

Attribute Agenda Building in An Environmental Crisis: News Coverage of MV X-Press Pearl Ship Incident in Sri Lanka

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ABSTRACT

This study investigated the building of the attribute agenda of an environmental crisis, taking the MV X-Press Pearl shipwreck incident as a case study. English weekend newspapers for a year since the incident were used for a content analysis to identify the information subsidies and their respective attribute agendas. An analysis framework was developed based on information subsidies and their respective attribute agendas. Results indicated that the governmental bodies unrelated to the environment were the most frequently cited sources, followed by experts and local non-governmental organizations/ industries. Conversely, the public was the least cited information source. Environmental damage was the most frequently emphasized attribute, followed by law and agreements and prevention. However, policy was the least reported attribute. Considering the correlation between information sources and attributes, the Marine Environmental Protection Authority highlighted the mitigation agenda, while non environmental related governmental bodies emphasized prevention agenda. Policymakers focused on getting compensation, while governmental bodies emphasized law and agreements and Experts prioritized on environmental damage. The evidence for attribute agenda building was found further strengthening the agenda building hypothesis and information subsidies had their own attributes highlighted in media reports. The study delves into the practical implications of agenda building, which can influence media outlets. It suggests strategic communication planning, aligning coverage with objectives, and collaborating with environmental advocacy groups. This understanding informs decision-making, promotes balanced coverage, and enhances public engagement. It is important to additionally take into account the process used to establish the agenda in future research.

Keywords: News Reporting; Attribute agenda building; Information subsidies; Environmental risk communication; Mv Xpress Pearl

INTRODUCTION

In recent years, there has been a growing worldwide concern regarding environmental catastrophes as the world grapples with many difficulties associated with climate change, biodiversity decline, pollution, and habitat destruction. These crises have wide-ranging ecological effects and present substantial risks to human well-being and social stability. In the face of these difficulties, the influence of the media in molding public opinion, policy priorities, and reactions to environmental emergencies has attracted growing interest from scholars, policymakers, and environmental activists (Yang et al., 2023).

Especially, the role of media in shaping public perception and policy agendas regarding climate change has been widely studied. Media attention to climate change is influenced by various factors, including political feedback, scientific consensus, and the involvement of non-governmental organizations and industry actors. Additionally, framing climate change in the media, including the representation of scientific uncertainty, has implications for public understanding and policy support (Yang & Saffer, 2018). With the development of the era of social media platforms, where information is disseminated faster than ever, media investigates social media to find potential stories. The role of social media platforms, such as Twitter, in influencing political agendas and stimulating discussions around climate change among policymakers has also been explored (Ebrey et al., 2020).

As far as Sri Lanka is concerned, media often reports environmental crisis. The MV X-Press Pearl ship tragedy, which transpired off the coast of Sri Lanka, stands as an environmental crisis that garnered international recognition. In May 2021, the cargo ship known as the MV X-Press Pearl experienced a fire incident and sank near Colombo, the capital city of Sri Lanka. The occurrence in question resulted in significant environmental consequences, such as the discharge of dangerous substances, occurrences of oil spills, and detrimental impacts on marine ecosystems. The occurrence not only garnered significant attention within Sri Lanka but also attracted global interest owing to its consequential effects on the ecology and economy (Gunarathne et al., 2022).

The media was crucial in disseminating information regarding the MV X-Press Pearl incident to local and global audiences. The media's portrayal of environmental catastrophes can substantially impact public comprehension, galvanize public sentiment, and mold policy-making choices (Yang & Saffer, A. 2018). Nevertheless, how these crises are portrayed in the media lacks neutrality, as it encompasses intricate procedures for selecting, framing, and highlighting specific features or facets of the event. Since the emergence of the concept of agenda building, it has been widely studied in the background of politics and, recently, in health-related sectors. The studies conducted on the topic of the environment remain limited. Therefore, there is a significant empirical gap in the agenda-building studies related to the environment. Only a limited number of studies have been conducted on this subject; therefore, the available data on this matter is limited. This study addressed this empirical gap by examining the environmental catastrophe of the Xpress Pearl Ship.

Based on the previous literature it is evident that the media is influenced by external sources in developing their news reports. This has been tested to a certain extent in environmentally related topics as well. The problem that this study examined is to see whether the media in Sri Lanka also got influenced by external sources when reporting news about the Xpress Pearl Ship. As the Xpress Pearl Ship incident became a major highlight in the media, the various information sources must have encouraged the media to promote their own agendas. Such scenarios ignite the agenda building process in media. Hence, this study aimed to address the following primary research questions: Was the media influenced by external parties when reporting news on the Xpress Pearl Ship? What were the agendas the external parties promoted?

The purpose of the study is to examine the phenomenon of attribute agenda building within the context of news coverage pertaining to the MV X-Press Pearl ship incident in Sri Lanka. In addition to the main purpose, some specific objectives can be identified. These specific objectives are to identify the characteristics highlighted by the media when covering the incident to examine several elements of the occurrence, including its origins, effects, accountable parties, environmental repercussions, and notable solutions that have garnered attention in media coverage and to examine the attributes and presentation of these features in news coverage, to identify media outlets and the contributions made by stakeholders.

LITERATURE REVIEW

An environmental crisis is a significant and pressing threat to the natural environment, with severe ramifications for ecosystems, biodiversity, and human well-being. The presence of a state of emergency or an urgent risk caused by human acts, natural disasters, or a combination of these factors distinguishes the phenomenon under examination. Environmental crises can take many forms, including but not limited to climate change, deforestation, pollution, biodiversity loss, and resource depletion. Human activities have a significant impact on the environment, which contributes to the occurrence of environmental crises. Environmental issues and crises caused primarily by human activity are man-made ecological crises. The emergence of these crises can have serious negative consequences for ecosystems, biodiversity, and human well-being (Yang et al., 2023).

The requirement for effective crisis response methods is one component of environmental crisis communication. According to Hale et al. (2005), the reaction stage is critical in crisis management since it is when decisions are taken that can save lives and lessen the effects of the crisis. The selection and transmission of material during this stage considerably impacts public opinion and perceptions of an organization's crisis management. According to Schoofs et al. (2019), empathy is essential in crisis communication because it helps organizations better understand the impact of environmental catastrophes and create trust with stakeholders.

Another critical factor is the function of cultural competence in environmental crisis communication. According to Oliveira (2013), companies and communication professionals must be prepared to deal with the problems of a multicultural crisis. Cultural variations, such as age, religion, and education, can impact business speech and crisis management tactics. Organizations can better understand and meet the cultural expectations of varied audiences by merging cultural competency and crisis management frameworks. Political communication is equally essential in environmental disasters.

Media play a significant role in reporting environmental crises. Same as the other mainstream media like TV and Radio and new media like social media, print media such as Newspapers play an important role in news reporting. Most importantly, newspapers have a significant impact on molding public opinion and influencing public debate. The newspapers have the authority to establish the agenda and decide which problems receive public attention. Newspapers can also impact public perceptions and attitudes regarding numerous topics by their editorial choices and news coverage. This impact is compelling in politically charged subjects, where newspapers may define the narrative and alter public opinion (Lim, 2006).

Several research on environmental crisis communications have been done at the international level. Rochyadi-Reetz et al. (2020) investigated the media framing of the transboundary haze issue in Indonesia, Singapore, and Malaysia. The current study examined media coverage of the haze problem to identify unique frames used by the media to describe this issue within individual countries. Lin (2018) conducted a study to examine the perspectives of traditional media news and new media in expressing the haze condition in Singapore. This study examined how conventional and new media channels framed the smog situation, concentrating on their coverage and viewpoints differences. In his study, Steele (2016) analyzed media coverage relative to an oil leak occurrence in Trinidad. The study looked at press releases, communication strategies, and media coverage produced by institutions, journalists, and other individuals involved to gain insight into how the oil spill disaster was portrayed in the media and the influence various stakeholders had on the narrative.

Environmental issues in Sri Lanka have gotten much attention in mainstream media. Sri Lanka has a long history of environmental management that dates back more than two

millennia. The inclusion of a constitutional environmental right within Sri Lanka's legal framework has been debated. Some argue that including an environmental right in the constitution is unnecessary or insignificant because it is already covered by policy recommendations (Gellers, 2015). Climate change is posing a huge environmental challenge for Sri Lanka. Droughts, storms, floods, and landslides are among the climate-related events that occur in the country. The events mentioned earlier have significant social and environmental consequences, particularly in densely populated areas such as Kurunegala, where economic development is rising (Madhubhashini, 2019). Developing a comprehensive approach to urban design considering climate change threats is critical to addressing these challenges.

In the context of Sri Lanka, environmental contamination is a significant and pressing concern. Water contamination has occurred due to inappropriate industrial wastewater disposal, such as the poisoning of the Kelani River caused by the spillage of diesel oil by a multinational beverage firm (Konasinghe & Edirisinghe, 2020). Because of the rising generation of garbage, solid waste management has become a significant concern, posing various challenges (Thuppahige & Babel, 2021). Furthermore, in its quest for sustainable urban mining practices, the e-waste recycling business faces challenges (Gunarathne et al., 2020).

The incident with the X-Press Pearl ship is related to a major maritime disaster that occurred in May 2021 involving the cargo vessel of the same name. A fire broke out aboard the ship while it was stationed off the coast of Colombo, Sri Lanka, seriously affecting the environment and ecology (James et al., 2022). The incidence resulted in the most significant maritime release of resin pellets, also known as nurdles, which are little plastic pellets used to manufacture plastic goods (James, 2023). According to James et al. (2022), an estimated 70 billion nurdles weighing approximately 1680 tons, were mistakenly thrown into the ocean, contaminating the nation's coastal areas.

The X-Press Pearl accident is commonly recognized as one of the most catastrophic examples of nurdle discharge caused by a marine mishap, second only to the release of 150 tons of nurdles into Hong Kong harbor during a typhoon in 2012. The release of nurdles from the X-Press Pearl vessel has significant consequences on marine ecosystems and plastic contamination inside the Indian Ocean. Nurdles have been found in the region of the ship's anchorage, raising environmental concerns and the risk of adverse effects on marine animals (Pattiaratchi et al., 2022).

The episode drew widespread media attention due to its multidimensional impact on the environment, economy, and humanitarian aspects. The news coverage mainly focused on the immediate and long-term environmental ramifications of the disaster, which included an oil leak, contamination of coastal rivers, destruction of marine habitats, and adverse effects on aquatic species. Journalists emphasized the impact on local groups such as fishermen who rely on the sea for economic subsistence, the potential health risks associated with exposure to dangerous substances, and the problems coastal residents face due to pollution. Various news outlets extensively reported the response efforts of Sri Lankan officials, foreign organizations, and volunteers to contain the oil spill, clean up the damaged areas, and lessen the environmental damage. The report primarily focused on the legal repercussions of the incident, including inquiries, potential lawsuits, and the liability faced by the ship's owners and operators. The economic implications were also highlighted, especially the consequences for the fishing and tourism industries. The news coverage emphasized the international collaboration and aid provided to Sri Lanka in properly tackling the environmental disaster. This included help from neighboring countries, global institutions, and experts in oil spill response and environmental governance (Pattiaratchi et al., 2022).

In the realm of environmental communication within the Sri Lankan context, a significant research gap exists regarding the agenda-building of environmental-related topics. While studies have explored various aspects of environmental journalism and crisis reporting, little attention has been directed towards understanding how environmental issues gain prominence on the media agenda. This gap is particularly notable given the increasing recognition of the nation's environmental challenges, ranging from deforestation and biodiversity loss to pollution and climate change impacts. The absence of research examining the agenda-building process for environmental topics within Sri Lanka leaves a critical void in our understanding of how public attention is directed towards these pressing issues. Consequently, this study seeks to fill this research gap by comprehensively analyzing agenda-building concerning an environmental-related topic in Sri Lanka. By investigating the factors influencing the visibility and salience of environmental issues in the media, policy discourse, and public consciousness, this research aims to provide valuable insights into the dynamics of environmental agenda-setting within the Sri Lankan context. Even though the ship incident is only a single instance in the media coverage it provides a valuable baseline on comprehending how the media agendas are built when it comes to environmental related issues. Through a nuanced examination of media coverage this study contributes to a deeper understanding of how environmental concerns are prioritized and addressed in Sri Lanka, informing more effective strategies for environmental advocacy, policy development, and public engagement.

The main theoretical framework of the study is the attribute agenda building. The second level of agenda building or attribute agenda building, has close connections with the concept of framing, proposing that media can influence the public about a topic by highlighting or ignoring attributes of the topic (Lin, 2018). In the simplest form, an attribute can be a topic's characteristic, quality, or property. Similar to agenda setting, this also has its origin in political communication.

Attribute agenda-building theory offers valuable insights into understanding the news coverage of the MV X-Press Pearl ship incident in Sri Lanka by examining how various attributes of the event are emphasized and highlighted in media reporting. Studying information subsidies is crucial in examining news coverage of the MV X-Press Pearl ship incident in Sri Lanka as it sheds light on the sources and channels through which information about the event is disseminated to the media. Information subsidies refer to providing news materials, press releases, or other forms of content by interested parties, such as government agencies, corporations, or advocacy groups, to news organizations. In the context of the ship incident, various stakeholders, including the Sri Lankan government, environmental organizations, shipping companies, and international agencies, may provide journalists with information to shape the incident's narrative.

METHODOLOGY

The qualitative approach was mainly used for the study. Nicholson & Anderson (2005) note that newspaper content analysis is a great study approach for examining numerous subjects and themes within newspaper stories. It reveals views, values, ideologies, and cultural systems expressed in newspaper content. Therefore, content analysis is the ideal methodological approach for investigating agenda-building in media coverage of environmental-related topics, such as the MV X-Press Pearl Ship incident in Sri Lanka. Moreover, this study was mainly conducted using the newspaper content analysis. Furthermore, English weekend newspapers were selected for the study. Madhubhashini (2021) notes that the weekend newspapers have higher circulation than weekday newspapers, indicating that more people read weekend newspapers. Purposive sampling was used to select the newspaper articles covered MV X-

Press Pearl Ship incident. By focusing on English weekend newspapers with the highest circulation, researchers aimed to analyse widely read publications likely to provide extensive coverage of the incident.

For the content study, the five leading English weekend newspapers were chosen. According to the Report Guide to Media (2022) published by the Department of Government Information, Sunday Times (Wijeya Newspapers Pvt Ltd), Sunday Observer (Associated Newspapers Pvt Ltd.), Sunday Island (Upali Newspapers Pvt Ltd.), Sunday Morning (Derana Macro entertainment Pvt Ltd.) and Ceylon Today (Ceylon newspapers limited) were identified as leading English Weekend newspapers in the country. The news coverage was checked for a year when the anniversary falls on 17th May 2022. However, researcher included an additional two weeks from the year anniversary, including any more news reported published. So, the news reports were collected from 01st May 2021 to 31st May 2022. The headline and the first paragraph of the news report were searched for keywords when conducting content analysis. The pre-identified keywords were "X-Press Pearl", "Shipwreck", and "sea pollution".

A series of trial searches were conducted before establishing the final keywords for the search. Once the keywords were finalised, newspapers were searched for relevant articles. The researcher reviewed the results for each keyword. The articles do not describe the Mv X-Press Pearl incident significantly, and instead, if the main focus is not the Mv X-Press Pearl incident, those articles were removed from the pool. Further duplicates and editorials were also removed. Editorials are written from the newspaper perspective and only convey the media agenda. Also, when searching for relevant reports, supplements and advertisements were excluded. The final total of newspaper articles for each newspaper was recorded in an excel sheet.

Table 1 Number of articles found in each newspaper.

Newspaper	Number of articles
Sunday Times	26
Sunday Observer	8
Sunday Island	14
Ceylon today	28
Sunday morning	4
Total	80

This study employed two independent coders to analyse the content of the newspaper articles. Both coders have experience conducting content analysis and a considerable understanding of communication-related studies and their concepts. A pilot content analysis was performed on two randomly selected newspapers with 20 randomly selected newspaper articles. The reliability of the two coders was measured using Cronbach's alpha. As the chosen data set was smaller, Cronbach's alpha was calculated using MS Excel. The output recorded a 'a=.901' as the Cronbach alpha value. Therefore, the results indicated significant reliability among the coders. An analysis framework was developed based on information subsidies and their respective attribute agendas.

Additionally, content analysis facilitates investigating the relationship between media agendas and other variables such as public opinion, political campaigns, and policymaking. By analyzing media content in conjunction with these factors, researchers can assess the impact of media agenda-building on various aspects of society. Lastly, content analysis provides a methodological framework that can be applied longitudinally and cross-sectionally, allowing for examining agenda-building processes over time and in diverse contexts. This longitudinal

approach enables scholars to monitor changes in media agendas, identify patterns and trends, and gain insights into the mechanisms of agenda formation in different socio-political environments. Overall, content analysis offers a structured and versatile approach to studying media agenda-building, providing researchers with the tools to understand how the media shape public discourse and influence societal processes related to environmental issues like the MV X-Press Pearl ship incident in Sri Lanka.

RESULTS AND DISCUSSION

Content analysis was mainly done to achieve the main purpose and the specific objectives and to answer the main question of the study. Therefore, the results are presented below.

Table 2 Frequency of information subsidies mentioned in news reports.

Subsidy	Frequency	Percentage
MEPA	33	11%
Gov bodies env	22	7%
Gov bodies non-env	49	16%
Ship Company	23	8%
NGO/ industries	40	13%
International Parties	24	8%
Policy Makers	36	12%
Experts	40	13%
Public	6	2%
Other	29	10%
Total	302	100%

According to the content analysis results, it is clear that governmental bodies unrelated to the environment (16%) have been referred to the most as the sources in news articles. Experts (13%) and local non-governmental organizations industries (13%) were quoted equally. The next most referred information source is the policy makers (12%) and the Marine Environmental Protection Authority (11%). The analysis results showed that the public (2%) has been the least referred information source in this context.

The prevalence of government sources in media narratives raises questions about the influence and control exerted by the government over the media landscape. This prompts an inquiry into whether this signifies a commitment to transparency and accountability or a bias towards official viewpoints. Understanding the government and media dynamics is crucial to uncovering power imbalances and assessing journalistic independence. Research by Chen et al. (2020) indicate that government agencies often use social media for information dissemination but lack interactive strategies for citizen engagement, potentially leading to a dominance of official perspectives.

Moreover, Raza et al. (2021) highlight the impact of user-generated content on shaping public perception of government performance, suggesting that critical information can challenge official narratives. The role of investigative journalism, providing avenues for diverse narratives beyond official sources. Examining media-government relationships reveals potential bias and manipulation. It further illustrates how governments use media to influence public opinion and policy support, indicating a complex interplay between media narratives and governmental agendas.

The fact that governmental bodies are not related to the environment are cited most frequently as information sources raises questions about the extent of government control or influence over media narratives. Examining whether this dominance reflects a genuine commitment to transparency and

accountability or indicates a bias towards official perspectives is crucial. Additionally, exploring the relationship between the government and media outlets could shed light on potential power dynamics and the degree of independence in journalistic practices. The significant presence of policymakers and the Marine Environmental Protection Authority (MEPA) as information sources highlights the role of regulatory bodies in shaping the narrative around environmental incidents. Analyzing how much media outlets challenge their statements and actions can reveal the level of accountability and public oversight in environmental governance.

The lack of representation of public voices in media coverage raises concerns about the inclusivity and representativeness of news articles. Understanding the reasons behind this underrepresentation is crucial for shedding light on barriers to civic engagement and participation in shaping public discourse. It is essential to investigate whether media outlets adequately capture affected communities' diverse viewpoints and concerns in their reporting. Research by Zúñiga et al. (2012) indicates that media use patterns related to information acquisition and community building positively impact civic participation, while those related to entertainment have a negative effect. This suggests a potential link between media consumption habits and levels of civic engagement. The significant influence of media coverage on shaping public perceptions, suggesting that media narratives can profoundly impact public attitudes. This underscores the importance of examining how media portrayals may contribute to the underrepresentation of public voices. Moreover, the role of media coverage in influencing public interest and support indicates that media narratives can shape public opinion and engagement. Understanding the barriers to civic engagement, such as lack of information and limited time is crucial in addressing the gaps in public representation in media discourse.

The finding that the public is the least referenced information source raises concerns about the inclusivity and representativeness of media coverage. Examining why public voices are marginalized and underrepresented in news articles can uncover barriers to civic engagement and participation in shaping public discourse. It is essential to explore whether media outlets adequately reflect the diverse perspectives and concerns of affected communities in their reporting.

Overall, the findings suggest that while various stakeholders contribute to the agenda-building process in news coverage, biases or structural constraints may influence the prioritization of certain voices over others. Investigating the factors driving these patterns can deepen our understanding of how media agendas are constructed and the implications for public awareness, policy formulation, and environmental advocacy.

Second, answering the question, "What are the attributes emphasized in media coverage of the MV X-Press Pearl ship incident?" The attributes the media focused on were reported with their frequencies and percentages.

Table 3 Frequency of attribute agenda mentioned in the news reports

Agenda	Frequency	Percentage
Mitigation	25	8%
Prevention	42	14%
compensation	25	8%
Law and Agreements	45	15%
environmental damage	61	20%
economical damage	26	9%
body	24	8%
behaviour	23	8%
policy	7	2%
other	24	8%
Total	302	100%

According to the results, environmental damage (20%) is the most frequent attribute that the media has reported. Law and agreements (15%) is the second most reported attribute, and prevention (14%) is the third most frequently reported attribute. Attributes such as mitigation (8%), economic damage (9%), Body (8%) and Behavior are given somewhat similar priority in news rereporting. The least mentioned attribute of the topic is the policy (2%).

The focus on environmental damage is the most reported attribute following incidents like shipwrecks, highlighting the significant impact on the ecosystem. It underscores the media's role in raising awareness about environmental issues. This emphasis reflects an acknowledgement of the ecological consequences of such events and signals an increasing importance placed on environmental concerns in media coverage. Research by Arifin & Handayani (2022) indicates that media reporting on environmental destruction can influence the formulation of environmental laws, suggesting a potential link between media coverage and policy changes. Additionally, it demonstrates how media coverage can affect firms' environmental behaviors, emphasizing the role of the media in influencing environmental practices.

Moreover, environmental disclosure and governance highlights the relationship between governance, media coverage, and the quality of environmental disclosure. This connection underscores the influence of governance structures and media representations on environmental reporting practices. The collective findings from these studies suggest that media coverage plays a critical role in shaping public perceptions and influencing environmental policies and practices. By consistently highlighting environmental damage in incidents like shipwrecks, the media raises awareness about environmental issues and potentially drives changes in environmental laws and corporate behaviors.

The fact that environmental damage is the most frequently reported attribute reflects the significant impact of the incident on the ecosystem. It underscores the importance of environmental concerns in media coverage. This emphasis suggests a recognition of the ecological consequences of the shipwreck and highlights the media's role in raising awareness about environmental issues.

The prominence of law and agreements as a reported attribute indicates the media's focus on the legal and regulatory aspects surrounding the incident. This suggests an interest in accountability, compliance with regulations, and the potential legal ramifications for those responsible. Examining how media outlets frame discussions around legal frameworks can provide insights into the complexities of maritime governance and regulatory enforcement.

The finding that policy is the least reported attribute suggests a potential gap in media coverage regarding the policy responses and governance mechanisms related to the incident. Understanding why policy receives less attention in media reporting can shed light on barriers to policy discourse and public engagement in decision-making processes. It is essential to explore whether media outlets adequately scrutinize responses and advocate for transparent and effective governance frameworks.

The study's last objective was to find the correlation between the sources and the attributes. Then, each information source was mapped against each attribute they have been highlighting in news reports. The results are shown in table 4.

Table 4 Analysis framework with numbers

	Mitigation	Prevention	compensation	Law and Agreements	environmental damage	economical damage	body	behaviour	policy	other
MEPA	10	5	2	1	5		2	4	1	3
Gov bodies env	2	1	1	1	12	3	0	2	0	0
Gov bodies non-env	2	8	1	16	7	3	3	3	2	4

Ship Company	2	5	1	8	0	0	2	2	0	3
NGO/ industries	3	3	1	6	9	10	1	5	1	1
International Parties	0	4	0	2	5	0	2	2	2	7
Policy Makers	3	6	10	4	5	4	2	1	0	1
Experts	1	6	2	3	16	2	3	3	1	3
Public	0	1	0	3	0	1	0	0	0	1
Other	1	4	6	1	2	3	9	1	0	2
Total	24	43	24	45	61	26	24	23	7	25
Total										302

Table 5 Analysis framework with percentages

	Mitigation	Prevention	compensation	Law and Agreements	environmental damage	economical damage	body	behavior	policy	other
MEPA	42%	12%	8%	2%	8%	0%	8%	17%	14%	12%
Gov bodies env	8%	2%	4%	2%	20%	12%	0%	9%	0%	0%
Gov bodies non-env	8%	19%	4%	36%	11%	12%	13%	13%	29%	16%
Ship Company	8%	12%	4%	18%	0%	0%	8%	9%	0%	12%
NGO/ industries	13%	7%	4%	13%	15%	38%	4%	22%	14%	4%
International Parties	0%	9%	0%	4%	8%	0%	8%	9%	29%	28%
Policy Makers	13%	14%	42%	9%	8%	15%	8%	4%	0%	4%
Experts	4%	14%	8%	7%	26%	8%	13%	13%	14%	12%
Public	0%	2%	0%	7%	0%	4%	0%	0%	0%	4%
Other	4%	9%	25%	2%	3%	12%	38%	4%	0%	8%
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

According to the analysis, the Marine Environmental Protection Authority was shown to be the source to highlight the Mitigation agenda of attributes (42%) compared to other sources of information. Attribute prevention (19%) was highlighted by governmental bodies that are not directly involved in environmental affairs. Policymakers were more interested in pushing forward the attribute agenda

compensation (42%). Another attribute agenda highlighted by governmental bodies not directly involved in environmental affairs is law and agreements (36%). The results indicate that experts were interested in building the attribute agenda on environmental damage (26%). Local NGOs and industry had their priority set as the economic damage (38%) caused by the ship's accident. Physical attributes were the highlight of most of the other information sources. Local NGOs and Industry were also interested in promoting attribute behavior (22%). Government bodies not engaged directly with environmental affairs and international parties have highlighted the attribute agenda policy in their references to the ship incident.

Accordingly, the results show the information sources the news reports quoted, the attributes highlighted by each news report, and the correlation between the attributes and the information sources. The significant emphasis MEPA places on the mitigation agenda attributes indicates a proactive approach towards addressing the environmental consequences of the incident. This suggests a commitment to implementing measures to minimize and mitigate the impact on marine ecosystems. However, it is essential to assess the effectiveness of these mitigation efforts critically and whether they are sufficient to address the scale of environmental damage caused by the shipwreck.

The focus of governmental bodies not directly involved in environmental affairs on prevention, compensation, and legal frameworks reflects a multifaceted approach to addressing the incident. This suggests recognizing the need for regulatory measures, financial compensation for affected parties, and legal accountability for those responsible. However, examining whether these agendas are driven by genuine concern for environmental protection and public welfare or influenced by political and economic interests is crucial.

The emphasis placed by policymakers on the compensation agenda highlights the importance of addressing the socio-economic impacts of the incident, particularly on affected communities and industries. However, it is essential to evaluate the adequacy and fairness of compensation mechanisms critically and whether they adequately address the long-term consequences for livelihoods and economic stability.

The focus of experts on the environmental damage agenda following incidents like shipwrecks underscores the ecological significance of such events and the necessity for scientific analysis and assessment. This commitment to understanding the environmental implications of shipwrecks reflects a dedication to informing decision-making processes with empirical evidence. However, it is crucial to ensure that expert perspectives are effectively integrated into policy and regulatory frameworks to drive meaningful action and promote environmental stewardship. Studies by Bennett et al. (2018) emphasize the importance of considering feedback, synergies, and trade-offs between social and ecological factors in stewardship planning processes. This holistic approach is essential for effectively integrating expert insights into environmental management and ensuring comprehensive decision-making frameworks. Furthermore, it highlights the challenges that arise in integrated environmental health impact assessments, underscoring the complexity of incorporating expert analyses into systemic risk evaluations. Effective integration of expert perspectives requires addressing these challenges and developing frameworks that account for multidisciplinary insights.

The priority of economic damage by local NGOs and industry reflects their concerns about the socio-economic repercussions of the incident on local communities and businesses. Similarly, the emphasis on behavior highlights the importance of promoting responsible practices and behavior change to prevent future accidents and mitigate environmental risks. However, it is essential to consider the potential conflicts of interest and power dynamics within these stakeholder groups and ensure that their agendas align with broader environmental and social goals.

The highlighting of the policy agenda by governmental bodies not directly engaged in environmental affairs and international parties underscores the significance of policy frameworks and international cooperation in addressing transboundary environmental issues. However, it is crucial to critically assess the influence of political interests and power dynamics in shaping policy agendas and ensure that they prioritize environmental sustainability and public welfare.

CONCLUSION

The study investigated agenda-building concerning environmental issues, specifically focusing on the MX Pearl incident, aiming to identify the sources of information referenced by the media. Attribute agendas covered in media reports on the MX Pearl incident were also examined, with environmental damage being the most discussed attribute. Different information subsidies focus on specific attribute agendas, such as governmental institutions prioritizing mitigation and prevention, while non-governmental organizations emphasize economic impact.

The study highlighted the significant influence of information subsidies on the media agenda, indicating their eagerness to promote specific attributes and agendas. Policymakers prioritized compensation over policy, aiming to assure the public of compensation for losses. Experts emphasize environmental damage, drawing attention to the potential long-term ecological impacts of the incident. Findings align with previous research, offering insights into the relationship between media and information subsidies. The study delves into the practical implications of agenda building, which can influence media outlets and information sources. Media organizations may develop a heightened awareness of their impact on public perception and policy agendas, leading to more strategic communication planning to achieve specific objectives. Strategic communication involves carefully considering how topics are presented and emphasized within news coverage, acknowledging the potential to shape audience perception and understanding. Media outlets may align their coverage with predetermined objectives, ensuring messaging goes beyond mere transmission of information.

Policymakers should recognize the media's significant role in shaping public priorities, potentially enhancing policy effectiveness by aligning with topics receiving substantial media coverage. Engaging strategically with the media enables officials to convey policy objectives effectively and influence public opinion. Environmental advocacy groups may collaborate closely with media outlets to ensure messages resonate with the public agenda. Increased media literacy among the public could lead to more critical consumption of environmental news and heightened civic engagement. Businesses may adjust environmental CSR initiatives based on media coverage, while educational institutions and media literacy advocates may emphasize the importance of critical media content analysis. Governments and public institutions may prioritize transparent communication to provide accurate information on environmental issues, and regulatory bodies may review ethical guidelines to ensure responsible journalism.

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