

RESEARCH ARTICLE



Evaluation of the Execution of the Plastic Bag Ban and Public Perceptions and Responses to Substitute Items in Mogadishu, Somalia

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Abstract: Governments worldwide are increasingly implementing restrictions on plastic bags due to their well-documented environmental harm. Despite a global rise in such initiatives, notable disparities exist in their implementation and enforcement. East Africa has been at the forefront of plastic bag legislation; however, enforcement remains inconsistent across countries. In Somalia, a nationwide restriction on plastic bags was announced for 2024, yet its implementation has been delayed. Within this context, and aligned with global efforts such as the United Nations Sustainable Development Goal 11, which aims to reduce the environmental impact of urban areas by 2030, this study sought to examine the implementation status of Somalia's plastic bag ban and explore consumer perceptions and anticipated behavioral responses. The focus was on understanding whether public attitudes would support reduced plastic bag usage and encourage adoption of environmentally friendly alternatives. A cross-sectional quantitative study was conducted in Mogadishu, Somalia, over a four-week period between October 20 and December 20, 2024. Primary data were collected using structured questionnaires administered through a convenience sampling approach. The target population comprised 1,000 residents of Mogadishu, from which 278 respondents were ultimately recruited. The survey assessed participants' knowledge, attitudes, and perceptions regarding the environmental, human, and ecological impacts of single-use plastic bags, as well as their responses to the government's restriction announcement. Findings indicated that 68% of respondents (n = 189) supported the government's initiative to restrict plastic bags, with statistical significance observed (OR 1.321–15.050, p < 0.05). Participants recognized the substantial environmental damage associated with plastic waste and perceived the policy as necessary, albeit delayed. While respondents expressed strong support for the ban, they emphasized the importance of accessible and environmentally sustainable alternatives to ensure effective transition away from plastic use. The study highlights a strong alignment between consumer awareness and positive attitudes toward plastic bag restrictions in Mogadishu. These findings have important implications for environmental policy in Somalia, suggesting that public support exists for stricter enforcement and sustainable interventions. Addressing implementation challenges and ensuring the availability of viable alternatives will be critical for the success of such policies. The results may also offer valuable insights for other regions facing similar environmental challenges, contributing to broader efforts toward sustainable urban development.

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1. INTRODUCTION

In recent centuries, the Earth has experienced substantial changes due to human-biosphere interactions, leading to alterations in ecosystem dynamics and various local and regional tipping points. Indicators of global environmental degradation include climate change, habitat destruction, and plastic pollution, which, individually or together, lead to the loss of biodiversity and nature's contributions to humanity (Waste, n.d.). Plastic bags have a widespread role in our daily lives, and their disappearance would profoundly transform the landscape of contemporary society (Isak, 2021). The waste produced by plastic bags is linked to environmental and socioeconomic challenges. Moreover, plastic bag trash has been linked to disease transmission, as it generates stagnant water conducive to mosquito breeding. Due to their lightweight nature, plastic bags are easily carried by the wind, leading to a degradation of the environment's aesthetic value. Plastic bag pollution adversely affects the ecology in numerous African nations, including Botswana, Uganda, Kenya, and Zimbabwe. They diminish the visual quality of the environment, obstruct water routes, and contribute to the mortality of certain species. Plastic bags are widely employed in our daily lives, and their disappearance would profoundly transform the landscape of contemporary society (Nyathi, 2020).

Plastics are integral to contemporary construction; nonetheless, their production poses significant health and environmental risks. Plastics and its derivatives pollute urban ecosystems, oceans, and waterways, leading to health complications for both humans and animals. Plastics substantially contribute to environmental pollution, affecting soil, water, and air quality, therefore posing a critical public health issue. For more than fifty years, plastics have elicited apprehensions due to their prevalence, non-biodegradable and enduring characteristics, and their detrimental effects on biodiversity and the environment (Lam, 2018). Approximately 500 billion plastic bags are utilized globally each year, with fewer than 10% being recycled (Rayne, 2008). Projections indicate that, despite prompt and vigorous actions from stakeholders, plastic pollution across all habitats is anticipated to increase by an additional 710 million metric tons (MMT) (Diana, 2022). A comprehensive overview of governmental policies aimed at mitigating plastic pollution throughout the plastic value chain is deficient, particularly regarding the cataloguing of implemented measures and the analysis of policy design and efficacy, notwithstanding several studies on plastic bag levies and bans in Europe and North America (Antaya, 2022). Global plastic waste management is a significant challenge due to its extensive impact on public health and the environment (Studies, 2021). Somali officials indicate that about one million metric tons of plastic materials are released annually at the port of Mogadishu, predominantly used once, impacting environmental integrity and the health of both animals and humans (Diana, 2022). The extensive usage of single-use plastic bags has resulted in significant environmental repercussions that have attracted global attention. The residual bags frequently culminate in landfills, oceans, rivers, and terrains, where they endure for centuries. (Akhter, 2023).

As a result, through collaborative initiatives and thorough measures to prevent further decline, the United Nations was necessitated to implement Sustainable Development Goal (SDG) 11, which focusses on reducing the per capita environmental impact of cities by 2030 (Zamora, 2023). The Somali government has lately banned single-use plastic bags; nevertheless, enforcement is inconsistent. Some firms persist in the illegal distribution of these items, while others have adopted alternatives like fabric bags, paper bags, or reusable containers. The aim of this study was to ascertain and comprehend the implementation of the Somalia plastic bag ban and its projected impact on altering consumer behavior regarding the reduction of plastic bag usage (Enge, 2018). The study is aimed at evaluating how the plastic bag ban has affected the residents of Mogadishu, Somalia, their reactions to the government's prohibition of plastic bags, and what alternative items may serve as substitutes for plastic bags.

Consequently, the prompt enforcement of a plastic prohibition has elicited considerable public opposition. The study's findings will aid policymakers in improving plastic waste management strategies and will help elevate public awareness regarding sustainable alternatives and environmental conservation measures in Somalia. Recently, numerous countries, states, and towns have intensified their initiatives to diminish the usage of plastic bags (Enge, 2018). This research aims to assess public perception and response to the ban on plastic bags, offering a thorough analysis that has previously been absent. Mogadishu

houses more than two million inhabitants. Mogadishu occupies a significant place in Somalia owing to its dynamic urban environment and exceptional natural splendor. Mogadishu is located in the southern region of the country and features a temperate climate. A considerable number of its inhabitants live along the shore, where they have convenient access to stunning beaches.

2. METHOD & MATERIALS

This study delineates the procedures, methods, and strategies employed for data collection and analysis while assuring the study's reliability and validity. The research encompassed the quantitative design, sample size, data-gathering methods, data analysis procedures, and ethical considerations. A cross-sectional design was employed to evaluate plastic bags confiscated at a particular moment. The study's target population comprised 1000 individuals, all resident in Mogadishu; hence, all persons aged over 18 having personal information were included. This research was carried out in Mogadishu, Somalia, from October 20 to January 2025. The sample size was determined using Cochran's formula for a single population proportion, and the sample was obtained non-randomly via a convenience sampling method. During data collection through Google Forms, respondents participated voluntarily, while the researcher ensured comprehensive completion of the survey.

$$n_0 = (z^2 \times p \times (1 - p)) / e^2 \quad Z^2=1.96 \text{ for } 95\% \text{ CI, } e^2, 0.05^2$$

$$n_0 = 1.96^2 * 0.5 (1- 0.5) / 0.05^2 = 278$$

In the meantime, the data-gathering technique primarily focused on limiting recollection bias and information bias, as this study aimed to reduce biased approaches. Furthermore, questionnaires were disseminated via online sharing groups and individual outreach, adhering to all criteria and eligibility requirements for respondents. The researcher provided a rational explanation to participants to clarify the study's purpose prior to their completion of the questionnaire. Additionally, the researcher assured participants that their information would be securely handled, maintaining confidentiality and anonymity for their responses. This study employs closed-ended questionnaires that enable respondents to verify their answers. The variables examined include social demographic characteristics, which illuminate insights regarding respondents' experiences, ultimately identifying the potential hazards of single-use plastic bags in Mogadishu, Somalia.

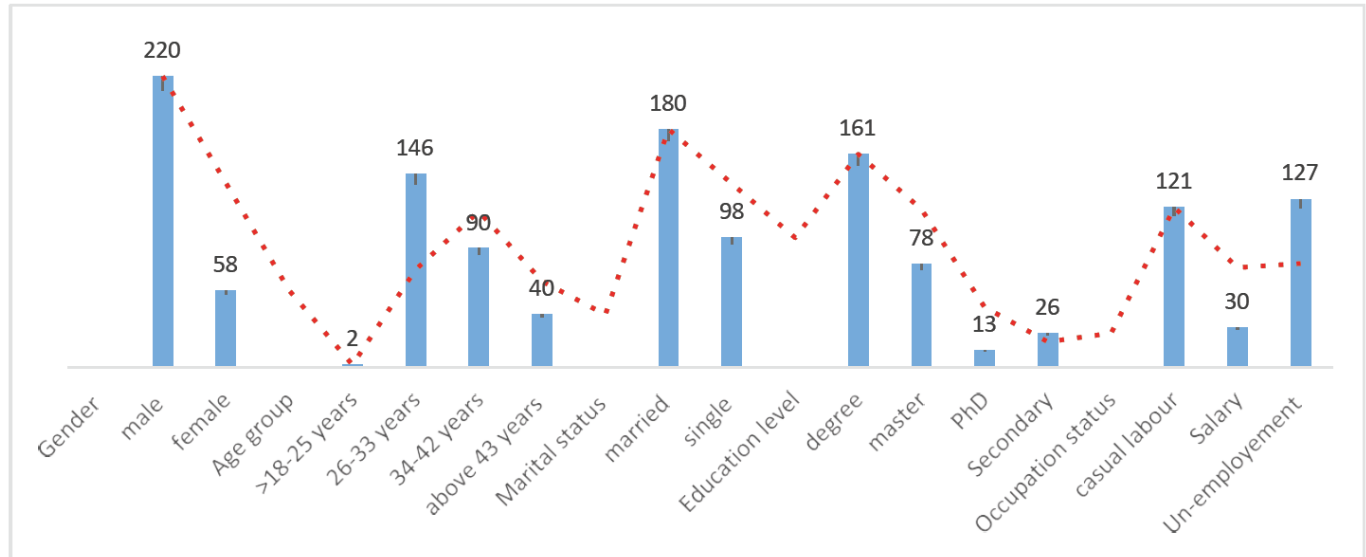
3. DATA COLLECTION AND DATA ANALYSIS

Data collection involved the distribution of a closed-ended questionnaire to the selected sample, with data gathering occurring over a four-week period. The researcher politely requested that the responders complete the questionnaire at their convenience. All participants were instructed to read and comprehend the informed consent form before responding to the questions, and the subsequently obtained data from the respondents was then entered into a statistical software package. The data was analyzed using both descriptive and inferential statistical methods to derive informative outcomes and draw conclusions from the study. It is essential to guarantee that the data is stored securely to prevent unauthorized access. Furthermore, access to data was restricted to individuals possessing the requisite clearance.

4. RESULTS

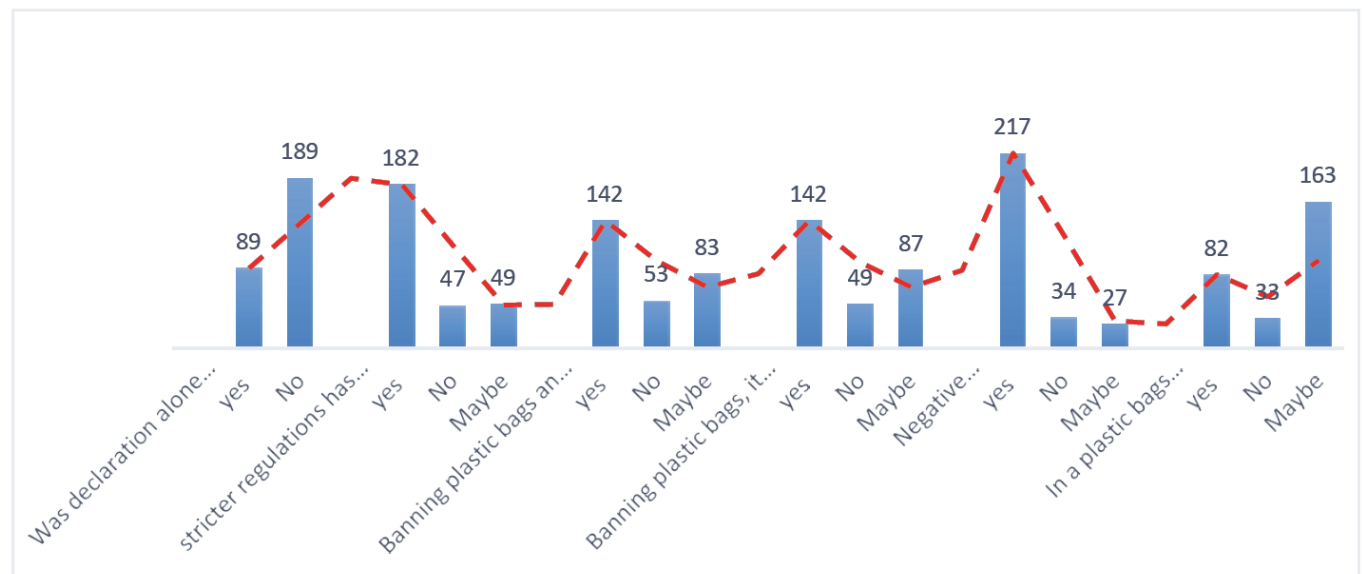
The assessment's findings revealed that most participants supported the announcement of the adjustment of fees for single-use plastic bags and also said that it would be handy to completely ban them at this time. The government must implement initiatives that address the importation of single-use plastic bags at seaports and establish measurement methods to monitor plastic bag usage. A total of 278 participants conducted the study, as evidenced by questionnaires and data analysis. This data served as the primary source of information regarding the impact of plastic bags and public response to their prohibition, as stated by the Ministry of Environmental Climate Change (MoECC).

Graph 1: Socio-demographic characteristics:



Graph 1: Disclose the respondents who provided their responses voluntarily, as the study did not compel participation. Furthermore, respondents engaged of their own volition, even if they wished to withdraw from the study, which was conducted freely. Consequently, the majority of respondents exhibited considerable enthusiasm for participation, while each category possesses a distinct explanation aligned with the study's objectives, primarily aimed at ascertaining the predominant responses. The initial variable indicated a higher number of males than females, with 220 respondents (79.1%) identified as the majority. Furthermore, the predominant age group contributing to the study was between 26 and 33 years, including 146 individuals (52.5%). The data indicated that the majority of respondents were married, totaling 180 (64.75%). The majority of respondents, 161 (57.9%), have a bachelor degree, indicating their educational attainment. The predominant occupation status among respondents was unemployment, 127 individuals (45.7%), while informal labor was another significant element.

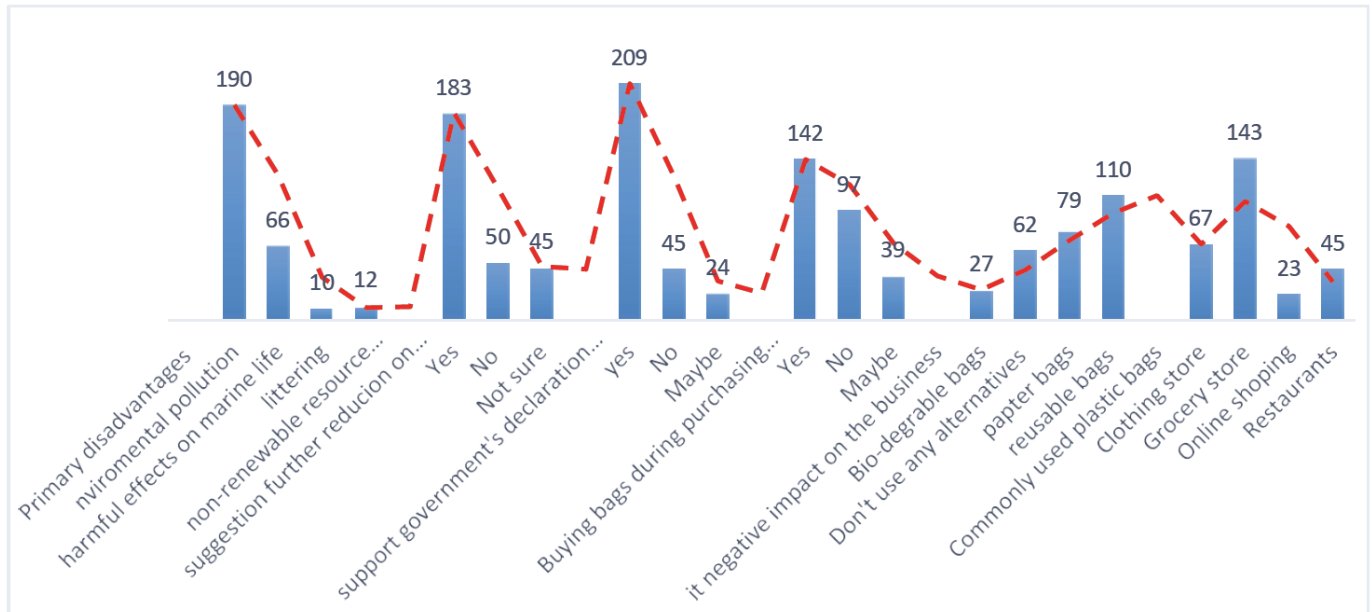
Graph 2: Public Perceptions of Plastic bags banned done by government



Graph 2: The proclamation from the government regarding the prohibition of single-use plastic bags was displayed. Was it adequate to address the concerns that have emerged in Mogadishu, Somalia? Furthermore, the declaration was inadequate to address the usage of plastic bags, since the majority of respondents disagreed that a mere announcement would suffice to reduce plastic bag consumption. 189 respondents (46.4%) indicated a belief in the

necessity of stricter regulations and enforcement regarding single-use plastic bags, while 182 respondents (65.5%) concurred. Furthermore, a majority of respondents, 142 (51.1%), deemed the prohibition of single-use plastic bags timely, as it was essential to commence this suspension. The respondents believed that the prohibition of single-use plastic bags decreased consumption, with 142 individuals (51.1%) concurring that the continued uncontrolled use of plastic bags necessitates legal measures to enforce reduction. Conversely, 217 respondents (78.1%) acknowledged the detrimental effects of plastic bags on the environment, recognizing their influence on ecology and livelihoods. Furthermore, the respondents did not engage in the recycling programme for single-use plastic bags (163, 58.6%), which aimed to mitigate and minimize the potential risks associated with single-use plastic bags.

Graph 3: People’s reaction about the single use of plastic bags bans declaration



Graph 3: The people's response to the introduction of reusable bags, which replaced the plastic bags banned by the government due to their detrimental impact on the environment and potential health risks to both humans and animals, was illustrated. Consequently, the importation of plastic bags was suspended nationwide. Nevertheless, 190 respondents (68.3%) acknowledged the primary disadvantages of plastic bags, agreeing that they contribute to environmental pollution through water contaminants, air pollution, and food contaminants. Respondents indicated a continued fall in plastic bag usage, with 183 (65.8%) in agreement, and had embraced a thoughtful approach towards additional reduction. Furthermore, the respondents indicated their support for the government's proclamation concerning plastic bags, highlighting the agreed implementation, with 209 (75.2%) in favor. The respondents reported that 142 (51.1%) purchase plastic bags while acquiring goods in stores or supermarkets, which consumers mostly utilize as carriers provided by these establishments. Consequently, the prohibition of plastic bags in Somalia adversely affects businesses, resulting in less commercial activity and economic strain, as acknowledged by 127 (45.7%) of the enterprises impacted. The respondents indicated a preference for reusable bags over alternatives to plastic bags, with 110 (39.6%) in agreement, while 79 (28.4%) acknowledged the use of paper. Furthermore, respondents indicated that the primary sources of plastic bags within the community are grocery stores and clothes retailers, with 143 (51.4%) and 67 (24.1%) agreeing, respectively, as they have demonstrated a commitment to reducing plastic bag usage and implemented a regulatory program for these establishments (Table 1).

Table 2 was shown the correlation between demographic characteristics and governmental declarations regarding bans on plastic bags, which adversely affect human, animal, and environmental health. The overuse of plastic bags has significantly compromised the environment, since Somalia's internal challenges, exacerbated by exports, have resulted in an uncontrolled proliferation of plastic bags among traders. Recently, the government initiated a campaign aimed at reducing plastic bag consumption and informed the public that exporting plastic bags is illegal; however, individuals utilizing single-use plastic bags supported the initiative in accordance with the plastic bag restrictions. The investigation has thus far produced

a statistically significant p- value of 0.005. Because other sub-variables lacked statistical significance, the overall statistic was also insignificant (p-value > 0.005). The age group indicated that the association with the government's announcement alone is adequate to address the plastic bag ban, as evidenced by a statistically significant p-value of 0.007. Additionally, marital status revealed a similar association, with a significant p-value of 0.047. Furthermore, the education level demonstrated a correlation with the government's announcement, which was statistically significant with a p-value of 0.002. Conversely, gender (OR, 95% CI, .223-.943), age group (OR, 95% CI, 0.50-.642), and education (OR, 95% CI, .498-2.374) are significant, although marital status (OR, 95% CI, .498-2.374) and occupational status (OR, 95% CI, 5.78–2.033) are not. Consequently, the odds ratios indicated that the estimation was likely protective due to the reduced exposure.

Table 1. Illustrate the analysis between socio-demographic variables and execution of single use plastic bags.

VARIABLES	Do you think government’s declaration alone is sufficient to tackle plastic bags ban?			X ² value	DF	P value	OR, 95%	P value
	Yes	No						
Gender								
Male	75	145	220	2.089054	1	0.1483	.223-.943	.034
Female	14	44	58					
Age group								
>18-25 years	1	1	2	12.027	3	0.007	0.50-.642	.008
26-33 years	58	88	146					
34-41 Years	25	65	90					
>42 years	5	35	40					
Marital status								
Married	65	115	180	3.937	1	0.047	.498-2.374	.831
Single	24	74	98					
Education level								
Degree	66	95	161	15.193	3	0.002	.112-.843	0.22
Master	16	62	78					
PhD	1	12	13					
Secondary school	6	20	26					
Occupation status								
Casual Labour	43	78	121	2.695	2	0.260	.578-2.033	.802
Salary	6	24	30					
Un-employed	40	87	127					

Table 3 The consumer's perception was linked to the government's announcement regarding the prohibition of single-use plastic bags, as it underscored that consumer awareness indicated a prior necessity for such intervention. However, the government's restriction was perceived as inconvenient due to its abrupt implementation, revealing that this initiative required more stringent regulations to effectively manage plastic bag usage and reduce the consumption of single-use plastic bags. Additionally, it exerts a detrimental environmental impact throughout its usage. At this time, it faced inconvenience but maintained a statistically significant p-value of 0.0001, as consumers perceived the stiffer limits on bag usage to be sta-

tistically significant with a p-value of 0.0001. Furthermore, the consumer's perception of the restriction of plastic bags was shown by a statistically significant p-value of 0.047. Although the community recognized the detrimental environmental effects of plastic bags, the statistical analysis yielded a p-value greater than 0.1700, indicating no meaningful correlation. Consequently, community involvement in the plastic recycling program was statistically significant, with a p-value of 0.002. Nonetheless, consumer attitudes regarding plastic bag limits were essential for implementing the legislation governing the single-use plastic bag policy (OR, 95% CI, 224-.924). Consequently, it was hindered at this juncture (OR, 95% CI: 0.078-0.541). Additionally, the use of plastic bags was diminished (OR, 95% CI, 274-1.108). The adverse environmental effects of plastic bags (OR, 95% CI, .346-4.436) and the efficacy of The odds ratio (OR) for plastic bag recycling programmes is 0.332 with a 95% confidence interval (CI) ranging from 0.332 to 1.206. Consequently, the odds ratios indicated that the estimation was likely protective due to the reduced exposure.

Table 2. Illustrated the analysis between Consumer’s Perceptions and implementation of single use plastic bags ceased.

VARIABLES	Do you think government’s declaration alone is sufficient to tackle plastic bags ban?			X ² value	DF	P value	OR, 95%	P value
	Yes	No						
Plastic was inconvenienced at this moment								
Yes	62	80	142	18.422	2	0.000	.078-.541	.001
No	9	44	53					
Maybe	18	65	83					
Stricter regulations to control bags usage								
Yes	79	103	182	32.115	2	0.000	.224-.924	.029
No	3	44	47					
Maybe	7	42	49					
It has reduced consumption								
Yes	57	85	142	8.84821 3	2	0.011	.274- 1.108	0.95
No	11	38	49					
Maybe	21	66	87					
Negative environmental impact of plastic bags								
Yes	68	149	217	5.841	2	0.054	.346- 4.436	.734
No	16	18	34					
Maybe	5	22	27					
Plastic bags recycling program								
Yes	40	42	82	15.869	2	0.000	.332- 1.206	.164
No	6	27	33					
Maybe	43	120	163					

Table 3. Shown the analysis between people’s reactions and execution of single use plastic bags banned.

VARIABLES	Do you think government’s declaration alone is sufficient to tackle plastic bags ban?			X ² value	DF	P value	OR, 95%	P value
	Yes	No						
Primary disadvantage of using plastic bags								
Environmental	65	125	190	1.636	3	.651	.119-2.488	.433
Harmful effect	17	49	66					
Littering	3	7	10					
Non-renewable	4	8	12					
Suggestions further reduce plastic bags usage								
Yes	64	119	183	5.507	2	0.064	0.80-.704	.010
No	9	41	50					
Maybe	16	29	45					
Support government's declaration of plastic bags banning								
Yes	79	130	209	13.026	2	0.001	1.321-15.050	.016
No	6	39	45					
Maybe	4	20	24					
Buying bags during purchase goods at store								
Yes	55	87	142	6.277	2	0.043	1.116-.463	.806
No	23	74	97					
Maybe	11	28	39					
Has it negative impact on the business								
Yes	49	78	127	7.110	2	0.029	.149-1.520	.210
No	31	70	101					
Maybe	9	41	50					
Using an alternative objects carrier								
Bio-degradable	5	22	27	3.659	3	0.301	.149-1.520	.210
Don’t use any	24	38	62					
Paper bags	24	55	73					
Reusable bags	36	74	110					
Places that usually get plastic bags								
Clothing stores	21	46	67	2.824	3	0,420	.290-1.703	.434
Grocery stores	41	102	143					
Online shopping	10	13	23					
Restaurants	17	28	45					

Table 3 was disclosed a correlation between the government's announcement regarding plastic bags and individuals' responses to alternative items intended to supplant them, indicating the public's sentiments towards the restrictions and potential substitutes for plastic bags as everyday carriers. Nonetheless, all enterprises have been utilizing plastic bags, and customers have been employing them as well. The public's response to the principal drawback of utilizing plastic bags, as mentioned, suggests that the government's statement alone is adequate to address the plastic bag ban, which was statistically insignificant with a p-value of .651. Conversely, recommendations for further diminishing plastic bag usage were shown to be insufficiently linked to the government's announcement alone, as evidenced by a statistically significant p-value of 0.064. Moreover, individuals demonstrated statistically substantial support for the government's proclamation regarding the restriction of plastic bags (p value 0.001). Notwithstanding, consumers have been utilizing single-use plastic bags since the acquisition of goods at retail establishments was statistically significant (p-value 0.043). Consequently, Somalia exerts a statistically significant adverse effect on business, evidenced by a p-value of 0.029. Enhance: the populace necessitates options to substitute plastic bags, which exhibited a statistically insignificant p-value of 0.301. Thus far, locations where individuals typically acquire plastic bags in grocery stores exhibited a statistically insignificant p-value of 0.420. The analysis examined consumers' responses to the government's restriction on plastic bags, highlighting the statistically significant link and elucidating the correlation estimates utilized in regression. The main drawbacks of utilizing plastic bags are indicated by an odds ratio (OR) of 95% confidence interval (CI) ranging from 0.119 to 2.488; recommendations for reducing plastic bag usage were associated with an OR of 95% CI from 0.80 to 0.704. Support for the government's statement to ban plastic bags was OR, 95% CI, 1.321-15.050; conversely, the purchase of bags while acquiring items at stores was OR, 95% CI, 1.116-0.463. Consequently, in Somalia, the adverse effect on the business was OR 95% CI .149-1.520. Furthermore, the use of alternative objects as carriers was associated with an odds ratio (OR) of 95% confidence interval (CI) ranging from .149 to 1.520, while locations typically receiving plastic bags had a correlation with an OR of 95% CI from .290 to 1.703.

5. DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

This study evaluated the execution of the suspension of single-use plastic bags in Somalia, which announced the measure on February 1, 2024. However, the implementation has been delayed until October, as officially announced; it is crucial to pursue progress beyond the current commitment to regulate plastics throughout their entire lifecycle. Legislative efficacy is a crucial metric for assessing the effectiveness of laws and identifying necessary amendments. This study revealed that 68% of participants did not concur, indicating that a mere announcement is insufficient to reduce single-use plastic bags without robust legislative enforcement, heightened policy awareness, and effective marketing oversight. A policy plan was necessary to ensure the implementation of the single-use plastic bag ban in accordance with the stated law. Furthermore, the government is endeavoring to curtail the utilization of plastic bags by customers. This study aimed to assess the impact of the single-use plastic bag ban on the population of Mogadishu, Somalia. Furthermore, the study identified the relevant factors to ascertain the estimation of correlation aspects that may be statistically significant at a p value of less than 0.005 in relation to the compliance with discontinued plastic bags. Consequently, the chi-square analysis demonstrated the correlation between sub-variables, shown by a p-value of less than 0.005. The study demonstrated a statistically significant correlation between the deployment of announcements and personal information, individuals' perceptions, and reactions, with a p-value of less than 0.05. Consumers' beliefs of the detrimental environmental effects of plastic bags exhibited a statistically significant p-value of less than 0.05. Nevertheless, the study demonstrated a statistically significant correlation between individuals' responses to reasonable substitutes for affordable products and the government's declaration concerning the prohibition of plastic bags, with a p-value of less than 0.05.

Compare to similarly study, in chine, the instrument works effectively by reducing the usage of charged plastic bags by nearly 44%, however, it also motivates the excessive usage of free inner plastic bags used as alternative plastic carrier bags (Wang, 2021). Similarly, in Indonesia, to reduce the use of plas-

tic bags 72.73% agreed that every shopping at the market for shopping bags that came from traders was not free (sold separately) (Angriani, 2021).

Similar study conducted from Kenya is claimed that they terminated between 60% to 90% of their workforces while KAM argued that it had a much more penetrating effect on job losses across the manufacturing (Behuria, 2021). Similarly, In Africa, 46% of countries had legislated to ban plastic bags by 2019, including Kenya, but with a partial ban in Ghana never implemented. The national policy context in Kenya could plausibly have reduced plastic packaging use by retailers, though there are also many other differences between the two case study cities and plastic bag ban enforcement remains challenging among countries such as Kenya (Dzodzomenyo, 2025).

Numerous studies indicated a significant drop (74%) in plastic bag usage and a rise (61%) in the adoption of reusable plastic bags at one store subsequent to the implementation of the tariff.

In 2011, Wales implemented a tax of 5 pence (0.07 USD) for single-use plastic bags. The utilization of plastic bags decreased by 70% across various retail establishments subsequent to the implementation of the plastic bag charge. The proportion of individuals utilizing their own bags increased by 21% from 61% (Nyathi, 2020).

6. CONCLUSION

This study revealed that there is no societal resistance to the proclamation; all participants acknowledged the detrimental effects of plastic bags on the environment, and people's perceptions and reactions passively endorsed the government's announcement regarding restrictions on single-use plastic bags. This study stated that banning single-use plastic bags is crucial for environmental protection and future generations; yet, it indicated that the prevalence of plastic bags persists in the marketplaces and supermarkets of Mogadishu. This discovery could significantly impact environmental policy in Somalia and serve as a model for other cities facing similar challenges. By addressing both implementation challenges and public views, the study can offer constructive advice to policymakers, businesses, and the community, fostering a cleaner and more sustainable Mogadishu. Moreover, the Ministry of Environment and Climate Change indicated that plastic bags persist in circulating among vendors and consumers. Consequently, the current investigation led to the conceptual advancement of validating the efficacy of the prohibition of plastic bags. The study concluded that consumer perceptions and public reactions indicated the necessity for the government to implement stringent measures regarding plastic bag consumption. There is consensus on the need for a rigorous regulatory framework aimed at controlling and mitigating plastic bag usage. Furthermore, the primary drawback of plastic bags is their contribution to environmental pollution, highlighting the importance of promoting reusable bags as alternatives. Community initiatives to diminish plastic bag usage are essential, as all institutions are advocating for the enforcement of restrictions on single-use plastic bags alongside measures to curtail their public usage. The predominant sources of plastic bags are grocery stores, which significantly contribute to the rise in the consumption of single-use plastic bags. Nonetheless, plastics have grown essential to human existence and are unavoidable, despite efforts to mitigate their impact, to ensure that individuals actively participate in enforcing and adhering to environmental regulations.

7. RECOMMENDATION

Assess the effectiveness of the ban's implementation by examining the participation of local authorities, enforcement tactics, and public awareness campaigns and as well as evaluate the decrease of plastic waste and its impact on urban sanitation, marine ecosystems, and public health. Assess public opinions about the prohibition and their readiness to adopt alternative items, such as reusable bags and biodegradable materials and regarding the order from the government is to identify unforeseen consequences, such as increased expenses for consumers or enterprises, and provide remedial measures.

Examine and advocate for locally appropriate alternatives to plastic bags, such as cloth bags, paper bags, or biodegradable options and as well as determine the ban's effects on businesses, particularly small-scale vendors, and their adoption of alternate packaging solutions.

Propose strategies to assist local industries in producing cost-effective and eco-friendly options, perhaps generating green employment, and recommend methods to enhance enforcement mechanisms, including heightened fines or incentives for adherence

We propose specialized initiatives to inform the public about the environmental and health advantages of the ban while advocating for policies that address the needs of marginalized communities.

8. STUDY LIMITATIONS

The constraints of time and resource limitations were significant obstacles, as data collection encountered challenges and respondents could not be contacted physically to obtain consent, given that the data was collected using Google Forms, which necessitated informing respondents to grant their approval.

CONTRIBUTIONS OF AUTHORS

The author acknowledges exclusive accountability for the following: study conceptualization and design, data collection, analysis and interpretation of results, and paper preparation.

STATEMENT OF INTEREST

The author discloses no conflict of interest. INFORMED CONSENT: Verbal informed permission was acquired from all participants in the study.

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I hereby affirm that I received no funding from any source for the research study titled "Assessment of the Implementation of Banned Single-Use Plastic Bags and People's Reactions to Alternative Objects to Replace Them in Mogadishu, Somalia." I have conducted this research independently and without any financial assistance.

DATA AVAILABILITY STATEMENT

Data can be obtained upon request

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