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## Analysis of Environmental Communication in Waste Management Efforts in Palu

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### Abstract

This study aims to provide information and become a reference for other parties in developing effective communication methods in waste management. Thus, the waste problem in Palu City can be overcome more efficiently, and the community can be more aware of environmental cleanliness. By involving active participation from all parties, including the community and society, waste management efforts can succeed, and Palu City will become cleaner and healthier. The research method used is a qualitative method that produces descriptive data in the form of written or spoken words and observable behaviour. This approach describes the social world from the point of view of the individual or the informant's interpretation in a scientific context. Informants were selected based on purposive sampling techniques with selection based on predetermined criteria, namely Seangle's permanent administrators, who have joined since the beginning of the community's establishment in 2017, the Palu City Environmental Agency, and participants in Seangle's work programs. The results showed that the work program carried out by Seangle had provided positive changes to people's habits, which, although not measured in concrete data, observationally look significant from time to time. The motivation given by Seangle through a persuasive attitude aroused community participation to jointly build positive habits toward waste management in Palu City.

**Keywords:** *Environmental Communication, Seangle, Waste Management.*

### Abstrak

Penelitian ini bertujuan untuk memberikan informasi dan menjadi referensi bagi pihak lain dalam mengembangkan metode komunikasi yang efektif dalam penanggulangan sampah. Sehingga, masalah sampah di Kota Palu dapat diatasi dengan lebih efisien dan masyarakat dapat memiliki kesadaran yang lebih tinggi terhadap kebersihan lingkungan. Dengan melibatkan partisipasi aktif dari semua pihak, termasuk komunitas dan masyarakat, diharapkan upaya penanggulangan sampah dapat berhasil dan Kota Palu menjadi lebih bersih dan sehat. Metode penelitian yang digunakan yaitu metode kualitatif yang menghasilkan data deskriptif berupa kata-kata tertulis atau lisan serta perilaku yang dapat diamati. Pendekatan ini menggambarkan dunia sosial dari sudut pandang individu atau interpretasi informan dalam konteks ilmiah. Informan dipilih berdasarkan teknik *purposive sampling* dengan penyeleksian berdasarkan kriteria yang telah ditentukan yaitu pengurus tetap Seangle yang telah bergabung sejak awal berdirinya komunitas tersebut pada 2017, Dinas Lingkungan Hidup Kota Palu, serta partisipan program-program kerja Seangle. Hasil penelitian menunjukkan bahwa program kerja yang dilakukan oleh Seangle telah memberikan perubahan positif terhadap kebiasaan masyarakat yang meski tidak diukur secara data konkrit namun secara pengamatan terlihat signifikan dari waktu ke waktu. Motivasi yang diberikan Seangle melalui sikap persuasif membangkitkan partisipasi masyarakat untuk bersama membangun kebiasaan positif terhadap penanggulangan sampah di Kota Palu.

**Kata Kunci:** *Seangle, Komunikasi Lingkungan, Penanggulangan Sampah*

## A. Introduction

Indonesia spans about 17,000 islands, extending from Sabang to Merauke. The Island Data Coordination Follow-up Meeting, led by the Geospatial Information Agency (BIG), reported in 2021 that the total count of islands in Indonesia had risen to 16,771 (Suranto, 2021). As per the 1982 International Convention on the Law of the Sea (UNCLOS), Indonesia's maritime territory covers an area of 3,257,357 km<sup>2</sup>, whereas its land area is 1,919,443 km<sup>2</sup> (KKPRI, 2019). According to the population census, Indonesia's population in 2020 reached 270.20 million individuals. The population had a growth of 32.56 million individuals in comparison to the figures from the 20/10 census. Indonesia covers a land area of 1.9 million km<sup>2</sup> and has an expected population density of 141 persons per km<sup>2</sup> (Adiarsi et al., 2015; BPS, 2023). Indonesia's population ranks third globally, following India and the United States (BPS, 2021; BPS, 2023).

Indonesia, being one of the most populated countries, is also confronted with a significant issue, which is garbage, particularly plastic waste (Akifah et al., 2018), especially plastic waste. According to the data from BPS, Indonesia is the second-largest global source of plastic trash (BPS, 2023). A report shows that 100 stores affiliated with the Indonesian Retail Entrepreneurs Association (APRINDO) collectively manufacture 10.95 million plastic bags within one year. Approximately half of plastic bags are disposable products that are discarded right away, while only around five per cent can be recycled (Zakirman et al., 2022).

Waste poses a significant challenge to environmental integrity and resource sustainability. Palu City in Central Sulawesi is confronted with significant waste-related issues. The population of Palu City is estimated to be 372,113 individuals, with a population density of 942 per square kilometre (BPS Sul-Teng, 2019, 2023). Palu City generates around 68,000 tons of waste annually, whereas the Environment Agency (DLH) can transport only about 142 tons of rubbish per day (BPS, 2021, 2023; Radarsulteng.id, 2022). The root cause of this issue is insufficient public knowledge regarding the necessity of minimizing the utilization of disposable items and the inadequacy of waste management initiatives.

The Palu City Government has implemented regulations to govern cleanliness and restrict waste disposal in public areas. Nevertheless, a significant number of individuals are nevertheless required to adhere to these regulations. Several grassroots initiatives have emerged to address the issue of trash. Seangle is a community that actively addresses waste management issues in Palu City (Seangle, 2023). This community organizes initiatives such as the Waste Education House (Rupiah) and Seaschool, which promote waste reduction and upcycling practices. These programs aim to impart knowledge, transform garbage into reusable items, and promote awareness about the significance of waste management within the community.

Seangle also organizes initiatives to clean up plastic garbage from beaches and coral reefs in Palu Bay. Seangle has successfully generated substantial awareness among the local population through these efforts. Furthermore, they collaborate with educational institutions to distribute knowledge on trash management and its detrimental consequences. Efficient and innovative

environmental communication is crucial in waste management endeavours. Seangle employs several communication strategies, such as social media platforms, to effectively communicate the need to preserve an environment free from garbage. Prior research has demonstrated that the strategic use of social media successfully facilitated the advancement of the waste management initiative.

Other research has demonstrated that implementing communication planning and innovative strategies in environmental initiatives can enhance consciousness and modify behaviour (Ardian, 2018). Additionally, evidence of this can be observed in the initiatives carried out by Seangle in Palu City. This study aims to conduct a detailed analysis of the environmental communication established by Seangle to encourage community involvement in addressing trash issues. Researching the communication tactics employed, including message packaging, selection of suitable communication channels, and adaptation to target requirements, is intriguing.

This work makes a valuable contribution to the field of communication science by focusing on developing and mapping a new discipline called environmental communication. (Bo'do et al., 2023; Herutomo, 2013; Herutomo & Istiyanto, 2021; Sanjaya, 2017). This study in environmental communication seeks to furnish knowledge and serve as a point of reference for stakeholders interested in devising efficacious communication strategies in waste management. Consequently, the trash issue in Indonesia may be effectively addressed, leading to increased public awareness of environmental hygiene. Effective waste management endeavours can be achieved by actively engaging all stakeholders, including individuals and communities. Seangle addresses the garbage issue in Palu City by focusing on its primary initiatives and actively engaging the neighbouring community. Seangle collaborates with people to implement environmental sanitation initiatives, including removing waste from rivers, beaches, and other public spaces.

Seangle also organizes socialization and training initiatives for the community regarding effective trash management and recycling. They offer guidance on waste segregation, composting methods, and approaches for recycling plastic waste. Seangle aims to promote public consciousness regarding environmental preservation and waste reduction through this endeavour.

## **B. Methods**

This study employs qualitative research methodologies to generate descriptive data in the form of written or spoken words and observable behaviour. Qualitative research is a form of research that seeks to understand and explain events in a naturalistic context. It encompasses more research methodologies. (Creswell & Creswell, 2018; Denzin et al., 2023)

Qualitative research seeks to comprehend the social realm, concepts, behaviours, perspectives, and human predicaments being investigated. This technique elucidates the social realm through the lens of an individual's perspective or the interpretation provided by an informant within a scientific framework. The

primary goal of qualitative research is to address phenomena or inquiries by employing a methodical scientific approach and utilizing qualitative methodologies. In this study, researchers play a crucial role in gathering and examining data. The research is grounded in a case study approach, which involves gathering comprehensive and detailed data about individuals, events, or groups to thoroughly understand their functioning within a specific context. This is achieved through the use of various methods, techniques, and multiple sources of information. Case studies offer comprehensive and meticulous information about specific events or occurrences, serving as a foundation for broader and more intricate research.

This study explores the concept of environmental communication, which seeks to enhance public engagement in promoting environmental protection. This concept encompasses seven domains of inquiry within the field of environmental communication (Cox, 2013; Cox & Pezzullo, 2017). These domains include environmental rhetoric and discourse, environmental media and journalism, public participation in decision-making, public education and advocacy campaigns, environmental collaboration and conflict resolution, risk communication, and the portrayal of environmental issues.

The research focused on analyzing environmental communication actions conducted by a specific entity, namely Seangle Kota Palu. The informants are chosen using purposive sampling techniques, where the selection is based on predetermined criteria. These criteria include individuals who have been part of Seangle's permanent management team since the community's inception in 2017, members of the Palu City Environmental Agency, and participants in Seangle's work programs. Moreover, the data collection methods encompass observation, interviews, and document retrieval. The research was conducted from December 2022 to May 2023. The process of data analysis commences by recognizing data discoveries that can provide answers to research inquiries. Next, the coding procedure is performed, specifically categorizing research findings into field data and references and connecting it to theory (Creswell, 2013; Creswell & Clark, 2018). The ultimate stage entails concluding. This conclusion can be temporary, ultimate, or conclusive.

### **C. Results and Discussion**

According to Alexander G. Flor, environmental communication uses approaches, principles, strategies, and communication techniques for environmental management and protection. It is briefly defined as the deliberate exchange of information in the form of knowledge and policies about the environment (Flor & Cangara, 2018). In other literature, Oravec and Klurce (Yenrizal, 2017) described environmental communication as examining how humans perceive and shape their socio-cultural relationship with the natural world. This is achieved through specific language and symbols to influence and direct human behavior towards the environment.

A program's effectiveness hinges on its ability to enhance behavior and maintain long-term viability. The success of a program is not determined by its implementation in the field, but rather by its ability to engage the community, media,

and policy stakeholders in a sustained collaboration. Before program implementation, thorough analysis is crucial to identify the specific program required for problem-solving in the field. A program's success is contingent upon its alignment with specific requirements and a strong sense of ownership in its execution.

Seangle Indonesia seeks to transition individuals into eco-conscious communities through sustainable initiatives, with the ultimate goal of transforming the country into an environmentally sustainable and waste-free nation. Seangle's three primary initiatives, Seaschool, RUIPAH, and Upcycling, consist of systematic and sequential implementation of waste management operations to mitigate the trash problem.

The implementation of environmental communication actions by Seangle Palu utilizes the participation of the agreed work program. Departing from the general definition, based on the findings in the field, Seangle has fulfilled the requirements for an action to be said to be environmental communication. Single provides persuasion messages that are not only rhetorical and textual but also direct to actions and concrete actions that target changes in people's habits.

Seangle Palu effectively employs environmental communication strategies through the active involvement of a mutually agreed work program. Building upon a comprehensive understanding of the subject matter, Seangle successfully meets the criteria for environmental communication by delivering persuasive messages that go beyond mere rhetoric and text. These messages directly prompt individuals to take tangible actions to bring about behavioural changes.

The scope of environmental communication is reflected in every program undertaken by Seangle.

### **1. Environmental Rhetoric and Discourse**

The research findings indicate that Seangle employs robust environmental discourse when addressing garbage issues in Palu City. They employ persuasive rhetoric to communicate crucial ideas regarding the significance of accountable waste management. They illustrate the consequences of insufficient waste management using evocative language, aiming to elicit anger from the audience towards the detrimental effects of improper waste disposal. They elucidate the harm inflicted upon flora and fauna, such as the presence of plastic waste in cows' digestive systems and the entanglement of coral reefs in the Palu Sea and Donggala Sea. Additionally, they highlight the resulting public health issues. Seangle's statement underscored the imperative need for prompt action and the cooperation of all stakeholders in tackling the trash issue. The Seangle team's techniques to building on program participants are evident. Their strategy involves employing emotive strategies to elicit sympathy, followed by the use of persuasive rhetoric to compel the audience to take tangible action.

Seangle uses many environmental discourses to disseminate its message while tackling the garbage issue in Palu City. They utilize social media platforms, such as Instagram, to disseminate information and promote initiatives pertaining to garbage management. The information they distribute encompasses factual details regarding the detrimental effects of waste on the environment, suggestions for

environmentally friendly waste management, and uplifting narratives about individuals or groups who have effectively resolved waste-related issues. Furthermore, Seangle actively engages in disseminating knowledge and presenting informative talks at community gatherings, educational institutions, and seminars. The aim is to enhance understanding and inspire individuals to take action in the realm of trash management.

Seangle's words and environmental discourse have had a profound influence on garbage management in Palu City. They effectively heightened public consciousness of the significance of appropriate trash management through compelling and emotive language. The impact is evident via the growing engagement of the community in Seangle's initiatives, including environmental restoration and waste management campaigns that encompass diverse demographics, encompassing not only teenagers but also youngsters and senior citizens. The civic engagement shown here demonstrates the efficacy of Seangle's environmental language and discourse in shaping behaviour and motivating tangible actions.

Furthermore, Seangle's environmental language and discourse have exerted an impact on local government policy pertaining to trash management. Seangle has effectively presented compelling information and arguments regarding the significance of governmental policies that promote sustainable waste management during their education. The impact entails a favourable alteration in the Palu City government's policy, characterized by a more proactive approach towards trash management. This includes the enhancement of waste management infrastructure and the provision of improved garbage transportation services. In addition, government entities also actively participate in events sponsored by Seangle.

## **2. Media and Environmental Journalism**

Seangle utilizes mass media to promote community engagement in garbage management. By organizing community campaigns and programs in partnership with online media outlets, they encourage the residents of Palu City to actively participate in responsible trash management initiatives. Seangle utilizes local newspapers, online publications, and social media platforms to generate widespread consciousness on the issue of trash and urges the general public to engage in tangible measures.

Seangle's Publications offer comprehensive insights into the garbage issue and present practical solutions that the community may use. Their presentation offers pragmatic guidance on eco-conscious waste management practices, including waste reduction, recycling, and reuse. These three items provide details about Seangle's active involvement in National Waste Care Day 2020 activities. Single informs the public about trash problems and offers practical advice to individuals and communities on effectively managing waste.

Furthermore, Seangle utilizes environmental media to acquire community backing and engagement. Through community campaigns and initiatives, they invite the local community to participate in environmental cleaning activities, rubbish collecting, and other endeavours that help the management of waste in Palu City. Seangle utilizes social media platforms to improve communication and engagement

across communities, fosters the development of environmentally conscious communities, and encourages cooperative efforts. This behaviour is observed on multiple occasions. Seangle conducted online seminars with various publications and promoted events on Seangle's official Instagram account.

Moreover, Seangle also has a role in shaping government laws pertaining to trash management. Their extensive reporting and advocacy efforts have increased public demand for more advanced and efficient waste management systems. The influence entails a favourable alteration in the government policy of Palu City, encompassing enhancements in waste management infrastructure, amelioration of trash transportation services, and stringent enforcement of regulations pertaining to waste management.

Seangle has also initiated a chain reaction within the community in Palu City. By implementing campaigns and community activities, they have effectively motivated and stimulated individuals and other community groups to actively engage in garbage management. It generates a favourable momentum and enhances communal awareness regarding the environment.

Seangle has effectively established a robust and enduring knowledge ecosystem focused on waste management in Palu City through media and environmental journalism involvement. Seangle publications provide the residents of Palu City with precise, current, and unbiased information. It assists the community in making well-informed decisions on trash management.

### **3. Public Participation in Decision Making**

Within environmental communication studies, public engagement frequently encompasses diverse modes of communication, including public meetings, online forums, public consultations, surveys, and open discourse. Public engagement in decision-making processes that affect the environment is facilitated by transparent and inclusive communication, which ensures that the viewpoints and concerns of the broader community are acknowledged and valued.

Seangle, an environmental community focused on environmental matters, offers extensive opportunities for public involvement in decision-making about environmental issues. Seangle offers accessible discussion activities that enable individuals and groups to exchange information, experiences, and knowledge on pertinent waste issues. These activities include interactive dialogues with diverse themes and discussions shared through Seangle's social media channels. Within discussion forums and community spaces, individuals who are part of the Seangle public can engage with one another, share thoughts and concepts, and acquire knowledge through mutual interaction.

Additionally, Seangle provides a platform for facilitating public discourse. It enables direct engagement with the government, environmental organisations, and communities in the decision-making process that affects the environment. Seangle organised a plastic waste debate for the National Waste Care Day event 2020. The purpose was to let the broader community voice their hopes and grievances regarding waste issues. Additionally, the Environmental Agency was invited to address these concerns and get feedback from the public. Seangle members can



express their opinions, address issues, and offer vital contributions to decision-makers through group conversations.

Furthermore, Seangle promotes working together and taking collective measures to safeguard and enhance the environment, with a particular focus on trash management. Seangle facilitates community engagement in addressing trash challenges by offering opportunities for active participation through environmental initiatives, collective waste management campaigns, and access to valuable resources. Seangle facilitates resilient public engagement by fostering collaboration and coordination within the community, allowing participants to make substantial contributions to decision-making processes that affect environmental matters.

Engaging the public in the decision-making process regarding the activities in Seangle fosters a sense of ownership and accountability among community members. The research revealed that engaging in decision-making enhances members' perception of ownership and involvement in the overall process. It has the potential to promote active engagement in carrying out tasks and enhance the drive to accomplish environmental objectives.

Moreover, the involvement of the public in the decision-making process also yields favourable outcomes in terms of the long-term viability and approval of the conducted operations. Engaging community members in the decision-making process mitigates the potential for making inconsequential or contentious decisions. By considering individuals' viewpoints and requirements, Seangle can develop more suitable and environmentally friendly activities in the long run.

#### **4. Public Education and Advocacy Campaigns**

Public education and advocacy campaigns are two important components in the study of environmental communication. Both focus on information dissemination and behaviour change to achieve sustainable environmental goals. Through a combination of public education strategies and advocacy campaigns that include socialization, direct education, and social media, the results show a holistic effort to influence people's attitudes and behaviours regarding the importance of waste management.

Community education is the process of conveying information and knowledge to the wider community about environmental issues, their impacts, and steps that can be taken to overcome these problems. Seangle's public education is contained in *Seaschool* and *RUPIAH* actions, which provide direct education on the importance of effective waste management for the sustainability of environmental maintenance. The aim is to increase people's awareness and understanding of environmental issues, which in this case are focused on waste problems, and provide them with enough knowledge to make sustainable decisions in everyday life. Seangle's public education is conducted through various channels, such as school-to-school and door-to-house socialization, seminars, social media, and other educational materials.

Advocacy campaigns in the context of environmental communication aim to influence people's attitudes, beliefs, and behaviours related to certain environmental issues (Jurin et al., 2010; Scheufele, 2018). Advocacy campaigns can involve a variety of communication strategies, including mass media, social media,

support raising, demonstrations, petitions, and lobbying. Seangle himself has several times carried out advocacy campaigns on the issue of waste management in Palu City, such as being the main collaborator for the Plastic Festival program with the theme Save the Earth from Plastic Disasters, creating an Instagram challenge in the form of a photography contest themed #AsikTanpaPlastik in commemoration of the 44th Anniversary of Palu City. The campaign aims to raise awareness, influence public opinion, mobilize public support, and push for better policy changes or actions for the environment.

In the context of environmental communication studies, public education and advocacy campaigns are interrelated and mutually supportive. Public education is the basis for forming public understanding and awareness of environmental issues, while advocacy campaigns take further steps by encouraging concrete action and social change. By combining these two approaches, environmental communication can serve as a means to influence society and stakeholders in creating awareness and behaviour change and encouraging sustainable action related to the environment (Tan et al., 2019).

The main findings of this study show that the environmental communication study approach through public education and advocacy campaigns conducted by Seangle has positively contributed to efforts to overcome waste problems in Palu City. This discussion will explain the relationship between findings and research objectives, compare them with previous research, analyze and interpret the findings, and discuss the research limitations.

Previous studies conducted in other areas have shown that environmental communication study approaches through public education and advocacy campaigns can positively impact tackling waste problems. The study is also consistent with those findings. For example, research in other cities shows that direct socialization with communities through door-to-door meetings and visits can increase awareness and change waste-related behaviour. This finding is in line with this study, which shows that socialization activities carried out by Seangle through door-to-door education have succeeded in increasing public awareness and participation in waste management in Palu City.

The findings of this study show that Seangle's approach to environmental communication studies, through public education and advocacy campaigns, has achieved some significant results. First, public awareness of the importance of waste management has increased significantly. It can be seen from the increase in community participation in waste management activities organized by Seangle. Second, changes in community behaviour related to waste sorting and management are also visible. Many residents are starting to sort waste at home and use more responsible waste management practices, such as composting and recycling.

Further analysis confirms that Seangle's door-to-door and school-to-school approach to public education effectively conveys information and changes people's attitudes and behaviours regarding waste. In addition, campaigns disseminated through social media have also reached a wider audience and inspired public participation in the waste management movement. Collaboration with the government and non-governmental organizations also provides important support

in creating policy changes and more environmentally friendly infrastructure in Palu City.

## 5. Environmental Collaboration and Conflict Resolution

Environmental collaboration in environmental communication entails harmonious cooperation among many stakeholders, such as communities, governments, non-governmental organizations, and the private sector, with the aim of attaining objectives pertaining to environmental concerns. Seangle has actively participated in and spearheaded other initiatives involving similar groups, such as organizing photographic contests to promote the #AsikTanpaPlastik campaigns in partnership with Yayasan Rumah Bahari Gemilang, Demoplastik, and SoalPalu. Seangle has also collaborated with volunteers from Expedition Sungai Nusantara to conduct brand audits of plastic garbage found on the beach as part of their microplastic research. Conflict resolution pertains to resolving difficulties or disputes that may occur within the realm of environmental matters.

Environmental cooperation and conflict resolution involve endeavours to foster cooperation among diverse parties in addressing intricate environmental issues and resolving disputes that may develop from disagreements or opposing interests. Collaboration and conflict resolution are interconnected elements in advancing environmental sustainability by assuring the inclusion of different viewpoints and interests and finding resolutions to intricate environmental problems. Environmental collaboration involves various parties with diverse interests and functions in environmental matters, including government entities, non-governmental organizations, local communities, industries, and the general public. Collaboration seeks to attain mutual comprehension, exchange resources, merge knowledge, and engage in joint efforts to tackle environmental concerns.

Efficient teamwork facilitates the seamless cooperation of various entities, reducing conflicts and enabling superior outcomes. Based on the research findings, Seangle has engaged in environmental partnerships with the Environmental Service (DLH), Marine and Fisheries Service (DKP), like-minded environmental organizations, and various online media outlets that frequently report on Seangle's efforts in waste management in Palu City, such as ANTARA, KabarPublik.id, and Central Sulawesi.

The partnership between Seangle and DLH exemplifies the cooperative endeavours of non-governmental groups and the government in the field of waste management. This partnership offers advantages in terms of DLH's resources and information accessibility and the expansion of Seangle's program and activity portfolio. By collaborating, Seangle can secure official endorsement and backing from the local government, thus enhancing the credibility and efficacy of its trash management initiatives.

Collaborating with comparable communities in waste management involves actively exchanging knowledge, expertise, and resources with other organizations or groups with the same focus and objectives. By collaborating, Seangle can broaden its network and establish synergistic relationships with other communities engaged in trash management. This can result in the development of more inventive and efficient solutions for environmental concerns related to garbage.

The partnership with ANTARA online media demonstrates Seangle's endeavour to enhance the prominence and circulation of information on its waste management initiatives and undertakings. Through media collaboration, Seangle effectively disseminates crucial information to the public via publications and press releases. Media utilisation is a potent means to engage a broader demographic, enhance public consciousness, and encourage active involvement in waste management initiatives.

Engaging in collaboration with DLH, comparable groups, and ANTARA online media is an intelligent approach in the field of environmental communication. The agreement enables Seangle to leverage current resources, enhance cooperation networks, improve information accessibility, and augment its effect in waste management. The findings of this study demonstrate that engaging in partnership with diverse stakeholders can yield substantial advantages in attaining the intended environmental objectives.

## 6. Risk Communication

Risk communication is a crucial component of the field of environmental communication. It entails disseminating information regarding environmental hazards to the general public, encompassing risks to human well-being, the durability of ecosystems, or susceptibility to climate change. Risk communication primarily aims to furnish individuals with a lucid and precise comprehension of the risk, enabling them to make well-informed choices and undertake suitable measures (Boyd et al., 2009; Lundgren & McMakin, 2009).

Seangle employs emotive messaging to convey the potential hazards that mayors encounter if no prompt and substantial action is taken in garbage management. The hazards involved encompass the provision of empirical evidence highlighting the substantial threat posed to human survival, such as the spread of diseases, ingestion of plastic trash by fauna, and the proliferation of plastic waste in the Palu Sea and Donggala Sea coral reefs. This evokes empathy in the audience, motivating them to come together and collaborate in implementing environmental conservation measures.

Each approach perceives risk communication from a slightly distinct standpoint, just as diverse audiences perceive risk differently. Having a comprehensive understanding of various risk communication viewpoints enables communicators to select a method that effectively caters to the requirements of their specific scenario and target audience. Consequently, their risk communication endeavours are more likely to achieve success (Lundgren & McMakin, 2013).

According to the observations made in the field, the subsequent analysis pertains to the risk communication strategy in environmental communication.

1. Determine potential risks posed by litter. To initiate risk communication, it is important to identify the hazards and risks linked to trash (Bradley et al., 2017). Single has undertaken extensive and enduring research on garbage and its effects. This study uncovers the potential hazards of garbage, including air pollution, water pollution, ecological degradation, and public health issues.
2. Evaluation of potential hazards and uncertainties. Risk analysis assesses the magnitude of risk and probable consequences that may arise from waste.

- Seangle's risk analysis includes evaluating pollution levels, the probability of disease transmission, financial damages, and the societal consequences of waste.
3. Provision of risk information. Seangle employs diverse communication channels to effectively inform the general public about the hazards associated with trash. The implementation of public campaigns accomplishes it the process of socializing in schools, community counselling, and the utilization of mass media.
  4. Community's comprehension of danger. It is vital for the general public to comprehend the risk information that Seangle has supplied. Seangle's major programs provide communities with a clear and tangible explanation of the hazards associated with garbage, including its effects on health and the environment. Additionally, these programs offer practical guidance on how communities can minimize these risks.
  5. Participation in the community. Efficient risk communication necessitates the active engagement of the community (Boyd et al., 2009). Seangle can engage the community through discussions, workshops, or open forums to solicit their concerns and opinions regarding the hazards of garbage. Engaging in community participation can enhance confidence, foster comprehension, and inspire tangible initiatives in trash management.
  6. Management of emergencies or critical situations. Effective communication of risks is crucial in waste-related emergencies, such as incidents at landfills or accidents. Seangle should have a prepared communication strategy in place for crises, ensuring prompt, precise, and dependable dissemination of information to the public regarding risks and necessary actions.

## 7. Representation of Environmental Issues

Seangle focuses on framing information when addressing environmental issues, emphasizing conveying a sense of urgency, the magnitude of the problem, and potential solutions. Their approach involves curating impactful news items, employing accessible language, and showcasing compelling visual imagery to depict environmental degradation, climate alteration, and viable sustainable remedies. Furthermore, Seangle employs potent visual depictions, such as photos and photographs, to emphasize ecological harm, the repercussions of climate change, and sustainable remedies. Seangle uses language that has the potential to evoke emotions, enhance public consciousness regarding environmental concerns, and shape their portrayal in public domains.

Seangle's risk communication efforts prompted the adoption of compelling and impactful environmental rhetoric. They employ captivating and evocative language to communicate messages regarding the immediacy and ramifications of environmental concerns to the community. Seangle effectively shaped individuals' viewpoints, dispositions, and actions about environmental matters by implementing this communication approach.

In addition, Seangle promotes public engagement by providing a platform for dialogue and information sharing. The organization actively involves communities in discussions regarding environmental matters, attentively listens to their concerns and perspectives, and offers avenues for their participation in decision-making processes related to environmental issues. Seangle ensures that the

depiction of environmental issues encompasses a diverse range of opinions and interests by actively engaging communities in the communication process. Seangle effectively conveyed environmental issues, so fostering a deeper comprehension of these concerns within the community. Communities are increasingly recognizing environmental hazards and the significance of implementing preventive measures. This impactful portrayal can motivate communities to engage in more sustainable behaviours and endorse environment-focused policies and activities (Sukmono & Wijayanti, 2019).

Finally, Seangle's portrayal of environmental challenges in this study cultivates consciousness, enhances comprehension, and inspires tangible efforts towards upholding a robust and sustainable ecosystem. Seangle has effectively established itself as an advocate for environmental change and assists communities in embracing sustainable attitudes and behaviours. Seangle has effectively fostered awareness, facilitated comprehension, and motivated tangible measures in addressing environmental concerns, particularly about trash management, through effective communication.

#### **D. Conclusion**

We have seen that Seangle employs an engaging and accessible approach in the realm of environmental communication. They employ plain language and refrain from utilizing intricate vocabulary. Furthermore, they employ visual media, such as photographs and videos, to elucidate the transmitted content.

The outcomes of Seangle's programs and initiatives in environmental communication are clearly apparent. Many residents have embraced a lifestyle that minimizes trash and actively participates in waste management efforts in their immediate vicinity. A growing number of residents are adopting the practice of utilizing recycled products, diligently sorting waste, and minimizing the consumption of disposable plastics. Seangle's triumph in addressing the garbage issue in Palu City serves as a motivating model for other communities and local authorities. The Environmental Communication Strategy they employ can serve as a model for developing comparable programs in different regions.

Eventually, the work program findings indicate that observable and significant improvements in people's habits, even though they are not quantitatively measured. Seangle's persuasive demeanour effectively motivated community engagement in a collective effort to cultivate positive habits about garbage management in Palu City.

By fostering community engagement and securing comprehensive backing from local authorities, waste management in Indonesia may be significantly enhanced. To attain a clean and healthy environment, it is imperative to consistently promote measures such as public education, the establishment of effective waste management infrastructure, and the encouragement of sustainable lifestyles.

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