



# Analysis of public awareness and behaviour in Banjarmasin City towards reducing the use of plastic waste: a case study of environmentally friendly policy implementation

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## ABSTRACT

**Background:** Increased environmental awareness in Banjarmasin City has led to the implementation of a policy to reduce the use of single-use plastic bags. This study aims to evaluate people's behaviour related to the policy by focusing on three main variables: environmentally friendly attitudes, lifestyle, and knowledge about the dangers and benefits of reducing plastic waste. **Methods:** This study used a quantitative approach with data collected through questionnaires distributed to 155 respondents in Banjarmasin City. The questionnaire instrument was designed to measure people's environmentally friendly attitudes, lifestyles, and knowledge of the benefits and hazards of plastic waste. The data was analysed by calculating the mean score and frequency to assess the level of awareness and behaviour. **Findings:** The results of the analysis show that in general, the environmentally friendly attitudes of the people of Banjarmasin are quite good with an average score of 3.54, but there is a need to increase understanding and participation in reducing the use of plastic bags. The community's eco-friendly lifestyle obtained an average score of 3.35, indicating an area that needs improvement. The community's knowledge of the benefits of plastic waste reduction had an average score of 3.87, while knowledge of the dangers of plastic waste reached an average score of 3.90, signalling that the community already has a fairly good understanding of this issue. **Conclusion:** This study concludes that although the people of Banjarmasin have a good understanding of the dangers and benefits of plastic waste reduction, environmentally friendly attitudes and lifestyles still need to be improved. A more intensive education and socialisation programme is expected to increase compliance and participation in implementing the plastic bag reduction policy. **Novelty/Originality of This Study:** This study provides new insights into how plastic bag reduction policies are accepted and implemented at the community level, focusing on the relationship between knowledge, attitudes, and lifestyles. The study also highlights the importance of integrating environmental education in local policies to improve the effectiveness of plastic waste reduction.

**KEYWORDS:** community behaviour; environmentally friendly attitude; environmental policy; plastic waste reduction; policy implementation.

## 1. Introduction

Population growth and economic development have an impact on people's behaviour, lifestyle and spending patterns. This has led to an increase in waste volume, including plastic waste (Wijaya & Ratnawati, 2023). Plastics are often used in economic activities due

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to their multifunctional and durable nature. However, due to its layered structure, plastic is difficult to recycle. Therefore, limiting the use of coated plastics is important from an environmental and sustainability perspective (Korte et al., 2023). The relatively low production cost of plastics makes them utilised at various scales for diverse needs. In addition, plastics have high chemical resistance, which makes their natural decomposition time very long (Rhodes, 2018). As a result, billions of tonnes of plastic have accumulated in nature.

Plastics have the potential to pollute various environments, including soil, water, sea, and living organisms. Plastic waste dumped into nature can damage the bodies of animals, birds, and even cause death (Nademo et al., 2023). Plastics take a very long time to break down, and the resulting plastic particles remain in the aquatic environment for a long period of time. During this decomposition process, plastics break into microplastics (<5 mm) or nanoplastics (<1 µm) through mechanical and photochemical mechanisms (Issac & Kandasubramanian, 2021). Microplastics, which are the smallest fragments of plastic (Yona et al., 2019), have the potential to negatively impact the environment and human health.

Indonesia is listed as the second largest producer of plastic waste, with a volume of approximately 187.2 million tonnes per year polluting the ocean (Jambeck et al., 2015). Globally, Indonesia is one of the top five contributors to plastic pollution, along with China, the Philippines, Vietnam and Sri Lanka, which together account for 56% of the world's total plastic waste (Rhodes, 2018). According to the National Waste Management Information System (SIPSN), the amount of waste generation in all districts/cities in Indonesia in 2022 reached 19,876,091.98 tonnes/year. From the waste composition data, plastic occupies the second largest position (17.85%) after food waste (41.91%), followed by wood waste/ranting 13.42%, and paper/cardboard 10.92% (SIPSN, 2022).

Banjarmasin City, the capital of South Kalimantan Province, has an area of about 98.5 km<sup>2</sup> and a population of about 747,000. Consisting of five sub-districts: North, Central, West, East, and South Banjarmasin, the city is known as the 'City of a Thousand Rivers'. For the people of Banjarmasin, rivers are not only a source of water, but also an important part of their daily lives, hosting various activities such as washing and bathing, as well as transport and trade routes. However, human activities in the city have led to a decline in river water quality, including the accumulation of plastic waste. This pollution has adversely affected the river ecosystems in South Kalimantan.

Along with population growth, waste management has become a major challenge affecting the condition of Banjarmasin's waterways. According to Dwi Naniek, Head of the Environmental Management Division of the Banjarmasin City Environmental Agency, hundreds of tonnes of waste are dumped into the river every day. The volume of waste generated by the city's more than 700,000 residents reaches 608 tonnes per day, 30% of which does not go to landfill. Based on SIPSN 2022 data, Banjarmasin has the highest volume of waste generation in South Kalimantan. The Martapura River, one of the main rivers in the province, is now moderately polluted, with major pollutants such as *Escherichia coli* (*E. coli*) and household waste. The accumulation of plastic waste in the river further deteriorates the condition of the aquatic environment, creating negative impacts on the ecosystem and the living creatures within it.

According to data from the Banjarmasin City Environment Agency for the period 2017-2022, six years after the plastic bag reduction policy was enacted in 2016, there was a decrease in the volume of plastic waste in 2018. However, this downward trend did not continue, as there was an increase in 2019-2021. The policy of banning single-use plastic bags through Mayor Regulation No. 18/2016 caused resistance from businesses and some communities. It is important to evaluate the effectiveness of this policy to determine the extent to which the reduction of single-use plastic waste has been successful. This study aims to analyse the behaviour of businesses and communities in supporting the plastic bag reduction policy in Banjarmasin City.

## 2. Methods

This research uses quantitative methods to analyse public behaviour in supporting the plastic bag reduction policy. On the other hand, qualitative methods were applied to evaluate the behaviour of businesses and measure the impact of the policy on reducing the volume of plastic waste. The selection of research locations was purposive to support the achievement of the research objectives. The research took place from February to July 2023, with locations in five sub-districts of Banjarmasin City, namely North, East, South, and West Banjarmasin Districts. Banjarmasin City was chosen as the object of research because it is the city with the highest waste generation in South Kalimantan and was the first to implement a plastic bag reduction policy. Sampling used a purposive sampling technique, where samples were purposively selected based on certain criteria in five sub-districts. Respondents in this study consisted of men and women aged at least 17 years who live in Banjarmasin and regularly shop at minimarkets. Population, sample and variables in detail can be seen in tables 1 and 2 below.

Table 1. Population and Sample

No	Category	Population	Sample/Respondent
1	Government	Banjarmasin City Environmental Agency	Head of Environmental Management 3 mini market business owners
2	Business Actors	Mini market	
3	People of Banjarmasin City	Plastic bag users	100

Table 2. Variable

No	Variable Name	Operational Definition of Variables (DOV)	Unit of Measurement	Measurement tools used
1	Business behaviour	Responses and actions taken by individuals or business organisations to policies enacted by the government.	None	Interview
2	Community behaviour	Active community involvement in policy implementation.	None	Questionnaire

### Analyse business behaviour and community behaviour patterns

Community participation in the single-use plastic bag reduction programme was measured through their involvement in activities such as bringing their own shopping bags. To assess this level of participation, respondents were asked questions covering various forms of individual involvement in plastic reduction efforts. Respondents were asked to answer with options consisting of strongly disagree (STS), disagree (TS), disagree (KS), agree (S), or strongly agree (SS).

## 3. Results and Discussion

### 3.1 Business behaviour

In the implementation of the plastic bag reduction policy in Banjarmasin City, the important role of the Environmental Agency (DLH) as the policy implementer is well recognised. Organisational structure and function play a vital role in ensuring the success of the policy, especially with close interaction and cooperation between the government, private sector, and the community (Lestari & As'ari, 2022). These three elements-DLH, businesses, and communities-have their respective responsibilities in implementing the plastic bag reduction policy.

Businesses, in this case minimarkets and supermarkets, hold an important responsibility to no longer provide single-use plastic bags to consumers. Instead, they are required to offer eco-friendly reusable shopping bags. Through observations and interviews, it was found that most businesses have fully complied with this policy and no longer provide single-use plastic bags. Several statements from businesses confirmed their commitment to this policy:

'our shop does not use plastic bags, because it is not environmentally friendly'

'our shop has switched from plastic bags because it is not environmentally friendly'

'now we have switched from plastic bags to goody bags or paid shopping bags, because besides the consideration of being more environmentally friendly, we also have to support government policies as a form of concrete action to help reduce plastic waste.'

According to the Mentality-Approach, one indicator of policy success is the extent to which regulations are able to influence the behaviour of implementers (government), the private sector, and society. This approach assesses their attitudes, responsibilities, and actions towards the policies implemented (Lestari & As'ari, 2022). Based on the results of the interviews, most businesses have accepted and implemented this policy. They also realise that the use of plastic bags has a negative impact on the environment and health, considering that plastic takes a long time to decompose. One business owner expressed his views regarding the negative impact of using plastic bags:

'my consideration towards the use of plastic bags is that if plastic bags are used and thrown away, it will pollute the environment because it is very difficult to decompose, that's why I don't use plastic bags because I don't like the environment. I believe that if there is no plastic bag waste, the environment will be clean, both the water is not polluted and the air has no pollution from waste, the community will be comfortable with a clean environment.'

'We strongly believe in protecting the environment, as a legal entity, we must comply with the rules of trade, one of which is the regulation regarding environmental maintenance to avoid environmental pollution which has a negative impact on the surrounding community.'

'As far as we know, plastic bags can pollute soil, water, sea, and even air. This is because plastic bag waste is very difficult to decompose and takes a long time to decompose. One alternative is to burn them, which is bad for the environment as it is polluted by the burning.'

Businesses' knowledge of the positive impact of reducing the use of plastic bags and the environmental impact of single-use plastic bags is good. Overall, the minimarket and supermarket sector has switched to using paid reusable bags.

According to Lawrence Green's theory, people's behaviour is influenced by three main factors, one of which is predisposing factors, which include attitudes, knowledge, and beliefs (Marbun et al., 2021). Business actors in Banjarmasin show a high level of compliance with government policies, understanding that these policies aim to protect the environment and prevent ecosystem pollution that can harm the community.

This compliance is in accordance with the compliance theory described by Afrianti (2021), which states that one of the functions of policy evaluation is to measure the level of compliance. According to the OECD, compliance with policies or regulations is a form of responsibility from the target group to the applicable regulations (Smeth, 2021). Policy implementers must support policy implementation in order to achieve the desired results. Apart from the government, business actors also have an important role in supporting policy success through active participation. The economic and social networks formed by business actors also have a significant influence on policy success, both positively and negatively. Some businesses also face challenges from consumers who still ask for plastic bags, but they try to explain their commitment to government policies:

'We didn't provide plastic bags but some of them insisted on wanting plastic and we got our company to follow the government's policy programme to reduce plastic bags which has been enacted by the Banjarmasin mayor's regulation in 2019.'

'Although we did not initially provide plastic bags, some customers still wanted plastic. However, we have committed to supporting the government's policy programme to reduce the use of plastic bags. Therefore, we ensure that our company complies with the 2019

Banjarmasin Mayor's regulation banning the use of plastic bags, along with our efforts to reduce negative impacts on the environment.'

'We realise that some customers expect plastic bags even though we did not initially provide them. However, as a company, we have committed to supporting the government's policy programme aimed at reducing the use of plastic bags. Therefore, we ensure that we fully comply with the 2019 Banjarmasin Mayor's regulation that bans the use of plastic bags. Through these measures, we strive to reduce our negative impact on the environment and stay on track with the government's policy programme.'

In this modern era, the issue of environmental protection and plastic waste reduction is an urgent global concern. As described above, company policies that support government regulations to reduce the use of plastic bags are essential (Wulandari, 2022). The 2019 Banjarmasin Mayor's Regulation aims to reduce the use of single-use plastic bags as part of efforts to preserve the environment.

Companies in Banjarmasin City face challenges in meeting the expectations of some customers who still want to use plastic bags. However, as part of their social responsibility and commitment to sustainability, these companies are trying to comply with the Banjarmasin Mayor's regulation by replacing plastic bags with environmentally friendly shopping bags, such as reusable cloth bags or paper bags.

The above statement also shows that customer habits and preferences may still influence the demand for plastic bags. This could be due to perceptions about convenience or price. Therefore, the company endeavours to educate consumers on the importance of reducing the use of plastic bags and their adverse impact on the environment. By providing effective information and education, companies hope to increase customer awareness to choose more environmentally friendly alternatives (Hairatunnisa, 2023).

The efforts of companies in Banjarmasin in reducing the use of plastic bags have started to show positive results for the environment (Hairatunnisa, 2023). By supporting government policies and following existing regulations, these companies play a role in reducing plastic waste in landfills and reducing environmental pollution. In addition, the use of environmentally friendly bags also helps save natural resources and reduce carbon emissions, while improving the company's image as an entity that cares about environmental sustainability.

'My evaluation is to not provide plastic bags but to provide cloth bags and paper bags, create promotional tools about reducing plastic bags,'

'Our evaluation shows that we do not provide plastic bags as part of our commitment to sustainability. Instead, we provide cloth bags and paper bags to our customers. This move aims to reduce the use of plastic bags and encourage the use of environmentally friendly alternatives.'

'Our evaluation led to the decision not to provide plastic bags to customers. Instead, we provide the option of reusable cloth bags and paper bags. In addition, we are also committed to creating effective promotional tools to convey important messages about the importance of reducing the use of plastic bags and choosing more sustainable alternatives.'

The statement illustrates the company's commitment to providing consumers with eco-friendly alternatives, namely cloth bags and paper bags. In addition, the promotional measures taken aim to raise awareness of the importance of reducing the use of plastic bags. The discussion further analyses the impact of using cloth bags and paper bags, as well as the effectiveness of the promotional campaign in changing consumer behaviour.

The decision to replace plastic bags with cloth bags and paper bags is a significant step that provides benefits to the environment. Research shows that the use of cloth bags made from natural or recycled fibres and reusable paper bags can reduce plastic waste (Hairatunnisa, 2023). Cloth bags have a longer lifespan and can be used multiple times, while recyclable paper bags are more environmentally friendly (Afila, 2022).

Creating promotional campaigns that support plastic bag reduction is a crucial step in changing consumer behaviour. Research shows that campaigns that provide clear information on the negative impacts of plastic bags, as well as offer solutions that can be practically implemented, are effective. Promotions that engage consumers through social

media or in-store information can reinforce the message and encourage the use of more environmentally friendly cloth or paper bags.

In evaluating the impact of using cloth bags and paper bags, it is important to assess the positive contribution to the environment. The reduction of plastic waste in landfills and environmental pollution is one of the outcomes of this measure (Annidia, 2023). The use of cloth and paper bags contributes to the saving of natural resources and the reduction of carbon emissions, and helps change consumer behaviour to support the use of more sustainable alternatives (Puspaningrum, 2022). In addition, effective promotional tools can change consumer behaviour, thereby accelerating the adoption of environmentally friendly alternatives and reducing the negative impacts of plastic bag use (Mawardani, 2023).

### 3.2 Community behaviour

This study measures people's behaviour patterns by referring to three main variables, namely environmentally friendly attitudes, lifestyle, and knowledge. The knowledge variable is further divided into two sub-variables, namely knowledge of the benefits of reducing plastic waste and knowledge of the dangers posed by plastic waste. This research data was collected using a questionnaire instrument.

The analysis of public behaviour in supporting the plastic bag reduction policy is based on environmentally friendly attitudes (SRL) and lifestyle (GH) in Banjarmasin City. Primary data was obtained through distributing questionnaires to 155 respondents. The results of the study provide an overview of the frequency distribution of community behaviour in supporting the plastic bag reduction policy, which will be explained in more detail in the following subsections.

### 3.3 Environmentally friendly attitude (SRL) variable

Concern for the environment affects human behaviour in various aspects, including in increasing the desire to use environmentally friendly products (Suki, 2013). This indicator of environmentally friendly behaviour is reflected in the daily activities of respondents who are accustomed to taking pro-environmental actions. The following (table 3) is the frequency distribution of respondents' environmentally friendly behaviour.

Tabel 3. Environmentally friendly attitudes of respondents in Banjarmasin City

No	Questions	STS	TS	KS	S	SS	Total Score	Average Score	Interpretation of Results
Eco-friendly attitude									
1	Not using plastic bags when shopping	4	40	6	52	53	575	3,71	Agree
2	Reduce plastic consumption	6	19	62	36	32	534	3,45	Agree
3	Be diligent in sorting waste	7	34	7	65	42	566	3,65	Agree
4	Ask merchants not to use plastic in packaging goods when shopping	2	24	70	37	22	518	3,34	Disagree
5	Support programmes that reduce the use of plastic bags	7	43	28	62	15	500	3,23	Disagree
6	Support policies applied to traditional markets	5	34	25	46	45	557	3,59	Agree
7	Participate in socialising the reduction of plastic bag use	6	13	31	64	41	586	3,78	Agree
Total								3,54	Agree

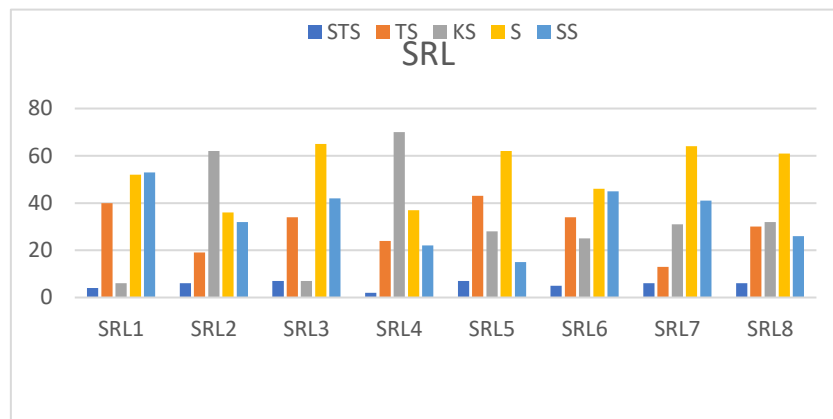


Fig 1. Data on community behaviour patterns based on Environmentally Friendly Attitudes

From Table 3, it can be seen that people's behaviour in reducing the use of plastic bags when shopping is still relatively low. This can be seen from the greater number of respondents who stated 'disagree' regarding the statement. Therefore, it requires the active role of the entire community as well as the government to increase public awareness by organising campaigns on environmental conservation issues. The average Likert score for people's environmentally friendly attitudes is 3.54, which indicates that respondents' attitudes towards environmental policies in their daily lives are quite good. This also indicates that the implementation of the plastic bag reduction policy in Banjarmasin City has successfully influenced people's behaviour.

### 3.4 Lifestyle variables (GH)

The lifestyle variable in this study is the lifestyle of the people of Banjarmasin City in their activities, interests and opinions on the use of plastic bags.

Table 4. Environmentally friendly lifestyle of respondents in Banjarmasin City

No	Questions	STS	TS	KS	S	SS	Total Score	Average Score	Interpretation of Results
Lifestyle									
1	Always use non-disposable products (such as: goody bag, thumbler)	11	43	9	38	54	546	3,52	Agree
2	Sorting organic and inorganic waste individually at home	13	45	32	41	24	483	3,12	Disagree
3	Reusing plastic bags used for shopping	10	12	6	76	51	611	3,94	Agree
4	Always invite people around to bring their own shopping bags/bags	13	39	34	47	22	491	3,17	Disagree
5	When shopping at traditional markets or modern retailers, always ask sellers not to wrap shopping in plastic bags.	20	38	34	45	18	468	3,02	Disagree
<b>Total</b>								<b>3,35</b>	<b>Disagree</b>

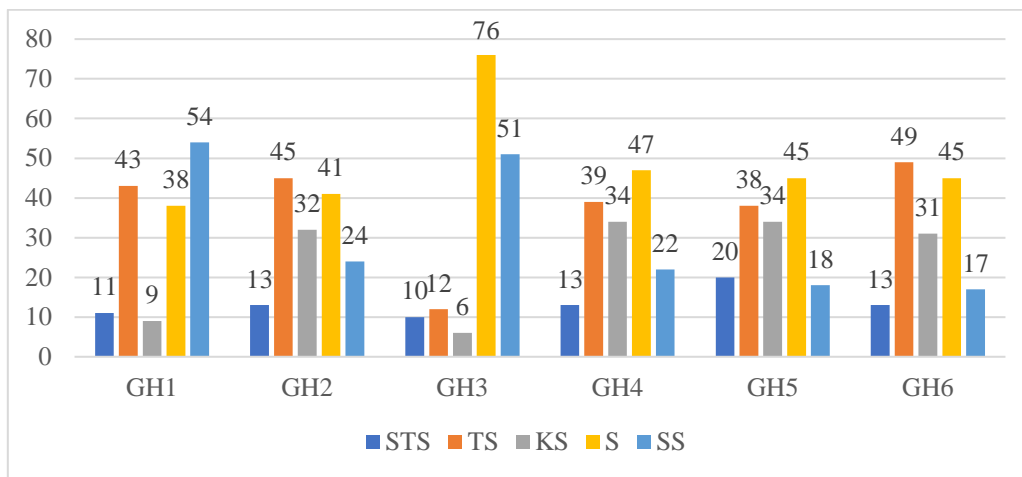


Fig 2. Data on community behaviour patterns based on lifestyle

Based on the data in Table 4, it can be seen that the environmentally friendly lifestyle of the people of Banjarmasin City is still relatively suboptimal. This is reflected in the average score of 3.35, which shows that many respondents ‘disagree’ regarding the behaviour of sorting organic and inorganic waste at home. This indicates that the level of public environmental awareness is still low. However, respondents showed a better level of awareness on the aspects of using products that can be used multiple times, such as goody bags and tumblers, as well as reusing plastic shopping bags, where many respondents agreed with this statement. This increased awareness is expected to help reduce plastic waste generation.

The behaviour of people and businesses is influenced by various factors, such as age, education level, occupation, and the environmental culture where they live. This research is in line with previous studies which show that the type of work and level of knowledge are not the main factors that influence individuals in reducing the use of plastic bags when shopping (Murdianningsih et al., 2020).

The paid plastic bag policy can be one of the efforts in supporting the plastic waste reduction programme in Indonesia. It is hoped that all elements of society - government, businesses, and the general public - can jointly adopt a more environmentally friendly lifestyle, support this policy, and reduce dependence on single-use plastics (Astuti, 2016). Concrete steps can begin at home, with education and socialisation to encourage compliance with the Banjarmasin City government's policy.

The level of community compliance, especially business actors, towards Banjarmasin government policies is in line with Rahmawati's view, which states that compliance is an attitude of discipline in following established rules. However, business actors are not fully disciplined in complying with regulations regarding waste segregation. This lack of compliance is an obstacle in efforts to reduce the use of plastic waste, which has an impact on environmental pollution in Banjarmasin City.

Questionnaire and interview data from businesses and the government show that more effective socialisation is needed. With better socialisation, the behavioural patterns of the community and businesses regarding waste segregation could improve, as the level of compliance in Banjarmasin City is already quite good, based on the results of this study's analysis.

### 3.5 Public knowledge of the benefits of reducing plastic waste

Next, a discussion of public knowledge about the benefits of reducing the use of single-use plastic bags. The knowledge variable shows five answer options, namely: Strongly Don't Know (STT), Don't Know (TT), Less Know (KT), Know (T), and Strongly Know (ST). The results of the questionnaire survey can be seen in table 5 below.



Table 5. Public knowledge on the benefits of reducing plastic waste

No	Questions	STS	TS	KS	S	SS	Total Score	Average Score	Interpretation of Results
Knowledge of the benefits of reducing plastic waste									
1	Knowing the reason for the Banjarmasin Mayor's policy to ban the use of plastic bags	6	15	44	45	45	573	3,70	Good
2	Knowing that buying goody bags as a substitute for plastic bags is a real act of love for the environment	5	15	24	63	48	599	3,86	Good
3	Knowing the many benefits of reducing the use of plastic bags	0	0	27	76	52	645	4,16	Good
4	Knowing the benefits of reducing plastic bags can maintain the balance of ecosis	5	33	7	62	48	580	3,74	Good
5	Knowing that environmentally friendly bags are better than plastic bags and can be used many times	7	16	22	54	56	601	3,88	Good
<b>Total</b>								<b>3,87</b>	<b>Good</b>

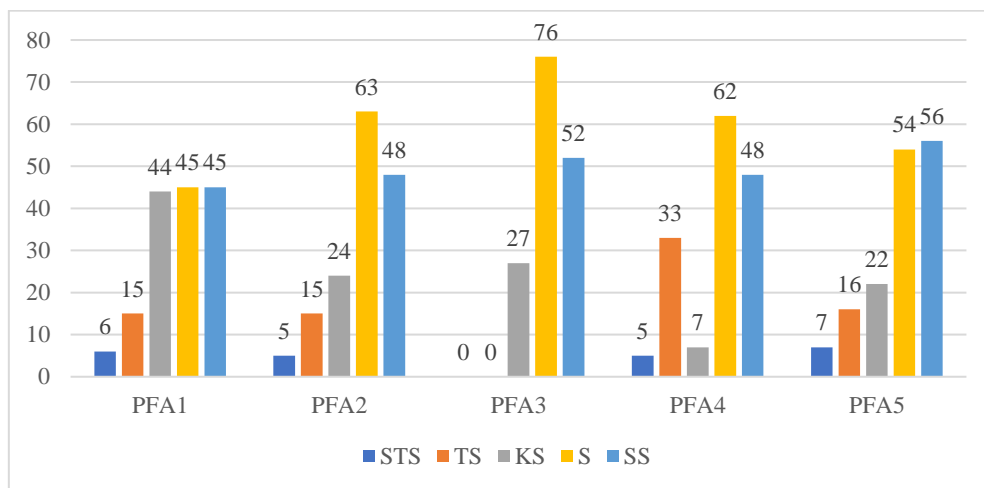


Fig 3. Public knowledge of the benefits of reducing plastic waste

Based on the data in Figure 3 and Table 5, it can be seen that people generally understand why the Banjarmasin City government has implemented a policy to reduce the use of single-use plastic bags. Respondents also realise that using goody bags instead of plastic bags is a form of concrete action to protect the environment. In addition, people are aware of the benefits of reducing the use of plastic bags for the balance of the ecosystem. The average score of 3.87 indicates a good level of knowledge among the community, which is expected to encourage behaviour change towards the use of reusable shopping bags.

### 3.6 Public knowledge of the dangers of plastic waste

Next, a discussion of public knowledge about the benefits of reducing the use of single-use plastic bags. The knowledge variable shows five answer options, namely: Strongly Don't Know (STT), Don't Know (TT), Less Know (KT), Know (T), and Strongly Know (ST). The results of the questionnaire survey can be seen in Table 6 below

Table 6. Public knowledge of the dangers of plastic waste

No	Questions	STS	TS	KS	S	SS	Total Score	Average Score	Interpretation of Results
Knowledge of the dangers of plastic waste									
1	Plastic is a type of waste that is difficult to decompose by nature and is one of the polluting materials.	2	19	1	56	77	652	4,21	Very well informed
2	Plastic has a variety of chemical substances harmful to living things and the environment	0	2	20	65	68	664	4,28	Very well informed
3	Plastic can pollute waterways, irrigation, rivers, lakes, beaches and soil	0	1	37	51	66	647	4,17	Informed
4	In certain amounts, plastic waste has been shown to clog river drains which can lead to flooding	1	16	2	71	65	648	4,18	Informed
5	Plastics that are discarded into the environment are consumed by animals and can cause death.	0	41	23	49	42	557	3,59	Informed
6	Plastic waste that is burned can cause air pollution that can cause cancer and global warming	11	46	22	35	41	514	3,32	No idea
7	Plastic waste that is thrown into the sea causes pollution of the marine ecosystem	4	17	24	57	53	603	3,89	Informed
8	Are you aware of eco-friendly packaging bags	6	31	23	60	35	552	3,56	Informed
9	Do you agree that plastic bags should be replaced entirely with eco-friendly bags as an effort to improve the environment	1	3	59	47	45	597	3,85	Informed
Total								3,90	Informed

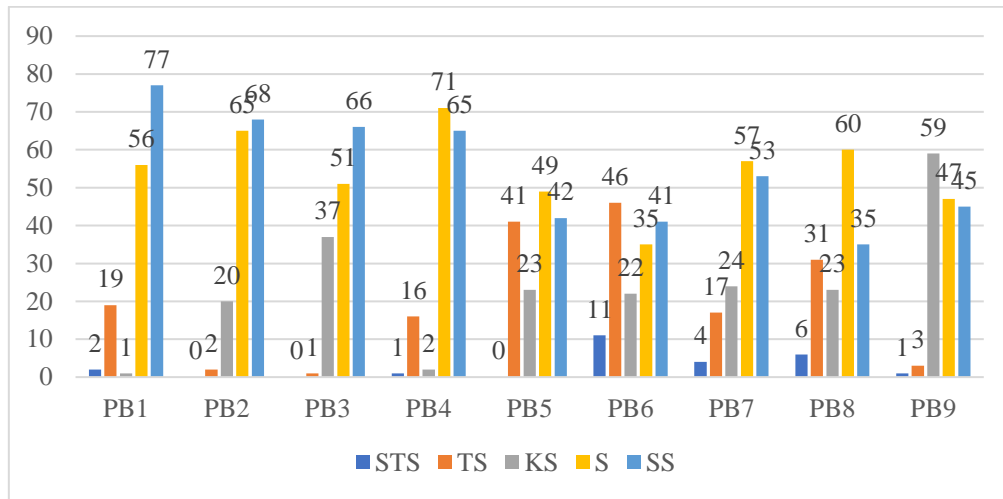


Fig 4. Public knowledge on the dangers of plastic waste

Based on the graph in Figure 4 and Table 6, it can be concluded that most people already understand that plastic waste disposed of into the environment can pollute and endanger the surrounding ecosystem. This applies to both plastic waste that enters the sea, rivers, soil, and drainage. The community also realises that plastic is a type of waste that is difficult to decompose naturally and has various chemical contents that are harmful to the life of living things and the environment. This result is supported by the dominance of ‘know’ answers from the respondents, with an average score of 3.90, which shows that the level of community knowledge about the dangers of plastic waste is quite good. With this knowledge, it is expected that the public will be more aware of the importance of reducing the use of plastic bags and switching to more environmentally friendly products.

### 5. Conclusions

This research reveals that the level of awareness of the people of Banjarmasin City regarding the dangers and benefits of reducing plastic waste is quite good, but there are still some aspects that need to be improved. Based on data analysis, people generally know that plastic waste is difficult to decompose, contains harmful chemicals, and can pollute the environment, including waterways, rivers, and the sea. In addition, they understand that burning plastic can cause air pollution that affects health and the environment. Although the level of public knowledge about the dangers of plastic is quite high, it is still found that awareness to implement environmentally-friendly lifestyles, such as the use of non-disposable products and waste segregation, has not been fully adopted by most respondents. This is reflected in the average score which shows that people are less likely to agree to sort waste individually at home, and only some respondents always use alternative products such as goody bags.

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The author contributed fully to the research.

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### Ethical Review Board Statement

Not applicable.

## Informed Consent Statement

Not applicable.

## Data Availability Statement

Not applicable.

## Conflicts of Interest

The authors declare no conflict of interest.

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