




# Implementation of Reusable Bag Use in Purchasing Decisions as a Sustainability in Makassar City

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**Abstract.** Environmental degradation has become an important concern in this era. It is a major threat to human survival which includes climate change, pollution, habitat destruction, and the destruction of nature. The use of plastic has a huge impact on environmental damage. Indonesia itself has been facing problems regarding plastic waste, especially plastic waste generated from disposable shopping bags. The majority of plastic waste comes from retail businesses, traditional markets, and street vendors. As a society that cares about the environment, we should switch to something environmentally friendly such as cloth bags or reusable bags. This can be seen as one of the responsible environmental actions and has a good impact on the environment. Based on this phenomenon, the author is interested in raising the title Implementation of Reusable Bag Use in Purchasing Decision as a Sustainability in Makassar City. Research with a quantitative approach using primary data as a source of information. The method of collecting data through a questionnaire using a list of structured questions involving women participants aged 26-35 years in the Women's community in Makassar City. The results of this study indicate that there is a positive influence of the use of reusable bags on people's purchasing decisions in Makassar.

**Keywords:** Reusable Bag, Plastic Bag, Environment, Sustainability

## 1 Introduction

The issue of plastic waste is not a recent concern. Data shows that plastic waste accounts for 14% of Indonesia's total annual waste production. As the world's second-largest contributor to plastic waste, Indonesia faces a significant challenge in addressing this problem [1]. Using plastic bags has a significant impact on the environment due to its non-biodegradable nature. If used excessively, plastic bags become one of the main contributors to environmental pollution. The largest contributor plastic waste in Indonesia comes in retail companies, supermarkets, traditional markets, and roadside stalls. In 2014, the Ministry of Environment and Forestry launched the 'Indonesia Bebas Sampah 2020' initiative. One of the initiatives taken by the Ministry of Environment and Forestry is promoting the reduction of plastic bag use and encouraging consumers to bring reusable shopping bags.

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Many people in Indonesia are still not concerned about the issue of the impact of plastic bag use. They prefer to ignore and consider this issue a less important issue, so we still have not addressed it until now even though the impact is very large on environmental damage, one of which is global warming. Global warming is the trapping of the sun's long-wave radiation emitted to the earth by greenhouse gases, one of the sources of greenhouse gases is plastic waste. The production of plastic bags involves the use of fossil fuels. The increased burning of fossil fuels has resulted in an increased amount of greenhouse gases into the earth's atmosphere which causes an increase in heat in the earth's atmosphere resulting in the greenhouse effect which causes global warming[2].

Plastic pollution affects human health in two primary ways: by humans consuming animals that have ingested plastic, and through its direct presence in the environment[3]. For example, plastic bags are made from materials that are difficult to decompose, often taking around 1,000 years or more to break down [4]. Many people discard plastic bags into the rivers or sea, posing a threat to aquatic life and blocking drainage systems, which can cause damage to homes [5]. Given the high number of plastic bag users in Indonesia and the numerous negative effects plastic bags have on the environment, humans, and animals, their usage needs to be reduced [6]. In response, many people have transitioned to using cloth or reusable bags as alternatives to plastic. This shift can be seen as part of green marketing strategies. Reusable bags are a crucial first step in reducing environmental pollution, especially in Indonesia. Western countries like the United States have long implemented policies against providing plastic bags to consumers. In Asia, Singapore has promoted the 'Bring Your Own Bag' since 2007. In Indonesia, the use of plastic bags was officially banned in Jakarta starting on July 1, 2020.

The implementation of the use of reusable bags has attracted many pros and cons in the community. In Makassar itself, public awareness of the use of reusable bags is not yet optimal, because there are still shops or supermarkets that still use disposable plastic bags. So, this affects people in making purchasing decisions. In addition, there are still many supermarkets that implement paid plastic bags which are still considered cheap, and consumers are still able to pay for them. So that people who have not used reusable bags prefer to go to supermarkets or shops that still use plastic bags.

It cannot be ignored that there are already people who have realized to use reusable bags. Although the use is not yet optimal, but at least it has a good impact on the environment. Using reusable bags can be seen as environmentally conscious action, reflecting the choice to purchase, use, and dispose of personal and household products in ways that minimize harm to the environment[7]. This research examines the long-term impact of using reusable bags on consumer behavior, in this case purchasing decisions, which may still be limited. So questions arise such as whether using reusable bags can encourage consumers to make purchases, especially for other products that are more eco-friendly so that the use of reusable bags is considered to have a sustainable impact. This caught the author's attention. With this issue, the author is interested in conducting research entitled: The implementation of reusable bag use in purchasing decisions as a sustainability in Makassar City (Case Study: Woman Community in Makassar City).

## **2 Literature Review**

### **2.1 Purchasing Decision**

Consumer awareness of products promoted through green marketing plays a crucial role in influencing the purchasing decisions for environmentally friendly products. Consumer concern for ESG issues, especially the environment, is a topic that can change consumer lifestyles to become more responsible to environment. Different lifestyles of each individual lead to different perspectives. A person's lifestyle will determine what products will be used and how to get these products with several stages to determine them. One of the green awareness efforts that continues to be campaigned is to stop using plastic bags and switch to using reusable bags. The use of reusable bags can influence a person's purchasing decision towards selected products and in selected stores.

Purchasing decision is a purchasing decision-making process that includes determining what to buy or not buy. Purchasing decision is a problem-solving process that involves identifying and assessing needs and desires, as well as gathering information, selecting sources and choosing purchase alternatives by considering the type of product, product form, brand, quantity, seller and payment time[8].

Consumer concern for the environment, awareness of environmentally friendly products, can influence consumer purchasing decisions, especially for environmentally friendly products[9]. Consumer behavior that shows the conditions when a person searches for, selects and evaluates products to fulfill his needs and wants is very influencing his purchasing decisions. A consumer whose purchasing habits are influenced by environmental considerations is now known as a green consumer[10].

### **2.2 Sustainability**

Governments worldwide are increasingly focusing on initiatives that emphasize environmental and social sustainability, such as ESG [11]. In this context, the concept of responsible investment has gained popularity in recent years, indicating a growing trend of integrating sustainability and ESG (Environmental, Social, and Governance) factors into investment decision. This change is partly driven by an increasing consumer interest in eco-friendly and sustainable products and services, along with greener production practices [12]. Furthermore, sustainable development is crucial for achieving significant environmental performance outcomes through the adoption of new or enhanced manufacturing and operational processes, along with efforts that lead to innovative and sustainable products and practices [13].

Sustainability as a corporate strategy refers to the integration of sustainability principles in all aspects of business operations and decisions to achieve a balance between economic growth, social welfare, and environmental protection. By adopting a sustainability strategy, companies focus not only on short-term profitability but also on long-term sustainability, which includes social and environmental responsibility. The implementation of sustainability provides added value and solutions for life and not just profit orientation, thus providing safety for the environment and people.

As a society that cares about the environment, it would be nice to understand the meaning of sustainability. By understanding the meaning of sustainability, we will unconsciously implement a lifestyle that supports sustainability goals. The sustainable development concept advocated by the Government of the Republic of Indonesia encourages people to safeguard the environment for future generations. Shifting to reusable bags is one element of sustainable consumption that supports to sustainable development[14]

### **2.3 Environmental Policy and Regulation**

Public awareness to protect the environment must be supported by environmental policies and regulations. In this case, the government as a regulator, must pay more attention to environmental policies and regulations. Because this will be a reference and motivation so that people can better protect the environment. So that the community and the government must collaborate to create a sustainable environment for future generations.

Indonesia as the second largest plastic waste producer in the world has developed various policies and regulations to protect and manage the environment in a sustainable manner. In accordance with Law Number 32 of 2009 concerning Environmental Protection and Management, it is stated that environmental protection and management is a systematic and integrated effort carried out to preserve environmental functions and prevent pollution and / or environmental damage which includes planning, utilization, control, maintenance, supervision, and law enforcement[15].

Indonesia has also demonstrated a strong commitment to the achievement of the Sustainable Development Goals (SDGs). The UN is committed to working with the Government of Indonesia to build a prosperous, democratic and just nation, where development benefits all, and where the rights of future generations are protected[16].

In terms of reducing the use of single-use plastic and encouraging the use of reusable bags, the government has also issued several policies and regulations regarding it. One of them is that the Indonesian government plans to gradually ban the use of single-use plastic by the end of 2029. This move was announced by the Minister of Environment and Forestry, Siti Nurbaya Bakar, in June 2023[17].

### **2.4 Purpose of the Research and Hypothesis**

The purpose of this research is to find out how the use of reusable bags affects the purchasing decisions of the Makassar city. In using this reusable bag, we also have to know whether environmental awareness has an influence on the use of reusable bags. By paying attention to environmental aspects, we also support sustainability. This sustainability is very important for the lives of future generations.

In addition to environmental awareness from the community, the government must also participate in supporting the use of reusable bags. With the government's appeal to ban the use of plastic bags, it is hoped that consumers will prefer to use reusable bags compared to plastic bags. Although plastic bags are cheaper to obtain, the use of

reusable bags can be used continuously and will certainly have a big impact on the environment.

● **Hypothesis 1:** The use of reusable bags in the purchasing decisions of the people of Makassar City.

This hypothesis states that the use of reusable bags will have an impact on the purchasing decisions of the people of Makassar City. The use of reusable bags has a positive influence on purchasing decisions for certain products and in certain stores.

● **Hypothesis 2:** The level of environmental awareness affects the use of reusable bags compared to plastic bags.

This hypothesis states that the level of public awareness of environmental sustainability will make people prefer to use reusable bags rather than plastic bags. By preferring to use reusable bags than plastic bags, we have a responsibility towards the environment that can save the environment for the present and the future.

● **Hypothesis 3:** Government appeals affect public awareness of the importance of using reusable bags.

This hypothesis states that the government's appeal regarding the use of reusable bags will make people realize that the use of reusable bags is very important, especially for environmental sustainability. By keeping on campaigning the trend of using reusable bags rather than plastic bags, other people will follow this trend.

### 3 Research Methods

This research uses a quantitative approach to examine the use of reusable bags on community purchasing decisions in Makassar city. Respondents were chosen using random sampling techniques from mothers aged 26-35 years in a women's communities in Makassar City, resulting in a sample of 30 participants. Data collection from respondents was carried out using a structured interview method through distributing questionnaires online. This questionnaire is considered quite effective, because respondents can directly select answers in the answer column according to their choice.

The measurement scale used in this study is a 5-point Likert scale (5=strongly agree, 4=agree, 3=neutral, 2=disagree, 1=strongly disagree). Questions 1-3 are used to measure whether the use of reusable bags affects purchasing decisions. Questions 4-6 are used to determine whether the level of environmental awareness affects the use of reusable bags compared to plastic bags. Questions 7-9 are used to determine whether the government's appeal regarding the prohibition of using plastic bags will affect the use of reusable bags. The data that has been obtained through the questionnaire is analyzed using quantitative methods and presented in the form of tables and descriptive analysis using the IBM SPSS 2.1 application.

## 4 Results and Discussions

### 4.1 Results

In this research, there are 9 questions given to respondents. the results of the descriptive analysis shown in the table below, there are 8 questionnaire questions that have an average value of  $>4.00$  and 1 question that has an average value of 3.97 or close to 4.00. From the average value obtained, it can show that the average respondent agrees and even strongly agrees with the statements given.

In addition to descriptive analysis, the authors also tried to conduct a Chi-Square statistical test. With the p value obtained from the Chi-Square test results of 0.00 - 0.03 or  $<0.05$ , this means that the alternative hypothesis is accepted while the null hypothesis is rejected, indicating that there is a significant relationship between the variables.

**Table 1.** Analysis of Descriptive Statistics on the Use of Reusable Bags

<b>Descriptive Statistics</b>	N	Minim um	Maxim um	Me an	Std. Deviation
1. Do you support the idea of using reusable bags while shopping at the market?	30	2	5	4.27	.868
2. Do you support the idea of using reusable bags while shopping at the supermarket?	30	2	5	4.27	.907
3. Do you concur with the idea of bringing a reusable bag when you go shopping?	30	2	5	4.30	.877
4. Do you support supermarkets that mandate the use of reusable bags?	30	2	5	4.53	.776
5. Do you agree that you would be willing to pay a higher price at supermarkets that enforce the use of reusable bags?	30	2	5	4.53	.776
6. Do you agree that you feel more comfortable using reusable bags compared to plastic bags?	30	3	5	4.67	.547
7. Do you agree that using reusable bags helps in	30	5	5	5.00	.000

reducing plastic waste?

8. Do you agree with supporting the government's call to prohibit the use of plastic bags in shops or supermarket?	3	5	5	5.0	.000
	0			0	
9. Do you agree that the residents of Makassar City have become environmentally aware by utilizing reusable bags?	3	2	5	3.9	.669
	0			7	
Valid N (listwise)	3				
	0				

## 4.2 Discussions

- **Hypothesis 1:** The use of reusable bags in the purchasing decisions of the people of Makassar City.

The adoption of reusable bags significantly impacts purchasing decisions in Makassar City, whether in traditional markets or in supermarkets. In the traditional market itself, there are still many traders who sell their wares with plastic bags. Although there are no strict government regulations and there is still a lack of campaign about the use of reusable bags, currently buyers also continue to use reusable bags when shopping at traditional markets. It is different if we shop at supermarkets. Currently, many supermarkets do not provide plastic bags. So that shoppers must also use reusable bags. Whether it is voluntarily purchased at the supermarket or bringing a reusable bag that is already owned.

With these two phenomena, the author assumes that currently the use of reusable bags has influenced purchasing decisions. The people of Makassar are currently using reusable bags when they want to shop either in traditional markets or supermarkets. Although some people still do not fully consider reusable bags important to use when shopping.

- **Hypothesis 2:** The level of environmental awareness affects the use of reusable bags compared to plastic bags.

Public awareness of environmental sustainability must now be a concern. A good environment today will provide a good life for the next generation. As consumers becomes aware that the current environmental damage is primarily a result human actions, they will recognize the significance of using reusable bags.

Excessive use of plastic bags will cause the environment to become unhealthy. Plastic that is difficult to decompose by soil will cause soil pollution and disruption to the ecosystem. Therefore, with public awareness of a better environment will increase the use of reusable bags and reduce the use of plastic bags. With such a public attitude, the environment will be better preserved.

- **Hypothesis 3:** Government appeals affect public awareness of the importance of using reusable bags.

In 2023, the mayor of Makassar has confirmed the ban on plastic bags through a circular letter. The circular was issued based on the Makassar mayor's regulation number 21 of 2023 concerning the prohibition of the use of plastic bags. The mayor of Makassar as the government authority in the city of Makassar, has made it mandatory to use reusable bags when shopping. With this government appeal, it certainly has an influence on the use of reusable bags in the city of Makassar. Although not fully adhered to by the community, most people have already realized that the use of reusable bags is very important.

Most supermarkets in Makassar have required the use of reusable bags and do not use plastic bags anymore. The government still has to campaign more often for the use of reusable bags. This is done so that people fully use reusable bags not only when shopping at supermarkets, but when shopping at traditional markets as well.

## 5 Conclusion

This research was conducted to find out how the application of the use of reusable bags to consumer purchasing decisions as a form of sustainability efforts in Makassar City. The use of reusable bag has an effect on purchasing decisions in the city of Makassar. Very often we encounter people who cancel shopping when shops or traders do not provide plastic bags. However, from the results of this study, the people of Makassar city have realized that the use of reusable bags is very important, so they continue to shop at stores that do not provide plastic bags. Even our community has been willing to spend some money just to buy reusable bags when they shop at supermarkets that do not provide plastic bags anymore.

From the research results, it can be concluded that the people of Makassar city already have the awareness to use environmentally friendly products, such as reusable bags. They have realized that the continuous use of plastic bags will cause environmental damage. As a result, many individuals in Makassar have transitioned from plastic bags to more eco-friendly alternatives or reusable bags.

The community and supermarkets in Makassar City also welcomed the government's call to discontinue the use of plastic bags. Most supermarkets in Makassar have eliminated plastic bags so that consumers are required to use reusable bags. Although traditional markets have not yet eliminated plastic bags, people who are aware of the environment still use reusable bags when shopping at traditional markets. Therefore, the government must increase campaign more actively in traditional markets, so that traders in traditional markets support the government's appeal to stop using plastic bags.

### 5.1 Limitations and suggestions for further research

In this study, the sampling location was limited to one of the women's communities in Makassar City. Respondents of this study were mothers aged 26-35 years. so the

results of this study cannot be generalized to other dearth in Indonesia which have different economic, social, and cultural characteristics. In addition, this research was conducted using quantitative methods so that only basic information from the respondents was included in this study. So, this research may have limitations in revealing the depth of respondents' perceptions and attitudes towards using reusable bags.

Future researchers are expected to use qualitative methods as well in order to obtain in-depth information from respondents. Because research on this issue still needs to be improved, future researchers are expected to conduct research in other cities and rural areas so that the objectives of this issue can be evenly distributed throughout Indonesia.

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