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Tittle of paper: Green Marketing Strategies in the Indian FMCG Sector: An Empirical Study
of Consumer Perception and Green washing Awareness in Kalyan and Ulhasnagar Cities.

Abstract:

The Fast-Moving Consumer Goods (FMCG) sector in India plays a crucial role in shaping consumption patterns and environmental impact due to its large-scale production and distribution. This study examines the adoption and effectiveness of green marketing strategies implemented by FMCG companies in India between 2020 and 2025. The research focuses on key strategic areas such as sustainable packaging, eco-friendly product formulation, and environmentally responsible promotional practices.

The study is based on both secondary data analysis and primary data collected from 99 respondents to understand consumer awareness, perception, and behavioural responses toward green marketing claims. The findings indicate a high level of consumer awareness regarding environmental issues and greenwashing practices; however, a noticeable gap exists between awareness and actual purchasing behaviour. Transparency, credible certifications, and detailed product information significantly influence consumer trust, while vague environmental claims lead to skepticism.

The study also identifies major challenges faced by firms, including cost constraints, lack of standardized labelling, and limited recycling infrastructure. It concludes that the effectiveness of green marketing strategies depends on authentic communication, consumer education, and regulatory support. The research provides practical recommendations for businesses and policymakers to enhance sustainability practices while maintaining competitiveness in the Indian FMCG sector.

Keywords:

Green Marketing, FMCG Sector, Consumer Perception, Greenwashing, Sustainable Packaging, Eco-friendly Products, Environmental Awareness, Brand Trust, Sustainability Strategies, Purchase Intention, Ethical Marketing.

1. Introduction:

The Indian FMCG sector is pivotal in daily consumption and waste generation. With rapid urbanisation, rising incomes and heightened environmental awareness, FMCG companies face pressure to reduce environmental footprints while maintaining affordability and scale. Green marketing — the design, promotion and delivery of products with reduced environmental

impact — has moved from a niche positioning to a mainstream strategic consideration for large Indian FMCG firms (e.g., HUL, ITC, Dabur) and emerging challengers. However, transitioning product portfolios, packaging, and supply chains to sustainable forms presents operational, marketing and regulatory challenges in a price-sensitive market. This paper synthesises recent academic and industry evidence to map typical green marketing strategies, evaluate effectiveness, and provide recommendations tailored to Indian FMCG realities.

The Indian FMCG sector, valued at over USD 150 billion and growing steadily, plays a crucial role in shaping consumption patterns. Major companies such as Hindustan Unilever Limited (HUL), ITC Limited, Dabur India, Tata Consumer Products, and emerging sustainable brands are increasingly embedding environmental considerations into their core strategies. For instance, several firms have committed to reducing virgin plastic usage, achieving carbon neutrality targets, adopting recyclable packaging formats, and promoting water stewardship initiatives. These efforts align with national initiatives such as the Swachh Bharat Mission, the Plastic Waste Management Rules, and Extended Producer Responsibility (EPR) guidelines.

Furthermore, digital transformation has amplified the visibility of green marketing campaigns. Social media platforms and influencer marketing have become powerful tools to communicate sustainability narratives. However, increased transparency also exposes firms to public scrutiny, making authenticity and measurable impact essential for maintaining credibility.

Therefore, this research seeks to provide a comprehensive understanding of how green marketing strategies are being conceptualised, implemented, and perceived in the Indian FMCG industry between 2020 and 2025. The study synthesises recent academic research and industry evidence to evaluate strategic approaches, identify effectiveness determinants, examine challenges, and propose actionable recommendations.

By bridging theoretical insights with industry realities, this paper contributes to both academic discourse and managerial practice. It provides a structured understanding of sustainable marketing transformation in a rapidly growing emerging economy and offers a roadmap for organisations seeking to integrate environmental responsibility with competitive advantage.

2. Objectives:

1. To review and categorise green marketing strategies used by Indian FMCG companies from 2020–2025.
2. To synthesise evidence on consumer responses and market outcomes of these strategies.
3. To identify key barriers (operational, financial, and perceptual) and risks (notably green washing).
4. To provide practical recommendations for firms and regulators to improve strategy effectiveness.

3. Literature Review:

1. Van Hoang (2025), in SAGE Open, examined the determinants of green purchase intention in the FMCG sector using PLS-SEM and fsQCA approaches and found that environmental concern, perceived value, and brand trust significantly influence purchase intention. The study highlights that brand trust mediates the relationship between green marketing practices and consumer buying behaviour, emphasising the importance of authentic sustainability communication.

2. Kulkarni, Patil, and Ubale (2024), in the IOSR Journal of Business and Management, analysed sustainable packaging practices in the Indian FMCG industry and found that packaging innovation is the most visible and widely adopted green marketing strategy. Their study highlights that high implementation costs and inadequate recycling infrastructure remain major barriers to effective sustainability transformation.

3. Sharma (2024), in the International Journal of Environmental Sustainability and Human Welfare, investigated green marketing initiatives among leading FMCG firms in India and found increasing adoption of eco-labelling, sustainable sourcing, and renewable energy practices. The study highlights that consistent green initiatives enhance corporate image and long-term brand reputation.

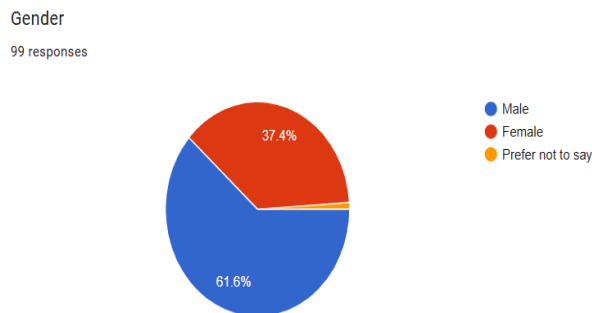
4. Jog (2020), in the Journal of Management and Research, examined consumer understanding of green washing in the Indian market and found that limited awareness of misleading environmental claims negatively affects consumer trust. The study highlights that unclear sustainability claims reduce brand loyalty and necessitate standardized regulatory frameworks.

5. Testa et al. (2021), in the *Journal of Cleaner Production*, explored the impact of environmental claims on consumer skepticism and found that vague or exaggerated green claims increase skepticism, while third-party certifications significantly enhance credibility. Their study highlights the importance of transparency and verification in green marketing communication.
6. Dutta and Banerjee (2022), in the *Asia-Pacific Journal of Marketing and Logistics*, analysed the relationship between green marketing strategies and firm performance in emerging markets and found a positive association between sustainability initiatives and long-term profitability. The study highlights that strategic alignment between environmental objectives and corporate vision strengthens competitive advantage.
7. Kapoor and Dwivedi (2023), in the *Journal of Retailing and Consumer Services*, examined the effectiveness of social media-based green campaigns and found that influencer credibility and message transparency significantly improve consumer engagement. Their study highlights that measurable sustainability evidence increases trust and digital interaction.
8. Singh and Verma (2021), in *Sustainability (MDPI)*, investigated the influence of environmental awareness on green purchase intention in India and found that environmental knowledge positively affects buying intention. The study highlights that price sensitivity moderates this relationship, particularly in low-involvement FMCG categories.
9. Gupta and Kumar (2023), in *Business Strategy and the Environment*, explored ESG disclosure practices in emerging economies and found that transparent sustainability reporting enhances corporate reputation and investor confidence. The study highlights that ESG integration can function as a strategic marketing advantage.
10. PwC India (2025), in its industry report *Sustainable Packaging in the FMCG and Retail Sector*, examined sustainability transitions in Indian FMCG companies and found that Extended Producer Responsibility (EPR) regulations are driving packaging innovation. The report highlights that collaborative efforts across the value chain are essential for achieving scalable environmental impact.

4. Statement of the Problem:

Although Indian FMCG firms are publicly adopting green marketing strategies, there is limited systematic evidence about (a) the actual effectiveness of those strategies in changing purchase behaviour at scale, (b) whether firm initiatives are being perceived as authentic or as green washing, and (c) how domestic innovations in sustainable materials can be integrated cost-effectively into mass FMCG supply chains. This paper addresses these gaps by synthesising recent evidence and deriving actionable recommendations for firms and regulators.

5. Analysis of Data and Interpretation:



1. Out of 99 respondents, the majority were male (61.6%), followed by female (37.4%), and a small fraction (1%) preferred not to disclose their gender. This indicates a slight gender imbalance, with males being more represented in the sample. Such distribution may influence perspectives on online purchasing behavior and environmental awareness.

2. The survey captures a predominantly working-age adult population (26–45 years = 69.7%) — the most active online shopping demographic. The 36–45 age group leads, suggesting mid-career professionals are the core respondents — likely with higher purchasing power and environmental awareness. Youth (18–25) at 26.3% form a significant minority, relevant as digitally native consumers. 46+ are severely underrepresented (~4%),

Which platform do you use most?

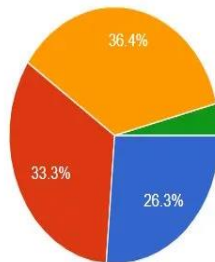
99 responses



● Amazon
● Flipkart

Age group

99 responses



● 18-25
● 26-35
● 36-45
● 46 and above

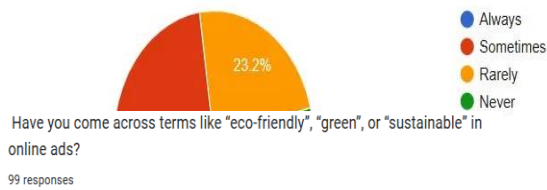
limiting insights for older consumer behavior Overall, the sample is skewed toward millennials and Gen X shoppers

3. Flipkart leads marginally over Amazon (42.4% vs 38.4%) —gap of only 4%, indicating a near-duopoly in Indian e-commerce. Together, Flipkart + Amazon command 80.8% of platform usage — confirming their overwhelming market dominance. Myntra (12.1%) retains a loyal fashion-focused niche audience. Meesho (7.1%) is growing in the value/budget segment, particularly among price-sensitive buyers. This platform distribution is crucial — greenwashing concerns are most relevant on Flipkart and Amazon where the majority shop

4. A strong 72.8% consider environmental factors at least sometimes (Always + Sometimes), showing that eco-consciousness is mainstream but inconsistent. Only 16.2% always factor in environment — true green consumers remain a small committed minority 23.2% rarely and ~4% never consider it, totaling ~27% who are largely indifferent to eco-factors. This reflects the classic "green attitude–behavior gap" — consumers care about the environment in principle but don't consistently act on it during purchase decisions. The

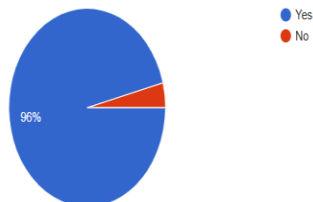
Do you consider environmental factors while purchasing online?

99 responses



Have you come across terms like "eco-friendly", "green", or "sustainable" in online ads?

99 responses



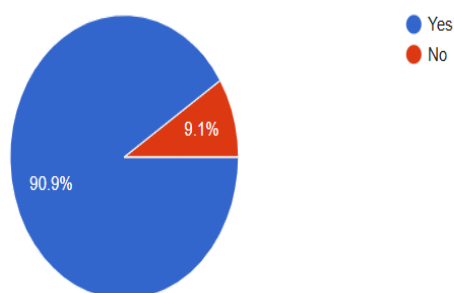
dominance of "Sometimes" suggests environmental consideration is situational and context-dependent.

5. An overwhelming 96% of respondents have encountered terms like "eco-friendly," "green," or "sustainable" in online ads. This is the highest consensus figure in the entire survey — virtually universal exposure. It confirms that green marketing language is pervasive across Indian e-commerce platforms. The near-total exposure makes this sample highly relevant for studying green washing perceptions. The 4% who haven't seen such terms are likely low-frequency online shoppers.

6.

Are you aware of the term "greenwashing"?

99 responses

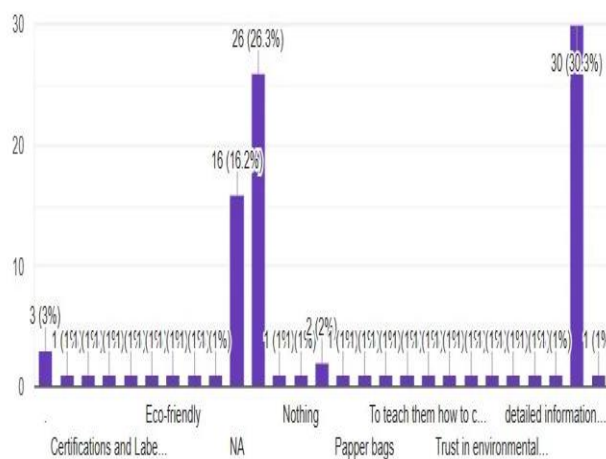


90.9% are aware of greenwashing — an exceptionally high literacy rate for a relatively specialized term. This suggests the sample is composed of educated, digitally informed consumers. Only 9.1% are unaware, indicating greenwashing awareness has reached near-mainstream status in this group. High awareness validates the survey's relevance — respondents can critically evaluate eco-claims they encounter. This level of awareness likely heightens skepticism toward green advertising claims

What factors increase your trust in environmental claims in online advertising?

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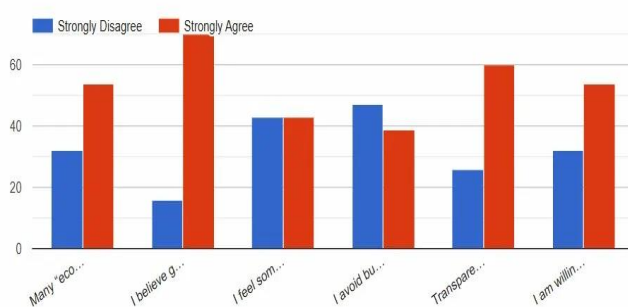
99 responses



7. Detailed, specific information (30.3%) is the #1 trust builder — consumers want facts, data, and transparency, not vague buzzwords. 26.3% responded "NA" — a significant portion are uncertain or distrustful of all environmental claims, signaling deep-rooted scepticism. Certifications & Labels (16.2%) rank third — third-party verification and eco-certifications (like ISO, BIS, Fair Trade) are valued but not the top factor. "Nothing" (2%) suggests a small but notable segment of complete eco-skeptics who trust no environmental claim. The low scores for individual responses highlight there is no single dominant trust-builder — a multi-pronged transparency strategy is needed.

Perception of Greenwashing, Trust and Purchase Intention

Copy chart



8. 1. Greenwashing is Widely Recognized (Statement 2 — Highest Agreement ~68): This is the strongest consensus in the entire survey. Respondents overwhelmingly believe greenwashing is a real and widespread practice — indicating high consumer awareness about misleading eco-claims.

2. Many Eco-Claims Are Seen as Misleading (Statement 1 — ~54 Agree): A majority agrees that "eco" labels are often exaggerated or false. This reflects deep skepticism toward environmental marketing in e-commerce.

3. Confusion & Skepticism is Divided (Statement 3 — Perfect Split ~43:43): This is the only neutral statement, with equal numbers agreeing and disagreeing. It suggests that while many feel confused, an equal portion feel informed enough to make judgments — pointing to mixed consumer literacy.

4. Consumers Don't Actively Avoid Greenwashed Brands (Statement 4 — ~47 Disagree): Despite awareness, respondents do not strongly avoid greenwashed brands. This reveals a critical intention-behavior gap — people know about greenwashing but don't always act on it.

5. Transparency Strongly Builds Trust (Statement 5 — ~60 Agree): Second highest agreement score. Consumers value honest communication from brands about sustainability. This is a major insight for brands seeking to build credibility.

6. Willingness to Pay More for Genuine Green Products (Statement 6 — ~54 Agree): A majority is willing to pay a premium for authentically sustainable products — showing that genuine eco-branding has real commercial value.

6. Suggestions:

For FMCG Firms

1. Adopt a packaging-first roadmap that sequences prioritised SKUs for reusable/recyclable materials (start with higher-margin or high-visibility SKUs). Partner with local recyclers and invest in take-back/refill schemes.
2. Use transparent, evidence-based claims — publish life-cycle summaries or third-party verification for major claims; avoid ambiguous words like “eco-friendly” without context.
3. Pilot domestic sustainable materials by partnering with research institutes/start-ups (e.g., biopolymers, mycelium packaging) to reduce dependence on imported compostable resins and lower costs over time.
4. Tiered pricing and product line strategies — offer both mainstream and “sustainable premium” product lines, reducing the need for immediate across-the-board price increases.
5. Consumer education campaigns — invest in digital campaigns that educate consumers on disposal, recycling, and refill options; measure behaviour change, not only reach.

For Policymakers & Industry Bodies

1. Standardise green claims and labelling with clear criteria and enforcement (reduce green washing).
2. Boost recycling infrastructure and EPR enforcement to make recyclable packaging truly recyclable at scale.
3. Support scale-up of domestic materials via grants, concessional finance, and public procurement pilots that buy sustainable packaging for government programs

7. Conclusion:

The study concludes that green marketing in the Indian FMCG sector has evolved into a strategic necessity rather than a promotional tool. The findings reveal a significant gap between consumer awareness and actual purchasing behavior, despite high exposure to sustainability claims and strong recognition of greenwashing practices. Transparency, detailed product information, and credible certifications emerge as critical factors influencing consumer trust. While firms are actively adopting sustainable practices, challenges such as cost constraints, consumer skepticism, and inadequate infrastructure persist. Therefore, the success of green marketing depends on authentic communication, regulatory support, and continuous consumer education to bridge the intention–behavior gap and ensure long-term sustainability.

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Awareness about citizens' right to combat open waste burning for reducing air pollution

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Abstract:

Keywords: Citizens' rights, Open waste burning, Air pollution.

Introduction:

Air pollution has emerged as one of the most critical environmental and public health challenges globally, with India being among one of the most affected countries. Many factors contribute to the problem but a significant contributor is open waste burning, which releases harmful pollutants such as particulate matter (PM_{2.5} and PM₁₀), carbon monoxide, and toxic compounds into the atmosphere (World Resources Institute India, 2023). These emissions pose severe health risks, including respiratory and cardiovascular diseases, and disproportionately affect vulnerable populations such as children and the elderly (Annals of Global Health, 2023).

Despite regulatory frameworks such as the Solid Waste Management Rules (2016), the practice remains widespread across urban and rural India due to inadequate waste management infrastructure and weak enforcement mechanisms (Centre for Science and Environment, 2023). Estimates suggest that a considerable proportion of municipal solid waste is openly burned, contributing significantly to air pollution and the carbon crisis (Centre for Science and Environment, 2023; World Resources Institute India, 2023).

Addressing this challenge requires a multi-dimensional approach involving improved waste management systems, stricter enforcement, and active citizen participation. Policy initiatives such as increasing penalties for open waste burning in cities like Mumbai indicate growing institutional efforts to curb the practice (The Times of India, 2024). Furthermore, strategies promoting open burning-free cities and community engagement highlight the importance of collective action in achieving sustainable outcomes (Climate and Clean Air Coalition, 2022). Therefore, understanding citizens' willingness to participate in community initiatives is essential for effectively reducing open waste burning and improving air quality at the local level.

Review of literature:

- 1) Bimastyaji Surya Ramadan ^{1,2}, Raden Tina Rosmalina³, Syafrudin², Munawir⁴, Hafizhul Khair⁵, Indriyani Rachman^{1,6}, Toru Matsumoto¹ (2023) Potential Risks of Open Waste Burning at the Household Level: A Case Study of Semarang, the Paper highlights that Open waste burning (OWB) has emerged as a significant environmental and public health concern in developing countries. A study conducted in Semarang, Indonesia revealed that OWB remains one of the most prevalent waste disposal methods, particularly in areas with inadequate waste collection services. The study estimated annual emissions of approximately 53,809.66 tons of CO₂-equivalent, with plastic waste contributing significantly to black carbon emissions. While carcinogenic risks were found to be within acceptable limits, non-carcinogenic risks exceeded safety thresholds, indicating potential long-term health hazards. The findings underscore the need for improved waste management systems and targeted policy interventions to mitigate the adverse impacts of OWB.
- 2) Ramaswami, A., Baidwan, N. K., & Nagpure, A. S. (2016) Municipal Solid Waste (MSW) management remains a critical environmental challenge in developing countries, with open burning identified as a significant contributor to air pollution and public health risks. Existing literature largely focuses on macro-level assessments of emissions, with limited attention to intra-urban variations. Prior studies attribute MSW burning primarily to inadequate infrastructure; however, evidence indicates its persistence even in well-served areas, suggesting the role of socio-behavioral factors. Research further reveals that despite awareness

of health risks, immediate concerns such as waste accumulation influence burning practices. Additionally, weak enforcement of formal regulations and low awareness of legal restrictions limit their effectiveness. Informal institutional mechanisms, including community norms and neighborhood associations, have been identified as significant determinants in reducing MSW burning.

- 3) Ramadan, B.S., Rachman (2022) highlights that open burning is a prevalent waste management practice, particularly in developing countries. They identify it as a major contributor to global air pollution, noting that it is often "under-recorded" or excluded from official waste management statistics. The literature establishes that because this practice occurs at the household level (domestic), it is difficult for municipal authorities to monitor or regulate. The review discusses the use of satellite data (like MODIS) to detect "fire points." However, it notes a limitation in the literature: satellites often struggle to detect small-scale domestic fires compared to large forest fires or agricultural burning. The review synthesizes various studies to identify why people burn waste:
- 4) Ajzen, I. (1991) The present study is grounded in an integrated theoretical framework combining the Theory of Planned Behavior (TPB), Collective Action Theory, and the Social-Ecological-Infrastructural Systems Framework (SEIS). The Theory of Planned Behavior posits that individuals' willingness to engage in protest actions is shaped by attitudes toward environmental issues, subjective norms, and perceived behavioral control. In the context of open waste burning, awareness of health and environmental risks may influence attitudes, while social norms within communities determine the acceptability of civic action. Collective Action Theory further explains that participation in protests depends on perceived collective efficacy, shared interests, and expected outcomes, highlighting the importance of organized citizen groups and community mobilization. The SEIS framework complements these perspectives by emphasizing the interaction between social behavior, institutional mechanisms, and infrastructural conditions in shaping environmental practices. Together, these theories suggest that willingness to participate in protests against open waste burning is not solely an outcome of individual awareness, but is also influenced by social organization, institutional trust, and the enabling environment for civic engagement.
- 5) Sennes et al. (2012) highlight that while citizens possess moderate environmental awareness, it often fails to translate into responsible action. This gap is evident in India, where open waste burning persists despite awareness of its harmful effects. Individuals tend to underestimate their personal contribution, leading to diffusion of responsibility and limited citizen participation. The study's classification of citizens into aware, optimistic, and suspicious groups helps explain varying levels of engagement in addressing such practices. It further shows that responsibility is often shifted to authorities, reducing individual accountability. Therefore, promoting ecological citizenship and community participation is essential to curb open waste burning at the local level.
- 6) "The Open Burning of Plastic Wastes Is an Urgent Global Health Issue" by Pathak et al. (2024), Gauri Sanjeev Pathak, Mark Nichter, Anita Hardon, and Eileen Moyer. The paper serves as a "viewpoint" or scoping review that calls for the global health community to prioritize atmospheric pollution from plastic burning. It concludes that without addressing the lack of waste infrastructure and the inherent toxicity of plastic composition, the global health burden of plastic will continue to escalate, particularly among the world's most vulnerable populations.
- 7) Mukherji, S. B., Sekiyama, M., Mino, T., & Chaturvedi, B. (2016). "Resident Knowledge and Willingness to Engage in Waste Management in Delhi, India", Focused on Assessing citizens' knowledge and willingness to participate in solid waste management. Despite poor compliance with waste rules, citizens show willingness to engage in waste management practices.

Participation is influenced by awareness, socio-economic status, and institutional support. Gaps exist between willingness and actual behavior.

- 8) Zhang, Y., Wang, H., & Liu, J. (2023) Study of Willingness to Participate in Environmental Governance” it was found that participation increases with environmental knowledge, Social networks and community interaction. Older age groups show lower willingness.
- 9) Sowmya, K., & Basavaraju, C. (2022). Right to environment as a separate fundamental right: An analysis. This research paper explores the evolving legal necessity of recognizing a clean environment not merely as a derivative of other rights, but as a standalone fundamental right.

Objectives of the study:

1. To know about adverse effects of burning waste in open especially near residential areas
2. To know about citizens’ rights to combat open waste burning for reducing air pollution.
3. To study the factors encouraging citizens to use their rights and powers to combat open waste burning.
4. To know the willingness of people to participate in a community initiative to reduce open waste burning.

Hypotheses:

Ha1: There is a relationship between Gender and awareness of specific laws or penalties related to open waste burning.

Ha2: There is a relationship between Educational Qualification and opinion of respondents on effectiveness of the government in controlling open waste burning.

Ha3: Awareness about penalties imposed by the National Green Tribunal is significantly related to reporting of open waste burning incidents to authorities.

Research Methodology:

Method of Sampling: Convenient sampling

Type of Research: Descriptive

Primary Data was collected by circulating a questionnaire through Google on Whatsapp. The data was analyzed with the help of diagrams and the Spearman Rho correlation coefficient test.

Both sources of data collection were used:

Primary data: It was collected by asking questions with the help of a questionnaire.

Sample size: 38 respondents between 18 to 50 age group.

Sample Area: Kalyan Dombivli Twin Cities.

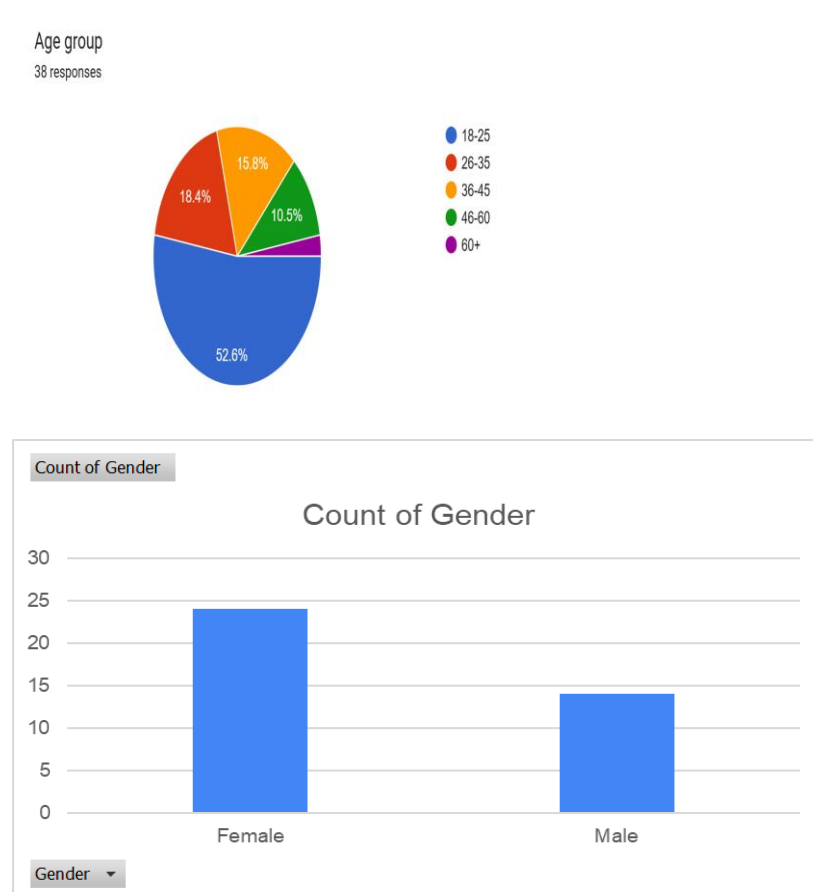
Secondary data: The secondary data has been collected from Online Books and Journals and relevant websites.

Limitations of the study:

- Responses to the questions of the questionnaire are as per respondents understanding which may differ.
- All responses from respondents are assumed to be true.
- A non-probability method of sampling has been used.

Data analysis:

Fig 1 Genderwise distribution of respondents

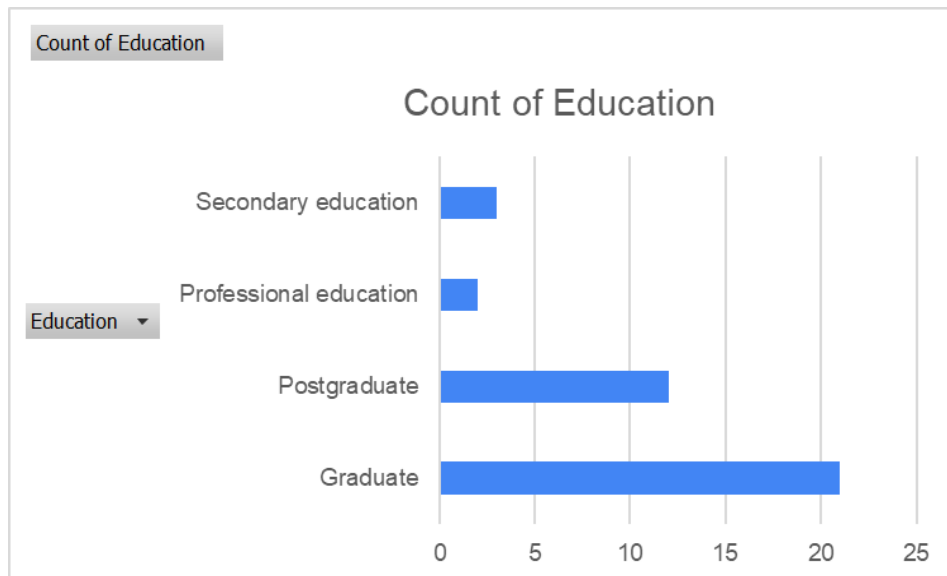


Source: Sample Survey

Fig 2 Education qualification of respondents

Education	Count of Education
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Graduate	21
Postgraduate	12
Professional education	2
Secondary education	3



Source: Sample Survey

Testing of hypothesis/ hypotheses:

Ha1: There is a relationship between Gender and awareness of specific laws or penalties related to open waste burning.

The correlation is NOT statistically significant ($p = 0.140$).

At the 0.1 significance level, we fail to reject the null hypothesis. We cannot conclude that a real relationship exists between the variables.

The correlation coefficient ($\rho = -0.244$) indicates a weak negative relationship.

A non-significant result doesn't prove there's no effect — it may indicate insufficient sample size or a small effect.

Ha2: There is a relationship between Educational Qualification and opinion of respondents on effectiveness of the government in controlling open waste burning.

There IS a statistically significant positive correlation ($p = 0.0096$).

At the 0.05 significance level, we reject the null hypothesis of no correlation. The relationship between the two variables is unlikely to be due to chance alone.

The correlation coefficient ($\rho = 0.415$) indicates a moderate positive relationship.

Correlation does not imply causation. A significant relationship doesn't tell us which variable (if either) causes changes in the other.

Ha3: Awareness about penalties imposed by the National Green Tribunal is significantly related to reporting of open waste burning incidents to authorities.

The correlation is NOT statistically significant ($p = 0.277$).

At the 0.05 significance level, we fail to reject the null hypothesis. We cannot conclude that a real relationship exists between the variables.

The correlation coefficient ($\rho = 0.181$) indicates a weak positive relationship.

A non-significant result doesn't prove there's no effect — it may indicate insufficient sample size or a small effect.

Findings:

- It has been found in the investigation that 45 % of respondents have witnessed open waste burning in their locality.
- 76 % of respondents perceive the impact of open waste burning is extremely harmful.
- 79% of the respondents said that they have experienced health issues due to burning of waste in the open.
- 55% of respondents are aware that burning of waste in the open is illegal in India.
- 37% of respondents are aware of laws and penalties.
- 84% of respondents are willing to report incidents of open waste burning.

- Lack of knowledge on where to report, belief that authorities won't take action and fear of retaliation from offenders are the factors responsible for preventing citizens from reporting about the incidents.
- Easy reporting mechanisms, awareness campaigns, stronger law enforcement and community participation and support encourages citizens to use legal measures against open waste burning.
- Respondents believe our government is effective to certain extent in controlling open waste burning especially in urban areas.
- Most of the respondents said hefty fines should be levied on the offenders.
- 87% of respondents are willing to participate in community initiatives to reduce open waste burning.

Suggestions:

- AI tools can be used to implement government initiatives and practice to combat the problem.
- Schools and Colleges can introduce credit courses to overcome the problem.
- More strict rules and regulations and amendments in existing laws are needed .
- Citizens' credit bank programmes can be implemented.
- Co-operative societies should be involved.
- Hefty fines should be imposed on the offenders.
- Regular patrolling by the government officials can act as a deterrent.

Conclusion:

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