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Gen Z and the SDGs: Leveraging Youth Power for Responsible Consumption in Developing Nations

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Abstract. *This study explores the evolution of green consumption behavior among Generation Z (Gen Z) in developing countries over the period from 2010 to 2024. Utilizing a synthesis analysis of secondary data from international reports, academic studies, and statistical databases, the research traces the shift in Gen Z's environmental awareness and sustainable purchasing practices. Findings indicate a significant rise in green consumption trends, particularly since 2015, driven by factors such as social media influence, price affordability, and environmental education. Regional variations are evident: Asia showcases the pivotal role of digital platforms, Latin America benefits from policy-driven education initiatives, and Africa features emerging grassroots movements amid infrastructural challenges. The study highlights Gen Z's potential as a transformative force in sustainable consumption, though their behavior remains conditional on economic and systemic support. These insights are linked to Sustainable Development Goals SDGs 12 and SDGs13, emphasizing the need for targeted policies to enhance Gen Z's contribution to global sustainability efforts in developing economies.*

Keywords: *Green consumption, SDGs, generation Z, environmental education*

1. Introduction

Over the past two decades, the world has witnessed a major shift in awareness and action regarding sustainable development, especially in the area of consumption. The traditional production-consumption model, which is based on massive resource exploitation and rapid disposal, is creating serious consequences for the global environment and climate. According to (Bové & Swartz, 2016), about 60% of global greenhouse gas emissions are related to the final consumer supply chain. In other words, consumers' purchasing, use and disposal of products are becoming one of the main causes contributing to the current climate crisis.

In this context, the concept of "green consumption" is no longer a temporary trend but has become a strategic direction, promoted by global organizations, businesses, and civil society. Green consumption is not only the behavior of choosing environmentally friendly products, but also includes lifestyle, awareness, and personal responsibility towards the natural ecosystem (Han, 2021). Green products, from organic food, sustainable fashion, to energy-saving technology, are gradually dominating the market, especially in developed countries. However, the story in developing countries is different, when consumers still have to carefully consider between cost, convenience and environmental value.

Gen Z, those born between 1995 and 2010, are emerging as a new consumer force with unique characteristics. They are the first generation to grow up in a comprehensive digital environment, with the ability to access information quickly, proactively and frequently

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interact on global social networking platforms. Notably, many recent studies show that Gen Z is not only a passive consumer but also a "trendsetters" in promoting ethical and environmentally friendly consumption (Djafarova & Foots, 2022). Their sensitivity to social issues, connectivity, and peer pressure from the online community has contributed to shaping this generation's consumer behavior in a more responsible direction.

But is Gen Z in developing countries really following the same "green consumption" trajectory as in developed countries? And if so, how has this trend formed and changed over the past decade? This is an important question not only for academia but also of strategic significance for policymakers and businesses. Because developing countries currently account for nearly 85% of the global youth population, and they will be the main consumer force in the next decade (GCA, 2021). Understanding the behavior of this generation, especially in the context of climate change and the pressure to implement the Sustainable Development Goals (SDGs), will help guide consumption policies, education and market development more effectively.

Another important aspect is that developing countries are at a point where the consumption norm is being shaped. Unlike developed countries, where consumer behavior has been stable according to the century-long industrialization model, developing countries have both access to global technology and face limitations in infrastructure, income, education and policy environment. Therefore, the behavior of Gen Z in these contexts will not only reflect on them as individuals but also be an indicator of the consumption direction of the entire economy in the future. Researching the green consumption behavior of Gen Z in this context is of academic significance and the basis for national and corporate strategies to pursue SDG 12 (Sustainable Consumption and Production) and SDG 13 (Climate Action).

Although the number of studies on green consumption in general has increased significantly in recent years, most of the work has focused on developed economies such as the US, UK, Germany, Japan or South Korea, where the social conditions, educational environment and policies supporting sustainable consumption are already well established. Meanwhile, developing countries have rarely been fully examined, especially with a cross-country and cross-time comparative approach.

A common problem in existing research is the lack of systematic synthesis of available data on green consumer behavior among Gen Z in developing countries. Several individual studies have been conducted at the national level, such as in India (Ghouse et al., 2024), South Africa (Synodinos et al., 2023), or Nepal (Aryal & Tamang, 2024). These works mainly use primary data from small-scale surveys and interviews, without cross-country or longitudinal comparisons.

In addition, there has been little systematic analysis of secondary data to track the evolution of Gen Z's green consumption behavior across multiple developing countries at the same time. This leaves gaps in understanding the changing nature, similarities, and regional differences in the behavior of this generation. The lack of a comprehensive perspective makes it difficult to develop appropriate green consumption policies, especially in cross-regional or international cooperation strategies. Existing studies rarely link directly to the Sustainable Development Goals (SDGs) in a clear way. Although green consumption is a core content of SDG 12 and has an impact on many other goals such as SDG 13 (climate), SDG 4 (education) or SDG 9 (technological innovation), the logical connection between consumer behavior and global goals is still quite fragmented in current works.

Based on the above gaps, this study aims to synthesize, analyze and compare the green consumption trends of Gen Z in developing countries, based entirely on reliable secondary data sources. Instead of conducting a new survey, the study will exploit available public databases and international reports to: (1) Tracing the change in Gen Z's green consumption behavior over the past 10–15 years, from around 2010 to present. (2) Compare regional differences (e.g., Southeast Asia, Sub-Saharan Africa, Latin America) to highlight regional specificity. (3) Analyze key factors influencing behavioral shifts, including social media, education, income, public policy, and the effects of globalization. Linking findings to SDG 12 and SDG 13, propose policy directions to enhance the role of Gen Z in promoting sustainable consumption. From there, the study posed three central questions: (1) How has Gen Z's green consumption behavior in developing countries changed over the past decade?, (2) Are there any clear differences in "greenness" between different geographic regions?, and (3) What are the main factors that promote or hinder Gen Z's green consumption behavior in the context of developing countries?

2. Literature Review

The concept of green consumption is no longer strange in discussions on sustainable development, especially since the 2000s when global awareness of climate change and resource depletion has increased. However, defining this concept precisely remains a challenge due to the diversity in approaches of organizations and scholars.

According to (Tian, 2024), green consumption is understood as the use of goods and services that meet basic needs and bring a better quality of life while minimizing the use of natural resources, toxic substances, and reducing pollution emissions throughout the product's life cycle. This definition emphasizes the relationship between individual consumer behavior and systemic environmental impacts, extending the perspective from purchasing behavior to factors such as maintenance, recycling, and product disposal.

(Oluwatosin Yetunde Abdul-Azeez et al., 2024) approaches the concept of green consumption through the lens of product life cycle and consumer responsibility. (Alam et al., 2023) states that green consumer behavior includes not only choosing environmentally friendly products, but also involves usage habits, ethical brand choices, and a willingness to pay more to reduce environmental impact.

In general, green consumer behavior can be identified through three main groups of characteristics: (1) Environmental awareness: the level of consumer understanding and concern about environmental issues such as pollution, climate change, and resource depletion. (2) Sustainable purchasing behavior: giving priority to choosing products with eco-certification, recycled products, local products, or products with long life cycles. (3) Green behavioral intention: the desire to change lifestyle, support green businesses, and avoid environmentally harmful products, even if it is inconvenient or more expensive. Unlike traditional consumer behavior that is driven solely by need and price, green consumer behavior is often a morally oriented behavior, where factors such as personal values, social responsibility, and community influence play a role in guiding purchasing decisions (Hosta & Zabkar, 2021).

Gen Z, generally defined as those born between 1995 and 2010, is the first generation to grow up in a digitally connected world. They use smartphones at a young age, consume information quickly, and engage in unprecedented levels of online social interaction. But in

addition to their digital flexibility, Gen Z also exhibits another prominent trait: concern for social and environmental values (Narayanan, 2022).

Many international studies show that Gen Z tends to prioritize brands that clearly demonstrate their commitment to the environment and society. According to a global survey by (Tran, 2024), up to 73% of Gen Z consumers are willing to pay more for sustainable products. This figure is significantly higher than previous generations such as Millennials (68%) or Gen X (55%). In particular, frequent interaction with environmental campaigns on social media has contributed to the formation of a generational identity associated with the concept of eco-consciousness.

More than just consumers, Gen Z is also a trend setter through their ability to spread ideas on social media. Trends such as "#NoPlastic", "#FridaysForFuture", or "#ThriftShopping" not only reflect their sympathy for environmental issues but also become lifestyle choices. Gen Z influencers promote sustainable companies, secondhand fashion, and zero-waste habits on "Green TikTok," which has grown rapidly. According to local media and youth climate action reports, these trends have increased youth-led eco-businesses and community clean-ups in Indonesia and Mexico. Secondary data support this trendsetter identification, although the extent and consistency are unclear. Ethnographic studies or social media content analysis could demonstrate how extensive and sustained this influence is across cultures. This shows that Gen Z's environmental attitude is not only limited to awareness but also expressed through clear behavior.

In developing countries, Gen Z plays a particularly important role. Unlike their parents, who are accustomed to traditional consumption models, Gen Z has access to globalization, modern education, and direct influence from international environmental campaigns. They live in a state of "catching up with the world", where consumption is not only to meet material needs but also to express personal identity and social responsibility. In countries such as Vietnam, more and more Gen Z young people are interested in consuming domestic products, reusing old items, and choosing environmentally friendly brands (H. T. T. Nguyen, 2025; Tran et al., 2022). However, there are still many challenges. Limited income sources, incomplete distribution infrastructure, and uneven awareness make the green consumption behavior of Gen Z in developing countries very heterogeneous. This is a fundamental difference compared to developed economies, where green consumption has gradually become the market norm.

Consumer behavior, especially green consumption, is a complex social phenomenon, governed by many layers of interacting factors. Here are the main factors noted in recent academic research:

1) Price and affordability: These are the factor that has the most obvious impact on green purchasing behavior, especially in developing countries. Green products often have higher production costs, leading to higher selling prices. For Gen Z, who are still financially dependent on their families or have just started working, price is a major barrier. According to (Sukresna & Mikina, 2024; Tan et al., 2019), in many Asian and African countries, young consumers express a desire to go green but in reality, choose cheaper products.
2) Social media and public pressure: The popularity of platforms like TikTok, Instagram, and Facebook has created a constant media environment where environmental campaigns can easily go viral. Gen Z is often influenced by "green influencers", viral

videos about sustainable living, or ethical consumerism. This not only affects awareness but also changes specific consumer behaviours.

3) Environmental education: The level and content of education deeply influence green consumer behaviour. In countries with integrated environmental education systems (such as Thailand and Costa Rica), Gen Z tends to take stronger action. Education not only equips knowledge but also encourages positive attitudes and behaviors.
4) Policy and law: At the macro level, policies supporting green consumption such as tax incentives for green products, national media campaigns, or mandatory eco-labeling regulations all have long-term impacts on consumer behavior. However, in many developing countries, the legal system is still inconsistent or slow to implement, limiting policy impact.
5) Globalisation and market integration: Gen Z is exposed to products, brands, and messages from all over the world. Green products from international brands have become a symbol of modern lifestyle. However, this trend also has a downside; it imposes Western standards on local markets, sometimes leading to consumption that is more formal than real (Strizhakova & Coulter, 2013).

Green consumption is an indispensable pillar in realizing Sustainable Development Goal 12 (SDG 12), Ensuring sustainable consumption and production patterns. According to (Sakharov & Andronova, 2021) without changing consumer behavior, the world will not be able to achieve any of the SDGs because they all depend on the rational use of resources.

SDG 12 emphasizes raising public awareness, encouraging businesses to innovate production models and promoting responsible consumption behavior. In particular, the role of Gen Z, the dominant consumer generation in the next decade, is extremely important. They are not only consumers, but also those who reshape market logic, forcing businesses to change towards a more sustainable direction. In addition, green consumption also plays a role in SDG 13 Climate Action. By reducing consumption of harmful products, increasing the use of recycled products, and supporting environmentally friendly brands, Gen Z is contributing to reducing greenhouse gas emissions indirectly. If properly encouraged, this generation's consumer behavior can become an important "social lever" in the fight against climate change.

Many countries have now integrated the SDGs into their consumption and education policies, but implementation has been slow or uneven. Therefore, understanding the development of Gen Z's green consumption behavior in each specific context will be the basis for making SDG policies more effective and feasible.

3. Methods

This study is designed as a synthesis analysis, based entirely on secondary data sources. More specifically, this is a quantitative and qualitative study, aiming to reproduce and explain the changes in green consumption behavior of Gen Z in developing countries, in the time frame from 2010 to 2024.

Selecting secondary data is an appropriate strategy in the current context, when international information sources have become diverse and highly reliable. In addition, due to the scope of the study spanning many countries and regions, conducting primary surveys is not feasible under limited resources. Exploiting secondary data also helps ensure objectivity and allows access to different aspects of the problem, from quantitative statistical data to qualitative analytical policy reports. In other words, the study does not seek to remeasure the

phenomenon, but instead aims to organize, systematize, and compare published findings, thereby drawing out general patterns and important differences across time and geography.

The analysis in this study is drawn from a variety of highly reliable secondary data sources, including international statistics, intergovernmental organization reports, and published academic works. The selection of data sources follows three main criteria: (1) the reliability of the issuing organization, (2) the timeliness, and (3) the relevance to the research subject of Gen Z in developing countries. All data will be systematically stored, coded and classified by time, geographic area and content type to ensure consistency in the analysis process.

To improve transparency and reproducibility, the study used defined selection and coding criteria. The following criteria chose documents and datasets: (1) publication date between 2010 and 2024 to match the study period; (2) relevance to green consumption, Gen Z behavior, or sustainability in developing countries; and (3) source credibility, prioritizing international organizations (e.g., UNEP, UNDP, World Bank), peer-reviewed articles, and globally recognized statistical platforms like Statista.

For qualitative data like policy reports and academic literature, theme coding was used. From the research topics, social media, environmental education, policy background, and affordability barriers emerged as key themes.

When possible, descriptive statistics for quantitative datasets were standardized. Normalization was used to estimate Gen Z-relevant values in countries that reported data in different formats (e.g., % of "youth" vs. age-specific groupings). Sensitivity checks prevented data gaps from skewing cross-regional comparisons.

The purpose of this comparison is to identify different patterns of green consumption development, thereby providing specific policy implications for each group of countries, avoiding the application of a single formula. The research methodology is designed to be interdisciplinary, flexible, and fully exploit the value of secondary data. It not only ensures objectivity and comprehensiveness, but is also consistent with the practical orientation and links with the United Nations Sustainable Development Goals, especially SDG 12 (Sustainable consumption and production) and SDG 13 (Climate action).

4. Results and Discussion

4.1. Trend changes over time

Over the past decade, the green consumer behaviour of Gen Z in developing countries has seen a marked shift, not only in awareness but also in practical action. The period from 2010 to 2014 is considered the seedling period, when the concept of environmentally friendly products only appeared sporadically in some large markets such as Brazil or Indonesia(de Lima Siqueira & Tavares, 2021). At that time, only about 12–15% of Gen Z consumers in the surveyed countries said that they "considered environmental factors when shopping." (Adialita & F. Sigarlaki, 2021; Borah et al., 2024).

However, from 2015 onwards, this trend began to grow strongly. Notably, 2019 marked a turning point with the spread of environmental movements initiated by Gen Z themselves, typically the global campaign Fridays for Future by Greta Thunberg, or the anti-plastic waste movement in Southeast Asia. At this time, according to a global survey by (Kucher, 2021), the proportion of Gen Z in developing countries willing to pay more for sustainable products has increased to about 38-42%, depending on the region.

By 2021-2024, green consumer behavior is no longer a notable exception but has become an important part of overall consumer behavior. In Vietnam, according to a (NGUYEN et al., 2023), Gen Z young people said they "prefer to choose products with eco-packaging or brands with clear environmental policies". In Colombia, the similar that Colombian Gen Z consumers are increasingly eco-conscious, especially in sectors like fashion, and some are willing to pay more for high-quality, sustainable products (Omori, 2022), while in Kenya, a survey from SDG (2022) shows that progress on responsible consumption and production (SDG 12) of Gen Z (Government of Kenya, 2022).

While the pace of change varies from country to country, the overall trend is upward over time , both in terms of the size of the audience and the level of behavioral commitment. While Gen Zers were previously mostly "intentional," they are now beginning to demonstrate it through clear actions: choosing local products, rejecting plastic packaging, supporting environmentally transparent brands, etc.

4.2. Comparison by region

When disaggregated by geographic region, some significant patterns can be seen, reflecting cultural, policy and development characteristics.

Asia :

In Southeast Asia, Gen Z is the driving force behind green consumption, not because they are formally educated about the environment, but largely because of the strong influence of digital media. Platforms like TikTok and Instagram have become "unofficial schools" for sustainable living, where young people share tips on using recycled products, "hauling secondhand goods" videos, or "zero waste" challenges. In Indonesia and Vietnam, community campaigns initiated by young people themselves, such as "Say No To Plastic" or "ReMake Plastic", have gone viral and created a huge social impact. However, green consumer behavior in Asia is still strongly influenced by the domestic market. Availability of eco-friendly products, sustainable distribution systems, and competitive pricing are key factors. In the Philippines, (Bautista et al., 2023) found that Gen Z is enthusiastic about green products, and that price sensitivity is a significant factor influencing their decisions.

Africa :

In Sub-Saharan Africa, the Gen Z green consumption landscape is quite unique. On the one hand, there is a lack of official data, especially detailed surveys by age or specific behaviors. On the other hand, in recent years, many indigenous green consumption movements have emerged, originating from youth organizations, social startups or student groups. For example, in Kenya, the "Eco-Warriors" movement in schools has created hundreds of small initiatives related to recycling and using eco-products. In Nigeria, the "Buy Naija to Grow the Naira" campaign has been restructured to encourage green domestic consumption. However, due to the lack of a support system from the state and the low average living standards, young people are often limited to the range of conditional green consumption behavior, that is, only when the price is right and available.

Latin America :

In contrast to Africa, many Latin American countries have clear policies and a strong commitment to promoting green consumption, especially among young people. In Mexico,

Chile, and Colombia, "Escuelas para el Desarrollo Sostenible" (Schools for Sustainable Development) programs have been integrated into the primary school curriculum, giving Gen Z early access to the concept of sustainable consumption, as well as the tools to put it into practice. (Agrawal et al., 2023) show that more than Gen Z in Latin America have participated in environmental awareness programs or campaigns. In Brazil, sales of eco-friendly brands are largely due to the consumer choices of young people (Floriano & Matos, 2022). However, this region also faces significant challenges such as political instability, inflation, and lack of sustainable investment from the private sector, making green consumption behavior still more aspirational than realistic among a significant portion of Gen Z.

4.3. Main influencing factors

After analyzing quantitative and qualitative data from the regions, the three most prominent factors influencing Gen Z green consumption behavior in developing countries were identified as follows:

(1) Social media and network influence

There is no denying the role of social media as a behavioral shaper for Gen Z. Unlike previous generations, Gen Z does not primarily receive information from newspapers or schools but from social media, short videos, and influencers. Content such as green product unboxing, minimalist living challenges, or recycling vlogs are both engaging and accessible, helping to drive behavioral awareness without the need for formal campaigns. Research by (Confetto et al., 2023) shows that Gen Z in developing countries changes their shopping behavior after viewing environmental content on social media.

(2) Price and affordability

Despite the positive trend, Gen Z is still a consumer group with a low financial threshold. In many countries, they are still dependent on their parents or have just started working, and their income is not yet stable. When faced with the price difference between green products and regular products, most will choose the more economical option. This is the reason why green consumer behavior often tends to be discontinuous: good intentions, but unstable actions. Adjusting subsidy policies and tax incentives for green businesses is a feasible solution in the long term.

(3) Level of popularization of environmental education

Formal and informal education play a crucial role in shaping sustainable consumption habits. Green consumer behavior is more likely to be established where environmental education programs are implemented early. However, many countries have yet to integrate this topic into the general education system. Lack of content, untrained teachers, and the perception of environmental education as secondary rather than primary are major barriers. The research results show that Gen Z's green consumption behavior is developing in a positive direction, but not uniformly. There is a clear distinction between areas with strong policy and education support and areas where consumption behavior is mainly influenced by social media and living conditions. Identifying the main influencing factors is an important first step to building appropriate policies, towards realizing SDGs 12 and 13 more effectively.

The results of the study show a fairly positive overall picture of the shift in green consumer behavior among Gen Z in developing countries. Overall, environmental awareness

and concern among this population group has increased significantly over the past decade. However, this growth has not been uniform across regions or even across Gen Z groups within the same country. Factors such as economic conditions, national policies, the level of environmental education, and the presence of media campaigns have a significant impact on the speed and level of behavioral commitment.

One notable finding is that Gen Z's green consumption behavior is strongly conditional, meaning they are willing to act for the environment, but only within the limits of their financial and personal comfort. Structural inequities affect affordability, not just individual budgets. Gen Z faces economic challenges in many developing nations due to youth unemployment, informal labor marketplaces, and urban–rural income inequalities. Sub-Saharan Africa and Southeast Asia have young unemployment rates exceeding 10%, with rural rates significantly higher (MacroTrends, 2023; TGE, 2023). These constraints limit young customers' purchasing power, making it harder for them to choose sustainable items even when they care about the environment.

Urban–rural differences affect behavior. Gen Z in Jakarta and Nairobi has better access to eco-products, green markets, and sustainability initiatives via digital platforms than rural youth who use traditional supply chains with restricted options. Thus, a lack of commitment may be due to systemic limitations outside individual control. To enable inclusive green consumption, affordability policies must be combined with structural improvements, including job programs, rural distribution infrastructure, and targeted subsidies.

For example, many young people in Vietnam or the Philippines are willing to choose recycled or domestic products, but will revert to their old choice if green products are expensive or difficult to access (Abeysekera et al., 2022; D. D. Nguyen, 2023). This is consistent with the conclusion of (Hallez et al., 2024), it is clear that positive behavioral intentions are not enough to lead to actual consumption behavior in the absence of supporting conditions. Social media acts as a powerful pull for green consumption trends. Gen Z not only passively receives information but also actively spreads sustainable values in their communities. This method works in certain places but not others. The digital gap remains, especially in rural areas and nations with poor internet infrastructure. In low-income nations, 27% of people have regular internet connectivity, compared to 93% in high-income countries (ITU, 2024). This difference affects Gen Z's capacity to access eco-friendly product e-commerce, digital environmental campaigns, and sustainability-related content online. Digital media may increase green consumption in urban and connected areas, but its reach is unequal, and strategies that rely largely on it may ignore vulnerable youth. This division must be addressed using media-based behavioral interventions for inclusivity. However, this also leads to the phenomenon of consumption following the trend, where sustainability sometimes becomes a sign of style rather than a deep ethical commitment. This is a point to note when assessing the true sustainability of green consumption trends among this population group.

Another important but often overlooked dimension is the role of the informal sector and local community organizations. In rural and underdeveloped parts of many developing countries, traditional marketplaces, student-led green groups, and faith-based organizations shape consumption habits. Large-scale datasets rarely capture these actors, who operate outside traditional policy frameworks. They effectively promote sustainable practices through community recycling, informal environmental education, and localized consumer networks. Their social capital and community trust can boost policy impact beyond top-down measures. Governments and development partners should actively pursue public, private, and informal

partnerships to include the groups in national green consumption policies, given their power. This would improve SDG implementation in areas with weak or unavailable formal institutions.

The findings from this study have direct links to at least two targets in the SDGs framework: SDG 12 - Responsible consumption and production, and SDG 13 - Climate action. For SDG 12, the data shows that green awareness and behavior among Gen Z have increased in most surveyed areas. This is a positive sign that awareness raising, public education and social media campaigns are having an effect. However, the gap between awareness and actual behavior also clearly reflects that current policies are still insufficient to convert intentions into actions on a large scale. This raises the need to build mechanisms to support green consumption behavior systematically, not only in communication but also in tax policies, market support and education.

Meanwhile, SDG 13 emphasizes the role of individual and community actions in reducing emissions. As Gen Z, the next generation of consumers, begins to adjust their consumption behavior towards a greener direction, the potential for indirect emission reductions from changing consumption patterns is huge. From choosing sustainable transportation, using energy-efficient products, to reducing fast fashion consumption, Gen Z can contribute significantly to reducing greenhouse gas emissions if given the opportunity. This further reinforces the argument that Gen Z is the key group to realizing SDG 13, not only as citizens but also as consumers and market shapers.

4.4. Limitations

Although this study used diverse and highly representative data sources, certain limitations exist that affect generalizability and depth of analysis. First, due to its reliance on secondary data, the study cannot delve into Gen Z's intrinsic motivations or personal emotions when making green consumption decisions. While secondary data provides breadth and comparability, they do not fully represent emotional, cultural, or value-based decision-making. This limits understanding of psychological or contextual factors that influence green consumption. Mixed-methods research may use interviews, focus groups, or ethnographic observations to enhance understanding and resolve surface-level trends and underlying intent. Much of the available data is primarily quantitative survey results or policy analysis, while factors such as social biases, personal values, and cultural influences are often overlooked or presented in an oversimplified manner.

Second, the lack of age specific data in some countries, particularly in Africa, is an obstacle to regional comparisons. Many statistics simply divide the age group into "under 30" or "general youth," making it difficult to isolate Gen Z behavior. In addition, the heterogeneity in survey timing, collection methods, and definitions of "green consumption" across data sources can also introduce bias. Regional comparisons may be complicated by data availability, geographic coverage, and indicator definitions. Sub-Saharan African datasets often group "youth" into broad age categories (e.g., under 30), making Gen Z-specific behavior harder to isolate. Green behavior indicators, such as willingness to pay for sustainable items and frequency of eco-friendly purchases, may vary by area, causing inconsistency across sources. Thus, regional variances should be viewed cautiously, and future cross-national syntheses need more consistent data gathering systems. Finally, the analysis of behavioral trends over three time periods (2010–2015, 2016–2020, 2021–2024) is

relatively general, based on data grouping for ease of analysis. In reality, changes in consumer behavior can occur continuously and are not clearly divided by year.

4.5. Policy implications

Based on the findings of this study, several key policy implications emerge to support and promote green consumption among Generation Z in a way that is both sustainable and systematic. First, strengthening environmental education from an early age is critical. Integrating topics related to sustainable development and responsible consumption into school curricula—whether through science, civics, or life skills at the primary and secondary levels, or through specialized courses and community-based projects at the university level, can play a pivotal role. Education does more than convey knowledge; it helps shape lasting habits and core values that influence consumer behavior over time. Second, governments and development agencies must actively support businesses, particularly small and medium-sized enterprises, in producing and distributing affordable, eco-friendly products tailored to Gen Z's preferences.

Policy instruments such as tax incentives for green initiatives, subsidies for sustainable goods, and innovation funds dedicated to responsible consumption can be implemented at both national and regional levels. Additionally, businesses should be encouraged to view social media not merely as a tool for marketing but as a platform for educating young consumers and fostering awareness about sustainability. Third, developing a transparent and credible green labeling and certification system is essential. One of the main barriers that prevents Gen Z from acting on their environmental intentions is uncertainty over the authenticity of green claims. Clear, accessible eco-labeling, combined with public outreach efforts, especially via digital platforms, can help bridge that gap and empower informed decision-making. Gen Z in developing countries represents a demographic with enormous potential for driving sustainable consumption. With the right blend of education, supportive policy, and responsive markets, this generation can serve as a powerful catalyst for responsible consumer behavior, making tangible contributions toward the realization of SDGs 12 and 13 in the decades ahead.

Green consumption policies must be tailored through community-based channels in Sub-Saharan Africa and other regions with weak government institutions. Local NGOs, youth organizations, and faith-based groups typically serve as trusted policy mediators. Policymakers should provide technical help, microgrants, and training to grassroots actors to empower community-led sustainability projects. Kenya's “Eco-Warriors” programme mobilised secondary school kids to segregate plastic garbage and plant trees at low cost. The initiative grew through peer leadership and school-based networks despite little government funding. Scaling such models can promote responsible consumption at low cost, especially where national governance mechanisms are inadequate.

Conclusion

This study systematically synthesized and analyzed secondary data to clarify the evolution of green consumption behavior among Gen Z in developing countries over the past decade. The results show that green consumption trends have been increasing strongly among this population group, especially since 2015. Gen Z not only has a heightened awareness of environmental issues but also demonstrates increasingly clear responsible consumption

behavior, although the level of commitment and sustainability of the behavior is still influenced by economic conditions, media, and local policies.

Answering the three research questions posed initially, it can be affirmed that: (1) Gen Z's green consumption behavior has been changing positively over time, from initial awareness to specific action, with clear milestones at both the individual and community levels. (2) Regional differences are significant: while Asia stands out with the role of social media, Latin America sees clear support from education policy, and Africa is developing indigenous green movements but still lacks a coherent support ecosystem. (3) The three main factors influencing Gen Z's green consumer behavior are: social media influence, affordability, and access to environmental education.

These findings reinforce the central role that Gen Z plays in shifting consumer behavior toward sustainability. They are not just shoppers, but also inspirers, standard-setters, and, in many cases, drivers of bottom-up market change. This is a generation that has the potential to be a key driver of the shift from traditional to responsible consumption, especially in developing countries where infrastructure and policy gaps remain. To realize that potential, there needs to be concerted intervention from both the public and private sectors. The government needs to develop policies to support green consumption in a meaningful way, invest in environmental education, encourage businesses to develop environmentally friendly products at reasonable prices, and create transparent information systems to increase consumer confidence. Businesses, on the other hand, should not only consider Gen Z as a potential customer group in terms of sales, but also need to cooperate with them as strategic partners in shaping the future of a sustainable market.

Academically, this study contributes to filling the gap in the international literature on green consumption behavior of Gen Z in developing countries, a topic that has been underexplored in terms of cross-regional secondary data synthesis. Practically, the presented results can provide an important reference for policymakers, educational institutions, and brands seeking appropriate approaches to the next generation of consumers.

Ultimately, understanding and supporting Gen Z in the process of "greening" their consumption behavior is not only a strategic issue in socio-economic development, but also an essential step towards realizing the Sustainable Development Goals, especially SDG 12 - Responsible Consumption and Production, and SDG 13 - Climate Action. In a context where time is running out for climate action, changing the consumption behavior of today's young generation is an investment in the future of the planet.

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Conflicts of Interest

The authors declare no conflict of interest.

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