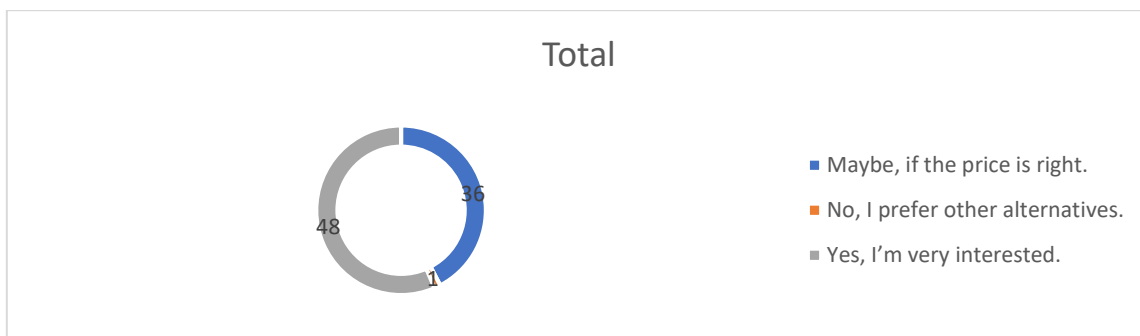
Interpretation: This pie chart shows statistics on the categories of respondents who are interested in BLOOMWARE: The pie chart illustrates that environmentally concerned consumers are the biggest group with 31 users (36.5%), pointing to high conformity with BLOOMWARE's green positioning. Regular travelers or outdoor users rank second at 22.4%, pointing towards interest in portability. Environmentally friendly companies account for 20%, pointing towards hospitality collaboration opportunities. Green stores account for 12.9%, opening retail collaboration prospects. Furthermore, 7.1% are zero-waste advocates, while 1.2% are corporate buyers. This information indicates a significant market presence among environmentally conscious consumers and companies, informing focused marketing and sales efforts.

4. How important is portability when choosing dining products for travel or outdoor activities?



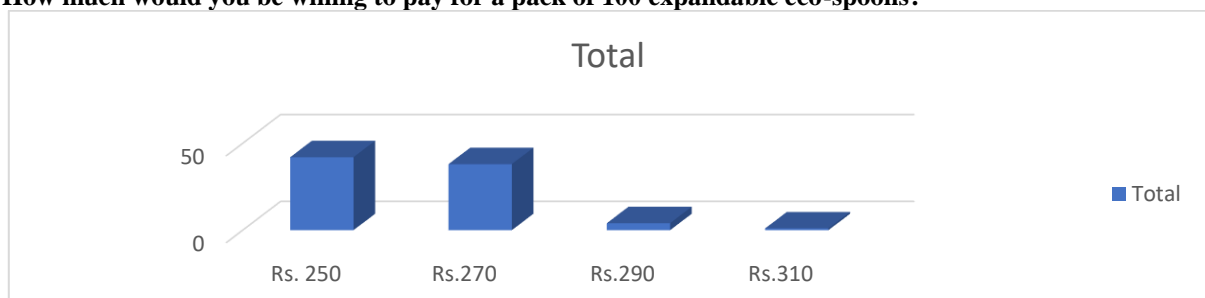
Interpretation: This graph illustrates the significance of portability in selecting dining products for travel or outdoor use: 65 respondents (76.5%) consider portability very important and find BLOOMWARE's compact, expandable nature highly desirable. 20 respondents (23.5%) rate it as somewhat important and most likely appreciate its eco-friendliness. As 100% find portability valuable, marketing should highlight its convenience to travelers and outdoor users. Partnerships with travel shops, green marketplaces, and event promoters can maximize visibility.

5. If you own a business, would you consider offering BLOOMWARE as a sustainable alternative to plastic spoons?



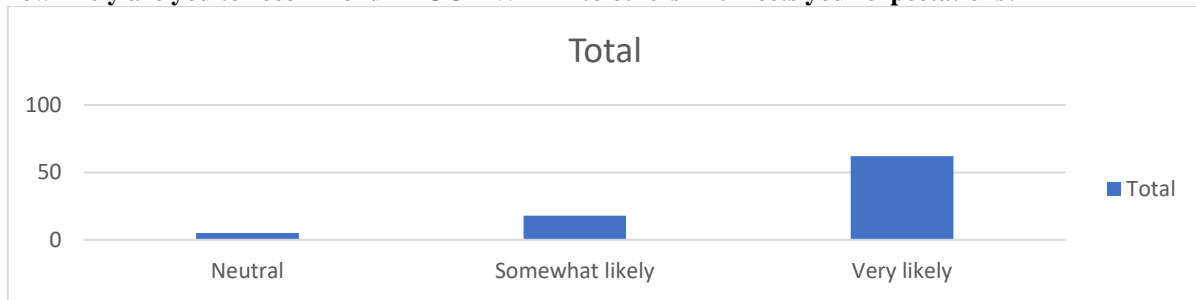
Interpretation: This graph illustrates entrepreneurs' interest in providing BLOOMWARE as a green substitute for plastic spoons. 48 of 85 entrepreneurs (56.5%) demonstrated keen interest in adopting BLOOMWARE, reflecting demand for sustainable dining solutions. 36 (42.4%) demonstrated conditional interest, subject to pricing. Competitive pricing and promotion of the sustainability advantage can turn them into consumers. Just 1 respondent (1.1%) desired alternatives, reflecting low resistance. With 99% interested, BLOOMWARE possesses substantial market potential. Strategic partnerships, B2B promotions, and volume pricing can fuel further adoption.

6. How much would you be willing to pay for a pack of 100 expandable eco-spoons?



Interpretation: This graph indicates respondents' willingness to pay for 100 expandable eco-spoons. 50 among 85 respondents (58.8%) opted for the most affordable price of Rs. 250, which testifies to strong price sensitivity. 40 respondents (47%) were willing to pay Rs. 270, expressing readiness to pay a premium for sustainability. Lesser numbers accepted higher price points, with only 5 respondents (5.9%) accepting Rs. 290 and 3 respondents (3.5%) at Rs. 310, illustrating little interest in premium pricing. The best price range would be Rs. 250 to Rs. 270. Tiered pricing, bulk discounts, or bundling could maximize revenues while keeping the product affordable.

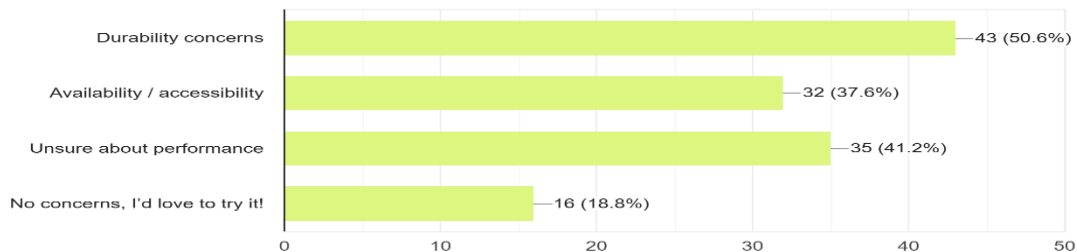
7. How likely are you to recommend BLOOMWARE to others if it meets your expectations?



Interpretation: This graph is an indication of the probability that respondents would recommend BLOOMWARE to other people if they are satisfied. The highly positive response suggests that BLOOMWARE stands a good opportunity to pick up pace through word of mouth if it meets expectations. Prioritizing customer satisfaction, resolving any issues from the neutral group, and soliciting reviews from happy users can further build brand advocacy.

8. What concerns, if any, would prevent you from purchasing BLOOMWARE? (Select all that apply)

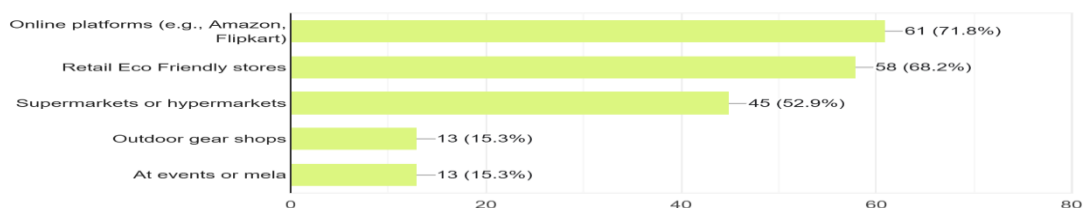
8. What concerns, if any, would prevent you from purchasing BLOOMWARE? (Select all that apply)
85 responses



Interpretation: This graph illustrates the concerns of the respondents in buying BLOOMWARE, as gathered from 85 replies. Half of the respondents (50.6%) were concerned with the durability of BLOOMWARE, and 41.2% were in doubt about its performance. Issuing product demonstrations, certifications, and customer feedback can help instill confidence. Moreover, 37.6% of the respondents were concerned about product availability, and this can be treated by opening up wider sales channels and building business alliances with environment-friendly retailers. Positively, 18.8% did not have any concerns, offering the opportunity to tap into good word-of-mouth advertising. By resolving durability, performance, and accessibility issues, BLOOMWARE can increase consumer trust and speed up market uptake.

9. Where would you prefer to purchase BLOOMWARE?

9. Where would you prefer to purchase BLOOMWARE?
85 responses

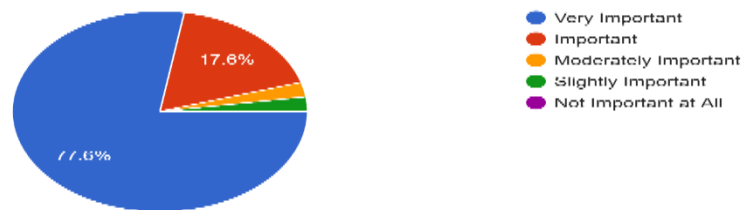


Interpretation: This graph indicates the most preferred purchasing channels for BLOOMWARE from 85 responses.

The majority of respondents (71.8%) favor buying BLOOMWARE from online websites such as Amazon and Flipkart, pointing towards a robust e-commerce strategy. 68.2% also like green retail stores, reflecting the desire for eco-friendly shopping experience. Supermarkets and hypermarkets are also liked by 52.9% of respondents, who want access in person to examine the product. Smaller segments (15.3%) are interested in purchasing from outdoor equipment stores and outdoor events, implying potential for niche promotions at adventure stores and environmental fairs. A two-channel approach of strong online presence and strategic retail partnerships can maximize BLOOMWARE's market penetration.

10. How important is it for you to reduce single-use plastic in your daily life?

10. How important is it for you to reduce single-use plastic in your daily life?
85 responses



Interpretation: This graph shows the answers of 85 participants on how important it is to cut down on single-use plastic in their everyday lives.

Most (77.6%) of the respondents ranked reducing single-use plastic as very important, showing keen environmental awareness and willingness to embrace alternatives such as BLOOMWARE. Further, 17.6% also ranked it as moderate, reflecting even more support for environmentally friendly products. Only 2.4% ranked it as moderately important, and a further 2.4% were not very concerned, perhaps as a result of unawareness or preference for convenience. BLOOMWARE has a definite chance to address the eco-friendly market by highlighting its biodegradable nature. Raising awareness about the less environmentally aware segment can further encourage product use and widen the brand influence.

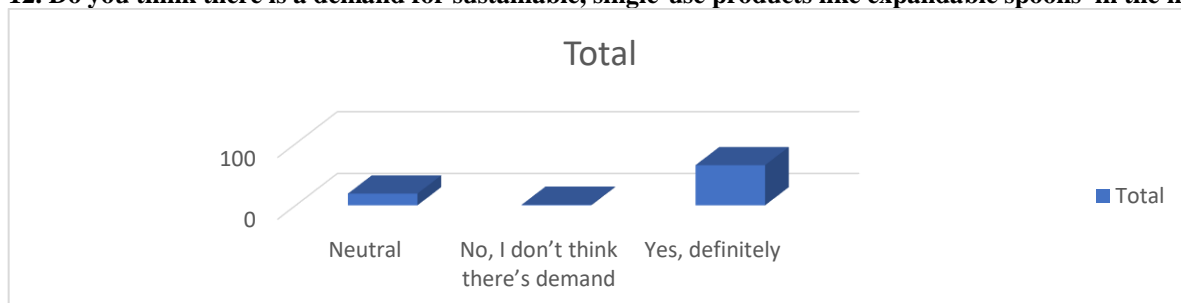
11. Would you find it convenient to carry a compact spoon that expands with water for use when needed?

11. Would you find it convenient to carry a compact spoon that expands with water for use when needed?
85 responses



Interpretation: This chart indicates the answer of 85 subjects as to the convenience of having a portable spoon that unfolds with water to be used whenever needed. Most of the respondents (83.5%) are very convenient with BLOOMWARE's expandable spoon, showing strong market potential for consumers who value portability, especially for travel and outdoor activities. Meanwhile, 16.5% think it could be useful in certain situations, suggesting they do not perceive it as a daily need. This positive response indicates that BLOOMWARE can effectively place itself as a must-have product for travelers, picnics, and emergency situations. Targeted promotions with demonstrations and testimonials can help establish trust and overcome reservations. Providing sample packets or trial privileges may also persuade the undecided users into regular ones

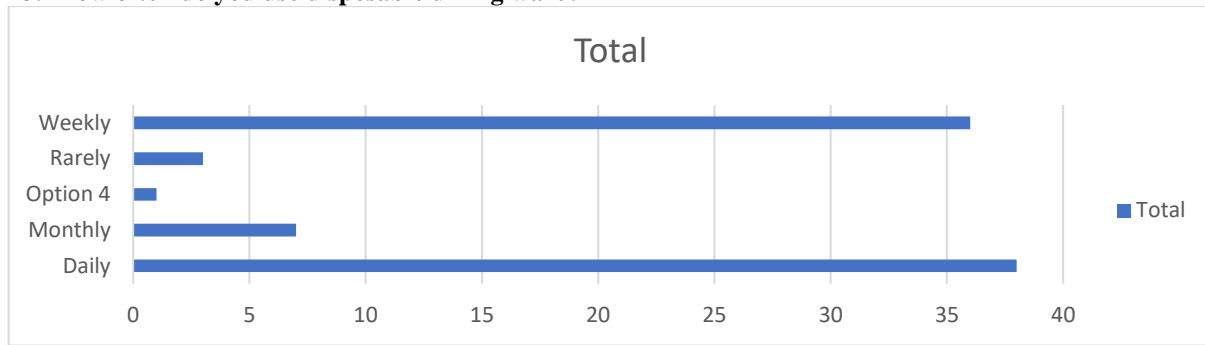
12. Do you think there is a demand for sustainable, single-use products like expandable spoons in the market?



Interpretation: This graph illustrates feedback from 85 respondents on perceived demand for sustainable, single-use items such as expandable spoons in the market.

With 68.2% of the respondents having faith that there is a need for sustainable goods such as BLOOMWARE, market potential is clear. This indicates increased consumer interest in green substitutes for single-use plastics. Though 25.9% are indifferent, targeted communications on the eco-friendliness of BLOOMWARE, its longevity, and convenience will instill confidence. The 5.9% doubt-harboring respondents might need extra convincing by product demonstrations, fair pricing, and word-of-mouth endorsements. Collaborating with environmentally friendly retailers and highlighting sustainability in marketing can also enhance product acceptance and position BLOOMWARE as a sustainable alternative.

13. How often do you use disposable dining ware?



Interpretation: This graph indicates the number of times disposable dining ware is used by 85 participants: as 44.7% of people use disposable dishes on a daily basis and 41.2% on a weekly basis, there is serious dependency on singles for convenience purposes. This affords BLOOMWARE as a green replacement an excellent potential. The 9.4% who occasionally use disposables can be prompted to use BLOOMWARE occasionally, with the 3.5% who seldomly use disposables and the 1.2% undecided subjects being influenced to a certain point by awareness strategies. Highlighting BLOOMWARE's convenience, durability, and biodegradability through collaboration with food service establishments, convenience stores, and websites can efficiently target this market.

14. Do you have any suggestions or feedback on how we can improve BLOOMWARE?

Responses:

- [1]. In terms of sustainable practices and importance of eco- friendly products and well utilisation of resources
- [2]. Come up with Loyalty rewarding in future days
- [3]. You can contribute to social and sustainable welfare out of profit
- [4]. Make it more aware to the market
- [5]. Make it more aware to the market

Interpretation: Analysis of Feedback for BLOOMWARE (4/85 responses - 4.7%)

Sustainability Practices: Better use of resources and eco-friendly practices with transparency are highlighted by respondents.

To achieve this, highlight sustainability reports and certifications.

Loyalty Rewards: Reward system suggestion to promote repeat buys.

To achieve this, roll out a "Green Points" loyalty program.

Social Impact: Responsiveness to social and environmental causes by consumers.

To achieve this, donate part of profits to sustainability efforts.

Market Awareness: Increased visibility and promotion are required.

To achieve this, increase awareness through influencer marketing and eco-events.

Thus, improving these recommendations can increase the brand value and customer loyalty of **BLOOMWARE**.

CHAPTER – IV FINDINGS AND RECOMMENDATIONS

Findings:

1. High Familiarity with Eco-Friendly Products: 94.1% were familiar with eco-friendly dining products, offering an immediate market for BLOOMWARE.
2. Strong Interest and Demand: 64.7% expressed keen interest in utilizing BLOOMWARE, and 68.2% perceive a demand for such environmentally friendly products.
3. Portability as a Key Feature: 76.5% of the respondents cited portability as a critical aspect, justifying BLOOMWARE's compact nature.

4. Pricing Sensitivity: 58.8% would like a price of ₹250 for a pack of 100 spoons, signalling a desire for affordability.
5. Market Channels: 71.8% would like to buy BLOOMWARE online, followed by green stores (68.2%) and supermarkets (52.9%).
6. Plastic Reduction Support: 77.6% would want to cut down on single-use plastic, reflecting BLOOMWARE's green agenda.
7. Convenience Factor: 83.5% consider an expandable spoon very convenient, particularly for travel and outdoor activities.
8. Concerns Over Durability and Performance: 50.6% were concerned with durability, and hence, product guarantee through trials or certifications would be necessary.
9. Improvement Suggestions: Ideas include loyalty rewards, further increasing social contribution by way of profit sharing, and raising market awareness.

Recommendations:

- **Marketing Strategy:** Targeted Advertisements: Target environmentally aware consumers, tourists, and the hospitality sector with sustainability-based advertising.
Influencer Engagement: Collaborate with eco-influencers and sustainability influencers for promotions.
Storytelling: Highlight the eco-positive contribution and life cycle of **BLOOMWARE** products.
- **Pricing and Promotions:** Competitive Pricing: Provide opening pricing at ₹250 per pack, with flexible bulk purchase concessions.
Loyalty Program: Use a "Green Points" program to indent repeat buying and promote sustainability.
- **Product Assurance:** Transparency: Share product testing results, certification, and demonstration of durability.
Sample Distribution: Provide free samples at eco-events, supermarkets, and sustainable fairs for touch-and-feel.
- **Sales Channels Expansion:** E-commerce Focus: Create a solid presence on the likes of Amazon and Flipkart.
Retail Partnerships: Partner with green stores, supermarkets, and travel accessory stores.
B2B Sales: Approach hospitality establishments, catering services, and corporate gifting markets.
- **Sustainability Commitment:** CSR Initiatives: Invest a percentage of profit in environmental initiatives or community building.
Partnerships: Partner with NGOs and sustainability groups to boost impact.
- **Consumer Education:** Workshops and Demonstrations: Organize sessions on product use and sustainability at local workshops.
- **Social Media Engagement:** Leverage videos and interactive content to showcase the expandability and durability of the spoon.

Through these efforts, **BLOOMWARE** can successfully leverage its high market appeal, overcome consumer concerns, and create a competitive presence in the green dining arena.

CHAPTER – V CONCLUSION

BLOOMWARE is a revolutionary and sustainable solution to the world's burgeoning single-use plastic pollution crisis. Utilizing rice husk fibre and plant binders, BLOOMWARE not only launches an innovative expandable spoon but BLOOMWARE offers a new and eco-friendly solution to the increasing problem of single use plastic waste. With rice husk fibre and plant-based binders, the product provides a functional substitute for traditional plastic spoons. The results of the survey proved a high level of market demand for environmentally friendly dining options, with a high percentage of respondents showing interest in embracing BLOOMWARE. Portability, price, and sustainability were found to be major drivers of consumer decisions, which bodes well for the product's market entry.

Yet, the issues of performance and durability point towards open product demonstrations and certification to gain consumers' trust. Building partnerships with environmentally friendly retailers, online retailers, and hotel businesses will create more visibility for the product. Having loyalty schemes, participating in social responsibility schemes, and organizing consumer awareness schemes will establish BLOOMWARE as a forerunner in green dining solutions. Finally, BLOOMWARE is a perfect example of how innovation can be used to ensure environmental sustainability. Through promoting responsible consumption and minimizing single-use plastic waste, the product is contributing to the world's transition to greener options. Through ongoing innovation and collaboration, BLOOMWARE will leave a lasting legacy in the eco-friendly tableware industry.

CHAPTER – VI BIBLIOGRAPHY

- [1]. Brown, L., & Smith, K. (2023). Sustainable Product Innovation: Principles and Practices. GreenTech Publishers.
- [2]. Jain, R., & Sharma, P. (2022). Consumer Behaviour Towards Eco-Friendly Products in India. Eco Research Institute.
- [3]. United Nations Environment Programme. (2022). Single-Use Plastics: A Roadmap for Sustainability. UNEP Report.
- [4]. Kumar, A., & Verma, S. (2021). "Analysing the Impact of Sustainable Alternatives on Consumer Choice," Journal of Environmental Management, 35(4), 456-470.
- [5]. Government of India. (2024). National Guidelines on Plastic Waste Management. Ministry of Environment, Forest and Climate Change.
- [6]. Choudhary, D., & Mishra, R. (2023). "Biodegradable Materials in Product Design: Trends and Challenges," International Journal of Sustainability Studies, 28(3).
- [7]. World Health Organization. (2023). Environmental Impact of Plastic Waste on Human Health. WHO Report.
- [8]. Sharma, L. (2021). Circular Economy in Practice: Sustainable Business Models. Eco-Vision Press.
- [9]. Bloomberg Green. (2024). "Sustainable Innovations in Consumer Products."
- [10]. Science direct. (2024). "Review of enablers and barriers of sustainable business practices in SMEs"
- [11]. Sushil Kumar Verma, Arbind prasad, (2024). "State of art review on sustainable biodegradable polymers with a market overview for sustainability packaging"