

## Digital activism and environmental justice: Social media mobilization against waste management

Rangga Galura Gumelar<sup>1</sup>, Imam Mukhroman<sup>2</sup>, Hanny Hafiar<sup>3</sup>

<sup>1,2</sup>Faculty of Social and Political Sciences, Universitas Sultan Ageng Tirtayasa, Serang, Indonesia

<sup>3</sup>Faculty of Communication Sciences, Universitas Padjadjaran, Bandung, Indonesia

### ABSTRACT

**Background:** Digital activism has increasingly shaped environmental justice movements, particularly in Global South contexts where local communities face environmental risks from large scale waste management projects. Social media platforms provide new spaces for grassroots mobilization, enabling citizens to circulate information, construct collective narratives, and attract broader public attention. However, empirical evidence on how digital activism amplifies environmental justice claims in localized environmental conflicts remains limited. **Purpose:** This study examines how social media activism mobilizes public engagement and strengthens environmental justice narratives in community resistance to waste management infrastructure. **Methods:** This research employs a mixed-methods approach combining quantitative content analysis and qualitative inquiry. The dataset consists of 61 Instagram posts and 175 TikTok videos related to the environmental conflict. Engagement rates (ER) were calculated to measure audience interaction, while digital observation and in-depth interviews with three key informants provided contextual insights. The analysis is informed by Schlosberg's environmental justice framework and mediatization theory. **Results:** The findings indicate that visual protest narratives significantly increase engagement and narrative diffusion. A viral TikTok video depicting residents' protests generated the highest engagement rate of 67%, significantly boosting the visibility of the campaign hashtag. Posts using symbolic protest narratives produced up to 1.8 times more social sharing compared to purely informational posts, demonstrating the importance of visual storytelling in amplifying grassroots environmental claims. **Conclusion:** Social media platforms function not only as communication channels but also as strategic arenas for environmental advocacy and mobilization. **Implications:** Digital activism can strengthen environmental justice movements by expanding citizen participation, increasing visibility of local environmental conflicts, and generating broader public pressure for more equitable environmental governance.

**Keywords:** Digital activism; environmental justice; Instagram; TikTok; public engagement

### To cite this article (APA Style):

Gumelar, R. G., Mukhroman, I., & Hafiar, H. (2026). Digital activism and environmental justice: Social media mobilization against waste management. *Jurnal Manajemen Komunikasi*, 10(2), 270-290. <https://doi.org/10.24198/jmk.v10i2.66583>

**Correspondence:** Dr. Ing Rangga Galura Gumelar, M.Si., Department of Communication Science University of Sultan Ageng Tirtayasa, Serang, Indonesia. Jalan Raya Palka KM. 03, Sindangsari, Pabuaran Kabupaten Serang, 42117. *Email:* [rangga.gumelar@untirta.ac.id](mailto:rangga.gumelar@untirta.ac.id)

**Submitted:** 3 September 2025, **Revised:** 21 April 2026, **Accepted:** 27 April 2026, **Published:** 30 April 2026

ISSN: 2548-3242 (printed), ISSN: 2549-0079 (online). Website: <http://jurnal.unpad.ac.id/manajemen-komunikasi>

Copyright © 2026 Author(s). This is an open access article under the CC BY-NC-SA license

## INTRODUCTION

Societal relations have evolved due to the growing availability of digital technology and media. Most digital media technologies have dramatically altered and continue to reshape patterns of social interaction, dissemination and consumption of information, and the nature of political and social engagement (Freelon et al., 2016; Treem et al., 2020). Digital media technologies have also transformed everyday life, both personally and professionally, and the everyday social activities of individuals have become increasingly dependent on digital media. Social media has in many ways, devalued social media's role in shaping social norms. With the increased availability of digital technology, it has become socially expected to own a digital device, regardless of the purpose of the device. Social media has, over time, evolved from a source of entertainment to an important means of fostering, shaping, and transmitting public discourse and opinion on critical political and social issues. The quality of public opinion and political discourse on social media has become a concern due to rapidly evolving digital communication technologies and algorithms (Boulianne et al., 2020; Skoric et al., 2016). Further, the development of social media and the increased accessibility of digital technologies have made it difficult for user to

distinguish between accurate and misleading information. While these much sleading information on the web, which has raised concerns in the political and social realms. The incorporation of Artificial Intelligence (AI) has also resulted in massive growth of the social media environment. As such, social media is no longer just a platform for communicators anymore, it has become the primary theater of construction, contestation and legitimation of public discourse on political and social issues.

While these issues raise serious some concerns, the speed and immediacy of information during which citizens are informed of this knowledge also made massive opportunities for active citizenship supposing decision-making communication. One of research indicates that social media engagement not only prompts citizen participation but also develops climate action networks for environmental justice, evidence strongly pointing toward people centric climate action (Debnath et al., 2022). Notably, research on environmental activism has shown potential for increased engagement and pro-environmental behavior intentions and effective mobilization of supporters through activist messages shared through social media (Sanford et al., 2023). Increased consumption of environmental content on social media has been linked to changing public attitudes and initiating stronger engagement, as well as

changing pro-environmental behavioral intent (Vraga et al., 2022).

For example, environmental justice was conceived as its own separate field in the 1980s when the evidence suggested that environmental burdens were disproportionately borne by marginalized communities around across race, class and geography. According to (Schlosberg, 2013), the environmental justice framework itself is formulated on three main pillars: distribution, recognition and participation. Recent responses from within environmental justice highlight the salience of intersectionality and structural inequality by illustrating how environmental burdens are enmeshed in larger socio-political systems (Temper & Shmelev, 2015). Effective social movements require integrating these elements in some comprehensive and fitting way. This framework emphasizes that the fairness is not only about environmental risk, but also about the identities and experiences of communities impacted by decision making process (Schlosberg, 2004; Svarstad & Benjaminsen, 2020). Therefore, the implication of this framework is crucial for understanding the dynamics of conflict and citizen mobilization especially environment issues of waste management in Indonesia. Pellow (2014) acquaint the concept of critical environmental fairness based on intersectional issues, multi species thinking and role of

critical groups in environmental conditions. This approach is highly relevant especially for analyzing environmental conflict where the environmental burdens of wealthy areas are transferred to marginalized areas through formal legitimacy. At the same time, the rise of digital media has transformed how the environmental issues are communicated and contested. From a mediatization perspective, media are not neutral channels, but it becomes as active agents to shape social reality and public understanding (Couldry & Hepp, 2023). Environmental problems are increasingly framed through media logics that prioritize visibility, emotional resonance, and engagement. This shift is particularly relevant in digital environments, where algorithmic systems influence which narratives gain prominence and how public attention is distributed.

A recent case in Pandeglang regency illustrates this dynamic, particularly the public rejection of cross-regional waste transfer from South Tangerang. It shows and proves us that this environmental issue is not a small matter. In August 2025, there was a wave of citizen rejection against cross-regional waste disposal cooperation from South Tangerang City to the Bangkonol Final Disposal Site (FDS) in Pandeglang. This condition triggered a series of direct actions driven and expanded through social media mobilization. Local coverage and

posts from social media users documented the escalation of protests, including the symbolic expression of public anger when truck loads of waste were dumped at the regent's office courtyard as a form of rejection against the memorandum of understanding (MoU), which mentioned opening channels for 500 tons of waste per day from outside South Tangerang to Pandeglang (Imam, 2025). The response from the Pandeglang regency government also took place under digital public scrutiny when meetings with residents and promises for Final Disposal Site (FDS) management improvements were also circulated through online video channels (Radarbantentv, 2025). This case is particularly significant because it represents a cross-regional environmental conflict in which urban waste burdens are transferred to a peripheral region with relatively weaker political and infrastructural capacity. Unlike many environmental conflicts that are confined within a single administrative boundary, the Pandeglang case involves inter-regional governance arrangements, public resistance, and digitally mediated mobilization occurring simultaneously. It makes a critical case for examining how digital activism shapes environmental justice claims in complex governance settings, not only at the local level but also within broader regional dynamics in Indonesia and Southeast Asia.

Based on literature regarding environmental issues mobilized by social media, these will spread and have long-term consequences if not resolved immediately. Empirical evidence from studies in Southeast Asia shows that the intensity of anti plastic and waste issue advocacy is currently increasing. This condition drives policy reform and closes polluting practices, although in reality, governance and implementation still need continuous improvement (Dauvergne & Islam, 2023). To promote advocacy related to environmental issues, particularly waste issues other research mentions the importance of information disclosure strategies in expanding campaign reach through hashtags (#) on social media as has been done by young generations in climate improvement movements (Herrada-Lores et al., 2024). However it must be acknowledged that social media is not an empty space but is full of various information and interests within it. Nevertheless digital activism can accelerate mass mobilization form identity solidarity, and transfer agendas to policy spaces, although it often collides with structural and cultural constraints and is very likely to experience disinformation, polarization, and violence against environmental defenders that can potentially hinder participation and create deterrent effects especially in Indonesia (Krismiyati et al., 2023; Rachimoellah et al., 2024).

Digital activism has fundamentally changed environmental advocacy through enlarge the information access, reducing organizational cost, and rapid mobilization across geographical boundaries. Digital activism can be defined as the use of digital technology facilitate social and political change to ensure how these tools lower participation barriers by expanding activist movements (Özkula, 2021). Environmental movements have been highly effective in adopting digital strategies, utilizing platforms like Facebook, X, Instagram, and WhatsApp to organize campaigns, share information, and build solidarity networks.

In environmental issues organizations like WALHI (Indonesian Environmental Forum) utilize Instagram and other platforms to increase awareness, change behavior, and mediate sustainable collective action (Isnata & Nugroho, 2024). Therefore in the field of communication it is firmly stated that the success of digital activism in Indonesia tends to occur when narratives are simple, action risks are low, and aligned with dominant values and norms in society (Rahmawati, 2025), by documenting digital activism practices of professional communities and society in general within an ecosystem that shows tactics, obstacles, and opportunities relevant to environmental campaigns (Wijaya et al., 2024). Based on these study results this research assumes that mobilization in

Pandeglang is a manifestation of the search for multi layered environmental justice, namely: (1) Distributive demands to reject ecological burdens considered imbalanced due to cross-regional policies; (2) Recognition demands for the experiences of village residents directly affected by health risks, odors, and ecological degradation; and (3) Meaningful participation demands in decision making processes related to waste cooperation. By examining digital traces (posts/tweets, hashtags, short videos), actor networks (communities, local journalists, NGOs), and offline action rhythms, this research attempts to explain how social media mediates power relation negotiations between citizens, local governments, and waste sending city authorities. Cross boundary environmental conflicts are a special type of environmental burdens more across administrative line typically from urban area with money to rural or marginalized regions.

Martínez-Alier (2020) states that waste management is a source of environmental justice problems, especially in developing countries with rapid urbanization and economic growth. The role of digital technology is important for transnational to support local resistance global environmental pressures. Previous studies mostly focused on large environmental issues such as deforestation and mining, while waste conflicts, particularly

transregional waste governance underexplored, specifically in Indonesia. Furthermore, there is still rare integration between environmental justice frameworks and digital activism theory in explaining how distribution, recognition, and participation are articulated and negotiated in online and offline. Mostly the research tends to highlight the empowering aspects of digital media for participation and mobilization, but lack of attention on dimension algorithmic visibility, competing interests, and disinformation. This creates a gap in analyzing how digital space simultaneously facilitate and constrain collective action. In other side the contribution of emotional dynamics such as anger and hope to mobilization processes has not been sufficiently explored in local environmental conflicts, where social relations and power imbalances are experienced more directly. There must be consequences more holistic approach to examining how digital media relates to interconnected environmental justice, particularly the translocation of waste between region.

To address the limitation of previous study, this research use Bennett and Segerberg (2012) theory of connective action as an analytical framework to exploring the role of digital platforms in environmental justice organization. Connective action is individual political communication, thus its contemporary

organizational structure is different. In this case, digital technology facilitates coordination without an organized hierarchical format to function. Based on emotional networks and hopes (Castells, 2015), this research conceptualizes environmental justice movements as building on their shared identity, distinct from digital activism, as emotional work. Successful movements will instill anger at the existing of affairs and hope for more sustainable future.

This study has several theoretical and practical implications. Theoretically, it integrates environmental justice and digital activism framework within the context of waste governance, an area that remains underexplored. It also incorporates a mediatization perspective to explain how digital media shape environmental narratives and public engagement. actically, the findings offer insights for policymakers and civil society organizations in designing more transparent, participatory, and inclusive waste governance strategies. The Pandeglang case demonstrates how digital media can mediate environmental conflicts and support more equitable forms of cross-regional governance.

## RESEARCH METHOD

This study adopts a mixed-methods approach, grounded in the assumption that digital activism operates across observable

online behavior and subjective meaning-making processes, thus requiring the integration of quantitative and qualitative strategies (Denzin, 2017; Creswell & Clark, 2017). This approach is particularly relevant for digital activism, where online traces alone cannot explain the socio-cultural and political contexts shaping participation. Digital activism emerges within networked communication structures and affective dynamics that extend beyond measurable engagement metrics (Castells, 2015; Papacharissi, 2015). A concurrent embedded design was applied, in which quantitative and qualitative data were collected simultaneously, with qualitative data embedded to contextualize and explain quantitative patterns (Creswell & Clark, 2017). This strategy aligns with a praxis-oriented perspective that recognizes the complexity of social phenomena and the limitations of single-method approaches (Flick, 2022). Prior research also supports mixed methods in digital activism studies for capturing both engagement patterns and interpretive dimensions of participation (Sloan & Quan-Haase, 2016; Theocharis et al., 2020).

Social media data were collected from Instagram and TikTok, two dominant platforms in Indonesia. A total of 236 posts were retrieved using the hashtag #TPABangkonol, limited to Indonesian-language content with location references to Pandeglang and surrounding

areas. The one-month period (July to mid-August 2025) was selected to capture peak issue attention within a bounded temporal cycle (Carlson et al., 2025; Theocharis et al., 2020). This research measured the Engagement Rate (ER) which is understood as a quantitative measure of how well a piece of content is able to stimulate social media user activity around that content.

Engagement Rate (ER) is widely used in digital communication studies as a proxy for message resonance and the success rate of social campaigns (Erz & Heeris Christensen, 2018). ER was chosen because it reflects user-centered engagement as it emphasizes active audience engagement (likes, comments, shares, saves) which theoretically relates to participatory communication and networked activism (Bennett & Segerberg, 2012). Referring to recent social media research practices (Boerman & Kruikemeier, 2016; Phua et al., 2017) this study uses three main approaches to calculate ER, adjusting for platform characteristics Instagram:

ER by Followers (ERIGF%):

$$ERIGF\% = \left( \frac{\text{Total Engagement}}{\text{Total Followers}} \right) \times 100$$

ER by Reach (ERIGR%)

$$ERIGR\% = \left( \frac{\text{Total Engagement}}{\text{Total Reach}} \right) \times 100$$

However, in this study, the most relevant approach to the concept of algorithmic gatekeeping on Instagram is to calculate ER Reach, this is because it is more representative than followers (Cotter, 2019). In addition, ER by Reach is used to assess the effectiveness of content distribution algorithms (Kumar et al., 2018); TikTok: ER by Views (ERTTV%)

$$\text{ERTTV\%} = \left( \frac{\text{Total Engagement}}{\text{Total Views}} \right) \times 100$$

This approach aligns with the nature of TikTok's For You Page (FYP)-based content discovery where views are more significant than the number of followers. ER by views specific to TikTok is used because video consumption based interactions are more appropriately normalized to the number of views. Recent scholarship in social media analytics further confirms that engagement metrics such as likes, comments, and shares represent measurable indicators of audience interaction and collective attention dynamics within digital networks, particularly in issue driven communication such as environmental campaigns and civic mobilization (Cinelli et al., 2021). Moreover, studies on platform based activism indicate that hashtag tracking and interaction metrics provide empirical insight into how environmental narratives circulate and gain visibility through algorithmic amplification and user participation

in networked communication spaces.

Data was collected using social media analytics tools and manual scraping through public APIs/inspections. The process data collection through systematic procedure. First, find the relevant content using the hashtag #TPABangkonol based on Language (Indonesian) and place Pandeglang. Second, make sure that the posts related to the issue of cross-regional waste management. Third, metadata from each post, such as (likes, comments, shares, views, and reach), were extracted using platform analytics tools and manual inspection. Fourth, removing duplicate or irrelevant, dataset. Finally, all data were cross-checked manually to verify accuracy and alignment across platforms. The variables were collected from Instagram (followers, reach, likes, comments, shares, saves) and TikTok (views, likes, comments, shares) in July and mid-August. Calculations were done at the aggregated post level, not averaged per content to avoid bias due to unequal distribution of interactions. Then, the results were compared across months and platforms to identify trends in public engagement. ER values were used to measure the intensity of public engagement and were then analyzed for correlations with the number of posts, issue themes related to environmental justice, and audience responses. With this approach, ER is not only a technical

metric but also a theoretical indicator of the relationship between digital activism and public engagement in the context of environmental justice (Schlosberg, 2013; Velasquez & LaRose, 2015).

The qualitative data were collected through semi-structured interviews with key informant consisting of (1) an environmental activist (Informant 1), (2) a scholar (Informant 2), and (3) a media workers (Informant 3). The key informants were selected using purposive sampling. Initial contact was made through social media analysis and subsequent informants were identified through snowball sampling. Selection criteria included direct involvement in waste related environmental issues, active engagement in digital communication, and familiarity with the #TPABangkonol discourse. The use of digital activism strategies and how it works will be further understood through contrasting interview data with that gathered from digital observations. In this research we focus on how participants navigate the tensions between digital and face to face organization in a time of information uncertainty how to manage regarding the credibility of information and adapt their communication strategies to the features of different platforms. These findings are crucial to understanding how digital activism operates within Indonesia's unique cultural and political context. Qualitative interviews are

particularly relevant in digital activism research because they enable researchers to explore how activists interpret online mobilization processes, negotiate credibility in rapidly circulating information environments, and construct collective meaning around environmental issues (Gerbaudo, 2018). By combining interview insights with digital observation data, researchers are able to capture both the observable patterns of online engagement and the subjective interpretations of actors who participate in these movements, thereby offering a more comprehensive understanding of how digital activism operates across online and offline spaces (Leong et al., 2020).

## RESULTS AND DISCUSSION

Drawing from data collected on Instagram and TikTok around garbage management rejection issues at Bangkonol Final Disposal Site (FDS) Pandeglang, this section presents results and key findings of this topic. After analysis, it is clear that digital mobilization modes have a pronounced temporal progression. In this instance, not all posts were as data as will be necessary for analysis in this article. The selection of posts was determined by research needs. There were only 36 uploads on this issue in the early part of July. That jumped to most 200 uploads when it hit national media and was trending on TikTok a couple of weeks later in

August. In addition to the general increases in posts examining the temporal patterns of digital mobilization around the Bangkonol waste management protest illustrates and suggests that algorithmic visibility can magnify coverage. The fact is, that the increasing jump posts provides that it was not due to administrator efforts but rather to the platform algorithmic logic replicates itself at scale. TikTok’s For You Page (FYP) system prioritizes rapid engagement at scale based on watch time and sharing patterns by pushing extremely emotional content like aerial mass demonstration footage or images of garbage trucks with “*Tolak Sampah Tangsel*” banners far beyond their initial followers.

As shown in Table 1, the highest engagement rate (6.7%) occurred in August following the circulation of TikTok videos documenting the Pandeglang community’s protest against the waste management project. It demonstrates that public opinion on social media spreads rapidly across region by such issues (Jackson & Foucault Welles, 2016). Natural language processing (NLP)-based

sentiment analysis of 1730 netizen comments shows public opinion patterns as follows: (1) Positive 83%, (2) Neutral 10%, (3) Negative 7%. This pattern reveals digital polarization typical of environmental issues consistent with literature findings on digital polarization in social movements on social media (Theocharis et al., 2020). By using Schlosberg’s theoretical analysis and framework of environmental justice consisting of (1) Distributive; (2) Procedural; (3) Recognition; and (4) Capability this quantitative findings can be interpreted more systematically. First, distributive justice related to the high engagement on content that highlights the unfairness of waste load distribution, shows that the issue of ecological risk distribution is the dominant narrative. Sentiment analysis results reinforce this, with 63% of comments contain phrases that emphasize that waste distribution from South Tangerang will only make Pandeglang as slum, dirty and unhealthy. The opinion of the deputy regent of Pandeglang who stated “*Let alone diamonds, when even garbage becomes cuan*

**Table 1 Digital Activism Development on Instagram (IG) and TikTok**

Month (2025)	Instagram (IG) Posts	ER (%) IG	TikTok Videos	ER (%) TikTok
July	9	0.3%	27	2.7%
August (Mid)	52	2.7%	148	6.7%
Total	61		175	

Source: Research Results, 2025

*then we take it*” backfired and formed a negative public perception. Second, procedural justice relates to Instagram and TikTok content in the form of video footage of community protest actions throwing waste in front of Pandeglang regency office showing concern over lack of procedural transparency. High interaction levels, with indicated 4.7% engagement rate (ER), show that the public demands participation rights in decision making. This is because decisions to accept waste from other regions have not been socialized first with leaders and affected communities. Third, recognition justice is evident from many uploads featuring testimonies from communities, community leaders, environmental activists, and journalists. This simply means that the subject on identity and indigeneity is able to power narratives in a better way. To be considered from a quantitative analysis perspective this same attribute of

being uploaded with local representation means that content is shared 1.8 times more than regular uploads. Fourth, capability justice demonstrates hashtag analysis indicates #TPABangkonol hashtag propelled by local youth groups. More than half of engagements (54%) among young people occur with other young users, while (46%) of engagements by young people are with people older than 29 years. As we can see from impressions, protests are dominated by young people aged 18-24. It reflects an increasing ability and willingness of local media as well as the youth to voice environmental problems through social media channels. This pattern reflects connective action (Bennett & Segerberg, 2012), where mobilization is driven by personalized content sharing and decentralized participation rather than formal organizational structures. Table 2 summarizes the synthesis of the quantitative

**Table 2 Quantitative Analysis Matrix Based on Schlosberg's Dimensions**

Schlosberg's Dimensions	Quantitative Indicators	Empirical Evidence	Theoretical Interpretation
Distributive	63% of comments mentioning unfairness in distribution	#TPABangkonol hashtag virality	Distribution injustice is the dominant narrative
Procedural	1.8x more shares on local content	Community demonstration to send garbage to the Regent's Office	Demands for transparency and participation
Recognition	1.8x more shares in local content	People's testimonies on Pandeglang Regent's policy	Issues of identity recognition and local wisdom
Capability	46% interaction from 18-24 years old	Call for demonstration	Young people as the main actors of activism

Source: Research Results, 2025

findings based on Schlosberg's environmental justice dimensions, including distributive, procedural, recognition, and capability justice.

In addition to quantitative findings, qualitative data were collected through in-depth interviews and observation of social media content. The results from all data sources depict an inequitable distribution of environmental burdens across impacted communities. An environmental activist stated:

We feel our area is being used as a dumping ground for Tangerang's waste. The burden of waste is also a matter of dignity, not just a technical term, for the people of Pandeglang (Informant 1, personal communication, August 23, 2025).

In reality regarding Pandeglang's decision to accept waste from South Tangerang, residents fundamentally feel they were not meaningfully involved in the decision making process. A scholar noted:

Public consultation procedures were merely formalities. Communication was one-way, communities were just informed, not invited to dialogue, especially residents directly affected by waste increase. The local government only flinches on the pretext of increasing local revenue, not on the interests of the community (Informant 2, personal communication, August 27, 2025).

Identity issues are highly prominent and have significant young generation effects.. Many of those involved in the demonstration were young people, who showed the courage to

speak out and act. One media worker stated:

Residents are very concerned, with 500 tons of garbage will have an impact on health, besides the Bangkonol landfill does not have proper facilities in processing waste. Through TikTok and Instagram, communities can voice this, because the government is considered inadequate in this condition. The fact is that those brave enough to speak out now are young people who have the courage to act (Informant 3, personal communication, September 1, 2025).

Observation data show that activism does not stop online, but transforms into direct action. For example the invitation to attend and report media on a demonstration at the office of Pandeglang regent (7/8/25) followed by inviting everyone not only encourages citizen participation, but also leads to subsequent action which are then mediated online. Overall, the finding shows consistent patterns across quantitative and qualitative data. The dominance of distributive justice narratives indicates that digital activism in the Bangkonol case is primarily driven by perceived inequalities in environmental burden. The high proportion of comments emphasizing unfair waste distribution reflects a strong public concern regarding ecological risk allocation. This finding aligns with the study by Van Dijck et al. (2018) which states that the success of digital activism is increasingly determined by the compatibility of narratives with algorithmic logic rather than by the strength of formal organizations.

In this context, the peak of public attention on the Bangkonol issue can be understood as the meeting point between citizens' moral outrage and the platform's algorithmic curation system. Papacharissi (2015) refers to this condition as affective publics, namely public bound by shared emotions mediated by digital technology. This is also consistent with Castells (2015), who argues that emotions such as anger and hope act as key drivers of networked social movements in digital environments. Thus, virality is not merely a technical issue but rather part of the process of politicizing emotions in environmental communication. This phenomenon conforms to the issue attention cycle in environmental communication whereby environmental problems receive intensive public attention over short time periods and when an event goes viral then it's no longer just a story (Bouvier, 2020; Boykoff, 2019).

Based on the results of the sentiment analysis which showed a predominance of positive sentiment (83%), this reflects strong support for the Pandeglang residents' actions, meaning that the community rejects the policies taken by the Pandeglang Government. However, the presence of negative sentiment 7% remains analytically important because it indicates a contestation of discourse. This polarization is a common characteristic of environmental conflicts mediated by digital

media. Negative comments generally include accusations that this rejection movement is an attempt to politicize or that certain issues have different interests thus questioning the dangers of resistance to protest actions. In the Bangkonol case, moral narratives about dignity, health, and justice are far more dominant than technocratic discourses about landfill capacity or waste management technology. Theocharis et al. (2020) describe social media as a space that accelerates opinion fragmentation while strengthening the cohesion of groups that already hold similar moral positions. This condition is in line with Walker's study (2012) which emphasizes that digital storytelling can strengthen claims of distribution injustice. This is consistent with (Schlosberg & Collins, 2014) research emphasizing the participation dimension as the core of environmental justice and also Whyte (2020), which showed the necessity of society/community recognition in the environmental movement. This result is consistent with the argument made by Nulman and Schlembach (2018) that social media enables young people to take action for environment in a more expanded manner. This study shows that resistance landfill in Pandeglang is mediated by digital logic, particularly Instagram and TikTok. This represents a classic center-periphery critique of ecological inequality, with Pandeglang being turned into a landfill by

wealthier southern cities like South Tangerang. The resistance of Pandeglang residents serves not only as a demand for justice but also as a symbol that easily spreads virally. Global studies have found a similar pattern: digital environmental activism tends to adapt to platform logic to achieve broad reach.

The dimension of procedural justice is further reflected in visual content showing the attitudes behinds citizens protests even symbolically by dumping waste in front of Pandeglang regent's office. This behavior can be viewed as a type of non-verbal political communication that occurs when paths for formal participation are closed. Communication academics in interviews reveal official channels of public consultation resemble empty . Social media content TikTok and Instagram showing viral videos of community demonstrations sending waste to Pandeglang regency office became evidence of public concern regarding procedural injustice. In this context procedural injustice refers to public dissatisfaction with the way the Pandeglang government handles environmental issues particularly the increasingly worrying waste management. According to Schlosberg and Collins (2014) procedural justice is important for environmental policy legitimacy to be accepted. Without transparency social movements tend to seek alternative channels namely digital media. This

dissatisfaction has driven social movements to seek alternative channels. Social media, such as TikTok and Instagram have become highly effective platforms for people to voice their opinions and concerns. Social media reduces participatory gaps by creating new rooms for disadvantaged public voices and concerns where individuals who do not feel represented can complain about certain things as well as raise larger awareness for those people. People feel left out when there's no transparency in existing procedures or public participation.

The videos of the residents collecting trash and bringing it to their government office had gone viral on TikTok and Instagram as a form of protest. This action was seen not only as symbolic, but as a demonstration of deep frustration and annoyance with the slow management of local institutions. When the society feel their voices are not heard through formal channels like writing letters and formal protest, this situation can trigger big action. It causes the society realized that unusual and viral action right now will get feedback and response from government.

For example, in the case of Bangkolol, the absence of traditional voices in digital content indicates that social media provides an alternate site that functions as a counter-public where historically marginalized groups can attain exposure beyond formal institutional

venues. The virality of testimonial-based content suggests that the source of legitimacy has shifted from technocratic discourse to lived experience. From this study we can conclude that recognition justice is also related to the construction of collective identity. The higher frequency of local actors in making digital content constructs a story about Pandeglang as an environmentally unjust community. Digital research has established that publicness in digital spaces is a series of emotional presentations created collectively (Papacharissi, 2015), linking well with Papacharissi's concept of affective publics. Such emissions of concern, anger and solidarity matter as they bolster the status of the community as an actor deserving attention. These findings suggest that recognition justice in the case of Bangkonol is achieved through a process rooted in the visibility of local narratives and when these are further amplified by the emotion and algorithm. On the one hand, social media creates possibilities for communities being recognized; on the other it constricts the forms that such recognition can take. Hence, recognition justice should not only be approached in terms of a normative principle but also as something located within a process that is mediated by digital communication structures.

The shared nature of the content reveals that local identity resonates at a high power,

patently. This means that if those communities really to flourish as a knowledge subjects with its local identity not just as the back ground but also created its own source of moral standing against technocratic discourses Bangkonol is one case study here. Data denoting the hashtag shows #TPABangkonol is local youth-driven. The dominance of the age sector 18–24 is emblematic in both high ratings of digital literacy and political leadership. What was most surprising is that nearly half of the relationships were inter-generational showing little diffused concern. This suggests us that social media utilized by the youth enhances their political competencies because it decreases the cost of participation and simultaneously aids in coordination. The key insight relates to digital mobilization turning into offline action. The online calls-to-action for real world demonstrations with accompanying hashtags and memes suggests that digital spaces often co-exist in the same space as in person ones. In this sense media is not just a medium for movement. This contends that the affordances and logics of platforms mediate environmental politics.

Both quantitative and qualitative data showed that the digital natives are beginning to appreciate their place in activism. As a consequence of this innovation connective action has led to the splintering and weakening

of traditional political organization that no longer relies on formal organizations for assistance but instead instantaneously moves through digital networks via citizen to citizen. This marks the beginning of a new era worry about “Pandeglang Youth” identity could become an entrypoint for digitised solidarity. More generally in the account of contemporary global environmental movements, the future success of these transnational organizations will be dependent on a digitally literate generation of young activists, such as those involved with Fridays for Future (Haunss & Sommer, 2020; Pickard, 2024). And social media, is just the medium, that public square of yore for ideas to marinate and be exchanged. The increasingly involved necessity of the claim as analogue politics is to digital.

This research contributes at three levels: 1) Data provides the most recent case of environmental action in Indonesia through Instagram and TikTok representative; 2) Theory expands theoretical ideas for analysing digitised movements such as justice frame, mediatization frame, connective actions framework; and also Methodology because it shows how mixed methods (quantitative analysis combined with qualitative investigation), empowers more multi-layers validity compared single-method limitations especially within communication media research interlocked by political ecology

practice. The finding that environmental justice in Indonesia not only can be defined by seeking formal regulations but also identified cultural and identity dimensions where digital media started to represent emotions. The study is Future work could broaden the platform level scope to X, YouTube, or facilitate mobilization comparison between WhatsApp and Telegram. In addition, scholars might consider cross national and international panel studies that account for digital emotions as affect is central to the production of solidarity in other forms of digital environmental activism.

Otherwise, an important finding from studies of digital activism is that online mobilisation can lead to material and consequential offline action. An example case is the invitation for a demonstration in the province of Pandeglang, which became a hotspot on various social media platforms. This demonstrates the interconnection between physical and virtual spaces, as well as the phenomenon of digital activism providing the social legitimacy for civil disobedience in offline context the social sphere. In this case, social media offered the impetus that legitimized the social movement as a protest, and outside of the call, it was not a social movement. The viral invitation captured the interest of many and had a significant impact at the national level. This case, among others, suggests that social media creates a relational

space where social movements and activism can thrive.

Linked to environmental communication theory and digital activism, the results reinforce three main conclusions: (1) Agenda setting in a digital era. Virality on TikTok and Instagram can transform local issues into national public problems (Meraz & Papacharissi, 2013); (2) Networked Publics. So this movement isn't homogeneous but networked. The Pandeglang digital activism also exemplifies connective action (Bennett & Segerberg, 2012; Karpf, 2018); (3) The Mediatization of Environmental Politics. Waste management is no longer debated as a technical policy issue, but rather as a symbolic issue fraught with political and also cultural significance. Viral visualizations of protest on digital media/social media demonstrate how mediatization shapes the way the public understands and responds to environmental issues. Within this framework the media isn't merely an intermediary but a crucial actor in shaping public opinion and legitimizing movements (Couldry & Hepp, 2018). This indicates that environmental conflicts are not only communicated through media but are also shaped by media logic itself.

## CONCLUSION

The results confirm the role of social

media in shaping environmental justice in Pandeglang. Platforms such as Instagram and TikTok, through hashtags like #TPABangkok which function as a public sphere that contains information and enables mobilized. The findings reveal that the vast majority of online discussions are framed in terms of two types of justice, distributive and recognition. Distributive justice reflects perceived inequalities in the allocation of environmental burdens, while recognition justice highlights issues of dignity, local identity and the visibility of affected communities. Digital activism, especially in the environmental space, can be considered as the youths as the main actors. They are particularly effective in transforming opinions or personal representation into a larger collective expression through networked participations.

This research clearly contributes academically to environmental communication studies, especially related to environmental justice theory, by incorporating the lens of mediatization and connective action. Additionally, the findings highlight the role of social media algorithms in shaping environmental action. The mixed-methods approach, through social media data analysis and qualitative interviews provides substantial concept the importance of environmental governance to have wider and more participatory dimension. It is important for local government

to be more sensitive and critical to listen citizens' voices and perspective. Local government must be responsive and make greater use of digital spaces, where affected parties can actively share their points of view. For environmental activists and organizations, combining online and offline campaigns is the most effective strategy. Future research should explore how emotions such as anger, hope, and fear shape digital environmental movements on other platforms, such as X, YouTube, and WhatsApp.

**Acknowledgements:** The authors express gratitude to all informants who participated in this study and offered insightful details regarding the phenomenon of environmental activism and the problem of waste management. The authors acknowledge the reviewers for their constructive feedback on this manuscript.

**Author Contributions:** Conceptualization, R.G.G.; methodology, R.G.G. and I.M.; data collection, R.G.G.; formal analysis, R.G.G. and H.H.; investigation, R.G.G.; writing original draft preparation, R.G.G.; writing review and editing, I.M. and H.H.; supervision, I.M. and H.H. All authors have read and agreed to the published version of the manuscript.

**AI Declaration:** The authors state that all AI tools involved in this work were limited to editing and improving the language of the text. All authors participated in the development of the ideas, the analysis of the data and the interpretation of the results.

**Ethical Clearance:** The research study followed ethical standards of conducting research. All of the participants volunteered, and they were given the option of consenting to the interviews. For this paper, participants' confidentiality was protected by altering their identities.

**Data Availability Statement:** Data that supports the findings of this study is available from the corresponding author by reasonable request.

**Conflicts of Interest:** The authors declare no conflict of interest.

**Funding:** This research received no external funding

## REFERENCES

- Bennett, W. L., & Segerberg, A. (2012). The logic of connective action: Digital media and the personalization of contentious politics. *Information, Communication & Society, 15*(5), 739–768. <https://doi.org/10.1080/1369118X.2012.670661>
- Boerman, S. C., & Kruijemeier, S. (2016). Consumer responses to promoted tweets sent by brands and political parties. *Computers in Human Behavior, 65*, 285–294. <https://doi.org/10.1016/j.chb.2016.08.033>
- Boulianne, S., Lalancette, M., & Ilkiw, D. (2020). “School strike 4 climate”: Social media and the international youth protest on climate change. *Media and Communication, 8*(2), 208–218. <https://doi.org/10.17645/mac.v8i2.2768>
- Bouvier, G. (2020). Racist call-outs and cancel culture on Twitter: The limitations of the platform's ability to define issues of social justice. *Discourse, Context & Media, 38*, 100431. <https://doi.org/10.1016/j.dcm.2020.10043>
- Boykoff, M. (2019). *Creative (climate) communications*. Cambridge University Press. <https://doi.org/10.1017/9781108164047>
- Carlson, D., Burgess, J., & Kasianenko, K. (2025). The lives and afterlives of community-created bots on Twitter: A minor history. *Convergence: The International Journal of Research into New Media Technologies, 31*(6), 2006–2024. <https://doi.org/10.1177/13548565251334087>
- Castells, M. (2015). *Networks of outrage and hope: Social movements in the Internet age*. John Wiley & Sons.
- Cinelli, M., De Francisci Morales, G., Galeazzi, A., Quattrociocchi, W., & Starnini, M. (2021). The echo chamber effect on social media. *Proceedings of the National Academy of Sciences, 118*(9), e2023301118.

- <https://doi.org/10.1073/pnas.2023301118>
- Cotter, K. (2019). Playing the visibility game: How digital influencers and algorithms negotiate influence on Instagram. *New Media & Society*, 21(4), 895–913. <https://doi.org/10.1177/1461444818815684>
- Couldry, N., & Hepp, A. (2018). *The mediated construction of reality*. John Wiley & Sons.
- Couldry, N., & Hepp, A. (2023). *Die mediale Konstruktion der Wirklichkeit*. Springer Fachmedien Wiesbaden. <https://doi.org/10.1007/978-3-658-37713-7>
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.
- Dauvergne, P., & Islam, S. (2023). The politics of anti-plastics activism in Indonesia and Malaysia. *Cambridge Prisms: Plastics*, 1, e1. <https://doi.org/10.1017/plc.2023.3>
- Debnath, R., Bardhan, R., Shah, D. U., Mohaddes, K., Ramage, M. H., Alvarez, R. M., & Sovacool, B. K. (2022). Social media enables people-centric climate action in the hard-to-decarbonise building sector. *Scientific Reports*, 12(1), 19017. <https://doi.org/10.1038/s41598-022-23624-9>
- Denzin, N. K. (2017). *The research act: A theoretical introduction to sociological methods*. Routledge.
- Erz, A., & Heeris Christensen, A.-B. (2018). Transforming consumers into brands: Tracing transformation processes of the practice of blogging. *Journal of Interactive Marketing*, 43(1), 69–82. <https://doi.org/10.1016/j.intmar.2017.12.0>
- Flick, U. (2022). *The SAGE handbook of qualitative research design*. SAGE Publications Ltd. <https://doi.org/10.4135/9781529770278>
- Freelon, D., McIlwain, C. D., & Clark, M. D. (2016). Beyond the hashtags: #Ferguson, #Blacklivesmatter, and the online struggle for offline justice. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2747066>
- Gerbaudo, P. (2018). Social media and populism: An elective affinity? *Media, Culture & Society*, 40(5), 745–753. <https://doi.org/10.1177/0163443718772192>
- Haunss, S., & Sommer, M. (2020). *Fridays for future—die Jugend gegen den Klimawandel: Konturen der weltweiten Protestbewegung*. Transcript Verlag. <https://doi.org/10.4361/9783839453476>
- Herrada-Lores, S., Estrella-Ramón, A., Gálvez-Rodríguez, M. ., & Iniesta-Bonillo, M. . (2024). The role of hashtags for non-profit causes: The #fridaysforfuture movement. *International Review on Public and Nonprofit Marketing*, 21(3), 735–756. <https://doi.org/10.1007/s12208-024-00401-0>
- Imam, N. (2025). Sampah dibuang di kantor Bupati Pandeglang, protes kerjasama sampah Tangsel. *Mediabanten.Com*. <https://mediabanten.com/sampah-dibuang-di-kantor-bupati-pandeglang-protes-kerjasama-sampah-tangsel/>
- Isnata, D., & Nugroho, C. (2024). Digital activism: The utilisation of social media Instagram @pulihanjakarta in campaigning for environmental issues. *Jurnal Riset Komunikasi*, 7(2), 248–261. <https://doi.org/10.38194/jurkom.v7i2.1064>
- Jackson, S. J., & Foucault Welles, B. (2016). #Ferguson is everywhere: initiators in emerging counterpublic networks. *Information, Communication & Society*, 19(3), 397–418. <https://doi.org/10.1080/1369118X.2015.1106571>
- Karpf, D. (2018). Analytic activism and its limitations. *Social Media + Society*,

- 4(1), 2056305117750718. <https://doi.org/10.1177/2056305117750718>
- Krismiayati, K., Nugraha, I. A., Imanita, M., Sasono, S., & Amin, F. (2023). Digital activism in social movements and its influence on the implementation of state administration in Indonesia. *Ministrate: Jurnal Birokrasi Dan Pemerintahan Daerah*, 5(1), 123–132. <https://doi.org/10.15575/jbpd.v5i1.23853>
- Kumar, S., Hamilton, W. L., Leskovec, J., & Jurafsky, D. (2018). Community interaction and conflict on the web. *Proceedings of the 2018 World Wide Web Conference on World Wide Web - WWW '18*, 933–943. <https://doi.org/10.1145/3178876.3186141>
- Leong, C., Faik, I., Tan, F. T. C., Tan, B., & Khoo, Y. H. (2020). Digital organizing of a global social movement: From connective to collective action. *Information and Organization*, 30(4), 100324. <https://doi.org/10.1016/j.infoandorg.2020.100324>
- MartínezAlier, J. (2020). A global environmental justice movement: Mapping ecological distribution conflicts. *Disjuntiva. Crítica de Les Ciències Socials*, 1(2), 83. <https://doi.org/10.14198/DISJUNTIVA2020.1.2.6>
- Meraz, S., & Papacharissi, Z. (2013). Networked framing and gatekeeping. *The International Journal of Press/Politics*, 18(2), 138–166. <https://doi.org/10.1177/1940161212474472>
- Nulman, E., & Schlembach, R. (2018). Advances in social movement theory since the global financial crisis. *European Journal of Social Theory*, 21(3), 376–390. <https://doi.org/10.1177/1368431017714213>
- Özkula, S. M. (2021). What is digital activism anyway? Social constructions of the “digital” in contemporary activism. *Journal of Digital Social Research*, 3(3), 60–84. <https://doi.org/10.33621/jdsr.v3i3.44>
- Papacharissi, Z. (2015). *Affective publics: Sentiment, technology, and politics*. Oxford University Press.
- Pellow, D. N. (2014). *Total liberation: The power and promise of animal rights and the radical earth movement*. U of Minnesota Press.
- Phua, J., Jin, S. V., & Kim, J. J. (2017). Uses and gratifications of social networking sites for bridging and bonding social capital: A comparison of Facebook, Twitter, Instagram, and Snapchat. *Computers in Human Behavior*, 72, 115–122. <https://doi.org/10.1016/j.chb.2017.02.041>
- Pickard, S. (2024). Disruptive do-it-ourselves politics: Young climate and environmental activists. In *Research Handbook on the Sociology of Youth* (pp. 254–267). Edward Elgar Publishing. <https://doi.org/10.4337/9781803921808.00031>
- Rachimoellah, M., Lubis, P. H., & Utimadini, N. J. (2024). Digital activism and political change: Challenges of social media’s impact on political development. *Journal of Middle East and Islamic Studies*, 11(2), 2. <https://doi.org/10.7454/meis.v11i2.177>
- Radarbantentv. (2025). *Hadapi masa pendemo, Bupati Pandeglang akan perbaiki pengelolaan TPA Bangkonol*. Tv.Radarbanten.Co.Id. <https://tv.radarbanten.co.id/2025/08/13/hadapi-masa-pendemo-bupati-pandeglang-akan-perbaiki-pengelolaan-tpa-bangkonol/>
- Rahmawati, A. (2025). Cyber activism in environmental issues: A content analysis of @pandawaragroup on TikTok. *Scriptura*, 15(1), 25–38. <https://doi.org/10.9744/scriptura.15.1.25-38>
- Sanford, M., Witkowska, M., Gifford, R., & Formanowicz, M. (2023). Emotional

- framing in online environmental activism: Pairing a Twitter study with an offline experiment. *Frontiers in Psychology*, 13, 1099331. <https://doi.org/10.3389/fpsyg.2022.1099331>
- Schlosberg, D. (2004). Reconceiving environmental justice: global movements and political theories. *Environmental Politics*, 13(3), 517–540. <https://doi.org/10.1080/0964401042000229025>
- Schlosberg, D. (2013). Theorising environmental justice: The expanding sphere of a discourse. *Environmental Politics*, 22(1), 37–55. <https://doi.org/10.1080/09644016.2013.755387>
- Schlosberg, D., & Collins, L. B. (2014). From environmental to climate justice: Climate change and the discourse of environmental justice. *WIREs Climate Change*, 5(3), 359–374. <https://doi.org/10.1002/wcc.275>
- Skoric, M. M., Zhu, Q., Goh, D., & Pang, N. (2016). Social media and citizen engagement: A meta-analytic review. *New Media & Society*, 18(9), 1817–1839. <https://doi.org/10.1177/1461444815616221>
- Sloan, L., & Quan-Haase, A. (2016). *The SAGE handbook of social media research methods*. SAGE Publications Ltd. <https://doi.org/10.4135/9781473983847>
- Svarstad, H., & Benjaminsen, T. A. (2020). Reading radical environmental justice through a political ecology lens. *Geoforum*, 108, 1–11. <https://doi.org/10.1016/j.geoforum.2019.11.007>
- Temper, L., & Shmelev, S. (2015). Mapping the frontiers and front lines of global environmental justice: the EJAtlas. *Journal of Political Ecology*, 22(1). <https://doi.org/10.2458/v22i1.21108>
- Theocharis, Y., Barberá, P., Fazekas, Z., & Popa, S. A. (2020). Social media and citizen engagement: A meta-analytic review. *Sage Open*, 10(2), 2158244020919447. <https://doi.org/10.1177/2158244020919447>
- Treem, J. W., Leonardi, P. M., & van den Hooff, B. (2020). Computer-mediated communication in the age of communication visibility. *Journal of Computer-Mediated Communication*, 25(1), 44–59. <https://doi.org/10.1093/jcmc/zmz024>
- Van Dijck, J., Poell, T., & De Waal, M. (2018). *The platform society: Public values in a connective world*. Oxford university press.
- Velasquez, A., & LaRose, R. (2015). Youth collective activism through social media: The role of collective efficacy. *New Media & Society*, 17(6), 899–918. <https://doi.org/10.1177/1461444813518391>
- Vraga, E. K., Bode, L., & Tully, M. (2022). Creating news literacy messages to enhance expert corrections of misinformation on Twitter. *Communication Research*, 49(2), 245–267. <https://doi.org/10.1177/0093650219898094>
- Walker, G. (2012). *Environmental Justice*. Routledge. <https://doi.org/10.4324/9780203610671>
- Whyte, K. (2020). Indigenous environmental justice: Anti-colonial action through kinship. In B. Coolsaet (Ed.), *Environmental justice*. Routledge. <https://doi.org/10.4324/9780429029585>
- Wijaya, G., Wahyudi, I., & Ida, R. (2024). Digital activism of health professional during pandemic: A lesson learned from @Pandemictalks. *Jurnal Ilmu Komunikasi*, 21(3), 446. <https://doi.org/10.31315/jik.v21i3.9067>