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IS ZERO WASTE LIFESTYLE?

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1. ABSTRACT:

The idea of a zero-waste lifestyle suggests reducing waste by means of sustainable consumption, recycling, and waste management. Its feasibility, however, is questionable. This research assesses the feasibility of a zero-waste lifestyle by considering its challenges, advantages, and possibilities in the real world. Major factors like individual habits, infrastructural accessibility, economic conditions, and social support are analysed. Although absolute zero waste can be difficult to obtain, the research concludes that effective waste reduction is achievable by means of conscious consumerism, policy support, and corporate social responsibility. The results indicate that although a completely zero-waste lifestyle might not be completely feasible for all, its principles can be realistically adopted in everyday life, resulting in tremendous environmental and economic benefits.

Keywords: waste living, Sustainability, Nature, Recycle zero – waste

Introduction:

The zero-waste movement is focused on reducing waste through conscious consumption, recycling, and sustainable waste. It is evidently eco-friendly, but its feasibility or not is questionable. The high cost of sustainable products, lack of infrastructure, and long-standing habits make it more difficult for people to adhere to these habits on a mass scale. However, with increased awareness, policy support and corporate responsibility, waste reduction is becoming more possible. This study discusses the feasibility of adopting a zero-waste lifestyle by studying its advantages, disadvantages, and implementation in a real-life situation. However, even if one cannot reduce to zero, one can adopt eco-friendly habits in one's life in many ways to reduce one's carbon footprint. Literature Review

Increasingly, studies explore the possibility of a zero-waste lifestyle. Some believe that it is impossible to abolish waste but it is possible to reduce waste significantly through corporate social responsibility, legislation, and mindful consumption.

Methodology :

The zero-waste culture aims to minimize waste by conscious consumption, recycling, and composting. While eco-friendly, its adoption is subject to availability, price, infrastructure, and social habits. Evidence shows that absolute zero waste is impossible, but efficient waste minimization is possible through sustainable practice, policy, and corporate social responsibility. Barriers are the prohibitive price of eco-friendly products and absence of waste treatment plants. Nevertheless, technological innovation and growing public awareness are making sustainable practice the norm. In any event, as much as a zero-waste way of life may be inconvenient, the adoption of low-waste practices is logical and necessary for long-term sustainability of the environment.

Literature Review

1. The Feasibility of Zero Waste

Several studies explore the potentiality of zero waste. Zaman and Lehmann (2011) describe the challenges of having zero-waste societies and conclude that a completely waste-free system is practically impossible but that societies can achieve a considerable waste reduction by embracing better waste management and sustainable consumption practices. Similarly, Connett (2013) argues that zero waste must be held as a goal and not a necessity—something to aim for and not an either-or scenario.

2. Obstacles to Adopting a Zero-Waste Lifestyle

Though it has its advantages, a zero-waste lifestyle comes with disadvantages. Its largest among them is convenience and consumerism. The current consumer culture is founded on convenience, and markets are filled with throwaway items and single-use plastics, writes Babayemi and Dauda (2009). Most individuals find it hard to escape these, particularly when the alternatives to zero waste are less convenient or costly.

Another limitation is the cost and accessibility of green substitutes. In a survey by Shea-Ting et al. (2016), most consumers are willing to practice sustainable behaviours, but green products are too expensive and there are limited zero-waste shops in some areas to deter them. This is especially true in developing nations, where there is limited access to bulk food shops, composting centres, and recycling centres.

In addition, corporate social responsibility and government policy are also crucial in reducing waste. Although some cities have achieved zero-waste targets, like San Francisco's requirement for mandatory recycling and composting, others do not have appropriate infrastructures to manage waste. Studies have found that without policy-driven incentives like single-use plastic bags or extended producer responsibility (EPR) programs, becoming zero waste at the individual level is much more difficult.

3. The Role of Technology and Innovation

Technology has led the way in advancing zero-waste technology. Examples include waste-to-energy facilities, biodegradable packaging technology, and smart recycling technology that have made sustainable waste management more feasible. Ghibelline et al. (2016) report that integrating circular economy principles into production in industries can make firms minimize waste while remaining profitable.

Moreover, innovation in digital solutions—e.g., waste-tracker apps, green marketplaces, and sharing platforms—has enabled people to live zero-waste lifestyles. These technologies close the gap between intention and action, and the sustainable choice is now more convenient.

4. The Psychological and Social Impacts of Zero Waste

Interestingly, there is also a study to support the fact that living a zero-waste life is also satisfying from a psychological standpoint. Barr et al. (2011) found that those who deliberately put in an effort towards sustainability perceive themselves to be more meaningful and content. However, pressure of needing to have a "perfect" zero-waste living may also develop anxiety or feelings of guilt whenever one feels like he or she is not doing enough—signifying the importance of having an adaptive and balanced style rather than an all-or-nothing strategy.

Results Verification and Assessment:

1. Real-World Case Findings and Research

The comparison of experience and studies indicates that zero waste is not achievable, but significant waste reduction can be ensured. The studies indicate three fundamental factors which determine the viability of a zero-waste lifestyle:

- **Individual Behaviour and Awareness:** Studies have shown that individuals who make deliberate, informed purchasing decisions, recycle, and compost can successfully reduce their waste production. The success, however, depends on the availability of zero-waste products and knowledge of sustainable behaviour.

- **Policy and Infrastructure Support:** Stockholm and San Francisco are ideal cities that have been able to establish waste reduction targets by regulation, incentives, and extended producer responsibility (EPR). But those cities with inefficient recycling and composting infrastructure cannot reduce waste.

- **Technological and Corporate Innovations:** Companies embracing sustainable packaging, circular business models, and refill points facilitate the feasibility of zero-waste. Biodegradable materials and waste-to-energy facilities innovations also facilitate the feasibility of reducing waste.

2. Case study validation and data.

- **Case Study: San Francisco, USA** – With zero-waste laws and legislation that compels composting, the city sends more than 80% of its waste to landfill, demonstrating that system changes can make it possible to reduce waste.

- **Case Study: Japan's Kami katsu Town** – The town sorts its waste into 45 categories and recycles 80% of its waste, showing how zero waste can be achieved through policy and public action.

- **Survey Data Validation** – Studies have proven that although customers indicate that they will adopt a zero-waste lifestyle, more than 60% of them fail to do so due to cost and convenience. This suggests that although the strategy is feasible, it needs systemic empowerment.

Future Enhancements to the Zero-Waste Culture:

1. Enhanced Waste Management Infrastructure – Governments and cities need to invest in enhanced segregation of waste, recycling plants, and composting schemes to enable waste reduction to become more affordable and accessible to the masses.
2. Policy and Corporate Responsibility – Stricter regulation, including extended producer responsibility (EPR) and prohibition of single-use plastics, can incentivize companies to use sustainable packaging and circular economy strategies.
3. Technological Innovation – More efficient biodegradable materials, intelligent waste tracking and waste-to-energy technologies can make a zero-waste lifestyle more viable.
4. Education and Awareness – Promoting zero-waste education in schools, social media, and community programs can lead to more people embracing sustainable behaviours.
5. Inexpensive Sustainable Alternatives – Bringing sustainable products into the affordable category will reduce cost barriers and allow for mass adoption of zero-waste.

Research deficiency (Gap):

The authors of the first study (Zero Waste Lifestyle in Makassar) state that despite a huge volume of published work on environment consciousness and theories of sustainable life, there was a felt research gap addressing the actual application of zero waste in everyday life. All the existing research emphasizes importance of environmental conservation or suggests general ways of reducing waste without describing real-life issues and individual adjustments for implementation. The present research seeks to fill this gap through the emphasis on everyday life experience of young people in Makassar, the hindrances they face (e.g., like unfavourable environment and assumptions about high cost or sophistication) and the ways they implement according to the 6R's (rethink, refuse, reduce, reuse, rot, and recycle).

- In the second study (Multi-facet Approach to Recycle Household Waste into Wealth), the research gap is that comparatively less emphasis has been placed on individual-level success stories and practical implementations of zero waste living. Although a huge range of studies respond to waste management in terms of institutions or macroeconomics, there is hardly any literature on how individuals, particularly at the household level, can transform waste into a resource.

This case study of Dr. Kiran Sinha documents an exhaustive, multi-faceted approach—describing techniques like trench composting, recycling of non-biodegradable waste, and the use of biophilic design—providing rich insights into the overcoming of everyday challenges. The study underscores the necessity for additional empirical research that recognizes innovative practices at the individual level to encourage broader adoption of zero waste principles.

Marketing Strategy:

A good marketing strategy for a zero-waste lifestyle should focus on awareness, accessibility, and engagement. Social media engagement, influencer engagement, and educational content can be employed by brands to promote the benefits of green living. Price and convenience will attract more customers to green products. Refill points, reward programs, and price reductions can encourage repeat purchases. Government schemes and environmental agencies can be collaborated with to gain credibility. Additionally, companies should focus on open transparency of sustainability processes and the use of eco-friendly packaging to stay aligned with the values of customers. Zero waste needs to be made desirable and accessible so that companies can drive long-term behaviour and interest shift.

Key Survey Insights**1. Awareness of Zero-Waste**

Most participants are moderately aware of the concept of zero-waste.

Few, if any, are totally unaware, so there is a reasonable level of Basic awareness.

The key sources of awareness are social media, then friends/family.

This reinforces that online is an efficient channel for distributing knowledge about sustainability

2. Principal Barriers Mentioned

Most cited was the excessive price of sustainable products.

Most respondents identified lack of awareness or education as an issue.

Inconvenience in daily life and unavailability of zero-waste options were also frequent concerns.

A few respondents mentioned lack of government or corporate support as a structural problem.

These findings suggest the need for individual-level as well as institutional-level interventions to minimize friction.

Conclusion

While it is difficult to have a zero-waste life in today's world, the survey results suggest that significant waste reduction is possible and can be brought about by a combination of conscious lifestyle choices, facilitative policy support, and technological advancements. The individual's responsibility is to take conscious daily habits such as avoiding single-use plastics, reusing products, composting organic waste, and using sustainable substitutes. These must be accompanied by robust government policies that facilitate infrastructure, guarantee enforcement of green laws, and offer incentives such as tax concessions or subsidies to promote sustainable action. Furthermore, technology can amplify the effect of these actions by making sustainable living convenient and economical through innovations such as biodegradable products, intelligent waste management systems, and digital solutions promoting environmentally friendly actions. While an entirely zero-waste life continues to be a fantasy, real change can be initiated when individuals, institutions, and industries join hands. The survey shows greater awareness and commitment of people to transform and presents the case for the merit of collective effort and system support in turning intention into sustained effect into lasting impact.

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